THE WEEKLY SPECTRUM

LIRRARY

Official Publication of the Student Organization.

VOL. XVI. NORTH DAKOTA AGRICULTURAL COLLEGE, TUESDAY Nov. 9th, 1909. PRICE 5 CENTS. Number 7. Foot Ball Game Delta Phi Beta **Machine Shop Is Prosperity Reigns Drainage System Is Proves A Fake** Sorority Entertains At Boarding Club **Nearing Completing Being Remodeled** Officials Indulge in "Chewing Happy Throng Makes Merry at Tools To Be Out Of Reach Of Pub-Club Reporter Tells of Advant- Drainage Ditches Now Being Con-Match" Over Decision and ages of Batchelor's Hall and structed on College Sec-Francis Hall on Satu. lic In Future. day Evening Until the Game is Stopped. its Uplifting Influence. tion. A Late Hour. The machine shop is again under ALLEGED REFEREE The boarding club which was FOR-Work began last week on the the process of reconstruction, unorganized two weeks ago is pros-WAS BRILLIANT AFFAIR FEITS GAME. drainage system which was deder the old arrangement it was pering and its members growing cided upon for the college farm necessary, in order that a passage fat. Even Durkin, who a month Athletic Relationship With St. Rooms Were Artistically Decoratat the last board meeting, and a might be had from the mechanical ago couldn't cast a shadow in his large force of men and teams has Thomas May be Abandoned ed With the College building to the engineering buildshirt sleeves has grown so fleshy Colors. For Good. been in the field since. ing, to leave the machine shop enthat you can almost see him with-Perhaps one of the most brilli-The system when completed will

Possibly one of the rankest exhibitions of the game of foot ball was witnessed at the Athletic park last Saturday where contrary to precedent there was a little beefing among the players, but some tall expostulation between the officials which finally resulted in the game being discontinued early in the second half.

We won the toss and St. Thomas kicked off to us. After a series of line bucks a short kick recovered by us resulted in a touchdown for us early in the half.

After this St. Thomas had the favoring wind and repeatedly advanced the ball dangerously near our goal line; however they were playing in hard luck and at every turn lost out. Finally shortly before the half was up they did succeed in putting it over the line. When they tried for a goal, tho, the ball struck the cross bar of the goal post and bounded back. As the A. C. had also failed to make a goal the score stood 5 to 5 in nobody's favor, which way it still stands, and very likely will remain.

On the kick off Darrow received the ball and advanced it thru an open field about 40 vards before the whistle sounded and the First Half was over.

In the second half after 14 minutes of play the field judge, Kalmbach, called a foul on a St. Thomas man for roughing Darrow. The penalty for which was his removal from the game and half the length of the field.

However the referee would not enforce the rule and said that the fild judge was exceeding his jurisdiction.

Following this the St. Thomas bunch left the field, and finally our men left. After a free for all argument had taken place and everybody had vociferated his or her opinion on the game of foot ball as it is played, ought to be played, etc., St. Thomas out of the munificent and bonteous goodness of their hearts offered to take their man out provided the penalty be not allowed and that Kalmbach do no further officiating. At this time however our fellows were already dressed and had left the Gym. Even if the hadn't we could never submit to such mandates of the "sudo" referee for St. Thomas whom it is believed by many was also their coach.

Below we submit the line up for what was to have been a football game, but in reality turned out to be a Gold Brick Buncoe Game. St. Thomas.

A. C. le Iwen

out his overcoat.

Improvement in the class work of its members has been remarked the faculty though probably with "An ax to grind," as the club been members have given trentle hints that an invitation to dinner would be nearly as welcome as one to the sorority "doins". However the absence of feminine chatter has some influence and the nervousness of the bashful members is gradually wearing off for even Ford sleeps well and has an alarming appetite. Of course as long as they keep the dormitory connected by telephone it will be difficult to regulate the hours of such society favorities as the club contains but there is consolation in the fact that the jealous fellow members are only obliged to hear one end of the giggling "conflabs" of calf love.

The hours of the club are necessarily regular as Critchfield is the only one who knows the way home in the dark and he is well chaperoned and never smells of laterals. anything stronger than "Ludefiske" and "Copenhagen Snoose" and will have his diploma in six months .- CLUB REPORTER.

SIX A. C. PEOPLE GET LUCKY NUMBERS

Darling's Luck still in Good Work ing Order. Keney Gets Booby.

Quite a number of the A. C. people registered for the land drawing of the Cheyenne and Standing Rock Indian reservations but not all of them were successful. As far as we have been able to find out the list given below s complete:

H. B. Darling, No. 43; Kate Pozderic, No. 1333; W. A. Haskins, No. 1742; John Thysell, No. 2250; C. W. Dynes, No. 11,923; Mark Keeny, No. 16,479.

		Eldri	dge.	
Williams	lt		Rawla	
Olson .	lg		Rhode	
McKinstry	c	.1	Kilday	
McDonald	rg	Hunt	inmier	
W. Haskins	(Acting	Capt)	rt.	
		Carr,(Capt)	
Anderson	re		Bawlf	
Miller, Darr	ow qb		Pepin	
Foss	lhb		Dries	
Ueland	fb		Hilger	
Wirtenberge	r rhb		Shea	
Officials:			mpire,	
Watkins (Vermont); Umpire and				
referee, Melville (Army); field				
judge, Kalm				
Kalamazoo.)				

Michaud utes.

consist of a main ditch along the north side of the section with primary and secondary laterals leadupon by the most pessimistic of ing into it from the south. The main ditch which is being made by contract was let to Huntoon and Holcomb of this city. This ditch is the chief feature of the system and will involve the greater part of the work. It is being constructed four feet wide on the bottom and with a depth of from four to five feet. It has the slight fall of 1-2 inch in one hundred feet and opens into what is commonly known as the Big Slough.

The primary laterals are being done by the college teams and extend south from the main ditch. They begin with a depth of about a foot and a half at the south end and increase to two and a half at the north end where they enter the main ditch. This gives them a fall of two feet in the half mile.

The secondary laterals are merely the dead-furrows which will be connected with the primary

In all the project will involve the moving of about 2000 cubic yards of earth and when completed will be a very representative Red River drainage system. The greatest difficulty to be overcome is the fact that the middle of the section is lower than the sides so that the ditch leading into the Big Slough is practically on a level. This may cause the drainage to be imperfect at times of high water in the slough, but beyond doubt the general results will be very satisfactory.

The work is being rushed as fast as posible during the warm weather and if all goes well the system will be completed the last of this week. As yet nothing definiate can be said as to the capacity of the ditches nor the amount which they will be required to carry off. The system will get its first trial next spring and exact data as to its capacity and the demands made upon it will be gath. ered at that time. It is certain, however, that the drainage of the farm will be well worth the expense incurred.

The first target practice on the lf range was held Friday when half of Company A tried their skill at out door shooting.

WILD ANIMAL MERCHANTS from the famous Dormitory jundays after 7:30. INEZ & LULU CO.

ant of the week end's social entertainments was that given by the members of the Delta Phi Beta Sorority last Saturday evening in Francis Hall.

The hall was artistically decor ated in vellow and green. Each corner was cosily arranged for a tete-a-tete and were at all times at the hight of the popular favor.

Dancing was the principal feature of the evening, regardless of the fact that the hall was somewhat small and the quarters were necessarily crowded. The excellence of the music went far toward surmounting this difficulty.

For those who did not care for dancing, card tables were provided. Whist was here largely played by those of the foot-ball heroes who owing to the recent game with St. Thomas and the effect of previous contests were in no condition to do the light fantastic. At a late hour a delicious lunch eon was dantily served from chafing dishes on a buffet table. The invited guests, among whom were members of the Mu Fraternity, the Junior Faculty, the foot-ball team and others all vote the evening a most enjoyable one and the members of the Delta Phi Beta as most capital entertainers.

CADETS MAKE FIRST

PUBLIC APPEARANCE

Lack of Practice is Evident But Rapid Improvement is Expected.

considerably earlier than regular inspection usually begins and of to stir about and by the time the showed the lack of practice. The he was nearly tickled to death. ceremonies were held on the par- Here the coat was given a thoride ground west of the library at the usual hour of 3:30. While the troublesome rodent temporarily company was being inspected and the journey resumed. Drum Major Keeney occupied the a number of the maneuvers. As the parade ground and the regular movements gone through. The music furnished by the band while place in front of the First Nation the march was not all that could be desired but was quite as tor was in a state of desperation good as could be expected when it and determined to disclose his is considered that nearly half the tormentor at any cost. Accordingmen had never played on the ly he proceeded to institute march before, and many had never thorough search to the great ameven marched. there however, and a few practices ed they were witnessing an unuswill see them in good form. Both ually violent case of Delerium Tre-We suply wild animals direct the band and company show a mens. This time, however, the marked increase in size this year. doctor succeeded in locating the gles. Mice a specialty. Call Sun. As usual there was a good sized mouse and after removing the crowd out to watch the cere- cause of his troubles traveled on monies.

tirely open to the public and thus afford an excellent chance for anyone to help themselves to any of the small tools to which they took a fancy. The method that has been used to overcome this difficulty, is this, they have opened the old door behind the lockers in the old hallway and closed the dor they have been using. They intend to move the tool lockers into the corner where the old door was and put the old steel fence around them. During the past week electric wiring of the new part of the machine shop has been completed and now there is light at any time in any part of the shop so that Erickson can work after dark if he wants to.

The testing machine is now reposing in its new home, the testing labratory.

DR. PUTNAM MIXES WITH DARING MOUSE

Strange Antics Cause People To Suspect the Doctor of Intemperance.

Dr. Putnam and an ordinary grey mouse were the chief actors in a rather exciting drama the other day which for a time cast grave doubts on the sobriety of our respected Director of Music. In some way the mouse gained access to the doctor's coat and secreted itself under the lining where it was when the doctor donned the garment at Music Hall The first inspection and parade preparatory to going down town. was held last Wednesday. This is No sooner did he start out than trouble began. The mouse began course both band and company doctor reached the Main Building ough shaking which quieted the

Another violent outbreak of time by putting the band through hostilities took place on the car which caused the passengers to soon as the company had been in- suspect the doctor of insanity but spected they too were marched to still failed to disclose the true cause of disturbance.

> The third and final act took onal hank. By that time the doc-The material is usement of bystanders who believin peace.

Don't Forget BOB SMITH TO-NIGHT at the Presbyterian Church. Get your Tickets at the Bookstore.

Parasite Blamed For

Fertility Not Gone From Soil Say Station Botanists.

Press Bulletin No. 33 has recently been issued. Bulletin advances the theory that the reduced wheat yields of the Red river valley are caused, not by lack of fertility but by a parasite which is carried in the seed and is residual in the soil.

The extract given below gives the substance of Prof. Bolley's conclusions upon the subject:

(1) "That continuous wheat Edwin Evingson ... cropping has, in my belief, been Ben Barrett Vice President chiefly instrumental in the introduction of wheat parasites into the soil and into the seed, and that these parasites are carried in various ways from field to field and especially are transmitted from crop to crop by way of the seed.

(2) That through the practice of continuous wheating, soils in many cases become infected with one to three or four definite parastic fungi which attack after the same manner as the flax-wilt fungi attack and destroy the flax crop on old flax lands, and therefore Domestic Science such wheat lands may be said to be "wheat-sick" in exactly the same sense that the old flax lands have previously been termed "flax-sick."

(3) We have found that various types of fertilizers and chemical substances applied to the soil, and various methods of treating the soil have marked effect upon the type of injury that these fungi are able to accomplish. For example, by special treatments of such old "wheat-sick" lands we have been able to heighten the destructive effects of the diseases upon the crop. In certain other cases we have been able to greatly modify or improve the character of the seed and straw produced.

(4) The diseases under consideration may attack the crop directly by the way of the seed, by way of the soil, or through wind blown speres.

(5) The destruction of the crop so far as reducing the yield of of plump seeds is concerned, seems to be quite closely proportionate to the speed of maturity and to the hardness of the straw; that is to say, a stiff, harsh straw suffers ess than a soft, succulent straw.

(6) While there is sufficient fertility available in our Red River soils to produce an abundant growth of straw, the quality of the straw produced is often of such nature that when attacked by the various soil and seed infesting fun gi it is unable to resist. The result is that the grain fails to fill. In many cases the young grains are cut off from the mother plant by the action of intervening fungi before even the milk stage is reached, with the result that all of for this strange equipment but it the grains of a head, or most of is generally supposed that a Knocthem, are shrivelled. The action ker's club or an Anvil Chorus will of the fungi is greatly heightened be heard from in the near future. by hot, moist weather and poor drainage. The fungi often attack Mr. Herbison, a one time inthe grain internaly and usually structor in dairying at this insti-

spotted appearance simulating a minute rust, finaly giving an ashy Decreasing Wheat Crop or grayish appearance to the upper portions.'

Sophs Hold First **Meeting For Year**

Election of Officers And Financial Discussion Make Lively Session.

A meeting of the sophomore class took place last Wednesday at which the class organized for the coming year. The following officers were elected.

... President Clarence Waldron Secretary Fern Dynes Treasurer John Halland Serg't. at arms A short discussion of the financial conditions took place after the election, but the class was unable to agree, and as a large percentage of the members were beginning to feel the call of the inner man, the class adjourned without finding out where the money was coming from.

Cooking Experiments

Co-operative Work With Other Institutions on Beef.

The Beef Producers association which has been organized for the purpose of educating the consumer in a better understanding of the beef carcass, has asked Miss Hoover of the Agricultural ber of other Domestic Science schools of the country to do some experimental work in cooking the cheaper cuts of beef. Each school has a certain cut to experiment with, Miss Hoover having the shin.

The results of the experiments will be a number of recipes which will be sent to the Beef Producers Association convention, which meets in Denver Jan. 10, 1910.

Some of the points to be considered in the work are, shopping how to buy, how the meat should be prepared by the butcher, average price, cost of cooking by coal gas or fireless cooker and stewing. The work is done for educational purposes and the recipes will be given to the public thru the press with due credit to the institution preparing them.

The work will be done in the course call ed Experimental Cooking.

Knockers Club.

Last Wednesday a detachment of the Junior Faculty was seen to leave the dormitory armed with sledge hammers. It has been impossible to find the exact reason

fruit upon the straw, giving it a tution stopped over at the college







Dak. Spectrum. Only One "Bolt" Left. Professor Keene was again absent from his 10 o'clock class on Wednesday .- North Dakota Spectrum,

D FROM THE

prices go Hand in Hand.

gion.

CLIPPE

Dak. Spectrum.

Fargo Ferris, Grady & Reineke,

"ELMORETO

A loc Cigar for 5 Cents

THE WEEKLY SPECTRUM.

THE WEEKLY SPECTRUM

sion of the effects of deep plow-

eral conditions surounding agri-

culture in this state at the pres-

ent time. Agriculture, he declar-

ed, must always be our leading in-

dustry, no matter how rich the

mineral and other resources of the

avoided entirely, or by proper

treatment eradicated if the land

Proper rotation also demands

Mr. Gregg next took the plat-

form and spoke on the "Value of

Leguminous Plants." Of the many

chemical constituents required by

growing crops all but three are

quite easily obtained. These three

are potash, phosphoric acid and

nitrogen. It is in the obtaining

of these that the legumes have

their special value. Clover has

the power to draw nitrogen out

of the air while alfalfa is able

to take the potash out of the soil.

Then followed a very lucid ex-

planation of the manner in which

The last speaker of the after-

these things were done.

stock be kept on the farm.

chief interest of our citizens.

ing. Afternoon Session.

608 Front Street - - Fargo, N. D. The afternoon session opened with a greatly increased attend-

Ship Hides, Furs and Pelts -TO-**Bolles & Rogers** 303 Broadway FARGO, N. D.

> The Worlds Best Cigars. POTENTATE-3 for a Quarter Ioc and 2 for 25c WHITE BEAUTY | The Great BUUD TUCK { Nickle Cigars

Dr. A. J. Kaess

BUUD TUCK S A TRY THEM

What Does It Mean?

state might prove , and with this Eight months ago yesterday in mind the preservation of the two bright young men entered richness of the soil must be the our office. One decided to take a course with us, but the other There are means by which this went to another school. Three may be done and at the same time days ago the young man whom increase the yield per acre. Mr. we instructed weat into a position as bookkeeper in a bank. Tohow the result may be obtained day the other young man entered by careful rotation of crops so our school and started at the begnning of his course.

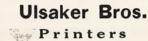
Aaker's Business College, Fargo, N. D.



Fargo, N. D. 60 Broadway,

THE PANTORIUM F. Rockwell, Prop. Fashionable Cleaners. Clothing cleaned, pressed and repaired. 621

N. P. Ave., Fargo, Phone 658.



We will be pleased to do your printing and we believe we can

save you money. At the place where the Spectrum is printed.

207 Broadway, Fargo, N. D.



The Spalding Trade Mark.

is known throughout the world as a

Guarantee of Quality.

A. G. SPALDING & BROS.

39 6th Street South

Minneapolis

Phone 853

Physicians and Surgeons.

F. J. CAMPBELL, M. D.

Practice limited to diseases of woman. Genito-Urinary and Skin diseases. Office hours: 10-12 and 3-5. Over McDonald Drug Store, Front St. Phone 729 Front St. -Phone 729

Drs SORKNESS & CARPENTER

Physicians and Surgeons.

Edwards Bldg., - Fargo, N. D.

DR. E. E. BASYE

Osteopath (Fargo Infirmary)

101 Eighth Street South.

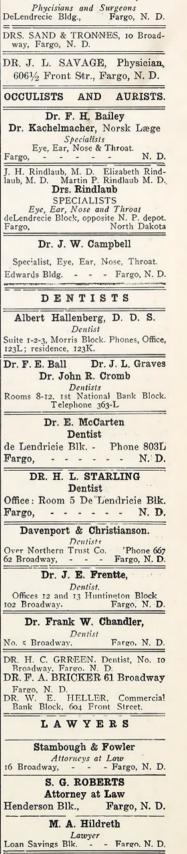
James Waite Vidal, M. D.,

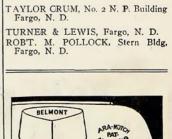
Physician and Surgeon. Edwards Block, Fargo, N. D.

Drs. Darrow & Weible,

3

Fargo, N. D.







POLITE VAUDEVILLE AT **First Instutute Held** 'HE GRAND

Matinee Prices 10-20c every Afternoon and Eevening Evening 10-20-30c

C. E. GREEN Dealer in Fresh and Salt MEATS

Poultry, Fish and Oysters in Season 'Phone 51-1. No. 105 Broadway, Fargo, N. D.

FARGO SEED HOUSE -Write Us-N. Dak. Fargo,

VIKING HOTEL & RESTAU. RANT Lindvig & Losness, Proprietors 420 Broadway, Fargo, N. D.

FOUT & PORTERFIELD Druggists

The Leading Drug Store in N. D.





SHOTWELL FLORAL CO. Everything in Cut Flowers, Plants Gold Fish, etc. Send for Catalogue N. D. Fargo, - - -

A J. Brown Go. Interior Decorating, Painting, Exclusive Imported and Domestic Wall Hangings.



STOP AT THE **Corner** Store CONFECTIONARY & CIGARS.

Matt Hamme Fargo,	er, Prop. N. D.
FARGO LUMBEI Lumber, Lath Sand, Gravel, Ceme Mill Work of 122 N. P. Ave.	& Shingles. nt and Plaster.
Fargo FARGO CITY PR sale and rent. Mon City Property. 1 W. J. LA Over First Nat Fargo, N	COPERTY for ey to Loan on Fire Insurance. ANE, ional Bank,

SCOTT HALL Depenable Footwear

Fargo,

ance due to the fact that the The first session of the farmers schools had been dismissed to give institute for the season of 1909the children an opportunity to at-10 was held at Hazelton, N. D., on tend the institute. Tuesday of last week. The warm The first of the three afternoon weather was most favorable for addresses was delivered by Supt. the meeting and the attendance Hoverstad who spoke on the gen-

At Hazelton

and the interest shown were very flattering. The opening address was by Sup intendent Hoverstad, who outlined the work being done in institutes and said that it was difficult to get a large attendance during the month of November as the farmers were so busy with their fall work that it was difficult for them to spare the time to attend the meetings. However the calls for institutes were so numerous this year that it was necessary to begin much earlier Hoverstad then went on to explain than usual to make room for all. Even now a number of such requests have been refused on ac. as not to exhaust the elements in count of lack of time. Another the soil faster than they could be great difficulty is that of procur. replaced. Plant diseases may in ing competent and experienced almost every instance be either speakers.

Prof. Shaw was unable to be present as had been planned and or seed becomes infected. O. C. Grieg, who for the past twenty-two years has conducted that a considerable amount of live the Minnesota institutes, was procured to take his place.

It was on the "Coateau Farm" belonging to Mr. Gregg that Supt. BIJOU Hoverstad and Prof. Haye now assistant secretary of agriculture, did much of the experimental work that has led to such wonderful results in the northwest.

Good Yields of Wheat. By a series of well directed

questions Mr. Hoverstad brought up many interesting points for discussion. He stated that the average wheat crop for the state was thirteen bushels but the facts brought out showed that those around Hazelton were much better. Those who had threshed were asked for their yields and it was shown by actual measure they ran from 13 1-2 to 22 bushels, one case of 175 acres of hard wheat giving 19 bushels per acre. Yields of 35 bushels of durum

were told of and flax ran up to 15 bushels to the acre.

Members of the audience took an active part in these discussions and many facts of general interest and value were brought out.

A Pioneer in Farming. Mr. O. C. Gregg was then introduced and gave a very able address well suited to the needs of the locality. He explained the reason for his beliefs based on many years experience. He settled on the "Coteau Farm" in 1870, eighty miles from a railroad and in a country where the climatic conditions were so different from those of his New England home that it was pioneering ndeed for him. It was here explained how Hoverstad and Hayes did their work that has now led to such results in what is known as "dry farming."

The speaker then went on to tell of his experiences in institute work in Colorado where he has made a careful study of dry farming conditions. The people of that state do not in many cases realize the advantages of a moderate as compared with a heavy rain fall, but Mr. Gregg declared that for his part he preferred an occasional lack of rain to an exdess, which did quite as much damage and was far more disagreeable.

The remainder of the forenoon N. D. session was devoted to a discus- and Peary-odicals."

In many cases reduced yields are due to worn out soil but to some due not to worn out soils but to some diseases which may be overcome with comparative ease. Those who had attended the meetings during the day were so pleased with the addresses and discussions that the speakers were

prevailed upon to stay and hold an evening session instead of proceeding to Brophy as was their original intention. The evening was devoted to

more general consideration of institute and experimental work in this state with a very practical talk on potato growing by Mr. Hoverstad and a similar one on trees by Mr. Gregg.

This session like the two prceeding ones was well attended and great interest was manifest.

The account of the above institute has been given in considerable detail not only because it is the first one of the present season but because it is a fair sample of an institute program. It is largely through such means as this that the valuable information obtained by the experiments carried on at the College are brought before the farmers for whose interests the investigations are carried on.

Student to Libarian: "What articles or information can I get on arctic explorations?"

Libarian : "We have Cook-books

THE WEEKLY SPECTRUM

Published every Tuesday of the school year by the students of the North Dakota Agricultural College, at Ulsaker Bros., 207 Broadway, Fargo, N. D.

J. Allen Clark, Publisher Entered as second class matter September 28, 1997, at the post-office at Agricultural College, N. D., under Act of Congress of March 3, 1879.

Subscribers are requested to give prompt notice of any non-delivery or delay of papers. All communications should be addressed to *Business Man-ager* "The Weekly Spectrum," Agricul-tural College, N. Dak.

TERMS.

 One year in advance
 \$1.00

 One year in arrears
 1.25

 One term
 50

 Single copies
 05

Zditorial Staff

Littorian Dout.	
LeRoy D. Gifford	Editor
Harold M. Dodge Associate	Editor
Earle B. HuntAssociate	Editor
J. Allen Clark Busines	s Mg'r.
Jessie ThompsonSociety	Editor.
Robert Miller Athletic	Editor
John T. Dinwoodie R	eporter
Inez Herron R	eporter
Alfred Anderson R	eporter
Roger AmidonR	eporter
D. J. Ford R	eporter

Statement Issued at the Meeting of the Faculty Representatives of the State University of North Dakota and the North Dakota, Agricultural College.

The athletic situation between the Agricultural College and the University was fully considered at a meeting between the faculty representatives of the two insti-This season's record tutions. shows the University undefeated, Fargo College and the State Science School played a tie, but two of them defeated the Agricultural College. Hence a game between the Agricultural College and the University would not this year decide the State Championship. The University is very anxious to have an opportunity to play Fargo College and the State Science Schoo, but this is not possible if pretty hard to get the best of the the University holds a date for girls. Whether this is due to the Agricultural College game. their watchfulness or to good In order to meet the interests of luck is not known. The would teh University, and in view of the fact that there was no written contract, the Agricultural the laundry room. They also had College has consented to forego a University game this season if to a post in the room. The dog, the University is able to arrange the other games. It is expected he soon became restless and woke that such games can be arranged the occupants of the first floor and in that case the Agricultural College will not meet the Uni- being flooded. versity in football this year. The regular games between the two institutions in basket ball and base ball were provided for. The track meet in the spring is also likely.

The above statement shows that the reason we did not meet the University this year, is that the University was unable to hold a date for us. This of course is to be regreted but as arrangements In many cases it was not brome have been made for the basket ball and base ball games it is not as bad as it might be. The Spectrum has always been heartily in favor of resuming athletic relations with the University and now that arrangements are completed we are sure that all the students will give their teams a sportmans-

THE WEEKLY SPECTRUM.

BIOLOGY

like deal when they come down here.

This is the first issue of the year in which anything of a purely literary nature has appeared. In past years there has been considerable material of this nature used However it has always been a question as to whether material of this nature should be used in a weekly paper. In looking over our exchange list we find that some of the weeklies use considerable of this material, while others are of a purely news character. The Spectrum would like to hear the views of some of our subscribers upon this subject. If our subscribers desire that we omit all stories and literary articles, it will be done, while on the other hand if it is their desire that we publish such stories as meet with our approval we will also be glad to do this. As very

that are really too good to be withheld. Let us hear from you on this matter. In this connection let us state that the Spectrum always will welcome any suggestions as to the policy of the paper. If there is any thing in the Spectrum that you think should be left out,-come and tell us about it, or if you think we are leaving out anything that should be published, come and tell us about that. This is your paper and our aim is to run it without reference to our personal likes and dislikes. So that if in your opinion this is not being accomplished we would

often storiese come to our notice

Hallowe'en at Dormitory. Tales of Hallowe'en pranks

be very glad to hear from you.

have been numerous during the week.

The dormitory has had its share and the results show that it is be humorists entered the basement and turned on all the faucets in a dog with them which they tied however, defeated their plans for and the basement was spared from

Quack Grass in Brome Seed.

During the last few years a large number of farmers have reported that they could not kill brome grass. One had been plowing a field four years without success. Prof. Churchill recently made an investigation in this line by getting samples of the grass. grass but quackgrass which was Nov. 3, 1909. introduced in the brome grass seed. This shows the importance of the new seed inspection law. Now it is unlawful to sell any seed containing quack grass seed.

Last year an article was printpaper about the Minne-

sota Agricultural College being a match making institution. The same might be said of the N. D. A. C., if statistics were gathered as two of the former Short Course students, Miss Gudrum Isfeld and Mr. John M. Johnson were united in marriage at the bride's home

AGRICULTURAL COLLEGE

The second annual report of the North Dakota Live Stock Association is in the hands of the printers and will soon be ready for distribution. This report contains the papers and addresses of their meeting in connection with the Tri State Grain Growers Convention last winter and many other articles helpful to live stock rais-

The second team took two days off last week on account of having no prospects for games, but are now busy training again having several games in sight. They had a practice game with the Fargo Highs Friday afternoon to keep the Highs in practice for their game with the St. Paul Central High School.

Nine full Courses viz: AGRICULTURE CIVIL ENGINEERING MECHANICAL ENGINEERING DOMESTIC SCIENCE GENERAL SCIENCE EDUCATION PHARMACEUTIAL CHEMISTRY VETERINARY SCIENCE These courses are available to those who have completed the equivalent of a good High School Training. For those who have not had such a training THE AGRICULTURAL AND MANUAL TRAINING HIGH SCHOOL offers complete secondary courses in :-AGRICULTURE ENGINEERING AND MANUAL TRAINING COMMERCE GENERAL SCIENCE DOMESTIC SCIENCE RURAL TEACHERS' TRAINING These courses all fit fully for college entrance **Special Courses:** COMMERCE FARM HUSBANDRY

The North Dakota

Agricultural College

FOR COMPLETENESS OF EQUIPMENT AND

FACILITIES FOR INSTRUCTION IS UNSUR-

: PASSED IN THE NORTHWEST : :

The College Department offers

A Complete Commercial Training Is Offered To All Students.

THIS COLLEGE

The demand of the present is for men and women who can think and investigate for themselves; who can deal with the social, agricultural and industrial problems of the day. This demand the Agricultural College is attempting to supply.

EXCEPTIONAL ADVANTAGES ARE OFFERED IN BIOLOGY, CHEMISTRY, DOMESTIC

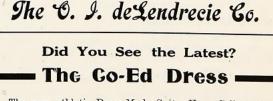
SCIENCE, LITERATURE, MATHEMATICS, ENGINEERING AND VETERINARY SCIENCE.

Graduates from approved High Schools are admitted to the Freshman classes of all courses. Credit is allowed in the Agricultural and Manual Training High Schools for all work done in the secondary schools.

TUITION FREE-Board and Room, \$3.75 to \$5.00 per Week.

For Catalogs and Circulars Address the Registrar

NORTH DAKOTA



The new athletic Dress-Mode Suit. Your College colors and initials. We invite inspection and a visit to our large ready-to-wear for young women.



The class in The Care and Man gement of Live Stock under Prof. Richards has been visiting the various barns at the college lately where they received practical instruction in the line of caring for different kinds of live stock.

Student who has been sent for

a burrette: "I want a brunette."

"Won't a blond do?"

Shall there be a private parlor in Ceres Hall? Mr. Tibert is puzzled and wants the pros and cons on the matter.

Wednesday was a drum duet for some time after the rest of the band had stopped.

The Spectrum staff held its first general meeting for the year Friday afternoon.

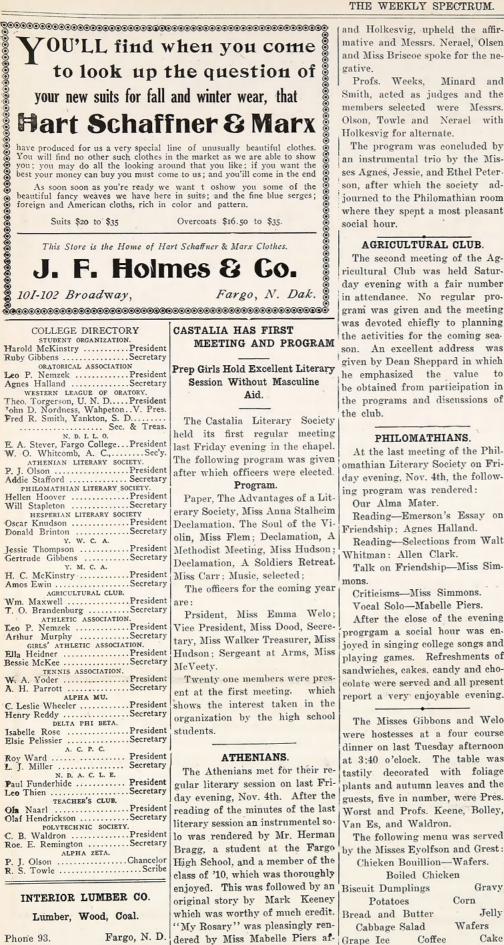


PHARMACY DOMESTIC SCIENCE POWER MACHINERY

OFFERS to the young people of this state an education which is thoroughly in line with modern thought and demands. It spends no time on dead languages or such subjects as are of little practical value. It aims to fit young men and young women for responsible positions in life.

THE LABORATORIES AND SHOPS ARE THOROUGHLY EQUIPPED

THE INSTRUCTORS ARE SPECIALISTS IN THEIR RESPECTIVE LINES



Phone 93. Ellen Surutskou,

> Kouzmusky, Sarovky, Bessarabia, Russia.

The above is the address to which our Agricultural Department has sent pedigreed Golden Dent sorn, wheat and barley. She reports that these grains are well adapted to that region.

Keeney is planning a pleasant which he intends to hand in this week.

Fargo, N. Dak.

ter which the local happenings of the week were given by Lars Welo, which were as spicy as ever. Miss Florence Hunt then gave a vocal solo entitled "Roses."

The main feature of the program was the preliminary contest in debate held for the purpose of choosing a team to represent the society in the Inter Society Debate which takes place on Dec. 13 upon the subject: Resolved, That a Graduated Income Tax With Exempsurprise on Prof. Slocum. He is tion of Incomes of Under \$5,000

Pianola Pianos Steinway Piano EVERYTHING KNOWN IN MUSIC Plano L'omnanv SIDDE Established 1894

mative and Messrs. Nerael, Olsen and Miss Briscoe spoke for the ne-

Minard and Smith, acted as judges and the members selected were Messrs. Olson, Towle and Nerael with

The program was concluded by an instrumental trio by the Misses Agnes, Jessie, and Ethel Peter son, after which the society adjourned to the Philomathian room where they spent a most pleasant

The second meeting of the Agricultural Club was held Saturday evening with a fair number in attendance. No regular program was given and the meeting was devoted chiefly to planning the activities for the coming season. An excellent address was given by Dean Sheppard in which he emphasized the value to be obtained from participation in the programs and discussions of

At the last meeting of the Philomathian Literary Society on Friday evening, Nov. 4th, the follow-

Reading-Emerson's Essay on

Talk on Friendship-Miss Sim-

Criticisms-Miss Simmons.

progrgam a social hour was enjoyed in singing college songs and playing games. Refreshments of sandwiches, cakes, candy and chocolate were served and all present report a very enjoyable evening.

The Misses Gibbons and Welo were hostesses at a four course dinner on last Tuesday afternoon at 3:40 o'clock. The table was tastily decorated with foliage plants and autumn leaves and the guests, five in number, were Pres Worst and Profs. Keene, Bolley,

The following menu was served by the Misses Eyolfson and Grest:

Jelly Wafers Cake

Teachers Club Meeting.

On last Wednesday evening the Teachers Club was reorganized and the following officers elected: President Lucy Carkin Vice. Pres. Annie O'Keefe Secretary Clara Gunness Treasurer John Anderson Critic Mamie Carr

sive year that Prof. Richards has

judged at the International. This

is certainly an honor and shows

his efficiency in that line. He is

receiving congratulations in large

numbers. This year he will also be

one of the judges in charge of the

PROF HULT VISITS FARGO

Prof. Hult, head of the depart-

ment of Greek and English, at the

U. N. D., former instructor at

this institution, visited friends at

the College last Saturday. Prof. Hult was enroute to Minneapolis

and St. Paul, where he will deliver

a series of lectures on Sunday,

Monday, and Tuesday. A volume of poems entitled "Reveries

and other poems'' by Prof. Hult

published by G. P. Putnam, will

appear within the next month.

student judging contest.

AGRICULTURAL CLUB Nov. 13, 1909.

Debate. That summer fallow Resolved:

is more profitable than a cultivated crop.

ou orop.	
Affiirmative	Negative
Walters	Brander
Peterson	Dyke
Anderson	Montgomery
Music	Selected
Reading	. Melvin Johnson
Candy Fact	ory Visited.

The class in "Food Products of the World," visited the J. Grant & Co., Candy factory, Friday morning.

Mr. Grant was kind enough to devote two hours to the class ex-



Have You Thought of. an

Chicago. This is the third suces- Insaving in Store Rent, I can sell at smaller profit, that is why I am located in my new block. -0-

FARGO, N. D. 417 N. P. Ave., Special Price to Students.



Flynn has the Agency. 631 N. P. Ave. 'Phone 21 Fargo, N. D.

THE MODEL TAILOR SHOP French Dry Cleaning, Pressing, and Repairing. Special attention given to Students' garments. A. D. Coates, Manager. 63 Broadway, Fargo, N. D.

There are at present 85 girls en-

Yell Leader Keeney was great- rolled in the Home Economics dely missed at the game Satarday. partment.

working out a couple of problems per annum, Would be a Desirable Modification of Federal Taxation. Messrs. Towle, Barrett McCall,

Grand Forks, N. D.

THE WEEKLY SPECTRUM.

you must rescue me."

broke in Peter.

aches.'

ful lot of you, but I don't know

"That's what mother said,

"Now, look at here," said Bes-

starting in on the lover's quar-

rel. Besides you know I didn't

mean what I said, those were only

Peter looked a little foolish but

bent down and picked up a bunch

strange?" said he, "but do you

know these flowers have blossom-

ed twice since we sat down on the

"So they have," said Bessie,

but so has the apple tree and so

has everything. Don't you know

that even you look eve rso much

larger and manlier than you did

a little while ago. You see time

flies like everything and we are

already two or three years older

"Oh yes, I just had that fune-

ral," said Peter. "I wish it had-

n't happened. But then it sort of

together, don't you think so?"

"Why, what's the matter?"

"And you won't leave me?"

swered Peter while he hugged her

whispered Bessie.

than we were at the funeral."

"Isn't it

of forget-me-nots.

"I won't stand anything of

an awful temper and that

shouldn't play with you."

ne or anything else.'

sie.

50 ? "

bench.'

around you all the time."

folks anyhow?"

What does a man profit if he gains the whole world and his pants bag in the knee?

We Press Clothes and we make 'Em.

Our "Fall and Winter" Stock is complete and ready for Your inspection. We never charge" for a look. And may be You need some Furnishings. A Hat, a Cap, or a pair of Gloves, or anything in that line. Our store Come in and look is in No. 7 Broadway. the place over, we want to get aquainted. . . .

Most Respectfully

C. J. Feller, N. Dak. Fargo,

The Completed Romance Now it is a law of nature not commonly known that all roman-

This romance differs from the common love story in one very important point, namely the fact that both the hero and the hero. ine die in the first chapter.

Pete Brown, age 16, second year High School and just safely thru with his last part of knickerbockers, had gone skating on the thin Red River ice with Bessie Webb, age 15 dark hair, brown eyes, the prettiest girl in all the world according to Peter's best judgment. Had each one skated separately they might have been compelled to finish this this romance alive but as it happened Peter was holding Bessie by the hand and showing her some fancy steps, | at nightfall. Bessie's mother and called the double grape vine, when the ice broke and they both fell their usual work with tear stainin, gave a shriek and a gasp and ed faces and heavy hearts little died. The whole thing was over in two minutes. When they were missed and mourned were chasbrought ashore several doctors 'pronounced'' them dead. They had a lovely funeral, beautiful the gayest of gay times. The white coffins, lots of flowers from friends, relatives and school chil- being noticed or interfered with dren. Everybody seemed terribly cut up over the affair excepting Bessie and Peter. They took in the whole business from first to last as good natured shades who seemed occasionally to have always do. For a while it occupied their attention so much they scarcely noticed each other.

Soon Bessie said, "It's a great success, ain't it?"

"Yes," said Peter. "But that's not what I have been thinking about."

'And what were you thinking about?" "Well, I was simply thinking

that we will have to complete our romance. You know we had barely got started when that pesky ice broke."

"That's right, Peter if you hadn't been so foolish and kept on squeezing my hand and giggling and paid more attention to the ice we could have finished as we were, but then it doesn't mat-

Now it is a law of nature not ces begun must be completed here on earth. That's why many who expect to die hurry up and get married. Those who perish early must linger until the law is satisfied. It is not only imagination, when poets people birds and trees with spirits and sprites. When we think we see fairiese dancing on the water by moonlight or hear whisperings and sighs among the

bushes in the garden these are simply the jolly, youthful beings who were cut off in the bud and who must fill the cups of love's trouble and love's happiness before they depart for other realms. According to this Peter and Bessie found themselves happily skipping along the old home path the rest of the folks went about dreaming that those they ing all over, thru garden and house round about them having shades felt greatly relieved by not and gave themselves up entirely to

the fun and frolic of love making. "But how long will it take to get thru with this?" asked Peter a serious thought.

"Well, let's see," said Bessie. 'I'm fifteen, and you're sixteen, years, providing everything goes well." we might get thru in five or six

mide and seek all that time?" into a flood of tears which she she felt a warm hand on her why, no, you goose," laugh- had been trying to restrain ed Bessie. "Haven't you read the

books? Don't you know what the books say?" "The books?"

"Yes, all the romances printed in books. I'll tell you,'' and here she began counting on her fingers.

'First there is all about who we are and how we get acquainted."

aches, third, comes a full under-William Rosen Representing the standing with awful excitement and happiness, fourth, our hopes **Furnishings** are unexpectedly upset and de-Clothing, ferred, fifth, we must have a big misunderstanding and a hopeless and Shoes lover's quarrel, sixth, I must get into some terible .danger and altho you are ever so mad at me Have your tailoring done at Best Clothing at lowest prices "Why, I can't get mad at you," 10% to all Students 107 Broadway, "Keep still, don't interrupt me," added Bessie, "you ain't OPEN EVENINGS realy mad but you think you are, For all Occasions Send "HER" one of our "DOLLAR BOXES,"—then watch results. seventh, after hesitating a little No. 9 Broadway we have the best kind of make Opposite Luger Furniture Store, up with tears and trembling and N. Dak. Fargo, sighs and vows. Eighth, let's see, oh yes, you are poor, you haven't wouldn't last forever. a solitary cent to your name. Evervthing that you expected has Time passed on, the two shades snugly perched on the garden been destroyed by an accident. To bench only dinly realized that the make up for this the books alseasons had made their rounds ways provide a nice rich uncle 303 Broadway once more, as the renewed odor who always dies at the right time. Now that's our program," said of lilac and honeysuckle came WE ARE THE LARGEST MANU-FACTURERS OF floating on the breeze. Leaving where we begin or what part we the sheltered nook they loitered take first. Bt we might as well about the garden and lost sight of begin at the beginning so that each other. "Peter, Peter!" calwe may know when we are thru." led Bessie, but no Peter answered. "Well, if that's the case then Finally she caught sight of him let's pass up the doubts and hearthanging over the garden fence watching Susan Marks and a num-"Oh, you can't," said Bessie. ber of other girls trotting off to Now, you see, I think an aw-

school. Susan who used to be a head shorter than Bessie was now whether you will amount to anya full head taller and Bessie couldthing or not and besides it would be very hard to leave my folks n't help but notice how Peter just to go and fuss and stew stared at her with wonder and admiration.

"So you're just wrapped up in "Is that so," snapped Peter. her," said Bessie. Who has asked you to leave your

"Wrapped up, nothing!" retorted Peter. "I suppose I darepouted Bessie. "She said you had n't look at anybody else now, not even my own soul, since I was lucky enough to get engaged "Lots your mother knows about to you."

Bessie gave a start as if she would spring at Peter, but suddenly wheeled about and started the kind, besides you are getting for her own room. Her heart our program all mixed up by your beating as though it would break. It never occured to her that this was the fifth point on the program and that the lovers quarrel was doubts. It really is very hard to an absolute necessity according think of leaving one's folks and to all the books. going away. Don't you find it

Once in her room she tumbled into bed and it seemed as though she would choke. "How could he?" She would never speak to him again as long as she lived. There was only one creature in the whole world that she hated more than Peter, and that was that bold, brazen faced Susan Marks, who seemed to pass thru a dozen different shapes of plant and beast and human, but always beckoning and calling Peter and drawing him farther and farther away from her. Waves of anger, love and remorse swept over her, hot tears coursed down her cheeks and she knew her heart would break unless she could find did a smile creep over her face, some one to help her in her mise. ry, some one to whom she could makes up for it that we can be tell the agony and sorrow of her great loss. A voice seemed call-"Of course it does." whispered ing her. Distinct she heard some "And are we to keep on play. Bessie at the same time bursing one repeat, "Bessie, Bessie!" and ing hide and seek all that time?" into a flood of tears which she she felt a warm hand on her

"Why, what's the matter?" her mother spoke to her consol-said Peter who thereupon pro- ingly but with great surprise: ceeded to console her in the most "Why, Bessie, what's the matter? approved manner according to the You must have a regular night. Brown and Bessie Webb. But Pelatest style laid down in the books. mare. Aren't you ever going to get up, you'd better hurry up and pleased and on their way home dress and get your breakfast. Bessie told Peter the whole, hor-"Well, I should say not," an- That Brown boy has been waiting for you down in the parlor for ter, instead of weeping as she had "Well, should think we could so tight that two or three moon-skip that," says Peter. beams which had accidently got him you would go skating with a wild man and acted twice as beams which had accidently got him you would go skating with a wild man and acted twice as "Of course," says Bessie, "but in between, were broken into him to-day." Bessie fully awake foolish and silly as he had ever ter much, we will have a good I was just starting to tell you splinters. The full understand- by this time almost should at dared act to Bessie before. time anyway. You'll see me home what the books say. First, our ing with all its estacies was so her mother, "You get him out of This dream to him was not all a and we''ll have a jolly time to-night just the same." acquaintance, second, there must perfectly real that Bessie cried the house, I don't want to see him. dream. You tell him that I'm not feeling

J. B. ASHELMAN. Royal Tailors. of New York and Chicago Call and See Me. 518 N. P. Ave. 'Phone FARGO N. 'Phone 815 N. DAK

Get In Line

THE FARGO TAILORING CO. Suits made to order. Cleaning and Pressing done on short notice. FARGO, N. D

Cut Flowers

FARGO FLORAL CO T. D. Smedley, Mgr.

A C. Bergerson TAILOR

Cleaning and Pressing Students are satisfied when they have their work done here. FARGO, N. D.



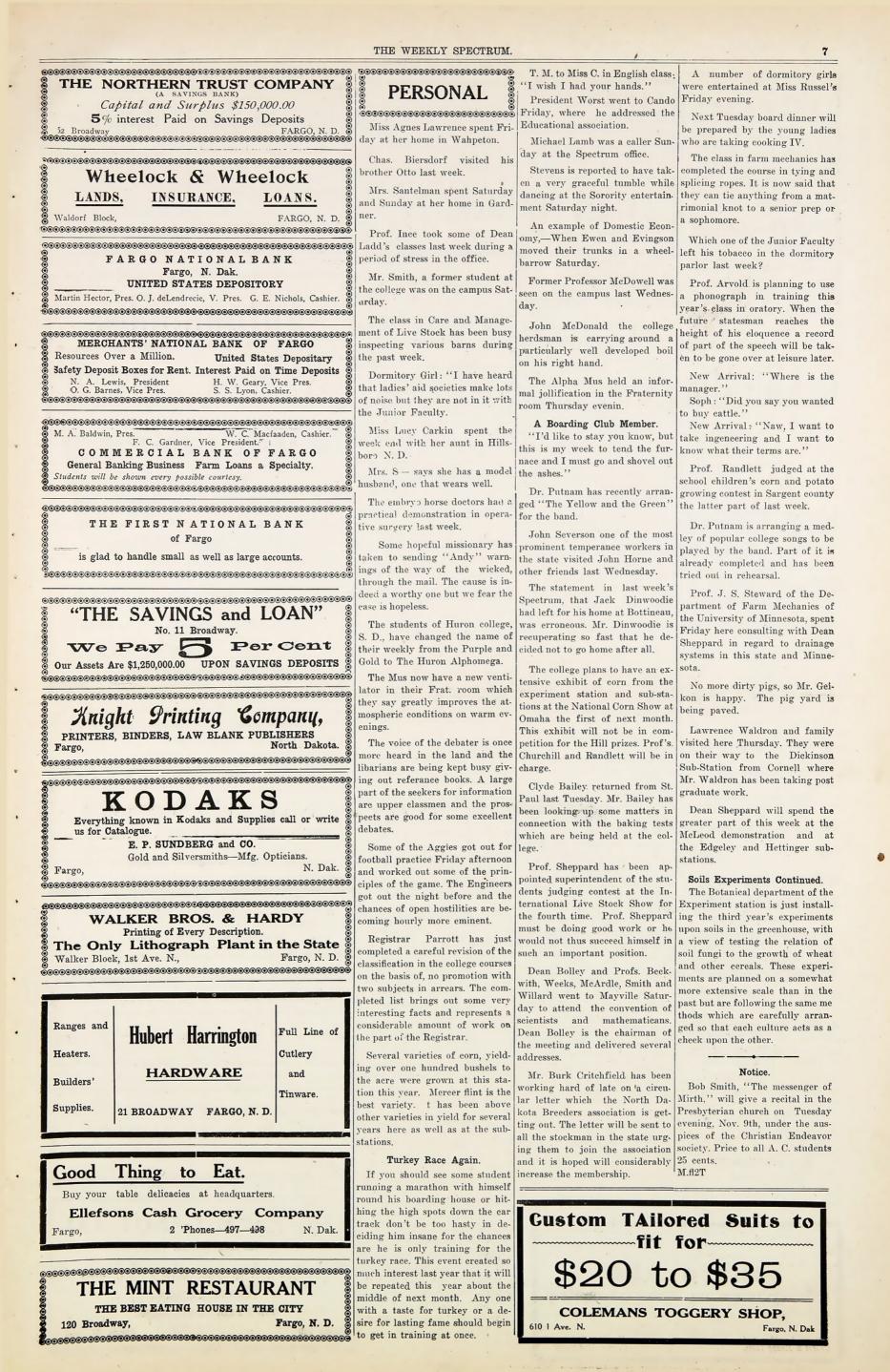
Dur 250 page Illustrated Veterinary In-strument Catalogue Mailed Free Upon Request. SHARP & SMITH

Manufacturers and Importers of High Grade Surgical and Veterinary Instruments and Hospital Supplies 92 Wabash Ave. 2 doors north of Wash-ington street, Chicago, Ill.

well and that I can't go skating." Having delivered herself of this thunderbolt she buried her face in the pillow. Her mother unable to understand the situation looked puzzled but finally went down and sent poor Peter about his business.

Next day the two sat in the large study room of the High School conning their lessons as usual. Peter sat eyeing a problem in Geometry which called upon him to prove that a straight line is the shortest distance between two points. He must have read the problem over about sixteen times without having the slight. est idea of its meaning because he was mentally struggling with that other problem. Why had Bessie turned him down after she had really proposed the skating party herself? Bessie was trying to commit to memory Bryant's beautiful poem on death called "Thanatopsis." In the meantime cold shivers crept down her back as she thought of the time and the funeral and all that. Not until her reviews reached Susan Marks whereupon she sent poor Peter several looks which announced that, "all's well." By the same wireless telegraphy Peter signaled back to the same effect. The teacher also made careful note of the mesages and just before school closed read from her sinner's list before the whole school the names of those who had not pleased her, and among them were Peter ter and Bessie were perfectly rible story of her dream, and Pe-

AGNES HALLAND.







We Photograph

Anything, Anywhere, Any time. Equipped with the best instruments obtainable and representing talent ac-quired by natural acquisitiveness and 20 years of steady experience. Our aim it to deliver "QUALITY PHOTO-GRAPHS" of anything, and we can

DEWEY'S STUDIO. FARGO, N. D. Edwards Bldg. We can save you money on them N. C. Anderson, Jeweler. ed. 66 Broadway, Fargo, N. D. Ideal Theat MOVING PICTURES AND IL LUSTRATED SONGS Every evening excepting Sundays 7:30, 8:30 and 9:30 Saturday Matinee. Change of pictures Mondays and Thursdays. -Ask For-Chancy Everhart Co. CANDIES The Pure, Good Kind. W. H. FLYNN state. A. C. GROCER -CONFECTIONARY-JOHN WANDMAKER The Barber Where you get the best hair-cut in the city. N. D Fargo, ATHLETIC and SPORTING GOODS General Hardware & Tools VESTERN HARDWARE ANTONS 57 Broadway, 'Phone 1530 J.E. Johnson CYCLE SUPPLY HOUSE Sporting Goods, Kodaks, Supplies. Edison Phonographs and Records. fore. Repairing of all Kind. 216 Broadway, Fargo, N. D.

E. J. BERG, Importing Tailor. 515 2nd D Fargo, Ave. N., M. F. HOLDERMAN At The Grand.

Confectionary and Cigars. N. Dak finishing work next Monday. Fargo,



homes gives us our standing in this community.

members meet with us.

bership can be increased is for you as a member to induce other live stock raisers whom you know to join. No dubt you know several live stck men to whose interest it would be to become a member of their state livestock association and they would probably join if they were urged to do so. I trust you will make an effort to obtain some new members be-

fore the annual meeting to help enlarge the usefulness of the association. The larger the organi zation the more influential it will be in aiding each individual memof the live-stock industry of the

Send in the names of those who consent to join before the meeting so that a program can be sent to them. If you cannot see prospective members send their names and we shall write them, in. viting them to join.

Yours for a larger membership, SECRETARY. P.S.-The annual report will soon

be ready for distribution. Watch for it. Read it.

It will probably come as a considerable shock to the sporting world to learn that at a heated discussion held at the boarding club Sunday the members decided that Johnson and Jeffries should not be allowed to fight on account of color.

Some of the Mus showed their chivalry by coming back Sunday afternoon to finish up the left over refreshments from the night be-

The Dormitory girls report strewill take the mice away.

in the new Veterinary building for the average student. The carpenters will start on the

PHYSICAL EQUIPMENT CONTINUES TO ARRIVE

Piece of FURNITURE we sell is an advertisement for THE LUGER FURNITURE CO. Each home we fur-

Are these not good reasons why you should select your fall home

furnishings from us? Come in and get our prices-we can save you

Much Practical Work Done By Students In Fitting Up Laboratory.

Several of the pieces of apparaothers are still coming.

One of the most interesting of nating currents into direct, this this year we should increase our was described in this paper a membership and have the new short time ago so all we will say about it is that it is an impressive The way in which our mem- and very useful piece of apparatus.

> Another piece that is interesting is a cook stove donated by the Malleable Steel Range company of South Bend, Indiana. This stove will be set up in room 27 and will be used in experiments in household economics and to determine the proper baking temperatures.

Max Harrington is working out the design of a vacum cleaner and when this is completed it will be installed in the doorway and everybody that enters the labratory will have to give himself a ber and in aiding the development thorough cleaning so as not to contaminate the otherwise immaculate laboratory.

In the past Dean Keene has had some trouble in impressing the idea of moments upon the minds of his pupils, but this year he will have in addition to the regular apparatus for illustrating moments a steelyard scale, a platform scale, a calculating scale and a differential pulley.

In a few weeks we will have two calorimeters, a Junkers calorimeter for measuring the heating power of gases and a Bomb calorimeter for determining the heat in coal and other solids. Dean Keene expects to run some tests of different gases after these arrive and among them he will run some tests of the city gas to determine whether the gas company are pumping more than 50 per cent air into the mains.

This has been the first year that Dean Keene has been able to get the appropriation necessary to put the labratory in the state of efficiency that he now has it. The Dean has received a large number of compliments from visitors neous times lately catching mice. on his equipment because the work And then the question arises, who offered is all of such a practical nature. In fact nearly all the apparatus is of such a nature that The plastering is about finished it is of immense practical value

> Work has been delayed on Cere's hall for the past week owing to the shortage of finishing brick.

Walter Knoop, who has been absent from classes for some time, on account of illness, is again back for work.

A puzzle for. chemists-What is the formula for dog ?- Ans. (K9.)

