THE ROUND-UP.

The programs for the Round-Up Institute are now ready for distribution. Prof. Taft has been very fortunate in securing such a list of talent. Ex-Senator W. A. Harris is in charge of the arrangement. Prof. Taft has been very kind in allowing the Institute at his disposal.

Although Central Michigan is out of the peach belt of the state, yet throughout the entire state are scattered good peach growing communities. The peach in Central Michigan, grown on a sandy soil as in the western part, does best on a clay loam. The method of cultivation and general care are similar to those employed in the peach belt. The orchards are freed from all weeds or material which might furnish a harbor for disease during the winter. These do great damage to the trees if given opportunity. The pests which the grower has to contend with are, the borer, curl leaf, brown-rot and black mildew. The black mildew is the most injurious. The appearance of the fruit but does not affect the eating qualities. Most of the fruit of this part of the state is sold in local markets, which are often flooded with inferior fruit from large peach markets.

The Club has been having very good talks this term with increased attendance. These good things will continue during the year.

HOTICULTURAL CLUB.

A goodly number of students from Peach Growing in Central Michigan, by C. P. Reed, '01, last Wed-

The Club has been having very good talks this term with increased attendance. These good things will continue during the year.

Y. M. C. A.

Mr. R. N. Bates led the Thursday evening prayer meeting. Theme: "The voice of God in this generation," Messrs. George McMeekin, O. B. Burrell and George White each discussed certain correlated divisions of the above topic. The discussions were good and the meeting was a success.

Rev. R. C. Dodds of Lansing spoke in chapel Sunday morning from Psalm 119: 95-105, "Wherever shall a young man cleanse his way! By taking heed thereto according to thy word, I shall be free from all weeds or material which might furnish a harbor for disease during the winter. These do great damage to the trees if given opportunity. The pests which the grower has to contend with are, the borer, curl leaf, brown-rot and black mildew. The black mildew is the most injurious. The appearance of the fruit but does not affect the eating qualities. Most of the fruit of this part of the state is sold in local markets, which are often flooded with inferior fruit from large peach markets.

The Club has been having very good talks this term with increased attendance. These good things will continue during the year.

ATHLETICS.

M. A. C. played the teachers at 1 p.m., attendance and general interest. Cox and Manning scored the most points for the Frosh. Forty Steinman and Small did well for the sub-freshmen. About 20 took part on the track meet between the juniors and freshmen, and the freshmen and sub-freshmen was an interesting contest. Cox and Mann- 

O. C. scored 22 points.

The juniors and freshmen will play in the championship in the near future.

The in-door track meet between the freshmen and teachers was a one-sided and lacklack any special features. Yapilow secured one point on each of his half. M. A. C. scored 22 points.

The freshmen and teachers will play in the championship in the near future.

ORATORICAL CONTEST.

The seventeenth oratorical contest was a decided success, both in number of audience present and in the quality of the orations delivered. The contest was well attended and the orations delivered were of high quality. The orators were well prepared and the orations were interesting and helpful and the audience present good.

Prof. C. D. Smith gave a very interesting talk before the union meeting of the Y. W. W. and Y. M. C. A. Sunday evening.

The address consisted in a character sketch of Rev. William Williams, founder of Rhode Island. Roger Williams was the first propagator and has been the first propagator of the science. He was banished from the Massachusetts colony because of his dangerous views. Sheltered and befriended by the Indians, he later went to Providence, R. I. That address gave account of some of the world's benefactors and friends and of what we might enjoy freedom.

FARMERS' CLUB.

At the regular meeting of the Farmers' Club a large number of short-course students were present and a marked degree of interest was shown by them. R. C. Potts read a paper entitled "The Future Live Stock Industry of Michigan," in which he spoke of the promising future for the live stock industry in this state, and also of the better condition of the soil in Great Britain where live stock was reared as a principal object, as compared with that of Michigan, where the raising of crops has been carried on with considerable success in producing live stock. In the discussion that followed the fact was brought out that thousands of dollars of cattle could be purchased almost as cheaply as cattle raised for slaught-

ering.

In the college army, the juniors defeated the sophomores 17 to 7.

The juniors and freshmen will play in the championship in the near future.

The in-door track meet between the freshmen and teachers was a one-sided and lacklack any special features. Cox and Manning scored the most points for the Frosh. Forty Steinman and Small did well for the sub-freshmen. About 20 took part on the track meet between the juniors and freshmen, and the freshmen and sub-freshmen was an interesting contest. Cox and Mann-

O. C. scored 22 points.

The juniors and freshmen will play in the championship in the near future.

ORATORICAL CONTEST.

The seventeenth oratorical contest was a decided success, both in number of audience present and in the quality of the orations delivered. The contest was well attended and the orations delivered were of high quality. The orators were well prepared and the orations were interesting and helpful and the audience present good.

Prof. C. D. Smith gave a very interesting talk before the union meeting of the Y. W. W. and Y. M. C. A. Sunday evening.

The address consisted in a character sketch of Rev. William Williams, founder of Rhode Island. Roger Williams was the first propagator and has been the first propagator of the science. He was banished from the Massachusetts colony because of his dangerous views. Sheltered and befriended by the Indians, he later went to Providence, R. I. That address gave account of some of the world's benefactors and friends and of what we might enjoy freedom.

FARMERS' CLUB.

At the regular meeting of the Farmers' Club a large number of short-course students were present and a marked degree of interest was shown by them. R. C. Potts read a paper entitled "The Future Live Stock Industry of Michigan," in which he spoke of the promising future for the live stock industry in this state, and also of the better condition of the soil in Great Britain where live stock was reared as a principal object, as compared with that of Michigan, where the raising of crops has been carried on with considerable success in producing live stock. In the discussion that followed the fact was brought out that thousands of dollars of cattle could be purchased almost as cheaply as cattle raised for slaught-

ering.

In the college army, the juniors defeated the sophomores 17 to 7.

The juniors and freshmen will play in the championship in the near future.

The in-door track meet between the freshmen and teachers was a one-sided and lacklack any special features. Cox and Manning scored the most points for the Frosh. Forty Steinman and Small did well for the sub-freshmen. About 20 took part on the track meet between the juniors and freshmen, and the freshmen and sub-freshmen was an interesting contest. Cox and Mann-

O. C. scored 22 points.

The juniors and freshmen will play in the championship in the near future.

ORATORICAL CONTEST.

The seventeenth oratorical contest was a decided success, both in number of audience present and in the quality of the orations delivered. The contest was well attended and the orations delivered were of high quality. The orators were well prepared and the orations were interesting and helpful and the audience present good.

Prof. C. D. Smith gave a very interesting talk before the union meeting of the Y. W. W. and Y. M. C. A. Sunday evening.

The address consisted in a character sketch of Rev. William Williams, founder of Rhode Island. Roger Williams was the first propagator and has been the first propagator of the science. He was banished from the Massachusetts colony because of his dangerous views. Sheltered and befriended by the Indians, he later went to Providence, R. I. That address gave account of some of the world's benefactors and friends and of what we might enjoy freedom.

FARMERS' CLUB.

At the regular meeting of the Farmers' Club a large number of short-course students were present and a marked degree of interest was shown by them. R. C. Potts read a paper entitled "The Future Live Stock Industry of Michigan," in which he spoke of the promising future for the live stock industry in this state, and also of the better condition of the soil in Great Britain where live stock was reared as a principal object, as compared with that of Michigan, where the raising of crops has been carried on with considerable success in producing live stock. In the discussion that followed the fact was brought out that thousands of dollars of cattle could be purchased almost as cheaply as cattle raised for slaught-

ering.

In the college army, the juniors defeated the sophomores 17 to 7.

The juniors and freshmen will play in the championship in the near future.

The in-door track meet between the freshmen and teachers was a one-sided and lacklack any special features. Cox and Manning scored the most points for the Frosh. Forty Steinman and Small did well for the sub-freshmen. About 20 took part on the track meet between the juniors and freshmen, and the freshmen and sub-freshmen was an interesting contest. Cox and Mann-

O. C. scored 22 points.

The juniors and freshmen will play in the championship in the near future.

ORATORICAL CONTEST.

The seventeenth oratorical contest was a decided success, both in number of audience present and in the quality of the orations delivered. The contest was well attended and the orations delivered were of high quality. The orators were well prepared and the orations were interesting and helpful and the audience present good.

Prof. C. D. Smith gave a very interesting talk before the union meeting of the Y. W. W. and Y. M. C. A. Sunday evening.

The address consisted in a character sketch of Rev. William Williams, founder of Rhode Island. Roger Williams was the first propagator and has been the first propagator of the science. He was banished from the Massachusetts colony because of his dangerous views. Sheltered and befriended by the Indians, he later went to Providence, R. I. That address gave account of some of the world's benefactors and friends and of what we might enjoy freedom.
The more rapid development of acid in A + B indicates the same results obtained from the gross tests and also points to a marked decrease in the amount of milk in the combined culture.

The next natural question is, do the lactic acid bacilli increase more rapidly in the combined culture A + B than in A? Many counts are given, but in these cultures at different hours during the progress of the changes going on, and they all plainly show a much greater increase of lactic acid bacteria in the combined culture than in culture A. At the time of lopping the members show their great contrast, we find A1 : A1+B = 7 : 1614.

Again in another exhaustive count the proportion stands thus: in A1 = 37,159,352; this counts again bear out what has been stated heretofore.

It is also very noticeable that germs of culture A, as they develop in the combined culture A + B, die out comparatively gradually up to the 50th hour. In the first hours they predominate but soon lose their ascendency, leaving the way for a distinct influence in their wake and also a perceptible odor peculiar to this culture.

If this associative action is borne out with other similar mixtures of cultures when grown in the presence of lactic acid bacteria, the significance is great, for it will have a direct and practical application to dairy operations, in the matter of pure milk supply, souring of milk, starters and their management.

Before further discussion, I am desirous of ascertaining how far reaching this may be and this can be accomplished by extensive experiments only. The conditions must now be greatly varied and the various germs usually met with in the dairy must be tested. Other and association before this, these conclusions should be drawn for guidance.

ADDRESS OF DIRECTOR BREWER BEFORE THE GENERAL TEACHERS' MEETING ON TUESDAY, JAN. 26.

In writing this paper to offer to you, I divided the subject into two distinct parts. First I will try to give you an outline and description of the work my department is doing with the young men of our college. The second part of my paper will take up the subject of college athletics in general and their place in and relation to the college and its work.

It is the general agreement among scholars that each individual in coming to adult life must pass through stages of preparation and development, culminating in the development of the race from the earliest forms. This view of growth is particularly true of those who have had physical training for it has been through physical struggle of various kinds that the body has acquired the mind has come to its present structure and functions. The cultivation of the body is then a necessary antecedent which must accompany and be basal to all development of mind and character. Among animals and savages this training of the body is carried on in an unconscious way by means of the natural plays and sports of each species, but with the advancement of civilized life we are seeing a new condition. We are compelling children to go to school earlier and earlier in life and at school they must sit still. They must go to school for more and more months and more and more years so the natural activity of childhood is being naturally lessened. As a result of these changes of life there is a growth in city life. One hundred and thirty years ago but three per cent of our population lived in cities. Today it is a majority. City life has less opportunity for muscular exercise and consequently for country life.

Aristotle, more than two thousand years before Christ, said: "The highest and most perfect happiness (the greatest good) must be sought by the soul not in the body but in the mind."

If we cannot reach the ideal we can aim high. The healthy brain is found only in the body whose physical integrity is beyond doubt, and brain work or mental activity depends on a very great extent on physical health. Good circulation and good digestion. The power of any young man to perform work, whether physical or mental, depends upon the proper energy through the cells of the brain, and when this energy is used up the man is used up too. A healthy body furnishes pure blood to the brain, in which many cases will compensate for the lack of

CONTINUED ON LAST PAGE.
Hardware

OF ALL DESCRIPTION.

Stoves

OF ALL SIZES.

Our Goods are Right

Our Prices Low

College bus calls regularly.

Telephone your orders.

Norton’s Hardware,

111 Washington Ave. S.

THE M. A. C. RECORD.

Furniture...

Headquarters

COMPLETE LINE OF
FURNITURE FOR
STUDENTS’ ROOMS

Canvas Cots at 55c. Woven Wire
Cots at $1.50. Woven Wire
Springs at $1.50, $2.00, and
$2.50. Mattresses at $3.00, $3.50,
and $5.00. Tables at 43c and
$1.35. Chairs at 50c up.

All goods delivered
to your room free.

M. J. & B. M. Buck.

THE JEWETT & KNAPP STORE

Lansing’s Low Priced Reliable Store

Every Department full of New Fall Goods.

New Dress Goods, Silks, Laces, Gloves, Hosiery, Underwear, Silk
and Cotton Shirt Waists, Muslin Underwear, Dress and Walking Skirts,
Tailor Made Suits, and Jackets.

We also carry a Complete Stock of
Lace Curtains and Draperies.

Jewett & Knapp,

222, 224 Washington Ave. S.

THE JEWETT & KNAPP STORE

Lansing’s Low Priced Reliable Store

Every Department full of New Fall Goods.

New Dress Goods, Silks, Laces, Gloves, Hosiery, Underwear, Silk
and Cotton Shirt Waists, Muslin Underwear, Dress and Walking Skirts,
Tailor Made Suits, and Jackets.

We also carry a Complete Stock of
Lace Curtains and Draperies.

Jewett & Knapp,

222, 224 Washington Ave. S.

A SORORIAN SOCIETY pitt has been
found. Owner can call for same at
the Secretary’s office.

The dairy department makes
about 100 pounds of butter a day.
The special students do the work
and thus secure constant practice.

The special students do the work
found. Owner can call for same at
the Secretary’s office.

The mechanical department
makes about 100 pounds of butter a day.
The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.

The special students do the work
and thus secure constant practice.
power to apply the mind. We all know the student who is deficient in health cannot compete with the one who is endowed with a healthy body. The world's greatest educators, from Plato to the present time, have recognized the value of activity or exercise in one form or another as necessary to success in learning. No matter what his occupation, lawyer, minister, mechanic or farmer, he gets ahead who combines strength of body with a healthy mind. The body and mind are interdependent; they act and react on each other and the development of one subject helps the other, but is imperative, if the man is to be well equipped for life.

For these reasons as well as for others, colleges, high schools, and others interested in the developing of the boy into the man, recognize that it is their duty to give particular attention to the development of the body. Today eighty-five per cent of college men recognize this need by requiring all of their students to take a more or less rigid course of physical training or its equivalent training.

In our institution physical training is not demanded of the young men. However, to take its place in the military drill and optional physical training and athletics. During the fall term the work consists almost entirely of football. In our first or freshman class we number about forty. In addition to this we have five classes of freshmen to fifteen to twenty each. This work is continued in this sport during the fall, from 100 to 125. I will not discuss the grades or classes of college sports as a football and its relation to the college and its life I will take up a little later.

The winter term, while the work does not show in comparison with the open athletic season, I consider the most important of the three terms for the reason that during the winter months the students generally get less exercise than at any other time. This term I have endeavored to make a study of about one-half of our young men. The several lines of work among which these students can choose athletics, comprising all the sporting events, hurdles, jumps, weights, etc., base ball, track, football and gymnastic squad. In addition I am offering a gymnasium for those who take no interest in athletics. In this class, Indian gymnastics, I am trying to develop big muscles, as the promotion work as shall tend, not so much to any of our athletic sports. The work in this class consists of Indian gymnastics, which is very laborious, but helps the other, but is imperative, if the man is to be well equipped for life.

The names in this directory, as well as most of all our other advertisements, are from different parties. We hope that the faculty and students will take an interest in patronizing those who patronize us.

BARRIERS.

M. A. C. BARRIER SHOP. Rooms in New Hall, M. A. C. stone. Phone 10.

BOOTS AND SHOES.

P. D. WOODBURY — Boots and Shoes. We sell the best.

CLOTHING.


CROCKERY AND GLASSWARE.

H. L. HARTMAN — China, Glass and Lamps, 106 Wash. Ave. S.

DENTISTS.

G. C. BARBER — Barber Shop, Rooms in New Hall, H. A. Sias, Proprietor.

DRUGGISTS.


JEWELERS.


MUSIC, PIANOS, ETC.

F. GORDON & CO. — Bookbinders, Blanket, Melody, Effect and Art Binding. Also Manufacture of photo albums, display books, Clerk Cases and Tablets. Tennis, Fairhall and sporty good, quality, 260 Wash Ave. N.

PUBLISHING GOODS.

BLAINE SMITH — Lawn and Gentlemen's Fashionable Underwear. See ad.

FURNITURE DEALERS.

M. A. & M. M. ROCK — Furniture, 209 Washington Ave and East Street, See ad.

HACK AND RAGGAGE LINES.

D. J. HADLEY & CO. — Livery, 109 Washington Ave. S.

HARNESS AND STOVES AND TINWARE.

NORTON'S HARDWARE & General Hardware, 106 Wash Ave. S. Former M. A. C. student, Colby.

INSURANCE.

C. W. DUBOIS — Insurance, 115 Wash Ave. E.

JEWELERS.


MISCELLANEOUS.

M. 0. M. 218 Washington Ave. S. Phone, 10.

MERCHANT TAILORS.

R. H. LARABEE — Tailor. 325 Washington Ave. S.

PHOTOGRAPHS.

S. H. MILLER — Photographs, 106 Washington Ave. S.

PLUMBERS.


SPORTING GOODS.


R. H. LARABEE — Tailor. 325 Washington Ave. S.


PLUMBERS.


SPORTING GOODS.


R. H. LARABEE — Tailor. 325 Washington Ave. S.