M. A. C. Special Live Stock Course.

JOHN A. ATCHINSON.

A short sketch of what the short course live stock men are doing, may be interesting to the readers of the M. A. C. Record.

We entered with the regular students January 3, and after finding boards, which most of the boys were fortunate to get good ones, we met President Snyder in his office and were classified.

We were then at leisure until the next day at 8 o'clock when we reported, with the Creamery and Dairy Specials, to Prof. Clinton D. Smith at the Agricultural Laboratory for lectures on stock feeding. Prof. Smith gave us very good lectures on calculating rations, silos, and feeding dairy cows. He next takes in the subject of cattle breeding and later other stock. Great stress is put upon the judgment of the feeder, or breeder, of his stock, its purpose fed for, and calculation of rations. We also have the advantage of the experience of an expert feeder, Mr. Richard Harriman, who keeps the C. G. Special Live Stock Farm of a man.

At nine o'clock on Mondays, Tuesdays and Fridays we spend one hour with Prof. E. M. Marshall at the Veterinary Laboratory in the study of bacteria, with special reference to their nature, requirements, and diseases produced by them, and how to combat them.

On Wednesdays and Thursdays we have at nine o'clock, lectures on stock breeding by Prof. H. W. Mumford. He has given us some very good practical information and selection and heredity and expects to take up other questions on the subject.

From ten to twelve o'clock daily except Saturdays we have lectures on the different breeds and stock judging by Prof. Mumford, for one hour, and practical scoring and judging stock the other hour. When we have finished his opinion of an animal, it is gone over, point by point, by Prof. Mumford, and defects and good points pointed out. These lectures are worth the cost of the whole course to any farmer who keeps stock. All the principal types are discussed and each breed classified, as beef, dairy or general purpose. We have studied Shorthorns, Ayrshires, Longhorns, Polled Durhams, Poland Chinas, Ayrshires, Galloways, and others. Prof. Mumford has purchased the M. A. C. herd, the Polled Durham, and the Ayrshire.

At one o'clock we again meet, with the creamery and dairy men, for veterinary lectures by Dr. Geo. A. Waterton, of the Michigan Agricultural College. We have studied the digestive organs of domestic animals and have a good foundation for more common diseases. To know the drugs to give and the prescriptions we have prescribed for our friends, or authority, is valuable to any man.

At three o'clock we go to the Chemical Laboratory where we analyze, in a crude manner, different food stuffs for protein, carbohydrates, and fat, under Mr. L. S. Munson.

At four o'clock we study forage plants at the Botanical Laboratory with Dr. W. F. Ford. Sometimes the boys think that there is not much in the study of grains and seeds, but I notice that we find something new every day.

At four o'clock we are left to our own devices, with the buildings tied up, and the library to read.

On Saturdays we take in the best farms and stock near the college. While we were at work in Springdale, Turner's noted farm. There is but little stock left on the farm but the buildings are, mostly, there, and a few of the specials taking of coming back next winter to take another course, they are so well rich with what we have had to do.

Hurrah! for Michigan's Agricultural College, the farmers' college.

The Greenhouse.

To the visitor or college resident, if he be a lover of the beautiful in nature, no place on the campus presents so many attractions in winter as the greenhouse. Its beauty and long benches filled with cactuses, geraniums and primroses, and yard upon yard of carpet-like foliage plants that are taking a winter's rest that they may put forth greater beauty to gladden bits of the campus when spring comes.

And we must not forget the house below the hill. It is not often seen by the visitor who wanders along about the grounds. It is not a showy place, but it has its humble attractions. There are long beds of the first annuals to come to our tables this season; hundreds of strawberry plants in bloom; a large bed of carnations, fragrant and many-colored; and violets—violets!

"Blue, bright as hope, or rides in summer fresh, pure, unmarred by stain of rain or sky."

Then doth reveal of radiant sun, of soft spring night

Then doth reveal of radiant sun, of soft spring night

What doth thine, thou, mocked by this dis-loyal day?

But yet methinks a light born of the grace and glory given as morning dawns again

Sweet messenger, hast thou some sign for me?

Some hint, I pray, if I read right?

The Greenhouse.

At three o'clock we go to the Greenhouse, which they may desire to—to teach the students about it, but it is not necessary to go there. It is a great place.

Indoor Athletic Meet.

Henry Keep and Professor Hickey, of the Lansing high school, have completed arrangements for an indoor athletic meet in the armory in Lansing, Saturday evening, Jan. 29.

At a recent meeting of the Athletic Association a resolution was adopted instructing the representatives in the M. A. A. to use his influence toward securing the next field day of the association in Lansing.

The Old State fair grounds could be used to good advantage for this purpose, but it is probable that the merchants of Lansing will do $200 to help defray expenses. P. E. Woodbridge, has been chosen to represent us in the M. A. A. and he will use every effort to bring the field day here.

At a meeting, held last Wednesday night, Miss Amy Vaughn, '97, began teaching a field day of the association in Lansing, Saturday evening, Jan. 29. Only College students and high school students will participate in the contests, and only College and high school people will be admitted to the building.

R. E. Bracket will give a medal for the all-round championship, and Lansing merchants will give prizes for the various events.

The following is probably the list of events: 50-yard dash; running high jump; running broad jump; standing high jump; pole vault; putting 16 lb. shot; feather, light, welter, and heavy weight wrestling; exhibition club-swinging, by Will Lyons; and exhibition bag-punching, by the champion bag-puncher of the State.

Night Cooking School.

Last Wednesday night Miss Amy Vaughn, '97, began teaching a special class in cooking, which is composed of young women belonging to the Y. W. C. A. of Lansing. Miss Vaughn is doing the work gratis in order to get practice in teaching this subject, which she has chosen as her profession. The class will meet every Tuesday and Thursday at 7 p.m. in the room in Lansing College. There were ten pupils last Wednesday night—two more are expected next Wednesday. There were two young brides, who have just awakened to a realization of the usefulness of the skillful, delicate, and successful art; and several teachers from the city schools, who are also aware of possible future contingencies in which they may desire to—to teach the subject.

Shall We Have Field Day in Lansing?

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At a meeting, held late last Thursday, the association appropriated half of this term's athletic dues, for the purchase of apparatus for indoor training. With this appropriation Henry Keep has purchased a twelve-foot jumping standard, one twelve-foot vaulting pole, two 3x7 side mats, and one 3x7 rubber mat for the take-off in jumping.

Constitution of the Club Boarding Association Amended.

At a meeting of the Club Boarding Association Saturday afternoon, two amendments to the constitution that provoked a pretty warm discussion were considered and finally adopted. The first amendment, changing the price of dinners, to transients, from 25 to 30 cents, did not meet with much opposition; but when it came to the second amendment, cutting the wages of cooks from 40c to 35c per week for each boarder in the club, there were several present who were prepared to oppose the measure. They thought the cooks were getting little enough for their long hours of labor; but the first amendment was adopted, by figures that they had ready, that the cooks were all getting good wages and that one, in particular, had received over $200 last term, clear of help hired, board and rooms.

There has been quite a demand for a curtailing of expenses in the clubs, in order that cheaper board might be furnished, and the sentiment supporting this demand finally carried.

Her smile was most bewitching.
As he did not know her name.
And she made a great impression.
But she made it on his hat. — Ex.

"A romantic young man says that a woman's heart is like the moon—it changes continually, but it always has a man in it."
During the last two years determinations of the proportion of moisture and the effect of various soils in various conditions, and experiments upon methods of saving the moisture of soils have been under observation at the Experiment Station of the Kansas State Agricultural College.

A recent bulletin devoted to the subject concludes with the following summary:

"The following experiments are described—all of them are regarded as preliminary, and not carried to a conclusion:

1. A study of the difference in the condition of moisture of soils which differ only by the preparatory tillage they have received. In these trials, the undisturbed prairie soil, as compared with that which had been brought under cultivation, was much dryer in all cases, except following a heavy rain. In the wheat, the part sampled of the sod, the upper portion, was about as wet as the ground, but it had dried out again. The plowed ground, not cropped nor cultivated during the season, was more uniform, and it was evident that the sod was persistently in better condition.

2. A comparison at the close of the season of the moisture content of ground that had been prepared in the spring by shallow plowing, by deep plowing, by subsoiling. The soils were sampled at different depths. No essential difference could be observed in the soil.

3. A trial to see whether soil to which salt and gyspum have been applied are more moist because of any direct or indirect effects of these chemicals. The results are negative.

4. A comparison of the loss of water from soil that was treated as follows: Cultivated, but not cropped, mulched, but not cropped; cropped, but not cultivated. The cropped soil dried out most rapidly.

5. Experiments with soil in gavainized iron pots, under well controlled conditions, showed that a layer of finely pulverized soil three-fourths inch thick had no marked influence on the rate of evaporation; that a hay mulch two inches thick checks evaporation most effectively, but that evaporation proceeds at a rapid rate from bare soil that a mulch, to be most useful, must be promptly applied; that the rate of evaporation from a sandy soil is less than that from one less sandy where both are kept constantly wet, but if allowed to dry, the sandy soil becomes much drier; that neither salt, gypsum, lime nor magnesium chloride exerts any beneficial effect in checking evaporation from the soil, the evaporation being practically the same as from untreated soil.

Yeast, its Manufacture and Use.

KATHERINE McCOY, '99.

The microscope has shown that yeast is a true plant belonging to the fungus tribe and consisting of a number of minute oval or spherical bodies which, under circumstances adapted to their development, grow and multiply to an incredible extent. These little cells multiply by budding, and their growth is very rapid.

The yeast plant requires, for growth, warmth, moisture, and nourishment. The temperature at which it is best cultivated is from 70 to 80 degrees F. A lower temperature, even freezing, does not destroy the yeast, but arrests its development; while raising it to a higher temperature weakens it. A temperature of 140 degrees destroys the cells in yeast suflaced with water but, in dry yeast, it may become higher. For the nourishment of yeast we have 10 parts of malt or sugar, 1 part of water, 1 part of yeast forms and rises to the top. This is all skimmed off, but the first cells formed as well as the last should be rejected. Bacteria which may be present, are, from their small size, floated up to the surface with the yeast content of the sod, and, as the fermentation slackens, cells which have been grown in a comparatively oxygenated fluid, are thrown to the surface. The yeast, when skimmed, should be stored in shallow vats, so as to admit of free access of atmospheric oxygen, the thorough aeration of which is essential.

Distillers' or Compressed yeast is the principal product of the manufacture of spirits from malt and raw solvent. After the grapes have gone through quite a complex process, the yeast is rapidly cooled and fermentation is allowed to continue for ten to twelve hours before it is skimmed. The yeast rises to the surface the same as in Brewers' yeast.
Professor Smith has been invited to address the National Association of Creamery Butter Makers at Topeka, Kansas, February 22.

The Lansing Condensed Milk Company have ordered 2,000 copies of the recent bulletin on Feeding Dairy Cows, to give their patrons "old boys." George W. Tower, Thursdays from 5 to 6 p.m. in the armory, under Miss Franc Burch, of Lansing.

The King's Daughters will meet tomorrow afternoon with Mrs. Guston, lesson, the twelfth chapter of Acts, Text, "Come," Leader, Mrs. Gunson.

Two of our special course students may be considered among the "old boys." George W. Tower, Detroit, is 62 years old, and J. B. Baker, Armada, is 60 years old.

Why would it not be well to extend the cause of our increased attendance.

Pleased With the Military

Have cut the price of Men's House Coats to, and on some below cost. Not often you have such an opportunity of buying a nice coat for so little money.

When you want that New Hat or Cap would have great pleasure in showing you the very latest styles. Students patronage solicited.

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Next best been from the good old

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Remnants of Carpets, Matting, etc., at 33 per cent. Reduction.

 Entire stock of Ladies' and Misses' Winter Jackets reduced to $5.00 and $7.50 each, from $10, $12, $15, $18. Sale prices in every department until Feb. 1st. Students and members of Societies are cordially invited to attend this sale.

Full Dress
Reduced to $3.95

High grade imported Patent Leather—black as midnight, but so bright you can see your face in it; coin toe, pointed toe or plain globe. Kid tops or fancy cloth tops.

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C. D. WOODBURY.

PHOTO P.
News from Graduates and Students.

A. T. Cartland, '97, called at Col­lege Saturday.

C. A. Graves, with '97, is prin­cipal of the Ridgeway public schools.

Prof. U. P. Hedrick, '93, is pleased with his new home in Logan, Utah. He says the college is best selected and has some very fine buildings.

John W. Tracy, '96, visited friends in the city and at M. A. C. last week. He has recently taken a trip through Boston, New York, and has friends in the city and at M. A. C.

Agriculture has just issued a bulle­tine, "Moisture" by Lyman J. Briggs, '93, Physicist of the Division of Soils.

Physicist of the Division of Soils.

The work is a carefully prepared, technical treatment of the subject, and is considered a valuable contribution to science.

Prof. F. B. Mumford, '91, of Missouri Agricultural College, has made a great hit with a score card for cattle that go well for use in his classes. The front of the card is like one used here, but the back covers an outside of a typical beef animal, showing the location of the various cuts and their values in Chi­cago markets. The device has been made by agricultural journals all over the country and by one, The Brother's Guest, three times.

In sending a couple of weeks at the College, looking up in the library some sub­jects connected, with his work in Detroit, Mr. Powell has charge of the work in landscape gardening on the boulevards and in the park of Detroit. This city is at present giving a great deal of attention to the development of its "breathing places" and next year or two many thousand dollars will be devoted to landscape gardening.

What They Say of the College Calendar.

The 5,000 M. A. C. calendars for 1898 have been sent out, and the demand for them is so great that we could use a few thousand more if we had them. As an indication of the appreciation with which the alumni received them, we quote from a few letters which come to us:

Charles H. Robson, '95, Milan, Mich. - "I am in receipt of your beautiful calendar. I shall be pleased to do it up in the College as I understand it. I have met some of its men and believe it is doing a much needed service. Shall be glad to be of any service to you that I can." J. D. Tower, '95, Kingston, R. I. - "I beg the privilege of con­gratulate with that receipt of your most attractive calendar, which reached me this morning. I wish further to congratulate you upon your phenomenal success in college work this year. Hurrah for C. L. Leaing may she wave! I am anticipating the pleasure of a visit to my home and the College before 1898 rolls by."

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January 18, 1898.

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