# The Aurora

## Iowa State Agricultural College

### July, 1886

## Table of Contents

<table>
<thead>
<tr>
<th>Literary</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandalphon</td>
<td>95</td>
</tr>
<tr>
<td>A Moral Crisis</td>
<td>95-93</td>
</tr>
<tr>
<td>Morse</td>
<td>98-100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scientific</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeking Support</td>
<td>100-101</td>
</tr>
<tr>
<td>Iron and Steel in Structures</td>
<td>101-103</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial</td>
</tr>
<tr>
<td>Exchange Notes</td>
</tr>
<tr>
<td>News From Other Colleges</td>
</tr>
<tr>
<td>Local</td>
</tr>
<tr>
<td>Personal</td>
</tr>
<tr>
<td>Alumni</td>
</tr>
<tr>
<td>Directory</td>
</tr>
<tr>
<td>Advertisements</td>
</tr>
</tbody>
</table>

Ames, Iowa: 
Iowa State Agricultural College. 
1886.
ADVERTISEMENTS.

MAXWELL & SON,
CITY BAKERY
—AND—
RESTAURANT.
Best Soda Fountain and Ice Cream Parlor in the City.
FANCY: GROCERIES: AND: FRUITS.
—FINE: CIGARS.—
AMES, - - - IOWA.

C. C. PURINTON,
BOONE, IOWA.
Send in your Magazines and have them bound.

Specimens for the Museum.

We ask students, graduates, and all other friends of the College to remember us in the way of museum specimens.

Fossils, Rocks, and Coals,
and other similar specimens of value. If in doubt as to the value of a specimen for our purpose, write to us and inquire. We want, also, Birds, Eggs, Nests, Skulls, and Skins of Quadrupeds, Shells from our Ponds, Insects, and Insect work.
Correspondence upon insects particularly requested.

Agricultural College Museum,
CARE OF PROF. OSBORN,
AMES, IO.

THE
MECHANICAL ENGINEERING DEPARTMENT
Will be indebted to its graduates and others interested for Drawing Blue Prints and Photographs of all kind of machinery.
Address,
N. C. BASSETT.

Western Headquarters
FOR HIGH CLASS

This season our Yards of White Leghorns have five Grand Hens, formerly owned by Fisher Bros. of Hope, Indiana, and were awarded first and highest honors at the Indiana Poultry Exhibition of 1885. Average weight 5½ lbs. Also five exceedingly Fine Pullets from W. Stahlschmidt, Canada, sired by one of the Finest Cockrels ever exhibited in the British Provinces. These Pullets will weigh 5 lbs strong, and are headed by a Cockrel with a record of 95½ points. In Brown Leghorns we breed the well-known and highly celebrated Walden & Bonney Strains. No bird excels them in Ear Lobe, Comb, Wattles, Deep, Rich Plumage and general make up.
We have as fine a stock as any dealer in America, and will furnish eggs at $1.50 for 13, securely packed and shipped to any address. M. E. WILCOX.
Ames, Iowa.
Have you read in the Talmud of old,
In the Legends the Rabins have told
Of the limitless realms of the air,
Have you read it—the marvelous story
Of Sandalphon, the Angel of Glory,
Sandalphon, the Angel of Prayer?

How erect, at the outermost gates
Of the City Celestial he waits,
With his feet on the ladder of light,
That, crowded with angels unnumbered,
By Jacob was seen, as he slumbered
Alone in the desert of night.

The Angels of Wind and of Fire
Chant only one hymn, and expire
With the song's irresistible stress;
Expire in their rapture and wonder,
As harp-strings are broken assunder
By music they throb to express.

But serene in the rapturous thong,
Unmoved by the rush of the song,
With eyes unimpassioned and slow,
Among the dead angels, the deathless
Sandalphon stands listening breathless
To sounds that come up from below;

From the spirits on earth that adore,
From the souls that entreat and implore
In the fervor and passion of prayer;
From the hearts that are broken with losses,
And weary with dragging the crosses
Too heavy for mortals to bear.

And he gathers the prayers as he stands,
And they change into flowers in his hands,
Into garlands of purple and red;
And beneath the great arch of the portal,
Through the streets of the City Immortal
Is wafted the fragrance they shed.

It is but a legend, I know,
A fable, a phantom, a show,
Of the ancient Rabbinical lore;
Yet the old mediaeval tradition,
The beautiful, strange superstition,
But haunts me and holds me the more.

When I look from my window at night
And the welkin above is all white,
All throbbing and panting with stars,
Among them majestic and standing
Sandalphon the angel, expanding
His pinions in nebulous bars.

And the legend, I feel, is a part
Of the hunger and thirst of the heart,
The frenzy and fire of the brain,
That grasps the fruitage forbidden,
The golden pomgranates of Eden,
To quiet its fever and pain.
LITERARY.

A MORAL CRISIS.

In the work of universal development nature gauges her progress by the decrease in retrogression. Material growth is measured by the decay of death-producing elements; intellectual advancement by the decline of ignorance. So the morality of the human race in its evolution is never greater than the exigency of the hour, for true strength of character is measured by the degree of evil it is capable of resisting.

The tiny well-spring of that power Nature gives with our life. It flows out at first a mere rivulet, gliding over and among the pebbles lying in its way, playing with every leaf of circumstance that drops into its shallow current, and loitering in each fern-shaded nook along its margins, as if loath to leave the shoals of uncertainty and hesitation for the broad stream of possibility and power. But as the years come and go, conducting the rivulet into broader fields and deeper valleys, the little rills of daily experience find their way into the primitive channel, and gradually swell the stream of power into a broad, swift-running river, that, meeting with other and larger rivers, mingle with them in one mighty, deep-flowing stream, moving surely and steadily on to the great ocean of eternity. The bark of our soul's destiny, carried on the bosom of this ever-rushing flood of human action, drifts with the current that bears it into the boundless sea of eternal glory or into the vast deeps of unbroken darkness.

The little brooklet whose course a single stone could once turn aside is now become the strong, resistless torrent, whose channel, worn deep into the unchangeable rocks of age, cannot be diverted by the most stupendous exertions of human power.

Human activity in childhood is like the rivulet—running it knows not whither, aimless and powerless, and subject to the caprice of each momentary event. Another will than its own guides it through all windings to the entrance of the valley of youth, where, leaving the security of its native hills, it starts for the first time in a direction which its own will marks out. Alas, for the folly of human care that at this most critical point so often leaves the tender, wavering mind of youth to be moulded by whatever good or evil influences may chance to meet it.

Sparkling, gaily-decked meadows stretch away down the long valley, their separations lost in the haze of distant years. The same flowers smilingly invite on either side, their fragrance is borne to the toiling world on the same breeze, and their hearts are warmed and quickened into growth by the same sun. The same mantle of beauty is spread over the whole valley, covering equally the clean, firm rocks of truth and rectitude and the slimy ooze of hypocrisy and ruin. Shall the current of our nation's life, just entering this unexplored region of existence, be permitted to wander wherever its fancy may direct? Shall the minds of our youth be hopelessly defiled by contact with this horrible mire of sin? The demands upon morality are more numerous and exacting with each succeeding generation; for, as knowledge increases through discovery, unguarded channels are opened to the insidious of nineteenth century depravity. The restless activity of this great age must find vent in labor of some kind, if not for good, then for evil. Occupation it will have, and the nation of 1900 will be what it makes the boys and girls of to-day.

Oh, ye that hold in your grasp the directing of this stream of action, as ye will, how faithfully are ye guarding against the first evil tendencies? How many times may you wink at a childish error before it becomes an actual sin and the habit has fixed the course of character for life? What are you, par-
ents, and what are we, teachers, doing each day to counterbalance the fearful progress of corruption that is yearly dragging thousands of our talented youth down into the awful sloughs of degredation and filth? Can the most stringent measures of self-control strangle the demon engendered within the nature or restore the original purity? Oh, withering curse of evil habits! Must the east wind of your power blast forever the delicate blossoms of hope that have lodged in our heart's most sacred recesses? Must the beauty of youth be dimmed, the glory of manhood obscured, and the declining light of old age be shrouded in the deadly folds of your pestilential vapors?

The dykes and levees we are building need to be doubly strong, for they must resist not only the restless beatings of a willful, misguided passion within, but the treacherous underminings of temptation without. The increasing freedom of thought and speech during the last century has widened the channel of activity with almost incredible rapidity, and on removing the old barriers the liberated powers have burst forth with enormous momentum and swept before them every landmark of former restraint, till, maddened by this iconoclastic frenzy, they have come thundering up to these modern walls of social law and order with a force threatening their total demolition. True reverence for age, station and government has been borne clown in the same mad whirl that destroyed the false sanctity attaching to ancient superstitions, creeds and dogmas. In the furious onslaught against old errors, everthing that bears on its face the fatal stamp of age is wantonly sacrificed before this deluge of new thought, new aspiration and new talent. The old virtues are despised equally with the old sins, because they are out of date, fogyish, old fashioned.

Originality of thought and action, we say, must not be hampered by the machinery of systematic routine. How far are the teachers of to-day responsible for the sentiment of our present young America—“Originality must not be chafed by restraints of systematic law?” Is not this so-called independence the first great turning point in the direction of actual irreverence? Does not the witty jest born of this irreverence, that for the moment holds up to pitiless ridicule the one whom it descends, become too often the unheeded little stream undermining the character and giving entrance to the long train of evils following in its wake—habitual mockery and scoffing, contempt and derision of government, and finally open defiance? If all evil habits were traced back to their source, scarcely one could be found that did not spring originally from want of parental regard. Already the lack of filial reverence in our youth has become proverbial, and the habits sown and cultivated in the home are bearing the fruits of revolution and communism throughout the length and breadth of the land.

Closely associated with lawlessness is its boon companion, idleness, the one an invariable attendant upon the other. The spoiled, idle boy can no more become a steady, industrious man by feeding upon his father's generosity than the filching dodder can become by absorption the straight, self-supporting plant from which it draws its life. The child of indolence in this generation must certainly become the proselyte of recklessness in the next.

How, then, is posterity to resist being drawn into these dark, treacherous currents of national sin, and borne on to the gulf of moral and intellectual ruin? Will repression alone suffice? Dare we risk the will and judgment as the sole barrier between vice and virtue, irreverence and veneration, idleness and industry? Is the will omnipotent, that we should give into its control the direction of our destiny? The
exigencies of the times demand that edu-
cation teach our youth self-control
and the exercise of judgment; but shall
it do so by exposing the plastic nature
to the world's wickedness ere habit has
given the character firmness? The
world is made better, not by what a
man thinks, but by what he does and
is. If humanity in the next quarter of
a century rises to a higher state of
morals and intellect, it will be on the
stepping stones of what the children of
to-day are taught to do and to be.

Yet, even in the strength of full ma-
turity, when long years of association
have made virtue seemingly proof
against contamination, the soul can
risk no compromise of righteousness
with iniquity. The stream of its own
purity flowing into the same channel
with that of popular immorality may at
first disdain to mingle its clear, spark-
lng waters with the turbid, sluggish
current by its side; but, as the former
associations of truth and virtue are left
farther and farther in the distance, the
line of sharp demarkation between the
two currents is gradually softened, a
little jet of foulness breaks into the
wavering margin, then a long arm is
thrust out, making way for larger vol-
umes, till finally the faltering waves,
striking against some huge rock of
doubt, are thrown into a wild con-
fusion of whirlpools, into which are
issued again as a seething, foaming
mass of pollution, rushing hopelessly
on to perdition. The soul, cast into
the open sea of eternity, looks back to
behold a flood of corruption in whose
black depth its early innocence is for-
ever lost, while streaming across the
livid waste of waters that stretch away
to the distant horizon come the last,
long glimmerings of the star of hope
sinking beneath the limitless deep.

Shall this be the fate of a generation
sacrificed to our indifference? Shall
our own security be taken as a safe-
guard against the dangers threatening
those who follow? The accelerated
speed of modern activity must be
steadied by walls of conservatism, and
as long as the impetuosity of youth ex-
ists, so long must diligence be exerted,
that its passion be guided into right
channels. The curbed spirit may hurl
anathemas against the fretting obstruc-
tions of the moment, but let them not
be the bitter cursings of a soul whose
destiny, borne on the waves of early
license, have been hopelessly stranded
on the reefs of abandoned depravity.

MORSE.

Inventions are the levers that move
the world. Every step in the advance-
ment of mankind from barbarism to
civilization has been marked by the
application of some new power. Half
a century ago the silent but mighty
stream of causes, upon which the hu-
man race from its birth has been borne
steadily forward in its vast career of
progress and development, was moving
calmly, peacefully along, when suddenly
it received a new and startling velocity.
An intellectual force, towering above
all others of its period, imparted to the
whole world, at once, an impulse, which
condensed the ordinary advances of a
century into the thrilling compass of a
single day.

There arose, from comparative ob-
scurity, a man possessing not only a
richness of intellectual culture and ac-
complishment, a modesty of demeanor
and purity of character, but a power of
invention, which, for the good it has
accomplished, far surpasses any which
the new world has yet given to man.
A colossal mind, whose faculties, rare
in their individual perfection and still
more in their harmonious combination,
have stamped upon the pages of his-
tory the impress of a renown imperish-
able as time itself. Of all inventions
which have wrought great good to hu-
manity, that of Prof. Samuel F. B. Morse ranks among the foremost.

It is almost impossible to approximate a full realization of the results of his simple yet wonderful invention—the telegraph. In the few short years of its existence the rapidity with which it has been extended throughout all the habitable earth is only exceeded by the speed with which the electric current traverses its iron nerve. The little thread of wire, placed as a timid experiment between the national capital and a neighboring city, grew and lengthened until within his own time the inventor saw hemisphere answer, through ocean's depths, unto hemisphere, and an encircled globe flashed forth the glory of his immortal name.

Wherever humming wires stretch along lonely hillsides, over far extending prairies, through the streets of crowded cities, or flash under ocean tides from continent to continent, there resounds the name of this great and noble man. He toiled, not for himself nor yet for his own country, but for the whole brotherhood of man. He contributed greatly to the prosperity and happiness of mankind and crowned his own name with more unfading laurels than ever wreathed the brow of illustrious conqueror. Myriads of wires now stretch throughout the land, from village to village, from city to city, and in every town of half a hundred inhabitants the click, click of the instrument may be heard. Through it we are enabled to read in the evening papers the occurrences of but a few hours past, and to-day we may read a full account of any important event that occurred but yesterday in the most distant part of the globe. It was a sublime result when the beating of the nation's heart at Washington was instantly felt at the farthest outposts of this broad republic, but what was that compared with the instantaneous transmission of thought across the ocean and over continents beyond until the sun himself was stripped by the speed of Morse's messages? The electric telegraph marks a most important era in the progress of civilization. It contributes in a thousand ways to the industrial agencies of the world by the rapid diffusion of thought and the substitution of knowledge for ignorance. It facilitates the interchange of national sentiments, removing the jealousy and misunderstandings which have been fruitful sources of strife. Thus it may well be called "the great peace-maker," pointing in its results to a period of unity and universal brotherhood, when differences shall be adjusted by the arbitration of reason and war rendered impossible. It has transformed every pursuit of man. It has changed the conditions and bids fair to change the character of all society. It has revolutionized journalism and given an open business directness to the once tangled web of diplomacy. Commerce now learns daily the demand and price current of all markets, projecting its gigantic enterprises with a full knowledge of the movements and policies of nations. Through the electric diffusion of intelligence the manufacturer is enabled to conform his fabrics to the varying fashions of different people, and production can keep pace with consumption. But not alone in these respects is the telegraph of greatest utility. To overland or railway traffic it is as indispensable as the massive engines themselves. Who does not know that through it is controlled every movement of all the thousands of trains, that, with their precious freight of human lives, are darting hither and thither at headlong speed throughout the land. Remove it, and, aside from the stoppage of thought traffic, but one-fifth of the commerce of the country could be performed with present facilities.

The name of Morse will be forever linked with human progress. As the massive wheels of time roll on, his
great invention will in truth remain unchanged—in principle it is perfection, and was as it now is when left by his master hand. Who better than he understood the value of life, comprehended its great mission, and illustrated to the latest syllable of time its true instincts, its personal discipline, its moral obligations and its god-like capacities. He is honored not alone for his achievement in mechanism, but for his humble, devoted and unselfish life. His heart was as large as his mind. All who knew him loved him. In presence he was comparable with our ideal of patriarchal days, in character as pure as whitest snow, and in all his aims, scientific, social or religious, as lofty as his faith in truth was resolute and devoted. His patient, arduous and long unrewarded labors in behalf of what he knew would be a most useful application of science, the fortitude with which he bore reverses and discouragements, the energy with which he urged the cause of truth and the modesty with which he recognized success, entitle his name to lasting distinction. Destined to a great work of practical utility and put to discipline in the school of misfortune, he has bequeathed to the world his own monument, that will live throughout all the ages of coming time, while among the benefactors of mankind he will ever stand with the highest and greatest of all.

C. J. C.

SCIENTIFIC.

SEEKING SUPPORT.

Rarely a phenomenon comes to one unbidden while the mind is cut loose from its moorings and has gone on a vacation to a land that knows no science and is full of fantasy and dreams. A long June day had closed and the curtain of the night was being let down slowly upon a heated world. The air, like all animate nature, was still, perhaps too tired to move. Two eyes were looking toward the western sky that was slowly mellowing into the night. In the path of my vision was a hanging plant, with its tip in mid-air, while its tendrils grasped the wire stretched for its support. Every leaf, so hung as to wave its green banner with the slightest breeze, was as still as the lifeless wire that held the tender plant up against the far-off sunset. Above the last leaf and the terminal bud stood a slender tendril with its tips pointing toward the School of Domestic Economy. It fell noticeably; the measuring rod being the background of the half-illuminated western sky.

Having paid its respects to the cooking school, it arose a little and swung around on a line with the Veterinary Hospital, where it condescended to another nod, as much as to say, "I take this opportunity, when all unobserved, of quietly recognizing yonder home for infirm beasts."

Again the tendril swung onward in its orbit and paid homage to the Hall of Sanitation. Onward it moved, sweeping in turn the Home of the Mathematician, that of the Military Disciplinarian, and a cluster of buildings that nestle behind the Council Chamber and the office of our Executive. The tendril seemed to pause for a moment, and then, raising itself well into the evening air, it leveled its pointer upon the Main Building, with the understanding, doubtless, in its own mind, that, next to the wire 'round which it swings, yonder home is the center of the world.

The Horticultural headquarters came next in line, it having made only a single bow toward a place where the Ladies' Hall may some day grace the grounds. On swept the tendril in its circular flight, now descending upon North Hall, and then quickly nodding.
at the home of the Horticulturist, and then was off for the Farm House.

At this point, the slender, sensitive filament, in its expression of regard for the one who had given it such a permanent setting out in the world, raised itself upright and moved forward in its cycle and descended again upon South Hall, having made the circuit of the campus in less than an hour.

The moon was now up, and by its mellow light the last observations were made. At half past nine o'clock the wanderer was left well on its way to the President's office. At six o'clock the next morning the tendrils had caught the wire, and, after making three close coils around it, was busy in drawing the plant up to its support.

Meanwhile, another leaf had come forth from that mysterious factory of vegetable forms—the unfolding bud; and its attendant tendrils was lengthening itself for its circumnutations or round of noddings. At the same hour of the evening it had reached the same length that its next older brother had the evening before. Visitors came and the observations were not repeated, but the next morning the wire had been caught again and one more step of four inches was taken up the wire.

Had the couch been easier the observer might have fallen asleep, and the vine would have toiled on unobserved, as its kind has done for ages heretofore.

BYRON D. HALSTED.

IRON AND STEEL IN STRUCTURES.

E. GRAY.

The rapid advance in the application of iron and steel in the last few decades amply justifies the name “The Iron Age.” In no time in the world’s history do we know of a parallel.

The Romans, whose works are the wonder and admiration of all, thought that safety was to be found only in structures as massive as their hills themselves. And many of their structures standing to-day testify that they built them not in vain. But what immense periods of time and forces of men were required for those works.

Yet the Roman with his Coliseum and highways, the best the world has ever known, mounted his oxcart and slowly and laboriously proceeded from place to place. Now, does a mighty chasm or a deep and rapid river bar our progress, it is spanned by a gosamer-like structure as safe, as durable, and far more beautiful than those of the Roman, while the days required for its erection would have been years for him.

To-day, do we desire to travel, we mount an iron carriage, drawn by an iron horse, and are whirled with the speed of the wind to our destination, or step on board an iron palace and an iron monster below, puffing the smoke from his nostrils, bears us to our desired port with a speed and safety unknown to the sailing vessel.

Thus turn where we may we are met by iron structures of every description where but a few years ago would have been found wood, stone, or no structure at all.

One may well ask why it is that iron, which was known and worked in the greatest antiquity, has of late sprung so marvellously to the front as a building material? The answer is found in new methods of production and working and a better knowledge of its properties.

The ancients produced steel as good or better than can now be made, as the fame of the Damascus Blade proves, but the cost was simply enormous, so that the idea of making such a structure as the steel bridge across the Menia straits would have been deemed irrational. While
steel was thus excluded, iron though of high price, might still have been used if enterprising and energetic engineers could have been found to risk the trial.

It is principally to the enterprise of American engineers that we owe the extended use of iron and steel. This is especially true in the line of bridge building, for it is in this line that the ingenuity and skill of the engineer is most severely taxed. The application of iron to the building of roofs and similar structures needs provision for but a dead or unchangeable load, while the bridge is subjected to vibrations of a moving load, the swaying of the wind, as well as the weight of the bridge itself. It is exposed to all the destructive influences of the weather and the necessities of travel. So that to design an iron or steel bridge that shall combine the elements of safety, indestructibility, beauty, and cheapness in the highest degree is a problem worthy the mind of a Newton.

It is interesting as well as instructive to study the advances in the application of iron and steel to bridge building. First, blocks were cast and arches built resembling those of stone; then some genius suggested hollow blocks built from plates of wrought iron; then discarding the arch, the entire bridge was built in tubular form; then the truss, clumsy at first but gradually growing more graceful; then that imitation of the spider's web, the suspension bridge, and last combining the principles of those before, the cantilever.

These advances took time for their attainment, and each represents the life work of one or more engineers. Each form has its proper sphere of application, and each has its faults. The truss is heavy and awkward, presenting large surfaces to the wind; the suspension bridge is light but flexible, and if not trussed swaying almost to destruction if a dog should trot across it, while it sustains hundreds of tons of dead load; the cantilever is subject to alternating strains of a destructive nature.

While the engineer was at work originating and improving designs, the iron workers were not idle; and while a few years ago wrought iron was the only reliable substance offered to the engineer, to-day he has steel at nearly equal cost, double the strength, of equal ductility, elasticity, and durability. This was brought about more by the Bessemer steel process than any other means. The introduction of the Bessemer process revolutionized the steel trade and gave an impetus to building unexampled. Now there are several processes of equal merit so that we need no longer fear high priced steel.

While the cost has thus been reduced, a better knowledge of the properties of the metal has also been gained. It was found that iron subjected to a steady strain remained for years unimpaired, but if subjected to shocks or intermitting strains of far less intensity it soon failed. Reasoning from this it was asserted that light shocks if repeated for a sufficient time would break the strongest bar. This though containing an element of truth is not strictly true. There is a limit below which the shocks do not injure the metal and its durability is unimpaired, but above this if the shocks are repeated often enough the bar will surely break. This limit varies with different qualities of iron, and steel being about one third the tensile strength for commercial iron and somewhat less for steel. But as a factor of safety of not less than 5 is used in all our standard structures, no one need fear for their durability. But in such cases as car wheels, rails, and springs this factor of safety cannot at all times be insured, and breakdowns are the consequence, often resulting in frightful loss of life.

An examination of the broken parts will nearly always show a crystalline appearance, so that the theory has been advanced that shocks will crystal-
IZE IRON AND ESPECIALLY STEEL SO THAT IN A SHORT TIME IT WILL BECOME AS BRITTLE AND UNRELIABLE AS GLASS. THIS THEORY WHILE ALSO CONTAINING AN ELEMENT OF TRUTH IS BUT ANOTHER HASTY GENERALIZATION FROM A SMALL FOUNDATION OF FACT. THE MOST EXTENSIVE EXPERIMENTS SHOW THAT A SINGLE SHOCK SUFFICIENT TO BREAK THE BAR MAY CAUSE THE SAME APPEARANCE. IT IS ALSO FOUND THAT THE CRYSTALIZATION DOES NOT EXTEND THROUGHOUT THE SUBSTANCE, BUT IS VERY LOCAL AND IS PRODUCED SIMULTANEOUSLY WITH THE FRACTURE, AND THEREFORE CAN NOT BE ITS CAUSE.

ONE OF THE MOST IMPORTANT THINGS THE ENGINEERS MUST GUARD AGAINST IN THE USE OF PIECES OF MORE THAN AVERAGE SIZE—ESPECIALLY SO OF STEEL—is INTERNAL STRAINS FORMED AS THE PIECE COOLS AFTER COMING FROM THE FORGE. MANY AT FIRST SIGHT UNEXPLAINABLE FAILURES OF LARGE STEEL PLATES HAVE BEEN TRACED TO THIS CAUSE. ALL ARE FAMILIAR WITH THE FACT THAT A GLASS VESSEL WHICH WILL RESIST HUNDREDS OF POUNDS PRESSURE, WILL BE SHIVERED IF IMMERSED IN HOT WATER. THIS IS CAUSED BY INTERNAL STRAINS. TO REMEDY THIS DEFECT SEVERAL MEANS ARE EMPLOYED. TO HEAT THE PIECE TO REDNESS AND ALLOW IT TO COOL SLOWLY, THUS GIVING GREATER FREEDOM TO THE MOLECULES TO ARRANGE THEMSELVES. ANOTHER METHOD IS TO SUBJECT THE PIECE TO INCREASING STRESS UNTIL IT IS STRETCHED A SMALL AMOUNT, WHEN THE INTERNAL STRAIN WILL BE RELIEVED BY WHAT IS KNOWN AS THE FLOW OF THE METAL. THIS METHOD, HOWEVER, CAN NOT BE EMPLOYED WITH TEMPERED STEEL, AS FRACTURE WOULD RESULT INSTEAD OF THE DESIRED STRETCHING.

THE MANY IMPORTANT POINTS IN THE APPLICATION OF IRON AND STEEL I CAN NOT HERE ATTEMPT TO ENUMERATE, BUT WILL TURN FOR A MOMENT TO THE KING OF METALS—STEEL. IT HAS BEEN SCARCELY A YEAR THAT STEEL OF A RELIABLE CHARACTER COULD BE PRODUCED AT A COST SO NEARLY THAT OF GOOD WROUGHT IRON THAT FOR IMPORTANT STRUCTURES THERE IS PRACTICALLY NO DIFFERENCE.

WHEN WE NOTICE THE GREAT ADVANTAGE OF STEEL IN LIGHTNESS, STRENGTH, AND RELIABILITY, WE CAN BUT PREDICT A GRAND FUTURE FOR IT. WHILE THE LAST FEW DECADES ARE RIGHTLY CALLED "THE IRON AGE," THE NEXT WILL AS TRULY BE "THE AGE OF STEEL."

---

THE AURORA.

PUBLISHED MONTHLY BY THE

Literary Societies

OF THE

Iowa State Agricultural College.

EDITORIAL STAFF.

WILL E. GAMBLE, '86, Editor-in-Chief.
LIZZIE LANGFITT, '86, - Literary.
JAMES W. BRADFORD, '86, - Scientific.
VENE C. GAMBEIL, '86, - Local.

BOARD OF DIRECTORS.

GEO. W. GREENE, '86, Pres. Philomath'n.
ESTHER CRAWFORD, '87, Sec. - Cliolian.
S. H. HEDGES, '86, Treas., - Bachelor.
H. R. CORBETT, '88, Solicitor, Crescent.

TERMS.

One year in advance, - - $1.00
Single Copy, - - .12

The AURORA will be forwarded to all subscribers until ordered discontinued and all arrearages paid.
Book Notices given free of all books sent us by authors or publishers.
Rates of Advertising furnished upon application.

Address,

"THE AURORA."
Ames, Iowa.

HYGIENE.

There is no topic upon which I could write that is of more importance to the student than hygiene. Yet it seems to the observer that no thought is more
foreian to the mind of the student of
the lower classes. The Freshman, ac­
customed to outdoor life, suffers most
from the sudden change to sedentary
life. The country boy is highly favored
whose health has not been to some ex­
tent injured during his first term at col­
lege. The causes are not numerous nor
obscure. They are: 1st, the want of
the accustomed exercise; 2d, overeat­
ing, and especially eating too much
meat; 3d, in some cases not sufficient
sleep. There is no rule as to the
amount of sleep a student should take;
better make the standard too great a
number of hours than too few. Eight
hours will suit the average student. It
is poor economy to rob one's self of an
hour or more of necessary sleep to at­
tend to any ordinary duty. There is
sufficient time during college life to get
enough sleep, if your time is properly
systematized.

The majority of all diseases that
affect students here, and, indeed, all
people in this climate, are colds and
the results of them, viz., catarrh,
bronchitis, laryngitis, tonsilitis, etc.
Each of these is an impaired mucous
membrane in its respective region,
brought about by an unhealthy skin.
The variableness of this climate altern­
ately causes anemia and hyperemia of
the skin. The effect is transmitted to
the mucous membranes and internal
organs, modifying their nutrition, the
result being the various diseases of
these organs.

To have a healthy skin, in this cli­
mate, means to be almost free from dis­
eease. How can we secure the health
of this important organ? By careful
attention in bathing; that it it shall be
often enough (twice a week); that the
reaction is thoroughly established; by
an occasional sun bath; by wearing
woolen fabric next the surface during
the winter, and of moderate thickness
during the summer. These precautions
against the common ailments will be of
more value than medication.
soul—the one by its searching power of analysis, knowing the lives of all men, originating all reform. * * * The inherited military genius of centuries, the fierce passion for martial fame, the splendid military training of years, have all proved unavailing, when pitted against men lonely and obscure, but whose valor comes from that mightiest fountain of human energy—the moral sentiment.”

Mr. A. C. Felt, of Benton county, next delivered his oration, Robert Burns. Mr. Felt began in a graceful, pleasing style, but as he got farther on his memory became somewhat treacherous. He said:

“Genius seems to be limited by the bounds of no climate; nor is it the characteristic of any particular people. Every nation has had its sweet singer, and the pride of every nation is centered in the love it bears for its dead heroes. The life and works of Burns was a fulfillment of one of the grandest missions time has ever imposed, the perpetuation of the spirits and customs of a mighty people.”

Morse was the subject of the third oration, by C. J. Cotey, Cerro Gordo county. Mr. Cotey treated the subject in a novel and attractive manner. He said:

“Inventions are the levers that move the world. Every step in the advancement of mankind, from barbarism to civilization, has been marked by the application of some new power. * * * Half a century ago the silent but mighty stream of causes, upon which the human race from its birth has been borne steadily forward in its vast career of progress and development, was moving calmly, peacefully along, when suddenly it received a new and startling velocity. An intellectual force, towering above all others of its period, imparted to the whole world, at once, an impulse which condensed the ordinary advances of a century into the thrilling compass of a single day.”

Mr. L. V. Harpel, of Polk county, although at first ill at ease on the rostrum, soon became interested in his subject, The Black Scepter, and held the undivided attention of the audience to the end. Mr. Harpel’s oration was well written, and in thought stood among the foremost. He said:

“The republic is a nation of kings. Each citizen is an important factor in its stability and welfare, and the average intelligence of all the citizens determines its rank among the powers. The wise citizen is its perennial foundation of life; the ignorant citizen its greatest source of national danger. * * * Hence we conclude that when the United States enfranchised four millions of the late slaves it took the risk of a tremendous political experiment.”

Mr. Harpel concludes:

“But whatever this solution may be, education must take the lead in all instrumentalities of reform. Nothing but a skillful application of this powerful lever of intellectual and moral elevation can harmonize the antagonistic forces existing in our nation, and, for the first time in the world’s history, bring about a peaceful race partnership in government.”

Mr. G. Z. Barnes, of Marshall county, delivered his oration, The Three If’s of American History, in a manner that merited the applause he received. His oration not being at hand I cannot make a quotation.

Mr. Barnes was followed by Miss Ollie Wilson, of Keokuk county, in a carefully written oration, on the subject How to Win. Miss Wilson performed her part of the program well.

“Indeed, how to win has ever been the great mystery of mysteries of all nations, and to read this riddle of the Sphinx is the question of to-day. In the past agitations have seemed to reach the extreme limit of human conception, and have rebounded with fearful rapidity; to-day the slower and
steadier progress of reason has advanced as far beyond the standard of those who have gone before, and yet the summit is still above, and he who will carve for himself footholds on the ascending fiers of attainment will always find room.”

Mr. Fred Faville’s rendition of The Uncrowned King was excellent. His thought was lucid and ornate. We quote the following.

“Wallace made possible the Scotland of modern ages, the Scotland of chivalry, of valor and of freedom, the land of poetry and song, whose ballads have welled for ages spontaneous from the nation’s heart! Whose immortal bards have sung her glories in enchanting strains! Whose warriors have won laurels on bloody fields in every clime! The land of the heather and fern, of peaceful lakes and rippling rills! The land where every fireside is an altar of prayer!”

Mr. Faville was followed by Mr. S. A. Beach, of Story county, in an ably written oration, entitled Individualism. Mr. Beach clothes his ideas in simple language. His production was free from a play upon words that is the fault of most amateur writers. Mr. Beach shows that the tendency of all empire is toward popular government.

“In Germany, it is true, ‘the divine right of kings’ is something stronger than fiction. In Russia it still holds stern and resistless sway. Yet the doctrine that kings rule by a divine right is everywhere yielding to the doctrine of the divine right of the people to rule themselves. * * Individualism was born a century ago amid the agony of revolutions. It was a reaction from the despotism of king and priesthood. To-day it reaches the opposite extreme, and threatens anarchy and mob rule.”

Mr. C. F. Curtiss next rendered his oration, Discipline of Duty. Mr. Curtis has a rich, oralund voice, his enunciation was clear and his articulation near perfection. He impressed his hearers with the idea that he had much power in reserve.

“When we turn over the historic pages and trace the rise and fall of nations and empires, we at once observe that it is from the unborn dictates of conscience and the inspired principles of duty that the finest growth of character has arisen. If we turn the historic pages of our own country, the recognition of duty comes to us from the silent graves of the half million dead, whose spirits are now hovering in faithful vigils over the destinies of this republic; from every home and fireside where virtue dwells; from all that is pure, manly and good, and forming in one grand, solemn concourse, marches down the line of ages, serving as light to guide and a rod to check the erring of generations yet unborn.”

Miss Esther Crawford, of Harrison county, closed the exercises proper of the evening by delivering A Moral Crisis, in many respects the best received oration of the evening. Class ’87 was well represented by Miss Crawford, and to herself she did no little honor. The Moral Crisis will be found in full in this number.

In speaking in a general way of the Junior exhibition of Class ’87, it can be justly said that the class has been well represented. It can boast of having among its numbers a number of good thinkers and polished speakers.

---

EXCHANGE NOTES.

The valedictories of all our exchange editors have been written. To see this noble army of “taffy” dispensers surrendering their arms to a new generation, while I “hold on” to my pen, causes a feeling of lonesomeness to pervade the exchange department of my nature. I have met a few of my contemporaries in the attitude of a belligerent, hurling words at them in exchange for like missiles thrown at me.
Others have met me with a spirit of kindliness and no doubt sympathy. To them I have been as courteous as my stock of horse-sense would permit. In "one sense" I feel that I have vanquished my foes, while they have lain their arms at the feet of their successors. I have the happy (?) realization that my term of office does not expire till the ides of November.

A new generation of exchange men have come into existence. To them I extend my...

The gentlemen students of Drake have determined to adopt a uniform dress at the beginning of next year, the purpose of which is to limit all distinctions of wealth and class, and to enable all to procure clothing at the lowest rates.—Delphic.

The College Message of June devotes two columns to a review of her exchanges. I congratulate the editor for the delicacy with which all the exchanges have been handled.

The Delaware College Review, in commenting on doing away with co-education in that institution, says: "When it was first introduced into our midst how gladly it was welcomed, and it was thought that a new and better era had dawned upon our school. For awhile all went well. But soon the novelty wore off, and all the evils of a mixed school became obvious to those not disposed to view them with favor. It was then that the struggle against co-education commenced, the Review originating and taking an active part in it. And now it has been successful. But we do not feel the pleasure that such a triumph ought to inspire. We forget the gain and feel but the loss. How void of interest will be college life without the fair maidens to give it charm. How dull the class-room without female to lend it grace and beauty. No longer will there be sweet smiles to drive away our cares, and happy, cheerful faces to meet us at morning prayers. Yes, they will soon be gone, and with them much of our pleasure and incentive to study. No longer will a failure be so greatly feared, as there will be no ladies to see us fail, nor will the professor's frown be so hard to bear, for no ladies will witness our disaster. And yet the female smile more than balanced the professor's frown, and we will bid a sorrowful farewell to you, O far Co-Education."

The Messenger comes late this month, but filled "chock full" with good literary articles.

The Wooster Collegian suggests the following to take the place of the present marking system: "It is that each student be required to write out a full and thorough summary of the work gone over in class, or if the Professor choose an elaborate discussion of some subject introduced, and to hand it in at the end of each month. It would require more work from the students, but the burden would come on those who slight their work now. It would be an undertaking for the Professor to revise these, but if excused from the extra work of examinotion, and doing his duty in a more satisfactory way, he would not complain. It would certainly require more thorough understanding of the work gone over by all the class. for it would not be so easy to slide through with only superficial knowledge of the subject."

NEWS FROM OTHER COLLEGES.

The Yale law school is the only one in the United States or England that has a four years' course of regular exercises and gives a degree of Doctor of Laws.

Rev. J. H. Vincent, D. D., delivered the annual lecture before the literary societies of Simpson.
Hon. James G. Blaine was Dartmouth's commencement orator.

The *Simpsonian* would like to see next year an inter-state base ball league between the State University, Cornell, Iowa, Ames and Simpson. The *Aurora* is heartily in favor of such a project, and I think it can be safely said that the Agricultural College will earnestly co-operate in any such movement. Simpson, start the ball rolling.

President Chapin, of Beloit College, has resigned.

Hereafter the oratorical prizes at Knox College will be awarded equally on literary merit and delivery, thought not taken into consideration at all.

Mr. J. W. E. to young lady: “Miss, do you believe in cremation?”

Young Lady: “Yes, if it is ice-cremation you mean,” she sweetly said, as she called for the sixth saucer.—*Ex.*

Professor: “Name a potent element in the art of drawing.” Student: “A mustard plaster.” The professor collapsed.—*Richmond College Message.*

Texas has given another million acres of land to her University.

Prof. Gilchrist, so long principal of the Iowa State Normal School, has been succeeded by Mr. Seerley, of Oskaloosa.

Tuft and Delaware colleges have both banished co-education. Brown is debating the question of admitting it.

Fifty young ladies were made bachelors recently at a Boston college. If this thing continues there will be a deficiency of old maids.—*Delaware College Review.*

Of the 365 universities and colleges in the United States, there are about 175 that publish papers, and there are about 190 papers published, of which the Brownomian, founded in 1826, is the oldest.

**LOCAL.**

“Good-bye.”

“A pleasant vacation.”

“Thank you. A safe return.”

“Be sure and write when you get home.”

The above has been stereotyped for the use of future classes at the close of the spring term.

If there is one place I would not wish to visit, it is the I. A. C. during vacation.

The next morning after Junior Ex. about seventy-five ate breakfast. At noon all the doors were locked.

The grounds were mowed at the proper time to make them look “nicely” at the close of the term.

The Masonic portion of the faculty and students attended the picnic in Hoggatt’s grove on St. John’s day.

McElyea’s and Jerrie’s are quite popular summer resorts this vacation, while the tent furnishes an excellent place for smoking—to keep away the mosquitos, you know.

Quite a number of the students, especially the Sophomores, do not intend to return this fall. We hope they will change their minds and surprise us by appearing here July 21.

The I. A. C. is noted for its department of Domestic Economy; and yet about half those taking that study failed to pass this spring. Whose is the fault?

The literary societies adjourned and held a sociable the last Saturday evening of the term. Though the kindness of President Hunt, the bell closing recreation hour was not rung till 8 o’clock.
Very few of the Alumni or other old students attended the exercises given by the Junior class.

The junior students in botany spent a very pleasant evening with Dr. and Mrs. Halstead.

The demerit marks were very kindly taken off by the President in order that all might start in the new administration with a clean record.

The Agricultural and Horticultural, and Domestic Economy Associations held a joint session the last regular night of meeting. The papers read were exceedingly interesting. Much taste was shown in the decorations.

The Senior class took tea with Dr. and Mrs. Welch. The evening was enjoyed by all, and will not be forgotten soon by any one there.

Each company in the battalion, excepting Co. G, held a competitive drill and selected the four best drilled men to be Corporals, two of the Captains acting as judges, Capt. Lincoln being referee.

"Your committee on securing water lilies beg leave to report that, besides securing an abundance of the same, it had a splendid time."

I take this method of informing the public that my laundry, situated three miles east of Ames, does good work and cheap as the cheapest.

Myron H. Reynolds.

Two years ago we had a lady perceptress who had her rooms on the first floor. The girls were as lady-like then, studied as hard and got as good marks as they do now, when there are two proctors on the same floor with them. Then they selected their own room-mates. Now, among other absurd regulations, her room-mate is selected for her. This is a little more than a girl who has a particular chum cares to submit to; and it is no wonder she should prefer going to Mt. Vernon or Grinnell, where young ladies are not treated as children.

The students who are staying here during vacation surely belong to the order that has for its motto, "Days of Labor and Nights of Rest."

The Seniors in the battalion, each accompanied by a spear manipulator, accepted Capt. Lincoln's challenge and assembled at Lincoln Castle immediately after the last dress parade of the term. In defense the Captain turned the heavily-loaded tables against them, but the Seniors were equal to the occasion and came off victorious. After the Captain acknowledged himself beaten, all repaired to the parlor, where a most enjoyable evening was spent.

An interesting feature which is being added to the museum during vacation is the series of cases containing insects. The first shows the types of each order; then follows the typical genus in each family, while other cases show insects destructive to the forest, the orchard and the farm crops.

"English as She is Spoke."—Professor in Geology: "Mr. B., you may recite on the birds of this period." Mr. B.: "In the sandstone in the valley of the Connecticut river is found the track of an extinct bird. This is about one hundred miles long by twenty wide, and is—." The class finish the recitation in concert, while Mr. B. looks on as though he felt it would have been twenty-five dollars in his pocket if he had never been born.

The literary societies held a declamation contest limited to the Freshmen and Sophomore classes. The Bachelors carried off first honors, the Philosophers second and third. Mrs. Riley placed Lulu Wright first, Prof. Chevalier tied John Abraham and Scott Bradford, Prof. Hainer gave Scott Bradford first.
The marks placed them in the following order: Scott Bradford, Lulu Wright and John Abraham. Below are the contestants with their subjects:

Love vs. Glory—Sherman Yates.
Jamie—Miss Amy Gilbert.
The Dandy Fifth—J. M. Culver.
Fall of Pemberton Mill—Miss Gertrude McClure.
The Blacksmith’s Story—Scott Bradford.
Cateline’s Defiance—A. McPherson.
Flying Jim’s Last Leap—Miss Lulu Wright.
Ramon—J. S. Tuthill.
The Legend of Bregenz—Miss Julia Wentch.
Shamus O’Brien—John Abraham.
Briar Rose—Miss Laura Moulton.
Logan’s Memorial Address on Grant—W. H. Wright.

Below is given the order of exercises of the Junior exhibition:
Music—Miss Westerman.
Invocation—President Fairchild.
Silent Forces—T. E. Stinson.
Robert Burns—A. C. Felt.
Morse—C. J. Cotey.
The Black Septer—L. V. Harpel.
Music—Misses Wagner.
The Three If’s of American History—G. Z. Barnes.
How to Win—Miss Ollie Wilson.
The Uncrowned King—Fred Faville.
Music—Miss Westerman.
Individualism—S. A. Beach.
Discipline of Duty—C. F. Curtiss.
A Moral Crisis—Miss Crawford.
Benediction—President Fairchild.

The following conversation was unwittingly listened to by the Local the evening of June 23:

Son: Pa, what is that?
Father: That is a Junior ex. orator.
S.: But what is it? Is it a machine?
F.: No; you might think so by the way he acts, but he does that way because his teacher told him he must.
S.: What makes the people make such a noise when he sits down?
F.: Those who make the most are his friends. The others because they are glad he is through.
S.: But what have they all been talking about?
F.: Generally what they know the least about. Some have told us of great men, some about our glorious country, and others have been telling the teachers what they should do.
S.: Pa, were you ever a junior ex. orator?
F.: Keep quiet, Charley. Don’t you see you are disturbing the people.

Mr. Andrews, once of ’86, made his friends here a very short but pleasant call.
Miss Mable Lucas spent a week visiting Miss Lulu Wright and other friends. We are glad to learn that Mable intends to be with us again this fall.
Frank Y. Locke visited with his friends here a couple of days.
Miss Julia Wentch’s parents made the College a visit and returned home with her at the close of the term.
President Chamberlain will be here to take his new position about July 20.
Will Godfrey came up from Des Moines to attend the Junior ex.
Miss Nell Barrett spent a couple of days visiting her many friends here on her way home from Callanan.
Every one was glad to see Fred Faville return in time to take his place in the Junior ex.
Miss Westerman, of Ames, one of Mrs. van Etten’s pupils, gave us some very excellent music for the closing exercises Wednesday evening.
Pat Finnigan’s sister made him a short visit the last of the term.

Miss Babcock, of Boone, made her friend, Miss Zimbleman, a very pleasant visit.

Clarence Baker smiled more visably than usual. Caused by a visit from his father.

Messrs. Rayen, Streets and E. S. Johnston took advantage of the cut in rates and visited Chicago during vacation.

Dr. Welch is spending his vacation at the seaside.

It seems natural to have the Misses Wynn here again, if it is only on a visit.

Mr. Roberts, from Dunlap, has been visiting G. W. Greene.

Gen. Geddes is having his residence in Ames nicely fitted up. The General expects to be established in it before the beginning of the fall term.

President and Mrs. Fairchild, of the Kansas Agricultural College, are visiting her brother, Dr. Halstead. Dr. Halstead’s brother, of Chicago, is here also.

Mrs. Giddings, of Mason City, visited at Prof. Osborn’s. Mrs. G. is a sister of Tommy Shearer, and was once a student at the I. A. C.

Mrs. Graves is spending vacation at Madrid.

Prof. and Mrs. Bennett were in Chicago the first part of vacation.

Mrs. VanEtten has resigned her position here as music teacher, and we understand will soon become the wife of Rev. Mr. Jones, of Keokuk.

We see by Science that the chief taxidermist of the National Museum, Wm.

T. Hornaday, is now in Montana for the purpose of securing some of the remaining buffalo for scientific purposes. Mr. H. spent two years at school here.

Yates and Wallace during vacation can collect more specimens, pass up more studies, smoke more tobacco, raise heavier beards, and, if they want to, make a fellow feel more lonesome, than any other two boys in existence.

'84. Geo. Osborn is inspector of stock for the Sioux City & Pacific railroad.

'84. W. H. Wier came down to Junior ex.

'83. '83. M. E. Wells and Miss Kate McNeil were married at Elwood, Neb., May 8, The AURORA is sorry it did not learn of the happy event sooner, but sends congratulations just the same.

'79. J. D. Shearer, from Minneapolis, Minn., has been visiting his parents, who are living near Ames. He spent a day here.

'85. C. A. Cary attended Junior ex. He is here now and intends taking a post course next fall.

'78. '84. Prof. and Mrs. Hainer are spending vacation with Mrs. H's parents at Waterloo.

'81. Four members of class '81, R. J. Hopkins, E. C. Fortner, Miss Nellie Bell and Mrs. Osborn, were here at the same time. It is needless to add that they enjoyed themselves only as classmates can when meeting after a long separation.

'84. Morris Vincent sent the museum a fine specimen of the hoary bat. He writes that he is realizing some of lucrative part of the nursery business.
'85. W. M. Hays is performing some valuable and interesting experiments on the growth and direction of corn roots, when planted at different depths. His paper, accompanied by nearly twenty drawings, presented before the Science Club, was exceedingly interesting.

'85. E. E. Sawyers passed through Ames the other day on his way back to Algona. He was returning from a visit to his old home in Ohio.

'85. Dr. T. W. Shearer and Miss Harrie Hutton were married in Tama City last month. At home to all their friends, at the corner of Ninth and North Street, Des Moines. The AURORA unites with their hosts of friends here in wishing these two young people the happiness they so richly merit.

'79. Prof. Osborn spent a week in the eastern part of the state and while away inspected the Putman entomological collection in the Davenport Academy of Science.

'77. Married, at St. Joseph, Mo., H. S. Fassett and Miss Alpha Campbell, '77. The cards say South Bend, Ind., is to be their home.

'72. Prof. Stanton and family are taking quite a pleasure trip this vacation. They first will visit Mrs. Stanton’s parents in Nebraska. There they will be joined by Prof. Halstead and Prof. Bessey and his family, and will spend the remainder of the time in Colorado.

'85. L. F. McCoy has secured a lucrative position on an engineering corps, headquarters at Dubuque.

'72. John L. Stevens has been nominated for the position of District Judge. The AURORA will not enter into politics, but it must say in due justice to the man that he is worthy and well qualified, and the party that nominated him showed their wisdom by selecting the best.

'81. Prof. F. B. Gault, superintendent of schools in South Pueblo, Cal., formerly one of Iowa's foremost educators, sensibly returns to Iowa for a wife. He was married on Wednesday to Miss Jennie Perrett, principal of the Ottumwa high school, a lady of rare worth and attainments.—Cedar Rapids Republican.

'82. Miss Etta Budd attended commencement exercises at State Normal.

**GENERAL DIRECTORY.**

**CHRISTIAN ASSOCIATION.**

**MEETINGS.**

Sunday School every Sunday at 1 p.m. Prayer Meetings: Sunday evenings at 7 p.m., in Freshman Recitation Room. A cordial invitation is extended to all.

Florence Weatherby, Secretary.
Esther Crawford, President.

---

**ALUMNI ASSOCIATION.**

E. W. Stanton, Secretary.
R. F. Jordan, Pres.

---

**SCIENCE CLUB.**

V. C. Gamble, Secretary.
W. M. Hays, Pres.

---

**AURORA ASSOCIATION.**

Miss Esther Crawford, Sec’y.
G. W. Greene, Pres.

---

**COLLEGE BAND.**

P. W. Coe, Sec’y.
Geo. Z. Barnes, Pres.