

The M. A. C. Record.

VOLUME I.

AGRICULTURAL COLLEGE, MICHIGAN, TUESDAY, JANUARY 28, 1896.

NUMBER 3.

ECHOES FROM THE INSTITUTES.

Parma.

The institute at Parma was bright, lively, and well attended. Numbers at meetings averaged 300 to 500. All that was said was sound, solid, and wholesome. We cannot too strongly commend the way in which the business was conducted. The presiding officer knew his duties, the secretary's reports were eminently lucid, comprehensive, and to the point, and the people were well trained in parliamentary procedure. They knew, too, when they had something to say, and how to say it; and when they had said it they sat down. *All due to the training of farmers' clubs.* They are many and well organized in Jackson Co.

The ladies of the clubs fed about 200 people each in the basement of the church, and did it deftly, attractively, and abundantly. The entertainment committee was omnipresent and full of resources. In this respect the institute was a model one. Organization and steady work did it. *Farmers' clubs taught them how.*

A good suggestion that from Mrs. Chapel, of Concord, that competent young men could earn a pretty penny during vacations by making accurate plats of farms in a given neighborhood at a reasonable price. Such plats are necessary for good farm bookkeeping. Our boys may make a note. Properly solicited, such work would take.

"The Senate of the United States has no farmer in it; the House of Representatives has only four."—*Ex-Gov. Luce at Parma.*

What a power the old Ex-Governor is among the farmers. The house "rose at him" time and again. His words for the College were sound, temperate, and helpful. They were worth more to the College among those farmers than whole speeches from dozens of professors. The spell of the old man's eloquence, and the sturdy character that men know to be behind it, are as potent as ever in swaying audiences.

"Love of the horse has been a potent factor in developing the societies for the prevention of cruelty to animals."—*A. W. Haydon at Parma.*

"The horse contributes more to the happiness, convenience, and comfort of man than any other factor."—*A. W. Haydon at Parma.*

"There hasn't been a lawsuit between farmers in Branch county for ten years. They arbitrate."—*Gov. Luce at Parma.*

Interest in the College at Parma was strong, feeling not always friendly, but always intelligent and conservative.

Adrian.

The attendance at Adrian was excellent as far as the weather permitted, but on the second day a hard sleet and rain set in, and reduced the attendance somewhat. Here again we find a remarkably intelligent and ready body of men. The questions asked and the speeches made are pointed and well expressed. Here again, the grange is a flourishing organization. Draw your own moral.

"There is more in the feed and care of sheep than in the breed."—*H. W. Mumford at Adrian.*

"To secure returns in fattening we must have a quick-growing, early-maturing sheep."—*H. W. Mumford at Adrian.*

The subject of rape elicited many questions, and a lively interest was developed.

"A friend and I stood upon Prospect Hill and looked with a glass over the landscape outstretched. Of the many lakes within view, we could see only the one at the foot of the hill and that seemed indistinct and far away. The green of the distant forest was a mere blur and the lines of streams, and hedge, and highway made but a tangled web. What was the trouble? For we knew from long ago the gorgeous beauties of the view. Was it in atmosphere, or in eye, or in instrument? We examined the telescope, we lengthened and shortened it. By a happy chance we turned it end for end and then we saw. We had been looking through the wrong end of the telescope. The pessimistic farmer is looking at farm life through the wrong end of the telescope. Let us be brave, hopeful, cheerful, and honor our calling."—*W. H. Moore of Palmyra, at Adrian.*

"Finally, farmers' institutes give the dear men such a good opportunity to air their opinions."—*Mrs. Eliza Beth Newton at Adrian.*

The Thursday afternoon session of the institute was the most lively and interesting attended so far on this

trip. These men are ready, armed and equipped, and they do not fear to set the lance in rest.

The institute has been marked by several unusual events. The county clerk yesterday sent a double marriage party into the court room to be married. Proceedings were suspended, the marriages were solemnized, and the young hearts were heartily cheered on their way. Today a ready talker took up a collection for the seamen's Bethels.

J. W. Helme, of Adrian, read a paper that was unique in its frankness of statement, on municipal, county, and state affairs. He nominated Geo. B. Horton for governor, and announced Pingree as his second choice. Mr. Horton has a right to feel proud of the enthusiastic reception given his name. His strictures upon city and county officials were direct and scathing. Such a paper in other assemblies might breed serious ill feeling. The paper concluded: "If you want to see how little patriotic effort is appreciated, just watch the partisans climb on my collar during this discussion."

"Partyism has got this country by the throat."—*Mr. Quick, at Adrian.*

School Commissioner Keeler's paper was full of thought and was well written, but was intemperate and sweeping in its statements, especially towards members of the Legislature and the Congress. Strong epithets hurt without convincing. He "has no quarrel even with our Agricultural College, although periodical outbreaks of trouble in faculty and board of control lay it open to criticism of friends and foes alike." The tone throughout was lugubrious, though the thoughts were in the main true and wholesome. Mr. Keeler's reply to some attack upon him, was admirable in every way. It was dignified, temperate, timely. He did credit to head heart alike.

President Thomas' "Sermon" was a jewel in its way. "If the iron be blunt, and ye do not whet the edge, ye must put to it the greater strength. * * * Today one must have knowledge and capital to set to farming. Farmers must become a professional body of men, they must educate their men to loyalty and devotion to their profession. This is a day of specializing—the farmer must specialize in preparation for his life work. The noblest way to make a living is on the farm." We lift our hat to President Thomas for the graceful and cordial way in which he seconded our efforts before the audience. It was a knightly courtesy which we shall not soon forget.

PRESS COMMENTS.

Great Interest in Farmers' Institutes all Over the State.

After the Institute at Harrisville, the *Review* makes the following comments:

"Institutes are good things.

"Push them along.

"The audience take a lively interest and are not a bit backward about quizzing the speakers.

"The college lecturers are mostly young men but they are bright and practical and most of them are farmers by birth, training and experience."

The *Hart Journal* says the Oceana Co. Institute was "a grand success;" "the slightest glance would dispel any theory of non-interest on the part of the farmers of this county." Continuing it says:

"The Women's Branch of the Farmers' Institute conducted by Mrs. Mary A. Mayo of Battle Creek was held on Tuesday afternoon at Temperance Hall at 2:00 o'clock with over 200 ladies in attendance. Mrs. Mayo in her greeting said it was very gratifying to meet so large an audience, the largest attendance of any meeting that she had yet addressed since in the Institute work. Mrs. Mayo is a wide awake, inspiring speaker. * * * * *

It is desired by Hart women that the women's branch of the Farmers' Institute be kept in existence, and that Mrs. Mayo will again return and address them on like subjects."

The *Tuscola Co. Advertiser* says of the Institute at Caro:

It's a big success,—the initial Tuscola County Farmers' Institute. Attendance very large, and the Institute the source of much valuable instruction.

We clip also from the *Free Press*:

Caro, Mich., January 18.—The first annual farmers' Institute for this county closed today. To Mr. Gladden, the conductor, Dr. Beal, and assistant professors from the M. A. C., is due the credit of presenting a successful and interesting program. Farmers attended from all

parts of the county. Discussions were general and opinions hotly contested.

The Newaygo Co. Institute at Fremont was largely attended and abounded with good papers and sharp discussions. The *Fremont News* summarizes by saying:

"This was, perhaps, the most profitable Institute ever held in Newaygo county."

Well Attended in Kalamazoo County.

Kalamazoo, Mich., January 22.—About 400 people attended the state farmers' institute conducted by Prof. L. R. Taft, at Cooper today. It was given under the auspices of the Kalamazoo county Farmers' Club, Wm. Strong, president. Dr. W. F. Sherman gave the address of welcome. The dairy and the production of cream and butter were subjects for this afternoon by J. H. Brown, Climax; A. J. Bliss, Silver Creek, and H. E. VanNorman, of the Agricultural College. Prof. Kedzie spoke of commercial fertilizers; Mrs. Squire Little, of life on the farm, and this evening Prof. A. B. Noble, of the college, spoke of reading in the farm home; and Prof. W. S. Holdsworth, also of the college, of art on the farm.—*Free Press.*

Good Papers Read at Ionia.

Ionia, Mich., January 22.—A state farmers' institute is in progress in this city today. It is being conducted by Prof. W. B. Barrows, of the Agricultural College, and participated in by all the leading farmers in this vicinity. The opera house was crowded to overflow today.—*Free Press.*

Among the local speakers at this institute were four of our alumni: W. W. Bemis, '76; E. H. Hunt, '77; L. B. Hall, '82, and A. R. Locke, '91, C. I. Goodwin, '77, is secretary and treasurer of the Ionia Co. Farmers' Association. The *Ionia Sentinel* says the address of welcome was omitted for lack of time. The program was opened by a selection of music and "a short opening address was then listened to by Prof. W. B. Barrows of the Agricultural College, who is conducting the institute."

THE ROUND-UP INSTITUTE.

Gov. Rich will give the opening address of the round-up institute at Grand Rapids, at 7:30 p. m., Tuesday, February 11. The lectures for that evening will be given by Dr. Howard Edwards of the College, on "The Purpose of the Agricultural College;" and by W. L. Rossman, State Analyst, on "Food Adulterations." Wednesday will be devoted to fruit topics, including "The Cultivation and Care of Peaches," by Roland Morrill; "Marketing Peaches," by Hon. R. D. Graham; and "Peaches in the Interior of Michigan," by H. P. Gladden; "Bees and Horticulture," by Prof. W. B. Barrows; "Currants and Gooseberries," by J. N. Stearns; "Strawberry Growing," by R. M. Kellogg; and "The Value of Spraying," by Prof. L. R. Taft. The evening session will be devoted to the discussion of "The Farm Home Reading Circle," by Prof. H. W. Mumford; "Forcing Vegetables Under Glass," by Thomas Gunson; and "A Plea for Unity of Action Among Farmers," by Hon. F. W. Redfern of Maple Rapids.

Thursday will be stock and dairy day. Mr. H. W. Mumford will present "Economic Methods of Sheep Feeding;" Hon. W. E. Boyden will be asked to give a paper on "Will Feeding for Beef Pay in Michigan?" and Hon. Wm. Ball will present "Practical Methods in Stock Breeding." Addresses on "The Dairy Herd," both as to "Breeding" and "Feeding and Care," and on the "Babcock Tester," will be given by Prof. C. D. Smith and J. H. Brown. An illustrated talk on "Making Good Butter" will be given by G. H. True. In the evening Prof. Smith will discuss briefly "The Michigan Experiment Station;" Prof. P. B. Woodworth will give a warm talk on "The Boiling Point;" and Dr. Beal has an illustrated lecture on "Forest Fires."

Friday will be general crop day. Hon. A. C. Glidden is expected to present the topic of "Water in the Soil;" Prof. F. S. Kedzie, "Commercial Fertilizers—is their use Profitable for the General Farmer?" Hon. I. H. Butterfield, "The Present Standing of Ensilage as a Food for the Various Kinds of Stock." Mr. I. N. Cowdrey will give a talk on "Growing Potatoes," and A. A. Crozier, of the Agricultural College, will talk on "Forage Crops." Dr. R. C. Kedzie will present his interesting talk on "Wheats for Michigan." In the evening Prof. W. S. Holdsworth will entertain and instruct the audience with his "Art on the Farm," and Ex-Governor Luce will close the institute with the topic "The Farmer's contribution to Society."

This program is subject to change, both as to topics and lectures, but the outline given above represents about what will be presented. Further announcements will follow.

The M. A. C. Record.

PUBLISHED WEEKLY BY THE

MICHIGAN AGRICULTURAL COLLEGE

EDITED BY THE FACULTY.

SUBSCRIPTION, 50 CENTS PER YEAR.

PRESS OF ROBERT SMITH & CO., LANSING, MICH.

We devote a large part of our space this week to echoes from the institutes. The RECORD intends to make most prominent in its columns each week, that which has been most prominent in the activity of the College population. At the opening of the present month, our men have come hurrying back from College and University, where they were writing, studying, and comparing, that their own work for the coming year might be fresh, vigorous, and up-to-date; or from the homes of dear ones far away, whose hearts had grown sick with longing, and whose frames had visibly ripened for the grave during years of absence; and like a well trained army at the signal for battle, without a balk and without a murmur, under the brilliant leadership of our Superintendent of Institutes, have taken their places and met the duties of the hour with readiness, tact, and effect. The College walks are deserted and the halls are silent, but all over this broad state our men are at work and the cause of agricultural education is advancing with great strides. It is a great Agricultural College extension movement—this institute work—and as such our hearts are in it.

Side by side with our men, and striking giant blows for scientific methods and right principles for the best interests of farmers and for broader and nobler living, are tried and chosen men and women like Morrill, of Benton Harbor; Kellogg, of Ionia; Brown, of Climax; Luce, of Coldwater; Ball, of Hamburg; Mrs. Mayo, of Battle Creek; Redfern, of Maple Rapids; Sterns, of Kalamazoo; Cowdrey, of Ithaca; Graham, of Grand Rapids; and a host of others—men and women whom it is a privilege to know and an honor to have as comrades.

The institutes have been marked by concord of feeling, and unity and harmony of action. The enthusiasm awakened at every place has been phenomenal, and the testimony to the solid good accruing to those attending has been uniform. Everywhere the halls used have been crowded with the most thorough-going, wideawake, progressive men and women in the county. We congratulate the state, the workers, and ourselves on the success of so large a movement.

The RECORD is not an agricultural paper nor the immediate relative of one. Our hands are not the hands of Esau nor our voice even a distant approach to that of Jacob, his brother. No farmer worthy of the name will depend for a moment on us, even in connection with our bulletins, to take the place of his weekly agricultural papers. He must have them for his markets, for his information concerning professional interests, for his knowledge of what the great agricultural world is thinking and doing. These and a host of other things lie entirely outside of our province; but we conceive that there is for us a sphere of usefulness clearly and naturally defined; a sphere which no publication now occupies or could occupy except by being just what we are. There has been complaint that the people, the farmers of the state, know little or nothing about the College; that they are expected to uphold and support an institution that they have no way of examining or becoming acquainted with except through stiff and formal reports at long intervals. On our part there has constantly been the feeling that the purpose, scope, and actual results of our work are in a large degree unknown, misunderstood, and positively antagonized for want of a direct means of communication between our patrons and ourselves. Every other college has a definite constituency to which it can appeal for protection, for hearty encouragement, for direct support. It commends itself to this constituency through various means of communication which will at once suggest themselves to the reader. Take the Methodist College of this state, for instance. How large, earnest, capable, and widespread a body of men is it that day by day carries that school next to its heart, and is constantly working for it wherever there is need or opportunity. They know its men, they glory in its triumph, they eulogize its methods, they magnify it before the people, until the whole church loves it as a child, and holds it as the palladium of its faith. We,

too, have a constituency, a great and noble one. But they do not know our men, they hear nothing of our successes and much of our failures, they receive only wild and mocking reports of our methods. We would change all this so far as our humble power will enable us. Week by week we would come to the homes of our people and tell them what their boys are doing, how our men are thinking, talking, working, what the men who bear the imprint of the College are accomplishing, until they may feel that they know the daily life of the College, what its training is actually worth, where its weak points lie, and how welcome their kindly criticisms will be. Is it a misuse of funds, after the state has so liberally equipped and endowed a school of agriculture, to use time and money to let the farmers know where the school is and what it can do for them?

We have had many delightful papers forwarded to us from the institutes, and we only wish that our space would permit the publication of all. As it is, we have had to select such as seem best calculated to serve the purpose of the RECORD. Elsewhere will be found an excellent paper by professor J. W. Smith, of Bay City, the contents of which we commend to the attention of our readers. The question of degeneracy in the rural districts is a startling one, and we are glad that our experience enables us heartily to concur with Professor Smith on this question. Nevertheless, a culling out process is constantly going on among the farm population, and we are thoroughly persuaded that the atmosphere, the methods, the ideals of the country school and its teacher favor the tendency. An old saw asserts an intimate relation between twig bending and tree inclination.

We have an abiding faith, Brother Smith, that the College will one day offer among its undergraduates and graduates, "schoolmarm" as thoroughly devoted to agriculture and as thoroughly familiar with its ore as they will be with domestic economy—provided always the demand for them as farmers' wives is not too urgent.

We publish, this week, notice of a special civil service examination, which may be of interest to some of our graduates. We already have a large number of alumni in Washington; but there seems to be room for more.

FURNACE SLAG FOR FERTILIZER.

A few days ago I received the following inquiry: "Has there ever an analysis been made by the College Department of Agricultural Chemistry of the slag from iron ore? There are large quantities of this slag, about the smelting furnaces in the Northern Peninsula, which I have reason to believe, contain the elements of a most excellent land fertilizer, and which may be cheaply prepared for use. It is used for repairing roads about the country where these furnaces are situated, as at Newberry."

No analysis of slag from Michigan furnaces had been made, but I immediately sent for a specimen, which was received from Newberry through the kindness of R. C. Bradley, and the same has been analyzed by Thorn Smith, assistant in Chemical Department of the Experiment Station. This shows that 51.58% of the pulverized slag is insoluble in hydrochloric acid; that of materials of value as fertilizers the slag contains 14.12% of lime, 3.64% of magnesia, and only a trace of phosphoric acid. Its value therefore as a fertilizer is small, because lime and magnesia can be obtained much cheaper as marl, and in a more active form as caustic lime. Unfortunately for the farmer, but fortunately for the iron makers, the Michigan ores contain so little phosphorus that the slag which contains the impurities has almost no value as a fertilizer. The iron ores of Germany contain so large an amount of phosphorus that the iron would be of poor quality if the phosphorus were not separated; but the slag ("Thomas Slag"), is quite valuable, being ground and sold for a fertilizer at \$10 a ton.

Some years ago the question came up whether the slag from the Bessemer Converters, in which pig iron is purified to make steel, might not contain enough phosphorus to make a valuable fertilizer. A quantity of Bessemer slag was procured from Pittsburgh, Pa., and analyzed, but it was too poor in phosphorus to be of any value for manure.

Several years ago a thrifty company in Ohio undertook to make a fertilizer by grinding furnace slag, adding to it some common salt, and brought large quantities into Michigan to sell under the name of "Western Reserve Fertilizer," the retail price of which was \$22.00 a ton. Some of this stuff was secured in North Lansing, and analyzed in this Experiment Station, when it was found

that the manure value was 35 cents a ton. These results were published in the *Detroit Free Press*, and the sale of this fertilizer stopped suddenly. The proprietors promptly came to Lansing, bringing two lawyers from Cleveland and engaging a prominent Lansing attorney, and threatened to commence suit for libel for \$50,000 damages, claiming they had 800 tons in the state for sale, and that my statement had stopped their sale entirely. They demanded an immediate retraction of my published statement, with the alternative of a suit in U. S. court. No retraction was made, and they left with a promise to commence the suit "as soon as they could arrange security for costs." There must have been some difficulty in arranging for the security required, for no suit at law has been commenced. The sale of this ground furnace slag has ceased in this state entirely.

Michigan soils are too rich in lime and magnesia to justify any outlay for their insoluble silicates in the form of furnace slag. The very excellence of our iron ores forbids that there should be much value in their slags. Road building is a very suitable use of them:

R. C. K.

CIVIL SERVICE EXAMINATION.

An examination will be held under the rules of the Civil Service Commission February 13 and 14, 1896, to fill the position of Expert Agriculturist in the office of Experiment Stations, U. S. Department of Agriculture, at a salary of \$1,500 per annum. The examination will be open to men only and will include the following subjects:

Theory and practice of agriculture, agricultural chemistry, French, German, abstracting of reports of agricultural investigations, and essay writing. The examination in the theory and practice of agriculture will have special reference to field crops and will include matters relating to the history, general statistics, geographical distribution, species and varieties, culture, manuring, rotation, harvesting, curing and storage, and uses of farm crops, the conditions of climate and soils affecting the growth and improvement of cultivated plants, and the methods and results of experimental investigations in agriculture.

Persons desiring to take this examination should apply at once to the Civil Service Commission, Washington, D. C., specifying what examination they propose to take, and where they would prefer to be examined.

A MECHANICAL MARVEL.

An expert tool juggler in one of the great English needle factories in a recent test of skill performed one of the most delicate mechanical feats imaginable. He took a common sewing needle of medium size (length one and five-eighths inches) and drilled a hole through its entire length from eye to point, the opening being just large enough to admit the passage of a very fine hair.

In the beginning man was created with a funny bone and to this day he laughs in his sleeve. He is the only animal that laughs except woman, who at present laughs more than man, perhaps on account of her sleeves.—*Ex.*

Can you tell me the signs of the Zodiac? By Gemini I Cancer.—*Ex.*

AT THE COLLEGE.

Prof. Weil's office is being papered and painted.

A new brick floor has been laid in the boiler room.

H. A. Sprague, of Fowlerville, *sp. m.* in '95, is working here in the machine shop.

Miss Tena B. Wellman will be married to Mr. Archie A. Parsons tomorrow at noon.

We now have excellent lettuce and radishes on our tables—the result of sub-irrigation in our forcing houses.

We are sorry to learn that Mr. Foreman is not enjoying his vacation as well as he might. He is just recovering from a week's tussle with the grip.

Last week an attempt was made to improve the ice for skating on the pond by flooding from the drain in No. 6, but the water was so warm that it melted the ice.

In the machine shop new iron lagging has been put on both low and high pressure cylinders. The lathes are also being overhauled and repaired. The

shaper is finished and is doing excellent work. The whole interior of the shop is being painted. In the wood shop guards are being made to cover the belts and pulleys, also cases for lathe tools.

The Horticultural Department is preparing packages containing several varieties of flower seeds each, which will be sent to the rural schools of the State for school-yard adornment.

Prof. Babcock was at the College a few days last week. He came up from Ann Arbor for the purpose of moving his furniture out of the rooms that will be occupied by Mr. and Mrs. Dean.

The Misses Wheeler gave a party to their friends, the Misses Gibbs, Renner, O'Connor, Steel, and Bertha and Mamie Baker, Monday afternoon of last week. "delicious" time is reported.

Prof. Holdsworth has had new lockers made for students' drawings and instruments, also a case for descriptive geometry models, so that these models can be kept in the Mechanical laboratory.

One of the best forage plants tried at the Grayling sub-experiment station was "sheep fescue." The College is now preparing to send out sample packages of the seed of this plant to be tested on the sandy plains in various localities of our State.

Acting President Winthrop E. Stone of Purdue University, spent last Friday visiting at M. A. C. Professor Stone was a classmate of Prof. Taft at Amherst and is professor of chemistry at Purdue, but for over a year, during Pres. Smart's illness, he has been acting president.

Among the passengers who were on the Santa Maria while it was frozen in the ice of Mackinac straits for 36 hours a couple of weeks ago, were two of our institute workers, Prof. H. W. Mumford and Mr. J. H. Brown of the Michigan Farmer. Prof. Mumford reports that they had taken the last square meal on the boat when relief came. Mr. Brown declared that it was the longest ride he had ever taken for 50 cents.

J. F. Merkel returned to College a week ago to spend the remainder of the vacation at work. At home he has been amusing himself and others by indulging in theatrical performances; taking the part of the "Bailli" in the "Chimes of Normandy" recently presented by local talent in Manistee. After he and eight others of the troupe had taken a turn with pneumonia as a result of their efforts on the stage, Joe concluded that starring in winter was not his forte.

NEWS FROM GRADUATES AND FORMER STUDENTS.

Students in Mechanical Course designated by "m." and specials by "sp." after name.

S. L. Ingerson, '97, is teaching at South Monterey, Mich.

Ed. B. Wallace, '98, will be with us again in the spring.

F. A. Golling, with '97, m., is clerk in his father's hotel at Alpena.

M. W. Stutz, with '96, m., is teaching at Flat Rock, Wayne Co., Mich.

M. P. Thompson, with '96, m., is working for the Grand Rapids Cycle Co.

R. E. Bateson, with '96, m., is a student at Purdue University, Lafayette, Ind.

Dustin C. Oakes, '74, leaves Coopersville today for a ten days' trip to New Orleans.

Frank F. Stephenson, sp. in '94, is teaching in the public schools at Tawas City.

Ray A. Latting, with '96, sp., of St. Johns, is taking the law course at the U. of M.

J. B. Dimmick, '93, m., is surveying on the new line of the Detroit & Mackinaw R. R.

R. J. Wilson, with '96, sp., is draughtsman for a manufacturing firm in Massillon, Ohio.

R. S. Welsh, '94, was very active in promoting the interests of the institute at the Soo.

It is reported that Carl H. Van Auken, with '98, is on a fruit farm near White Cloud, Mich.

E. M. Kanter, with '96, m., has a position as salesman in a machinery supply house in Detroit.

Manning Agnew is teaching at Parshallburg, Mich., and will be two weeks late in the spring.

Wm. L. Rossman, '89, State Analyst, has been doing institute work for some time past. His last report on

"Food Adulterations" contains some very interesting as well as valuable information.

Phil Porter, '99 m., expects to change from the Mechanical to the Agricultural course in the spring.

H. R. Parish, '95, m., is spending the winter at home, but expects to go on the lakes again in the spring.

Geo. W. Rose, with '95, m., has turned horticulturist and located on a fruit farm near Benton Harbor, Mich.

Lew W. Spaulding, '90, m., is teaching Mathematics and Manual Training in a private school at Hillside, Wis.

Wm. A. Ansoerge, with '95, m., is assistant business manager of the Elliot Button Fastener Co. of Grand Rapids.

In the January *Business World* appears a cut of J. W. Perrigo, '93, m., who is connected with the Detroit Business University.

P. S. Rose, with '96, m., is principal of schools at Old Mission, Mich. He will return to M. A. C. at the opening of the summer term.

John P. Churchill, '95, m., is in the employ of the Illinois Central R. R. as inspector of piles. His address is 5434 Wabash Ave., Chicago.

J. R. Petley, with '96, visited in Lansing last week. He is in business with his father, superintending his shirt factory in Milwaukee, Wis.

W. W. Tracy, '67, has a large and growing collection of Indian relics. We notice that he is at present advertising for additions to his collection.

David Boehringer whom those who were here in '92 will remember as a student and as assistant to Mr. Gunson, has a thriving business as florist in Bay City.

Guy H. Frace and J. G. Veldhuis, both of '95, are students at the Detroit Medical College. Z. Veldhuis, with '96, sp., will graduate from the veterinary department of the same college at the end of this year.

Clifton B. Charles, '79, of Bangor, Mich., is one of the progressive farmers of that section. He will take part in the long institute at South Haven, Feb. 3 to 7, having for his subject "Rural Schools." He is enthusiastic in his praise of the Alumni Catalogue.

Ray Sessions, '79, took a very active part in the Farmer's Institute at Mancelona. He read a paper at the institute and at the business meeting was elected Secretary of the association. It might also be mentioned that Mr. Sessions is the proud father of three fine little girls.

While Profs. Weil, Chamberlain and Wescott were in Bay City recently they were very pleasantly entertained by A. C. McKinnon, with '95, m., who also aided them very materially in making the acquaintance of the mechanics of the city. While there they called on Capt. James Davidson, shipbuilder, who presented the College a very fine photograph of the "Rappahannock," the engines of which were tested by our mechanical seniors, Goodenough and Parish, last July.

L. C. Colburn, '88, professor engineering and mathematics of the University of Wyoming at Laramie, writes: Mining fever is spreading rapidly in this part of the country. I have surveyed one large placer claim comprising 1,400 hundred acres of ground, and have laid out 2½ miles of ditch. The company have made a small test, sluicing 27 cubic yards and got out \$29 in "dust." I made several panning tests and got on an average 3½ cents per pan of dirt, counting 160 pans to the cubic yard you can see the claim is rich. I have been figuring on a big electric power plant for a group of mines, can get 450 feet fall in 1½ miles and a good supply of water—estimate 1,600 horse power.

THE NEEDS OF OUR DISTRICT SCHOOLS.

[Read at the Bay County Institute, Bay City, Jan. 13, by Prof. J. W. Smith of Bay City.]

A few months ago a writer in one of our first-class magazines came to the conclusion that the people in our rural districts are, intellectually speaking, degenerating. He declared that the present fathers are, as a rule, less intelligent than were their fathers, but that they are superior to their sons. Shortly after reading this article an ex-superintendent of one of our city schools, a man who has had large experience both in the city and in the country, gave me as his opinion that the writer was correct in his conclusion. A few days since one of the most learned, and also one of the ablest, of the University professors recalled for my benefit an address of General Garfield in which he quoted a distinguished writer as saying, that we could not expect to preserve in this country our intelligent farming communities, but that

in the course of time, say in a century or so, the free, independent, American farmer will be a thing of the past, and in his place will be a class of peasants similar to those we now find in the countries of the old world.

The line of thought here advanced is to me very startling. We have been so accustomed to hear our farmers spoken of as the bone and sinew of the State, as the salt without which our political system would long since have lost its savor, that we are at first disposed to give our emphatic dissent from the truth of the conclusion above cited. The difficulties in the way of safely drawing any such conclusions are certainly great. Any theory which promises to fix the status of the American farmer of today as occupying a lower or a higher scale than did the preceding generation, or which undertakes to prophesy from present conditions what will be his state in the future, to be of any value must be based upon a careful investigation of past conditions, and a wide observation of the present.

If my early life was not, strictly speaking, spent upon the farm, this at least is true, that some of the warmest friends I ever had, and now have, were, and are, farmers. Lately I made a short visit to the home of my boyhood in Central Michigan, and with my mind full of the conversation above quoted, I asked one of my friends, a country physician enjoying a large practice, if, in his opinion, the present generation of farmers was greatly inferior to their fathers, and how it was with the children. The reply was, that, possibly, the first statement might have some truth in it, but, he said, that, so far from being inferior to their parents, the rising generation gives great promise of being their superiors in every way. This was encouraging, but of course it is no more conclusive than the contrary opinion above expressed.

The educational system of this State owes a great debt to the broad-mindedness of the early pioneers. They were certainly a remarkable class of men. It was the very elect of the eastern communities who shouldered their axes, loaded their wives, children, and household goods into those old prairie schooners and started for Michigan. These able, energetic, daring pioneers took upon themselves a great task, for in addition to the labor involved in turning a wilderness into fertile fields, they were also called upon to lay the foundations of the social state. As an aid to this they built school-houses, entering heartily into the spirit of that clause in the ordinance of 1787, which declares that "Religion, morality and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall be forever encouraged."

From the very nature of the case the pioneer school-house was not an elaborate affair, and it was illy provided with those appliances which are now considered indispensable. Nevertheless, what these schools lacked in mechanical aids was more than made up by the great interest which our forefathers took in the school itself. It was this school sentiment, this determination on the part of the pioneers that their children should, as far as possible, enjoy all the advantages which their limited means could procure, that made the pioneer school in spite of all its disadvantages, far more successful in proportion than is our modern rural school. It is not the elegant building, or the abundance of maps and charts, or even the free text-books that constitute a good school. It is not even the presence in the school-room of a live, progressive teacher that accomplishes the result. All these are valuable, the last mentioned being the most important, but these advantages must be supplemented and energized by the presence in the school district of an educational sentiment that will not tolerate a poor school.

The first place for this educational sentiment to find expression is in the selection of the school officers. The old maxim that "as the teacher is, so is the school," in a great many instances might well be changed to read, "as the school board is, so is the school." And this again could often well be altered to read "as the community is so will the school board be." An intelligent community, one fully alive to its school interests, will always fill its school board with its best citizens. Then a good school board will exercise great care in the selection of a teacher, and when one has been selected, will give a loyal support. No greater clog can be put upon a teacher than to place the school in charge of a set of inefficient officers. Very often by their petty intermeddling and lack of intelligent conception of what constitutes a good school, they will paralyze the well directed efforts of the best teacher that the sun ever shone upon.

Another aid to the district school is a personal acquaintance on the part of the parents with the teacher. My actual experience as a teacher in the district school dates back more than twenty years, at which time the custom of boarding around was still in vogue. Undoubtedly the present custom of having the teacher board in one place has its advantages, but the old plan

had at least one thing to recommend it. The teacher, on the one hand, obtained a good knowledge of the home life of the pupils; while, on the other hand, both the parents and the pupils became better acquainted with the teacher. If the teacher was worthy of respect, this mutual acquaintance could not fail of being mutually beneficial. The teacher was in a much better position to fit his discipline and his instruction to the peculiar wants of the child, while the parents often became personally interested in the teacher. From this personal contact, it has not seldom happened that friendships were formed which lasted through life.

The pioneer schoolhouse, with all its sacred memories, has passed into history; or perchance if one still remains, it reminds us of Whittier's lines:

"Still sits the schoolhouse by the road
A ragged beggar, sunning."

Gone, also, is the pioneer schoolmaster, and in his place stands a representative of the second, or even of the third, generation of some one of his pupils. We owe a great debt of gratitude to these old schoolmasters, for with all their traditional harshness, which is largely a myth, they educated a class of men and women who have bravely and successfully fought life's battles and have made the name of Michigan an honored one in the sisterhood of states. If you will inquire into the history of the principal men in any community, those who have attained wealth or political distinction, you will find that their early ambition was first kindled by the wise counsels and the kindly interest taken in them by their old pioneer schoolmasters. Some of these masters themselves attained distinction. We have one of them still living in our midst who as a lawyer, a jurist and a citizen, for more than sixty years has served his county and his state with distinguished ability. I refer to the Hon. Sanford M. Green—all honor to him and to the inspiring lesson which his noble and useful life has taught.

And this is the great function of the teacher—to inspire his pupils. General Garfield once said in substance, that a log would be a good enough schoolhouse for him, if upon it sat Mark Hopkins as a teacher. Of course we cannot hope to have a Mark Hopkins or a Sanford M. Green in every schoolhouse, but a district board should, none the less, carefully consider the personal qualities of the one who makes an application for the school, and should never employ a teacher, if it can be avoided, who is destitute of this ability to inspire. A child may count that day happy when it brings to him a young man or woman, whose cultivated mind, refined tastes and high aspirations will lead him to look beyond his narrow surroundings, and will enkindle in his immature mind an ambition to lead a broader and a better life. There are teachers in the schools of every county who ought not to occupy that responsible position for a single day. Very largely these teachers have received only such instruction as the district school affords, their minds and tastes have never received the invigorating influence which comes from personal contact with highly cultivated people, and they have no personal qualities which strongly recommend them. They are teaching simply for the money; they are unfit to inspire and instruct our youth; and they ought never to be employed in that capacity.

Our district schools not only need better teachers, but they need a greater proportion of male teachers than they now have. If our district schools are not as good in some respects as they used to be, it is because so many young girls are employed as teachers. The pioneer teacher was a schoolmaster, not a schoolmistress, and although in polish he might have lacked some, nevertheless his virile strength gave a tone to the school which is always beneficial, especially in the case of the older pupils. I would not exclude our ambitious young ladies from the work of teaching, but I also would not allow them to entirely supplant our ambitious young men in this work of instructing the young.

If you say that the young men who graduate from our high schools do not wish to teach in the district schools, I answer then, it is because you offer them no inducements; while it is well known that every winter a large proportion of the undergraduates of the Agricultural College desire to spend their vacation as teachers in the district schools. It is true that the greater part of these candidates are without experience, but it is also true that by reason of their superior mental training they are much superior to the majority of the teachers now employed. Farmers' boys ought, at some time in their school life, to come under the influence of the professors, or the graduates, or at least an undergraduate of Michigan's Farmers' College. If five hundred or a thousand of the undergraduates could, during the winter vacation, be scattered through the district schools of Michigan, great good could not fail to result. The ambitious boys, finding how comparatively easy it is for even a poor boy to get an education, when he is really

determined to do it, would often be induced to go to college; while the farmers themselves would be benefited by the information which they could gain from the teacher upon the science of agriculture.

Another criticism upon our district schools is that there is no attempt made to adapt the character of the instruction to the peculiar wants of the farming community. The course of study is now, and always has been, organized with reference to any other pursuit rather than that of farming. At present a teacher who has spent all his life in the city, and has attended only a city school, finds himself entirely at home in the district school where conditions of life are very different. In the one place as in the other, our arithmetics deal in stocks and bonds, longitude and time, domestic and foreign exchange, but never a word is said as to how you would combine different foods to make a profitable ration. Agricultural chemistry is no where required, and the principles of agriculture is a subject equally conspicuous by its absence. The faculty of our Agricultural College ought to have some voice in prescribing the character of the instruction which our farmers' boys shall pursue. Agriculture is not only an art, but a science. There is a beauty in the growth of a hill of potatoes that is not discernable to the uneducated eye. Let us educate our farmers' boys at home so that they shall understand the art, and in the district school, and in the Agricultural College, so that they may understand the science of farming. Then indeed will we hear less complaint because they desire to leave the farm, and the ogre of an ignorant peasantry will be forever banished.

What the district schools of nearly every township in this state need just now is to be reduced to a system. At present they are little more than a disjointed collection of schools, some good, some bad, but whether good or bad, they have no chain of interdependence and nothing to look forward to for the next step in a higher course than the neighboring city school. In the same sense in which a city system of schools may be said to exist, there is no such thing as a system of district schools in Michigan. Some attempt has been made of late years, towards reducing the district schools to a system, by the introduction of a graded course of study extending through eight grades and bearing a close resemblance to the course of study found in the average city school. But beyond that nothing is even attempted. There ought to be, and under proper conditions there would be, enough pupils in every township containing four or five hundred children of school age to give employment to at least one teacher, who should give all his time to the more advanced classes. For the accommodation of these pupils there should be erected in the center of the township, as nearly as may be, a school known as the township high school. The course of instruction should contain all those branches that are necessary to prepare the pupils to enter the State Agricultural College. The pupils who graduate from this township high school should be given diplomas entitling them to enter the Agricultural College without further examination.

One of the wisest steps ever taken by the University of Michigan was the admission of graduates from approved city high schools upon their diplomas. It has induced hundreds of students to enter the University who would otherwise have stayed at home; it has induced hundreds of other students to graduate from the high schools who would never have done so under other circumstances; it has created an educational sentiment in the cities of the state that has been of incalculable benefit to the cause of education. It has raised the character of our high school teachers to such an extent that they are now almost entirely college graduates; and, in short it has inspired superintendents, teachers, pupils and parents alike with an interest in higher education which cannot fail of being productive of the greatest good in the future.

All this is well and we greatly rejoice at it. But this system, excellent as it is, has had comparatively little effect on the district schools. What the University has done for the city schools, the Michigan Agricultural College should be allowed to do for our district schools. From the time the child enters the city school until he leaves it, he has held constantly before him the idea that he ought to graduate from the University of Michigan. When the Michigan Agricultural College shall occupy as large a place in the school life of every pupil in the district schools of Michigan as does our noble University in the life of the city child, then there will be no cause for regret that its halls are comparatively empty of students, but they will be filled to overflowing with farmers' sons. And that is a consummation devoutly to be wished. For when that day shall arrive, the direful forebodings, the Cassandra-like prophecies quoted at the beginning of this paper, will be found to have no foundation to rest upon.

ARE YOU GOING TO COLLEGE

To this question 99 Per Cent

Of those who expect to be up to date,
twentieth century men

WILL ANSWER "YES"

To What College

Are You Going?

75 Per Cent Of those who expect
to go somewhere

DO NOT KNOW WHERE TO GO.

To these we have a few words to say in favor of the

Michigan Agricultural College

We have a better equipment for Scientific and Practical Investigation along Agricultural and Mechanical lines than any similar Institution in the country.

We have a teaching force of

**THIRTY PROFESSORS
AND INSTRUCTORS**

We have a Library containing over 18,000
Volumes, Eight Laboratories fully equipped,
Three Large Dormitories, all located in

**ONE OF THE MOST
BEAUTIFUL PARKS IN MICHIGAN**

We have two courses:

AGRICULTURAL AND MECHANICAL

Four Years are Required
to Complete Either Course.

The Courses Embrace

AGRICULTURE, HORTICULTURE, CHEMISTRY, BOTANY,
ZOOLOGY, VETERINARY SCIENCE, MATHEMATICS,
MECHANICAL ENGINEERING, ELECTRICAL ENGI-
NEERING, CIVIL ENGINEERING, DRAWING,
ENGLISH LANGUAGE and LITERATURE,
FRENCH, GERMAN, HISTORY, POLIT-
ICAL ECONOMY and MILITARY
TACTICS.

The work of the class room is supplemented with practical work in field, garden and shop; and this together with military drill, gymnasium practice and athletics promotes vigorous health. A street car line connects us with the city, thus giving us exceptional social and religious privileges.

Expenses are Reasonable

Tuition Free to residents of the State; \$5.00 per term to non-residents. Board in clubs costs about \$2.50 per week. You can get board and rooms in the city if you desire.

The students maintain Six Open Literary Societies and Three Fraternities.

Our next term begins Monday, February 24, '96.

The next College Year begins Monday, August 24, '96.

And now, if you are interested in getting an education, an education that is broad and practical, one that does not develop the intellectual at the expense of the physical, one that does develop the skilled farmer and mechanic, send us your name and let us furnish you with catalog and further particulars.

ADDRESS "THE SECRETARY,"

Agricultural College,
Michigan.