THE SPECTRUM.

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Irrigation in North Dakota.

Irrigation as a practical question in North Dakota is a somewhat new and untried problem. The enactment of a law by the National Congress rendering available a large amount of money to be used for promoting irrigation enterprises has awakened a lively interest in the subject, and since North Dakota is one of the states included in the law referred to, and particularly since North Dakota has almost the largest amount of money in the national treasury for irrigation works of any state in the list included in the law, it becomes a matter in which all citizens of the state have, and by right ought to have, a keen interest.

Irrigation as contemplated in the law of 1902 means the reclamation of lands, not by nature productive, by the artificial application of water so that these lands shall become productive. The nature of the problem, therefore, makes it of more direct and vital importance in the states and territories which are known as arid; that is, those in which the rainfall is not sufficient any season to produce successful agricultural crops. Arid lands are desert, and in a state of nature are covered more or less scatteringly with a rough growth of sage brush and cacti.

There is only a small amount of such desert land in North Dakota. A considerable territory in the state lying on the high plateau in the western portion is properly classed semi-arid. This means that in the years of more abundant rainfall crops can be grown successfully with ordinary cultivation. In dry seasons only the most careful and thorough methods of cultivation will insure a crop, and it is still an open question whether good cultivation can be made to overcome the somewhat scanty rainfall. The methods of farming in use by Dakota farmers have not been such as to have demonstrated fully whether or not crops can be successfully grown west of the Missouri River one year after another.

In North Dakota the question of irrigation is not therefore so much one of reclaiming arid lands as of rendering productive in years of doubtful rainfall areas which might fail of profitable returns if dependence were placed solely upon rainfall. This many times means the equivalent of one good drenching rain in a season. Many times a good crop would be insured if the ground could be thoroughly wetted once just at the critical time when the growing plants would suffer if the moisture were not supplied. This condition arises frequently in the states which are not considered to be within the humid belt.

In our state the vital question is as to the practicability of getting water onto the land. There are no high mountains in the state from which a supply of water can be obtained and conducted by means of ditches upon the land, as is possible in the arid regions of the west, where there are snow-clad peaks from which streams descend to the valleys. Again, the larger streams in North Da-

kota are deeply intrenched in valleys from which it is difficult to conduct the water upon the land.

The feasibility of applying water by pumping has not been fully demonstrated except in limited areas. There are in North Dakota, however, a number of tracts ranging from a few hundred to 20,000 acres in extent upon which water can be conducted by means of ditches, dams being constructed to conserve the waters of the spring rains and melting snows. When there is added to these areas those which may probably be successfully irrigated by the use of pumps for lifting the water into storage reservoirs, the irrigation possibilities in our state become of considerable importance.

Probably one of the important lessons which the application of the principle of irrigation will entail will be that of more intensified farming, meaning by this a more thorough tillage of the soil, a more carefully systematized rotation of crops, and the more scientific study of the adaptability of certain crops to particular types and conditions of soils. The soil in nearly all parts of the state is recognized as containing the necessary properties for crop production if only the natural resources are fully and scientifically made use of. If the study of irrigation teaches us to carefully and scientifically use the soil, the agitation of the question will have wrought great good to the farming interests of the state, and thus will have enhanced the value of property and contributed to the prosperity and happiness of millions. D. E. WILLARD.

Grafting Plants.

Taking a leaf-bud from one plant, and inserting it into the stock of another, so that the two will grow together, is called grafting. With fruit trees or shrubs it is a useful thing, because two kinds of fruit or flowers may be raised on one tree. The same with plants; two varieties of blossoms may be had on one plant.

The process of grafting is much more easily carried on than explained. There are three kinds of grafts, the cleft, the whip, and the side graft. The cleft graft is used for trees or shrubs and more bushy plants; it is very simple. The stock is sawed off, and the end split for a few inches down the center; the cion, or twig, has its lower end smoothly cut wedge-shaped, a little thicker on one side than the other. The cleft in the stock may be pried open with some wedge-shaped tool, and the cion is put into the cleft. Then the tool is withdrawn, and the stock holds the twig in place. The joining place should then be covered with waxed cloth; care should be taken to cover every wounded part of the stock and twig. This method is rude, though successful, and one disadvantage of the cleft graft is that it leaves too large a wound. For small stalks the whip graft is better.

When the whip graft is used, the stock and twig should be nearly of a size. Both should be cut with similar slopes, and in each slope a tongue is cut. When the slopes are put together the two tongues are interlocked. In this graft twine may be used to bind the wound, instead of waxed cloth, though the latter is preferable. In this graft the wound is very small, and grows together more quickly than in the cleft method.

Another form of grafting is the side-graft, which, like the whip-graft, is also used for small stemmed plants. The cion is cut to a long wedge, and the stock has a downward cut made in its side, into which the twig is placed. Then the waxed cloth should be applied, taking care to cover the cut entirely; the fingers should be waxed when putting on the bandage.

SELMA ASLESEN.

Domestic Science.

Inasmuch as a course of study in Domestic Science has come to be a part of the curiculum of all the more important scientific and technical schools of the country, and inasmuch as special schools for the furtherance of this work have been established by far-seeing and broad-minded philanthropists, and more or less modified courses are being rapidly introduced into our public schools, it would seem that a clear understanding of just what is included in such a course of study might be of interest.

There is a tendency among many people, I think, to treat this subject rather lightly. Who has not heard the jokes about the cooking school pie and the cooking school bread, founded, no doubt, upon actual facts, and the idea seems prevalent, more especially among the men, that this subject is all a farce, and that there is no real genuineness about the work. What man would trade his wife's cooking for that of his cooking school trained daughters? But who knows through what awful trials and tribulations this same faithful wife may not have passed in her early married life, stumbling upon ways and means of doing things the best and the easiest way only after many weary failures, when all this expenditure of mental and physical energy might have been perverted to other and better channels by a systematic study of domestic conditions in her girlhood at some good school incorporated for just such purposes.

This study stands pre-eminent because it is one which is striving to bring woman back to her natural sphere—the home—instead of fitting her to enter into competitive relations with man in the manifold industries and arts.

Many people argue that a girl can learn to cook and to sew at home if she will. Ah, yes! if she will. But why doesn't she always? Why does little Willie think it so much pleasanter to split Mrs. Jones' kindling than that for his own mother, and why does little Mary just love to go over to Mrs. Brown's to mind the baby? Most likely, if they are the children of their parents because there is something in it for them, either in the way of pennies or cookies, or a pleasant smile and encouragement, and then there is something so alluring in doing things away from home, and doing things we don't have to do.

These same people who argue for the girl's staying at home would also have the boy learn all there is about agriculture on the farm alone. Had everyone been of this opinion there would now be none of the great agricultural colleges which are doing so much for our farmers today, and which have come to be recognized as essential as any of our technical and professional schools. Just as the farmer of the past generation has been too busy getting all he could from the soil as it stood, or with the least possible labor, to keep the wolf from the door, and was not able to spend his energies experimenting to determine as to just what was the best rotation of crops, or just what was best to put on the soil to replace the elements taken up by the previous year's crops—and fortunately for the farmer of that period nature did not limit her bounties to provide for but one season alone, and so our ancestors were provided for until such time as our scientific researches have unfolded to men some of the mysterious workings of nature, and until such time as men have come to devoting their lives to the working out of these revelations, and to the giving out of this knowledge to the young men of today, so that they may go back to these now nearly impoverished farms,

and with intelligence and a certainty of satisfactory results bring forth from the soil all and more than enough to supply his own wants and the wants of those most nearly and dearly related to him.

As it was with the busy farmer, so it was, and more so with the busy housewife, who, with the many cares of house, family, dairying, and poultry raising, and with equipment poorer and cruder than her husband would ever have put up with, had little time to stop to consider or to plan out how things might be simplified, and the work brought down to a systematic basis.

This same dear woman, by some sort of mental process unknown to the masculine mind, reasoned that it took far longer to teach her daughter how to do things than to do them herself, and if the daughter's power of observation were not keen, and if her filial sense of duty was not abnormally developed, she was very likely to let her mother go on with the awful drudgery, while she devoted herself to piano practice and the painting of velvet plaques to adorn the parlor walls. This misguided sacrifice on the part of the mother, which will probably mean "wings and a golden crown" in the world to come, means an existence of mere drudgery here on earth, and means the sending out into the world of a girl entirely unfitted for a home maker, and an individual selfish and self-centered in every way.

And yet these same mothers are many times over-anxious to have their daughters well married off, and, as they hope, their future happiness thus assured. Who cannot tell of incidents without number, humorous perhaps now, but tragic then, of the first meals of their early married life. The funny papers would never have been able to get out their regular editions between the lulls of political campaigns had it not been for the mistakes of Mrs. Newlywed and the blundering references of Mr. Newlywed to how mother's things used to taste.

But, luckily for the intactment of our home life today, there has been an awakening, and people now realize that if a woman is to be a home-maker—and we all know that that is the ambition of every true woman—she must be fitted for it, and so we have these schools established, where teachers are employed to teach those things which the mother has neither the time nor the patience to teach her daughter.

The general line of study varies, of course, in different institutions, but the fundamental truths which underlie all the courses are much the same.

If one wishes to specialize in this work, of course more time must be devoted to it, but for the girl who wishes to use the knowledge acquired from such study in her own home, one to two years will do much for her, supplemented by reading along these lines at home. This work, as the name implies, centers naturally about the home, and is divided into four great classes: First, the home itself, its development, and its relation to other social institutions, and its function in society; treating of the production and transmission of wealth, dealing with the intellectual and social training as well as the ethical and religious.

Then comes the formation of the home: First, the family; second, the house. Under the head of "The House" are considered the location and surroundings, both natural and artificial, the domestic architecture; that is, what style best to be adopted, deciding upon a plan, and being able to distinguish the poorly planned house from a well planned one. Under this head is also considered the foundation and cellar for the house. Next, one is inquisitive about the best ways for plumbing and draining the house, how best to heat it, to ventilate it, and how to light it.

After these most necessary details are studied, domestic art is next looked into. The treatment of the walls and the floors of the house, and the selections of the furnishings to harmonize with them,

while some attention is given in this connection to the psychological effect of color. The third subdivision is the maintenance of the home. First, there is the care of the house as regards cleanliness; the care of plumbing; how to insure against sewer gas and water backing up into the basement, and the hundred little annoyances always incident to poor plumbing. The care of the heating, lighting, and ventilating system. Public sanitation is also studied, together with house drainage. The removal of dust and dirt with the least possible annoyance.

Then the broad study of food is taken up. In the elementary courses this subject, together with the subject of clothing or sewing, occupies the most important positions. Here is studied the selection of the food and food material, and dietaries are also mapped out, varying to meet the varying conditions of man. Learning to distinguish between diets necessary for the working man, the office man, the invalid and the growing child, and why there should be any differentiation at all in these dietaries. Emerson says: "That to know how to eat, what to eat, and when to eat, is a mighty problem which humanity has not yet solved, although it has enriched itself with a myriad of wonderful inventions."

Newell Dwight Hillis, in his quotation, "Right Living as a Fine Art," says that "the old German philosopher asked but one cluster of grapes, one glass of milk and a slice of bread twice each day." Having completed his philosophy, the old scholar looked back on forty happy years, saying that every fine dinner his friends had given him had blunted his brain for one day, while indigestion consumed an amount of vital energy which would have sufficed for one page of good writing.

In the longer courses of study this branch in the preparation of foods is dealt with more or less elaborately, but in the less pretentious schools only the more simple combinations are given, the object being not to see how much variety can be taught, but to see that the girls learn to cook the things that they do have, well, and serve them attractively. And while these schools teach that the best grades of foods are the cheapest, care is taken that the girls do not acquire too extravagant notions.

Some attention is given to the food adulterations which have come to be used so cleverly by the canning manufacturers today.

The girls are taught to be inquisitive about the source of the milk and water supply of the household to know what dangers are to be anticipated from those quarters. Also to be able to do all the marketing for the household; to know the good meats, the fresh vegetables and the best fruit. Under this same subject of the maintenance of the home, comes the subject of clothing. Usually it is not necessary to force the thoughts of the young girls upon this subject. Rather, the thoughts are to be guided and turned into the proper channels. She must learn to know the value of materials and fabrics; to study the lines of the human body, and to be able to discern those things which are beautiful.

Another branch of the home dealt with more or less elaborately in the different schools is that of home or emergency nursing, treating of simple and commonsense things to be done in case of accidents or in case of an illness in the home.

The last subdivision treated is that of the administration of the home, involving the relations of the different members of the family to one another, the training of the children and the much-talked-of question of domestic service.

This subject of domestic service has been, and is, still more or less of a problem to the American people. Some one has said that we are not so much in need of a solution to this domestic problem as we are in need of properly educated women in our homes—women educated to know both how to do the actual labor

incident to housekeeping and to know how to superintend others to do the work. In fact, one cannot well see that a maid does her work properly unless one knows something about the work oneself, and is capable of judging as to whether or not the work is satisfactory, and not to be like the young housekeeper, who said: "Bridget, I think we will have eggs for breakfast." Bridget says, "Shure, mum, there's nary an egg in the house, mum." "Oh, well; we'll have omlet, then; I like that just as well," answered the young woman, with a finality of tone which would seem to leave no further question in the matter.

But there is one thing certain in this servant problem, and that is that it will never be solved until women learn to treat the women employed by them in a businesslike way, and treat them with the consideration due a human being and an American citizen, and give her a definite time for working and a place fit for human habitation when she is free from her duties, to which she can go for rest, and not stow her away in a cheese box of a bedroom in which there are none of the comforts, or even necessities, of civilized life, and then expect her to have any ambition or spirit for her personal appearance or for her work.

The last subdivision considered is the final management of the home, learning how to keep simple accounts, making out of checks, bills, receipts, and the learning of the value of money and how best to spend it to get the most benefit from it.

I found this little toast to the cook the other day in one of our home science magazines:

"We feel in our hearts, and read it in books,
That civilized man cannot live without cooks.
So here's long life and the best of wishes
To that one who prepared all these dishes.
And be she from Africa's or Erin's shore,
Let's hope that she'll stay to cook many more.
That no envious friend, by gold and by greed,
May entice her away, his household to feed;
And that you won't spoil her by too much praise,
So that she'll ask you her wages to raise
Above what your income 'll possibly bear;
Of your manners and motives, also take care.
Be on time always, or some fine morning
You'll find your cook has given warning.
You're not uneasy! Now, what's that you say?
'Not the least afraid they'll coax her away?'
She's fast anchored here because she's your wife!
Oh, you lucky man! Provided for life
With a first-class cook and nothing for wages—
Wise is the man who his cook thus engages.
But I can't say that I think the outlook
Is so very flattering for the cook;
Unless she has learned that the better part
Lies in giving, not getting. Bless her heart."

SUSAN M. REID.

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Dr. F. W. Atkinson, lately returned from Manila, where he served for three years as Superintendent of Education, has been appointed superintendent of the schools at Newton, Mass., one of the wealthy suburbs of Boston.—*Ex.*

"Japan: The England of the East," in *The College Signal*, is a well written article on the progress of Japan as a national power. One reason given for this progress is that the Japanese, in general, are naturally students.

What a Locomotive Engineer Has to Remember.

How many iron-clad rules can the human mind keep within instant recall, if death is the penalty for forgetting?

The answer to this question is supposed to lie somewhere in the code of rules and signals which the officials of railroads have devised for the operation of their fast trains. On a certain road between New York City and Chicago, there are about 700 rules for each 125 miles of road. These rules were made for the safety of the public, but the public may well look askance when it learns that one man must remember 700 of them, and that a slip in any one rule may mean a shocking loss to human life.

These 700 rules are the average for each division of the chief railroad lines running west from New York. Each set covers the work of one engineer, who drives his train until another engineer with a fresh set of rules, and presumably a fresh memory, relieves him. What this means to the public, in twenty-four hours' ride on one of these trains, can be judged from the following list of what an engineer on a certain 125-mile run has to watch while his locomotive is going at a speed of sixty miles an hour.

Five hundred "cross over" switch lights, to learn whether they are red or white. Fifteen "interlocking" switch lights, to learn whether they are red, white, or green. Seven "non-interlocking" switch lights, to know whether they are red or white. Three "non-interlocking switch lights, to know whether they are red or green. Semaphore arms at twenty-five way stations, for possible red lights. Four hundred highway crossings, to know whether they are "clear." Locomotives of a dozen trains approaching on parallel tracks, for red or green lights. Telegraph operators at twenty-five way stations, who may be waiting near the track with orders. Whether one or two torpedoes are exploded at any point in the 100 miles, signifying "caution" or "stop." Whether his clearance card is good for each of twenty-five stations. Whether there is enough waste water in the engine tender. Whether there is enough coal in the engine tender. Whether the steam pressure is being kept up. Whether the fireman is obeying another long set of rules. And in adition to these rules the engineer must watch: The rattle of his engine, to detect a loose or broken part; the condition of the track ahead of his engine; the approach to every small hill or incline in the track.

By day the switch and signal lights are replaced by signal boards and "blocks," the color and direction of which must be read as literally as the lamps.

To lessen the danger from an overstrain on the mind of the engineer on these runs, a few precautions are taken. The engineers who drive the limited trains on the 125 miles of road cited above, either "double" the distance by taking a train each way in one day and resting the next, or else are allowed to cover the division in one direction daily.

The public has good reason to ask whether the safety limit has not been reached with both speed and rules. There must be a point where the locomotive is so large, and its sped so great, that one human mind cannot safely control it, no matters how few the levers are.

NORMAN ELLISON, '07.

A Home Missionary.

It was Sunday in the little village of Sparta, and as it was a bright spring morning, everyone was going to church. Even Mr. Jones, the blacksmith, who lived in a fine red house by the church, and Farmer Brown and his family, and Mary Ann Lewis, who lived in a little cottage by the road, were there.

Mary Ann Lewis was a maiden lady of about thirty-five. She had for many years made a living from a small flock of chickens, and from the knitting of stockings and mittens, intended for the children of the neighborhood. She wore a neatly made sateen dress, and under her shabby bonnet could be seen her coal black hair, which was tightly done up on the back of her head.

After church was over, most of the people stood in front of the little white church to talk about their crops and the weather. Mary Ann Lewis hastened over to where Mrs. Smith was standing and was heard to say, "Du yer think I could ride along to town with yer this week when yer go in to sell yer marketing? My chickens have laid extry well this spring and I have saved two dollars, and I want to take them two dollars and get me a new Sunday bonnet." "Certainly, Mary, Ann," said Mrs. Smith. "You come over tomorrow at 1 o'clock and we will go."

The next day Mary Ann Lewis could be seen hurrying toward Mrs. Smith's, who was just ready to start when Mary Ann reached there. They were soon on their way to town. The roads were very good, and the horse trotted swiftly along, so they were soon in town. While Mrs. Smith was tying the horse, Mary Ann said, "Now, yer go 'round and do yer trading and I will go to the millinery store. Then when yer get ready, come to the millinery store and we'll go home." Mrs. Smith agreed to this; so they both went their way.

Soon Mary Ann Lewis reached the store and asked to be shown some bonnets, but, as this was the first time she had picked out a bonnet for six years, she scarcely knew what kind she wanted. At last, as she was standing by a counter looking at a bonnet, she saw a sign, which said, "Help a child to get a home." Near the sign was a little box for the money. Mary Ann then went close to the notice, reading it over and over again. At first she hesitated, then dropped her two dollars in the box. She walked out of the store and started in search of Mrs. Smith. They soon met, and the latter said: "Mary Ann, where is your new bonnet?" "Well, yer see," said Mary Ann, "there was a little child that needed a home, so I thought I could wear this here bunnet another year." Next Sunday the people were disappointed at not seeing Mary Ann Lewis's new bonnet, but they soon learned that she had invested her money in home missionary work.

ELIZABETH RICE, '07.

Our Exchange Table.

In looking over the December publications from the various institutions, we are glad to note the improvement made, especially in the exchange department. Many of our exchanges seem to be following such papers as the *Tennessee U. Magazine*, and in them the improvement is marked. Some of the papers, however, still hold to the idea that the exchange department is intended only for jokes and "take offs," and fill their columns with such matter. This seems to be most true of high school papers. Of course, a good joke, occasionally, besides filling space, is enjoyed by every one, but too much space should not be devoted to them. Several of our exchanges have added a new department, that of "Current Events." These events are short notes on the affairs of the world, and hence are of interest to all.

The Chicago University has received $3,000,000 for archæological research in Egypt and Babylon.—*Ex.*

The annual report of the Yale Bureau of Self Help shows that students of that institution earned, during the year, something like $50,000 for their support while attending college. The principal ways in which this money was earned was by tutoring and waiting on tables.—*Ex.*

The University of Arizona has representatives from twelve states, and also from England, Switzerland and Mexico, on its enrollment.

Dr. Chas. W. Dabney, president of the University of Tennessee, has been elected president of the University of Cincinnati.—*Ex.*

"'Give me a kiss, my charming Pearl,'
A young man said to a blue-eyed girl.
She said, 'You great, big, lazy elf,
Pucker your lips and help yourself.'"
—*Ex.*

The daily newspaper of Michigan University has been purchased from the students by the faculty for the sum of $2,250. The faculty intend to make the paper a part of the English course, the reporters being drawn from special classes in English.—*Ex.*

The increased enrollment of 115 in the freshman class at Yale seems to be due to the withdrawal of the Greek requirement.—*Ex.*

North Dakota.

All hail to thee, bread-basket of the world!
Hail, North Dakota, land of homes and free!
Thou virgin state, whose banner late unfurled—
All mankind hastens here to dwell in thee.
Though but few dream thy future destiny!
The people mingling on thy prairies vast
Will nobly guard both union, liberty.
Be e'er our constellation's steadiest,
Our northern star, the seat of empire in the west.

R. A. F.

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Editorial.

The January SPECTRUM appears later than had been intended, but the delay seems to have been unavoidable. The college did not open for regular work until about a week after the beginning of the new year, and a number of the editors were having such a good time that they did not put in their appearance until school had been going for a week or more.

The New Year finds us with an attendance of over seven hundred. Every department is crowded to the limit of its capacity. Many students have been turned away because the department in which they wished to take work could not accommodate them. Even the library and chapel hall are now used as recitation rooms. Things are rather crowded, but we wish each new student to feel that he is welcome and that the older students and professors are willing to help him in every way possible.

We wish to again remind the student body of the story prizes offered by THE SPECTRUM. As was mentioned in the December issue, a prize will be offered for each of the two best original stories

which shall be written and handed in to the editor on or before February 15. The first will be a cash prize of $3.00, and the second $2.00. This is the first time THE SPECTRUM has ever offered a story prize, and we hope that every student who possibly can will help in making the contest a success by entering it. THE SPECTRUM reserves the right to publish any or all of the stories handed in.

Students, support your college paper. Help make it larger and better by subscribing now. Don't be a "sponge" by reading the paper over your roommate's shoulder. We are trying to give you a paper almost twice as large as the average school paper published in this state. We are offering you this paper for seventy-five cents, and that, too, with less than a hundred subscribers. Other school papers are supported by at least two-thirds of the student body. Come, brace up! Subscribe for your school paper and enable us to offer you a larger and better paper, containing new cuts and other interesting material.

There will be plenty of contests this term where literary ability will have a chance to show itself. If you are not an orator there is still a chance along the line of declamation and debate.

The local oratorical contest is scheduled for February 19. From among the members who are already at work on their orations there will undoubtedly be enough contestants who will enter to make the contest interesting. We may not all be able to take part in a contest of this kind, but we can at least all be present and help make it a success.

Nothing has been heard as yet of the Inter-Society declamation contest. Last year this contest came in March. It will probably come about the same time this year. From the present outlook it would seem as though its success will depend more upon the efforts of a few individuals than upon the two literary societies. The Athenians have not been heard from this year, while the Philomethian Society seems to be stronger than ever before. The purpose of this contest is to encourage declamation and wholesome society rivalry. There is no rivalry now, and we predict that there will be little at the contest.

There are two prizes offered for debate, the winners of which are to be decided upon by a contest some time this term. Superintendent Stockwell offers $10 as the first prize, and the English Department $5 as the second prize. The rules of the contest demand that the contestants must have taken part in at least two contests in the literary society or debating club to which they belong. If we are to have a contest it is high time we were doing something.

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PROF. O. G. LIBBY'S TALK ON BIRDS.

Much valuable information was gained from Prof. O. G. Libby's talk on birds, given in chapel December 7th. Mr. Libby based most of his talk on original investigation, and showed that he had the subject well in hand. He pointed out in a clear manner how by watching their flight, one could count the number of birds, by aid of the telescope. He told how the birds always followed certain paths in their migration; the way in which they communicated by bird language; how they changed color to suit their environment, in order to avoid danger; how they knew just where to migrate in order to escape severe heat or cold; the manner in which they could live at heights almost devoid of air; how they aided vegetation by carrying with them, in various ways, seeds from place to place, and also their great value as bacteria destroyers. Mr. Libby is to be commended for the work which he is pursuing.

Athletic Department.

At a recent meeting of the Athletic Association J. Swensen was elected president; Oliver Dynes, secretary; and W. Herman custodian of the property belonging to the association.

Last term, Dec. 7th, the A. C. boys' basket-ball team played the Valley City Normal team at Valley City. The game was played before a good-sized, enthusiastic crowd of spectators and resulted in a victory for the A. C. by a score of 42 to 23. The floor was rather small, however, and very slippery, rendering good team work almost impossible. As a preliminary to the boys' game, the first and second team of young ladies from the Normal played a close and interesting game. An informal dance was given after the game. The boys all declared the trip a most enjoyable one. The line-up was as follows:

A. C.		V. C. N.
Westergaard	c.	Jaten
Rose	r. f.	Thurston
Kennedy / Slingsby	l. f.	W. Pickett
Spelliscy	r. g.	Carlson
Corbett	l. g.	P. Pickett

On Dec. 12th the annual basket-ball game between the A. C. and V. C. Normal girls' teams occurred at Fargo. A large, enthusiastic crowd had assembled at the Company B armory to witness the game, which was to decide the championship of the state. The game was fast and exciting from start to finish, both teams showing excellent team work. The game was probably as good an exhibition of basket ball as will be seen in Fargo this year. The Normal girls were, however, a little too strong in the basket shooting department, and the final score stood 17 to 9 in their favor. Before the girls' game was played, the A. C. boys' team tried conclusions with that of Company B, winning by the score of 43 to 23. The girls' teams lined up as follows:

A. C.		V. C. N.
Stella Haggart	c.	Mamie Hyslop
Laura Ueland	r. f.	Eva Hutchinson
Grace Lofthouse	l. f.	Myrtle Jackson
Bessie Rice	r. g.	Elsie McFarland
Emily May	l. g.	Ella Schroeder

So far this season the A. C. basket ball team has won every game which they have played. Two games have been taken from Company B and one from the Valley City Normal. If the boys keep up this gait they will certainly land a fine trip.

The young ladies have not been so fortunate. Only one game has been played, and that was lost to the V. C. N. girls' team. The score was 9 to 17. The fact that the score was tied twice proves that the Aggie girls put up a good game.

It is understood that there is to be a reform in the matter of paying up dues to the Athletic Association. No pay, no gymnasium work. This seems reasonable and should be carried through.

A large number of students who do not belong to the association have been in the habit of taking baths. These young gentlemen will be forced to pay 25 cents per bath, until they pay the fee.

It has been suggested by some horrid boy that the girls who use the gymnasium should pay their dues along with the members of the sterner sex. Of course this sounds a trifle mean, but,

considering the financial condition of the Athletic Association, a second thought will place the matter in a more reasonable light.

Many people object to athletics in connection with college life. The most popular excuse for this view is that a young man or young lady goes to school to study, and that to mix in athletics cannot but interfere with the proper performance of this duty. While in some instances this is true, in the majority of cases the various athletic teams or the gymnasium classes are a God-send to the sturdy young farmers who come to school to get an education.

The average young man who comes to our public institution of learning has been working hard all summer, and in consequence has an enormous appetite. It may be all right to cram and plug, but it will take something more than this to use up the superabundance of food material which the husky young individual of whom I am speaking is sure to place himself outside of. It is plain that he will have to cut down his bill of fare or take a little more exercise to prevent his system from becoming clogged up with a surplus of food. The next thing, he will be too sick to study. As the first of these remedies is a moral impossibility, the second must necessarily be adopted. The easiest accessible means of gaining this exercise is through the medium of college sports. Therefore, I say, push them along.

NECESSITY FOR ATHLETICS.

For the first time in the history of the Agricultural College gymnastics will become a regular department of athletic work. Students have heretofore come in so irregularly, and have been in so many different classes, that it was nearly impossible to get them together in order to have classes in gymnastics, but this year an effort will be made to organize them at different times in different classes so that each male student who is not taking track work, basket ball, military drill or heavy shop work, will be able to have two hours per week of regular gymnastic instruction. More time than two hours per week would be of greater benefit to the student, but because of the long hours that he is at present required to put in at scholastic work and military drill he will be obliged to take only two hours of gymnastic work. Many of the students are unfamiliar with the meaning and value of gymnastics, and therefore should not hesitate, but be willing to at once enter the different classes when he is not occupied in recitations, in order to ascertain for himself its true value.

Most of the students who come to the A. C. have been accustomed to some kind of physical labor, and frequently hard labor, and when they enter college they lay aside all physical work and give all their time to study and mental training. Moreover, the change in diet creates a better appetite than they usually have, and consequently they eat more than they should, and become sick and melancholy. This sickness is generally attributed to overstudy, or thinking too much, but the true facts of the case are that it is a lack of physical exercise such as they have been accustomed to before entering college. Now gymnastics, basket ball, track work, etc., are designed for the purpose of offsetting these natural results from lack of physical labor. Some parents may object to having their sons and daughters spend their time in gymnastic instruction or in athletic sports, but this is a mistake, and will in the end work a real injury to their children. Two hours per week is certainly not too much to put into work of this

kind, when you consider that perhaps these same students have been accustomed to from eight to ten hours of work per day.

If any student finds himself blue, discouraged or sick, let him at once take advantage of the drill hall and the advice he may receive from the director of athletics, who is paid for that purpose, and here find a remedy for the sickness. Last winter from sixty to seventy students left because of being sick or discouraged, a condition brought about by over-study. This could have been remedied in most cases if these students had taken advantage of the drill hall and the advice of the athletic instructor.

Again, some of the students felt a bit embarrassed in coming to the athletic director to learn something of gymnastics and concerning their physical body. This is simply childishness, and the students should feel that they are paying for what they receive, and that the athletic director is only too glad to give them advice of any kind that will help them to have a strong body, and consequently a strong mind. If any student feels that he is deficient in any part of his body—if, for example, he has defects in his legs, arms, chest, back or his breathing capacity, or in any other way—he should come at once to the drill hall at the hours of regular gymnastic instruction, which will be every day from 10 to 11 and from 3:30 to 6 p. m., and on Saturdays from 2:30 to 6 p. m., and receive instruction in the form of special exercises that will be given to remedy this defect.

In the library students will find several books on gymnastics, and it would be well for them to carefully read the same. It should always be borne in mind that unless one feels well and has a good body he cannot have a good mind or do effective work. Too many students are trying to get golden eggs before they are laid; that is, they try to study and obtain intellectual knowledge when the first requisite is to obtain by physical labor or exercise of some kind a sound body within which only can rest a sound mind.

E. B. C.

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Local Happenings.

Corbett would stop smoking if—

Miss Ethel Bowers is back at school, after a short illness.

Professor—"Where is silicon found?"
Student—"Why, all over."

Mr. Simon Powers, with his cheerful smile, is back at college again.

Be it known to all canines: No admittance into chapel henceforth.

Mr. Schollander is having a very profitable time in Washington. Professor Carleton has written Professor Shepperd, requesting him to let Ernie remain until February 1.

Mr. Rush, ex-member of the board of trustees, visited the college Friday.

Mr. Stockwell, state superintendent of schools, visited the school last month.

If you want to be in the fashion, get the mumps. They are all the go now.

Monday, January 11, Dean Knowlton, of Fargo College, gave a very interesting and instructive talk to the students on "Herbert Spencer." He showed how a great and forceful character influences

the lives of men the world over, whether they are conscious of it or not.

Sleepy Student in Chemistry—"At what temperature will water dissolve?"

Miss Jennie Jensen classified for the freshman work at college last Wednesday.

Lyman Miller, a graduate of the Fargo High School, is a student at our college.

John Hutchinson, a student of the winter of '01, is again pursuing his studies in college.

The famous "Jud" spent a very pleasant vacation with his friend Rufus See, at Gladstone.

In her recent illness, Miss Bowers was presented with a beautiful bunch of—"flowers." (?)

Corbett has been chosen by the girls as manager. No wonder he is wearing a broad smile these days.

Miss Mary Darrow, '04, shows at her classes this term an added brightness—it's a solitaire this time.

William Perry has returned to the college for the winter term, after an absence of several months.

Official announcement of latest explosive compound discovered in chemical department: K I × 2 S.

Everyone is sorry to hear of the illness of George Axvig. It is hoped that he will soon be about again.

The college extends congratulations to Arthur Fowler, who was so successful as to secure the position of private secretary to Congressman Spalding in Washington, D. C. Mr. Fowler has, the last two years, been studying law at the University of Minnesota, and will now continue his studies at the Washington school of law.

The members of the faculty and student body extend to Mr. Manns, on the sad bereavement of his father, their heartfelt sympathy.

They sat on the railing at midnight,
A lady and our friend, Fowler;
And the moon rose over Fargo
Behind the Cathedral tower.

Instructor of Mathematics—"What is the difference between a comma and a period?"

Student—"A comma is a period with a tail on."

The book store has been doing a rushing business the last few days, and Messrs. Hulberg and Mikkelson are now gathering the fruit of their hard labor expended in the early part of their business venture.

The many friends bid Mr. and Mrs. Bolley welcome to Fargo again. Mr. and Mrs. Bolley had a most delightful trip abroad, and brought with them many rare and valuable remembrances from the old country.

We are sorry to learn that Miss Claire Olson, a member of the freshman class last year, and a great favorite with all the girls, has lately been ill and is compelled to go to the South for her health. We all wish her a speedy recovery.

The students of the Agricultural College held their annual meeting of the oratorical association Monday, January 11. The following officers were elected for the coming year:

William Porter, president.
Lloyd Worst, vice-president.
Oliver Dynes, secretary.
Roger Browne, treasurer.

Prof. in Chem.—"Why is hydrogen the lightest of gases?"

Smart Student—"Because it was the first element that nature threw off."

Last Friday evening some of the girls gave a Leap Year's sleighing party. After the ride they had an oyster supper at Miss Bowers.' All the boys say they had a lovely time and are determined not to let the girls outdo them, but they will have to go some.

Rev. Mr. Zundel, of the English Lutheran Church, on Monday, December 14, gave a very practical talk to the students on the subject, "What a man soweth, that shall he also reap." The students could not help but be benefited by the talk, and carry away with them some thoughts that will be helpful to them at any time throughout life. The students would be delighted to hear from Mr. Zundel again.

The college opened January 4 with a large attendance, and many new students. To all such we say: "Welcome; make yourselves at home; take the best the college has to offer, in the shops, laboratories and class rooms; get acquainted one with another; join one of the college clubs or literary societies, and get all the enjoyment you can out of life. Then, when you return to your homes next spring, you can truthfully say, 'The winter of '04 was the happiest and most profitable one I have ever spent.'"

Musical Department.

The winter term opens with a large increase of attendance in the department. All branches of the work show remarkable gains over any previous session. In the band 54 are on the roll. Dr. Putnam has formed two complete bands—No. 1 and No. 2—advanced and beginners. No. 1 has 31 members, divided as follows: E clarinet, 8 B clarinets, 4 cornets, 4 altos, 5 trombones, 1 tenor, 2 baritones, 3 basses, 2 drums and drum major. No. 2 has 23 members, as follows: Piccolo, 3 clarinets, 5 cornets, 4 altos, 3 trombones, 1 tenor, 2 baritones, 2 basses, 2 drums. It is a remarkable coincidence that the old and new players divide in this manner.

Among the new arrivals of experienced players in the band may be mentioned: Archie Andrews, baritone, from the Walhalla Band; H. P. Jamison, cornet, of Drayton; A. F. Claw, first trombone, of the First Regiment Band, Lisbon; John Orser, trombone, Colgate; B. P. Vold, clarinet, and John Salling, snare drum, formerly of the Casselton band.

The chorus, which is at work on the opera, "Pinafore," will number about 30. The opera is to be staged during March. Some soloists from outside the college will be secured and the production will be staged in complete form.

One of the practice pianos is now in the girls' cloak room of Science Hall. Another piano is to be secured and placed in Francis Hall, making four pianos in use by the department.

Miss Carter's piano class has been largely augmented. She has 22 college pupils. Her time is nearly all occupied during the entire week.

It is "Major" Swenson now, if you please, John Swenson having been appointed drum major of Band No. 1.