sickness, when he usually sent for it, as he wanted it or craved it. His last illness was the natural result of his course of life, over which, as a friend, the writer must draw a veil. He used to say, in comparative health, "I'm a standing temperance lecture to all the young men of the city." When asked, two or three weeks before his death, to visit a farmer friend, he said: "I shall never visit your farm. My brain doesn't work"—putting his hand to his head. And, when confined to his home, he said, "I'm doomed to die!"

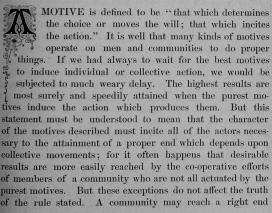
Thus passed away one of the greatest of men by nature, who never forgot anything! "I wish I could forget somethings," he would say. He had three dialects—the low, the common and the classic English. He excelled in each.

THOUGHT IN EDUCATION.

BY JAMES F. WILSON.

[An address, delivered at the dedication of the Bloomer Public School building, at Council Bluffs, Friday, August 26th, 1881.]

MR. PRESIDENT AND CITIZENS OF COUNCIL BLUFFS:



when a part of its members act from purest motives, while the rest are impelled by those of a lower order. But if all were actuated by the former character of motives, the end would be sooner reached and better assured. Diversity of motives leads to discussion concerning the means to be employed, and, to a certain extent, confuses the movements through which the result is to come. A practical suggestion is frequently of more force than a most learned argument. Not that discussion is to be decried as a thing of mischief always to be avoided, but rather that the necessity for its presence is sometimes to be deplored. At best we must take the world as we find it, and do our utmost to improve its ways and advance its interests. We must deal with men on the basis of their diverse motives, and with communities from the standpoint of their unavoidable divisions concerning the means for the accomplishment of their purposes. In these several regards we may find almost everything with which we come in contact useful.

Possibly no motive to human action is more decried than selfishness, and yet every man possesses it, and every community is moved by it. It is everywhere, and is in almost everything. It comes to us at all times, and shares in most of our endeavors. But it is not the uniformly bad thing we are apt to regard it. While it prompts us to do some of the worst things in life, it often moves us to most praiseworthy effort. It may be a help or a hindrance, as we will. If it leads us wrong, it laughs at us and chastises us for our folly. If we are guided by its better promptings, it rewards us with many pleasant things. It is an omnipresent force, and is useful or destructive according to the condition of the human machinery on which it acts. We can have much of it or little of it. This depends on the steadiness of the hand with which we manipulate the valve through which it acts. But it is a very curious agent. It plays fantastic tricks on us like a harlequin. But only does this when its mask is down, and we do not see it. When its mask is up, and we see its promptings, we turn away from it, and refuse to admit that its presence has any influence over us. But in the turning we are apt to pull the mask down, and straightway do the bidding of the presence from which we have turned away. But when it is acting on others it always seems to us that it is unmasked, and we fancy that we can read the influence of the magic wand in every movement. Then it is that we make up the account of human actions, and conclude that selfishness prompts everything, and that it is wholly bad, little realizing that in this very fact we make an entry against ourselves. The very contrast we make between ourselves and others may be the result of the meanest trick that selfishness can play upon us. The subject is one of curious study, full of suggestions, surprises, disappointments, and pleasures. It is a garden filled with beautiful flowers and noxious weeds. In destroying the weeds we need not disturb the flowers, but we are very apt to do it. I may tell further on how this may be avoided.

Discontent is another source from which spring a multitude of motives of human action. It is a dreadfully disagreeable presence. It never means to be anything else. But it greatly overworks its case. If all discontents were well founded there would be a great deal more of real trouble in the world than there is. But most of them are not well founded, and mankind is finding this out every day, and coming to a clearer understanding of the true character of this restless element in human affairs. And this induces the belief that discontent is not without its good effects. Every discontent is, in a certain sense, a progressive force in society. It stimulates inquiry, which leads to a better understanding of the causes which give unrest to individuals and communities. Every discovery that a given discontent is not well founded creates a conservative force, the tendency of which is to prevent others and to contribute to the preservation of organized society. Not that we may expect the time to come when no discontent will appear, this cannot be in the very nature of things. The time will never come when all men will be content, and it is not best that it should come. Such a result would seriously diminish the mental activities of mankind. This is by no means desirable. It is well, therefore, that it is impracticable. It is every man's privilege to grumble,

indeed it seems almost a necessity to some. A grumbler is a disagreeable person; but he is not on that account without his usefulness. An exercise of the privilege, in the long run, leaves no lasting hurt, on the contrary, it often results in permanent good. To be content leads to inactivity. This is not good for either individuals or communities. Its presence is indicative of decay. Better have an exaggerated view of a present evil than this. Better discontent than stagnation. For some of the most admirable progresses in human affairs have had their origin in unreasonable discontents. Everything of the kind brings within our reach a compensation. We must learn how to detect its presence, and of this I may say a word further on.

There are always multitudes of people who believe that the world is going all wrong. There are pessimists. The beliefs of these people are founded on more causes than there are individuals entertaining them; and each cause involves motives to action. It is difficult to make one laugh who is always crying. A good result must be a surprise to a person who is always anticipating evil. When it comes, it is received with ingratitude, and the recipient relapses into gloomy forebodings. Such people are not lovable. They do not give us pleasant views of life, nor unfold to us the beauties which every mind may command and every hand may manipulate. But there are many such people. If we were to calculate the world's chances of going wrong on the basis of the number of persons who believe that it is so tending, we should not long doubt that the future has great disaster in store for us. Fortunately for all concerned, we are not obliged to formulate our conclusions from such data. It is our right to challenge the opinions of the multitude who live in the atmosphere of anticipated calamity. It is our privilege to demand the wherefores of the forebodings of evil. It is our duty to test the foundations on which apprehension rests. And when we do these things an agreeable result comes to us, which leads us to wonder at the unrest and anxiety which render so large a proportion of mankind unhappy, for these tests disclose how marvelously slender are the cords which support the world's solicitudes. They are not only slender, but each one is unlike every other one. Each individual anxiety is induced by a cause more or less different from all others; and, taken together, they are as numerous as men multiplied by their several causes of anxiety. And thus the general solicitude is shown to be an aggregation of incongruous details. This dominant fact enables us to discover how little real cause there is for believing that the world is going all wrong, and that its progress is in the inverse relation from good to bad, and from bad to worse. Such is not the tendency of the world. Mankind is engaged in no such march of madness as this. To believe that it is, is to doubt one's self. It is better to be thankful that one is not as other men are, than to believe that, as a general rule, all men are wilfully bad. We must not weigh others in scales that have become rusty from contact with the damps of our own real or suppositious misfortunes. On the other hand, it is not best to believe that everything is going well because we may be favored with sunshine. If the world is not all wrong, it is not safe to conclude that it is all right. This would disarm us of power to effect reformations, as it would deprive us of those motives which incite us to right and persistent endeavors. As great mistakes can be made in this respect as in that other which constitutes its opposite. Better is it to believe the doctrine that there is at the worst a general average of good and evil, than to accept either of the extremes mentioned. But it is not well to rest here, for it is a neutral ground where none but negative forces exist. Our aim should be to make the right dominant.

But this is an educational occasion, and what has education to do with all this? Right education has everything to do with it; and right education is what this country must have. We are advancing rapidly toward universal education, and Iowa is aligned with the front rank. Our position is one pleasant to look upon. With a permanent school fund of \$3,448,411, yielding for the year 1880 an income of \$282,902; with 11,037 school-houses, wherein were taught 10,590 ungraded and 494 graded schools, in which are employed 7,254 male and 14,344 female teachers, at a cost of

\$2,901,948 for the year; with expenses connected with school buildings of \$1,007,492, and contingent expenditures of \$933,658, making a grand total of \$4,843,098 of outlay for public schools in a single year, we may justly take some pride in our position. And these facts indicate the high degree of interest which our people take in their system of public schools. And here it is well to state, that, while our total expenditures for schools for the year 1880 were \$4,843,098. only \$282,902 came from the income arising from investment of the permanent school fund; \$409,113 from the county school tax of one mill on the dollar of the property valuation, \$16,000 from fines and penalties, - leaving \$4,035,083 as the amount raised by the people in the several school districts from taxes voluntarily levied upon themselves. This is the practical test of the extent of interest felt by our people in their school system; and it evidences their great appreciation of the value of education to themselves and to their institutions. Taxation is not a resort to which the people voluntarily turn to promote objects of doubtful utility. Our people do not doubt in the matter of promoting the efficiency of their public schools. They know that the success of our system of government depends largely upon the work therein done. They realize that in and out of the doors of the public schoolhouses come and go the minds that are to direct the affairs of the country, make and execute its laws, conduct its commerce, administer its business, create measures for its further development, manipulate its moral forces, and do whatever may be done for the promotion of the general welfare. They know that the education of the great mass of the American people will begin and end in the public school, so far as formal instruction is concerned. The millions will never reach the higher schools—the academies, the colleges, the universities of the country. But the millions will always control, and so the education which they derive from the public schools should be of the right kind. To be this it must be practical. To be practical it must be thoughtful. And this brings me to a thought I wish to enforce; for upon it hinges the supreme value of our public school system. It is the pivot on which I shall turn to account most of what I have already said.

The first thing a pupil should be taught is to think. The most potential of educational forces is thought. The pupil who thinks most will know most. To learn the contents of a book is one thing: to understand the subject of which it treats is quite another thing. The former may be the mere result of memory. The pupil who achieves it may be able to repeat every word between the lids of the book. He may do this, and still not understand what they are intended to convey. The latter is the product of thought; and its possessor is master of the author's purpose, though he may not be able to repeat a single sentence as it is written in the book. Rules in grammar and mathematics are all very well, indeed are essential. They are the orderly methods devised to aid the student in his educational efforts. But they are as dead languages to the unlearned, to one who can do no more than repeat them. The rule is easily committed to memory: but it is of little value unless the reason for its adoption is understood. That a thing is every one may know. Why it is, very few may understand. For practical purposes the why is not less important than the is. Both are necessary to thorough education. To embrace them both, thought is indispensable.

No person should be employed as a teacher who does not know how to think. He cannot teach others to think, unless he is a thinker himself. It is a waste of money to employ a teacher who cannot command both the *is* and the *why*. And when you have secured the best, you should see that he does his duty in the respect named. A teacher may do much for a pupil, but he cannot do all. But if he contents himself with a class recitation which only fills the measure of the text of the book, he falls as far short of his duty as does the student who merely memorizes his lesson.

The class recitation should be as much an occasion for thinking as is the time devoted to the study of the lesson. No answer should be passed without the reason for it keeping it company. The duty of enforcing this rule should be imposed on every teacher, and its performance rigidly exacted. Let it be understood that this is the rule for both teacher and pupil, and you will soon see a marked improvement in the

efficiency of the former, while the averages of the latter will always rank closely to perfect. The distinction between dull and bright pupils, too much fostered in our public schools, will rapidly disappear. The former will be aided in his efforts to surmount the difficulties which oppose him in his attempts to acquire education, give him strength to advance and confidence in his ability to do so; while the latter will escape the dangers of superficial education which often attend recognized brightness. Not only will this be the case, but departure from school will come more nearly meaning fitness for practical life. It does not always mean this; indeed, it too often means far less than this. Regretfully often it is the pupil's first step in the endeavor to fit himself for the practicalities of life. And this applies to all grades of educational life, from graduation at the public school to that which marks the student's departure from the most advanced college. It is then that the value of thinking comes to the front, and enforces a realization of its importance. Then is made plain the truth of the old saying that "there is no royal road to learning;" every one must travel it afoot, and there are so many earnest toilers in the way that they block it up against all who are not as resolute as themselves. Superficial preparations for the conflict are but incumbrances. has not been learned aright, must be unlearned. Even genius learns that its brightness can be obscured by competitive thought, and whosoever "depends for success on what nature has done for him, finds himself defeated by some one who has done for himself." A pretender soon gets his measure taken. The practical unlearned will readily detect the unpracticable scholar. The former now takes rank for brightness in the stirring practicalities of life, while the latter is consigned to the rear for dullness.

The world is full of the triumphs of thinkers. Men are remembered for what they have done; and all doers have been thinkers. When you read of any great deed, you cannot rest until you find out who did it. An expression full of thought, beauty, and suggestiveness comes in your way, and you at once search out the author. An invention which has

promoted the welfare of mankind comes to your notice, and at once you inquire who was the inventor. You read of emperors, of kings, of generals, of men of wealth and station, but forget them almost as soon as you have passed their names, unless they have done something worthy of their stations and opportunities. Station is nothing. Doing is everything. The right ambition is to do something, not merely to be something. It is very common to place before the boys of this country, as an incentive to greater endeavor. the possibility of any one reaching the highest stations of public trust, confidence, and honor. The Presidency, it is said, is not beyond the reach of any boy, no matter how humble his origin, or how repressive the circumstances of his beginnings in life. This is true; numerous instances of the kind are found in the line of our Presidents. But a man may be President and die and be forgotten. How many persons in this audience can mention in their order the names of the men who have been Presidents of the United States, and give the terms of their administrations? If all, or any considerable number can do it, then are you an exceptional audience. If I should put the question concerning the Vice-Presidency, the inability to answer would be about, if not entirely, universal. And thus we see that high station does not assure fame. Deeds do this. We remember Washington not as President, but as the doer of deeds in our Revolution, and as the man of exemplary private and public life. We remember Jefferson not as President, but as the author of the Declaration of Independence. Nor is it only in politics and public life that this applies. We remember Fulton because of his success of applying steam to navigation; Franklin because of the wise things he said, and his connection with discovery in the department of electricity. Indeed the doing of bad deeds will carry the names of men in the recollection of a people when high station with inactivity wholly fail to do it. We remember Arnold because of his treason; this was the dominant act of his life, and displaced all others. And so fame and infamy both depend on what men do. Let this impress on each one the supreme importance of doing right. But be

assured that right thinking is the surest of all human agencies in establishing this practice. And this is why I want methodical, constant, effective habits of thought enforced in our public schools. Let this be done, and we shall always have men to answer to all the demands of the exigencies of public and private life. We will be a nation of people of right tendencies. It is written that "they used to go to other cities of Greece for rhetoricians, painters and music-masters, but to Lacedemon for legislators, magistrates and generals of armies. At Athens they learned to speak well, and here to do well: there to disengage themselves from a sophistical argument, and to unravel ensnaring syllogisms; here to evade the baits and allurements of pleasure, and with a noble courage and resolution to confute and conquer the menaces of fortune and death; those cudgelled their brains about words, these made it their business to inquire into things; there was an eternal babble of the tongue, here a continual exercise of the soul."

It is not difficult to discover a somewhat striking parallel between this statement of Grecian conditions and those which pertain to education in this country. The public schools constitute our Lacedæmon, while the higher schools and colleges represent the other cities of Greece. But as it required Lacedæmon and her sister cities to constitute Greece, so our public schools and those of higher grade and our colleges and universities are necessary to the perfection of our educational system. But as Greece drew on Lacedemon for the actors in the practicalities of her life, so do the people of this country fill the ranks of her public service, commerce, trade, and general development, largely from the men whose educational advantages have depended on the public schools. Millions of our youth step from the doors of the public school-houses into the activities of life, while those who go thereto from college halls are numbered by thousands. Nor is this a cause of so deep regret as some imagine. The experiences of public school life are most needful in a republic. The mingling of pupils from every grade and condition of our social life is helpful in every regard. Equality is the rule of public school associations. The pupils learn to disregard the distinctions of wealth and station. Whoever behaves well is respected and treated as an equal. The son of the rich man soon comes to know that he must toil to keep pace with the boy who knows nothing of luxury, and whose home is poverty. This enforces respect, which is not lost in all subsequent life. Let these associations and impressions be strengthened by the processes of right thought, and they grow into most forceful supports to our social and political fabrics. When the mutations of subsequent life reverse the order of wealth and station of those who have gone out from the public schools, the same rule of equality is recognized; and the poor boy who has become the rich man will love and respect and give a hand helpful to the rich boy who has become the poor man. And these instances are so constant and common all over the land as to create a bond of sympathy which will hold our people together as none have been hitherto. We cannot overestimate the value of this feature of our educational social life to our republic. A common interest in public institutions, enlightened by habits of correct thought and intensified by reciprocal sympathy, will prove a reliable and enduring support to our system of government.

But many of our Lacedæmonians from the common schools are not content until they have scaled the walls of the other cities of Greece, and become masters of all they find therein. Whatever of art, literature, and science there exists, they appropriate. They accustom themselves to the walks of advanced culture, and explore all the ranges of the school of philosophy. They become an universal presence. This tendency toward enlarged and liberal education is one of the most hopeful signs of our times. But it more rigidly imposes the duty of giving it right direction in its earlier stages. This can only be done by having right modes of thought occupy the first place in the system of instruction practiced in our common schools. This purpose should meet the pupil on his first school day, and become his constant companion in hours of study and recitation. It would soon become a pleasant companion, leading into lines of mental development at once methodical, comprehensive, and forceful. But to

reach this result, the teacher must understand his or her duty, and feel that it involves very much more than earning a salary by presence in the school-room during the hours prescribed by law, custom, or contract.

The organization of pupils into classes is a convenience, but it must not be allowed to dispense with the individuality of the pupil. The class is not the unit in educational work. The pupil is the unit. This is the rule on which the teacher must proceed. To deal only with the class in the aggregate is fatal to right education. A system of instruction which proceeds on that principle is almost certain to be at fault with every member of a class; for it works wholly in the mental grooves of the teacher which may be unlike those of each individual in the class. The first duty of the teacher, therefore, is to acquaint himself or herself with the mental peculiarities of each pupil, and adopt such methods of instruction as will meet the requirements of each case. Minds have their own lines of movement as planets have their orbits, and it is as easy for the teacher to become acquainted with the former as with the latter. Let this understanding be had, and teaching will become comparatively easy. Any other resort leads to confusion, difficulty, failure. A pupil cannot make satisfactory advancement without thought. He cannot have this, if the teacher, failing to understand his peculiar mental organization, tries to force him into lines adapted to others but foreign to himself. Every pupil can become a thinker. Give him a right start, and he will largely work his own way. And this is the highest duty of the teacher. I give it this rank because it relates to those results in educational administration which most intimately affect the interest of the public as distinguished from those of the individual. And in no other country is this line so distinctly marked as in our Our people are their own masters of public affairs. They make and unmake their laws, and order their ways of administration. We are a young nation, but rapidly pushing to the front in directing the affairs of the world. Our opportunity for usefulness has never been equalled by that given to any other people. The duties which this devolves on us are of supreme importance. We need all the aid we can obtain to assure their right discharge. Our common school system is our most important auxiliary. Hence the interest we take in it, the money we spend upon it, and the hope we center in it. Let it but give us a nation of thinkers, and our future will be assured. Give us this, and we need take no concern about a supply of statesmen or men of affairs of science, of art, of literature, of invention, of trade, of commerce, of all departments needful in the march of our people toward a higher development of national life than the world has ever witnessed. Right thought can, in a large degree, control the selfish tendencies of men and modify the motives which spring therefrom. It can stand in the presence of discontent, whether this relate to public or private affairs, calm its passions and direct its energies into ways of practical expression and orderly action. It can lay its hand on that disorganizing belief which affirms that the world is going all wrong, and discover to its votaries the fact that not only is the good equal to the bad, but more, and that the general tendency is in the right direction. It is the effective governor of that great engine whose structure is human society, regulating its motion conserving its forces, and assuring stability and satisfactory results. Right thought never permanently leads into wrong ways, and is always alert to detect a mistake and to retrace its steps. And thus we find an intimate relation existing between the three subjects mentioned in the earlier part of my remarks, and right education which involves instruction in and the enforcement of right modes of thought.

In conclusion, allow me to extend to you my congratulations on the completion of the educational structure in which we are assembled. It is an honor to you and a credit to your enterprising city. It is one of the most complete and commodious public school buildings in the State. Its design is admirable, and its arrangement about perfect. As you dedicate it to the use for which you caused it to be constructed, so dedicate yourselves to the promotion of right education within its walls. Here your children are to be taught, and those habits of mind formed in them which will accompany

them through life. The foundations of success or failure will be laid for them here. Let it not be done without your inspection. It is not enough that you have erected this temple; you must see to its administrations. This for yourselves, for your children, and for your country.

OBSERVATIONS ON TORNADOES IN IOWA.

BY THE EDITOR.

HE recent tornado at Grinnell and Malcom calls to mind former cyclones at Camanche and near Iowa City. It is proper to premise that Iowa is not the only State where whirlwinds or tornadoes prevail at intervals of years. They occur in Texas, Georgia, Ohio, Missouri, Illinois, and all over the old northwestern States, as well as in the Pacific States.

The old English word whirlwind is the true name and nature of the wind; tornado is the Spanish name; cyclone is the Greek or oriental designation,—all meaning a wind, whirling, turning around, or circling about, with the top of clouds enfolding themselves into a funnel-shaped cloud, the lower end or bottom whirling and taking up and overturning everything in its reach. The little eddies that gather up dust and straw resemble a tornado, on a small scale. So much for the shape or nature of the whirlwind, so destructive of life and property.

The only thing in art, which resembles nature in a whirlwind, is a balloon, in shape and ascent. The basket resembles the dust and broken fragments whirling and flying in every direction.

The laws of tornadoes are few. They seldom strike the same place the second time—unlike lightning, which often strikes in the same place.

1. Tornadoes or whirlwinds follow flat and low lands. They never strike high points or ridges of land, except when passing from one valley to another, and in their course they Copyright of Annals of Iowa is the property of State of Iowa, by & through the State Historical Society of Iowa and its content may not be copied or emailed to multiple sites or posted to a listsery without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.