

The Spectrum.

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HEROISM.

It takes great strength to train
To modern service your ancestral brain;
To lift the weight of the unnumbered years
Of dead men's habits, methods and ideas;
To hold that back with one hand, and support
With the other the weak steps of a new thought.

It takes great strength to bring your life up square
With your accepted thought and hold it there;
Resisting the inertia that drags back
From new attempts to the old habit's track.
It is so easy to drift back, to sink;
So hard to live abreast of what you think.

It takes great strength to live where you belong
When other people think that you are wrong;
People you love and who love you, and whose
Approval is a pleasure you would choose.
To bear this pressure and succeed at length,
Is living your belief—well, it takes strength.

And courage, too! But what does courage mean
Save strength to help you face a pain foreseen?
Courage to undertake this lifelong strain
Of setting yours against your grandsire's brain;
Dangerous risk of walking lone and free
Out of the easy paths that used to be;
And the fierce pain of hurting those we love
When love meets truth, and truth must ride above.

But the best courage man has ever shown
Is daring to cut loose and think alone.
Dark as the unlit chambers of clear space,
Where light shines back from no reflecting face.
Our sun's wide glare, our heaven's shining blue,
We owe to fog and dust they fumble through;
And our rich wisdom that we treasure so
Shines from the thousand things that we don't know.
But to think new—it takes a courage grim,
As led Columbus over the world's rim.
To think, it costs ome courage; and to go—
Try it. It taxes every power you know.

It takes great love to stir a human heart
To live beyond the others and apart;
A love that is not shallow, is not small,
Is not for one or two, but for them all;
Love that can wound love, for its higher need;
Love that can leave love, though the heart may bleed.
Love that can lose love, family and friend;
Yet steadfastly live, loving to the end.
A love that asks no answer, that can live
Moved by one burning, deathless force—to give
Love, strength and courage. Courage, strength and love,
The heroes of all time are built thereof.

Charlotte Perkins Stetson.

Jerry Bones.

You all know Jerry, of course, you see him almost every day, and give vent to the same time-honored jokes, at his expense, that he has been made the butt of since coming to live with us. But if you really knew Jerry, knew him as I knew him, you would treat his bones with more respect. Whenever I see Jerry with a cigarette between his teeth, I cannot get to him quick enough to relieve him of it, knowing, as I do, how he hates anything of the kind. And if nobody is near, I apologize for the rudeness of some new ass of the old type. Toothpicks, he did not mind, for in life, Jerry was very much given to the toothpick habit. The wads of chewing-gum that I sometimes find wedged between his jaws I always pry out, and after softening them on the radiator I stick them under the seat of certain chairs where I know they will be found and chewed by those who practice that habit. Jerry enjoys seeing them chew his gum very much, in fact, there are few things that so amuse him as to see some "sweet thing" munching as contentedly as old Brindle on a pleasant day in summer.

My friendship for Jerry began back in my Sophomore days, and came about purely by accident, but we have continued without a lapse until the present and I am sure will continue until I, too, shed the flesh of this life, and join the innumerable throng on the other shore. Then I know our friendship will be still closer netted; for then we shall be able to converse with each other every day as we did that night, when I first learned to respect him.

It all came about in this way—Back in the Soph days when I was, I suppose, as bad as any of that kind, I had a habit of going up to the Hall at night to study, whenever it got too noisy down below. It was well along in the spring term, and exams had begun to

push a trifle when one night I was trying to get fastened in my mind a few facts that should have been there long before; but the row overhead—where a precious trio of Juniors roosted—was growing with every succeeding minute; so I concluded to try the solitude of the Hall.

Oh yes, I understand that we are not allowed there after night, but my dear fledgeling, you must learn some time that there are others besides Cupid that laugh at locksmiths. It is all easy enough. After I had got nicely settled to work, I had occasion to look up a point in anatomy. The easiest way was to consult Jerry; so off I went, and soon had him seated in a recitation-room bench in front of me in as life-like a position as possible. When I took him down from the stand, I found three good cigarettes between his teeth, and feeling that he had no need for them and that I might, I put them in my pocket and thereby gained his good-will. I can't say just how long I had been at work, but it must have been some time, for I have a faint remembrance of hearing the court-house clock strike. It must have struck eleven. Shortly after, I heard a rattling of Jerry's bones. I thought of course he was sliding off the bench. Then I heard a sort of hollow yawn and heard his teeth clack together in a most unmistakable fashion. I raised my eyes to find Jerry in the act of getting on his feet. I don't suppose it will be necessary to tell you that I was startled, perhaps I should say frightened, for I think that describes the feeling better. I remember experiencing for the first time that crawling, prickling sensation of the scalp which precedes the erection of the hair, and felt my eyes hanging out of their sockets. Jerry, however, appeared to notice my condition and, thoughtfully speaking, brought me to my senses.

"Beg pardon, Blokie, for startlin' you. I thought you was so interested in the story you're readin' dat you wouldn't notice me," began Jerry in a not altogether musical voice.

"Good Heavens, Jerry," I managed to sputter, "I hadn't the slightest idea there was any life in you."

Jerry made a noise that sounded like pieces of plastering rattling down between the partitions at the "Dorm." After a while, when I became more collected and he had repeated it a few times, I recognized it as his laugh. Oh Jerry is full of fun!

Seeing that I hadn't full possession of my faculties, he began to explain: "Say, Blokie, you don't jes' understand my condition,—dis is my annual,—see?"

I didn't see in the least and tried, as well as my bewildered condition permitted, to explain that this experience was to me most remarkable.

The Jerry resumed: "Say, Blokie, jes' wait a tick or two, and I'll tell you how it is. You see it's dis way. It's just fifteen years to-night since I quit livin', see? An' you was so kind as to take me down off dat damn hook and to pry the cigarettes out'n my teet' and to bring me over here, dat when my annual came, I didn't mind talking to you, see?"

I tried to express that my vision was not perfectly clear yet, so Jerry resumed: "You see, Blokie, my glim went out fifteen years ago; and every year when dat day comes around I can talk with live people from 12 o'clock till morning, if I want to. And you bein' a particular white bloke, I didn't mind talkin' to you, see?"

I began to understand—Hamlet's ghost was under much the same conditions, except that he seemed to enjoy a succession of days or nights when he might talk with people if he chose. Here was certainly an experience whereby I might be able to learn something of Jerry's life. We had all made guesses as to the sort of man that Jerry had

been. Blake always said that Jerry had been a pugilist in his time, because of the shape of his occiput and lack of frontal, that his jaw was of the bull-dog variety and that from his height and the strength of his bones, he had, in all probability, been a "right pretty man in the ring." Most of the fellows agreed that Jerry had been a "man of dukes" and had been a "stayer", too, for the snape of his chest denoted a considerable lung capacity. As my wits came back to me, almost the first thought that occurred to me was to ask if he had ever been in the ring. To show Jerry that I was perfectly calm and entirely at my ease I tilted back in my chair, set my heels on the desk, and lighted one of the cigarettes that I had taken from between his teeth.

"Say Blokie," began Jerry,—

"Jerry, I wish you wouldn't address me as 'Blokie,' it smacks too much of the stock-yard. My name is Henry."

"All right, Hank, anything to please. I'm mighty obliged to you for taking de 'coffin-nails' out'n my teet', for I despise 'em mighty. You ain't got a good old cob about you, have you? I can't do it like I used to could when I had a t'roat, but I can go tro' de motion and it does most as much good, since my taster is gone wid de odder tings."

"I'm awful sorry I haven't, Jerry, but I'll go over to the greenhouse and rustle one, full as bad, in just a minute. Those fellows at the green-house own some particularly vile affairs."

"Say, Hank, why do call me Jerry? Dat aint my name. I used to be Joe when I needed a name at all, Joe Haugecherty from de fift' ward."

And Jerry, for I must still call him Jerry, sprang lightly back and put up his "dukes" on guard. Here was my chance. "Jerry, if you don't mind, I'll still call you by that name,—"

"Oh dat's all right, Hank, make it Jerry if you want to. I used to have an uncle named Jerry dat lammed the

why out'n a butcher in our ward every election."

"Jerry, were you ever in the ring?"
"Ever in de ring!"

Such an enormous amount of plaster seemed to be rattling down between the partitions that I looked around for something to happen, but it was only Jerry's laughter. It took him fully a minute to recover.

"Oh, I say, Hank, you're a sly cove, now you are. Ever in the ring!" and the plaster began to rattle again.

"No, of course I wasn't never in de ring, not on your life, Hankie, my buck, I was too smooth a lad to get my deat' in dat way."

"Well, what was your business?"

"Business! why I was a plumber, and I want to tell you right here, I'd never done a job like dat." And Jerry pointed with the bones of his fore-finger at a union in the steam-pipe, where a right-and-left coupling should have been. Here was a disappointment. After all our strong arguments as to his physical qualifications, to find that he had been an ordinary plumber!

"But you used to scrap occasionally, didn't you?"

"Well I guess nit, not when I could get away widout it, I didn't, not never. Do you suppose I was goin' to run de risk of gettin' my phiz smashed up like dat yap, Mike Connell, down in the sixt? I was a ladies' man, I was, Hankie." And Jerry made a graceful side-movement with his hips and scraped one foot on the floor, at the same time raising his arm and going through the motion of spitting over his elbow.

"I can't do it like I used to could when I was alive. Say, I'd a been a lala at de cake-walk business dat I see Haggart and Treat doin' in the hall. But dey didn't have any cake-walk in my time, on'y niggers did it den. Oh, I'm pretty much onto de guys about here, and I can spin you some yarns about de spooney people dat come into my room to spoon, never knowin' dat de old

skeleton is takin' it all in and laughin' to hisself."

"Jerry" said I, "I never knew before what made so much loose plaster in that room, but this explains it all."

"Scuse me, please," said Jerry, "but would you mind, Hank, if I asked you to straighten out my toes? You see my fingers have got so many wires in dem, dat I can't move 'em easy and when dem damn kids (scuse please) gets to foolin', dey almost always gets my fingers and toes twisted, and I can't get dem straight again." And Jerry put first one and then the other heel on my knee, while I rearranged his dislocated phalanges. "Say Hank," resumed Jerry as soon as I had him straightened out, "where is Meinecke? I ain't seen dat bloke for more'n two years and it use' to be dat whenever I couldn't see dat guy, I could hear him. I never could make out where he could find so many pies and doughnuts. Seemed like he never came into my room but he would set down by a table and first t'ing I'd know, he'd be saying, 'Hullo, Jerry, old man, have a doughnut' And den he'd laugh and begin eatin'. And he u always come and stick a piece tro' my slats. Course it would tumble out on de floor, but needer of us cared fur dat. But it was kinder friendly like, you know."

"Oh, Dutch graduated and I understand he is foraging in St. Paul now and incidentally managing a butcher shop owned by a fellow from Chicago, named Swift. It was the direct effect of ancestry, Jerry. Dutch was equal to better things if he had applied himself.

"Applied himself, why Hank, you're foolin'. Dat's all dat fellow ever did. Den dere was dat other guy, Heat', dat was gettin' to be such a ladies' man. De one dat used to run de Spectrum."

"Oh, Heath, you mean."

' 'Yes, dat's de bloke."

"He graduated, too, and is prowling about on the Pacific Coast, waiting for an opportunity to be governor of one of

these states, or get a good job in a draughting office."

"Den where is Olsen gone ter? De long guy dat was altus runnin' t'ings to sint himself, and de other guys didn't never seem to know it."

"Why, he is Mayor of Sanborn, manager of his father's elevators, doing chores, and a tew other things like that. Why is it, Jerry, that you are so interested in those tellows?"

"Oh you see, Hank, I've been here on dat hook of mine ever since de A. C. was born. Why, I knew Charlie Hall, when he didn't have a whisker and used to mash de girls. It does beat all where people get their dignty. But say, is 'Snake' and Fowler graduated, too?"

"Yes, they left last spring and are now numbered among our dear departed."

"And is de college a-runnin' de same as ever?"

"Yes, pretty much."

"Well, dat does beat ali. Is Fowler still married?"

"Still married!—why, Jerry, Fowler was never married." And then so much plaster rattled down that Jerry almost fell off the seat.

Just then there came a rattling at the front door that surprised us both most wonderfully.

"Dat's Gus," said Jerry, "and now how you goin' to get me back without bot' of us bein' disgraced?" Sure enough it was the janitor, and the only thing I could 'o was to double Jerry up like a knife, gather him under my arm and bolt for the back door. Fortunately, it is fastened with a spring-lock, so I got away all right and soon had Jerry on his hook again, and was in the act of leaving when Jerry stopped me with—"Say, Hank, I can't talk to you again for a year."

"Well, good-bye, Jerry, old man, I'll come to see you often," and I took his hand. It didn't seem so bony as it formerly had.

"Good-bye, Jerry, I must get—"

"But, Hank, hold on a tick, won't you?"

I could hear foot-steps coming down the hall and there wasn't a second to lose. "What is it, Jerry, quick!"

"Is it true, dat Gorder is goin' to get married?"

But I couddn't wait to tell him.

K. O. P.

The *Devils Lake Inter Ocean* insists that colleges, universities and the judiciary keep out of politics. What a disgrace Prof. Seth Low of New York would be, according to the *Inter Ocean* were he a citizen of North Dakota. It must be a remarkable emergency that demands a brand of politics of this order. To a young man just starting political life it would seem all the other way; that those who stand for education and justice should be active in politics to the end that it would stand for the best there is in American government. There are instances however, it seems, where this condition is not wanted.

In spite of the fact, that Feb. 28 was the most disagreeable day this winter, the dance given by the Philomathian Literary Society in the college armory on that date was a decided success and beyond a doubt was the social feature of the winter. About sixty couples danced the light fantastic to the elegant musical selections of Schirrmann's orchestra. At a tiny hour the guests departed, mutually agreed that they had been amply repaid for venturing out on such a stormy night.

The mild weather, which we have been enjoying of late seems to herald the spring time, as we are all affected with "that tired feeling" which is characteristic of that time of the year.

How Sadie Cured her Brother.

"Sadie, where's the morning paper?"

"O, Fred, please don't call me 'Sadie.' You know I despise that name."

"O shucks, you're too all-fired particular about your name, sis."

"Are you ever going to stop using slang, Fred? You get worse every day. Really, sometimes I am perfectly mortified at the language you use, when some of the girls are here."

"Well I can't help it, sissy. I'm so used to it now, that I never think. Tell me where the paper is and I'll try to do better."

Sadie relieved, and told him it was on the library table. Fred went to find the paper, while Sadie began making plans to cure her brother of using slang.

Fred Miller had just come home from college. He was a bright boy and had graduated with high honors, but while in school, he had heard the usual amount of college cant and slang. It had impressed him at first as being very interesting, so he undertook to acquire the new language. It did not take him long, however. But he found that when he once had learned the habit, it was almost impossible to rid himself of it.

His mother and sister were wholly disgusted with the language he used, when he returned home; and they tried every means in their power to cure him of it, but all to no avail. Sadie, however, had not given up yet. She was as anxious as ever "to show him the error of his ways," as Fred expressed it.

When the family were all seated at dinner, Mr. Miller said, "I had a letter from Colonel Morgan today, and he writes that he is going to make us a visit soon. You remember the colonel, don't you mother?"

"Yes indeed," replied Mrs. Miller, and I shall be very glad to see him again."

"You chickens have never seen him," said Mr. Miller, turning to Fred and sister.

"No," answered Sadie, "who is he?"

"He was my roommate, and very best friend at college," replied her father. "And I tell you Fred, you'll have to reform before he comes, because I never saw a man more choice of his language than Colonel Morgan. And it would break his heart to hear you talk the way you do sometimes, and you a college graduate."

Fred winced a little, and promised to try and do better. While Mrs. Miller added with a sweet, motherly smile, that perhaps if he tried real hard for a few days he would cure himself. Sadie promised to help him all she could, and then the matter was dropped.

A few days later, the colonel came. Mr. Miller went to the station to meet him, leaving Fred in the office while he was gone.

Fred came home in the evening mumbling and grumbling to himself, and wondering how he was ever going to get through the evening.

"Why, I'll not be able to speak," he grumbled, "I'll be so afraid of saying something that will shock the old fellow."

However, he went in the front door very quietly, and peering through the portieres he saw Sadie seated in a small rocker talking to the colonel. He heard his own name mentioned several times but thought nothing of it, as he supposed Sadie was telling the colonel all about him.

"I suppose I'll have to go and fix up," he said to himself starting upstairs. A short time after he came down, and went into the parlor, "to meet his doom," as he told his mother, whom he met on the way.

Sadie arose, on his entrance, saying, "Colonel Morgan, this is my brother Fred. I presume that is all the introduction you will need, as you have heard of each other before."

"How do you do, my boy," said the colonel, jumping up and grabbing Fred's hand.

"I'm powerful glad to see you."

Fred stepped back a pace or two, but the colonel went on: "You see I have a great interest in you, for your father and I were eternally together when we were kids at school, and at college we were always chums."

Fred looked at Sadie in amazement, and she hastily threw a disgusted look back at him. Then she said she must leave him and the colonel to themselves, as she had promised to do some work for her mother. Fred looked at her imploringly, but Sadie paid no attention to the look, and she went out, leaving the two alone.

Fred found it almost impossible to converse with the colonel. He would talk of nothing but 'shows,' races, and shooting contests; and although Fred enjoyed all these sports, it was disgusting to him to hear as old and cultured a man as Colonel Morgan rave over them.

"Do you ever attend the races," asked the colonel.

"No," said Fred, "not very often, my parents do not approve of it."

"Well, I'll be blowed," replied the colonel. "I though your old man would enjoy that kind of sport."

Fred was dumbfounded. He looked from one corner of the room to another, in helpless agony. What could he say? And was this old man crazy, or was he the educated, cultured old gentleman who had been his father's companion?

No matter what subject was touched upon, the colonel would turn it to some slang topic of the day. And poor Fred was in a perfect fever of nervousness, when Sadie came in to announce that supper was ready.

"Well I'm mighty glad," said the colonel, "I was getting powerful hungry."

When they were all seated at the table, Mr. Miller smilingly asked, "Well colo-

nel, what do you think of my two little children?"

"They re exceedingly fine youngsters," replied the colonel.

Mr. Miller looked somewhat amazed at the colonel's answer, but did not pay much attention to it, while Fred kept his eyes fixed on his plate, looking very much disgusted; and Sadie and her mother exchanged surprised glances.

"Hang me! Charlie," went on the colonel, "if Fred don't make me think of exactly what you were, when you were a kid. Only he doesn't appear to be such a young scapegoat as you. You were a pretty gay lad, if you happen to remember."

"Yes, I remember," said Mr. Miller, somewhat meekly.

"So do I," said Colonel Morgan. Then with a boisterous laugh, he added, "much to my sorrow."

"I don't see why it should be to your sorrow," said Fred a little angrily.

"Why, he was everlastingly getting me into trouble," answered the colonel. "I shouldn't have minded his getting himself into a million scrapes, if he hadn't dragged me in, too."

Gradually the conversation changed to books and magazines that had just lately been published. And on being asked how he liked them, the colonel would speak of one as "not half bad," of another that was "dreadfully boring," and of still others that were "powerful interesting."

Fred took no part in the conversation, but once when he chanced to look up, he saw Sadie glance significantly at her mother, and then at him. He could not interpret the look, but for a long while kept pondering over what it could mean. He saw his mother and sister listening to the colonel's rough conversation, and noticed how little they seemed to mind it; in fact he thought they rather enjoyed it. When suddenly an idea occurred to him. He dropped his knife

and fork with a clatter, and blushed scarlet to the very roots of his hair.

"Why what's the matter, boy?" exclaimed the colonel.

"Nothing," said Fred, more embarrassed than ever, "I guess my coffee was too hot."

Fred glanced angrily at Sadie, but she looked back so kindly and beseechingly that his face softened somewhat; then he saw Colonel Morgan look slyly at Sadie with such a merry twinkle in his eye, that Fred calmed down immediately.

The family lingered at the table some time longer, the colonel's language not improving the longer he stayed, when finally he announced that if he would catch his train, he must leave immediately.

Mr. Miller offered to accompany him to the depot; and you may be sure Fred did not demur, as he had no wish at all to go himself.

Bidding farewell to all, the colonel took his departure; saying as he went out the door: "I've had a powerful good time, and I'll be glad to stop again, the next time I go through your town.

The moment the door was closed, Fred turned to his sister, exclaiming,

"O, Sadie, how could you do it?"

"Then you aren't angry?" said Sadie. "I was so afraid you would be. I did hate to do it, but I wanted so much for you to see how your language sounded, and I thought I would never have a better chance to show you."

"You are the best little sister in the world," said Fred, putting his arm around her, "and you may be sure that I am completely cured of slang. Forever and ever," he added, leading her out of the room.

A few days later a neatly addressed letter came to Fred. On opening it, he found it was from Colonel Morgan.

"I hope," wrote the colonel, "that you will not always remember me as the man I appeared to be, when I visited you the other day. But your sister told me of your one fault, and asked me to help her cure you. I entered most willingly into the plot, only I did feel a great deal chagrined when I saw how thoroughly disgusted you were. I hope, however, that we shall soon meet again, and be able to converse as civilized men ought."

"And so we shall," said Fred, putting away the letter, then adding, "thanks to my little sister."

MARIA A. CALLEY, '05.

The *Grand Forks Herald* has recently been furnishing a choice brand of amusement, much enjoyed by those blessed with a sense of the ridiculous. The editor has richly carved a title after the order of the one that Artemus Ward was wont to confer upon his kangaroo. It is to be regretted that the press of the state has met this attempt in such a caustic and critical spirit. It isn't often that such an exquisite pair of long-furry ears are displayed to the delighted multitude, while such an unusual performance of engaging antics as their owner regaled us with, is certainly an event of a lifetime in this dull and prosy world.

After the Philo. program on Feb. 15, the society members started for their homes but decided that such an ideal night should not pass by without a sleigh ride. The telephone, and in a few minutes Marsh & Loomis' large bob with four horses was at their command. We will not tell you all, but they had the best time ever.

It is hoped that the Rubens will glean enough knowledge while here, to know that half of the "right of way" is granted to bicycles and will allow them to pass without the mimicry and rude remarks which have been so frequently noticed of late.

Exchanges.

We acknowledge the receipt of the November and December issues of the *Student* from the N. D. U.

Lives of flunkers oft remind us

We can throw a bluff as far,
And departing leave behind us

Goose-eggs for the registrar.—*Ex.*

The Normal Oracle, of Valley City, N. D., has been placed on our exchange list and we hope that all issues will contain as good material as the February number.

The Comenian for March is, as usual, an interesting issue containing material of various kinds. The editorial on the results of correct pronunciation is especially well written.

THE SPECTRUM is better this past month (in our estimation) than ever before. "Education and Life" being an excellent article on education preparing one for life.—*Georgia Tech.*

Prof. Hart (recently married):—My wife has a wonderful mind. She is, generally speaking,—

Older Friend:—"Shake, old man, you'll soon get accustomed to that as I did."

The February issue of *The Geomys* does not contain the usual amount of reading matter. Although the material is by no means a discredit to the school, the paper seems to bear evidence of a lack of energy on the part of the editorial staff.

"Boston is soon to have a college in which young women are to be taught electrical and mining engineering, naval construction and architecture, thus hastening the day when men will not have to work."—*State Normal Magazine*

Is the above conclusion correct? When women become mechanics, will not the men have to work harder than before—to hold their positions?

The Student of Marinette, Wis., is a comparatively new name on our exchange list. In this paper we recognize a very neat type of periodical, considerably better than the average high school paper.

"A Des Moines minister was opposed to the execution of Czolgosz, lest he was not prepared to die and would go to hell. The Clinton, Iowa, *Herald* asks: what does the reverend gentleman suppose hell was made for, anyhow."—*Ex*

(During Exams.):

Now I lay me down to rest,
To cram real hard, I've done my best,
And if I die before I wake,
I'll have no d---d exams. to take.

—*Troy Polytechnic.*

"Articles on 'General Science' have been noticed in the last few issues of THE SPECTRUM. These papers are good and make instructive and interesting reading. The last chapter of a 'continued story' comes out in this, the January number. It is not wise to print serial stories in a college periodical, owing to the irregularity in getting out the usual college magazine. We forget the story and lose interest. The editorial appealing to the students for more and better work appeals to us. We earnestly voice its sentiments."—*State Normal Magazine.*

Prep.: "Do fishes talk?"

Wise: "Of course they do! You know that codfish ball and oyster stew."

Some of our girls on being asked what kind of vessel they preferred, answered, "a little smack."

Professor in Physics: "Archimedes, you say, discovered specific gravity on getting into his bath. Why had the principal never occurred to him before?"

Student: "Perhaps it was the first time he ever took a bath."

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Editorial.

The House Committee on Mines and Mining has agreed to report favorably upon the Grosvenor bill which, as promised, provides an income for mining schools and agricultural colleges for investigation and instruction in mining and subjects including road making, irrigation, etc. If this bill should become

a law, it would secure for this college and the school of mines at the university an annual income beginning at \$5,000 and increasing \$1,000 per annum till the amount reached \$10,000. The original bill provided for the same total appropriation, all of which was to go to the agricultural or land grant colleges. At a conference held in Washington it was agreed, upon recommendation by President Worst, to so modify the bill as to allow half of the appropriation to go to schools of mines or to universities of which such schools are a part.

The reasonableness of the compromise is quite apparent to everyone and if there may have been a doubter he was quickly convinced that President Worst was right as soon as the *Herald* went into its fit. Aside from the added strength that two separate interests would give to the bill, who would ever think of trying to establish two mining schools for North Dakota, and who ever did indeed except the *Herald's* man of straw?

As the bill provides for work in road building, irrigation, forestry, etc., as well as in technical lines of mining, the division of the work between this institution and the university would be a most natural one and its passage would be of great benefit—not particularly to the respective schools, perhaps, but to the state at large. While our mining questions are not likely ever to become very complicated ones, yet, the time is near at hand when the storage and profitable use of the waters of the state for agricultural purposes will be the all important one in many localities.

On this account, it is only a matter of the plainest common sense to desire a passage of the bill and were the measure put to a popular vote in the state today, the verdict would be, without doubt, unanimously in favor of the passage of the bill.

Living under a popular form of government where the wish of the people

is faithfully carried out by their representatives and their best interests devotedly espoused, of course our representatives at Washington will use every means in their power to secure the enactment of this bill. That is to say, all of those will, with the exception of those who won't.

Just a month after the Grosvenor bill was introduced, Senator Hansbrough evidently saw a bright and shining light in the other direction, for he introduced a bill providing the same income for the university that the Grosvenor bill does, but leaving out the agricultural college entirely. As the ways of politicians are past finding out, it is useless to question his motive.

Whether Mr. Hansbrough is making a solar plexus move upon Mr. Grosvenor

for the attitude of that gentleman upon Mr. Hansbrough's irrigation bill, or whether our senior senator takes this jovial and off-hand way of announcing his attitude toward the two institutions and the interests which they represent in the state, the oracle hath not yet divulged.

Through the Minneapolis papers we note that Rev. Marion D. Shutter, pastor of the Church of the Redeemer, will deliver the baccalaureate address at the University of Minnesota on Sunday of commencement week. This fact will be of interest to the members of our institution, as it will be remembered that Rev. Shutter delivered our baccalaureate address last commencement.

Food Adulterants and Preservatives.

Read before the Chemical Club, Feb. 8, 1902.

The new food law, which went into effect in this state on the 1st of January, will undoubtedly cause considerable worry among the grocerymen, merchants, and wholesalers throughout the state if it is properly enforced. According to this law the sale or offering for sale of any article of food or any beverage which is unwholesome or adulterated within the meaning of the law is punishable by a fine of not less than \$25 or more than \$100 with all necessary costs, for each offense. The law considers unwholesome or adulterated, all articles of food or beverage that contain any form of aniline dye or other coal tar dye, formaldehyde, benzoic acid, sulphites, sulphurous acid, or salicylic acid; also if any substance or substances have been mixed with it so as to reduce or lower or injuriously effect its quality or strength so that such article of food or beverage when offered for sale shall deceive or

tend to deceive the purchaser. If any inferior or cheaper substance or substances have been substituted, wholly or in part, for the article, or any necessary or valuable constituent of the article been wholly or in part abstracted. If it consists wholly or in part of a diseased, decomposed, filthy, or putrid animal or vegetable substance. If it be an imitation of or offered for sale under the specific name of another article, or if it be labeled or branded so as to deceive or mislead the purchaser. Under this law all baking powders must have printed legibly upon the outside of the package a true and correct analysis of all their ingredients.

This is a law that has been sorely needed in North Dakota. So greatly adulterated many of the articles of food offered for sale in this state have been that it has often been spoken of as the "dumping ground of the Northwest." Minnesota has had a law somewhat sim-

ilar to our new law in force for some years but this law did not prevent the manufacture of adulterated goods in that state for sale in this. Now, however, our state has decided to protect itself as it should have been doing long ago. The very fact that one pure food bill was killed in our legislature two years ago by the opposition brought to bear upon it by the wholesalers of our state would indicate that they knew very well that many of the articles of food that they were offering for sale were greatly adulterated and much inferior to what they represented them to be.

We will first consider the substances and their customary use which the law expressly states shall not be used.

SOME OF THE POISONS

Aniline and Coal Tar Dyes. These are used in coloring candies and bottled soda waters probably more than in any other article of food though they are also used in coloring artificially made jellies and fruit syrups and some butter colorings it is claimed are made up largely of by-products of coal tar. In candies of the cheaper grades a large percentage of the highly colored varieties contain some form of aniline dye and this is well known to be poisonous. It is used quite largely in coloring the so called "temperance drinks." Dr. Jenkins of the Connecticut Experiment Station found that one glass of raspberry soda, ordinary "pop", contained enough aniline dye to color a piece of cloth 4 inches square. He also detected the presence of eosin, a coal tar dye, in bottle tomato catsup.

Formaldehyde. This substance is used as a preservative in a very large variety of articles of food. We find it used in milk to prevent its turning sour. "Freezem," a patent substance for keeping milk sweet, is, in reality, only a six per cent. solution of formaldehyde. Formaldehyde is also used in canned goods, temperance drinks, fruit syrups, special food preparations, etc. This substance has

but lately come into general use as a preservative; and, while a very powerful germicide, it should have no place in the food that we eat, as it cannot help but be injurious to the human system. Formaldehyde tends to harden proteids, when present, even in the minutest quantity; and, by so doing, it makes the work of digestion much more difficult.

Benzoic Acid. This is used quite extensively as a preservative in canned goods, tomato catsup, temperance drinks, fruit syrups, etc. It also has injurious effects upon the body when taken into the system. It, together with salicylic acid, is largely used as a preservative of beer.

Sulfites and sulfuric Acid. These enter into the composition of many solutions and patent mixtures placed upon the market as preservatives of decay or decomposition in food articles such as chopped meats, fresh meat, summer sausage, etc. The sulfite of sodium is probably used more than any other.

Salicylic Acid. This is used as a preservative in a great variety of foods, canned goods, meats, temperance drinks, malted liquors, fruit syrups, jellies, milk, etc.

Salicylic Acid is often the active ingredient in many of the patent preservatives sold under high-sounding names for use in private families. Salicylic acid is a powerful antiseptic. As such, it retards the growth of both the organized and unorganized ferments. It completely arrests the conversion of starch into sugar by the pancreatic extracts, and so is directly opposed to the process of digestion. Its greatest use, probably, as a preservative, is in beer and carbonated soda waters; nearly all of the latter contain it. A man might not get much salicylic acid in a pint of beer; but many men will sit down and drink in the neighborhood of a gallon, rather more than less, in the course of an evening. If a man kept this up, it would not be long before he would ac-

cumulate a considerable amount of salicylic acid in his system; and numerous cases have resulted, where death was apparently due to depression of the heart caused by this salicylic acid. In its effect, the source of the salicylic acid used most commonly explains its danger. The acid formerly was made from oil of wintergreen, or derived from the willow by a very costly process. Then it was purer and less injurious. Nowadays, salicylic acid is made chiefly from coal tar, or from carbolic acid derived from coal tar, whose derivatives are, almost without exception, great heart depressors.

There is one acid and its salts not expressly mentioned in the law which is probably used as much, if not more, than any other preservative. This is boric acid, with its principal compound, borax. These are used in a great number of the canned goods, and, also, in the beverages, fruit syrups, jellies, etc. They are even used sometimes in milk to keep it fresh, though hardly as much as formaldehyde.

These compounds were not expressly mentioned in the law because there has been considerable difference of opinion as to whether in small quantities they are injurious or not. As the law was worded to forbid the use of any injurious or unwholesome article in food it is only necessary to prove that boric acid and borax are injurious to bring them under the law. This really has been done, though several learned men still hold to the contrary opinion, among them being a noted investigator who undoubtedly is the best authority on physiological chemistry in America. In this case, however, he may be regarded as a prejudiced witness, having performed his experiments in the interests of a borax company. The materia medica says that boric acid taken in small quantities causes a decided fall in the temperature of the body while large doses produce diarrhœa and vomiting. It often causes a rash to break out on the body,

generally the face, which may be mistaken for eczema. In repeated doses either borax or boric acid tends to liquify the blood and act as poisons.

Several other chemical compounds are used as preservatives but not nearly as commonly as the ones above given.

We will now consider briefly a few of the principal adulterations in foods. First we may take flour. I would not have you understand that all or nearly all flours are adulterated. Such is not the case, far from it. But we do have much adulterated flour. Flour is subject to two kinds of adulteration, vegetable and mineral. As regards the first we find examples of it in the mixture with wheat flour of bean meal, rice flour, barley flour, white peas, rye flour, and starch products made from corn. Some of these adulterants are put in to cheapen the flour while others are used to whiten an inferior flour or make it "bind" better. The mineral adulterants are generally found in what is known as "damaged" flour. Mineral substances are added to this kind of flour to improve its appearance and make it more saleable. Alum, carbonate of soda, carbonate of magnesia, mineral white (hydrated sulphate of lime), and silicate of alumina are the minerals generally used. Now, however, there is in the United States a mixed flour law, part of the war revenue act approved in 1898, which requires the marking of "mixed flours" as such and the taking out a special license by the manufacturer of it. This has tended to do away with a great deal of the adulterated flours, especially those minerally adulterated.

Sugars. While this product is adulterated in some cases, the great majority of sugars made in this country are comparatively pure, that is the granulated sugars. Sometimes they are adulterated with saccharine or glucose but not very often. The sugars which are adulterated, however, are the powdered sugars. These often contain a considerable percentage of starch, corn flour it is called.

The maple sugars and syrups on the market are largely imitation products containing little and often no maple sugar whatever. Much of the maple sugar and syrup sold nowadays is made from corn and flavored with an extract from the cob. This imitation article cannot be told from the genuine by the ordinary person. Nearly all of the syrups sold in cans and labeled "Pure Maple Syrup" contain all the way from 20 to 80 per cent. of glucose. Glucose is largely used in the making of artificial honey. The average jar of honey for sale at your grocery store has about an ounce of honey comb floating on the top while the rest is glucose. It is hard to get pure genuine honey because the artificial honey is sold so cheap that no one can afford to put genuine honey on the market.

Fruit Jellies, the kind generally sold by your grocer, are perhaps as big a fraud upon the public as any thing before mentioned. The majority of them consist of starch paste, sweetened with glucose, flavored with artificial extracts, preserved with salicylic acid, and colored with aniline dyes. This surely ought to make a combination strong enough to kill a saint, let alone we ordinary mortals.

Coffee, tea, pepper, spices, etc., are all susceptible to this common evil. Coffee is mixed with chicory, roasted peas,

lumps of wheat middlings, imitation coffee, etc., in an endeavor to cheapen it so the profits to the manufacturer will be larger. Foreign leaves are often mixed with tea to a considerable extent, while pepper, spices, etc., contain an amount of adulterants that is surprising to say the least. Dr. Jenkins of the Connecticut Experiment Station found one sample of pepper that contained over 75 per cent. of charcoal, sawdust, and flour; and one sample of cayenne pepper that was less than 10 per cent. pure pepper. The principal adulterants for spices are peanut and coconut shells which, while they may not be very injurious when taken in small quantity, come rather high in price when we buy them as spice.

Volumes could be written on the subject of adulteration as it extends to nearly all of the articles of our daily food. This paper has only touched on a few of them, but it will probably give you somewhat of an idea now extensive the system of adulteration is.

While we dislike to mistrust our fellow men, it is forced upon us daily that, in the words of the old adage, "You must do others or they'll do you." We sincerely hope that the Pure Food Law will tend to "do" the manufacturer and seller of adulterated articles of food as we have been "done" long enough. It's a long lane that has no turning.

L. B. GREEN.

Local Happenings.

The veterinary class at last has "Old Jim" carved and pickled.

W. O. Perry reports churnings to the amount of 850 pounds of butter last week.

The Agricultural Department is preparing to issue two bulletins this spring; one on crop rotation, and one on corn.

Miss Anna Stapleton recently left College to accept a position in the "Patterson" District, near Enderlin.

Professor Lindsay to Elocution Class: I told her to look at me while she was speaking and the habit seems to have become fixed.

The college clock seems to have been on a spree lately or maybe the fellow that set it was.

Everyone has, no doubt, noticed that the business manager is trying to raise a mustache. As to his success, you may judge for yourselves.

Visitors are not allowed to monopolize the assistant professor in the chemical laboratory between 1:30 and 3:30 o'clock, as was recently done by an A. C. music teacher.

The dignity of the "would-be stars" of the trigonometry class was seen to shrink into nothingness, when Professor McArdle informed them that their newly invented forceps for removing radicals, was a complete failure.

Scott wears a very genial smile lately as he has already been greeted as "my son."

Wonderful developments have been made of late.

Professor in Literature to Mr. H.: "Well, did you add two new words to your vocabulary last week?"

Mr. H.: "Yes, but I don't know what they mean."

Miss Goldie Reynolds who has attended the A. C. for the past few years, making sewing her specialty, now fills the position as assistant professor in that department.

The Agricultural College Y. M. C. A. held its annual election of officers on Feb. 24 which resulted as follows:

President—M. H. Fallis.

Vice President—A. M. Mikkelson.

Secretary—C. O. Halberg.

Treasurer—Arthur Irle.

The membership of this organization has increased very rapidly of late, and the meetings are well attended and enthusiastic.

Mr. Goeschell went to Valley City with the basket ball team on March 9. It is said that he walked six and a half miles while taking a young lady home from the game. We think that he must have gotten lost.

Mr. Voigt, Editor of the *Osborn Reporter*, Osborne, N. D., visited the college March 3.

Miss Ward: You musn't look straight at me: it's bad for the eyes to look at a very bright object.

The physics class had their picture taken and are no longer proud of their beauty.

Feb. 24 Mr. Phelan gave a talk in chapel.

Miss Stapleton: "Could you get a magnet strong enough to attract a man?"
Whom are you after now, Anna?

Professor of Astronomy: All those who want to take an examination this morning, raise your hands.

Without an exception, all hands were thrust violently into the air.

On inquiry, it was found that this rash break was made by a Prep. class. The upper classmen are confident that the little Preps. will recover from this disease before long.

February 20th,

In her latest attire,

The boys do admire,

Miss Lambert.

Jensen in blowpipe analysis: "I have blown my head off and yet canot fuse this stibnite." It's up to Fred. He was using starch instead of sodium carbonate for a flux.

One of the chief amusements of the Senior class consists in crawling into the reducing furnace in the mineralogical laboratory and then heating it up to 3,000 degrees.

Mr. Clarence E. Doverholdt, a student of last term, died Feb. 14 at his home at Buffalo, N. D. The bereaved family and friends have the deepest sympathy of the student body.

But for the Philo. dance on Feb. 28 our mechanical building might have gone up in smoke. One of the young men, on his way to the dance, discovered the fire and reported it to others. The door of the engine room was broken in and it was found that the floor around the exhaust pipe of the gasoline engine had caught fire but was extinguished before any material damage had been done. Moral: Have a dance every night.

A severe cold was accountable for the non-appearance of Miss Ruth Phelan at college for a few days last week.

Professor Hall is the only Professor who has had the honor of having all the Seniors in a class at the same time.

Miss Jacobsen, sewing up Jim's coat: "I'll take a half-back stitch on this."

McGuigan: "Why not take a 'full-back' stitch."

It is reported that we have two or three glaziers among us.

Miss Alta Cowan, a student of '97, visited the college on March 5.

Professor Hall, to mineralogy class: "That is a very soft but extremely hard metal.

Our Editor did not report for classes on March 4, due to his vaccination working overtime.

College Declamatory Contest.

The seventh annual inter-society declamation contest for the Worst-Hinebauch gold and silver medals was held in the college chapel on Friday evening, March fourteenth. The Philomathian Literary Society was represented by J. C. Haggart and Tom W. Osgood. The Athenian Literary Society was represented by Misses Katie and Dora Jensen, Alys Reid, Mr. M. H. Fallis and Walter Herman. Each contestant showed careful training and each one was deserving of much credit. The programme was as follows:

- Hanover MarchKeifer
- COLLEGE CADET BAND.
- "Me an' Bill".....
- Mr. M. H. Fallis.
- "Heroes of the Land of Penn".....
- Mr. W. Herman.
- Rianzi's Address to the Romans....
- Mr. J. C. Haggart.
- The First Settler's Story
- Miss Alys Reid.
- Duet—I Will Magnify Thee.....
- Mesenthal
- Mrs. Burnam and Mrs. Hall.
- Robert of Sicily
- Miss Dora Jensen.
- Supposed Speech of John Adams on the Declaration of Independence...
- Mr. Tom. W. Osgood.
- The Polish Boy
- Miss Katie Jensen.
- Soprano Solo
- Selected
- Mrs. C. M. Hall.
- Soprano Solo
- Selected
- Mrs. Grace Lincoln Burnam.
- Judge's decision.

After the program the judges, A. B. Lee, A. T. Cole and Reverend Dickinson, retired for consultation.

During the evening Mrs. Grace Burnam and Mrs. C. M. Hall rendered vocal solos, which highly pleased the

audience who showed their appreciation by hearty encores to which both ladies gracefully responded.

The College Cadet Band made its first public appearance and that the audience was surprised as well as delighted was beyond a doubt. In behalf of the Faculty and student body we wish to assure the band members and their leader, Mr. Rudd, that their efforts for the past three months to effect a first class band organization is fully realized and appreciated.

After a short address, Professor Hult read the decision of the judges, who awarded first place and the gold medal to Tom W. Osgood. The Philomathian yell was very much in evidence at this time.

Mr. Osgood speaks in a deep, distinct voice, which is highly pleasing to his listeners and the outcome seemed unanimous. Having won the gold medal twice in succession, it now becomes the property of Mr. Osgood.

The second place and silver medal was won by Miss Alys Reid, who gave "The First Settler's Story." A more correct rendition of the selection could hardly have been given.

It was now time for the Athenian yell which was given with a vim.

An exceedingly close third and one worthy of mention was John C. Haggart. "Rianzi's Address to the Romans," was the selection given by Mr. Haggart, who fascinated the audience with the stirring eloquence.

Misses Dora and Katie Jensen, Messrs. Fallis and Herman, all displayed much oratorical talent. A lively selection from the band and the rousing cheers of the societies concluded the evening's entertainment.