

# THE SPECULUM.

VOLUME XII.—No. 10.

AGRICULTURAL COLLEGE, MICH., SEPT. 11, 1893.

WHOLE NO. 72.

## Biographies.

PROF. L. P. BRECKENRIDGE.

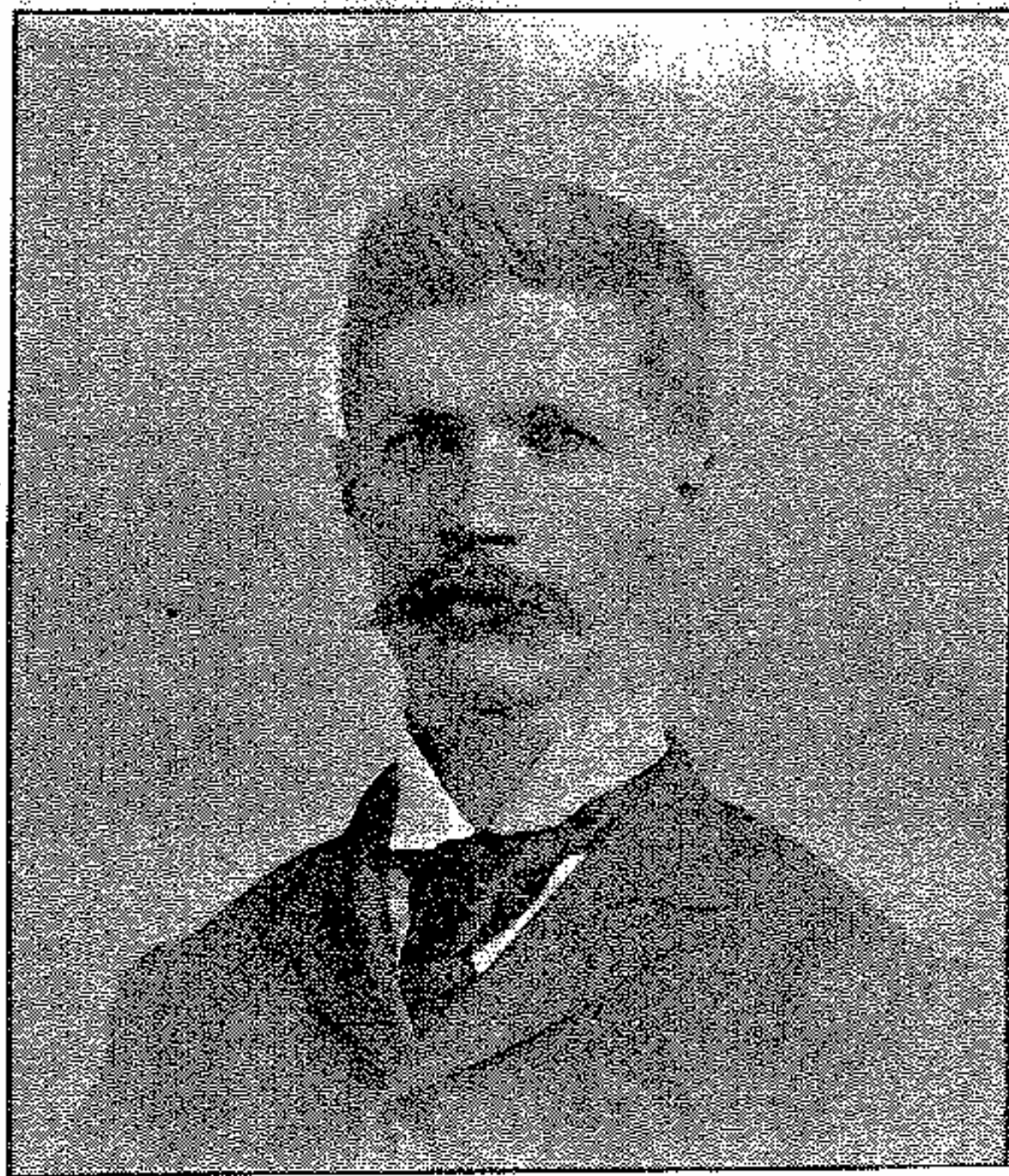
Prof. L. P. Breckenridge, during his stay at the college, received from the students such commendation as is rarely the good fortune of a professor to obtain. From first to last all criticisms on his work have been highly complimentary, and many were the regrets expressed at his removal. It was thought when Prof. Durand left, two years ago, that his place could not well be filled, but Professor Breckenridge, tho' of an entirely different "turn" of mind, at once dispelled all fears and awakened no hopes but what have been realized. Prof. Breckenridge is of a very practical turn of mind, and among boys this quality leads the van.

CHARLES L. WEIL.

Charles L. Weil, whose picture we are able to present to our readers, is a young man to hold such an honorable and responsible position as that just vacated by Prof. Breckenridge, viz.: Professor of Mechanical Engineering and Director of the Shops. He is but twenty-eight years of age, birthplace North Andover, Essex county, Mass. Prof. Weil is a graduate of the Johnson high school of

North Andover, and the Massachusetts Institute of Technology, Boston.

After graduating from the Johnson high school, at the age of sixteen, he entered the office of a wholesale house in Boston, where he remained about fifteen months. After this he resumed his studies under a private tutor, and since that time has been engaged in the study of mechanical engineering, either as a student, mechanic, draftsman or teacher.



CHARLES L. WEIL.

In the year 1888 the degree of B. S. was conferred upon him by the Department of Mechanical Engineering of the Massachusetts Institute of Technology. His first experience as a teacher was obtained in a manual training school while working as a draftsman, giving instructions in mechanical drawing and mathematics. After a varied experience as draftsman, mechanic, and student, he resigned his position at the Hydraulic Works,

Brooklyn, N. Y., in 1891, to accept a position as instructor at the Lehigh University.

His labors at M. A. C., like that of many other of his co-workers, begins with this college year. To him and them THE SPECULUM bids Godspeed.

C. F. RITTINGER.

"The king of shadows loves a shining mark." Whether this old adage be true or not it has been apparently verified in the death of Mr. C. F. Rittinger whose picture we present herewith. He died at Cass City, Tuscola County, Mich., August 21, 1893, aged 24 years, 3 months, 21 days. His illness was of about twelve weeks duration. It originated about June 1 by severe hemorrhage of the lungs. The cause of the hemorrhage is unknown but has been attributed to injuries received at the football game in Detroit last fall between the U. of M. and Cornell teams, or to a slight accident while coasting during the winter at Cass City. Both injuries were considered trivial at the time, and the sudden death of so strong and young a man is a sad surprise.

He entered and graduated with the class of '90 at M. A. C. From first to last he was a universal favorite with all the boys. Wherever he went he was received with expressions of the most hearty good will. He was honored by the Student's Organization in being elected business manager of THE SPECULUM. He was the orator of his class during the senior year and at commencement was voted to be its most popular member. In athletics he took a prominent part and much of the base ball fame of M. A. C. during the few past years may rightly be attributed to the inspiration and force of character of "Charley Rit."



C. F. RITTINGER.

After his graduation he served as principal of the Okemos school for one year. All the boys and girls liked him and advanced rapidly under his instructions. The next year he spent at Ann Arbor with the class of '93 law, where he made many friends. During the past year he has filled ably and well the important position of principal in the Cass City high school, and was re-engaged for next year. In many respects Mr. Rittinger was a superior character and he gave promise of being a star

among men. In physical strength he had few equals. In intellectual vigor he ranked high. His generosity was unbounded. These qualities with his impetuosity and fiery zeal enabled him to subdue difficulties and laugh at impossibilities. "He was a man, take him for all in all," when shall we look upon his like again? Engaged to be married to Miss Kate McClinton, one of the most estimable and beautiful young ladies of Cass City,

the marriage took place on the day set apart for the wedding, notwithstanding Mr. Rittinger's illness, thinking of course that he would soon be well.

The funeral occasion was a very touching scene: the young man so lately the embodiment of vigor lying motionless and pale in death. His young widow, tired from incessant watching for twelve anxious weeks, heart-broken from the loss of him in whom her love and hopes were centered, pouring out her heart's grief. The little children

who loved to place their tiny hand confidently in his, or climb upon his knees and entwine their delicate arms about the strong and kind man's neck could not be comforted, but their sobbing hearts told how they loved. The school children, one by one, passed by his bier and turned away with weeping eyes. Hard, hard, must be the heart unmoved at such a scene as this. The I. O. O. F. of which Mr. Rittinger was a member, attended the services as a body, and they with the many friends followed the remains to the depot, the corpse being taken to his home in Indiana for burial. He loved Christ's Sermon on the Mount and tried to follow its precepts. He said he was not afraid to die and that he had faith in a life of happiness and immortality.

DICK J. CROSBY.

When a man has done good and faithful work for four years at a college like this, where only merit wins, he deserves a good position. Dick J. Crosby, who succeeds Prof. Hedrick as instructor in English was born October 2, 1866, in Elbridge township, Oceana county, Mich. At this time it was an Indian reservation, there being only one other white family in the township. Mr. Crosby's school life began at the age of seven years in the first school house in the town. After the age of thirteen his schooling was confined to the winter months of the year as he was obliged to assist his father on the farm during the summer. Until the age of eighteen he cared but little about an education, but at this time he made a sudden resolve to become a teacher. About a year later he obtained a certificate and entered upon the pedagogical duties. During the fall of '87 he worked on a stock farm and supplied lumber camps with beef. The following winter he again resumed the work of the school room and taught "the young ideas how to shoot." The subject of our sketch never enjoyed the advantages of a high school education, but during the summer and autumn of '88

he spent four months at the Flint Normal College. It was while here that he determined to take a course at the Michigan Agricultural College and after returning home and teaching again for eight months he entered this institution with the class of '93. He took the Agricultural course and ever was known to be faithful and prompt, which at the close of the four years left him the first man in his class as a student. During his course he has been the recipient of many honors, not only from his own society, but from the student body. He was the first class president of '93—filled the positions of secretary and also president of the Student's Organization—acted as base ball manager during his senior year and was one of the eight commencement orators in his class.

"The heights by great men reached and kept  
Were not attained by sudden flight,  
But they while their companions slept  
Were upward toiling in the night."

A. T. STEVENS.

The class of '93, M. A. C. contained not a few names of men of such qualities as not only desire, but are bound to make life a success. Of these, some were particularly noticeable all through their college life, and though their voices were not "heard in the streets," they were ever awake and gave forth no uncertain sound at meetings of their class or the Student's Organization. For a man of sound judgment and wise counsel, none perhaps excelled Mr. A. T. Stevens; and the Agricultural Department of this college may count itself fortunate in securing as one of its assistants the services of so honest, reliable, and energetic a man.

Mr. Stevens was born in an old log house in the township of Alaiedon, Ingham county, Mich., August 17, 1863. During his boyhood days he attended school in his own district until the winter of '79, when he was able to attend a better district school by walking two and one-half miles each morning and evening. The following spring he entered the high school of Mason, from

which he graduated in June, 1883. For the next seven years he taught school during the winter and worked with his father on the farm during the summer months. In the spring of '90 he began the agricultural course at this college and graduated with the class of '93. He taught school each winter during his course here, and by this means together with special labor at the college procured every dollar that he spent in the course. "He that tholes overcomes."

J. N. HATCH.

Mr. J. N. Hatch, the gentleman chosen as instructor in mathematics, to fill the position left vacant by Mr. Babcock's promotion to assistant professor, was born at St. Helena, Napa county, California. At the age of five, he, with his parents, moved to Vacaville, Cal. His father being a fruit grower, Mr. Hatch's early life was largely spent in horticultural pursuits. Although his early education was confined to a district school, he was fortunate in having a teacher who took pride in instructing him in the higher branches.

In the autumn of 1886 he entered the California Normal College in Vacaville, attending there for one year. The year following he accepted a position in the Red Bluff College, Red Bluff, Cal., with the promise of help in higher mathematics, preparatory to entering the University of Michigan. Mr. Hatch entered the U. of M. in '88 and graduated in '92. Since his graduation he has been engaged the greater part of the time in engineering in Philadelphia. While here he also taught mathematics in a night school in the Drexel Institute. Mr. Hatch has now entered upon his duties here and THE SPECULUM wishes him a happy success.

H. M. HOWE.

In the outer court to the president's sanctum for a number of years past, might have been seen the genial face of Mr. Clinton. Mr. Clinton, you are aware, has flown with Mrs. Clinton to the southern

sunny lands. Another gentleman of equal grace and humor now officiates in this outer court in the capacity of President Gorton's private secretary. Mr. H. M. Howe was born on a farm near Flint, Mich., in 1872. He had the uninterrupted advantages of a good district school from an early age till sixteen. From the age of 16 years to 18 years he attended the Flint Normal. He then obtained a position in the business department of the Indiana Normal College, located at Covington. This position he held till the institution passed into other hands.

In the fall of '91, he became one of the instructors in the Detroit Business University and left it only for the sake of pursuing studies at this college together with his other duties. We trust this laudable ambition, which desires knowledge above money, may enable Mr. Howe to attain the end at which he aims.

P. M. CHAMBERLAIN.

Paul Mellen Chamberlain was born at Three Oaks, Mich., 1865. He attended the common school at this place until September, 1882, the Cushing Academy at Ashburnham from September, '82, till June, '83; Olivet College from September, '83, to December, '84; from this time till April, '86, he farmed and taught school. From '86 to August, '88, he attended M. A. C. During the winter vacation between '86 and '87, he acted as a draftsman for the Columbus Machine Company. The next winter vacation, '87 and '88, he acted as instructor in the Dakota Agricultural College. In September, '88, he was draftsman for the Brown Hoisting and Conveying Machine Company, Cleveland, Ohio. In September, '89, he received the degree of M. E. from Sibley College and Cornell University. From July '90, to October, '92, Mr. Chamberlain was assistant engineer with the Frich Company of Waynesboro, Pennsylvania, manufacturers of high speed engines and builders of refrigerator machines and Corliss engines. With the Michigan Frich

Company he also had experience in designing, erecting and testing plants. In November, '91, he was made junior member of the American Society of Mechanical Engineers. In November, '92, he was in the employ of Hercules Iron Works, Aurora, Illinois, acting in the capacity of mechanical engineer. Here he was in charge of designs with more or less superintendence of instruction. Mr. Chamberlain is now at this college. He succeeds Professor Van Dervort as assistant professor in Mechanics.

### The Anthracite Coal Combination.

BY PROF. FRED GOODENOUGH, CLASS '91.

Before leaving the M. A. C. for Scranton, I jestingly promised some of the inhabitants of Howard Terrace and Bachelor's Hall that I would investigate the "coal combine," interview one or two coal kings, and see if the price of the article in question couldn't be reduced to a reasonable basis.

Obedient to promise, I have paid some attention to the subject, and have learned some things about coal and coal-mining that I may safely say I did not know before. Assuming that the readers of the SPECULUM are not entirely familiar with the subject, it may be of interest to them to find out what the "coal combine" really is, why it was organized, and what object it has, if any, other than to maintain the present price of coal.

It is quite generally supposed by the uninitiated that the supply of anthracite coal is practically inexhaustible; that it is distributed over Pennsylvania and other parts of the union in large areas. Nothing could be more erroneous. The anthracite fields of the United States comprise altogether an area less than that of Ingham county. There are three of these coal fields; the Wyoming region comprising an area of about 175 square miles, the Lehigh region with an area of 45 square miles, and the

Schuylkill region which includes an area of 265 square miles.

It is very clear then that the supply of anthracite is far from being inexhaustible. In fact, nearly one-eighth of it has been already mined; and when we recollect that it is only about twenty years ago that anthracite began to be mined in large quantities, it becomes only too evident that in a very short time the American people will have to depend upon the smoky bituminous for their fuel supply.

Again, there is an enormous waste in mining anthracite. A coal operator who obtains forty per cent of the coal in the ground considers himself fortunate. It is estimated that in the early days, the operators of the Schuylkill region left at least three and one-half tons of the coal in the ground and on the culm heap for every ton sent to market. In most cases, the roof of the "goaf" or mined portion has fallen on account of the inefficient methods of working, and the coal left in the mine is irrecoverably lost.

Though it is not probable that the conditions just cited had anything to do with the formation of the combination, they nevertheless furnish a good excuse for its existence. Prior to the formation of this combination the condition of things in the anthracite regions were decidedly bad and growing worse. The market price was reduced to such a point by the competition of individual operators that only such coal as could be "won" with the least expense was taken out of the mine. The breakers were of the most primitive type and fully one-third of the coal brought to the surface was piled up on the culm dump. The market did not warrant any outlay for improvements, and a continuance of the system could only have resulted in the premature exhaustion of the mines.

Another serious phase of the question was the wages paid the miner. The low price of coal necessitated low wages, and as

a result the anthracite regions experienced a series of labor riots more bitter and relentless if possible than those the bituminous regions are undergoing at present. The "oldest inhabitant" can tell how breakers were burned, bosses murdered, and how the Molly McGuires fairly instituted a reign of terror around Scranton and Wilkesbarre.

These conditions have been changed in a large measure since the formation of the combination. To be sure the price of coal has steadily advanced, but it may be said to the credit of the companies that they have expended fair-sized fortunes in introducing improved methods of mining, breaking and screening the coal. Each operator knows exactly how much he is to produce each month, and his energies are directed toward obtaining the greatest possible amount of coal from his tract of land, rather than in trying to undersell his competitors. Some of the operators in the Wyoming regions are now able to win nearly fifty per cent. of the original contents of the mine by the use of the most improved machinery.

The miner has now a comparatively easy lot. Much is heard about the wretched condition of the Pennsylvania miner, but it is only applicable to the bituminous regions. I have taken two or three trips through one of the mines, and have talked with the men. They are allowed to mine six car-loads (mine car-loads) per day, and get from sixty to seventy-five cents per car. They are quite often able to finish their work by noon or before and have the afternoon for a loafing spell.

The combination is composed largely of the leading railroad companies, chief of which are the Reading, Jersey Central, and D., L. & W. Their method of operation is well known. The output and selling price is determined for each month of the year at a meeting of the sales agents. The output is apportioned among the members of the "combine" according to their facilities for production, and the output of the indi-

vidual operators is bought by the companies for about fifty-five or sixty per cent. of the final selling price.

It is not likely that the combination will ever be dissolved. The limited area of the coal fields permits its existence—we might say *demand*s its existence.

Anthracite coal must be considered in the light of a luxury and paid for accordingly; its price cannot be made to depend upon the cost of production, but only upon the ratio of its desirability compared with bituminous. It is useless to expect the price to fall. We must simply pay what is asked, and consider how much more fortunate we are than our descendants, who 200 years hence will not be able to buy anthracite coal at any price.

40 Coal Exchange, Scranton, Penn.

## The Relation of the College to the Farmer.

C. W. LEIPPRANDT PHI DELTA THETA.

A farmer should be an educated citizen, as he is obliged to bear his portion of public burdens, amenable to the laws, and in an humble or wider range, should be an exponent of society. He should, therefore, be able to fulfill the duties of even highly responsible stations, with self-reliance and intelligence. He should understand and comprehend the constitution of the United States and of his own state, and the laws and forms relative to township and county officers and their duties.

He should be qualified to keep farm accounts, draft ordinary instruments, survey his farm, and level for drains or highways. He should have a good command of the English language and speak and write with vigor, that he may instruct others, avert mischief, or inculcate truth. The leaders among men are those who impress themselves on all around them.

A farmer should be a chemist, so far as

the comprehension of the principles which affect his daily life and business are concerned. Chemistry teaches the value, quality, nature, and application of manure. The question of fertilization or sterilization of the earth is here involved. A periodical renovation of the soil is not only the base of Agriculture, but in fact of all Political Economy. How vast the difference between conjecturing the value of fertilizers and making them a subject of positive analysis and actual demonstration. When we make a hot bed, soap, butter, a loaf of bread, or light a lamp, we are playing with the most startling chemical laws.

Physiology opens a wide field of study to the farmer, for on the observance of its laws, depend the life, health and growth of all animal and vegetable nature. Obedience to these laws meets with true reward, defiance to these laws is the ill luck of poor farmers. This science teaches that like reproduces like, that the best reproduces the best, and that it is actually cheaper to raise a good crop, or a good animal than a poor one. It is of great importance to the farmer, to have a knowledge of the structure, nature, and habits of his animals, that he may select and breed with judgment, and not depend on luck.

Vegetation is covered with myriads of minute organisms. Insects sometimes blight or destroy entire crops, which cover vast sections of the country while other parasites equally innumerable infest the skin of animals, penetrate the surface, and impair their vital functions. Observation of these insects, their nature, and habits from eggs to maturity, leads to remedies which will destroy them, or at least check their ravages.

Veterinary science treats of the physiology and anatomy of the domestic animals, and their principal diseases, describing their nature, causes, symptoms, treatment, and their prevention. Practical surgery treats of the care and management of pregnant animals, attention to the offspring,

what to do and what not to do in difficult cases of parturition, lectures upon the actions, uses, abuses of medicines used in the veterinary practice.

Botany is of great value to the farmer, especially as taught here. It is emphatically a science in which the student is sent directly to nature for his facts. In this way he becomes an accurately trained and reliable observer. He applies numerous questions to his plants, by observation, trying many experiments, and in studying their behavior in this manner, cultivates his judgment and learns to draw correct conclusions. Botany is indispensable to a practical farmer or horticulturist as it enables him to select the plants best adapted to his soil and climate, when to plant or sow the seed, how to cross to obtain the best results, etc.

A knowledge of the laws of Physics is all important. The best method of construction and relative economy of material is also necessary.

A farmer must be able to appreciate the agricultural literature of the times, and not only thus to receive the product of other minds, but to think and investigate for himself. He should be competent to express his thoughts intelligently, so as to influence others. He should be a leader among men. To accomplish this, great stress should be given to the subject of English, by studying its grammar and its greatest works.

Mathematical science is valuable as an instrument of practical utility. It trains in the methods of reasoning that leads to definite conclusions. It disciplines the mind to order and accuracy, in putting together and taking apart.

Every farm should have an orchard and a variety of small fruit. If this is properly managed the farmer can have fresh fruit every day in the year. The average farmer has vegetables during only a small portion of the year and often envies his city friends because they have fresh vegetables most of the year, while no one has so good an

opportunity to have a good supply of choice vegetables, at so small an expense as the farmer, if he knows how to grow them.

Every farmer should be equipped with a small forcing house, where the farmer could grow plants during the winter to be transplanted in the spring to the garden or lawn. He should grow vegetables to supply his table, and flowers to decorate his house, etc.

A farmer should have a knowledge of the nature and quality of seed so that he can grow his own seed and be able to test it before planting, and not run any risk in seeds not germinating.

There is an old saying "That to educate a farmer's son is to educate him off the farm." This may be true of many institutions, but certainly not of this, as the students here are required to work on the farm two and one-half hours per day for five days in a week, applying what they learn in the class-room. In other words they learn the art of farming. Besides this the student also gets a good drill in the wood and blacksmith shop, which will accustom him to the use of tools and fit him to do the repairing on the farm and manage farm machinery.

The work in the laboratory, is likewise important, consisting of tracing pedigrees and studying the history, habits and natures of the domestic animals.

In the dairy, tests are made as to the relative value of feed as related to the quality and quantity of milk. Tests are also made as to which breed is best adapted to the dairy and which for beef.

The day is past when all the education that a farmer needs is simply enough to enable him to read and write a little. This with a knowledge of plowing and hoeing may be sufficient to enable him to extract from the necessaries of a physical existence, but it is not sufficient to enable him to grapple with the deeply laid schemes of the professional men. He must be a man of general information.

## SCIENTIFIC.

### At The World's Fair.

#### ELECTRICITY.

P. B. WOODWORTH, E. E.

The World's Fair from an electrical standpoint alone is well worth visiting by everyone. In fact, one might say it is all an electrical exhibit.

A comparison with the electrical exhibit at the Centennial is astonishing. The whole exhibit could have been placed in fifty feet square; and now we believe that electrical work is in its infancy.

For grandness and splendor all must admit that the exhibit is far ahead of anything the world has ever seen. Probably the technical student is the only one who could raise an objection. Comparatively few exhibits are shown in such a way as to present their historical development, details or principles of construction. What interests the ordinary observer as a grand effect is lost upon the student if he is not given an opportunity to see the inside of the thing. The electric launches are beautiful, wonderful, and go. Yet, excepting the signs at the ticket offices, the public is none the wiser after seeing or using. The writer heard a young man from an eastern college explain to a lady friend that under the floor was a Shipman gasoline engine. And further that the purr of the motor was the engine working. Later on the same trip, the trap was lifted by request and the electric motor and the 78 storage cells, of 125 ampere hours each were shown. The launches are 35 feet 10 inches long, six feet beam and have a draft of 28 inches. They are charged twice per day and run on an average of 40 miles per day at six miles per hour.



## AGRICULTURE.

F. B. MUMFORD, B. S.

The World's Columbian Exposition differs from all former great fairs in the prominent place given to agriculture. Not many years ago it would have been impossible to secure anything like the recognition that agriculture has received at Chicago. This is the direct outcome of the great improvement in agricultural methods, and the intellectual advancement of farmers throughout our great land.

In our opinion not a little of this advancement can be traced directly to the foundation of agricultural colleges and experiment stations. One acquainted with the history of the exhibits present, could but be impressed with the important part taken by agricultural colleges in the collection and preparation of the exhibits in agriculture.

The great variety of ways in which our common grains and grasses may be used for decorative purposes, is a revelation to many. Yet, the extent to which it is carried in many instances, inclines one to the belief that the educational value of an exhibit is often sacrificed for mere display.

The exhibit of experiment stations is in direct contrast to the above; here everything is arranged with the single idea of its educational features, and nothing is exhibited for mere display.

The exhibit of improved machinery appropriately occupies a conspicuous place in the agricultural building. The advancement in sowing, harvesting, and storing crops has been wonderful, and no more interesting and valuable time could be spent by those interested, than by a careful study of this development.

The great show of improved live stock now in progress, proves conclusively that America will soon cease to go to Europe for the best specimens of the great breeds of live stock. The present exhibit is admitted

to equal or excel the great royal shows in England, and it may not be many years before the great cattle breeders of England will come to America for infusions of the best blood in all classes of live stock. We can well be proud of American agriculture as exhibited at Chicago.

## EDUCATION.

The sameness of the educational display made at the World's Fair, by the different schools and colleges of the United States, was painfully noticeable. If you looked carefully at the exhibit of one prominent school, you had the gist of the whole display. The same pictures of buildings and grounds, the same class of drawings, the same essays, the same collections of insects etc.—all were there, arranged and displayed by the different schools with a wearisome sameness.

The mechanical schools probably displayed typical student work in the specimens of dovetailing and pattern work shown, but, when you had seen the work of one school, you had a fair sample of the whole.

Some schools made a prominent display of foreign-made laboratory apparatus—costly pieces for delicate physical and chemical experiments, but these things could hardly be called school products; they were school advertisements. Our own college might have made a display of laboratory apparatus fully equal, if not superior, to that made by Cornell, Ann Arbor, Harvard, Yale, or the Johns Hopkins University, had they cared to make a display of instruments rather than products. As it is, however, our college display compares very favorably indeed with any of the displays made by the different national or foreign schools of like character.

One noticeable feature of the educational exhibit was the entire lack of any system or plan of arrangement in the Protestant display and the very harmonious arrangement in the parochial display. Evidently there

were many heads in the arrangement of the Protestant exhibit and only one head in the arrangement of the parochial exhibit. Another striking fact which one was obliged to admit to himself in looking over the display, was the superiority of the parochial display over that of the Protestant. It was made prominently noticeable in the fineness of the work, in the systematic arrangement and in the abundance of material displayed. Of course, this does not in any way prove the superiority of the parochial over the Protestant schools; it means, simply, that the parochial schools made a strenuous effort to present an excellent showing at the World's Fair, and in this way overcome some of the prejudice which Protestants have for these schools, while the Protestant schools, having no occasion to make any great effort in this direction, brought only the material at hand and let this, with the reputation of the school speak for itself.

Thinking it may be of interest to some of our readers, and that it may tickle the vanity of some of the freshmen to have their names appear in print before the arrival of the annual catalogue we give below the names of the class of '97: A. Sessakian, Jno. Whitten, H. O. Skiels, J. F. Merkel, S. D. Lees, R. T. Lockie, F. Golling, R. A. Parker, E. A. Calkins, S. W. Keifer, C. F. Hermann, R. A. Latting, R. J. Robb, N. H. Williams, A. LaDue, S. J. Redfern, G. C. Humphrey, R. A. Gongwer, D. McElroy, F. N. Bierce, Geo. Campbell, E. E. Buell, W. C. Stewart, W. A. Quick, J. W. Rigterink, T. W. Clark, F. Wagner, E. D. Osborne, E. M. Randall, A. T. Jennings, H. C. Matheson, A. R. Rogers, R. B. Fugate, H. Robb, W. R. Goodwin, A. L. Pond, Jos. Berry, N. J. Miller, E. A. Greening, H. E. Smith, Geo. A. Parker, J. C. Narmore, H. L. Hoffman, F. E. Baker, F. Jones, Jr. E. B. Deland, H. Harlow, W. J. Russell, C. B. Laitner, F. Stricker, J. Stock, H. L. Baldwin, C. Kelley, C. D. Butterfield, O. T. Riddle, G. W. Leshar, T. A. Crittenden, B. H. Halstead, L. Edwards, F. M. Morrison, F. E. Smallwood, J. H. Steele, N. C. Thomas, H. W. Hart, C. A. Graves, C. H. Alvord, E. T. Patterson, O. Goenflo, R. A. Bowditch, Miss Bertha Wellman, Miss Marcia Vedder, Miss M. H. Watts, Miss Clara Steele, Miss Nancie McArthur.

The stewards of the various boarding clubs for this term are as follows: Club A, C. C. Pashby; Club B, D. D. McArthur; Club C, W. A. Ansorge; Club D, R. C. Fisher; Club E, W. F. Wight.

# THE SPECULUM.

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AGRICULTURAL COLLEGE, SEPT. 11, 1893.

IN the brief space of time between the closing of the summer and the opening of the fall term there is ordinarily scarcely more than time for the students to spend a few happy hours in their old homes surrounded by mothers, fathers, brothers, sisters, neighbors and cousins (?) relating the oft repeated story of personal achievement and hopeful prospects. While the time left to be spent with her to whom most letters are addressed seems almost infinitesimally brief.

This, however, is an exceptional year; many go not home at all. Alas for the home friends! Alas for the sweethearts! The boys have gone to the fair. Many of their friends must stay at home. It is too bad that while they are deprived of the pleasure a trip to Chicago brings that they must also be deprived in many instances of

even a brief visit from the boys. But "such is life" and we are sure that the boys will not so forget "the old folks at home" as not to send many interesting accounts of their personal observations, both during their visit to and after their return from the White City. Too much can not be said in favor of the patient, toiling, loving hearts who have taken upon themselves increased burdens, that their boys may be well educated and fitted for higher work than the common drudgery of life. Most of the students appreciate the kindness and favors thus shown and use their means frugally, their time diligently, and their hands and brain liberally.

Heaven pity those who do not and may their tribe decrease!

Not only does a certain purpose run through all nature, but certain tendencies also run through all human nature and one of them is a failure to recognize while passing the blessings with which we are favored. "We never miss the water till the well runs dry." This fact is clearly demonstrated every day everywhere, by men in all conditions and vocations of life; it is shown in their expressions of regret that they did not appreciate the opportunities of their childhood, their youth, and their early manhood and womanhood.

But of all vocations, the student, in the rush and excitement of college life, is perhaps in the greater danger of allowing golden opportunities to slip by unimproved. So many side issues keep constantly coming up—class interests, society interests, athletic interests, political interests, and besides all these, that innate tendency of the soul towards a life of ease and pleasure—that unless the student has on the whole armor he may be pierced to the quick from this direction or that, and the strong vitality with which he is endowed may flow out and go coursing down through the mad torrent to the boundless ocean of oblivion. This fact is most strongly impressed on our minds

at every commencement and we need not repeat the regrets of many who have then found that the part of life most fraught with opportunities and best calculated to strengthen, develop, and ennoble has passed away. "Miss not the occasion, by the forelock take that subtle power, the never halting time; lest a mere moment's putting off should make mischance almost as heavy as a crime."

WHILE the classes of '94, '95 and '96 were standing at West Gate, after bidding '93 an affectionate farewell, and seeing the graduates shoulder their grips, and with staff in hand begin their weary march away to the battle of life, they saw soon after the last pilgrim had disappeared from view, a mere shadow away in the western horizon. Nearer and nearer it came. Soon the murmur spread that an army of freshmen were approaching. The older classmen fell back to gain a better position, and many, especially of '96, fortified themselves within the dormitory walls, arming themselves with fiery zeal and aqueous ammunition. Slowly and cautiously the invaders advanced—no colors flying, no drums beating—eyes could not suffice as an avenue of entrance to their hungry minds. The customary organ so often brought into requisition to meet such cravings, promptly responded, and with ears bent forward they marched with trepid step up the hill to the president's house. This august structure overcame many with direful forebodings as to the character of its inmates and to make matters worse, the road here took a divide. A debate ensued. A division followed, one part going on Main Drive, the other following around on Faculty Row, both keeping in the middle of the road to avoid treading on the grass. Onward they marched. In the course of fifteen minutes they were rejoiced to meet again in front of the library and museum building. Here they were so cordially received by half a dozen or more Y. M. C. A. men that their countenances soon became cheerful and serene.

HOWEVER careless parents are regarding the moral atmosphere which surrounds their children while under their own protection, when these same boys grow older and take their departure from the old home, there is with every parent an anxious feeling for the boys' moral welfare. Could they but know that the young man would seek the companionship of good associates; or did they feel sure that whatever his associates he would prove himself to be proof against all evil influences, they would feel no cause for anxiety. The moral worth of every individual is acknowledged by all to be of the highest importance as an element in character. Intellectuality is essential, sociability is good, but rectitude is best of all. Seeing then that this is one of the great corner stones of the structure we wish to build let it not be left out, for who can reckon the loss if, when our building is nearly completed it topples over as it surely will, without being built upon this rock.

IN business affairs there are specially appointed times when all the resources and liabilities are brought to light and new plans laid for the future of the firm. So also at the beginning of another college year it is wise for each student to sit down and take an inventory of his stock of credits and numerous obligations and determine whether he shall be able or not, at the present outlay of energy to meet each future demand and show a clean record and a clear balance sheet at the close of his course. This advice is given gratis and is specially intended for the seniors. Each commencement is a witness of just such neglect, and students and faculty are much embarrassed to see a young man almost graduate with his class.

THE new students are especially asked to make mental note of the fact that THE SPECULUM is the only organ of the students. It was established in 1881, and

since that time has received almost the entire support of the individual members of each class, and continues to enroll on its subscription list each year the alumni of each graduating class. It has always been the policy of THE SPECULUM to voice the sentiments of the student body, while the literary department has been freely supplied with articles from our most able alumni. The scientific department, college news, personals, athletics, and colleges and exchanges are all distinct and highly interesting and important departments. The men in charge of these departments for the coming year give promise of being as efficient in their respective positions as any of the previous incumbents. We feel it to be entirely unnecessary to urge each man of the class of '97 to become a subscriber to THE SPECULUM at once and thus help and be helped, in making the student's paper a fit representative of the most hustling, business-like, progressive body of students in this or any other state.

SOME customs of the past are time honored, and honoring to all time, because they are founded on high, noble and worthy principles; others have sunk into oblivion and are heard of no more, because they have lost their significance, or were unworthy of being perpetuated by an enlightened and progressive people. Soon to be numbered among the latter is the disgraceful custom of "hazing" at colleges, especially of that of the new men. "It is a custom more honored in the breach than the observance." The better sentiment is strongly opposed to it and now "hazing" if indulged in at all is practiced only by men of low renown, or impetuous youths, who thoughtlessly follow some bold villain who finds delight only in giving others pain and annoyance.

We would not be understood to say the first word against a good, manly, friendly, personal or class "scrap." He who wrestles

with us strengthens our muscles and sharpens our wits. But we have not language strong enough to express our indignation for men who covered by the darkness at the opening of each college year "Make night hideous" by storming about the halls and dormitories, preventing the rest of tired workers and infringing on the property and rights of others. The freshmen are the ones directly injured; heaven knows they have enough to bear in getting started in their course without being made the victims of lawlessness. Were they permitted, man for man to meet those would-be braves, in nine cases out of ten they would vanquish them in the twinkling of an eye, for men who are so low as to go in the darkness and in bands to molest strangers, alone, or at most in twos, are despicable cowards.

While upon this trend of thought, we wish to speak one word about the care of college property, especially of the dormitories. In the past it has not been an infrequent thing to see lying at the foot of a stair, a piece of furniture or a waste-box in a sadly dilapidated condition. The destructive propensity in some men seems to be so highly developed as to have become a controlling passion. All we have to say farther is a word of warning. Let the destroyer beware lest he, himself, be destroyed.

At present writing, the class of '97 numbers about seventy. It is a trifle smaller than the average class for a few years past, yet it appears to give promise of being a strong class. Several causes go to produce a small diminution in the entries this fall term, but we hope that these shall have disappeared in a few months and that the "spring freshmen" may be more numerous than in any preceding year. Chief among the causes for a smaller attendance than usual this fall are, first, the hard times, second, the changes during the past two terms at the college itself. Many are detained from entering for lack of money. Others for lack of con-

fidence that everything is in good working condition after so many changes of professors and instructors. The first we hope may soon be removed and we are sanguine concerning the latter. We expect in our next issue to speak of the work of some of the special departments under their new management.

To students this is an eventful season of the year but in a college like this where the dormitory system is in vogue, it is the occasion of more than ordinary bustle and confusion. Very few are fortunate enough to escape the ordeal of moving and even these have the triennial overhauling of their rooms to try their patience. Hardly do we know which to envy more, the graduate ever on the alert to catch a freshman who wishes to buy, or the freshman who cautiously treads to and fro and sighs to feel his money slipping from him wherever he turns. Both feel as if they are where they have but few privileges. But not so with the sophomores, juniors and seniors. They have each taken one step higher and oh! my! how high they hold their heads and with what a self-possessed air they sweep past the poor beleaguered freshman. It is a pleasing thing to see, however, that many of the upper class men have not forgotten the difficulty with which one can adapt himself to new environments and out of the "innate goodness of their hearts" they lend with hearty good will a helping hand. "May their tribe increase."

Glad we are to know that President Gorton is very anxious to see every room in the dormitories neatly papered and painted at a very small cost to the students so that the boys may feel some pride in furnishing them neatly and tastefully. It is a disgrace to the State of Michigan to offer for habitation, rooms in such a condition as that in which some of our rooms are found. Boys come from clean and, it may be, elegant homes and are obliged to go to rooming in places

unfit for any one of average refinement. At the prices charged for the rent of these rooms they ought to be kept clean and tastefully painted, plastered and papered. The rent per term received by the State for the average room about 12 x 16 feet is from \$8 to \$14. When rooms are kept in decent condition by the State boys will take a natural pride in keeping them so. Moreover, it will be found that the conduct of the fellows will be much improved. It is a noticeable fact that the occupants of tidy rooms conduct themselves with greater decorum than those of rooms slovenly kept. This, some one will say, is due to the difference in characters of the boys, but we mean to say that there is a reflex action upon a person from his surroundings. In the old log school-house with its wooden benches the boys and girls held high carnival at recess and noon, but in the new modern building with its varnished furniture, frescoed walls, flowers and pictures, the voices are soft and low and the step light and graceful.

## COLLEGE NEWS.

A new little girl makes music at the Taft portion of Faculty Row.

At the first Faculty meeting this term seven new members were present.

President and Mrs. Gorton and son Guy arrived on the grounds August 22.

There is a rumor two of our sub-faculty are soon to move from Michigan to the married state.

Professor Breckenridge and family left for their new home at Champaign, Illinois, August 29.

Thirty fine new tables for the Botanical Laboratory have just been received, also two new herbarium cases.

While at Chicago, Dr. Kedzie attended the National Association of Chemists, before which body he read a paper.

The experiment treating potatoes, for the scab, with corrosive sublimate is going to turn out very successfully.

Extensive and needed improvements are being made in the dormitories in the way of plastering and painting the walls.

Mr. J. N. Hatch takes Mr. Babcock's place as assistant in mathematics, Mr. Babcock having taken Professor McNair's place.

The first edition—8,000 copies of Bulletin 94, "Birds of Michigan" is exhausted and a second edition of 5,000 copies is now in press.

Professor Weil, Professor Breckenridge's successor, was married August 30, and came directly to the college, arriving here September 1.

Mr. A. R. Curtis, foreman of the woodshop here, has resigned his position in order to accept a similar one at the University of Illinois.

It has been decreed by the powers that be, that the seniors will spend a large part of this term in educational labor, studying flowers and fruits.

Professor Harwood and family moved from the college during vacation and the house is now occupied by his successor, Professor Smith and family.

President Clute's baccalaureate address, his ex-augural address, and President Gorton's inaugural address have been printed by the State Board of Agriculture.

President Clute's ex-augural address, the subject of which was, "Four years of Progress," is a review of the work done and improvements made here during the past four years.

Mr. H. M. Howe of Flint is the president's private secretary. He is a graduate of the Detroit Business University, and has been teaching book-keeping in the Detroit night school.

Eddie and Marrian Clute left for their new home in Florida, August 14, going via Chicago. They will be joined a week later by President Clute, and two weeks later by Mrs. Clute.

Dr. Beal attended the several scientific associations held at Madison, Wisconsin, where he read several papers, one on the labor system at agricultural colleges, which brought out an interesting discussion.

All the houses on Faculty Row and all the principal buildings on the grounds will soon be connected by cement walks. This will add much to the appearance of the grounds as well as to the comfort of the residents.

Professor and Mrs. Van Dervort left on Tuesday, August 29, for their new home at the University of Illinois. Professor Van Dervort's successor, Mr. Paul Chamberlain and wife, are now occupying rooms in the Terrace.

And now we have the class of '97 with us. They are seventy-nine at present, though this number will probably be somewhat increased. Forty-six have entered the agricultural course, the remainder the mechanical course.

Professor F. W. McNair has resigned his position here in order to accept a similar position in the Michigan Mining School at Houghton. Himself and family left for their new home early in vacation, going via Chicago & Wisconsin.

Among eighty new varieties of strawberries tested on the Horticultural Department this year, for the first time, the following seem to deserve places among the best sorts: Clyde, Greenville, Leroy, No. 1 (Allen), No. 2 (Feicht), No. 3 (Stayman), Weston, and Yankee Doodle.

The Botanical Department has just received a gift of ninety-four species of the grasses and sedges of Arizona from Professor J. W. Toumey, also 160 plants from the Sierra Nevada region, Tulare county, California, from Professor Geo. D. Sones of the Fresno high school. Many of these specimens are very rare and interesting.

Faculty Row was well represented at the White City during vacation. Among those who spent a few days at the fair are Professor Vedder and family, Professor Cook and family, Dr. Kedzie and family, Dr. Beal and family, Dr. Edwards, Professors Noble and Holdsworth, Messrs. Grosbeck, Butterfield, Rossman, Hedrick, Bradley, Professor and Mrs. Van Dervort, Professor and Mrs. Hicks, Professor and Mrs. McNair, Professor and Mrs. Woodworth, Professor Gulley, Lieutenant Lewis, Mrs. Landon, and the Misses Wheeler.

The boys who attended the fair are still wondering whether they "took in" the fair or were "taken in" by the fair. Their camp which was named Camp W. L. Simpson, in honor of a former head of the military department, was pleasantly situated on Midway Plaisance. This afforded them an excellent opportunity for seeing the fair, which they made the most of. After a week spent there they broke camp and returned to the college or to their homes, with the feeling that it was a week well spent. During their stay there a very pleasant reception was given at the Michigan Building in honor of the Michigan boys at West Point, and the M. A. C. Cadets.

At the reception given by the Y. M. C. A. Friday evening, Sept. 8, an interesting program was opened by a short address by the president, Mr. McArthur, followed by an instrumental duet by Messrs. Horne & Partridge; eulogy on the Bible, Mr. Newell; piano solo, Miss Renner; Relation of Association Work to College and Society Work, Mr. Crosby; recitation, Miss Wellman; vocal solo, Mr. Fisher; recitation, Mr. Van Alstyn; and a short address by President Gorton. The program was closed with music by quartette, Messrs Partridge, Horne, Laitner and Fisher. After the program a short time was pleasantly spent in a social way.

The officers of the cadet battalion for the coming year are as follows: Captains, G. E. Simmons, M. F. Loomis, R. S. Campbell, H. R. Allen; first lieutenants, W. F. Wight, R. S. Welsh; adjutant, S. F. Scott, F. M. Nichols; chief of artillery, V. V. Newell, L. A. Wilson; quartermaster, M. P. Carney; chief signal officer, E. C. Crawford; sergt. major, M. G. Kains; first sergeants, H. F. Lake, C. P. Close, H. D. Baker, A. C. McKinnon; sergeants, R. C. Fisher,

E. J. Heck, W. J. Goodenough, W. C. Bagley, W. A. Ansorge, R. L. Reynolds, E. L. Fugate, H. E. Ward, C. H. Robison, W. C. Stebbins, R. R. Robb, G. L. Stewart, M. D. Owen, W. W. Smith, O. P. West; corporals, Amos, VanNorman, VanAlstyn, Buck, Fisher, G., Doolittle, Peiley, Briggs, Normington, Clark, J. A., Horne, Anderson, Miles, Thompson.

President Gorton in his inaugural address given at the close of the graduating exercises August 9, says, "In trying to appreciate the responsibilities which will devolve upon the office of president of the Agricultural College, I realize, too, that there are many new problems affecting nearly all its branches. A man to be successful in any profession, and I hold that practical agriculture is as much a profession as the practice of medicine, must keep up with the varying conditions. Agriculture is no longer local." He then mentions some of the things that influence agricultural products and prosperity, and speaks of the effect of educating the agriculturist, and of what the agriculturist does for a country. "No cry of blood-thirsty anarchist, no treason, no rebellion, do we find among the farmers, but let them be oppressed and history has shown what they will do. France found it out just one hundred years ago. Let the country need their services for its protection and thirty years ago America saw and felt what their strong arms would do. Labor without soul is not worthy to be called labor. That labor which comes from the heart, that labor which springs from the source of tears of joy or sorrow, that work is work worthy of the name." He then speaks of the relation of the studies to each other and to the student. In his advice to the graduates he says, "Remember that you are building for yourself. If you do not do for yourself who will do for you? Look for to-day; yesterday has gone. Be persistent and remember that all hard work with a right motive is sure of success."

President Clute, in his baccalaureate address, delivered August 6, the subject of which is "Bread, Brawn, Brain," says—"Life is the greatest gift. Without it we are nothing. Next in importance to life is the means of sustaining life, bread, to gain which is the most imperative occupation of all men. To win bread, brawn is necessary, also necessary in all the finer kinds of work; it holds the pencil, guides the pen, and moves the tongue of the orator. Bread makes brawn. Through brawn there comes to brain such subtle force as the still more subtle soul may use for the manifestation of life and thought."

He spoke of the old education and its mistakes, of the new education and its development.

"The new education requires a sound body. The powers of the child are in a great degree hereditary. The child has a right to be well born. In early years especially the body should be well trained in the games, pleasures, and accomplishments of the times. The new education having secured the brawn as the

physical basis of mind, goes on with the education of the mind itself."

He spoke of the rise of the study of natural science in our schools, of the benefits derived from the study of the natural sciences, of mathematics, history, literature and language.

"All these have their place and are necessary, but the boy must have also training in manual labor in order to provide himself with bread. He then spoke of the foundation of the Michigan Agricultural College, the methods pursued there, and the kind of knowledge to be gained and closed with a few words to the graduating class."

## PERSONALS.

We desire the earnest co-operation of every person who has ever been connected with the college in trying to make this department an interesting one. Let every alumnus and every person who has been with classes here send in news to the editor of this department, often, thus making his work much easier and the department more interesting to all.

A most pleasant alumni reunion occurred at Chicago on the occasion of the college reception at the Michigan Building. Although the affair was entirely informal, the opportunity to renew old friendships and talk over "old times" was enjoyed by all. Among those present were Ex-President Clute, '62; Ex Secretary Reynolds, '70; Prof. W. C. Latta, '77, of Purdue University; Mrs. Wm. McBain, '79, the first lady graduate of M. A. C.; M. S. Thomas, '79; Dr. C. W. McCurdy, '81, of the University of Idaho; Prof. L. G. Carpenter, '79, of the Colorado Agricultural College; Prof. L. H. Bailey, '81, of Cornell University; Orel Hershiser, '84; Prof. J. D. Towar, '85, of the Rhode Island School of Agriculture; Perry G. Towar, '85; P. B. Woodworth, '86, and Mrs. Woodworth, '93; Prof. P. M. Chamberlain, '88; C. L. Lawton, '88; W. F. Staley, '88; Prof. W. J. Meyers, '90, of the Colorado Agricultural College. As the cadets were in camp at the same time there was a large number of the students present besides many of the class of '93, and many members of the Faculty and others who were interested in the college.

'62.

Ex-President Clute left for Florida during the August recess. At commencement the State Board conferred upon him the degree of Doctor of Laws.

'64.

While in Madison, Wis., attending the recent meeting of the A. A. A. S., Dr. Beal had the pleasure of dining with W. W. Daniels, Professor of Chemistry in the University of Wisconsin. He reports Prof. Daniels as still deeply interested in the welfare of M. A. C.

'69.

Dr. C. E. Bessey was elected president of the botanical section at the Madison meeting of the A. A. A. S.

'70.

H. G. Reynolds paid the college a flying visit July 31, just prior to leaving for Los Angeles, Cal.

C. W. Garfield is one of the judges of the pomological exhibit at the Columbian Exposition.

'71.

Byron D. Halstead of Rutgers College, N. J., read several papers of interest and importance before the A. A. A. S.

'73.

A son of Benjamin T. Halstead is a member of '97.

C. S. Crandall is in charge of the forestry and grass exhibits of Colorado at the World's Fair.

'74.

Dr. J. K. Gailey was married on June 6, to Miss Florence L. Bullock at the bride's home in Chicago. THE SPECULUM extends congratulations.

'77.

Prof. F. S. Kedzie "took in" the big fair during the August recess.

Prof. W. C. Latta of the Purdue University Agricultural Experiment Station, has recently had an addition to his salary.

WITH '78.

H. W. Wilson held a position in the Custom House at Port Huron during the republican administration, but with the advent of the democrats H. W. was forced to abdicate. He will open a store at Crosswell.

Wilford Macklem is editor of the *Crosswell Democrat*, and has also an extensive law practice.

'81.

It is reported on good authority that Dr. McCurdy has entered the ranks of the Benedicts.

W. H. Burgess is judge of probate for Sanilac county. He was elected on the republican ticket.

'83.

Prof. C. M. Weed, entomologist of the Mississippi station spent some time in Chicago while on his way to the meeting of the A. A. A. S. at Madison.

'84.

Orel Hershiser's display of honey at the fair is pronounced by competent authorities to be the best there.

C. P. Gillette was recently elected a member of the Association for the Promotion of Agricultural Science. Prof. C. L. Ingersoll, '74, of the University of Nebraska, was also elected a member of the same association not long since.



'85.

J. W. Matthews and G. C. Lawrence received the degree of Master of Science from their Alma Mater in August.

E. R. Lake visited the fair at the time of the college encampment.

'86.

P. B. Woodworth and Miss Lucy Clute ('93) were married August 11. After a few weeks in Chicago, Professor and Mrs. Woodworth returned to the college where they are now "at home" in the Terrace.

'88.

W. M. Munson of the Maine State College spent a few days on the grounds recently. He was on his way to Chicago.

P. M. Chamberlain has been appointed by the State Board of Agriculture, assistant professor of mechanics to fill the vacancy caused by the resignation of W. H. Van Dervort, '89, who has accepted a similar position in the University of Illinois.

'89.

R. S. Baker visited his brother, H. D. Baker, '95, at commencement. He afterward spent some time in Chicago.

Wm. Lightbody has been engaged for the ensuing year as principal of one of the Detroit public schools.

L. A. Clinton writes from the Clemson Agricultural College, Fort Hill, S. C., as follows: "I am very much pleased with my location here. The work has started off finely and we are already very much at home. The college has an attendance of 450 students. We find the southern people very friendly and hospitable, and they give a warm welcome to a stranger."

Hobart A. Stewart is raising fruit at San Diego, California. He has a brother in '97.

'90.

Warren Babcock, Jr., will take the chair left vacant by the resignation of Prof. McNair, who becomes professor of mathematics at the State Mining School.

F. B. Mumford has been chosen to succeed E. A. Burnett, '88, as assistant professor of agriculture.

E. A. Stricker is the junior member of the law firm of Robison & Stricker of Detroit.

Charles F. Rittinger died at his home in Cass City, August 21, from complications brought on by over-exertion. His death was quite sudden and was a surprise to his friends, for, although he had been in poor health for some time, he was thought to be well on the road to recovery. He had been married but two months.

Geo. E. Hancorne has been spending the summer at the Rockford, Illinois, Normal, studying the languages. He will return to Mendon to teach during the coming year.

WITH '90.

F. B. Smith is spending his vacation on the Pacific Coast.

J. H. Wheeler is at Oklahoma City and not Guthrie, as was stated in our last issue.

'91.

W. O. Hedrick has been appointed assistant professor of history and political economy by the State Board. Prof. Hedrick will continue his studies at the University next winter.

V. H. Lowe is still employed at the Libbey Glass Co.'s exhibit at Chicago. He will return to M. A. C. "after the fair is over" and continue his post-graduate work.

C. A. Udell is proprietor of an extensive fruit store in St. Louis, Mo. Charley reports the best of success.

H. L. Bunnell is farming near Jefferson, Ohio, and is also working hard for "protection."

WITH '91.

W. S. Howland is at the Lakeside Hospital in Cleveland, under treatment for an abscess. He has the sympathy of THE SPECULUM.

'92.

C. A. Hathaway expects to enter the field of electrical engineering in the near future.

A. N. Bateman called at the college September 1. He is at present "taking a vacation."

H. B. Fuller has had an increase of salary as principal of the Lewiston schools.

WITH '92.

L. N. Brown graduated from the department of law at the U. of M. last year and is now practicing his profession in Ann Arbor.

'93.

L. H. Baker has accepted a position as assistant principal of the Galesburg high school for the ensuing year.

A. C. Burnham has accepted a position in the engineering department of the South Dakota Agricultural College.

W. L. Harvey is rustivating in Northern Wisconsin.

D. J. Crosby has been retained at the college as instructor in English and A. T. Stevens as assistant on the Farm Department.

We have received the announcement of the marriage of Elmer B. Hale and Miss M. Lizzie Hall on August 23, at the bride's home in Orleans. THE SPECULUM extends congratulations.

Hardly had we received the above announcement when we learned that another '93 man had been similarly affected. Justin T. Wight and Miss Henrietta Hodgman were married August 15, at Cheshire. After the marriage Mr. and Mrs. Wight left for an extended tour through the West.

Vernon J. Willey, our predecessor of the "Personals" column has been appointed principal of the State School for the Blind at Lansing.

WITH '93.

V. J. Hooper is principal of the schools at Mackinaw City.

M. H. Cohen is a conductor on the Ft. Wayne and Belle Isle Electric R. R. of Detroit.

WITH '94.

Miss Otie Cook was among the visitors at commencement.

Allen Rohrer is at his home at Redmont, Mich. He will probably return in the spring and continue his work at M. A. C.

The Goodwin brothers are working for the benefit of their fellowmen by selling a work on Etiquette. Success to them.

WITH '95.

Yasuharu Kato finished his first year at Hope College in June.

E. C. Green is farming at Wayne. He expects to re-enter in the spring, taking up his work with '96.

B. D. Stevens is draughting at his home in Tuscola. He expects to study architecture at Leland Stanford University next year.

WITH '96.

W. J. Garbe has purchased a farm in Chippewa county, and is putting into practice what he learned concerning agriculture and horticulture at M. A. C.

### ATHLETICS.

As is usual at this season of the year, the editor of athletics is placed in close straits for material. We can do little but speculate on the future and urge activity for the present.

The return tournament of tennis between the Lansing and college clubs was played at the Terrace court on August 2, at 4 o'clock, P. M. The game was highly interesting and brought many out from the city as well as most of the college population. The result was in favor of the college, Cook and Tharrell winning four straight sets. Score, 6-2, 6-3, 6-2, 7-5.

There has been little activity on the ball field. The class of '96 played Williamston at the college August 5. The attendance was not large and interest did not run high at any stage of the game.

Williamston—0 2 2 1 1 0 0 1 1—8  
M. A. C. '96—4 0 0 2 0 1 2 2 3—14

More spirit has been shown of late by the faculty "kids" in handling their opponents, the boys from Okemos. Mr. A. B. Cook has led his valiant forces to repeated victories and now we wait with breathless anxiety for the faculty to accept the challenge appearing in the *Eagle* a few weeks ago.

The season for the practicing of foot-ball draws on and we expect, soon, to see elevens drawn up in place, working under the direction of Manager Woodworth or his able assistant, A. J. Beese. At the time of the great eastern games in foot-ball our college is closed for the long vacation, and for this reason matched games with other colleges have been discouraged at this place by the faculty. This, however, need not deter us from having several spirited class games during the term.

Hillsdale offers special attractions to the M. I. A. A. to hold its special field day at that place on the fair grounds early in October. Wherever held the time remaining is short and there is need of immediate and earnest training encouraged by a local field day. Such an event would be especially helpful in bringing out the men of '97.

Freshmen cannot overestimate the value of a systematic training in athletics both in the gymnasium, under the military department, and on the track. Some of the freshmen would need no second urging to "come out" if they could but step out and look at their gait—careless and awkward compared with that firm tread and erect bearing that characterizes the athlete and the student who has drilled well for a term.



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STUDENTS' HEADQUARTERS FOR

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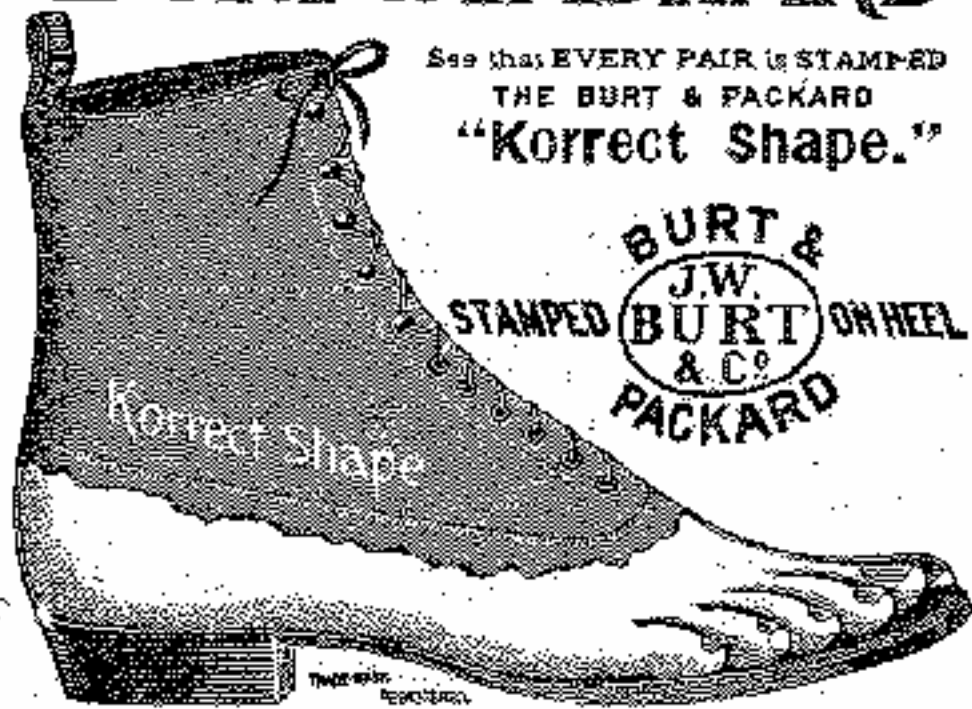
All styles at Rock Bottom Prices.

# I WAS GLAD WHEN THEY SAID UNTO ME

THE NEW CLASS THIS YEAR NUMBERS SEVENTY PERSONS.

We are beginning to feel that we are a part of the College, and we hope that our new President, Secretary, and Members of the Faculty will kindly give us some attention during the coming year.

## WEAR THE BURT & PACKARD



We are deeply interested in the affairs at the College and everything pertaining to its welfare, and more especially in its footwear.

It is pretty generally understood that Burt & Packard Korrek Shape Shoes are about the best made; very often wear a whole year—sometimes more. We appreciate the liberal patronage given us last term on this line. We expect to sell a good many more this year, and to accomplish this we have made the popular price of five dollars a pair for any of the styles. These are of the finest make of French Calf, and retail at corner of Park Place and Broadway, New York City, for eight dollars a pair. We always keep a variety of styles in Patent Leather and Kid low shoes for parties or class wear. SHALL WE SEE YOU SOON?

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WE make especial effort to PLEASE all connected with the M. A. C.

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WE carry only celebrated manufactures that are thoroughly reliable, and we guarantee every pair sold. W. L. Douglas' \$3 and \$2 shoes are the best in the world for the money. Call and look them over.

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STUDENTS' SUPPLIES.

Wire Springs at	\$2.00
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Canvas Cots at	1.50
Wire Cots at	2.00 and upwards.
Chairs at	.50 and upwards.
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Tables at	1.00 and upwards.

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We will make  
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Repairing  
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## About Advertisements.

FELLOW STUDENTS, now, as in the past, let us patronize those who patronize us. Let men who appreciate the value of our trade enough to advertise with us have our patronage. Merchants, Physicians, Publishing Houses, Business Colleges, Musical Academies, School Boards, Teachers' Co-operative Associations, and all Employment Bureaus, Barbers, Livery-men and Hotel Proprietors—all should send in their ads. to the SPECULUM. If you do not believe it, try us and be convinced.

## ELGIN MIFFLIN

THE season has arrived when you will want Outing Shirts and Lighter Underwear. In looking for a place to supply your wants I desire to call your attention to my stock, believing it the largest and finest shown in this city, and at right prices. Bicycle Hose, Belts, Sweaters, Summer Vests. My Hat Stock is unusually large and complete and when in need of anything in the line of headwear come in and let me show you through my stock. For anything in the line of Gentlemen's Fine Furnishings you will always find my place headquarters. Students patronage respectfully solicited.

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That in Footwear we can satisfy them in **STYLES, QUALITY, FIT and PRICE.**

△ **REPAIRING.** △

**J. A. PARK,**

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College Text Books and Stationery,  
Gold Pens,  
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Picture Frames and Wall Paper  
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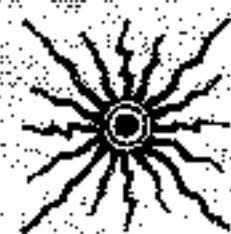
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All orders promptly attended to.

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Hat, Cap, or anything in the Furnishing  
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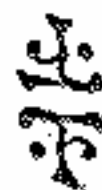
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