

CHAPTER II.

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INTRODUCTION.

In 1874 the general assembly of Iowa passed a law having for its object the encouragement of manual or industrial education. Because of prevailing or erroneous ideals and the lack of funds to provide rooms and equipment, only a few schools have established manual training departments. While encouraging reports have come from these schools, and a general interest in the subject is felt, not as much has been undertaken and accomplished as the leaders in education wish.

There seems to be a more general awakening on the subject recently.

The National Educational Association has done much to increase the interest.

In the report of the committee of twelve on rural schools the broad statement is made, that nowhere on earth has a child such advantages for elementary education as on a good farm, where he is trained to love work and to put his brains to work. This excellent report contains so much that is of value touching industrial training, that I quote from it most cheerfully:

MANUAL TRAINING—ART.

“One central and invaluable thing gained on the farm is the necessity for and habit of work. All work on the farm should be honored in the school room by expanding and concentrating it. The school should send back the children to the farm filled with the dignity of labor.

“The work of the farm, in a broad sense, is manual training, but most farm boys get a coarse way of doing manual training. They do not learn to use their hands expertly as they should. On all farms there should be work shops for the mending of tools, construction of materials and apparatus for farm work, and in the country school there should also be a small manual training department in which pupils may be trained to use their hands skillfully in making things needed for the farm and the home.”

A manual training room in connection with each country school may to some appear ideal and very remote. The age requires trained men—better trained than ever before—and observation teaches that the theoretical and ideal of yesterday is the practical of today. So it is most likely to be in the future.

The report of the committee on American Industrial Education, made at New York in 1900, expresses what seems to be a growing sentiment.

"There are now in this country," the report states, "only the beginnings of systematic educational opportunities for young people to learn the theory and practice of particular employments for which they are fitted by nature and in which they long to become engaged. We have an excellent system of public and endowed schools in which are more or less well taught the elements of knowledge and in which a very considerable mental capacity is developed. After leaving these schools our boys *know* something, so far as knowledge can be gained from books and oral instruction, but they can *do* little or nothing. This mental, abstract, and memoriter education needs to be supplemented by a manual, industrial, industrial art, commercial, or engineering education if the boy is to become a doer, or a director. He then not only *knows* something but he can *do* something, and because he can do something he is worth something to society. However much a man *knows*, he is a drone in the hive if he cannot do something for the common good. It must be understood we are not asking for utilitarian education *in place* of a mind-informing and mind-developing education, but to supplement such cultural education as the boy or girl has been able to obtain. Neither do we care to insist upon young people availing themselves of this utilitarian education. We are only concerned that it should be offered, and we have every reason to believe that it will be a long time before the facilities will outrun the pressing demand for any kind of education which will enable a man to rise, in honor and in usefulness, in his chosen calling."

The Iowa State Teachers' Association at its annual session in December, 1902, took a strong position in favor of the introduction of manual training. It adopted a report from the educational council, in which the following language is used:

"Manual training should be introduced into the public schools of Iowa. It should consist of free-hand and mechanical drawing, cutting, weaving and folding of paper and straw; basketry and clay modeling; work in card-

board, wood and metals; designing, bench-work, sewing, cooking, care for domestic animals and gardening. This will teach the child self-reliance, honesty, accuracy, perseverance, invest dull subjects with new life, give an idea of real values; develop a wholesome respect for labor and laboring classes; keep the boys longer in school; train the mind to think, the eyes to see, the hand to do; furnish profitable employment for idle moments and prevent arrested development; make school a part of life, not simply a preparation for life. It gives systematic training to the child's motor activities whereby he gains complete command of his powers."

If manual training will even aid in a small way to "develop wholesome respect for labor and the laboring classes," and assist in overcoming the prejudice which exists on the part of some against those who labor with their hands, its introduction should be encouraged.

Though the general teaching body is in favor of needed changes being made in courses of study, and of the introduction of more of the industrial features in school work, the introduction of manual training may not be rapid. Two things appear to be necessary before great changes may be very generally made. First the people must be led to understand that proposed changes are for the benefit of the children, and second, provision must be made whereby it will become possible to obtain teachers prepared to give the required instruction. As stated elsewhere manual training has been incorporated in the courses of study in a number of normal schools. It is to these schools in large part that we must, I think, look for the greatest assistance. Boards of directors and those governing and managing normal schools must work in unity. The people are not likely to undertake the introduction of manual training without some assurance that teachers qualified to give instruction may be had, while on the other hand a course in manual training is not likely to be added to the normal school course unless it is reasonably certain that teachers will be needed to instruct in manual training in public schools.

In Wisconsin where for several years an effort has been made to introduce manual training, and a good beginning is reported, manual training department have been established in connection with several normal schools and fair sized classes organized. The state superintendent reports: "In several of the normal schools work in manual training and domestic economy has been incorporated in the courses of study for the grades below the normal department," and that rapid progress is being made in the working out of satisfactory courses in both subjects.

Classes might also be organized and instructed in manual training at the state college of agriculture and mechanic arts. Even by utilizing both the normal school and the state college, there will not soon be a sufficient number of teachers prepared to give the instruction desired in industrial lines.

To interest more of the friends of our school system in manual education is our purpose.

A careful reading of the accompanying pages will, I think, show that nearly every question likely to arise has been anticipated and answered.

The department of public instruction acknowledges its very deepest indebtedness to Mr. A. C. Newell, Supervisor of Manual Training, West Des Moines, for most valuable services rendered in the preparation of this chapter.

MANUAL TRAINING AND HOW TO INTRODUCE IT INTO THE PUBLIC SCHOOLS.

Manual training has sometimes been condemned on the ground that expensive buildings and costly equipments are necessary in order that it may be introduced and maintained successfully in the public schools. Elaborate equipments of machinery, benches and tools, costing thousands of dollars are of great help in strictly technical education, but much good work can be done in manual training without them. Fine clothes sometimes help a man to make a good impression upon the world; but they are costly, and do not always materially increase the efficiency of his labor. The size of the library in a school bears about the same relation to the efficiency of the work done by the pupils as the size of the manual training equipment does. The amount that a child learns in school does not increase in a direct proportion as the number of books in the library increases. A pupil can get a pretty good education from a few books well chosen and well studied. So it may be said that the amount of good that a child can get from manual training does not increase in the same proportion as the cost of the equipment increases. The boy or girl will obtain benefit from a modest equipment in manual training in the same proportion as he does from a few books in a library. The value of a fine library is not underestimated, nor are the advantages of a com-

plete, all-round manual training equipment; both are desirable and should be obtained if possible. It would be unwise if a school should be closed because it did not have a large, splendid library; so it is a mistake to have no manual training because a costly equipment cannot be obtained. The ideal type of manual training of the present day is not an expensive patent medicine cure for all the evils and diseases to which the present school system is heir. It is, however, a subject of much value, and its introduction will improve almost any school system of the present day.

WHY MANUAL TRAINING IS NEEDED.

Education has been defined as the training that cultivates the powers and forms the character. Manual training is an educational form of hand-work in which the pupils are taught to see, to reason, and to execute. The tendency of some of our modern education has been to draw the thoughts away from daily life, that is toward the theoretical. A close study of social conditions of today leads to the opinion that education should be closely connected with and prepare for every day life. After years of experience, it has been found that the child needs a training of the motor powers, and that this training enabling the eye, hand, and brain to work together, is educative, just the same as the study of history and the development of the memory cultivate the powers and help form the character. The kindergarten was originated and put into the schools to train the motor powers. Recently the colleges have complained that young people are poorly prepared to receive the greatest benefits of laboratory methods of study.

The changes in the industrial condition of the civilized world during the past thirty or forty years have made it necessary for the schools to furnish industrial training for the pupils, because the homes no longer furnish it. Formerly, each family largely supplied its own wants, and was almost independent of other people. The different members were active. One or more could weave cloth, rugs, carpet, etc., others could make shoes, most of them could help in constructing the simple household furniture, or assist in carpentry work in erecting a house, barn or shed. In fact, our forefathers could make most of the articles used about the home or worn on the person. Today all this is changed.

These things are now made in great factories where each person learns to do one kind of work. "No admittance" is written over the doors of these great establishments, and the children of to-day do not know how articles are made, nor do they appreciate their value. If all of a child's playthings are given to him, he frequently becomes destructive and does not appreciate them properly. On the other hand, if he spends considerable time making some article that he wants, he realizes its value and takes care of it accordingly. After a child has found out how much time it takes to construct an object, his idea of the worth of any article is increased and he becomes less destructive.

AIMS OF MANUAL TRAINING.

In manual training schools no attempt is made to teach a complete trade, as the aim of the work is educational rather than utilitarian. The pupils give only one-fourth, or at most one-third, of their time to manual work, and it is practically impossible to teach a complete trade in so short a time. It would not be of very great value for a child to learn all the details of a particular trade unless he wished to follow that line of work later in life. In some cities there are people working at about two hundred different trades. It is not practicable nor possible to teach all these different kinds of work. In some of the large cities there are trade schools doing splendid work on a different plan, giving most of the time to the particular trade that the child wishes to learn. However, in the manual training school, parts of several trades are taught and important information is given that will help a child to choose a trade later if he wishes. Manual training is taught as a part of general education and is not intended as technical education. Pupils in manual training are taught how to use tools, and given the underlying principles that are the foundation of all trades. They learn the proper use of carpenters' tools, turning tools, etc., in making useful articles that will be of value to them in their play or in the home. Sometimes quite good pieces of furniture are made. Young people of the age that attend our manual training schools are more benefited from this class of work than they would be from the technical study of stair building, roof trusses, or the construction of buildings.

The aims of manual training are many. Some of them, briefly stated, are: To create a love for labor and a respect for rough work with the hands; to develop independence and self

reliance; to produce habits of exactness, order and neatness; to cultivate dexterity of the hand; to train the eye to a sense of form, and to give to the growing child physical exercise and turn his mind to thoughts of useful things which will help him later in life.

Nearly all children love activity, and cannot, and ought not to study all of the time. A child's physical nature requires a certain amount of exercise; and if his activity is turned to something that is useful and enjoyable, we have accomplished a real good in the world. Children love games, and prefer the kind which gives them activity of *both* mind and body, to those which are entirely intellectual or purely physical. This is true more particularly of boys. Football, baseball, tennis, basket ball and other games in which the mind and body must *both* be alert are certainly more popular among children of school age, than purely intellectual games, such as checkers, cards, dominoes, etc., or even contests that are almost entirely physical in their nature such as foot races and some kinds of gymnastics. Manual training to a certain extent takes the place of games which appeal to both the intellectual and physical sides of a child's nature.

BENEFITS OR RESULTS OF MANUAL TRAINING.

In the well ordered manual training room we find that the children are much interested and have a love for and a delight in their work. There are few school studies which so interest a boy that he is anxious to do more than is expected or required of him. At certain times each week in Des Moines the pupils are permitted to come back to the buildings for extra work. In spite of other duties and outside attractions a very large per cent of the entire number of pupils taking manual training avail themselves of this privilege. Many of them stay and work as long as the teacher remains, and leave reluctantly.

Manual training usually creates and always intensifies a love for work with the hands. Many boys who are called lazy because they will do nothing about the house will work with a will for some one else if they are earning money. Nearly all such boys will willingly use the tools in the manual training room and soon get over their idle habits and distaste for work. Manual training pupils leave school with the idea that it is just as honorable (and more profitable) to work with the hands at two dollars a day, as to clerk in a store at three dollars a week.

Many pupils who do poor work in their other studies do well in woodwork and mechanical drawing. This success wins the respect of their fellow pupils and frequently encourages the backward youth to do better in other lines of work. If a slow boy suddenly finds out that he can do this work better than his fellow pupils, he will make a great effort to excel, and it seems to give him a new lease on life. He finds that he is good for something and this gives him a self-respect and a desire that he has never had before to go to work in earnest.

Manual training helps the pupils in other studies to a considerable extent. The training which the boys and girls receive in the shop and draughting room enables them to comprehend more thoroughly and quickly many of the difficult problems of mathematics and science. Hands familiar with tools can handle scientific apparatus to greater advantage, and this independence and self-reliance obtained in the manual training room bring better results and cause the person to accomplish more work.

Some portions of arithmetic are taught in the manual training department in a very practical way. A course in mechanical drawing is certainly of great advantage to students of geometry, for it enables them to understand the figures and to obtain a better comprehension of the subject.

Although manual training is taught as a part of *general education*, it frequently aids the young man or woman materially in selecting an occupation after school life is over. Most of the manual training boys do not become artisans after leaving school. The graduates very frequently obtain positions which require knowledge of several different kinds of work, and the all-round training which they have had seems to give them a versatility which enables them to adapt themselves to circumstances very successfully. Manual training is almost as valuable to the professional man as to the artisan. It will make the surgeon's fingers more skillful, help the dentist in his mechanical operations, give the lawyer a clearer idea of the value of industrial work, and cause the minister to more fully understand the joys, tasks and tribulations of the artisan class.

Another great benefit that is frequently noticed, is that manual training is the one thing that keeps some boys in school longer than they would otherwise stay. Pupils are not permitted to take manual training alone, so they are taught other subjects and obtain something of an education in other lines.

Many people have noticed that manual training has a good moral influence over a child. The pupils are *constantly* taught that their models and drawings have little value in the teacher's eyes unless they are true to size and form, and without defects. Perfection of work is the ideal that is constantly kept before them, and any attempt to cheat or pass in poor work is frowned upon. In a short time the pupil himself has a high ideal of what his own work ought to be, and he desires to make every model and drawing just as well as he possibly can. He learns to see in the concrete, and judge the vast difference between good and bad, between right and wrong, and this gives him the foundation for honesty in thought and in act. The moral effect of industry is very marked. Many bad boys have soon become interested in manual training work, and have thus been kept from bad thoughts and out of mischief by having both hands and brain busy in the workshop. The present method of reforming criminals is to keep mind and body busy with work. Work that a bad boy enjoys will surely benefit him morally.

HOW TO INTRODUCE MANUAL TRAINING.

There are four things that are necessary in order to introduce manual training into the school system. By the expenditure of more or less money each of the obstacles can be made to disappear. Our purpose is to show that some of the difficulties that prevent the introduction of manual training are not so impossible to overcome as is sometimes supposed. The city school board and superintendent usually proceed as follows:

1. To secure or arrange a suitable room;
2. To obtain a competent teacher;
3. To buy the necessary equipment;
4. To provide material with which to work.

KIND OF ROOM THAT IS NECESSARY.

Any school room that is well lighted will do fairly well for this work. The size will of course depend upon the number of persons who are to work there at one time. A teacher can give instruction to a class of twenty quite satisfactorily. There are many kinds of work that are being taught under the name of manual training, but the sort that is best known, and the one that is frequently introduced first, is bench work in wood, also called wood joinery and sloyd. If a class of twenty are to work in the room, each having a bench of his own, the room should be

about twenty-seven by thirty-one feet, or at least have a floor space about equal to that suggested. A slightly smaller room can be used but not to so good advantage. If a room of approximately the size named, that is with 837 square feet floor space, cannot be secured, the number of pupils working at one time should be reduced, also the number of benches and the amount of equipment.

Most of the work in manual training below the sixth or seventh grades can be done in the ordinary school rooms.

WHO SHOULD BE THE TEACHER?

The degree of success enjoyed by any manual training department depends largely upon the teacher, the dynamo of inspiration and enthusiasm, who should keep himself so connected with the pupils that ideals can be created and activities stimulated, and all their motor powers made to perform work efficiently whenever enthused by his energizing spirit. We could not expect the greatest efficiency from a poorly constructed dynamo; neither can we obtain the best results from a poorly prepared teacher. Experience has shown that the expert artisan is not the person to put at the head of a manual training department. Professor James W. Robertson, of Ottawa, Canada, who has charge of a large number of manual training schools, which were established out of a fund given for that purpose by Sir Wm. C. Macdonald, in speaking of teachers says: "It is no use to put an artisan, be he ever so clever a workman, into the manual training room and tell him to carry on the work. The artisan may be ever so clever and well-intentioned, but his forte is in handling *material* and in making the best use of that. The teacher's forte is in handling *children* and making the most of them which is quite another thing." The manual training room *should not* be a shop in which the sole idea is to make articles of commercial value for the market. In the manual training school the teacher should so plan the methods of making the models that the *pupils* themselves will obtain the greatest benefit possible. The *teacher* will think of the *training* that the boy or girl will receive by making the object, rather than of the model itself, which if possible should be a useful thing which the child can use about the house or elsewhere. The *artisan* will think of the *object*, and plan to make it by commercial methods, which of course demand that it be made in the quickest possible manner, also giving special attention to its appearance when done. One

of the arguments for having manual training in the schools, is that a boy can *not* get in a shop the all-round training that he needs. If we put an artisan into the school room as teacher a large amount of the benefit obtained from manual training is lost. The articles made by the pupils under the *artisan* teacher will usually appear better than those made under the instruction of a trained manual training teacher. This should not worry any school superintendent or principal, because the artisan will allow the pupils to use the mitre-box, trimmers and many other mechanical helps, which the trained teacher will object to on the ground that greater skill of hand and much more mental power can be obtained by other methods. A good education, a training as a teacher, skill of hand and a knowledge of many kinds of mechanical work, are all required as preparation for manual training teachers. The best teachers that can be obtained at a moderate salary are those who have taken special courses intended to prepare teachers of manual training in the normal schools or universities. At the present time several of the normal schools and universities of the state offer courses in construction work and other manual training for the primary grades, but no college in the state, at this time, makes any attempt to prepare teachers for grammar grade or high school work. Iowa will have to draw most of her manual training teachers at rather high salaries from the universities and normal schools of the neighboring states till our own schools introduce this work.

MANUAL TRAINING SCHOOLS FOR TEACHERS.

A few of the schools that prepare manual training teachers or are expecting to do so very soon are given below:

- University of Missouri, Columbia. Also summer courses.
- University of Minnesota, Minneapolis.
- State Normal School of Wisconsin at Oshkosh.
- University of Illinois, Champaign. Summer courses.
- School of Education, Chicago. Primary work.
- Chicago Normal School, Chicago.
- State Normal School, Greeley, Colo.
- State Normal School, Mankato, Minn.
- State Normal School, Moorhead, Minn.
- State Normal, Platteville, Wis.
- Drake University, Des Moines. Primary work.
- Highland Park College, Des Moines. Primary work.

Chicago Sloyd School. (Anna Murray, director.), 147 Fifth Ave., Chicago.

Bay View, Mich., Summer University, Sloyd Department. Summer courses only.

State Normal of Iowa, Cedar Falls. Primary work.

Teachers College, New York City. Summer courses also.

State Agricultural College, Ames.

University of Wisconsin, Madison.

University of Michigan, Ann Arbor.

University of Illinois, Champaign, etc.

All of the Engineering schools give courses helpful to high school and grammar grade teachers of manual training.

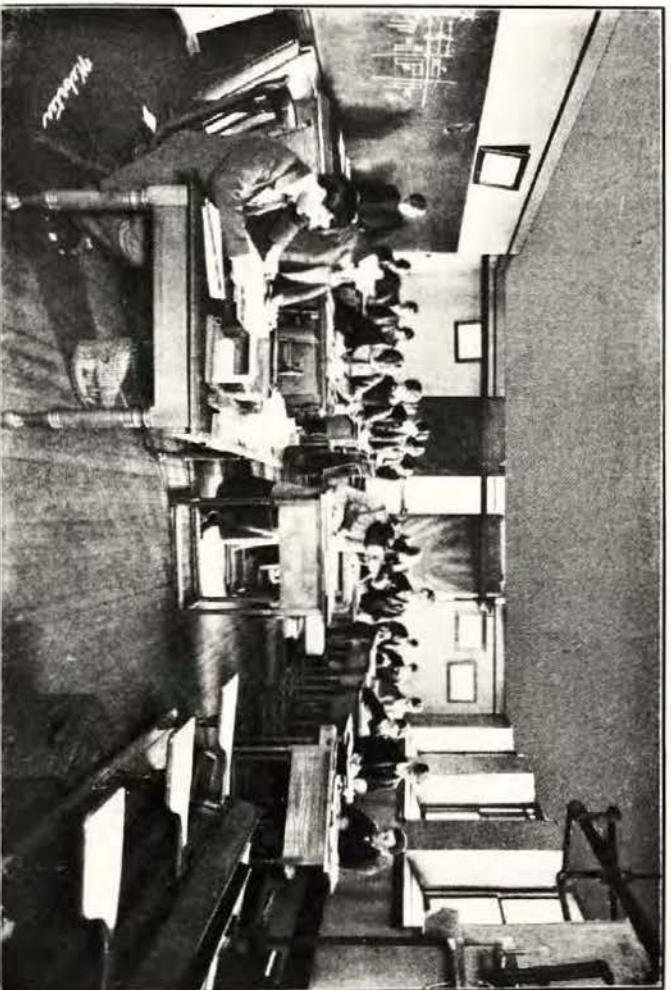
In introducing manual training into the larger cities of Iowa a properly trained specialist should be secured to take charge of the work and give his entire time to it. In the smaller cities a teacher must be secured who can teach some form of manual training and also one or more other lines of work. As soon as our normal schools furnish construction work for the primary grades, and bench work in wood for the grammar grades and high schools, then the smaller towns and cities will be able to find some one who can carry on this work successfully even though he may not be a trained manual training specialist. Many of the normal schools and universities have already begun to prepare teachers for this work and others will soon follow. The day is not far distant (judging from recent reports from several schools) when many such teachers will be educated; and then the problem of manual training for the schools of the smaller towns will be solved; for the expense of equipment need not be very great if the school is small.

MATERIALS USED AND COST OF MANUAL TRAINING.

The kind of work that is attempted of course determines the sort of materials that are to be used, and also to a certain extent the cost of manual training. The best, the most profitable, and the cheapest form of manual training that can be introduced into the grammar grades and high schools is without doubt woodwork of some kind. Metal work of different kinds is taught in many of the well equipped manual training schools of the larger cities. The equipments for metal work are in general rather expensive; and, as woodwork is more suitable for school use, (especially for boys and girls who live in the smaller towns and



West Des Moines High School Manual Training Department.



West Des Moines High School Mechanical Drawing Room.



Elmwood School, West Des Moines, Manual Training Department.

cities) nothing will be written about the more expensive forms of manual training.

Some form of handwork can be introduced profitably into every grade. Sewing, weaving, clay modeling, paper folding and cutting, card board work, raffia braiding, and even simple forms of basketry, are all suitable for the primary grades. If carefully managed, the cost of this work will not be more than a few cents a year for each pupil. The fifth and sixth grades delight in making baskets of raffia and rattan or rope. Venetian iron work, and knife work in thin wood are also excellent for these grades. The pupils will in most cases be willing to pay for much of the material used if they are allowed to take home the objects they have made. A little money can sometimes be made out of basketry. The thin wood work can be done at the seats of an ordinary room, but some sort of a board or desk cover should be used to protect the seat top. A whittling outfit for twenty pupils can be obtained for from ten to twenty dollars. (See catalogues of Chandler & Barber, Boston; Orr & Lockett, Chicago; Hammacher, Schlemmer & Co., New York; and other dealers.) Materials for primary grades can be obtained of Thomas Charles Company, 195 Wabash Ave., Chicago; also of Home & School Art Co., 706 Fine Arts Building, Chicago; and other dealers.

Bench work in wood is usually introduced into the seventh or eighth grade. In West Des Moines the average seventh grade pupil makes six or seven models the first year, the classes meeting once a week for an hour. The exact cost of the wood in the first six models is twelve cents. A certain amount is wasted which will probably bring the cost up to twenty-five cents per pupil per year. The second year the wood in the models costs twenty-three cents, and the waste will increase it to about thirty-five cents each.

COST OF WOODWORK IN THE HIGH SCHOOL.

Many of the best high schools have their courses arranged so that their pupils spend two periods each day in the manual training department, one-half the time in the mechanical drawing-room and the remainder in the workshop. The cost of a course in bench work in wood depends upon the number and size of the models, and the kind of wood that is used. If small models, requiring much work on each piece are given, the cost of the course is less. In West Des Moines the pupils work forty-five

minutes each day, and the cost of the wood in the models that they construct in a year is about one dollar and twenty-five cents for each person. There is a waste of possibly forty or fifty cents a pupil, bringing the cost to about one dollar and seventy-five cents. Each person pays for all of the larger articles which he takes home, so this materially reduces the expense.

The wood in the models in the course in wood carving (three months, one period daily) costs about forty cents, with not more than ten cents waste. This total of fifty cents is reduced materially as the pupils usually pay for most of the articles they make, and take them home. The pupils pay for the wood in the articles, nothing more. The cost of the wood used in the course of wood turning per pupil is about one dollar, the wood in the articles made costing sixty cents. A considerable portion of the sixty cents is returned when the pupils take away their much-valued work. The course in pattern making costs about the same as the course in wood turning.

At least five per cent on the cost of the equipment must usually be expended each year to keep up repairs and to replace tools worn out, lost or stolen, etc.

The cost of manual training in different cities varies a great deal. Wood in Iowa is rather expensive compared with the cost in some other states.

OUTLINE OF MANUAL TRAINING WORK.

An outline of work may offer some suggestions of value to school officials who are contemplating the introduction of manual training into the schools under their supervision. The following is the outline of manual training work for the grades and high school as taught in West Des Moines, Iowa:

FIRST GRADE.

Clay modeling.
Paper folding and cutting.
Weaving with yarn, etc.
Sewing.

THIRD GRADE.

Card board work.
Sewing.

SECOND GRADE.

Clay modeling.
Paper folding and cutting.
Weaving on looms.
Sewing.

FOURTH GRADE.

Card board work.
Sewing. (To be introduced soon.)

FIFTH GRADE.

Basket and mat weaving using raffia, rattan and rope.
Venetian iron work

SIXTH GRADE.

Mechanical drawing.
Basketry.
Venetian iron work. (Thin wood work at seats. Not yet introduced to any extent.)

SEVENTH GRADE.

Bench work or sloyd in shop.
Mechanical drawing.
Basketry and braided raffia work.

EIGHTH GRADE.

Bench work in wood continued.
Mechanical drawing continued.
Basketry especially for girls.

The amount of time spent by the grade pupils is from one to two hours a week. It is expected that sewing will be introduced into all of the grades at no distant day.

The following are the names of some of the articles made by the seventh and eighth grade woodwork classes:

Two practice exercises, flower stick, planter, tool rack, bread board, flower pot cross, flower pot stand, coat hanger, hat rack hammer handle, towel roller, hatchet handle, nail box, match box, salad fork, pen tray, salad spoon, clock shelf, book rack, sugar scoop and meat pounder or mallet.

In two years the average pupil makes from twelve to sixteen of these articles, working one hour a week. The models are made in the order named, and a fast workman sometimes makes the whole set and even more in two years time.

OUTLINE OF HIGH SCHOOL WORK.

FIRST YEAR.

Mechanical drawing, forty-five minutes per day. This course consists of the use of instruments in making simple geometric and working drawings; the study of the orthographic projection, and practice in making drawings showing the intersection of solids and the development of the surfaces of objects. The pupils are taught to make simple letters and figures, and a title plate in which several styles of letters are used is also required.

Wood joinery, forty-five minutes per day. The chief object of this course is to teach the correct use of the tools that are commonly used in carpentry and joinery. The first part of the work

consists of a number of exercises which are given simply for practice so that the pupils may obtain some skill in the use of the try square, gauge, bit, saw and chisel. The method of using a plane is then explained, and the students are required to make a number of joints. The latter part of the course consists of making a number of constructed articles. These objects are made of several parts, and are all useful articles which can be used about a home.

The names of some of the articles made in this course follow:

Ping-pong rackets, coat hanger, towel hanger, lamp bracket, nail box, bench hook, picture frame, book rack, bench drawer, handkerchief box, dove-tailed glove box, brush broom holder, photograph box, carpenter's mallet, wall pocket, necktie box, tabouret, and sometimes other useful articles. All of the above articles are not required. Certain models *must* be made, and the pupil is allowed to select some others that he prefers from those remaining.

SECOND YEAR.

Mechanical drawing, forty-five minutes per day. This course includes the drawing of screws, bolts, nuts, etc., sketching of machines, machine detailing, sectioning and tracing to occupy most of the time. A brief study is also made of shades, shadows, isometric and oblique projection; and water colors are used in tinting a few of the drawings.

Wood carving, forty-five minutes per day during first three months; use of veiner and parting tool in making straight and curved lines, outline carving, chip carving, relief carving.

Wood turning, forty-five minutes per day for six months (follows carving). The work consists of: center turning and the correct use of the common turning tools; inside and outside turning on the face plates, and making spheres, goblets, towel rings, napkin rings, plates, boxes, etc.; constructing articles from designs, as stools and stands; the use of wood filler, oil, stain, shellac and varnish in finishing and polishing wood; inlaying on the face plate; exercises in gluing and turning of glued pieces, and the study of the strength and uses of different kinds of wood.

THIRD YEAR.

Mechanical drawing, forty-five minutes per day. The time in the third year is given to the study of perspective. Objects are drawn in parallel and oblique perspective, and later in the

course comes the study of shades, shadows and the intersection of surfaces. Some time in the latter part of the year is given to architectural perspective and the use of water colors.

Pattern making, forty-five minutes per day. Part of the time at the beginning of this course has been given to cabinet work. Later the principles of pattern making are taught and a number of patterns are constructed. Castings have been made from some of the patterns at one of the city foundries.

A fourth year in drawing, and a course in machine work in metal will probably be introduced before long.

Courses in cooking are being carried on very successfully in the upper grammar grades and high schools of many cities.

EQUIPMENT FOR MANUAL TRAINING.

Many specialists have given the problem of equipment much thought during the past few years. The kind of an equipment that should be secured depends upon many factors, such as the kind of work desired, the size of the classes that are to work at one time, the total number of pupils to use the outfit, the amount of money available, etc. No attempt to treat this subject exhaustively will be made in this article, but a few suggestions will be given, and accurate lists of the tools required for certain kinds of work will be furnished.



W. C. TOLES CO., CHICAGO.

Different schools have slightly different equipments for bench work in wood. This is somewhat due to the fact that the models or articles made are not uniform in all schools. One set of models requires a slightly different set of tools from that which would be necessary in making another set of objects. All schools use about the same kinds of tools, but the number of each kind varies considerably. Orr & Lockett, of Chicago, Chandler & Barber, of Boston, Hammacher, Schlemmer & Co., of New York, and probably other firms have good lists of tools made out by experienced teachers. A close study of such a list is valuable to a person who is planning to purchase a manual training outfit.

It is very difficult to recommend any particular bench as being the proper one to purchase. If the bench is to be used for Grammar grade work and does not have very hard usage, one of the cheaper ones costing from six to nine dollars apiece will answer the purpose nicely. The following are benches of this class with ordinary retail price which is usually somewhat discounted by some firms if a number are purchased at one time:

Style L. Bench (Hammacher, Schlemmer Co., N. Y.) Price.....	\$ 8.00
Youth's Bench (Grand Rapids Mien Hand Screw Co.) Price.....	8.00
Single Bench (Orr & Lockett, Chicago).....	7.00
Bench No. 1 (The Artisans Guild, Muskegon, Mich.).....	9.00
Bench No. 10 (Chandler & Barber, Boston).....	10.00



GRAND RAPIDS HAND SCREW CO. *

A better grade of benches with improved vises, etc., can be obtained from most of the above companies; also from:

W. C. Toles & Co., Irving Park, Chicago, Price.....	\$15.00
E. H. Sheldon & Co., Evanston, Illinois, Price.....	\$10.00 to 15.00

A few lists of tools and the approximate prices at which they can be purchased may be of interest in connection with this report. The list for the seventh and eighth grades is quite complete and is practically like the equipments that have been used in five of the grade buildings in West Des Moines for several years. The lists may be cut down slightly if absolutely necessary.

CONCLUSION.

The outlook for manual training in Iowa is encouraging. Several of the larger cities have had good courses in manual training for some years. The first of the smaller places to introduce manual training is Ackley. Supt. Paul F. Voelker writes that their equipment cost about \$250, and that the work in Ackley has been very satisfactory to all concerned. He also stated in a recent letter that the expense of materials had not been at all large so far. The teacher of manual training is Mr. G. E. Wallace, a graduate of the Iowa State Normal. Mr. Wallace obtained his preparation in the manual training line in the summer sessions of the University of Wisconsin. He teaches manual training three hours a day, and other subjects during the remainder of the time.

The outline of work herein given may not be exactly what is wanted in other places, and is probably far from ideal. If the suggestions given and the information furnished prove helpful, and tend to encourage the introduction of manual training into the public schools, an end much desired will have been achieved.

TOOLS USED IN THE WEST DES MOINES GRAMMAR SCHOOLS.

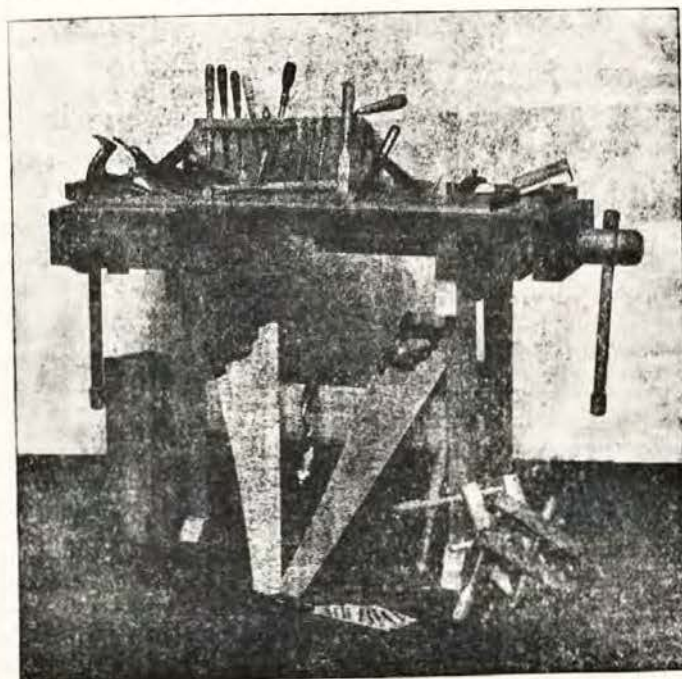
LIST MADE BY A. C. NEWELL, SUPERVISOR OF MANUAL TRAINING.

The following list of tools *without benches* can be obtained of L. H. Kurtz, Des Moines, Iowa, for about \$118.00, the price varying slightly with the market:

EQUIPMENT FOR MANUAL TRAINING FOR SEVENTH AND EIGHTH GRADES.

- 15 No. 3 Bailey's iron smooth planes.
- 6 No. 9½ Bailey's iron block planes.
- 12 1-inch Buck Bros tang firmer chisels with handles.
- 4 ¼-inch Buck Bros tang firmer chisels with handles.
- 4 ½-inch Buck Bros tang firmer chisels with handles.
- 3 ¾-inch Buck Bros tang firmer chisels with handles.
- 2 1-inch Buck Bros tang firmer chisels with handles.
- 6 Slovd knives, 2½-inch blades (Chandler & Barber, Boston) No. 50-0.
- 6 Stanley's improved adjustable spoke shaves No 54.
- 6 No. 2 13 oz. Madole hammers
- 6 Disston's 10-inch back saws (12 to 15 points) No. 4.
- 4 Cross cut or panel saws. Disston's 20-inch with 10 points No. 4.
- 4 Disston's 24-inch rip saws, D8. (1 with 6 points, 2 with 8 points and 1 with 10 points) No 4.
- 1 Disston's compass saw, 12-inch with 8 points.
- 4 turn saws, 14-inch, (frames and blades.)
- 1 dozen 14 inch turn saw blades assorted, ¼-inch webs, 7 points 3-16-inch webs, 8 points, ½-inch webs, 10 points.
- 1 No. 18 Stanley 8 inch T. bevel, iron handle.
- 4 Framing steel squares, 18 x 12-inch or 12 x 8 inches.
- 1 Draw knife 8 inch.
- 4 Braces, (1 with 12-inch sweep, and 3 with 10-inch sweep,) Miller Falls Co's or Barber's.
- 1 Set R. Jennings' (genuine) auger bits No. 4 to 16.
- 4 No. 8 R. Jennings' (genuine) auger bits (extra bits.)
- 1 No. 10 R. Jennings' (genuine) auger bits (extra bits.)
- 1 No 12 R. Jennings' (genuine) auger bits (extra bits.)
- 2 ¼ inch Gimlet bits (Shepardson's double cut, or Syracuse wood boring.)
- 1 5-32 inch Gimlet bits (Shepardson's double cut, or Syracuse wood boring.)
- 2 3-16 inch Gimlet bits (Shepardson's double cut, or Syracuse wood boring.)
- 1 7-32 inch Gimlet bits (Shepardson's double cut, or Syracuse wood boring.)
- 2 Countersinks (1 rose and 1 snail for wood.)
- 1 Washita oil stone in case 7 x 2 inches.
- 2 Soft Arkansas oil stones, mounted, 7x2 inches (Pike's).
- 2 No. 13 malleable iron oil cans, size 3½ inches.
- 2 Knurled nail sets (Sayre's, Newark or Pratt's). One for brads and one for nails.
- 20 No. 18 Stanley 24-inch two fold rules.
- 20 No. 12 Stanley 6-inch try squares.
- 20 No. 64 ¼-6 inch gauges.
- 6 Tower's Champion Standard 5-inch screw drivers.

- 4 Wing dividers, 7 inch, P. S. & W. Co.
- 10 Counter brushes, 12 to 14 inches long.
- 3 10-inch wood hand screws (Bliss or Tarbell).
- 2 Hickory mallets (round heads 2½ or 3x5 inches).
- 1 Set Buck Bros. Tang Firmer gouges with handles. To be ground outside. Sizes from ½ inch to 2 inches (12 tools).
- 1 No. 4 Hercules grindstone (26x3 inches) mounted for hand or foot power. Made by Cleveland Stone Co.
- 4 Flat bastard files with handles (10-inch, Nicholson's).
- 3 Hand bastard files with handles (10 inch, Nicholson's).
- 2 Half round bastard files with handles (10-inch, Nicholson's).
- 2 Half round cabinet files with handles (12-inch, Nicholson's).
- 1 Round bastard file with handle (10-inch, Nicholson's).
- 4 5-inch slim taper three cornered files (one handle, Nicholson's)
- 2 4-inch slim taper three cornered files (Nicholson's).
- 2 Bit files (Nicholson's).
- 1 Nicholson file card and brush with cleaner.
- 1 No. 3 11-inch Wentworth saw vise (or Disston's saw filing vise.)



TOOLS.

- 1 No. 95 Morrell's saw set (or Disston's).
- 2 Steel cabinet scrapers, rectangular.
- 1 Steel cabinet scraper, convex and concave ends.
- 2 Screw driver bits (assorted).
- 3 Washita slip stones for gouges (assorted).

- 20 Springfield drawing kits, size 13x19 inches (Chandler & Barber, Boston).
- 6 Eagle compasses.
- 1 lb. No. 60 erasers.
- 4 doz. Dixon V.H. No. 5 lead pencils.
- 1 doz. boxes No. 2 cut tacks.
- 2 1½-inch flat shellac brushes.
- 2 1½-inch flat rubber bound varnish brushes.
- 1 pint Le Page's liquid glue.
- 5 Maple or oak bench hooks.
- 20 Manual training benches. (The benches used in the grade buildings of West Des Moines are the Youth's benches, made by the Grand Rapids Hand Screw Co. They were bought in large quantities and cost about \$5.00 apiece net.) Total \$120.00.

FOR TWENTY HIGH SCHOOL PUPILS.

The following list of tools can be obtained of L. H. Kurtz and other dealers, Des Moines, for about \$101.50. If it is desired to have both high school and grade pupils work in the same room, add the following list of tools to that of the seventh and eighth grades for the use of the high school:

- 20 Handled Buck Bros. 1-inch tang firmer chisels.
- 20 Handled Buck Bros. ¾-inch tang firmer chisels.
- 20 Handled Buck Bros. ½-inch tang firmer chisels.
- 20 Handled Buck Bros. ¼-inch tang firmer chisels.
- 1 No. 32 new Langdon mitre box with saw, 24x4 inches.
- 1 Mounted Washita oil stone, size, 7x2 inches.
- 10 No. 3 Bailey's iron smooth planes.
- 1 Mounted soft Arkansas oil stone size 7 x 2 inches.
- 10 No. 5 Bailey's iron jack planes.
- 4 No. 26 Bailey's adjustable wood jack planes.
- 1 No. 8 Bailey's iron jointer plane 24 inches long with 2½-inch cutter.
- 20 No. 9½ Bailey's iron block planes.
- 3 No. 18 Stanley's 8-inch T bevels. Iron handles.
- 3 No. 4 genuine R. Jennings' auger bits.
- 3 No. 6 genuine R. Jennings' auger bits.
- 6 10-inch genuine Disston back saws, fourteen points. No. 4.
- 4 Disston's 24-inch rip saws, eight points. No. 4 D 8.
- 6 Wood hand screws, 12-inch. (Bliss or Tarbell.)
- 1 No. 2 Clark's expansion bit.
- 1 Set ⅝-inch steel figures.
- 1 No. 45 Bailey's adjustable beading, rabbet and slitting plane.

EQUIPMENT FOR HIGH SCHOOL MECHANICAL DRAWING.

The cost of the following as estimated by Mr. Newell is about \$5.

- 1 pine drawing board, 16x25 inches. Cross strip with tongue and groove on ends.
- 1 24-inch Pear wood T squares.
- 1 7-inch 45 degree rubber triangle.
- 1 7-inch 60 degree rubber triangle.

- 1 12-inch flat draughting scale. (Triangular scale is better but more expensive.)
- 1 Pear wood irregular curve. (Get an assortment for a class.)
- 1 Set German silver draughting instruments in case, as follows:
- 1 5½-inch compass with pivot head, pen, pencil and extension bar.
- 1 5-inch dividers with pivot head.
- 1 Spring bow pen.
- 1 5¼-inch ruling pen (Wood handle preferred.)

EQUIPMENT FOR HIGH SCHOOL BENCH WORK IN WOOD.

LIST PREPARED BY MR. A. C. NEWELL, SUPERVISOR OF MANUAL TRAINING, DES MOINES, IOWA.

The following set of tools can be furnished for individual, general and bench use (without benches) for about \$170.

Individual Tools—

- 20 No. 5 Bailey's iron jack planes.
- 20 No. 9½ Bailey's iron block planes.
- 20 Handled Buck Bros. 1-inch tang firmer chisels.
- 20 Handled Buck Bros. ¾-inch tang firmer chisels.
- 20 Handled Buck Bros. ½-inch tang firmer chisels.
- 20 Handled Buck Bros. ¼-inch tang firmer chisels.

Bench Outfit—

- 20 Manual training benches (to be selected) price not included in this list.
- 20 No. 12 Stanley's 6-inch try squares.
- 20 No. 18 Stanley's 24-inch two-fold rules.
- 20 No. 64 ¼-6-inch marking gauges.

Tools for General Use—

- 12 No. 4 Disston's 10-inch back saws, 14 points.
- 7 No. 4 Disston's 24-inch rip saws, 8 points, D 8.
- 1 No. 4 Disston's 24-inch rip saws, 6 points, D 8.
- 4 No. 4 Disston's 20-inch cross-cut or panel saws, 10 points.
- 1 No. 2 Disston's 12-inch compass saw, 8 points.
- 4 Turn saws, 14-inch.
- 1 Dozen 14-inch turn saw blades assorted, ¼-inch webs with 7 points; 3-16-inch webs with 8 points and ⅜-inch webs with 10 points.
- 1 No. 3 11-inch Wentworth saw vice.
- 1 No. 95 Morrell's saw set (or Disstons.)
- 1 No. 32 New Langdon Mitre Box with saw 24 x 4 inches.
- 4 Braces (1 with 12-inch sweep, and 3 with 10-inch sweep) Miller Falls Co. or Barber's.
- 1 Set Genuine R. Jennings' auger bits No. 4 to 16 (13 tools.)
- 3 No. 4 Genuine R. Jennings' auger bits.
- 3 No. 6 Genuine R. Jennings' auger bits.
- 4 No. 8 Genuine R. Jennings' auger bits.
- 1 No. 10 Genuine R. Jennings' auger bits.
- 1 No. 12 Genuine R. Jennings' auger bits.
- 6 Gimlet bits (Shepardson's double cut, or Syracuse wood boring,) Sizes 2½, 1-5-32, 2-3-16 and 1-7-32 inches.
- 2 Countersinks (1 rose and 1 snail for wood.)
- 2 Screw driver bits assorted.
- 1 No. 2 Clark's expansion bit.
- 6 Sloyd knives 1½-inch blades No. 50-0, (Chandler & Barber, Boston.)
- 6 Stanley's improved adjustable spoke shave No. 54.
- 1 Draw knife 8-inch.
- 6 No. 2, 13 oz. Madole hammers.

- 4 No. 18 Stanley's 8-inch T. Bevels.
- 4 Steel framing squares 18 x 12 inches or 12 x 8 inches.
- 2 Washita oil stones in case 7 x 2 inches.
- 3 Soft Arkansas oil stones in case 7 x 2 inches.
- 1 No. 4 Hercules grindstone, 26x3, mounted for hand and foot power; made by Cleveland Stone Co. (use larger stone if there is power in the room to turn the stone).
- 3 Washita slip stones for gouges (assorted).
- 3 Buck Bros' tang firmer gouges, with handles. To be ground outside. Sizes, $\frac{3}{4}$, $\frac{7}{8}$, 1- $\frac{1}{2}$ inches.
- 5 No. 3 malleable iron oil cans; size, 3- $\frac{1}{2}$ inches.
- 2 Knurled nail sets; sizes of points, 1-16 and $\frac{1}{8}$ inches.
- 5 Tower's champion standard 5-inch screw driver.
- 4 Wing dividers, 7 inch.
- 10 Counter brushes, 12 to 14 inches long.
- 1 Nicholson file card and brush, with cleaner.
- 4 Wood hand screws, 10-inch (Bliss or Tarbell).
- 6 Wood hand screws, 12-inch (Bliss or Tarbell).
- 4 Hickory mallets; size of heads, 3x5 inches.
- 2 Flat bastard files, 10-inch, Nicholson's.
- 2 Handled hand bastard files, 10 inch.
- 2 Handled half-round bastard files, 10-inch, Nicholson's.
- 2 Handled half-round cabinet files, 12-inch, Nicholson's.
- 1 Handled round bastard file, 10-inch, Nicholson's.
- 1 Handled flat, smooth file, 10-inch Nicholson's.
- 4 5-inch Slim taper three-cornered files (one handle).
- 2 4-inch slim taper three-cornered files.
- 2 Bit files.
- 2 Steel cabinet scrapers, rectangular.
- 1 Steel cabinet scraper, convex and concave ends.
- 1 Set $\frac{1}{8}$ -inch steel figures.
- 1 Set No. 45 Stanley plow.
- 2 $\frac{1}{2}$ -inch flat shellac brushes.
- 2 $\frac{1}{2}$ -inch flat rubber bound varnish brushes.
- 5 Maple or oak bench hooks. (Pupils to make fifteen more.)
- 4 Handled $\frac{1}{8}$ -inch Buck Bros. tang firmer chisels.

Wood carving equipment for each pupil. Wholesale price of the following set of these tools is about \$1.25. For geometrical or chip carving the following tools are needed for each pupil:

- 1 Handled $\frac{1}{8}$ -inch carving skew chisel ground on both sides (S. J. Addis or Buck Bros.).
- 1 Handled $\frac{1}{4}$ -inch carving parting tool (S. J. Addis or Buck Bros.).
- 1 Handled 3-32-inch carving veiner (S. J. Addis or Buck Bros.).

General equipment for wood carving. Wholesale price of list about \$3.50,

- 1 Set of 4 fine slip stones with thin edges for carving tools.
- 4 Pieces of good, soft leather, size, 3x10 inches (for sharpening tools).
- 1 Package of razorine (to put on leather for sharpening tools.)
- 4 Assorted carving punches (pupils to make others out of nails).
- 4 Small round-headed carver's mallets (hickory).

For relief carving. Retail price is from thirty to forty cents for each tool:

- 1 Set of 12-handled carver's gouges (assorted). The different sets should not be alike but contain tools of slightly different widths and sweeps.

Wood turning and pattern making equipment list for each pupil. Wholesale price of following set of tools for each pupil about \$4.25:

- 1 Handled 1-inch Buck Bros. turning skew chisel.
- 1 Handled $\frac{1}{2}$ -inch Buck Bros. turning skew chisel.
- 1 Handled $\frac{1}{4}$ -inch Buck Bros. turning skew chisel.

Wood turning and pattern making equipment. List for each pupil.

- 1 Handled 1-inch Buck Bros. turning gouge.
- 1 Handled $\frac{1}{2}$ -inch Buck Bros. turning gouge.
- 1 Handled $\frac{3}{8}$ -inch Buck Bros. turning round end scraper.
- 1 Handled $\frac{1}{8}$ or $\frac{1}{4}$ -inch Buck Bros. turning parting tool.
- 1 Washita slip stone $4\frac{1}{2}$ x $2\frac{1}{4}$ x $\frac{5}{8}$ -inch.
- 1 Rule, (desk rule $1\frac{1}{2}$ -inch or Stanley No. 18.)
- 1 Pair Starrett's outside spring calipers No. 79, 6-inch.
- 1 No. 13 steel oil can, size $3\frac{1}{8}$ -inch.

General equipment for wood turning. No estimate has been obtained. Probable cost from \$1,200 to \$1,800.

- 1 Electric motor to furnish power.
- Main shafts and counter shafts for each lathe.
- 12 Wood turning lathes.
- Belting.
- 1 Monkey wrench.
- Several pairs No. 73 Starrett's inside spring calipers, 6-inch.
- Several Pattern maker's shrinkage rules.
- 1 Band saw.

BOOKS VALUABLE TO A SUPERINTENDENT OR TEACHER OF MANUAL TRAINING.

- Argument for Manual Training. N. M. Butler. (Kellogg & Co., Chicago, pamphlet.)
- Bench Work in Wood. W. F. M. Goss. (Pub. by Ginn & Co., Boston.)
- Card Board Construction. J. H. Trybom. Detroit.
- Exercises in Wood Work, by Ivan Sickles. American Book Co.
- How to Make Baskets. Mary White. (Doubleday, Page & Co., New York.)
- Indian Basketry. G. W. James. (Henry Malkin, 1 Williams street New York.)
- Industrial Education. S. G. Love. (E. L. Kellogg & Co.)
- Industrial Instruction, by Robert Seidel. Pub. by Heath, Boston.)
- Manual Training School (The), C. M. Woodward. (Heath & Co., Boston.)
- Manual Training Magazine, C. A. Bennett, Peoria, Ill., Editor. (Univ. of Chicago Press, Chicago.)
- Modern Carpentry. Fred T. Hodgson. (Suggestions for practical work.) F. J. Drake & Co., Chicago.
- Sloyd. Everett Schwartz. (Educational Pub. Co., Chicago.)
- Theory of Education, Sloyd. Otto Saloman. (Silver, Burdett Co., Chicago.)
- Teacher's Hand Book of Sloyd. Otto Saloman. (Silver Burdett Co., Chicago.)

Working Drawings of Models in Sloyd. Gustaf Larson, Boston. (Published by Mr. Larson.)

Wood Turning, M. J. Golden. (Harper Bros., New York.)

Wood Carving, C. G. Leland. (Scribner Sons, New York.)

Woodwork. (Elementary.) G. B. Kilbon. (Lee & Shepard, Boston.)

Woodwork, S. Barter. (English Sloyd.) (Whittaker & Co.)

For a more complete list of books on Manual Training see pamphlet catalogue published by the Grand Rapids, Mich., Public Library.

BOOKS HELPFUL TO A MECHANICAL DRAWING TEACHER.

Appleton's Cyclopaedia of Drawing. (W. E. Worthen.) D. Appleton & Co. (An old book.)

Descriptive Geometry, by A. E. Church. Published by A. S. Barnes & Co., 111 Williams street, New York.

Gearing, Geo. B. Grant, 86 Seneca street, Cleveland, Ohio.

Lettering of Working Drawings, by J. C. L. Fish, D. Van Noshand Co., New York.

Copley's Alphabets. Excelsior Pub. House, 29 Beekman street, New York.

Ames' Alphabets. Daniel T. Ames, New York.

Student's Alphabets. Keuffel & Esser, New York.

Linear Drawings, by Ellis A. Davidson. Cassell & Co., London, Pub.

Machine Drawing, Gardner C. Anthony, Tufts College, Mass. Pub. by D. C. Heath, Boston.

Mechanical Drawing, Gardner C. Anthony, Tufts College, Mass. Pub. by D. C. Heath, Boston.

Mechanical Drawing, by T. B. Morse, American Book Co.

Mechanical Manual of Industrial Drawing, L. S. Thompson, D. C. Heath, Chicago.

Mechanical Drawing, by Linus Faunce, Mass. Inst. Technology, Boston.

Mechanical Drawing, by J. C. Tracy. American Book Co.

DEALERS IN MANUAL TRAINING EQUIPMENTS.

Artisan's Guild, Muskegon, Mich. Catalogue of benches, etc.

Bemis, A. L. 5 Cypress St., Worcester, Mass. Catalogue of benches, etc.

Buck Bros. edge tools, Millbury, Mass.

Charles Co., Thomas, basketry, raffia, cardboard, etc., 195 Wabash Ave., Chicago.

Chandler & Barber, 126 Summer St., Boston. Catalogue of manual training goods.

Dietzgen Co., Eugene. Drawing instruments, 181 Monroe St., Chicago.

Grand Rapids hand screw Co., Grand Rapids, Mich.

Hamacher, Schlemmer & Co., 209 Bowery, New York. Catalogue of manual training goods.

Home & School Art Co., raffia, rattan, yarn, etc., 706 Fine Arts Building, Chicago.

Keuffel & Esser Co., drawing instruments, 111 Madison St., Chicago.

Kidder, R. E., Drawing tables and lathes, 39 Hermon St., Worcester, Mass.

Kurtz, L. H., Walnut St., Des Moines, Iowa.

Mansure Co., E. L., carpet yarn, roving, etc., for weaving, 74 Mich. Ave., Chicago.

Orr & Lockett, 71-73 Randolph St., Chicago, Ill. Catalogue of manual training goods.

Sheldon & Co., E. H., Evanston Ill. Catalogue of benches, vices, lathes, etc.

Toles Co., W. C., Irving Park, Chicago, Ill. Catalogue of benches and vises.

CHAPTER III.

CIRCULARS OF INFORMATION AND SUGGESTION ISSUED IN 1902 AND 1903.

TO NEWLY ELECTED COUNTY SUPERINTENDENTS.
TO BOARDS OF DIRECTORS—MARCH MEETING.
OFFICIAL CALL TO COUNTY SUPERINTENDENTS.
TO INSTRUCTORS IN NORMAL INSTITUTES.
CONCERNING THE SCHOOL ENUMERATION.
TO BOARDS OF DIRECTORS—SEPTEMBER MEETING.
EXAMINATIONS FOR COUNTY CERTIFICATES.
TO SUPERINTENDENTS AND COUNTY AUDITORS.
TO BOARDS OF COUNTY SUPERVISORS.
REGARDING USE OF INSTITUTE FUND.

STATE OF IOWA

DEPARTMENT OF

PUBLIC INSTRUCTION

DES MOINES.

SUGGESTIONS TO NEWLY ELECTED COUNTY
SUPERINTENDENTS.

In accordance with the established custom of this department we desire to send you most cordial greetings, and to wish you success in your efforts to promote the cause of education in this state. The success of this department is dependent largely upon the hearty co-operation and aid received from the county superintendents. Those of you who are entering for the first time upon the duties of the office will doubtless feel the need of some helpful suggestions in order that you may have a more perfect understanding of the laws relating to the administration of schools and the details of the work which has been entrusted to you by the people. With a desire to aid you, your earnest attention is called to a few matters which we deem important.

School Attendance. The biennial report of this department which will soon be printed shows a condition of affairs which is not entirely satisfactory to those who are interested in the education of all the children. This report will show that the school population of the state increased from 1900 to 1901 about 4,000, while the number of pupils enrolled in our public schools dropped from 566,223 in 1900 to 562,662 in 1901. This is an unfortunate showing, and we can only hope to remedy it by the personal efforts of county superintendents, to whom the people look for leadership in such matters. We hope by and through your efforts to gain the aid and sympathy of school officers and teachers in order that a larger number of children may become regular in attendance upon the public schools. You are asked to

give this subject a place upon the program at your teachers' associations and at the normal institute. In visiting schools you are also asked to ascertain if pupils are absent, and if so to learn the cause and endeavor in every way to overcome the indifference of patrons and secure their co-operation in having pupils attend punctually and regularly.

Libraries. The friends of the great library movement have every reason to rejoice over the showing that has been made during the past two years. The work placed upon the county superintendent by the new library law has been very great, but the returns more than justify the expenditure of all time and effort given to the work. We are thoroughly convinced that the success of the library movement depends almost entirely upon the energy and zeal displayed by the superintendent, who is under the law charged with a part of the responsibility in the selection of books. Many instances could be given where tact and patience have resulted in securing the establishment of libraries in some neighborhoods where at first only a wasteful expenditure of public funds could be seen.

It is the purpose of the state board of educational examiners whose duty it is to recommend lists of books for the school district libraries, to issue a supplementary list before July 1, 1902. In due time you will be asked for suggestions in reference to this list. In the meantime you can do much to encourage teachers and pupils by inspecting libraries and cases when visiting schools, and in having the subject of books discussed at your associations.

Examinations. Lists of examination questions will be sent you for the months of February, March, April, July, August, September and October. We believe their use will unify the work of the state to a greater or less extent.

By law the county superintendent is given large discretionary power in the examination of teachers. The successful examiner must display good judgment, great firmness, and be supplied with an abundance of common sense. As to the candidate's moral character, aptness to teach and physical ability to properly assume the position of a teacher in our public schools most careful inquiry should be made. In no case should a certificate be granted to one who is not able to satisfy you that he possesses a good moral character. In case of doubt you are urged to give the children of the county, rather than the candidate, the benefit of it. Upon this point you will find it much more

difficult to inform yourself than upon the candidate's intellectual and physical qualifications. You are urged to be cautious and careful in order that you may be just to the candidate whose good name you might unintentionally injure. Inquiries instituted should be pushed until from all sources you will have gained information that will enable you to arrive at the truth. Remember that in the examination of teachers you serve as attorney, judge and jury for both the teacher and the children.

For many years it has been the ruling of this department that certificates be not issued to females under seventeen nor to males under nineteen years of age. In some counties the minimum requirement has by order of the county superintendent been raised to eighteen years for females. We most heartily approve of this action, wherever conditions are such as to enable the county superintendent to supply the schools of the county with teachers.

Some years ago the attorney general rendered an opinion in which it was held that the county superintendent had no authority under the law to renew, endorse or duplicate a certificate, either in his own county or one issued in another. While this is doubtless the law, it is to be hoped that any courtesies that can officially be extended by county superintendents to teachers will be, especially to those who have by rich and successful experience proven themselves worthy of every confidence.

Visitation of Schools. The county superintendent should spend the greater part of his time among the schools of the county. Next to the licensing of competent persons to give instruction, is the supervision of schools by the county superintendent. Do not neglect this important work. Only by an official acquaintance with the conditions concerning each school and a knowledge of the strength and weakness of each teacher as shown by actual work, will you be able to render the best service to the people of your county. A record should be kept of each visit made, and in it should be recorded the condition of the school, library, apparatus, school registers, blackboards, windows, floors, desks, maps, charts, outbuildings and grounds, including the number of trees in thrifty condition. If possible, endeavor to have one or more members of the board of directors go with you to the school and note its workings and the condition of the premises. Much time and attention on your part to the inspection of schools will give you a knowledge

of them of inestimable value and will indicate the strength of your administration to the people.

Normal Institute. Under the law you are required to conduct annually a normal institute. You will be held responsible by the teachers and the people of the county for the success or failure of this important part of your work. The management of the institute is entirely in your hands, and all details of the work should be carefully planned by you before your instructors are employed. The character of the work done in your institute will in part be governed by the class of teachers to be instructed. In visiting schools you will be able to note various phases of work that should be emphasized in your institute. The institute ought not to be alone a place where instruction is given in academic studies. How to read, write and spell should be learned before admission to the institute is gained. In order that the problems of school administration may be presented and discussed, and the best methods for presenting subjects considered, every institute should have one or more instructors of recognized ability to give instruction. This department will so far as possible require of county superintendents the completest evidence of the fitness of those employed as instructors. In no case will we approve of the appointment of instructors for a normal institute unless we have reasons for believing them to be qualified both morally and intellectually for the work which they are expected to do.

Experience has proven that the latter part of March and the early part of April is a most excellent time for the holding of the institute. For the summer season there is little choice, though the weather in the latter part of June and the latter part of August is generally preferable.

The National Educational Association will be held at Minneapolis, July 7 to 11 of this year, and we urge that superintendents arrange their institutes so as to avoid conflicting with this great meeting. When you have fixed the time of your institute please inform us of it without waiting for us to send you an application blank.

Appeals. Vigilance upon your part will enable you to avoid embarrassing appeal cases. Occasionally you will be asked to serve as an arbitrator, but we recommend that before agreeing to serve in such a capacity you obtain a written agreement signed by both parties to abide by your decision. In no case

have you jurisdiction involving a judgment for money, a contract, or the right and title to hold office. In this connection we urge a thorough acquaintance upon your part with the school law and rulings given in connection with each section, together with the decisions published. A careful study of the notes and references under the various sections of the law is urged, and will be found most helpful. The county attorney is the legal adviser of the county superintendent, and with him and this department you should not hesitate to consult freely in case of doubt.

Teachers' Reading Circle. For more than ten years the county superintendents of this state have conducted what is familiarly known as the Iowa state teachers' reading circle. The management has been entirely under the control of the superintendents. At the recent department meeting held in this city in December, four new members of the reading circle board were chosen. We are informed that in the month of February this board will meet for the purpose of selecting the books for the ensuing year. We urge upon you the importance of co-operating with the board in its endeavors to promote the work of the circle. The value of a course in reading systematically pursued cannot be overestimated. You are urged to remember this important branch of educational work. Every county in the state should have a large membership this year.

County Superintendents' Meetings. The county superintendents of southeastern and northwestern Iowa will be asked to meet in connection with the educational associations held in those parts of the state whenever they are called. The former will be at Washington and the latter at Spencer. The county superintendents in other parts of the state will be called to meet at convenient points during the spring. It is expected that every superintendent will be present. This is an imperative duty and should not be neglected. A program of suggested topics will be mailed you in due time.

School Secretaries and Treasurers. The value of school statistics depends upon their accuracy. Reports are now required to be made annually by these officers to you. In order that they may be submitted promptly you should avail yourself of every opportunity to urge upon them the necessity of accuracy and promptness. Consult with them in reference to school work, and we suggest that at least one meeting be held in each county for the benefit of the school officers and boards of directors. Experi-

ence has shown that wherever such meetings are held they have proven mutually helpful.

Parents' Meetings. In a number of counties during the past half dozen years superintendents have been instrumental in holding meetings for the purpose of enlisting the co-operation of parents in the general work of education. Generally the management of these meetings can be entrusted to the teachers of their own localities. You will, however, be expected to have general oversight of all work of this kind.

Pupils' Reading Circle. Under the library system of this state which now makes it possible for the different school districts to provide the choicest works of literature, it is possible for you to conduct a most successful pupils' reading circle. We urge upon you the importance of undertaking this work. We suggest that you outline for the pupil's benefit a course of reading for the term. When this is once accomplished the work will prove comparatively easy under the leadership of a competent teacher.

School Laws. The 1897 edition of the school laws of Iowa is now exhausted. A new edition will be at once undertaken, and it is hoped that it can be completed soon after the adjournment of the general assembly this year.

Hand-Book for Iowa Schools. Early in 1901 copies of the Hand-book for Iowa Schools were sent to county superintendents for distribution to teachers. It is our desire that every school district shall have a copy of the Hand-book. We now have on hand a sufficient quantity to supply you with any reasonable number, whenever there is a demand for them on the part of the schools. The reception of the Hand-book by teachers and school officers has been most gratifying. It has already proven of great value. You are urged to commend it to your teachers, and to explain its value and use at your associations. At the normal institute you will do well to have some instructor who thoroughly appreciates the importance of a course of study, give talks to the teachers, explaining the best methods of using it.

Conclusion. Under the law you are to serve as the medium of communication between this department and the school officers and teachers of your county. We express the sincere hope that any circulars or blanks intended for teachers and school officers will be promptly distributed. This suggestion is made with full knowledge that in the past an occasional superintend-

ent has persistently declined to perform this important official duty.

In the past it has been customary for this department to look to the county superintendents for aid and support in the educational work. This we shall certainly do in the future; and we express the hope that during the biennial period upon which we have just entered our relations will continue most cordial, and that through our combined efforts the cause of education may be immeasurably strengthened and improved.

RICHARD C. BARRETT,
Superintendent Public Instruction

January 8, 1902.

TO BOARDS OF DIRECTORS.

NOTE—In accordance with section 2735 of the code, each county superintendent will send the secretary of every school corporation a copy of this circular at once, to be read to the board at its regular meeting on the third Monday in March.

It is an honor not lightly to be esteemed to be chosen by the electors to supervise the school interests of any community. The right use of the power conferred means improved school premises, beautified grounds and buildings, better equipment, enlarged libraries, buildings repaired and cleansed, trees planted, walks laid out, fences built, longer school year, less frequent changes of teachers, and better teachers at higher wages.

The opportunity you have to at least attempt these and other needed improvements is yours by the expressed wishes of your constituency, and we congratulate you most heartily.

The very best is none too good for the children of Iowa, and we cannot refrain from expressing the sincere hope that you will be satisfied with nothing less.

Much that is contained in this circular has often been written in former communications which have been sent you from this department. In our work, as in yours, it often becomes necessary to repeat or restate previous suggestions deemed important. We shall at all times endeavor to present for consideration only such matters as appear to us of greatest interest. Necessarily some suggestions are only applicable to certain districts, but no topic is presented that does not in our opinion relate to the conditions in more than one thousand schools of the state.

We would have you note that conditions change, thus making necessary from year to year new plans for the proper conduct of schools. Plans and methods suited to the conditions of a half century ago are now antiquated. You will be called upon to plan for new buildings. We urge that you consult an architect of recognized ability. The fact that a small sum will be added to the total expenditures is not significant. The comfort, health, happiness and welfare of the children will, we hope, be your chief concern.

New School Laws. The department now has in preparation a new edition of the school laws, and it is planned to place the copy in the hands of the state printer as soon after the adjournment of the Twenty-ninth General Assembly as is possible. As soon as the new edition is published, a sufficient number of copies will be sent each county superintendent to supply all who are entitled to the same. Our supply of the edition of 1897 is completely exhausted, thus making it necessary for new boards of directors to request of out-going members the copies of the school laws in their possession.

Tree Planting. By the provisions of section 2787 of the code it is the imperative duty of the board of each school corporation to set out and properly protect twelve or more shade trees on each schoolhouse site where such trees are not now growing.

Under this section it becomes the duty of the county superintendent to call the attention of boards neglecting to comply with its requirements. While in many districts commendable pride is taken in tree planting, there are several thousand districts of the state where no attempt whatever is made to comply with the plain provisions of the law. The beautiful groves surrounding nearly all homes in Iowa are evidence that trees will grow in all parts of the state, if properly planted and cared for. Tree planting teaches the pupil the need and value of forests, and cultivates his finer tastes; and the trees furnish relief and beauty for the grounds, and afford protection from the hot sun of summer and the cold winds of winter.

Arbor Day will be observed in the public schools on Friday, the 25th of April, and we urge that upon that day boards of directors comply with the provisions of law as set forth above, and join with teachers and pupils in planting trees and having suitable exercises, for which provision is made in our manual for "Special Days."

School Libraries. We desire again to commend to the thoughtful consideration of boards of directors the cause of libraries. Reports submitted by county superintendents for the year ending September 1901, show that nearly \$50,000 were expended for library books in the rural schools. In addition to the above amount the people voluntarily raised nearly \$30,000 additional. For many years past thousands of dollars have been expended annually to teach children to read, but it is only in more recent years we have come to realize that it is not only a duty to teach them to read, but to provide them with the choicest literature that can be obtained. Not to do so often means that they themselves select reading matter that is injurious, and often of the most dangerous character. To care for these libraries should be considered a great privilege, and every possible effort should be made that the people themselves may have access to the same.

A supplementary list of books is now being prepared by the state board of educational examiners, and will be ready for distribution in midsummer. The present catalogue contains the law, forms for keeping the records, with rules and regulations for taking proper care of books. On this point let us say that while officers and teachers are charged with selecting and caring for the books, it devolves upon the boards to select the necessary library cases and record books, and to see that persons charged with such duties perform them in a business-like manner.

Small Schools. This department is in possession of information to the effect that we have more small schools in operation to our population than any other northern state. Over twenty-five hundred districts have an average daily attendance of less than ten pupils, while many do not average five pupils in daily attendance. The law permits boards of directors to close schools and transport pupils to other schools in the same or an adjoining corporation, and we urge that this be done whenever there will be a saving of expense and children will secure increased educational advantages.

This department has issued in pamphlet form Chapter II of the biennial report of the office for the years 1900-1901, relating to the consolidation of districts and the transportation of children. Boards of directors interested in this subject may be supplied with a limited number of copies upon application to the superintendent of public instruction.

The Hand-Book for Iowa Schools. We again respectfully urge that the board of every township and rural independent district see that the course of study contained in the Hand-book is followed by the teachers in charge of the schools of the corporation. We have frequently spoken of the value of a course of study, and deem it unnecessary at this time to repeat in this connection our former suggestions. Any schools not supplied with the Hand-book should immediately apply to the county superintendent for copies. The county superintendent is expected to have a supply of the Hand-book for proper distribution among the schools of the county.

School Attendance and Statistics. The summarized statistics given by county superintendents for the year 1901 show that there are 735,159 persons between the ages of five and twenty-one years. Of this number 562,662 were enrolled in public schools. When compared with the statistics of the previous year, it is observed that while there was an increase of more than four thousand in school population, the number enrolled was more than three thousand less in 1901 than the previous year. This showing is unsatisfactory, and we take this opportunity to call your attention to the importance of co-operating with the teachers in securing regular attendance upon the public schools. We also ask that you earnestly request the secretary of your corporation to closely inspect the Teachers' Term Reports in order that there may be no question as to their accuracy. To be of value, statistics should be absolutely correct in every particular.

We also call your especial attention to the average daily attendance. Last year's statistics show that more than 180,000 of the children who enrolled in the public schools failed to attend regularly. Only by regular attendance may we hope to have the children secure the best possible results. We commend this important matter to you for your consideration, and sincerely hope that in every way you will encourage children to attend school regularly.

March Meeting of Boards. The boards of all school corporations hold their first regular meeting on the third Monday in March. No action of the new board would have any force if taken before that date. The place of meeting must be within the civil township in which the corporation is situated. Members-elect may qualify on or before the third Monday in March.

In case of failure to elect, or to qualify, the incumbent may continue in office. If he fails to qualify there is a vacancy to be filled by the board; and the person appointed holds only until the next annual meeting of the electors. A director may administer the oath to any director-elect and to the president; or such person may qualify before someone authorized by law to take an acknowledgment. Every duty imposed upon the board as a body, in order to have legal standing must be performed at a regular or special meeting and be made a matter of record.

At this meeting boards are empowered:

1. To admit members-elect, and to fill the membership of the board. See sections 2757, 2758 and 2771.
2. To elect by ballot from the board a president, who must take the oath of office required by section 5, article 11, constitution of Iowa. Section 2757.
3. To require the secretary to file with the officers named in section 2766, a certificate of the election, qualification, and postoffice address of the president, secretary and treasurer.
4. To transfer any surplus in the schoolhouse fund unappropriated, to either the contingent or teachers' fund, if instructed by the electors to do so. Sections 2749 and 2778.
5. To provide for the teaching of any special study ordered by the electors to be taught as a branch. Sections 2749 and 2778.
6. To take the proper steps to carry out the expressed wishes of the electors upon matters within the control of such electors. Sections 2778 and 2779.
7. To make any contracts, purchases, payments, and sales necessary to carry out a vote of the electors. Section 2778.
8. To confer with the county superintendent as to the most approved plan for the erection of any schoolhouse. Section 2779.
9. To fix schoolhouse sites and to order the removal of any schoolhouse. Section 2773.
10. To establish graded or union schools wherever they may be desirable. Section 2776.
11. To prescribe a course of study and the branches to be taught. Section 2772. This must include the subjects directed to be taught in all schools by section 2775.
12. To adopt such rules and regulations as may be needed for the general government of the schools. Section 2772.
13. To provide for change of text-books, if so voted by the electors. Section 2829.
14. To use contingent fund in the treasury to purchase records, dictionaries, library books, maps and apparatus, to the extent of \$25 yearly for each schoolroom. Section 2783.
15. To furnish the necessary books to indigent pupils. Section 2783. If free text-books have been voted, the board will take measures to carry out such vote. Section 2837.
16. To give especial attention to the matter of convenient water closets, as required by the mandatory provisions of Section 2784.

17. Where county uniformity is not in force, to purchase text-books to be resold to pupils in accordance with sections 2824 to 2828.
18. To direct shade trees set out on each site where the required number is not now in growing condition. Section 2787.
19. To effect an insurance on school property with unappropriated contingent fund. Section 2783.
20. To examine the books and accounts of the treasurer, and make a proper settlement with him. Sections 2780 and 2769.
21. To make such rules and regulations as may be thought necessary to control and govern the board as a body. Section 2772.
22. In school townships, to adopt rules and regulations for the government of each director in the discharge of his official duties. Sections 2772 and 2785.
23. To determine the number of schools, the time more than six months they shall be taught, and where each child shall attend school. Section 2773.
24. To elect teachers and to fix the compensation of each teacher. Section 2778.
25. To estimate the amounts required for the teachers' and contingent funds, and for text-books, and cause the secretary to certify the same, with the amount voted by the electors for schoolhouse purposes, to the board of supervisors. Sections 2753, 2806 and 2825.
26. In school townships, to apportion the schoolhouse taxes among the sub-districts, and cause the secretary to certify such apportionment in strict accordance with section 2806.
27. To direct upon what terms non-residents not entitled by section 2803 to attend, may be admitted. Section 2804.
28. To arrange for the instruction of children in other districts, and to provide for transporting children to school. Section 2774.
29. To provide for the visitation of the schools of the district by one or more of the members of the board. Section 2782.
30. In independent school districts, to make provision for a kindergarten for the instruction of small children. Section 2777.
31. To vote a rate of schoolhouse tax to pay interest on bonds, or to pay the principal maturing, if the electors have failed so to vote. Section 2813.
32. To take any other action consistent with the law that will tend to increase the value and efficiency of the schools.

RICHARD C. BARRETT,
Superintendent Public Instruction.

March 1, 1902.

OFFICIAL CALL TO COUNTY SUPERINTENDENTS.

In accordance with section 2622 of the code, which provides that the superintendent of public instruction may meet the county superintendents at such points in the state as may be most suitable, you are hereby called to meet in convention as follows:

Washington, April 3 and 4; Spencer, April 10 and 11; Waterloo, April 15 and 16; Council Bluffs, April 17 and 18; Des Moines, April 22 and 23.

SUBJECTS FOR DISCUSSION:

1. Recent school legislation.
2. The National Educational Association at Minneapolis, July 8-11.
3. Character of teachers' county examination questions.
4. How may the institute be made of greatest value to teachers?
5. The new edition of the school laws.
6. What shall be done with the inefficient teachers? With the aged teachers?
7. The county superintendent as a lawyer and as a law enforcing power.
8. Should all applicants be examined upon the expiration of their certificates, or should certificates be duplicated upon proofs of successful teaching experience? Why?
9. Graduation from common schools. From normal institutes.
10. How may the department of public instruction render better service to the cause of common school education?
11. Under what conditions should the county superintendent encourage the establishing of township high schools? Of central graded schools? Of the consolidation of schools? Of the transportation of pupils?
12. The Iowa Teachers' Reading Circle.
13. How may school property be improved?
14. The benefit of a uniform system of blanks for Iowa schools.
15. Agriculture and horticulture in rural schools.

Meetings in each case will begin at one o'clock P. M. on the first date given.

Section 2742 guarantees to you the expenses incurred in attendance upon one of these meetings. It is expected that you will be present and take an active part, unless for some good reason you are prevented from attending.

Superintendents quite generally agree that they receive the greatest help from these informal conferences. We hope to meet superintendents at one meeting at least.

RICHARD C. BARRETT,
Superintendent Public Instruction.

March 15, 1902.

PRACTICAL SUGGESTIONS TO CONDUCTORS AND INSTRUCTORS IN NORMAL INSTITUTES.

Many of the suggestions of other years are embodied in this circular. This appears necessary because of the large number of new instructors each year. The statistics show that the number of attendants upon the institute has annually diminished until the enrollment exceeds only slightly the number of teachers required. If this fact is an indication that less academic work is to be undertaken and more professional made possible, the change should be gladly welcomed.

The importance of the Normal Institute as a part of our school system cannot easily be overestimated. To many teachers it is the only school in which they can get any training in the best means of discipline and the most approved methods of instruction. To many others it is the only place to which they can go annually for new draughts of inspiration and enthusiasm to refresh them for another year's work. To all teachers it should provide the means of getting increased information, securing better training, and developing higher ideals of professional life.

The results of the institute depend very largely upon the high character and teaching ability of the instructors. As the teacher is so is the school; and as the instructors are so is the institute. If they are punctual in attendance, prompt in management, and particular in work, the teachers will follow their example. If they are concise in statement, careful in expression, and clear in instruction, the teachers will imitate their style. If they are exact in results, energetic in action, and enthusiastic in spirit, the teachers will be so to a greater or less degree.

To make the institute a success the instructors must not forget that it was created for the purpose of training teachers in better means of discipline and more successful methods of instruction. It should, therefore, be a model school in both

these respects, so that teachers may learn by example as well as precept. Though it is not the primary object of the institute to give academic instruction, yet in most counties it is generally found necessary to do so for the benefit of those who have not had the requisite preparation. In giving such instruction the opportunity should be used for illustrating the best methods of presenting and teaching the subject.

That the institute may give the largest returns for the expenditure of time and money, there must be a definite plan of the work and a proper division of the time. In this way each subject and each instructor will receive a rightful share, which is a matter of simple justice. This will prevent a dragging and loss of time in some classes and hurried and inefficient work in others. Not only should the time be properly divided, but every minute of it should be carefully used to the best advantage. To do this each instructor must have his own part of the work well planned and thoroughly wrought out, so that he may daily exemplify to the teachers the qualities of promptness and preparation.

The legitimate and most important duty of the instructors is to give instruction, rather than to hear recitations; yet in giving instruction, they should properly develop and carefully illustrate all the elements that belong to the class recitation. The best methods of doing this work should be presented not only in a theoretical sense, but in a practical way before the class. The instruction should be clear, direct, forceful, enthusiastic, entertaining, and especially be adapted to the needs of the teachers in attendance. Teachers should be taught how to study for the purpose of gaining information and for making special preparation for the daily work in their own schools.

To use the language of another, it is necessary that "in order to adapt improved methods to the ungraded schools, teachers must be shown how these methods can be used. Simply telling teachers that these methods must be modified to suit their circumstances will not do. It is the province of the instructor to point out these modifications and fix them well in the minds of unskilled teachers. This is the vital point upon which our teachers need help." They may know the theory by heart but not be able to make the application until they see it done by one skilled in the work by much experience and practice.

The most important thing to be done in an institute is not to impart information that will assist in securing a certificate nor

alone to drill in the latest and best methods of teaching, but to inspire the lifeless, strengthen the weak, encourage the discouraged, and elevate the teachers' ideals of their work and life. The instructor should stand before the class, a living embodiment of the highest type of manhood or womanhood, and the best practical example of what every teacher should become. The general exercises, which bring all the teachers together, present a good opportunity to excite the zeal, arouse the enthusiasm, and increase the interest of teachers in their own success and that of the schools over which they may preside.

Your especial attention is called to the "Preliminary Thoughts and Considerations" in the Manual for Normal Institutes. The whole Manual is commended to you for your most careful consideration. At great labor and no small expense this work has been prepared by the state, and will be found the safest guide for both instructors and teachers to follow.

It is to be hoped that you will lend most earnest effort to the giving of helpful and practical suggestions. To illustrate: The teachers in all the rural districts of Iowa have in a sense, by law, been made librarians during the time schools are in session. A reasonable and proper amount of time may profitably be spent in explaining the care of books, the necessity of book cases, how to make the best use of the library, the keeping of the library records, etc. Teachers should be impressed with the fact that since such a comparatively small number of pupils ever complete a prescribed course of study it is important that they be taught to educate themselves through the means of books.

Let at least a part of the time placed at your command be given to explaining the right use of the "Hand-Book for Iowa Schools."

You are asked to call especial attention to the compulsory education law recently enacted. Its passage means much for education in this state. All teachers should before the close of the institute be made thoroughly familiar with the law, and urged to co-operate in its enforcement.

In concluding this friendly word of greeting, I do so with the firm conviction that your approval as an instructor by this department is for the very best interests of the children of the

commonwealth. Directly or indirectly you touch the lives of three-quarter millions of them.

To influence this army for right living is the highest honor.

RICHARD C. BARRETT,

Superintendent Public Instruction.

June 2, 1902.

THE SCHOOL ENUMERATION.

To County Superintendents: The taking of the annual enumeration of school children is so important that we address you for the purpose of urging that you leave nothing undone to secure prompt and accurate returns.

As you are aware, the school census includes all persons between five and twenty-one years of age who are residents of the district. No exception whatever is made, and to be complete the list must include the names of all persons of the stipulated age even if married or temporarily absent to attend school or engage in other work. A child in one of the charitable or reformatory institutions must be enumerated in the district where its parents reside. To do justly with all the districts, it is absolutely essential to have a correct list of all who are entitled to school privileges in each separate district.

Section 9 of the law for compulsory attendance says: "It shall be the duty of all officers, empowered to take the school census, to ascertain the number of children of the ages of seven (7) to fourteen (14) years, inclusive, in their respective districts." It will be necessary for the county superintendent to give timely notice of this new requirement to the secretary of each school corporation and the director in each subdistrict, as it must be made a part of the superintendent's annual report to this department.

The time for taking the enumeration is fixed by the statute, which should be strictly followed. Section 2785 says that "each director shall, between the first and tenth days of September in each year, prepare a list of the heads of families in his subdistrict, the number and sex of all children of school age, and by the fifteenth day of said month report this list to the secretary of the school township, who shall make full record thereof." Section 2764, referring to the duties of the secretary, says: "He shall, between the first day of September and the third Monday in September of each year, enter in a book made for that pur-

pose, the name, sex and age of every person between five and twenty-one residing in the corporation, together with the name of the parent or guardian."

We call your attention to this important matter so that you may use the best means possible to have the enumeration taken at the right time, and with the utmost care in respect to securing an accurate count in every district in your county. We suggest that it may be well to send blanks to secretaries, and directors in subdistricts, containing form number 34, for their help and guidance in performing their duty in this matter.

RICHARD C. BARRETT,

Superintendent Public Instruction.

August 10, 1902.

TO BOARDS OF DIRECTORS.

NOTE TO COUNTY SUPERINTENDENTS: In accordance with section 2735 you will please send to the secretary of every school corporation in your county a copy of this circular to be read at the regular meeting of the board of directors on the third Monday in September.

Greeting. The common schools are of far greater importance in the development of the people and the uplifting of the race intellectually, physically and morally, than any other agency. In them the masses must be trained. The state is beginning to unlock the vaults of the state treasury and give more of its material wealth to improve and develop the higher educational institutions. This is not for the purpose of giving those in charge the largest and best institution of the kind, but to give to the youth of the state the best opportunity to develop themselves and to grow in all the graces. The more liberal policy now adopted and followed in state educational matters is commended to you as a suitable example to follow in local educational interests. There should be no waste of funds; no extravagance; no superfluous equipment; no teachers on full pay and part work; no small schools devoid of interest, and conducted for the benefit of the teacher, or director, or neighbor with whom she boards; but wise liberality joined to sensible economy should be the motto of every board.

Improvement in individual schools and in the system itself demands first careful thinking. Official acts of boards of directors often affect the life and development of a community for years, and sometimes the physical well being of children for life. To avoid injury to health there must be exercised a wise discretion in choosing sites, planning buildings, heating, ventilating and lighting the same, prescribing courses of study, determining the length of the school day for small children, and in the preparation of programs. The whole business of education is most serious, requires thought, and should not be lightly considered.

Attention is called to the following subjects, which are deemed of importance:

New School Laws. The new edition of the School Laws has been issued, and copies of the same bound in paper will be supplied to each school director by the county superintendent, and one copy bound in cloth to each school corporation. The former editions of the School Law should be laid aside as they are most likely to mislead. The explanatory notes printed in connection with the law governing school corporations have been carefully revised, and will be found to be very helpful. As is generally understood, these notes are based upon decisions of the supreme court, opinions of the attorney-general, and the decisions and opinions of the superintendent of public instruction.

Compulsory Education. The enactment by the last legislature of the compulsory education law marks an important point in the development of our educational system. The proper interpretation of the law and its right, just and perfect enforcement, will do much to rightly educate a large number of children who have been deprived, intentionally or otherwise, of the benefits of established schools. The state has not presumed to say exactly where children shall attend, so long as they shall be taught the common school branches. Boards will do well to note that children of the age of seven to fourteen years inclusive come under the provisions of the law, and must attend school twelve consecutive weeks "each school year." The school year for school purposes should be regarded as beginning on the third Monday in March, when a new board enters upon its duties. Note 57, section 2773, School Laws. Also section 2773.

In addition to the above the law is important since it gives to boards of directors authority to provide for the instruction of

children who are habitually truant. At their discretion, boards may establish truant schools, or set aside a separate room in any school building for that purpose. It is to be hoped that there will be but little, if any, need of truant schools. Where there is a necessity for such, however, the board should not hesitate to act promptly, but with discretion. The right enforcement of the law will call for an interested and educated public sentiment, and we earnestly hope that boards will attempt to secure the co-operation of parents in their efforts to carry the law into effect.

The Training of Teachers. To supply competent and trained teachers for the schools is the most difficult as well as the most important matter in connection with the entire educational system. In partial recognition of this the last general assembly passed a law which provides for the inspection, recognition and supervision of schools designed for the instruction and training of teachers for the common schools.

Desirous of executing the law in its fullest and highest sense, and anxious to see all of the children of the state under the control of trained teachers the state board of educational examiners has provided that the graduates of any school having at least one year in the science and art of education in its course, and being fully accredited by the State university, may be admitted to the examination for a two years' state certificate. Schools now fully accredited wishing to avail themselves of the benefits of the law, should provide in the junior or senior year for a year's work in pedagogy and apply to the president of the state board of educational examiners for inspection. Proper application blanks may be had by writing to this office.

Graduates of approved accredited schools granted certificates under this law will be authorized to teach the studies enumerated in the certificate, in any public school in the state.

The new law offers advantages which we think will appeal to those in your high schools who may contemplate teaching. We commend the whole subject to you for your most careful consideration, believing that since so many of our high school graduates enter upon the work of teaching, you will be fully warranted in adjusting your course of study so as to permit those who desire, to obtain the required instruction.

Library Books. In accordance with the provisions of law which require that at least biennially the board of educational examiners shall recommend lists of books suitable for use in

school district libraries, a supplementary list has been prepared, and a catalogue containing the same has been issued. The catalogues will be distributed to those entitled to them from the office of the county superintendent. The library movement has attracted the attention of those interested in good schools and in the promotion of the best educational work of the state, and you are urged to give the movement your continued co-operation.

By the provisions of the library law a certain amount of money is to be expended annually, in all school townships and rural independent districts for library books. The money for this purpose is derived from interest on the permanent school fund, being apportioned annually to the extent of more than \$100,000 to the various school corporations of the state. The general assembly has ordered that a certain number of cents per pupil shall be expended for the maintenance of the school libraries for the benefit of all the people.

The library in the school is no longer considered a luxury, but a necessity, and it is hoped that the excellent beginning that has been made to provide the schools with the best books, will be continued with still greater interest.

While the law provides that books shall be purchased between the third Monday of September and the first day of December, it is hoped that the purchase of books will be made early in the school year in order that the children may have the benefit to the greatest degree. County and city superintendents will be found most willing to co-operate with you in this as in other educational work.

The money withheld from the apportionment cannot be used for any purpose except the purchase of library books, but the contingent fund may be used for the purchase of record books and book cases, both of which are necessary for the protection and care of the books. The board should not only see that these things are supplied, but properly used by the secretary and librarian having charge of the libraries. Independent districts of cities, towns and villages may avail themselves of this law and withhold money from the apportionment for library purposes by an affirmative vote of the board.

Low Wages and Poor Teachers. Authentic information at hand shows that while in a few localities teachers' wages have been slightly advanced there has not been a sufficient increase to induce many of the best teachers to continue teaching. County superintendents quite generally agree they are unable to keep

good teachers at present wages. It is our deliberate opinion, based upon statements of superintendents, that at least one-fifth of those certificated each year are licensed solely because there are no others to fill the schools, and that they are not competent.

While it is not to be presumed that an advance in the monthly wages paid, will at once give superior teachers to all schools, we think it will be an inducement for those now teaching, to continue, and for others to prepare themselves and enter upon the work. Unquestionably, higher wages will result in greater permanency, a longer tenure of service, and improved schools.

Teachers' Certificates. Section 2788 is explicit in its statement that no person shall be employed as a teacher and paid from the public funds unless he holds a certificate from the county superintendent or the state board of educational examiners. And it is a duty you owe to yourselves, as well as to the public, to observe that teachers elected to positions in your schools are the holders of certificates which enumerate the studies the holder is authorized to teach. The fact that the teacher is certificated is not sufficient. He may not legally give instruction in branches other than those covered by the certificate granted. See note 4, section 2630; note 6, section 2736; note 14, section 2775, and note 20, section 2778. Without special mention in the teacher's contract, it is to be inferred that only the usual common branches and others included in the course of study are to be taught.

The Treasurer's Report. When the treasurer of the school corporation makes his annual report on the third Monday in September, he should be required to produce or fully account for all funds of the district on hand. A complete settlement should be made with him, and a statement to that effect should be placed on record. His report and that of the secretary should be filed at once with the county superintendent.

Hand-Book for Iowa Schools. At the expense of the state there has been provided a copy of the "Hand-Book for Iowa Schools" for every school. The Hand-book contains a course of study which has been pronounced of the greatest value. Teachers have been instructed in the normal institutes how they may best use the course. Hundreds of them are reported as doing so. There should be no exceptions. In the work of classifying and harmonizing our schools it is necessary that all should labor toward a common end if the highest results are attained. You

will do well to insist that the prescribed course of study shall be followed. Any additional copies of the Hand-book may be had upon application to the county superintendent.

We thank you for the support and co-operation we have received at your hands, and bespeak your continued assistance in advancing the educational interests of our state.

September Meeting. The boards of all school districts are required by law to hold a regular meeting on the third Monday in September. Among the items of business that may be transacted are the following:

1. To fill, by ballot, any vacancies among the officers or members of the board. Section 2771.
2. To examine the books and accounts of the treasurer, and make a proper settlement with him. Section 2769.
3. To elect a secretary, and also a treasurer in all districts in which he is not chosen by the electors. Section 2757.
4. To fix the compensation of secretary and treasurer. Section 2780. And to fix the amount of their bonds. Section 2760.
5. To fix schoolhouse sites, and to order the removal of any schoolhouse. Section 2773.
6. To establish graded and higher schools wherever they may be necessary. Section 2776.
7. To prescribe a course of study in the branches to be taught. Section 2772.
8. To adopt such rules and regulations as may be necessary for its own government, as a board, and that of the directors, officers, teachers and pupils. Section 2772.
9. To determine the number of schools, and the time more than six months that they shall be taught during the year. Section 2773.
10. To direct upon what terms nonresidents, not entitled by section 2773 to attend free of tuition, may be admitted. Section 2804.
11. To effect an insurance on school property with contingent fund not otherwise appropriated. Section 2783.
12. To adopt rules and regulations for the government of the director in each subdistrict in school townships, in the proper discharge of his official duties. Section 2785.
13. To make any contracts, purchases, payments and sales necessary to carry out a vote of the electors. Sections 2749 and 2778.
14. To use any unappropriated contingent fund in the treasury to purchase dictionaries, library books, maps, charts and apparatus. Section 2783.
15. To arrange for building and maintaining fences about schoolhouse grounds. Chapter 88, laws of Twenty-seventh General Assembly. See page 99, School Laws of 1902.
16. To issue "funding bonds" to pay any judgment, or any bonds lawfully issued against the corporation. Section 2812.
17. To give special attention to the matter of convenient water-closets, as required by the mandatory provisions of the law. Section 2784.

18. To instruct the treasurer how much more than five cents for each pupil enumerated shall be withheld for library purposes. Chapter 110, Acts of the Twenty-eighth General Assembly. Page 103, Laws of 1902.

19. To instruct the secretary to file with the county superintendent, county auditor and county treasurer the name and postoffice address of the president, secretary and treasurer of the district, promptly according to the law. Section 2766.

20. To take any other action consistent with the law that will tend to increase the value and efficiency of the schools.

RICHARD C. BARRITT,
Superintendent Public Instruction.

August 20, 1902.

REGULATIONS GOVERNING UNIFORM EXAMINATIONS FOR TEACHERS' COUNTY CERTIFICATES, 1902.

OPINION OF ATTORNEY GENERAL.

Section 2622 of the Code provides:

"He (the superintendent of public instruction) shall be charged with the general supervision of all the county superintendents and the common schools of the state."

Section 2735 provides:

"He (the county superintendent) shall at all times comply with the directions of the superintendent of public instruction in all matters within that officer's jurisdiction, and serve as the organ of communication between him and school township, district or independent district authorities, and transmit to them or the teachers thereof, all blanks, circulars or other communications designed for them."

It was the intention of the legislature in enacting these statutes to give to the superintendent of public instruction the general supervision over all school matters in the state, and to make the county superintendent of schools in each county the means whereby the rulings and acts of the superintendent of public instruction are conveyed to or communicated to the persons within the county.

Under the power so conferred by the legislature, the superintendent of public instruction has authority to prescribe the conditions under which county superintendents shall issue certificates to applicants therefor, and to prescribe the names and character of the certificates to be issued by the county superintendents.

I think it is also within the power of the superintendent of public instruction to specify the minimum age of applicants to whom certificates may be issued by county superintendents.

DIRECTIONS TO COUNTY SUPERINTENDENTS.

In harmony with the opinion of the Attorney General the following regulations with reference to uniform examinations for teachers' certificates are hereby prescribed for the guidance of county superintendents, to take effect September 15, 1902.

REGULATIONS.

CERTIFICATES.

Teachers' certificates issued by county superintendents shall be of three grades, namely: first, second and third. A special certificate and a kindergarten certificate are authorized by law.

FIRST GRADE.

Term. Certificates of this grade shall be issued for a term of two years.

Educational Requirements. The examination of candidates shall include competency in and ability to teach orthography, reading, writing, arithmetic, geography, grammar, history of the United States, didactics, physiology and hygiene including special reference to effects of alcohol, stimulants and narcotics, elementary civics, elementary algebra, elements of physics, elementary economics and music.

Experience. Candidates must submit proof of thirty-six weeks successful experience in teaching.

Standing Required. For certificates of this grade, candidates must attain an average standing of 90 per cent; and in orthography, reading, writing, arithmetic, geography, grammar, history of the United States, didactics, physiology and hygiene a standing of at least 85 per cent, with no other branch below 80 per cent.

Renewals and Indorsements. Under the laws of this state there is no provision for the renewal of a certificate, or for the indorsement of one by another superintendent. Section 2737 provides for the issuing but not for the renewing or indorsing of a certificate. A certificate may not be issued upon an

examination taken in another county or state. In addition to furnishing any credentials or other written evidence which the county superintendent may require, the applicant must appear in person.—Opinion Attorney General.

SECOND GRADE.

Term. All second grade certificates shall be issued for a term not to exceed one year.

Educational Requirements. The examination of candidates shall include competency in and ability to teach orthography, reading, writing, arithmetic, geography, grammar, history of the United States, didactics, physiology and hygiene, including special reference to effects of alcohol, stimulants and narcotics, and music.

Experience. In counties issuing only two grades of certificates none is required. Counties issuing three grades may require evidence of at least one term of successful experience.

Standing Required. Candidates must attain an average standing of at least 85 per cent., with no branch below 75 per cent.

Renewals and Indorsements. See same heading under First Grade.

THIRD GRADE.

Term. At the discretion of the county superintendent certificates of this grade may be limited to one or two terms.

Number of Certificates. Certificates of this grade should not be granted more than once or twice to the same person.

Educational Requirements. Same as for second grade.

Experience. None is required.

Standing Required. Candidates for certificates of this grade must attain an average standing of at least 80 per cent., with no branch below 65 per cent.

Renewals and Indorsements. See same heading under First Grade.

SPECIAL CERTIFICATES.

Term. Special certificates shall be issued for a term not to exceed one year.

Educational Requirements. Candidates for this certificate need be examined in such branches only as they shall be

employed to teach. Special certificates may be issued to teachers of music and other special branches including high school studies.

Standing Required. Optional with the county superintendent.

KINDERGARTEN CERTIFICATES.

Term. Kindergarten certificates shall be issued for a term not to exceed one year.

Educational Requirements. "Any teacher in kindergartens shall hold a certificate from the county superintendent certifying that the holder thereof has been examined upon kindergarten principles and methods and is qualified to teach in kindergartens."

Standing Required. Optional with county superintendent.

DATES OF EXAMINATIONS.

The examination of applicants for all certificates shall be held on the last Friday and Saturday in each month, at the county seat. Special examinations may be held elsewhere in the county at the discretion of the county superintendent. Applications made at irregular times should be rejected, unless good reasons are given for not attending the regular examinations.

GENERAL REGULATIONS.

1. All applicants shall be at least eighteen years of age.
2. Candidates undertaking the first grade examination and failing to attain the standard required for a certificate of that grade may be given a certificate of a lower grade, provided the percentages attained are as high as those required in the grade for which the certificate is granted.

3. County superintendents may at their discretion supplement examinations with additional questions and for sufficient reasons refuse to grant a certificate to a candidate after he has attained the required standing.

4. Applicants may be required to present such evidences of good moral character as the county superintendent shall demand. The superintendent must be fully satisfied in every particular mentioned in the law before issuing the certificate.

5. The examination papers of applicants for certificates and any testimonials with regard to the moral character of the applicant belong to the county superintendent individually, and are for his guidance alone.

6. The county superintendent is the sole judge of the manner and extent of the examination he will require of applicants for certificates to teach, and unless fully satisfied in all respects it is his duty to refuse to grant a certificate.

7. Candidates to whom a first grade or two years' certificate is granted shall pay two dollars. Applicants for all other certificates issued by a county superintendent are required to pay a fee of one dollar.

8. Teachers wishing to teach studies not named for county certificates should take examination in such subjects and have the same placed on the certificate.

RICHARD C. BARRETT,
Superintendent Public Instruction.

Des Moines, Sept. 10, 1902.

MINIMUM AGE OF TEACHERS.

To County Superintendents: By reference to note 11, section 2737, S. L. 1902, it will be noted that the minimum age at which certificates may be granted has been fixed at eighteen years for both men and women. It is hoped that the change will encourage young men to engage in teaching, and that many young women who have left school to teach will be encouraged to continue their studies for another year in high schools or elsewhere. In many counties the minimum age for women has for some years been eighteen, and the testimony of county superintendents in these counties is that results have been beneficial. A few county superintendents have asked that the limit be fixed still higher. This has not seemed wise. Note 12, section 2737 authorizes any county superintendent, however, to fix a higher minimum age than that determined by this department, should he deem it best to do so.

Your attention is called to the regulations prepared for your guidance in granting certificates. It is our opinion that the standard fixed is the very best the state can have at this time. It will be observed that but slight changes have been made from regulations issued in 1898. September 15th has been selected

as the time regulations shall go into effect, since this is the date when the next annual report in reference to examination fees and certificates begins.

RICHARD C. BARRETT,

Superintendent Public Instruction,

DES MOINES, September 12, 1902.

TO COUNTY SUPERINTENDENTS AND COUNTY AUDITORS.

The annual reports of the county superintendents now on file in this office show that in some counties it is a common practice to violate, unintentionally, we think, the law in relation to the expenditure of the normal institute fund.

It should be known and observed.

First. No warrant may be drawn in excess of the amount of institute fund in the county treasury.

Second. All bills must be signed and sworn to by the party in whose favor the order is made and verified by the county superintendent.

Third. "All disbursements of the institute fund shall be by warrants drawn by the county auditor, who shall draw said warrants upon the written order of the county superintendent," and be for no purpose except for services rendered or expenses incurred in connection with the institute.

The practice of paying lecturers from the institute fund for addressing teachers' associations is clearly a violation of law. We are required to hold also that the institute fund may not be used to pay assistants secured by the county superintendent to aid in conducting examinations or grading manuscripts. The examination is no part of the institute, and anyone employed to aid in conducting the same should be paid by the county in the same manner as others are who assist in general county work.

A voluntary association of teachers is not an institute in the legal sense. The institute must in all cases be conducted for at least six working days, and be approved by the superintendent of public instruction.

RICHARD C. BARRETT,

Superintendent Public Instruction.

January 5, 1903.

TO BOARDS OF COUNTY SUPERVISORS.

Section 1301 of the Code provides that all county officers collecting fees shall, on the first Monday of January in each year, make report thereof under oath to the board of supervisors of their county, showing the amount of fees collected together with vouchers for the payment to the proper officer of all sums collected. We would respectfully call your attention to the fact that settlement should be made with the county superintendent the same as with any other county officer. This should be done as a matter of interest to the county, fairness to the superintendent and justice to his bondsmen.

By section 2738 the county superintendent is required to collect certain fees and deposit the same with the county treasurer, who shall disburse the same only upon warrants issued by the county auditor upon the written order of the county superintendent; and "no warrant shall be drawn by the auditor in excess of the amount of institute fund then in the county treasury." The same section as amended provides that "the county superintendent shall furnish to the county board of supervisors a certified itemized account of the receipts and disbursements of all moneys collected and paid out by him for a normal institute, which account they shall examine, audit and publish with their proceedings next following the holding of the normal institute." The same amendment also provides that "the superintendent shall report to the board of supervisors the first of January annually a summary of his official transactions for the previous year."

We also call your attention to the advisability of checking up the record books and other property belonging to the superintendent's office. The NORMAL MONTHLY and the MIDLAND SCHOOLS are furnished by the state and should be kept on file and preserved for the benefit of the office.

The county superintendent has large power and equal responsibility. We bespeak for him your hearty support and encouragement in every right endeavor to advance the good of

the schools. We are confident that fair and liberal treatment from you will be compensated by increased effort and greater usefulness on the part of the superintendent.

RICHARD C. BARRETT,
Superintendent Public Instruction.

January 5, 1903.

TO THE SUPERINTENDENTS AND TEACHERS OF IOWA.

I have been profoundly impressed with the high character of the exercises which have been held annually to commemorate the birthdays of Lincoln and Washington, and have full confidence that the preparation of programs suited to the varying needs of the pupils is a work that can be safely left to your wise discretion.

For the reason that Special Day Leaflets have for several years been issued and can be found in school libraries, it has been decided not to issue a new one this year.

I sincerely hope that the absence of a new leaflet will only serve to stimulate you to greater zeal in the teaching of patriotism.

Lincoln's birthday, February 12, and Washington's February 22 should be appropriately observed in every schoolroom in the state. Since the latter comes on Sunday, it is recommended that school exercises be conducted on the preceding Friday.

Wherever possible you are urged to co-operate with the G. A. R., W. R. C., Sons of Veterans, Sons of the American Revolution, Daughters of the American Revolution, Colonial Dames of America and the Spanish War Veterans in the proper observance of Special Days devoted to the teaching of patriotism.

The high and gracious duty to be attained in the observance of Lincoln's and Washington's birthdays is to awaken in the minds and hearts of the youth a strong and abiding faith in the flag of our country, and an intelligent appreciation of the lives and deeds of great and good men.

Every right endeavor should be made to have all citizens feel that they have an important work to perform in loyalty-building.

In your efforts to make our country the goodliest among the nations may the enduring qualities of justice, truth, honor and

loyalty be taught in such a manner as to win the sympathetic affection and co-operation of the people.

Yours sincerely,

RICHARD C. BARRETT,
Superintendent Public Instruction.

DES MOINES, January 27, 1903.

REGARDING THE USE OF INSTITUTE FUND.

To County Superintendents. The statistics for 1902 show that twenty-seven counties were carrying in the normal institute fund from \$150.00 to \$800.00 unexpended balances.

In a recent communication attention was called to the fact that the institute fund may not be overdrawn. I desire now to call your attention to the importance of making a wise expenditure of the large balances now on hand. With the exception of \$50.00, which is annually contributed by the state for the support of the institute, the teachers now at work in our schools have contributed the money which is unexpended, and I believe it will commend itself to your sense of justice that they should have the benefit of it.

The fact that your predecessors left a large balance in the institute fund should in no way deter you from expending such a sum as will enable you to conduct an institute of the greatest benefit to all classes of teachers. So far as possible all expenses should be carefully itemized and "incidentals" reduced to the minimum. In many instances the institute can be lengthened with great profit, provided the instructors are what they should be. We do not urge that an effort be made to cover more subjects, but that an effort should be made to do better work. The best work that can be done in an institute is work that can be carried into the schoolroom by the teachers. I fear that too much of the instruction in some of our institutes is given for the purpose of entertaining teachers, and is of no practical benefit to them in their work.

One too common a fault observed in visiting institutes is that often too many instructors are employed. Every endeavor should be made to employ a few high grade instructors who know the needs of teachers, and possess the power to impart knowledge and to enthuse them.

If your institute fund is sufficiently large to enable you to do so, we recommend that you hold two sessions of the institute, one in the spring and one in the summer. This plan has for a number of years been adopted in a number of counties, and the results have been very gratifying. Usually the spring session is for one week of six days and is largely inspirational in character. For the reason that so many young teachers enter the schoolrooms first during the summer term, the spring session of the institute affords the very best opportunity to instruct them, and at the same time interest them in all of the general educational work of the county. Often the spring institute can be made of great interest to the school officers of the county.

It is important that those who represent the people and those who instruct the children should understand each others aims and purposes. To aid in the accomplishment of this object a whole day of a normal institute session might profitably be spent. It can hardly be expected that the school directors will leave their work during the busy summer season and devote a day to the consideration of educational matters. That they will do so during the spring has often been shown.

In engaging lecturers you will do well to employ men and women who can talk of what the school can do for the farm and the home. The practice adopted in some counties of inviting prominent and successful professional and business men to address an institute is commended.

We would have you make it a part of your work to interest the people more generally in the work of the teacher and the school. To aid in the accomplishment of this, we recently mailed you a suggestive list of topics for discussion. Some of these topics may be well discussed at your normal institute, and teachers informed as to the best method of interesting the parents. Teachers should be encouraged to hold meetings of the mothers of the district. Much good will be accomplished if these meetings are conducted regularly, and at short intervals. Rightly conducted, a cordial bond of sympathy between parents and teachers will grow out of these meetings.

Our state is noted for its large educational associations. We should not be content with a few large meetings. Local meetings should be multiplied throughout the state in order that there may be aroused still greater interest in the common schools.

All things point toward a prosperous year. Let us not fail in our duty to make it the very best possible for the children.

Yours sincerely,

RICHARD C. BARRETT,
Superintendent Public Instruction.

January 30, 1903.

TO BOARDS OF DIRECTORS.

Note. In accordance with section 2735 it is expected that each county superintendent will send the secretary of every school corporation a copy of this circular at once to be read to the board at its meeting on the third Monday in March.

The boards of all school corporations hold their first regular meeting on the third Monday in March. No action of the new board will have any force if taken before that date. The place of meeting must be within the civil township in which the corporation is situated. Members-elect may qualify on or before the third Monday in March. In case of failure to elect or qualify the incumbent may continue in office. If he fails to qualify there is a vacancy to be filled by the board; and the person appointed holds only until the next annual meeting of the electors. A director may administer the oath to any director-elect and to the president; or such person may qualify before someone authorized by law to take an acknowledgment. Every duty imposed upon the board as a body, in order to have legal standing, must be performed at a regular meeting or a special meeting, and be made a matter of record.

At the close of this circular we enumerate some of the duties and powers of boards of directors. Before calling your attention to a few important matters, we desire to congratulate you upon the opportunity you now have for promoting the educational interests of the state. We bespeak your hearty co-operation in all efforts that shall be made for the betterment of the schools, and express the sincere hope that your best efforts will be exerted to improve existing educational conditions.

Teachers. The duty of selecting teachers is second to none, devolving upon boards of directors. It is now very generally recognized that a school system, perfect in every detail, may not be expected to accomplish the results desired if in charge of

incompetent or poorly prepared teachers. The law makes it the duty of each member of the board to assist in the election of all teachers. The sub-director may not employ a teacher without authority from the board. We renew the recommendation often made by this department that teachers be elected for the full school year. Only by so doing may the best results be obtained.

An advance of at least twenty five per cent in the wages paid teachers should in our opinion be provided for in hundreds of districts at the annual meeting. Experience teaches that experienced and successful teachers may not long be retained at the average monthly salary now paid.

Compulsory Attendance. The enforcement of the compulsory attendance law should be placed in the hands of truant officers. This has already been done in a number of cities, and the plan promises to give excellent satisfaction. While in the country, towns and villages, the necessity for a truant officer is not so great as in the larger cities, there are found to be rambling through the woods, roving over the prairies, or loitering about public places, pupils who should be in school. In justice to yourselves and the communities you represent, we urge the appointment of a truant officer.

School Grounds and Buildings. The zeal displayed during the past year by boards of directors and other citizens to beautify school premises cannot be too highly commended. The need of a more general movement for improving and beautifying school grounds and buildings is imperative. Not only should the provisions of law regarding shade trees be complied with, but a strong effort should be made to beautify the entire school surroundings. It should require no extended remarks to convince any citizen that the school where children spend so many hours of their lives should be so inviting as to draw them towards it. In this connection I would also urge strongly the value of schoolroom decorations. Every school building should be examined as to cleanliness and furnishings before the opening of the next term of school, and the outbuildings inspected as to location and condition. That you will encourage the teacher and pupils in their efforts to make school grounds more attractive and the school successful by furnishing the necessary funds and aiding them with your presence and advice, is earnestly hoped.

Improvement of Rural Schools. The rural schools of the state may be improved in the manner suggested above, and also by uniting two or more small schools in one. The consolidation of small, weak schools is no longer an experiment in our state. On the contrary, the plan of uniting small schools has been successfully tried and is now carried on in a number of counties. Where sub-district or rural independent district schools are small, a satisfactory plan is to close one or more of the schools and provide for the education of the pupils in these districts elsewhere. Often by this arrangement one teacher will do the work of three or more and perform the duties in a manner highly satisfactory and with better results than is possible where small separate schools are maintained.

The plan adopted in a number of counties of closing all of the schools of the township and transporting the pupils to a central building has likewise proven successful. As the merits of centralized schools become known, prejudices and imaginary objections are overcome, and the plan grows in public favor.

Both of these plans for the improvement of rural schools are commended to all thoughtful citizens for consideration. We ask that boards of directors interested will make a full and complete investigation of the plan before deciding in favor of the continuation of present plans and methods which may have proven unsatisfactory.

School Laws. It is well for all members of the boards of directors to familiarize themselves with the provisions of the new edition of the school laws. Directors on retiring from office are required to surrender to their successors all books and papers belonging to the office. Directors not supplied with a copy of the new school laws should apply to the county superintendent.

Course of Study. Your attention is again called to the value of a course of study. It is the intention to have a copy of the revised Hand-book for Iowa Schools in every schoolroom. These books are the property of the district and should be left in the schoolroom. The value of a course of study is apparent to everyone who has observed the want of system and the lack of order where no course is in use. We believe that you will

find the Hand-book of great value, and we commend it to you for official recognition. It can be used to the greatest advantage in even the smallest country school. Copies may be had upon application to the county superintendent.

Manual Training. We commend to you the subject of manual training. It teaches the child self-reliance, develops a wholesome respect for labor, keeps the boys longer in school, furnishes helpful employment for idle moments, makes school a part of life and gives systematic training to the child's motor activities.

The department of education has issued a leaflet giving very full and complete information regarding the introduction of the subject into the public schools, and will take pleasure in forwarding a copy of the same to any person interested in this important subject.

Many other matters of greatest interest to the schools will arise, but we cannot speak of them in so brief a circular. You are assured that this department and your county superintendent are anxious to co-operate with you in all movements tending to improve the schools and promote the welfare of the children.

The March Meeting. At this meeting boards are empowered:

1. To admit members-elect, and to fill the membership of the board. See sections 2757, 2758 and 2771.
2. To elect by ballot from the board a president, who must take the oath of office required by section 5, article 11, constitution of Iowa. Section 2757.
3. To require the secretary to file with the officers named in section 2766, a certificate of the election, qualification and postoffice address of the president, secretary and treasurer.
4. To transfer any surplus in the schoolhouse fund unappropriated, to either the contingent or teachers' fund, if instructed by the electors to do so. Sections 2749 and 2778.
5. To provide for the teaching of any special study ordered by the electors to be taught as a branch. Sections 2749 and 2778.
6. To take the proper steps to carry out the expressed wishes of the electors upon matters within the control of such electors. Sections 2778 and 2779.
7. To make any contracts, purchases, payments and sales necessary to carry out a vote of the electors. Section 2778.
8. To confer with the county superintendent as to the most approved plan for the erection of any schoolhouse. Section 2779.

9. To fix schoolhouse sites and to order the removal of any schoolhouse. Section 2773.
10. To establish graded or union schools wherever they may be desirable. Section 2776.
11. To prescribe a course of study and the branches to be taught. Section 2772. This must include the subjects directed to be taught in all schools by section 2775.
12. To adopt such rules and regulations as may be needed for the general government of the schools. Section 2772.
13. To provide for change of text-books, if so voted by the electors. Section 2829.
14. To use contingent fund in the treasury to purchase records, dictionaries, library books, maps, and apparatus, to the extent of \$25 yearly for each schoolroom. Section 2783.
15. To furnish the necessary books to indigent pupils. Section 2783. If free text-books have been voted, the board will take measures to carry out such vote. Section 2837.
16. To give special attention to the matter of convenient water-closets, as required by the mandatory provisions of section 2784.
17. Where county uniformity is not in force, to purchase text-books to be resold to pupils, in accordance with sections 2824 to 2828.
18. To direct shade trees set out on each site where the required number is not now in growing condition. Section 2787.
19. To effect an insurance on school property with unappropriated contingent fund. Section 2783.
20. To examine the books and accounts of the treasurer and make a proper settlement with him. Sections 2780 and 2769.
21. To make such rules and regulations as may be thought necessary to control and govern the board as a body. Section 2772.
22. In school townships, to adopt rules and regulations for the government of each director in the discharge of his official duties. Sections 2772 and 2785.
23. To determine the number of schools, the time more than six months they shall be taught, and where each child shall attend school. Section 2773.
24. To elect teachers and to fix the compensation of each teacher. Section 2778.
25. To estimate the amounts required for the teachers' and contingent funds, and for text-books, and cause the secretary to certify the same with the amount voted by the electors for schoolhouse purposes, to the board of supervisors. Sections 2753, 2806 and 2825.
26. In school townships, to apportion the schoolhouse taxes among the sub-districts, and cause the secretary to certify such apportionment in strict accordance with section 2806.
27. To direct upon what terms non-residents not entitled by section 2803 to attend, may be admitted. Section 2804.

28. To arrange for the instruction of children in other districts, and to provide for transporting children to school. Section 2774.

29. To provide for the visitation of the schools of the district by one or more of the members of the board. Section 2782.

30. In independent school districts, to make provision for a kindergarten for the instruction of small children. Section 2777.

31. To vote a rate of schoolhouse tax to pay interest on bonds, or to pay the principal maturing, if the electors have failed so to vote. Section 2813.

32. To provide for the enforcement of the provisions of the compulsory education law. Chapter 128, Acts of the Twenty-ninth General Assembly.

33. To take any other action consistent with the law that will tend to increase the value and efficiency of the schools.

RICHARD C. BARRETT,
Superintendent Public Instruction.

February 27, 1903.

CONCERNING ARBOR DAY.

To County Superintendents:

According to your reports now on file in this office there were 219,904 trees in a thrifty condition on the school grounds of the state in 1900; in 1901 there were 225,462; and in 1902, the number had increased to 229,342. While this is encouraging and indicates that we are moving forward in the work year by year, there are yet hundreds of school grounds in Iowa without any trees whatever. This fact should stimulate all of us to increased effort to arouse more interest in this subject. Our purpose should be to have trees planted this spring on all grounds where they are needed either for ornament or protection. Call the attention of boards of directors and patrons to the necessity of improving the school grounds, and teachers and pupils to the desirability of making the school rooms home-like and pleasant. Endeavor to secure organized action that will result in such improvement and awaken an interest that will not die out in a single season.

The zeal and interest shown by the county superintendent will be contagious, and will be felt by school officers, teachers and pupils. Though most teachers will do what they can to beautify the grounds about the buildings, yet they need your help and the assistance of the board of directors. Hence you will do well to request the boards in your county to observe the coming Arbor Day by planting trees where they are needed and giving care to those now on the grounds. Where nothing has been done urge the necessity of complying with the law in section 2787, which requires that "the board of each school corporation shall cause to be set out and properly protected twelve or more shade trees on each schoolhouse site where such trees are not growing."

The school premises should be the brightest spot in the neighborhood, and when work of this kind is undertaken and carried on with spirit and animation it reacts upon the regular life of

the school and stirs it to new activities. It is conceded that the educational results of Arbor Day efforts have been extensive and beneficial. The selection and planting of growing trees impart a knowledge of the principles and methods of such work, while the care and cultivation of trees and flowers will be of lasting benefit to the pupils and the neighborhood.

RICHARD C. BARRETT,

Superintendent Public Instruction.

April 10, 1903.

A PROCLAMATION BY THE GOVERNOR.

One of the striking characteristics of high civilization is concern and provision for the future. It is a part of our duty to do what we can to surround the generations yet to come with all the comfort and all the beauty of which our land is capable. In this state there is no method more fruitful of good results, nothing that will add more to the charm of the landscape and the pleasure of life than to adorn our highways, streets, parks, school yards and lawns with trees.

Therefore I, Albert B. Cummins, Governor of the State of Iowa, do hereby set apart Thursday, the 30th day of April, 1903, as

ARBOR DAY.

This day is one of peculiar significance to all the people who live within the Louisiana Territory, and I cannot conceive of a better way in which to celebrate it than by making our part of it more beautiful even than it now is.

I earnestly recommend that the people of the state observe the day in an appropriate manner; and I especially enjoin upon the schools of the state the utility of devoting the day to such exercises as will create and foster a love of nature, and that in the course of such exercises the teachers and pupils will unite in planting trees and dedicating them to the good of those who will come after them.

In Testimony Whereof, I have hereunto set my hand, and caused to be affixed the great Seal of the State.

Done at Des Moines, this 23d day of March, A.D., 1903.

ALBERT B. CUMMINS.

By the Governor:

W. B. MARTIN,

Secretary of State.

CHAPTER IV.

SELECTIONS FROM MANUALS FOR SPECIAL DAY EXERCISES.

INTRODUCTION.

FLAG DAY.

ARBOR AND BIRD DAY.

MEMORIAL DAY.

THANKSGIVING DAY.

INTRODUCTION.

A sentiment in favor of the celebration of special days by programs designed expressly for such use, has grown with the years and is now a recognized feature of Iowa school work.

These exercises supplement the teachings of home in their tendency to foster a love for the beautiful, and a tenderness toward those who need care and protection. They inculcate the spirit of Christianity in the outdoor study which leads "from nature up to nature's God." They harmonize the principles of loyalty and moral purpose—the foundation of true patriotism—and in their every influence add to the groundwork of education that higher, holier impulse which results in the formation of well-rounded character, and gives to the state its most perfect citizenship.

These pleasurable occasions vary the monotony of school-room work. They also afford opportunity for parents and friends of education to visit schools and to stimulate, by words of approval, the endeavor of teachers and pupils.

The birthday anniversaries of Washington and Lincoln present fitting dates for the grouping of important events in the history of the republic. The life-story of each, great in office, genuine in manliness, woven into a chain of recitation and song with an accompaniment of flag decorations, makes an attractive holiday performance. The blending of these lessons with educational processes insures a culture that will enrich the heart as well as inform the mind.

In 1902 there was issued from the Department of Public Instruction a book of 100 pages, with the following introduction by Hon. Leslie M. Shaw, former Governor of Iowa:

"It is comparatively easy for the old to define the duties of the young, and youth has no difficulty in distinguishing exemplary old age. It is more difficult, however, for the present day man and woman to know and do the present day duty, and be the ideal citizen of the hour. The faults and

weaknesses in our lives need never be from want of knowledge, for the state gives each boy and girl ample opportunity for development. Failure is usually for want of application rather than from want of opportunity. . . . He who does his best today will be more likely to do well tomorrow than the one who illy performs the duties of the present. Now is the time to prepare for that useful citizenship that is due our country. To do the duties of today well, results not only in gratifying consciousness of meritorious conduct, but develops strength for the better performance of the duties of tomorrow, and the ever enlarging and more burdensome duties of future years; and it is on strength thus acquired that the state must depend. No section of our country possesses a more ideal body of young people than ours, and upon them will very soon rest the burdens of business life, political life, home life and church life. But those who wait until the greater responsibilities arise before making a supreme effort will surely fall short of their present hopes of usefulness."

In his greeting the Superintendent of Public Instruction said:

"Special Day Exercises, rightly conducted, may be the means of intellectual and ethical growth. Only the *time-server* permits these occasions to become artificial and thus encourage boldness, self-consciousness and vanity instead of loyalty, patriotism, charity and love; the *true* teacher uses these opportunities to impress lessons which will remain with his pupils long after their school days are over.

"Things taught incidentally often mean much more than those upon which emphasis is placed. That of which the child speaks out of school is more likely to be remembered than the routine of school work.

"The learning of memory gems is becoming a recognized part of legitimate school work. No mere doggerel, but only those poems which develop a love for poetry and stimulate the impulse toward beautiful thought and unselfish action should be stored in the mind of the child.

"The child learns the best selections of our best poets and orators, repeats them, dwells upon them, acts under their inspiration, and eventually they become embodied and exemplified in his life, in his thoughts, in his aspirations."

One object of the booklet was to secure uniformity, another to aid through suggestive selections. General directions were given in an address

TO THE TEACHER.

All proper lessons in patriotism should first create respect and love for father and mother, brothers and sisters.

When this is done, we have a foundation on which to base a proper love of country. There is more of real value to the boys of the country in dwelling with emphasis upon Washington's devotion to his mother than there is in the whole war history of the nation.

Let us pledge the children first to love and obedience at home, then to obedience at school. Respect and reverence for the laws of their community, their state and their country will naturally follow.

In the making of a good citizen, knowledge is as essential as right feeling. When the teachers fully realize that a knowledge of political, social

and economic science is the only foundation of that intelligence, which is essential to true patriotism, then will they give their studies their earnest attention and their enthusiasm will inspire the children to thus early form habits of impartial investigation and true citizenship.

Let the pupils of the school be urged to read some good periodical of current events and discuss such events as suggest the application of the principles taught in their books.

Let history and geography be alive with suggestions of what has contributed to the prosperity of the nation, and what has detracted from its welfare.

There is something wrong in thinking that patriots must be soldiers or sailors. To be a patriot is to love one's country, to serve it faithfully, to support its government intelligently, to obey its laws, to pay fair taxes into the treasury, and to treat his fellow citizens as he himself would like to be treated.

FLAG DAY.

LINCOLN'S BIRTHDAY

FEBRUARY 12.

WASHINGTON'S BIRTHDAY

FEBRUARY 22.

SALUTE TO THE FLAG.

Flag of the sun that shines for all,
Flag of the breeze that blows for all,
Flag of the sea that flows for all,
Flag of the school that stands for all,
Flag of the people, one and all,
Hail! flag of liberty! all hail!
Hail! glorious years to come!

—Butlerworth.

THE FLAG AND THE SCHOOLHOUSE.

Let the National Flag float over every schoolhouse in the country, and the exercises be such as shall impress upon our youth the patriotic duties of American citizens. — Benjamin Harrison.

OUR HERITAGE FROM WASHINGTON AND LINCOLN.

Without Washington we should probably never have won our independence of the British Crown, and we should almost certainly have failed to become a great nation, remaining instead, a cluster of jangling little communities. Without Lincoln, we might perhaps have failed to keep the political unity we had won. Yet the nation's debt to these men is not confined to what it owes them for its material well being, incalculable though this debt is. Beyond the fact that we are an independent and united people, with half a continent as our heritage, lies the fact that every American is richer by the heritage of the noble deeds and noble words of Washington and Lincoln.

It is not only the country which these men helped to make and helped to save that is ours by inheritance; we inherit also all that is best and highest in their character and in their lives. We inherit from Lincoln and from the might of Lincoln's generation, not merely the freedom of those who once were slaves; for we inherit also the fact of the freeing them, we inherit the glory and the honor and the wonder of the deed that was done, no less than the actual results of the deed when done. As men think over the real nature of the triumph then scored for human-kind, their hearts shall ever throb as they cannot over any victory won at less cost than ours.

We are richer for each grim campaign, for each hard-fought battle. We are richer for valor displayed alike by those who fought so valiantly for the right and by those who, no less valiantly fought for what they deemed the right. We have in us nobler capacities for what is great and good, because of the infinite woe and suffering, and because of the splendid ultimate triumph.—*Theodore Roosevelt in American Ideals.*

GOD GIVE US MEN.

God give us men, a time like this demands
Great hearts, strong minds, true faith and ready hands;
Men whom the lust of office cannot kill,
Men whom the spoils of office cannot buy;
Men who possess opinions and a will,
Men who love honor, men who will not lie;
Men who can stand before a demagogue
And brave his treacherous flatteries without winking;
Tall men, sun-crowned, who live above the fog,
In public duty, and in private thinking. —*J. G. Holland.*

THE YOUNG AMERICAN.

Let thy noble motto be,
God—the country—liberty!
Planted on religion's rock,
Thou shalt stand in every shock.

Laugh at danger, far or near,
Spurn at baseness, spurn at fear;
Still with persevering might,
Speak the truth and do the right.
So shall peace, a charming guest,
Dove-like in thy bosom rest;
So shall honor's steady blaze
Beam upon thy closing days.

—*E. H. Everett.*

LIFE OF GEORGE WASHINGTON.

OUTLINE.

1. Washington as a Boy.
a-home, c-home life,
b-parents, d-sports.
2. Washington at School.
a-kind of school,
b-studies, exercise, books,
c-surveying,
d-rules of conduct.
3. Washington as a Surveyor.
a-preparation for the work,
b-his friends, the Fairfaxes,
c-life in the woods,
d-life at Belvoir,
e-quality of his work,
f-character exhibited.
4. Washington in the French and Indian War.
a-preparation for this work,
b-first military office,
c-mission to the Ohio,
d-first campaign, Fort Necessity,
e-Braddock's campaign,
f-character exhibited.
5. Washington in the Revolution.
a-appointment as commander,
b-acceptance of office,
c-personal sacrifice involved,
d-taking command,
e-his work at Boston, Trenton, Princeton, and Valley Forge,
f-his resignation,
g-character exhibited.
6. Washington as President.
a-election to presidency,
b-personal sacrifice,
c-most important events,

d-visit to Boston,
e-the farewell address,
f-character exhibited.

COMPARISON OF THE LIVES OF WASHINGTON AND LINCOLN.

1. The birth, early life and home surroundings of each.
2. Opportunities for an education.
3. Occupations followed—
 - a-Washington as surveyor, colonel, land owner, general, president.
 - b-Lincoln as railsplitter, country store keeper, post-master, surveyor, captain, lawyer, president.
4. Services each rendered to his country.
5. Strong traits of character shown by the life work of each.
6. Washington, the Father; Lincoln, the Savior of his country.

FLAG DAY.

PROGRAM FOR LOWER GRADES.

Song....."Our Flag."
 Recitation....."Salute Old Glory."
 Exercise....."The Colors of Our Flag."
 Recitation....."The Young American."
 Exercise....."I Would Tell."
 Song....."Ode to Washington."
 Recitation....."February Twenty-Second."
 Recitation....."Why am I like Washington?"
 Reading....."Tributes to Washington and Lincoln."
 Song.....
 Recitation....."Washington's Birthday."
 Exercise....."Washington."
 Recitation....."Country, Home and Liberty."
 Reading....."Honesty."
 Recitation....."Why."
 Concert Recitation....."Our Flag."
 Song....."Star Spangled Banner."

PROGRAM FOR HIGHER GRADES.

Song....."Red, White and Blue."
 Reading....."The Story of Our Flag."
 Dialogue....."In Memory of Washington."
 Recitation....."Abraham Lincoln."
 Song....."Ode to Washington."
 Exercise....."Crowning Lincoln."
 Essay....."Comparison of the Lives of Washington and Lincoln."
 Reading....."Our Heritage from Washington and Lincoln."

Song....."Iowa—Beautiful Land."
 Reading....."The Duty of Public Service."
 Recitation....."God Give Us Men."
 Lantern Drill....."Beacon Lights."
 Song....."Mount Vernon Bells."
 Recitation....."Ready."
 Song....."Star Spangled Banner."

FLAG QUIZ.

First flag. When made?
 How many stripes? Why?
 How many stars? Why?
 How many red stripes?
 How many white stripes?
 Why were colors red, white, and blue chosen?
 When is the flag's birthday?
 How old is the flag?
 When will the next star be added?Why?
 How many stars has the flag of 1902?

ARBOR AND BIRD DAY.

APRIL 26.

And this our life exempt from public haunts;
 Finds tongues in trees, books in the running brooks,
 Sermons in stones, and good in everything.

—*Shakespeare.*

What the leaves are to the forest,
 With air and light for food,
 Ere their sweet and tender juices
 Have been hardened into wood--
 That to the world are children;
 Through them it feels the glow
 Of a brighter and sunnier climate
 Than reaches the trunks below.

—*Longfellow.*

ANNUAL OBSERVANCE OF ARBOR AND BIRD DAY.

Since 1887, the date of the first Forestry circular in Iowa, Arbor Day has been annually observed in the schools. Many trees have been planted and given a significance in historic names, and grounds have been otherwise beautified. School children have been taught to feel that the cultivation and care of trees at home and at school is their duty, and that it is also their privilege to act in this capacity as guardians of the future for the trees of the state.

To enhance the value of Arbor Day celebrations it has been deemed wise to add the preservation of trees as bird homes, as an interesting feature. The instinct to destroy is thus turned aside, and children themselves made the guardians of bird life and bird music. As "character cannot gain at one point without an influence being reflected at every other point," this union of the humane with the æsthetic and poetic will bring good results.



THE TRAGEDIES OF THE NESTS.

The life of the birds is a series of adventures and hairbreadth escapes by flood and field. A few of them probably die a natural death, or even live out half of their appointed days. What perils beset their nests, even in the most favored localities! The cabins of the early settlers, when the country was swarming with hostile Indians, were not surrounded by such dangers. The tender households of the birds are not only exposed to hostile Indians in the shape of cats and collectors, but to numerous murderous and blood-thirsty animals, against whom they have no defense but concealment. They lead the darkest kind of pioneer life, even in our gardens and orchards and under the walls of our houses. Not a day or night passes, from the time the eggs are laid till the young are flown, when the chances are not greatly in favor of the nest being rifled and its contents devoured—by owls, skunks, minks and coons at night, and by crows, jays, squirrels, weasels, snakes and rats during the day. Infancy, we say, is hedged about by many perils; but the infancy of birds is cradled and pillowed in peril.—*John Burroughs from "Signs and Seasons."*

A PRAYER.

Teach me, Father, how to go
Softly as the grasses grow;
Hush my soul to meet the shock
Of the wild world as a rock;
But my spirit, propt with power,
Make as simple as a flower;
Let the dry heart fill its cup,
Like a poppy looking up;
Let life lightly wear her crown,
Like a poppy looking down,
When its heart is filled with dew,
And its life begins anew.

Teach me, Father, how to be
Kind and patient as a tree.
Joyfully the crickets croon
Under shady oak at noon;
Beetle, on his mission bent,
Tarries in that cooling tent.
Let me, also, cheer a spot,
Hidden field or garden grot—
Place where passing souls can rest
On the way and be their best.

—*Edwin Markham.*

MEMORIAL DAY.

MAY 30, 1902.

"We come with our garlands of flowers gay,
To lay on our soldiers' graves today
To show our love for the true and brave,
That we remember the price they gave
To save our country so fair and free
A heritage rich for you and me.
We think of their marching with weary feet,
How they slept on the ground 'mid the rain and sleet,
How they met the foe with a courage strong
And died so bravely to right a wrong."

ORIGIN OF MEMORIAL DAY.

General John Murray was the originator of Memorial Day in the north. While visiting in the South in the winter of 1867-'68, he noticed the touching rite of decorating soldiers' graves with flowers, by the ladies. Being very much impressed with this custom, he instituted a similar one at his home.

On the 5th of May, 1868, Gen. John A. Logan, who was then Commander-in-Chief of the Grand Army of the Republic, established Decoration Day, and by a general order, May 30, 1868, was designated as a day set apart for the purpose of paying tribute to the memory of those brave men who died in defense of our country. The National Encampment held in Washington had it incorporated in its rules and regulations, May 11, 1870.

Since then, in many of the states, May 30th has been established as a legal holiday, and it is the universal custom to decorate the graves of all ex-soldiers, thus making it one of the most patriotic days of the year, wherein all classes unite in paying honor to our heroic dead, and thus showing respect for their memory and the cause for which they fought.

THE MARTYR'S WAY.

For the wreck and the wrong of it, boys and girls,
For the terror and loss as well,
Our hearts must hold
A regret untold
As we think of those who fell.
But their blood, on whichever side they fought,
Re-made the nation and progress brought.
We forget the woe,
For we live and know
That the fighting and sighing, the falling and dying,
Were but steps toward the future—the martyr's way,
Adown which the sons of the Blue and the Gray
Look with love and with pride, on Memorial Day.

—*Selected.*

MEMORIAL DAY.

PROGRAM FOR LOWER GRADES.

Song.....	"The Blue and the Gray."
Recitation.....	"The Heroes' Day."
Exercise.....	"The Little Army."
Song.....	"My Brave Soldier Boy."
Recitation.....	"Our Soldiers' Graves."
Reading.....	"A Little Child Shall Lead Them."
Concert Recitation.....	"The Flag Goes By."
Recitation.....	"Let Little Hands."
Song.....	"We Are Little Soldier Men."
Recitation.....	"Death for His Country."
Exercise.....	"Flowers for Our Heroes."
Recitation.....	"How Shall I Serve My Country."
Recitation.....	"The Better Way."
Song.....	"Scatter the Flowers."
Recitation.....	"A High Resolve."
Exercise.....	"Our Tribute."
Recitation.....	"Only a Drummer Boy."
Song.....	"America."

PROGRAM FOR HIGHER GRADES.

Song.....	"Salute the Old Defender, Boy."
Recitation.....	"The Boys in Blue."
Reading.....	"Our Debt to the Nation's Heroes."
Recitation.....	"Warning."
Song.....	"The Blue and the Gray."
Recitation.....	"One Flag."
Reading.....	"Battle of Santiago."
Recitation.....	"Picket Guard."
Patriotic Drill for Sixteen Boys.....	
Reading.....	"The Army of Peace."
Recitation.....	"Decoration Day."
Song.....	"Old Kentucky Home."
Recitation.....	"John Burns, of Gettysburg."
Reading.....	"The Spanish-American War."
Recitation.....	"The Gray-Haired Vet."
Concert Recitation by School.....	"Our Heroes."
Reading.....	"Prayer for Our Country."
Song.....	"America."

UNRECORDED HEROISM.

"There are graves today which we have not decorated. No statues rise in their honor, and their names are not preserved in song or story.

"But for them there is a pyramid of national gratitude, more enduring than stone or marble, more precious than gold, 'yea, than much fine gold;' a pyramid whose broad base is securely anchored in the hearts of a grateful people, where every deed of valor and every noble sacrifice has its imperishable record."

OUR DEBT TO THE NATION'S HEROES.

Every feat of heroism makes us forever indebted to the man who performed it. The whole nation is better, the whole nation is braver because Farragut, lashed in the rigging of the Hartford, forged past the forts and over the unseen death below, to try his wooden stem against the iron-clad hull of the Confederate ram; because Cushing pushed his little torpedo boat through the darkness to sink beside the sinking Albemarle. All daring and courage, all iron endurance of misfortune, all devotion to the ideal of honor and the glory of the flag, make for a finer and nobler type of manhood. All of us lift our heads higher, because those of our countrymen whose trade it is to meet danger have met it well and bravely. If ever we had to meet defeat at the hands of a foreign foe, or had to submit tamely to wrong or insult, every man among us worthy of the name of American would feel dishonored and debased. On the other hand, the memory of every triumph won by Americans, by just so much helps to make each American nobler and better.

Every man among us is more fit to meet the duties and responsibilities of citizenship because of the perils over which, in the past, the nation has triumphed; because of the blood and sweat and tears, the labor and the anguish, through which, in the days that have gone, our forefathers moved on to triumph.

—Theodore Roosevelt, in "American Ideals."

THE FLAG GOES BY.

Hats off!
 Along the street there comes
 A blare of bugles, a ruffle of drums,
 A flash of color beneath the sky.
 Hats off!
 The flag is passing by.

 Blue and crimson and white it shines,
 Over the steele-tipped ordered lines.
 Hats off!
 The colors before us fly.
 But more than the flag is passing by.

Hats off!
 Along the street there comes
 A veteran band, to the sound of drums,
 And loyal hearts are beating high.
 Hats off!
 The flag is passing by.

—From *Youth's Companion*.

THE SPANISH-AMERICAN WAR.

It is gratifying to all of us to know that this has never ceased to be a war of humanity. The last ship that went out of the harbor of Havana before war was declared, was an American ship that had taken to the suffering people of Cuba the supplies furnished by American charity, and the first ship to sail into the harbor of Santiago was an American ship bearing food supplies to the suffering Cubans, and I am sure it is the universal prayer of American citizens that justice and humanity and civilization shall characterize the final settlement of peace as they have distinguished the progress of the war.

My countrymen, the currents of destiny flow through the hearts of our people. Who will check them, who will divert them, who will stop them? And the movements of men, planned and designed by the Master of men will never be interrupted by the American people.

I witness with pride and satisfaction the cheers of the multitudes as the veterans of the civil war on both sides of the contest are reviewed. I witness with increasing pride the wild acclaim of the people as you watch the volunteers and regulars and our naval reserves pass before your eyes, for I read in the faces and hearts of my countrymen the purpose to see to it that this government with its free institutions, shall never perish from the face of the earth.

My heart is filled with gratitude to the God of battles, who has so favored us, and to the soldiers and sailors who have won such victories on land and sea and have given such a new meaning to American valor. No braver soldiers or sailors ever assembled under any flag.

Gentlemen, the American people are ready. If the Merrimac is to be sunk in the mouth of the Santiago harbor to prevent the escape of the Spanish fleet, a brave young hero is ready to do it and to succeed in what his foes have never been able to do—sink an American ship. All honor to the army and navy, without whose sacrifices we could not celebrate the victory. The flag of our country is safe in the hands of our patriots and heroes.—*Wm. McKinley.*

ONE FLAG.

There's a thrill and a throb in the air today,
A throb and a thrill ever new;
For billows have broken o'er wall and town
Of red and of white and of blue.

The blood runs swift and a shrill huzza
Springs glad to the lips of youth.
While louder the silence speaks of those
Who fought, dear God, for thy truth.

It floats up the aisles of the village church,
It springs from the State House Dome;
It kisses the breeze, wherever it please,
Set firm in the heart of the home.

And all through the hours, the incense of flowers,
Of prayers and of praise is sung
From a censer of gold, that the children hold,
While the storied past is sung.

The censer is memory's sacred urn
That holdeth for love and rue,
The ashes of those whom each heart knows
Fought for the gray or the blue.

Fewer each year as the end draws near,
When none will be left, not one,
Who saw the sorrowful sights of war
Or shared in the brave deeds done.

But unto the children we tell the tale;
And once in each twelvemonth long,
We honor the men who died for us
When the goodly land went wrong.

—Selected.

DECORATION DAY.

'Mid the flower-wreathed tombs I stand,
Bearing lilies in my hand.
Comrades, in what soldier-grave
Sleeps the bravest of the brave?

Is it he who sank to rest
With his colors 'round his breast?
Friendship makes his tomb a shrine,
Garlands veil it; ask not mine.

One low grave, yon trees beneath
Bears no roses, wears no wreath;
Yet no heart more high and warm
Ever dared the battle-storm.

Never gleamed a prouder eye
In the front of victory;
Never foot had firmer tread
On the field where hope lay dead.

Turning from my comrades' eyes,
Kneeling where a woman lies,
I strew lilies on the grave
Of the bravest of the brave.

—Thomas Wentworth Higginson.

THANKSGIVING DAY.

NOVEMBER 27, 1902.

Give the heart's best treasures;
 From fair nature learn.
 Give thy love and ask not,
 Wait not a return!
 And the more thou spendest
 From thy little store,
 With a double bounty
 God will give thee more.

—Proctor.

THANKSGIVING DAY.

PROGRAM FOR LOWER GRADES.

Song....."Thanksgiving" (Gaynor's Songs of the Child's World.)
 The Boston Thanksgiving Story.....Told by one of the Pupils.
 Quotations.....By the School.
 Exercise....."The Farmer"
 Concert Recitation by School....."Giving Thanks."
 Song.....
 Exercise....."Story of the Pilgrims."
 Recitation....."The Seasons."
 Reading.....Selection.
 Song.....
 Recitation....."Tom's Thanksgiving."
 Exercise....."This Way."
 Exercise....."Story of a Seed."
 Recitation....."Thanksgiving Ride of the Pumpkins."
 Song....."God Bless Our Native Land."

PROGRAM FOR HIGHER GRADES.

Song....."Nearer My God to Thee."
 Reading....."Proclamation of the President or Governor."
 Exercise....."The Seasons."
 Reading....."Address to the Pupils."
 Recitation....."The First Thanksgiving."
 Reading....."Where Plymouth Rock Crops Out."
 Song.....
 Essay....."Why We Celebrate Thanksgiving."
 Reading....."The Old New England Thanksgiving."
 Quotations.....By the Pupils.

Reading.....Selection.
 Concert Recitation by School....."Loving Words."
 Reading....."Progress of Our State in the Last Century."
 Song.....
 Reading....."Advice to a Boy."
 Recitation....."Giving and Taking."
 Reading....."The Harvest Tide."
 Recitation....."Gentleman Gay's Thanksgiving."
 Recitation.....Selection.
 Exercise....."Our Country."
 Song....."God Bless Our Native Land."

ESSAY—"WHY WE CELEBRATE THANKSGIVING DAY."

(The following outline may be used for an exercise in composition, all pupils of grammar grades taking the theme. The best composition may be read when the program is given):

OUTLINE.

1. The Puritans in England.
2. Their departure to Holland and life there.
3. Their desire to come to America.
4. The Speedwell and the Mayflower.
5. Voyage of the Mayflower.
6. Landing at Plymouth Rock.
7. Beginning of the colony.
8. Sufferings and privations of the first winter.
9. The first crop and harvest.
10. The governor's proclamation.
11. Comparison of the methods of observing the holiday in colonial days and at the present time.

THE CORN SONG.

(The pupil bearing a basket of corn.)

Heap high the farmer's wintry hoard!
 Heap high the golden corn!
 No richer gift has Autumn poured
 From out her lavish horn.

Let other lands, exulting, glean
 The apple from the pine,
 The orange from its glossy green,
 The cluster from the vine;

We better love the hardy gift
Our rugged vales bestow,
To cheer us when the storm shall drift
Our harvest fields with snow.

Let earth withhold her goodly root,
Let mildew blight the rye,
Give to the worm the orchard's fruit,
The wheat field to the fly;

But let the good old crop adorn
The hills our fathers trod,
Still let us, for his golden corn,
Send up our thanks to God,

—J. G. Whittier.

THE GOLDEN HARVEST.

"Harvest is come. The bins are full,
The barn's are running o'er;
Both grains and fruit we've garnered in
Till we've no space for more.
We've worked and toiled through heat and cold,
To plant, to sow, to reap;
And now for all this bounteous store
Let us Thanksgiving keep."

THE PROGRESS OF OUR STATE IN THE LAST CENTURY.

Iowa was first seen by the white men in 1673. Marquette and Joliet, two French explorers and missionaries, sailed down the Mississippi. The first Iowa prairie they beheld was that on which the town of Guttenberg, Clayton county, is built.

In 1788 Julien Dubuque obtained a grant of land from the Indians and made a settlement near the city which bears his name.

In 1809 a military post was established on the present site of Fort Madison.

In 1838 the territory of Iowa was organized by act of Congress, and Robert Lucas was appointed governor.

On December 28, 1846, Iowa was admitted into the union. There were then but twenty-seven organized counties.

In 1856 the seat of government was changed from Iowa City to Des Moines, the old Capitol at Iowa City being appropriated to the use of the State University.

In the Civil War Iowa furnished seventy-five thousand five hundred and nineteen men, or more than one-tenth of her entire population at the time.

The last century has witnessed many changes in our state. The stage coach and the prairie schooner of the pioneer days have given place to six

trunk lines of railway which cross the state and afford direct communication with Chicago and the east. These also connect with the lines that cross the Rocky Mountains and extend to the Pacific Ocean.

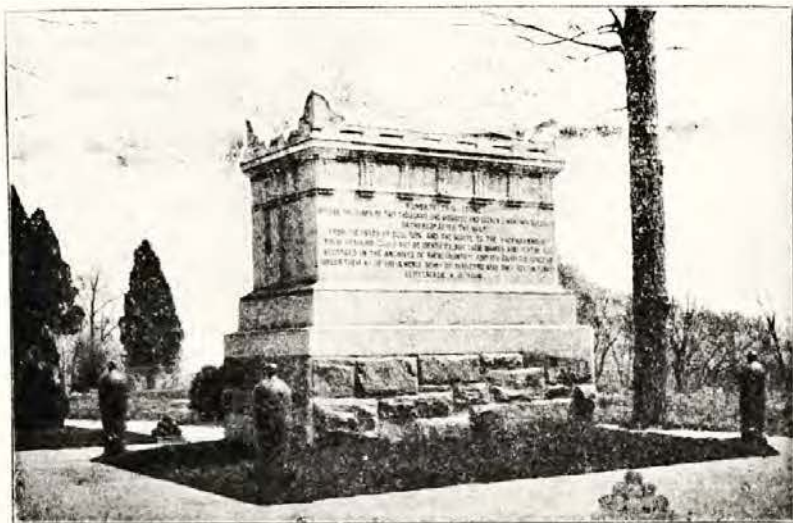
The prairies which in the olden times swarmed with geese, ducks, pigeons, blackbirds and prairie chickens, have become cornfields producing a yearly crop worth as much as all the gold and silver mined in our country during the same period.

The small band of early settlers has been supplanted by more than two millions of people who have transformed the rude villages into beautiful and thriving cities. Their fine buildings and large manufactories are the pride of the state. Iowa has now within her borders eighty towns and cities of more than two thousand inhabitants.

The little country school has grown into an immense educational system with the State University at the head and including the State Normal School, the Agricultural College, and thousands of graded and ungraded schools.

MEMORIAL DAY.

MAY 30, 1903.



TOMB OF THE UNKNOWN DEAD—ARLINGTON

EPITAPH:

*Beneath this stone
repose the bones of two thousand one hundred and eleven Union soldiers
gathered after the war
from the fields of Bull Run and the route to the Rappahannock.
Their remains could not be identified, but their names and deaths are
recorded in the archives of their country; and its grateful citizens
honor them as of their noble army of martyrs. May they rest in peace.*

MEMORIAL DAY.

TO THE TEACHERS AND PUPILS OF THE PUBLIC SCHOOLS OF IOWA:

Memorial Day has been dedicated as sacred to the Nation's loyal dead, and should be so honored and observed by every school in the state. It stands not only for nationality, but symbolizes the indestructibility of the republic through the valor and devotion of its patriotic citizens. By a correct observance of this day the children and young people can demonstrate to the old soldiers that "gratitude is the fairest flower of the heart." And we are confident that no other exercises will give them so much genuine pleasure as those presented by the schools. One writer has said that "if the men whom the day commemorates could look down from the battlements of that undiscovered country whither they have gone, upon the countless memorials placed to their memory, they would be deeply moved by these expressions of the gratitude of the nation. But they would be more profoundly moved could they see the children of the land gathered year after year to pay homage to their memory. For the granite will crumble away, the pictured canvas grow dim, the stately buildings decay; but to be cherished in the memory of our youth is to live in perpetual spring-time."

In each community where there is a Grand Army Post or Woman's Relief Corps, it will be well to invite such orders to attend and participate in the exercises. And where no such organizations exist all the veterans of the school district should have special invitations to be present and take some active part.

This leaflet is prepared and published with the hope that it may be a guide to the teachers in planning their exercises for Memorial Day of this year. A suggestive program is given which may be helpful in arranging one suited to local conditions. During the days of preparation the teacher should make good use of the opportunity to teach patriotism by presenting noble examples of self-sacrifice, of gallant deeds, and heroic fortitude.

Expressing the hope that the day may be one of pleasure, profit and patriotism, I am yours sincerely,

RICHARD C. BARRETT,
Superintendent Public Instruction.

THE SCHOOLS AND CIVIL WAR.

EXTRACT FROM AN ADDRESS BEFORE THE IOWA STATE BOARD OF EDUCATION BY ITS PRESIDENT IN DECEMBER, 1862.

GENTLEMEN OF THE BOARD OF EDUCATION:

"You have again assembled for the sacred purpose of devoting your efforts to the perfection of our common school system. The educational interests of our own state, to which your labors will be devoted, ought to be the dearest to an intelligent people. Gentlemen, you are here under no ordinary circumstances. Our great, and recently so prosperous country, is involved in a deadly struggle for its preservation. But the future historian may justly congratulate the people of Iowa in view of the fact that while they were sending forth the thousands of their brave and loyal sons to strike for the preservation of our common country, and the maintenance of law and order, they did not lose sight of that on which all law and order rests—the education of their children; being well convinced of the great truth, that a great and free republic can only exist through the intelligence and virtue of its people, and that a harmonious education of the mind and heart of every citizen of this great country will effectually wipe out the causes of this wicked rebellion—ignorance and its fruits, passion and prejudice.

A few months ago the law makers of our state were assembled in these halls to provide the sinews of war for the protection of our government. Their efforts were those of patriotic and loyal citizens, and it was in perfect harmony with their other acts when they provided means for this, your meeting. At the same time the legislature of a neighboring state was in session discussing the propriety of discontinuing the common schools, and appropriating the school money for very different purposes; and there was consistency in their acts, for they were plotting treason and rebellion. When our legislature appropriated the means for your present session, they regarded you as soldiers of our country who should fight with the sword of an enlightened mind, a battle through which the foundations of a future, permanent peace should be laid; and if through your agency the

hillsides throughout the length and breadth of our state shall be ornamented with school houses, you will have erected more formidable batteries against disloyalty and treason than if you had planted thousands of cannon there."

N. J. RUSCH,

President State Board of Education.

DES MOINES, IOWA, December 2, 1862.



NATIONAL CEMETERY, CHATTANOOGA.

Let the lesson of Memorial Day be self-sacrifice. Bring out the thought that every nation that has safe homes and schools has had its leaders, who so loved the people that they planned and worked long and hard to bring about these conditions.

FIRST MEMORIAL DAY PROCLAMATION.

We should guard their graves with sacred vigilance. All that the consecrated wealth and taste of the nation can add to their adornment and security is but a fitting tribute to the memory of her slain defenders.

Let no wanton foot tread rudely on such hallowed ground; let pleasant paths invite the coming and the going of revered visitors and fond mourners; let no vandalism of avarice or neglect, no ravages of time, testify to the present or the coming generations, that we have forgotten as a people the cost of a free and undivided republic.

If other eyes grow dull, and other hands slack, and other hearts cold in the solemn trust, ours shall keep it well as long as the light and warmth of life remain to us.

Let us, then, gather round their sacred remains and garland the passionless mounds above them with the choicest flowers of springtime; let us raise above them the dear old flag they saved from dishonor; let us in this solemn presence renew our pledges to aid and assist those whom they have left among us as a sacred charge upon a nation's gratitude—the soldiers' and sailors' widows and orphans.—*John A. Logan.*

(Extract from the order of G. A. R. Commander-in-Chief, May 5, 1858.)

Let the National Flag float over every schoolhouse in the country, and the exercises be such as shall impress upon our youth the patriotic duties of American citizens.—*Benjamin Harrison.*

I invoke all within the hearing of my voice to heed well the lessons of this Memorial Day; to weave each year a fresh garland for the graves of some beloved comrade or favorite hero; and to rebuke any and all who talk of civil war save as the last tribunal of kings and peoples.—*Gen. Sherman.*

There is the national flag! He must be cold indeed who can look upon its folds rippling in the breeze without pride of country. White is for purity, red for valor, blue for justice, and altogether—bunting, stripes, stars and colors blazing in the sky—make the flag of our country to be cherished by all our hearts, to be upheld by all our hands.—*Charles Sumner*

Teach first and last, Americanism. Let no youth leave the school without being thoroughly grounded in the history, the principles, and the incalculable blessings of American freedom, and the girls the intelligent mothers of free men.—*Depew.*

SUGGESTIVE PROGRAMS.

Made up of selections found in special day books for 1901 and 1902.

FOR LOWER GRADES.

Song, 1901.....	"God Bless Our Native Land."
Recitation, 1902.....	"Let Little Hands."
Exercise, 1902.....	"The Little Army."
Recitation, 1901.....	"A Child's Offering."
Song, 1902.....	"My Brave Soldier Boy."
Exercise, 1901.....	"Blossoms, O Flowers."
Concert recitation, 1901.....	"The Children's Pledge."
Address.....	By member W. R. C.
Song, 1902.....	"We Are Little Soldier Men."
Recitation, 1902.....	"The Better Way."
Recitation, 1901.....	"For Me and For You."
Motion song, 1901.....	"Our Flag."
Exercise, 1902.....	"Our Tribute."
Song.....	"America."

FOR HIGHER GRADES.

Song.....	"Battle Hymn of the Republic."
Recitation, 1901.....	"The Influence of Heroic Deeds."
Reading, 1901.....	"The Heroines of the War."
Recitation, 1902.....	"Picket Guard."
Song.....	"The Vacant Chair."
Address.....	By a Veteran.
Reading, 1902.....	"The Army of Peace."
Recitation, 1901.....	"The Roll Call."
Song.....	"The Star-Spangled Banner."
Roll call, 1901.....	Response with quotations.
Recitation, 1902.....	"John Burns of Gettysburg."
Reading, 1902.....	"The Spanish-American War."
Song.....	"Sleep, Comrades, Sleep."
Recitation, 1901.....	"We Mourn for All."
Recitation, 1901.....	"Memorial Day."
Concert recitation, 1902.....	"Our Heroes."
Song.....	"America."

THE OLD GRAND ARMY BOYS.

You may talk about the Masons,
 And the Odd Fellows, and such;
 You may call them so fraternal
 As to fairly beat the Dutch;
 You may praise them if you choose to,
 With their mystic rites and noise,
 But they cannot hold a candle
 To the old Grand Army Boys.

For a man that has a memory
 Can learn about the craft;
 He can get degrees and passwords
 That can make a funeral laugh.
 And be loaded down with symbols;
 But for true fraternal joys,
 They cannot hold a candle
 To the old Grand Army boys.

You may talk about your badges,
 But the one that has the call
 Is the *star, flag and eagle*
 That is far above them all.
 It was won when cannon thundered
 'Mid the battle's smoke and noise;
 So there's nothing holds a candle
 To the old Grand Army boys.

Why they fought and bled together,
 And they shared the prison pen,
 And they faced the front in battle
 With the touch of men.
 Then the compact was cemented
 'Mid the conflict's crash and noise.
 So there's nothing holds a candle
 To the old Grand Army boys.

They fraternal? Well, I reckon;
 And their charity's all right.
 Are they loyal? They have proved it,
 For they left their homes to fight.
 And the nation owes them homage
 For the peace it now enjoys;
 For there's nothing holds a candle
 To the old Grand Army boys.

—Selected.

CHAPTER V.

LOUISIANA PURCHASE FLAG DAY.

INTRODUCTION BY GOVERNOR CUMMINS.

SUGGESTIONS TO TEACHERS.

CUT OF IOWA COMMISSION.

TOPICS FOR STUDY.

MAP OF LOUISIANA PURCHASE.

ACQUISITION OF LOUISIANA.

LOUISIANA PURCHASE STATES.

Louisiana Purchase Flag Day

Resources are the gift of the Creator. Development is the great duty of the Republic.
—Schuyler Colfax.

Centennial of the Louisiana Purchase

1803 - 1903

Never was heard the cycle stroke,
Yet the dial pointed to morn,
And over the clock of God there broke
The light of an age new-born.
Then a shifting scene, and a virgin land
Like a paradise lay outspread,
And Louisiana, fair and grand,
To the Saxon world was wed.

—Hubert M. Skinner.

Official Circular

to be used in the celebration of

Louisiana Purchase Flag Day

December 18, 1903

Issued by the Department of Public Instruction

Richard C. Barrett
Superintendent Public Instruction

A natural base for the greatest continuous empire ever established by man.
—Gladstone, on Louisiana Purchase.

"IOWA—Her affections, like the rivers of her borders, flow to an inseparable union."



THE IOWA BUILDING, ST. LOUIS.

IOWA—"Our liberties we prize, and our rights we will maintain."

INTRODUCTION.

There is no event in the history of America that should be celebrated by the people of Iowa with more fervor than the transfer of the territory which now comprises the State, from France to the United States. There is no day that should be remembered with deeper patriotic gratitude by the citizens of this commonwealth than the day upon which the flag of the Republic supplanted the flag of the Empire. Let us not forget that it is through this event that we must trace our title to the immortal rights and dignities of the Declaration of Independence, to the glories of the War of the Revolution, and to the priceless heritage of the Constitution. The day is not only significant to Iowa, but to the country and the world. The Nation has marched with mighty strides toward leadership in all the affairs of the earth. Who can say where we would have been in the race of progress had the Mississippi river continued to be our western boundary? The men of 1803 builded better than they knew, for the Providence that works with steady purpose for the good of humanity inspired their course. The recognition year by year of this vital day in the history of the land can but make us worthier of the unequalled privileges we enjoy.

ALBERT B. CUMMINS,
Governor of Iowa.

Des Moines, Oct. 1, 1903.

STATE OF IOWA
DEPARTMENT OF PUBLIC INSTRUCTION
DES MOINES

TO THE TEACHERS OF IOWA:

The department of public instruction in preparing this leaflet aims to awaken a greater interest in the history of Iowa and her institutions, and of the Louisiana Territory, its discoverers, explorers, early settlers, and resources, and to call the attention of the citizens of our state to the LOUISIANA PURCHASE EXPOSITION to be held in St. Louis in 1904.

In part our object will have been attained if this little publication serves to incite further study—not only in libraries, but in newspapers and magazines and in public addresses from the pulpit and platform—of the great underlying principles of self-government.

While the teacher should at all times teach the principles of true citizenship he may frequently with beneficial results have special day exercises, and with enthusiasm kindle in the minds of his pupils, consideration of the public good, the welfare of the nation, and the interests of mankind.

It has been deemed appropriate to designate Friday, December 18th (the 20th being Sunday), as Louisiana Purchase Flag Day for the schools. On the latter date at New Orleans in 1803 the Spanish government of Louisiana surrendered the province to the Commissioner of France, who immediately transferred it to the government of the United States, which assumed formal sovereignty and raised the American flag.

That the teachers of the state of Iowa will prepare suitable exercises commemorating the centennial anniversary of this, one of the very greatest events in the history of the Republic, is a fond hope and an earnest desire.

Grateful acknowledgment is due to all who have contributed to the text, and to the Iowa Commission Louisiana Purchase Exposition and its officers.

RICHARD C. BARRETT,
Superintendent Public Instruction.

October 1, 1903.

LOUISIANA PURCHASE FLAG DAY.

December 20, 1803—1903.

TUNE: "Maryland, My Maryland."

The *Century Bell* is pealing now,
With one accord the nations bow,
To greet the glorious Middle West,
In triune colors gaily drest:
O'er Louisiana's broad domain,
One chorus floats, with glad refrain:—
Behold what blessings God hath wrought,
On valley with rare treasure fraught.

Where brave explorers led the way,
The "Prairie Mayflower"¹ came to stay;
O giant souls, those pioneers!
With noble women—worthy peers:
Their bold endeavor cleft the wood,
Fair cities rose, where forests stood;
And deserts blossomed far and wide,
When arts of industry were plied.

From Mississippi's boundary line,
Where patriot deeds the soil enshrine,
To heights the snow-clad peaks above,
There proudly rose the Flag we love:
And still the Star of Empire led,
Where mountain springs the valleys fed,
And cry of gold lured hundreds on,
Till lo! the continent was won.

Thou heart of Freedom's cherished land,
Republic, girt by ocean strand;
Thy Horn of Plenty carries store,
For new world marts, and distant shore:
But most thy praise we chant today,
For learning's wise and helpful sway;
Columbia opes her lavish hands—
On many a hill, the *School House* stands.

Now, century old, and world renowned,
Thy car of Progress onward bound;
Let Sister States fond tribute pay—
On Louisiana Purchase Day:
And Iowa,—the banner state,²
That sprang to freedom's cause elate,
Her teeming borders river prest,
Of all that's good affords the best.

—ADDIE B. BILLINGTON,
DES MOINES, IOWA.

NOTE—1. The emigrant wagon has been called the *Prairie Mayflower*.
2. Iowa was the first free state carved from the Louisiana Purchase.

IOWA COMMISSION LOUISIANA PURCHASE EXPOSITION.



MEMBERS AND OFFICERS.

- | | |
|---|--|
| 1. Will C. Whiting, Whiting. | 8. F. R. Conaway, Secretary, Des Moines. |
| 2. C. J. A. Ericson, Boone. | 9. Thomas Uptegraff, McGregor. |
| 3. S. S. Carruthers, Bloomfield. | 10. W. F. Harriman, Vice-Pres., Hampton. |
| 4. S. Bailey, Mount Ayr. | 11. W. W. Wittmer, Des Moines. |
| 5. LeRoy A. Palmer, Mount Pleasant. | 12. W. T. Shepherd, Harlan. |
| 6. S. M. Leach, Treasurer, Adel. | 13. J. H. Trowin, Cedar Rapids. |
| 7. William Larrabee, President, Clermont. | 14. George M. Curtis, Clinton. |

EDUCATION A LEADING FEATURE.

President Butler, of Columbia University, returning to New York from St. Louis, declared the Louisiana Purchase Exposition would be the first to make proper provisions for educational features, and that it would be the first exposition with a thoroughly educational rather than a commercial tone.

SELECTION OF THE IOWA SITE.

The southeastern section of the grounds of the Louisiana Purchase Exposition at St. Louis, on a plateau rising seventy-five feet above the main exposition grounds, beautifully shaded with large trees, has been set aside for the state buildings. Beginning September 29th, and ending October 4th, 1902, there gathered at St. Louis state officers and commissioners from twenty-six states to receive the sites allotted.

In presenting the staff and banner marking the site for the Iowa building, President David R. Francis, of the exposition, in an impressive and eloquent address, praised the state which had given to the nation some of its ablest counselors, praised the state for its wonderful resources in agriculture, its development of its minerals, with its wonderful manufacturing possibilities, and above all, her public school system. He named Iowa the "Prairie Queen," and hoped that a greater fraternal feeling would be established because of the renewed friendships which would be acquired on account of the exposition commemorating the great event of the purchase of the Louisiana territory.

In his response, accepting the flag and site, former Governor William Larrabee, President of the Iowa Commission for the Louisiana Purchase Exposition, said:

Mr. President, Ladies and Gentlemen: The people of Iowa understand well the magnitude of your undertaking. They understand also equally well the great results that will follow the success of it. They have confidence in the management, and on behalf of our people and the commission that represents them, I accept this site, this beautiful site, with much pleasure indeed. We intend to make a home here, and have a large family domicile in 1904. I will give you all, and make it a standing invitation to visit us. The latch-string will be out. It is hardly necessary to say anything for Iowa. In fact I am embarrassed, Mr. President, by the praise from you and from others here this morning, but I know that you would be disappointed not to hear from this young "Prairie Queen" of the West, and I now have the pleasure of introducing to you Hon. L. A. Palmer, who will express to you the high appreciation and deep gratitude that we owe you.

INFLUENCE OF PUBLIC SCHOOLS.

Hon. Leroy A. Palmer, a member of the Iowa Commission, in his response said in part:

Iowa bases her faith in her future upon her public school—her public school, that great leveler of class distinction! It knows no color line—it knows no line of servitude—it knows no line of unfortunate birth; it knows no line of rich and poor; of employer and employe. In that atmosphere of democratic equality there is no labor problem—no antagonism between capital and labor—no strife of classes.

Iowa's great democratic opportunity for the citizen begins in the common school. And as Iowa is a great republican commonwealth, in the highest and loftiest meaning of that term, so her common schools are so many nurseries of vital, permeating democracy—democracy of association—which alone can make a true republicanism enduring, and class distinction impossible. Yes, Mr. President, Iowa will join in friendly rivalry with her sisters and lend her co-operative aid. She will second every effort of your local and national board to make the time of this exposition one of the red-letter days of the Republic.

IOWA.

Iowa stands next to the top in the literacy of its population, 99.63 per cent of those from ten to fourteen years being able to read and write in 1900, although there was no compulsory attendance law prior to 1902. In 1902 it expended \$9,556,890 on its schools, there being 18,513 school rooms with 22,708 teachers holding certificates. Schoolhouses are valued at \$18,989,923. The enrollment of children in the public schools in 1902 reached 560,173. The public school libraries contain 554,110 volumes, an increase of more than 200,000 in two years. The average length of school term is one hundred and sixty days. There has been a liberal increase in the wages of teachers during the school year of 1902 and 1903. About one-third of the schools are located in towns and cities and two-thirds in the country. There is one state and several private normal schools. In 1902 the state normal school had twenty-eight professors and twenty-eight other teachers, with 2,065 students. Under a law passed in 1902 sixteen private schools have become accredited for the training of teachers under state supervision. For higher education there are about two hundred public high schools and a number of private academies, no considerable district being without one. Though each is a law unto itself, yet the courses of study pursued are of high standard and generally quite uniform throughout the state. The state university, the head of the public school

system, is at Iowa City, the former capital, with law, medical, dental and other colleges. In 1902 it had forty-eight professors one hundred and eleven other teachers, and 1,512 students. There is also a state college of agriculture and mechanic arts, located at Ames. This institution in 1902 had thirty-two professors, forty-three other teachers, and 1,480 students. In 1902 a memorial university, at present a military academy, was opened at Mason City by the Sons of Veterans. Connected with certain of the public secondary schools there are twenty training classes for teachers.

Among the private schools of the state there are sixteen business colleges and twenty-six academies. Under the auspices of the Roman Catholic church there are in the state twenty-five schools for higher education (academies and colleges), with an attendance of 4,040 pupils, three normal schools, one hundred and sixty-seven parish schools, with an attendance of 22,529 pupils.

Iowa was one of the first states to pass a township school law. The laws enable the cities and towns to provide the best school facilities.

The state has 228,622 farms valued at \$865,000,000. Of the total number of farms 148,886 are operated by owners. Farm buildings are worth \$240,802,810. The agricultural products are annually worth \$400,000,000. The total number of men engaged in agricultural pursuits is 370,957. The total number of cattle in 1900 was 5,367,630, and the total value of the same was \$142,518,902. There are 9,485 miles of railway. These roads employ 40,636 men at an annual compensation of \$23,115,095. There are 14,819 manufacturing establishments employing 58,553 employes. The annual output from the same is valued at \$164,617,877. The coal mines of the state employed 13,192 men for the year 1902-1903, and produced 6,185,734 tons.

In the main, state officers are chosen for a term of two years by the qualified electors. Justices of the supreme court are elected for a term of six years and railroad commissioners for three years.

The state has an area of 56,025 square miles and a population of 2,231,853. The capital is Des Moines.

IOWA A CHILD OF THE LOUISIANA PURCHASE.

At the close of the French and Indian war France yielded up all her claims to territories on the mainland in North America, excepting the city of New Orleans, ceding all east of the Mississippi to England and all west to Spain.

In 1800, Spain, by a secret treaty, restored to France the territory of Louisiana.

In 1803 the United States purchased the Louisiana territory of France for \$15,000,000.

In 1804 President Jefferson sent an exploring party, under Lewis and Clark, to the head waters of the Missouri, and thence across to the Pacific.

The Iowa country had a constitutional status in the Province of Louisiana in 1803. In 1804 it formed a part of the District of Louisiana. In 1805 it remained a part of that district known as the Territory of Louisiana. In 1812 it was included in the newly created Territory of Missouri. In 1834 it was united with the Territory of Michigan. From 1834 to 1836 the whole Iowa country was known as the counties of Dubuque and Des Moines, under the territorial supervision of Wisconsin. In 1838 the Territory of Wisconsin was divided, and that portion west of the Mississippi was established as the TERRITORY OF IOWA.

The territorial epoch of Iowa, which really began in 1836 when the Territory of Wisconsin was established—including the Iowa country—came to a close in 1846.

The STATE OF IOWA was organized and admitted into the Union December 28, 1846. Iowa was the first free state formed out of the Louisiana purchase.

In 1902 the Governor of Iowa named December 20—Louisiana Purchase—"Flag Day." The Iowa Commission fixed on June 16 and 17 as Iowa Days at the Louisiana Purchase Exposition. These dates commemorate the two hundred and thirty-first anniversary of the discovery of Iowa by Marquette and Joliet.

PIONEERS.

They rise to mastery of wind and snow;
They go like soldiers grimly into strife
To colonize the plain. They plough and sow,
And fertilize the sod with their own life,
As did the Indian and the buffalo.

—HAMLIN GARLAND.

TOPICS FOR STUDY.

Give an outline sketch of the life of Julien Dubuque. Write a description of the city that bears his name. Mention states in the Louisiana Purchase that have names of Indian derivation. What cities within this tract are named after historic personages? Give a list of Indian names in Iowa; counties, cities, streams.

BIOGRAPHICAL SUBJECTS.

De Soto,	Joliet,	Carver,	Kearney,
La Salle,	Marquette,	Scott,	Benton,
Lewis,	Clark,	Lincoln,	Grant,
Iberville,	Fremont,	John Brown,	Sherman,
Pike,	Long,	Kit Carson,	Burr.

INDIAN TRIBES ON IOWA SOIL.

Moingonas,	Illinois,	Pottawattamies,	Missourias,
Iowas,	Sacs,	Musquakies,	Winnebagoes,
Dakotas,	Foxes,	Tamas,	Omahas.
Sioux,	Algonquins,	Ottoes,	Osages

NATIVE GAME AND FOWL.

Bear,	Elk,	Quail,
Bison,	Deer,	Grouse,
Buffalo,	Goat,	Prairie Chicken,
Antelope,	Coyote,	Wild Geese.

NATURAL WONDERS IN MIDDLE WEST.

Falls of St. Anthony.	Black Hills.
Yellowstone Park.	Hot Springs.

NOTABLE WORKS OF MAN IN MIDDLE WEST.

Union Pacific Railway.	Eads' Jetties.
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EXPOSITIONS ARE THE TIME-KEEPERS OF PROGRESS. THEY RECORD THE WORLD'S ADVANCEMENT. * * * At the beginning of the nineteenth century there was not a mile of steam railroad on the globe. Now there are enough miles to make its circuit many times. Then there was not a line of electric telegraph; now we have a vast mileage traversing all lands and all seas. God and man have linked the nations together. No nation can longer be indifferent to any other. And as we are brought more and more in touch with each other, the less occasion is there for misunderstandings, and the stronger the disposition, when we have differences, to adjust them in the court of arbitration, which is the noblest forum for the settlement of international disputes.—President McKinley's last address.

IOWA LEADS IN STOCK GROWING.

Extracts from an address by Hon. W. F. Harriman:

Iowa farmers and stock growers are the possessors of more fine herds than any other state or nation. They are liberal purchasers, as well as liberal sellers, of the best stock in the world.

The value of domestic animals in Iowa exceeds that of any other state in the Union, and constitutes more than one-eleventh of the total value of domestic animals in all the states and territories. The total value for all the states and territories being \$2,981,722,945, and that of Iowa \$278,830,096.

No other state in the Union has so large a number of acres in farms, nor has any other state so many acres of improved land as Iowa.

It is natural and proper that we extol the virtues and importance of our own homes and our beloved state. While we love Iowa best of all, we are not unmindful of the attainments and importance of our neighbor states.

IOWA.

Midland, where mighty torrents run,
Of placid brow and modest mien,
With glowing bosom to the sun,
Sits the majestic Prairie Queen.
Imperial rivers kiss her feet,
The free winds through her tresses blow,
Her breath with unsown flowers is sweet,
Her cheeks are flushed with Morning glow.
Grand in her beauty what cares she
For jeweled cliffs, and rills of gold,
For seats along the sounding sea,
And storied monuments of old?
Her hands are strong, her fame secure,
Her praise on lips whose praise is dear,
Her heart and hope and purpose pure,
And God in all her landscapes near.
Aye, splendid in her ample lap,
Are annual harvests heaped sublime;
Earth bears not, on her proudest map,
A fatter soil, a fairer clime.
How sing her billowy seas of grain!
How laugh her fruits on vine and tree!
How glad her homes, in Plenty's reign,
Where Love is Lord and Worship free!
Land of the generous heart and brave!
Thy hosts leaped in the fiercest fray,
When bled the noblest sons to save
Our mighty realm for Freedom's sway.
Thy children know where honor lies,
The deeds that greatness consecrates,
And on their stalwart virtues rise
The pillars of the peerless State.

—HORATIO N. POWERS.

SUGGESTIVE THOUGHT TOPICS.

BY FREEMAN R. CONAWAY,

Secretary Iowa Commission Louisiana Purchase Exposition.

To what nations of Europe did the Louisiana Territory belong?

When were the transfers made?

October 28, 1768, before independence was declared by the American colonies, a republic was established in the Louisiana Territory; give the reasons for its failure.

Give principal events in the history of Iowa.

Names of State officers.

Judges of the Supreme Court.

United States Senators and Representatives from Iowa.

Name county seats of the State.

Number of square miles and number of acres in the State.

Principal products.

Mineral resources and industries, and where produced and located.

Number of schools, school buildings, colleges, and where located.

Amount of funds for educational purposes per year.

State institutions and their location.

Principal cities, population with principal industries.

Number of daily and weekly newspapers and total number of publications.

Railroads in Iowa and their mileage.

Congressional districts, giving counties comprising same.

Prominent rivers.

A BIT OF IOWA HISTORY.

From Governor Stephen Hempstead's message to the General Assembly, Iowa City, December 8, 1854:

In July last I received information from the counties of Cerro Gordo, Floyd, Bremer, Chickasaw, Franklin and others, that a large body of Indians, well armed and equipped, had made demonstration of hostilities by fortifying themselves in various places, killing stock and plundering houses, and that many of the inhabitants had entirely forsaken their homes and left a large portion of their property at the mercy of the enemy; praying that a military force might be sent to protect them and their settlements. Upon the reception of this information, an order was immediately issued to Gen. John G. Shields, directing him to call out the City Guards of Dubuque, and such other force as might be necessary, not exceeding two companies, to remove the Indians from the State. This order was promptly obeyed, and the company was ready for service, when information was received that the Indians had dispersed—that the citizens were returning to their homes, and quiet had been restored.

MIDWAY ON THE TRAIL.

O those days! They come and come
Like thronging songs both sweet and sad.
Days on the Dakota plain, in spring
When the sod is green and velvet smooth,
Days on the mountains alone with the eagles.
Days on the Mississippi, feeling the jar and throb
Of the engine's splendid beam.

The sunrise blooms again
On the glorious Dakota sod.
I plant my stake on untracked land,
Thrilled with the wonder and marvel of it.
I hear the gobble of weary geese at sunset,
As they pass close to earth, hungry and timid.
I hear once more the jovial shout
Of jubilant landseeker, and see
The cranes dancing in shadowy row
Beside the shallow pool.
Over me the stars bloom out,
And on my blanket falls the frost
Of the clear midnight.

I walk behind the seeder on the mellow sod
Of Iowan prairies, warm with sun.
Around and over me goes the northward flight
Of million of water-fowl; gopher's whistle;
I trace the awful circle of the calling crane
Circling the sun in his flight. I hear
The chorus of the prairie chicken.
I toil on in the red sunset.
Harvest days follow.
The flaming sun rides high
Above the gentle moving fields of wheat
Stretching to the sky's dim circling rim.

September comes,
And with it a roaring wind, hot and dry,
A magnetic, splendid southern wind.
Stacks of grain arise like plants of sudden growth,
The corn grows sere and dry, the air
Is full of smell of ripening grain, the moon
Is like a silver boat in sapphire seas.
I walk behind the plow on still
October days when the frost melts slowly
From the shadowed leaves.
The skies grow gray with snow
And winter comes.

Snow!

I ride behind a swift young horse
Beneath broad Iowan oaks; the bells
Make the clear night musical, the sky,
Low-hung, splendid, is frosty with stars,
And the moon sails on in silence;
Her wake of light lies on the crusted snow,
But she sails on and on beyond the skies,
Beyond the land of youth and love,
Into the land of mystery
Beyond the farthest West.

—HAMLIN GARLAND, an Iowa author.

EASTERN IOWA—1818.

The Mississippi is generally from three-fourths of a mile to three miles wide, interspersed with numerous islands clothed with the richest growth of timber, but subject to inundation. The river is at no time so low as not to afford water sufficient to float crafts drawing four feet of water. There are two rapids in the river, but neither of them materially obstructs navigation. About ninety miles from Prairie du Chien, and seven miles from the west side of the Mississippi, is a lead mine which is worked by the Fox Indians. The women dig the ore, carry it to the river where they have furnaces, and smelt it. The mine is called De Buke's, and is very rich and productive. The Indians have lately discovered another in the vicinity, only four feet below the surface and said to be rich. So deeply rooted is the jealousy of the Indians, that they allow no trader to build his hut on the side of the river in the vicinity of these mines.

The first tribe of Indians after leaving St. Louis is the Ojibwayes (Ioways). This tribe live about one hundred miles from the west side of the Mississippi on the Menomonee (Des Moines) and have about four hundred warriors. The next tribe are the Sauks, who live on the Mississippi, and about four hundred miles above St. Louis. They emigrated from the Ouisconsin about thirty-five years ago (1783). Their military strength is about eight hundred warriors, exclusive of old men and boys, divided into two divisions of four hundred men. Each division is commanded by a war chief. The first are those most distinguished for deeds of valor; the second the ordinary warriors. They have also two village chiefs who appear to preside over the civil concerns of the nation.

The next tribe is the Fox Indians. This tribe have a few lodges on the east side of the Mississippi near Fort Armstrong, and about four miles from the Sauk village. At the mine De Buke they have another village and another on Turkey river, thirty miles below Prairie du Chien. Their whole military strength is about four hundred warriors. They are at this time in a state of war with the Sioux; and as the Sauks are in strict amity with the Fox Indians, and have the influence and control of them, they are also drawn into the war. This was in consequence of depredations committed by the Fox Indians on the Sioux.—EDWARD TANNER, IN ANNALS OF IOWA.

THE PIONEERS.

I love the man of nerve, who dares to do;—
The moral hero, stalwart through and through,
Who treads the untried path, evades the rut,
And in a forest clearing builds a hut;
Removes the tares encumbering the soil,
And founds an empire based on thought and toil.

Within his veins the blood of humble birth,
His purpose stable as the rock-bound earth,
His mind expansive and his pulsing brain
Resolving problems not of selfish gain;
This man will never servile bend his knees;—
He feels the uplift of the centuries.

Leviathans for him forsake the main,
And monsters leave the forest and the plain;
The future holds no terrors for his soul,
No avarice collects its robber toll;
No social caste; no parties, clubs nor creeds
To multiply his cares, increase his needs.

With wants but few, no Pioneer will crave
A crown in life nor flowers on his grave.
He leaves behind the slavery of style,
The myrmidons of pride, deceit and guile,
Enlisting with the cohorts of the free,
The motto on his shield is "Liberty."

What cares he for the monarch's jeweled crown?
For prince or plutocrat, for fame's renown?
The turmoil and the strife of endless greed
When honest toil supplies each simple need?
He seeks not glory, yet the future years
Weave all their laurels for the Pioneers.

And well they may! To them alone is due
The march of progress since the world was new.
They have explored the boundless realm of mind
And left their choicest blessings for mankind.
The realm of matter bears, in every clime,
Their works substantial as enduring time.

Then let me, once for all, propose this toast:
"Here's to those men of all we love the most—
Those living for the future, not the past,
Surmounting obstacles however vast!"
And so, through joys and sorrows, smiles and tears,
I say, "God bless the sturdy Pioneers."

—G. F. RINEHART, Newton, Iowa.

THE LOUISIANA PURCHASE.

HON. JOHN F. LACKY.

(Adapted.)

God has guided the settlement of this country. When Columbus started on his venturesome voyage he firmly resolved to sail due west and under no circumstances to change his direction, but the flight of flocks of parrots to the southwest led his seamen to appeal to the Admiral to follow the birds. He finally yielded, and landed in the West Indies instead of upon the coast of Georgia or North Carolina, thus reserving the United States for English occupation.

Columbus, by changing his course, caused the settlement of the West Indies, Mexico, and South America by the Spanish people instead of the territory now occupied by the original thirteen colonies of the United States. The Spanish people turned aside, and a different people, with different languages and aspirations, laid the foundations of our present great republic.

The mighty Mississippi flows over the remains of De Soto. The French pioneers of Canada heard of the great stream near its course. LaSalle, Marquette, Joliet, Hennepin and DeTouty have written their names upon the map of the future center of the world's civilization. Following the river in its majestic course to the Gulf, there the French missionary voyagers raised the cross of Jesus and the flag of France, and took possession in the name of their King and called the land Louisiana.

In 1682 the flag of France was raised, in 1699 the first settlement was made near the Gulf. The French ceded the land to Spain in 1762. In the treaty of San Ildefonso, October 1, 1800, Spain again transferred it back to France, though the flag of Spain still floated over the various posts.

When Bonaparte became the First Consul and dictator of France, war with Great Britain had become unavoidable. Our minister at Paris, Mr. R. R. Livingston, opened up negotiations to secure the navigation of the river and the title to the land near the mouth of the stream. He especially desired to purchase New Orleans. Mr. Jefferson, however, wanted Florida as well as the mouth of the river. Spain was still in possession and the time seemed ripe for a treaty. The phenomenal and prophetic mind of the young Napoleon alone seemed to comprehend the possibilities of such a treaty. James Monroe was sent as a special envoy to act with Mr. Livingston, and they were authorized to buy New Orleans, the mouth of the river, and Florida for \$2,000,000. Napoleon promptly placed the whole negotiation with Marbois, his minister of finance. Marbois had been in the United States and had acquired the most priceless of all treasures, an American wife, and the affair was in friendly hands.

Napoleon knew how untenable this country was for him as against England, the mistress of the sea. He needed money, and so he fixed his terms and startled the American commissioners by the magnitude of the transaction.

Fortunately, there was no Atlantic cable or steamship line, and the responsibility had to be assumed without further instructions, and the future author of the Monroe Doctrine was there, ready, willing, and brave enough to take the responsibility.



MAP OF LOUISIANA PURCHASE.

LOUISIANA ACQUIRED BY SETTLERS.

ROOSEVELT

Americans would have won Louisiana in any event, even if the treaty of Livingston and Monroe had not been signed. The real history of the acquisition must tell of the great westward movement begun in 1769, and not merely of the feeble diplomacy of Jefferson's administration. In 1802 American settlers were already clustered here and there on the eastern fringe of the vast region which then went by the name of Louisiana. All the stalwart freemen who had made their rude clearings, and built their rude towns, on the hither side of the mighty Mississippi, were straining with eager desire against the forces which withheld them from seizing, with strong hand, the coveted province. They did not themselves know, and far less did the public men of the day realize, the full import and meaning of the conquest upon which they were about to enter. For the moment the navigation of the mouth of the Mississippi seemed to them of the first importance. Even the frontiersmen themselves put second to this the right to people the vast continent which lay between the Pacific and the Mississippi. * * * The winning of Louisiana was due to no one man, and least of all to any statesman or set of statesmen. It followed inevitably upon the great westward thrust of the settler-folk; a thrust which was delivered blindly, but which no rival race could parry, until it was stopped by the ocean itself. * * * The fate of Louisiana was already fixed. It was not the diplomats who decided its destiny, but the settlers of the Western states. * * * The steady Westward movement of the Americans was the all important factor in determining the ultimate ownership of New Orleans. Livingston, the American minister, saw plainly the inevitable outcome of the struggle. In the end Louisiana was certain to fall into the grasp of the United States.

WHITE MEN MEET "MR. BEAR."

LEWIS AND CLARK EXPEDITION, 1804.

One day six good hunters attacked a grizzly, and four firing at forty paces, each lodged a ball in the body, two going through the lungs. The animal ran at them furiously, when the other hunters fired two balls into him, breaking a shoulder. The bear yet pursued them, driving two into a canoe and the others into thickets, from which they fired as fast as they could reload. Turning on them, he drove two so closely that they dropped their guns and sprang from a precipice twenty feet high into the river followed by the bear, who finally succumbed to a shot through the head after eight balls had passed completely through his body.

ACQUISITION OF LOUISIANA.

Told in simple story in Drake's
"The Making of the Great West."

In 1800 Napoleon had come to the head of the French nation. Ambition to restore the ancient sovereignty of France over Louisiana led him to propose to Spain the exchange of Tuscany for it. Spain accepted the offer, and in 1800-1801 treaties of cession were signed, but not made public, because war with England was probable. Therefore, for the present, Spain kept possession of Louisiana in trust for France.

Suddenly, without previous notice, the Spanish intendant at New Orleans revoked the right of deposit.* This act shut the only door by which the people of Ohio, Kentucky and Illinois could get to the sea. It exasperated them to such a point that they begged the General Government to drive the Spaniards out of the Mississippi.

In Thomas Jefferson the people of the West found a more sagacious advocate. The cession could not long remain a secret. It was soon known in the United States, but instead of calming the people, the change of masters revived their fears, since it was felt that Napoleon, whose exploits filled Europe with alarm, would prove more difficult to deal with than Spain, whom nobody feared.

Our minister, Livingston, a very able man, was told to bring the Louisiana question to Napoleon's attention, and to do it in such a way as to leave no doubt in his mind that the United States could not remain an idle looker-on while New Orleans was being bought and sold.

Mr. Livingston did not stop with the suggestion to sell New Orleans to us. He went farther, and proposed the cession of all Louisiana above the Arkansas and east of the Mississippi. He did it with true republican frankness, never hesitating to press home upon Napoleon's advisers the dilemma which the possession of Louisiana must offer to their choice. "What will you do with Louisiana? Would you have England wrest it from you? Do you wish to force the United States into joining with England, against you?"

France was on the eve of war with England. But for this we should hardly have had Louisiana so easily. Napoleon wanted money. He foresaw that no foreign power could long hold the mouth of the Mississippi, and have peace with those states. He declared for the sale of Louisiana, outright, in these words: "I will not keep a possession which would not be safe in our hands, which would embroil our people with the Americans, or produce a coldness between us. I will make use of it, on the contrary, to attach them to me, and embroil them with the English, and raise up against the latter, enemies who will some day avenge us."

Napoleon would not even wait for Mr. Monroe to arrive, after making up his mind, but sent at once for Mr. Livingston, and opened the matter with him on the spot. When Mr. Monroe came, with powers from congress to treat for the cession of New Orleans and the Floridas only, Napoleon surprised him with this master-stroke of policy which not even Mr. Jefferson had foreseen. And thus a treaty for the whole of Louisiana was concluded.

(Treaty signed April 30, 1803. Sent to United States May 13. Ratified October 21. Formal sovereignty assumed December 20, 1803.)

The price agreed upon was eighty million francs (twenty million dollars). Of this sum sixty were to be paid in money. The remaining twenty were to be retained by the United States as indemnity for damage done to our commerce under the orders of the Directory. The principle was now laid down, that free ships make free goods. When they had signed the treaty, the commissioners arose and shook each other's hands. "We have lived long," said Livingston,† "but this is the noblest work of our lives."

* The landing and storing of merchandise, going to foreign markets, until such time as it could be put on board ship.

† Livingston, Robert R., one of the framers of the "Declaration," deserves the name of the author of the Louisiana Purchase.

ARMY OF THE CORN.

All summer long the army stands
In ranks erect and clean,
The garrison of level lands
And of the hills between.
The Armies of the Wind and Rain
Come shouting to the fight;
Alert upon the spreading plain
The corn waits in its might.

It flaunts its tasseled banners high;
And beats each swaying shield,
Until the summer's battle cry
Is chorused from the field.
Victorious and sturdy still
It rises from the fray,
And rustling chants of gladness fill
The long hours of the day.

The dawn's first tender, rosy blush—
The hailing of the morn—
Finds shrouded in a peaceful hush,
The Army of the Corn.
But friendly breezes come and go
Till dying afternoon
Hears faintly sighing, soft and low,
The echo of a croon.

And so, serene and bold and brave,
All through the summer long
The gleaming banners proudly wave
In cadence with the song.
Until the golden autumn morn
When there will come to spoil
The standing Army of the Corn,
The hopeful Troop of Toil,

—St. Louis Globe-Democrat.

WESTWARD HO!

What strength! what strife! what rude unrest!
 What shocks! what half-shaped armies met!
 A mighty nation moving west,
 With all its steely sinews set
 Against the living forests. Hear
 The shouts, the shots of pioneer,
 The rended forests, rolling wheels,
 As if some half-checked army reels.
 Recoils, redoubles, comes again,
 Loud-sounding like a hurricane.

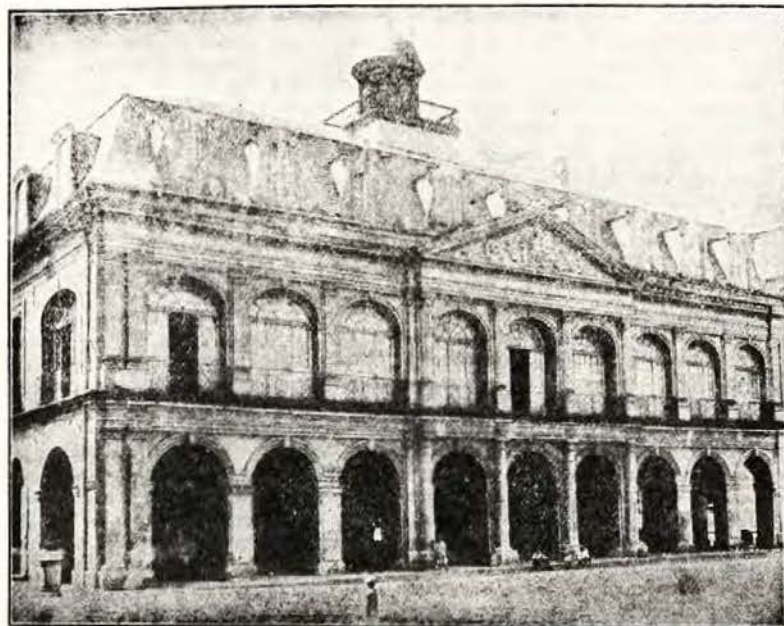
—JOAQUIN MILLER.

"The great trouble with pioneering is that it never lasts."

THE SETTLER.

His echoing axe the settler swung
 Amid the sea-like solitude,
 And rushing, thundering, down were flung
 The Titans of the wood:—
 Rude was the garb and strong the frame
 Of him who plied his ceaseless toil:
 To form that garb, the wildwood game
 Contributed their spoil;
 His roof adorned a lovely spot,
 'Mid the black logs green glowed the grain,
 And herbs and plants the woods knew not
 Throve in the sun and rain.
 The violet sprang at spring's first tinge,
 The rose of summer spread its glow,
 The maize hung on its autumn fringe,
 Rude winter brought its snow;
 And still the settler labored there,
 His shout and whistle woke the air,
 As cheerily he plied
 His garden spade, or drove his share
 Along the hillock's side.
 His gaunt hound yelled, his rifle flashed,
 The grim bear hurled its savage growl,
 In blood and foam the panther gnashed
 Its fangs, with dying howl.
 The fleet deer ceased its flying bound,
 The snarling wolf-foe bit the ground,
 The beaver sank beneath the wound,
 Its pond-built Venice nigh.

—ALFRED BILLINGS STREET.



THE CABILDO,

in which took place at New Orleans, the transfer of the Louisiana Territory from France to the United States, December 20, 1803. The Louisiana State Building at the World's Fair will be a replica of this historic structure.

DISCOVERY OF THE UPPER MISSISSIPPI.

1680.

EXPEDITION SENT OUT BY LA SALLE.

For six weeks the explorers plied their paddles against the current of the Mississippi unmolested. One day when they had drawn their canoe on shore to repair it, the Frenchmen were suddenly surrounded by a war party of Sioux, the very people of all others whom they most wished to avoid.

In a moment the whites were made prisoners. The scowling looks and threatening gestures of their captors boded them no good. Hennepin proffered the peace-pipe. It was snatched from his hand. When he began muttering prayers aloud, the Indians angrily signed to him to be silent, thinking he was preparing some charm to overpower them with, but they let him chant the same prayers, he says, thinking there could be no sorcery or medicine in song.

In nineteen days the party landed near the site of St. Paul. From here the trail was struck leading to the Sioux villages. Here the prisoners were separated, Hennepin going to an aged chief, who adopted him as his own son. In the following summer, when the Sioux went on their annual buffalo hunt, they took the three Frenchmen along with them. La Salle had promised to send word of himself to them at the mouth of the Wisconsin, and they knew he would not fail them. Telling the Sioux their friends were coming, loaded with gifts, the greedy Sioux were easily induced to let Hennepin and one other go down the river to meet them alone and unguarded. One Frenchman remained behind with the Sioux as a hostage for the others.

The two whites began their descent of the river, carrying their canoe around the Falls of St. Anthony, to which Father Hennepin gave this name, until, after many adventures, Lake Pepin was reached. To their consternation, the travelers were overtaken at this point by a party of Sioux who had followed their prisoners so closely as hardly to lose sight of them, and now pushed on ahead to the Wisconsin. Finding neither traders nor goods there, the Sioux paddled back again, and the unlucky white men were forced to turn about and go back again as they came.

After some longer stay among the Sioux, the captives were found by some French traders who ransomed them out of the hands of the savages.

At the head of the rescuing party was one Du Lhut, or Duluth, for whom the City of Duluth is named, as Lake Pepin is also said to have been named for another of this party. Thus, in St. Anthony's Falls, Lake Pepin and Duluth we have a group of names commemorating the men of La Salle's exploring party, as well as the exploration itself.

—SAMUEL ADAMS DRAKE.—Making of the Great West.

Flag exercises may be given, with twelve girls wearing crowns to represent the twelve states of the Louisiana Purchase. Two girls, uncrowned, may represent territories.

RE-DISCOVERY OF THE MISSISSIPPI.

JOLIET, MARQUETTE, FIVE BOATMEN.

On the 17th of June, 1673, they safely entered the long-desired Mississippi "with a joy," writes Marquette, "which I cannot express." They journeyed from Prairie du Chien southward more than a hundred leagues without seeing aught but birds and beasts, and monstrous fishes.

When near the present site of Keokuk, at the mouth of the Des Moines River, on June 25th, they perceived the first signs of man in all this solitude—foot-prints by the river-side, and then a beaten path, which impressed them as leading to some Indian village. * * * Cautiously following the little path in silence across the beautiful prairie and through thickets, they suddenly came in view of an Indian village, picturesquely placed on a river bank, and overlooked by two others on a neighboring hill. Having, as Marquette says, "recommended ourselves to God with all our hearts," and "having implored His help, we passed on undiscovered, and came so near we even heard the Indians talking." They announced themselves by a loud cry. The Indians rushed out of their cabins, and recognizing them as French, sent four of their chief warriors forward. Two chiefs, carrying calumets, or tobacco pipes, elaborately trimmed with various feathers, advanced very slowly and in silence, lifting their calumets as if offering them for the sun to smoke. Marquette, encouraged by their friendly attitude, and still more on seeing that they wore French cloth, broke the silence; to which the Indians answered that they were Illinois, who, in token of peace, presented their pipes to smoke and invited the strangers to their village. Marquette found that in addition to abundant game, the Illinois tribe raised beans, melons, squashes, and Indian corn. Their dishes were of wood, their spoons of the bones of buffalo, their knives, stone, their arms chiefly bows and arrows.

The word "calumet" is due to Marquette. He says: "It now remains for me to speak of the calumet, than which there is nothing among them more mysterious, or more esteemed. It seems to be the god of peace and of war. Carry it about you and show it and you can march fearlessly among enemies, who even in the heat of battle lay down their arms when it is shown. Hence, the Illinois gave me one to serve as my safeguard amid all the nations that I had to pass on my voyage. There is a calumet for peace and one for war, distinguished only by the color of the feathers with which they are adorned, red being the sign of war. They use them also for settling disputes, strengthening alliances, and speaking to strangers. It is made of polished red stone, like marble, so pierced that one end serves to hold the tobacco, while the other is fastened on the stem, which is a stick two feet long, as thick as a common cane, and pierced in the middle; it is ornamented with the head and neck of different birds of beautiful plumage; they also add large feathers of red and green and other colors, with which it is all covered. They esteem it peculiarly, because they regard it as the calumet, or pipe, of the sun; and, in fact, they present it to him to smoke when they wish to obtain calm, or rain, or fair weather.

Leaving the Illinois one afternoon, about the end of June, Joliet, Marquette, and companions, embarked in sight of the whole admiring tribe, and following the river, reached the mouth of the muddy Missouri. They were the first white men who had ever gazed on this mighty stream.

—From *Explorers and Travelers* (Chas. Scribner's Sons).

NORTH AMERICAN INDIANS.

RECITATION.

Not many generations ago, where you now sit, encircled with all that exalts and embellishes civilized life, the rank thistle nodded in the wind, and the wild fox dug his hole unscared. Here, lived and loved another race of beings. Beneath the same sun that rolls over your head, the Indian hunter pursued the panting deer; gazing on the same moon that smiles for you, the Indian lover wooed his dusky mate. Here the wigwam-blaze beamed on the tender and helpless, and the council-fire glared on the wise and daring. Now they dipped their noble limbs in your sedge lakes, and now they paddled the light canoe along your rocky shores. Here, they warred; the echoing whoop, the bloody grapple, the defying death-song, all were here; and when the tiger-strife was over, here curled the smoke of peace.

Here, too, they worshipped; and from many a dark bosom went up a fervent prayer to the Great Spirit. He had not written his laws for them on tables of stone, but he had traced them on the tables of their hearts. The poor child of nature knew not the God of Revelation, but the God of the universe he acknowledged in everything around. —SPRAGUE.

HOW THE INDIANS HUNT BUFFALO.

DIARY OF CAPTAIN LEWIS, 1804.

When the Indians engage in killing buffalo, the hunters mount on horseback and, armed with bows and arrows, encircle the herd and gradually drive it into a plain or open place fit for the movement of the horse; they then ride in among them, and singling out a buffalo, a female being preferred, go as close as possible and wound her with arrows till they think they have given the mortal stroke; when they pursue another till the quiver is exhausted. If, which rarely happens, the wounded buffalo attacks the hunter, he evades the blow by the agility of his horse, which is trained for the combat with great dexterity.

The mode of hunting is to select one of the most active and fleet young men, who is disguised in a buffalo skin round his body. The skin of the head, with the ears and horns, is fastened on his own head in such a way as to deceive the buffalo. Thus dressed he fixes himself at a convenient distance between a herd of buffalo and any of the river precipices. His companions get in the rear and side of the herd, and at a given signal show themselves and advance toward the buffalo. Finding the hunters beside them they run toward the disguised Indian or decoy, who leads them on at full speed toward the river, when suddenly securing himself in some crevice of the cliff, which he had previously fixed on, the herd is left on the brink of the precipice. It is then in vain for the foremost to retreat or even stop; they are pressed on by the hindmost ranks, who, seeing no danger but from the hunters, goad on those before them till the whole are precipitated and the shore is strewn with their dead bodies. Sometimes in this perilous seduction the Indian himself is either trodden under foot or, missing his footing in the cliff, is urged down the precipice by the falling herd.

A NEW IDEAL OF FREEDOM.

PRESIDENT ALBERT B. STORMS,
Of Iowa State College, at Ames.

An extract from an address delivered at Iowa State Fair, 1903.

The opening up of this territory was really due to the aggressiveness, the independence of spirit, the persistence of the Western people in the Mississippi Valley. This Mississippi Valley is indeed an empire. They asked Napoleon for a city, and instead of the city he gave them an empire of 2,540 miles in extent north and south. If you will follow me from the mouth of the Mississippi to the source of the Missouri, you will have traveled 4,000 miles and all within the limits practically of this territory, ceded and called the Louisiana Purchase. If you were to start on an express train from the mouth of the Mississippi and travel one mile a minute, which is more than the average time made by any express train for any considerable length of time, and you travel night and day without stopping for an instant, you would travel all the first night and all the next day, and all the next night and all the next day, and into the forenoon of the third day before you would come to the north limit. It is an immense territory and even we who live within its borders do not understand its immense expanse. It is difficult to grasp it within the comprehension.

Out of this Father of Waters there has sprung a new civilization. We call ourselves Anglo-Saxon and are proud of that fact. The Anglo-Saxons have thus far in human progress met and conquered races, enslaved them, and robbed them, and yet I believe, as some speaker has said, we have always left them richer, happier and freer than they have ever been before. The Anglo-Saxon is the conquering race, and yet I venture to say here in the Mississippi Valley we are developing a new civilization that has in it features unknown to the Anglo-Saxon race in the old country. We have an immense empire in its wealth. I often dwell upon this thought and try to imagine all it contains.

We have created the wealth of this country. It is not the wealth of conquest but has been wrought out by industry and genius; by ingenuity; by improved methods; by the mixing of brains with the soil. Now if I may take a moment in which to say that which comes to me with even more force, it is this. It is time for us not simply to glory over this wealth and the promise of the future but time for us now to ask what Divine Providence probably has in mind in putting these trusts into our hands.

When Morse had completed the first electrical telegraph and the first message was to be sent, he dictated that this should be the message: "Behold what God hath wrought."

And now as we stand in the presence of this immense wealth and the immense opportunity of this day, it behooves us to stop and ask what does God mean?

If Almighty God has a plan and a purpose for men, unless they reverently inquire of Him and then obey, they are likely to find deterioration and then decay in the varied riches which they possess.

One of the things surely that God intends for us I believe is to work out a new ideal of freedom. A new ideal of liberty has been wrought and that ideal is equality of opportunity.

LOUISIANA PURCHASE EXPOSITION.

HON. JAMES H. TREWIN.

* * * The consequences of the acquisition of Louisiana are stupendous and have exerted such an enormous influence over our destiny as a nation that it is most fitting a great commemorative world's fair should be held in the largest city of the region and upon the banks of the mighty river whose free navigation gave rise to the controversy so happily ended by Livingston's unauthorized treaty—the wisest and most audacious act ever done by an American ambassador. * * * This territory has three times the population and many times the wealth of the entire United States at the time of the acquisition. It now teems with a population of over seventeen millions of intelligent, prosperous people, and with its vast areas and resources yet undeveloped, is capable of supporting in comfort many millions more. Besides this, its possession made possible the acquisition of the great Northwest and Texas and California.

The centennial of this great event will be celebrated in a world's fair twice the size of any other ever attempted in any country. Its success is assured by ample funds. The entire cost will be about forty millions of dollars. It will in every respect be an international exposition worthy of the event commemorated. The grounds and buildings are laid out on a larger scale than ever before attempted, covering more than 1,200 acres, and will be surpassingly beautiful. * * *

What part shall Iowa take in this great enterprise? Within her boundaries are 55,000 square miles of the choicest land of the entire Purchase, and two and a quarter millions of as intelligent and progressive people as can be found anywhere. A just state pride should induce every citizen to encourage a proper showing for Iowa. We are first in education, agriculture, stock raising, butter producing, and in many other things we are too modest to mention. Let us maintain supremacy in these and win it in others. Our manufacturing interests should be exploited, and the advantages afforded in Iowa cities and towns for the increase and enlargement of these industries made apparent. We should show the world the excellence of our public and private schools, colleges, universities, churches and other institutions, and that as an abiding place, Iowa has no superior on earth, and thus invite good people to come and help us develop our almost limitless resources and share our prosperity and our many other blessings.

A PRAIRIE FIRE.

These pure skies

Were never stained with village smoke;

The fragrant wind that through them flies,

Is breathed from wastes by plough unbroke.

Alone the fire, when frostwinds were

The heavy herbage of the ground,

Gathers his annual harvest here.

With roaring like the battle's sound

And hurrying flames that sweep the plain,

And smoke-streams gushing up the sky.

—BRYANT.

ST. LOUIS—THE EXPOSITION CITY.

St. Louis was founded by the French in 1764, and named in honor of Louis XV. It lies on the west bank of the Mississippi river, seventeen miles below the point where it receives its great tributary, the Missouri. St. Louis is one of the few very large manufacturing centers of the world, and is an important distributing point for the products of the United States. St. Louis has an area of 62½ square miles or 40,000 acres. The frontage on the Mississippi river is twenty miles. Estimated population, including East St. Louis and suburbs, 800,000, making it fourth in population in the United States. It is besides, the principal gateway of commerce for the great Southwest.

Fifty-three foreign governments have officially announced their participation in the Louisiana Purchase Exposition, and forty-two of them have already made grants for the purpose amounting to \$6,389,650. There were forty-six represented at Chicago, and the aggregate of their expenditures was \$5,763,103.

LINKS IN THE CHRONOLOGICAL CHAIN OF THE CELEBRATION OF THE CENTENNIAL OF THE LOUISIANA PURCHASE.

1889—W. V. Byars in St. Louis Sunday Republic: "If 1776 declared our independence of the world, 1803 achieved it, and the states of the Louisiana Purchase should join in making this Western Centennial the greatest of all."

1896—Hon. David R. Francis, at meeting of the Business Men's League, suggests that St. Louis, as the gateway of the great territory, celebrate the centennial by a great international exposition, second to none ever seen in the world.

1898—Missouri Historical Society recommends a delegate convention.

1899—In response to call issued by Governor Stephens to governors of all states and territories in the Louisiana Purchase territory, fourteen states and territories are represented in convention at St. Louis.

1901—President McKinley appoints a national commission and issues a proclamation giving notice of date of the exposition and invites all nations to participate.

1901—December 20.—Ground-breaking ceremonies on world's fair site in Forest Park, St. Louis.

1902—Sundry civil bill, carrying world's fair appropriation, amounting to \$1,048,000, and providing for postponement of world's fair to 1904, passed Congress and is approved by President Roosevelt.

Louisiana Purchase States and Territories.

STATE	Admitted	HISTORIC NAME	HISTORIC CITY	NICKNAME	STATE FLOWER
Louisiana	1812	LeMoyne D'Iberville...	New Orleans.....	"Creole State".....	Magnolia.
Missouri	1821	La Ciede, 1764.....	St. Louis.....	"Iron State".....	No State Flower.
Arkansas.....	1836	French Settlers.....	Little Rock.....	"Bear State".....	Apple Blossom.
Iowa	1846	Julien Dubuque.....	Dubuque.....	"Hawkeye State"....	Wild Rose.
Minnesota.....	1858	Jonathan Carver....	St. Paul.....	"North Star State"...	Mocassin.
Kansas	1861	Henry Leavenworth...	Leavenworth	"Garden of the West"	Sun Flower.
Nebraska. ..	1867	Philip Kearney.....	Omaha.....	"Blackwater State"...	Golden Rod.
Colorado	1876	Capt. S. H. Long.....	Denver.....	"Centennial State"...	Columbine.
North Dakota.....	1889	Lord Selkirk.....	Mandan, 1804.....	"Sioux State".....	Golden Rod.
South Dakota.....	1889	Iowans.....	Sioux Falls	"Coyote State" and... "Granary of America"	No State Flower.
Montana	1889	Sidney Egerton.....	Fort Union.. ..	"Bonanza State" ..	Bitter Root.
Wyoming	1890	Captain Bonneville....	.....	.....	No State Flower.
Oklahoma.....	.....	Gov. George W. Steele	Guthrie	"Equality State".....	No State Flower.
Indian Territory.....	.....	Creek Indians.....	Old Agency.....	"Cyclone State".....	Mistletoe.

NOTE.—Parts of Alabama and Mississippi were also claimed by the United States as a part of the Louisiana Purchase.

ATTENDANCE AT WORLD'S FAIRS.

CITY IN WHICH HELD.	YEAR.	ATTENDANCE.
London.....	1851	6,000,000
Paris	1867	8,500,000
Philadelphia	1876	10,000,000
Paris	1878	13,000,000
Paris	1889	25,000,000
Chicago.....	1893	28,000,000
Paris	1900	48,200,000

LOUISIANA PURCHASE.

APPROXIMATE 1902.

NAME	POPULATION	AREA IN MILES	TAXABLE WEALTH
Arkansas.....	1,311,564	53,850	\$189,999,050
Colorado	539,700	103,925	430,000,000
Iowa	2,231,853	56,025	2,106,615,620
Kansas	1,470,495	82,080	1,021,833,294
Louisiana.....	1,381,625	48,720	267,723,138
Minnesota	1,751,394	83,365	585,083,328
Missouri	3,106,665	69,415	1,093,091,264
Montana.....	243,329	146,080	153,441,154
Nebraska.....	1,068,539	77,510	171,747,593
North Dakota	319,040	70,795	143,000,000
South Dakota	401,570	77,650	172,225,085
Wyoming.....	92,531	97,890	37,892,303
Indian Territory	391,960	31,400	94,000,000
Oklahoma	398,245	39,030	150,000,000
	14,703,510	1,037,735	\$6,616,642,829

"The taxable wealth above given is approximate only because of variations in the systems of assessments and is in most instances much below actual values." The table is taken from Hosmer's History of the Louisiana Purchase.



KEOKUK—AN EARLY IOWA SETTLER.

CHAPTER VI.

REPORT OF THE STATE BOARD OF EDUCATIONAL EXAMINERS.

STATE DIPLOMAS.
STATE CERTIFICATES.
PRIMARY STATE CERTIFICATES.
SPECIAL STATE CERTIFICATES.
TWO-YEAR STATE CERTIFICATES.
RENEWAL OF STATE CERTIFICATES.
REGISTRATION OF STATE CERTIFICATES.
SUMMARY OF CERTIFICATES ISSUED.
STATEMENT OF FEES AND EXPENSES.
NAMES OF PERSONS LICENSED.

State Certificates and Diplomas, Oct. 1, 1901, to Oct. 1, 1903.

BOARD OF EDUCATIONAL EXAMINERS,

RICHARD C. BARRETT, ex-officio, president, Des Moines.
GEORGE E. MACLEAN, ex-officio, Iowa City.
HOMER H. SEERLEY, ex-officio, Cedar Falls.
HAMLINE H. FREER*, Mt. Vernon.
ALICE BRADRICK ALTONA†, Des Moines.

STATE DIPLOMAS.

I. General Requirements.

1. In every case the applicant must have held a state certificate, and have taught under the supervision of this board at least three years before applying for the state diploma, a life certificate.
2. Every candidate will be required to file the following credentials:
 - a. Documentary evidence from standard reputable educational institutions, certifying to the special scholarship and training of the applicant.
 - b. Documentary evidence showing the standing and ability of the applicant as an educator. This evidence should cover recent work.
 - c. He should also refer to at least three persons of good scholarship and professional success, who are engaged in educational work, and who can vouch for his success and character.
 - d. Credentials should be original, of recent date, of specific character, and addressed "to the state board of educational examiners"

II. Specific Requirements:

1. In his registration blank, the candidate must certify that he has taught or studied all the branches that are required by law for the state diploma.
2. He must give, in detail, the places where he has done educational work, and must produce evidence that he has taught at least eight years, three of which have been in Iowa within recent years.
3. He must be a resident of Iowa at the time of his application.
4. He must file in his own handwriting, an original thesis of from 3,000 to 4,000 words on a professional subject, assigned by the board. In every case this thesis must be fully outlined, and be accompanied by a bibliography of the subject considered.

*Term expired Nov. 26, 1902. Owen J. McManus, Council Bluffs, appointed his successor.

†Term expires 1905.

STATE BOARD OF EDUCATIONAL EXAMINERS



GEO. E. MACLEAN.
OWEN J. McMANUS.

RICHARD C. BARRETT.

HOMER H. SEERLY.
ALICE BRADICK-ALTONA.

5. This thesis will be marked by such persons as the board may designate on the following points:

- a. Correct use of the English language.
- b. Choice and arrangement of subject-matter.
- c. Thought and expression.
- d. Originality and research.
- e. General appearance of the manuscript.

III. Educational Requirements.

In accordance with the statute, candidates for state diplomas are required to be examined in orthography, reading, writing, arithmetic, geography, English grammar, book-keeping, physiology, history of the United States, algebra, botany, natural philosophy, drawing, civil government, constitution and laws of the state, didactics, geometry, trigonometry, chemistry, zoology, geology, astronomy, political economy, rhetoric, English literature, general history, and such other studies as the board may require. Those who hold a state certificate will be excused from examination on all branches in above enumeration preceding geometry, as those are required for a state certificate. Under the law the board is responsible for examining all candidates in all subjects required by statute, but in order to be fair and reasonable, some of these examinations may be oral and individual, and some may be written and general.

STATE CERTIFICATES.

By order of the board, on and after September 1, 1902, state certificates issued shall enumerate the subjects which the holder is authorized to teach. Candidates seeking a first certificate or those wishing renewal may be examined in additional subjects without paying an extra fee. Such subjects will include in part, those beyond the state certificate, required in high schools.

For the information of those desiring to become candidates, and to encourage the professional preparation of teachers, the board has classified candidates for state certificates under the following heads and established the following requirements:

1. Classes of Candidates.

- a. Graduates of higher institutions of learning.
- b. Graduates of state normal schools.
- c. Graduates of good schools where they have pursued a two years' course in didactic subjects.
- d. Other candidates.

1. Graduates of the College of Liberal Arts of the state university who have pursued in addition to the course in psychology, a pedagogical course of at least one year, and graduates of other liberal arts colleges with equivalent courses approved by the board, will be admitted to the examination upon filing certified statements given by the president or registrar of their graduation, and of their record in the pedagogical course.

NOTE: It is important for all applicants for state diplomas to remember that great value will be attached to the use of the English language in all the papers filed as part of the scholastic examination.

Those graduates of the state university or other colleges having equivalent approved courses of study, who have not had pedagogical work as stated above, will be admitted to the examination upon proofs of one year's successful experience in teaching.

2. Candidates who are graduates of the state normal school or of other schools requiring equivalent courses approved by the board, giving one year of special training in a well organized training school, will be admitted to the examination upon filing certified statements given by the president or registrar exhibiting those facts.

3. Candidates who are graduates of good schools, whose courses of study are approved by the board, and who have pursued a two year's course in didactic subjects, consisting of school management, elementary psychology, principles of education and methods of instruction, will be admitted to the examination on making proofs of one year of thirty-six weeks of successful experience. When, in addition to the above didactic course, such candidates have also had a year of special training in a well organized training school, they will be admitted to the examination without further qualification.

4. Other candidates will be admitted to the examination on filing official letters addressed to the board by one or more county superintendents and city superintendents, or other professional educators, including statements from the school boards under whom the candidate has taught, certifying to teaching covering at least two years of thirty-six weeks each of successful experience.

I. Documentary examination:

1. Each candidate must file the following credentials as the official proofs of being qualified to hold a state certificate:

a. Official letters *addressed to the board*, by one or more county superintendents and city superintendents or other professional educators, certifying to the success of the applicant in government and instruction. The work thus commended must have been done under the person's supervision who certifies to its excellence.

b. Statements from the school boards for whom the candidate has taught, certifying to teaching covering at least two years, of thirty-six weeks each, in which good and successful service was rendered. Credentials should be original, explicit in character, of recent date, and addressed "to the state board of educational examiners."

c. To be assured that the candidate is successful in instruction and government, the board reserves the right to investigate further until all doubt is removed.

II. Plan of the Examination.

1.—*Preliminary.* The application blank properly filled out, the fee of three dollars, and the credentials mentioned in a and b must all be filed with the president of the board to receive consideration, and approved by the board before the written examination is given.

2.—*Didactics.* School management, elementary psychology, and methods of instruction constitute the examination in this subject. The topics and questions selected will be such as to permit a well-informed teacher to complete the same in one and one-half hours.

3.—*U. S. History and English.* An essay prepared in one and one-half hours on some topic in United States history, assigned by the examiner, which must be written without delay, and not copied, will constitute the examination in United States history, orthography, penmanship, and use of English language, if the other papers written do not discredit the English.

4. Grouping of subjects:

a. Group 1.

English grammar.

Reading.

Geography.

b. Group 2.

Civil government of United States.

Civil government of Iowa.

School law.

Economics.

Music.

c. Group 3.

Arithmetic.

Algebra.

Bookkeeping.

d. Group 4.

Physiology.

Botany.

Physics.

Drawing.

III. Schedule of time granted :

FIRST DAY.

A. M., 8 to 9:30, Essay on United States history.

9:30 to 12, Group 1.

P. M., 1:30 to 3 Didactics.

3 to 5:30, Group 2.

SECOND DAY.

A. M., 8 to 12, Group 3.

P. M., 1:30 to 5:00, Group 4.

PRIMARY STATE CERTIFICATES.

THE PRIMARY TEACHERS' CERTIFICATE is intended for primary teachers as a recognition of professional skill and successful experience. The holder of such a certificate will be authorized to teach in first, second and third grades in any public school in the state for a period of five years. The fee, as fixed by law, is \$3, one-half of which is returned in case of failure.

I. Documentary Examination:

The following testimonials and credentials are required as evidence of success in primary teaching and of good character as a person.

1. Official statements addressed to the Board of Examiners from the present school board and from other boards certifying to the service of the applicant as teacher in first, second or third grade work for a period of two years of thirty-six weeks each, two of which years must have been under one school board.

2. Professional statements from county-superintendent, city superintendent or village principal under whose supervision the applicant has worked, certifying to the particular and professional success of the applicant as a teacher of the first, second and third grade work.

3. Candidates who are graduates of good schools, whose courses of study are approved by the board, and who have pursued a two years' course in didactic subjects, consisting of school management, elementary psychology, principles of education, and primary methods of instruction, will be admitted to the examination on making proofs of one year of thirty-six weeks of successful experience in primary teaching. When, in addition to the above didactic course, such candidates have also had a year of special training in a well-organized primary training school, they will be admitted to the examination without other qualification. Candidates who are graduates of higher institutions of learning whose courses of study are approved by the board, and who have pursued during the junior or senior year of their course a year of pedagogical study, consisting of history of education and primary methods, will be admitted to the examination.

II. Scholastic Examination:

To insure that the applicant has sufficient scholarship to be granted a primary teachers' certificate, the following things are required:

1. Such an examination in the branches, orthography, reading, writing, arithmetic, geography, grammar, history of the United States, and physiology and hygiene, as in each individual case may be necessary to insure good scholarship in the applicant. In cases where the applicant is the holder of an excellent county certificate in force in regard to these branches, this scholastic examination may not be necessary. By sending to the president of the board the certificate and any other documentary evidence that may assist in making the necessary proofs, this part of the examination can be determined before the date of appearance before the board.

2. The examination in English will be determined by a thesis of at least one thousand words.

III. Professional Examination:

The following subjects as outlined in the syllabus will constitute the professional examination required for the present year: Psychology of the child, school management, history of education, school laws of Iowa, primary methods, vocal music, physical culture, drawing, and plant study.

IV. Plan of Examination:

Preliminary, the application blank properly filled out, the fee of \$3, and the credentials mentioned in I and II, must all be filed with the president of the board, to receive consideration at that meeting, and be approved before the written examination is given.

V. Schedule of Time Granted.

FIRST DAY.

A. M.—8:00 to 9:30—Psychology of the child. School management.
9:30 to 12:00—History of education. School laws of Iowa.
P. M.—1:30 to 4:00—Primary methods. Drawing. Plant study.
4:00 to 5:00—Vocal music. Physical culture.

SECOND DAY.

A. M.—8:00 to 12:00.—P. M.—1:30 to 5:00—Scholastic examination in case board requires same. See section II, note 1, in this circular.

SPECIAL STATE CERTIFICATES.

The law authorizing the Iowa state board of educational examiners to grant special certificates was enacted in 1900, and is as follows.

"SEC 2. It may also issue a special certificate to any teacher of music, drawing, penmanship, or other special branches, or to any primary teacher, of sufficient experience, who shall pass such examination as the board may require in the branches and methods pertaining thereto, for which the certificate is sought. Such certificates shall be designated by the name of the branch, and shall not be valid for any other department or branch. The board shall keep a complete register of all persons to whom certificates or diplomas are issued."

The special state certificate is intended for teachers of special branches, as a recognition of professional skill, expert scholarship, and successful experience in teaching a particular subject.

While the candidate must possess complete and technical knowledge of the special branch for the teaching of which a certificate is desired, some general education and culture will be required, as a certificate cannot be granted on account of proficiency in one subject only.

The holder of a special certificate will be authorized to teach the branch specified in any public school in the state for a period of five years. The fee, as fixed by law is \$3, one-half of which is returnable in case of failure. Certificates will be issued to the same person in more than one branch, but the fee of \$3 must be paid for each, as no special certificate will authorize the holder to teach more than one subject.

In addition to music, drawing and penmanship, special certificates will be granted in history, rhetoric, literature, Latin, German, French, algebra, geometry, trigonometry and individual sciences.

NOTE: Teachers in high schools must hold certificates for those subjects in which they give instruction.

I. Documentary Examination:

The following testimonials and credentials are required as evidence of success as a teacher of a particular subject, and of good moral character as a person:

1. Official statements from school boards, certifying to the service of the applicant as a teacher of the subject in which certificate is asked, for a period of two years, of thirty-six weeks each, both of which years must have been under one school board.

2. Candidates who are graduates of good secondary or normal schools, and graduates of higher institutions of learning, may have such reduction in time of successful experience required as the board of examiners may decide after consideration of each individual case. It is to be understood, however, in all cases of reduction of time, that candidates have pursued scholastic and pedagogical courses approved by the board.

3. Professional statements from city or county superintendents or village principals, under whose supervision the applicant has worked, certifying to the particular and professional success of the applicant as a teacher of the specified branch.

II. Scholastic Examination:

To insure that the applicant has sufficient scholarship to be granted a special teacher's certificate, the following things are required:

1. Such an examination in the branches, orthography, reading, writing, arithmetic, geography, grammar, history of United States, and physiology and hygiene, as in each individual case may be necessary to insure good scholarship in the applicant. In cases where the applicant is the holder of an excellent county certificate, in force, in regard to these branches, this scholastic examination may not be necessary.

2. The examination in grammar and composition will be determined by a thesis of at least one thousand words, subject to be selected by the board, in harmony with the kind of certificate sought by the applicant.

III. Professional Examination:

Syllabi will be prepared in music, drawing, and penmanship, and these can be had on application. It does not seem necessary to give a syllabus, outlining points to be emphasized on other subjects, but on each subject a rigid examination will be required, both upon knowledge of the branch itself and upon the methods of teaching it.

IV. Plan of Examination:

As preliminary, the application blank properly filled out, the fee of \$3, and the credentials mentioned in I and II, must all be filed by the candidate with the president of the board, in order to be admitted to the written examination.

NOTE: All correspondence for special certificates should be addressed to the president of the board.

TWO YEARS' STATE CERTIFICATES.

According to a law enacted by the Twenty-ninth General Assembly, the state board of educational examiners is authorized to issue a two years' state certificate to any graduate of an approved accredited school who shall pass the required examination for a two years' county certificate; said examination to be passed under the supervision of the state board of educational examiners.

Upon making application for such certificate the candidate must file his certificate of graduation together with a fee of \$2, one-half of which shall be returned in case of failure.

RENEWAL OF CERTIFICATES.

1. *Proofs required.*—a. The candidate must file letters from superintendents or other prominent educators that certify to his present success in instruction and in government, and to the fact that his present physical condition and mental and moral character are still such as to justify the board in granting him this renewal.

- b. He must also show, by official letters from school boards for whom he has worked, the fact of his being successful as an instructor and as a disciplinarian under the expiring certificate.

Holders of state licenses to teach, desiring a renewal of the same, should file with the board an application, credentials, and fee of \$3, at least six months before the expiration of their certificates, in order that there may be sufficient time to issue a renewal before the expiration of the certificate. At the discretion of the board, candidates who have taught successfully for five years under its supervision may obtain a renewal upon writing a satisfactory thesis upon a subject assigned by the board. In all cases the board reserves the right to require a full and complete examination. The thesis must in all cases be in the hand writing of the applicant, and must show professional study and investigation.

2. *Examination Required.*—Unless otherwise decided, the candidate must appear at the time assigned and take such examination as the board may think necessary, but where personal knowledge or acquaintance of the board with the applicant may permit, and where the first examination was good, an original essay on an educational topic, assigned by the board, may be substituted for personal presence at the examination. This paper must be in the handwriting of the applicant, and must show professional study and investigation.

General suggestions to all candidates;

1. An examination for state certificate must be had before there can be an application for a state diploma. A teacher must do work under the supervision of this board for three years under a state certificate, before an application for a diploma can be considered.

NOTE. Candidates for renewal, desirous of having valid authority from the board, to teach either geometry, rhetoric, English and American literature, general history, or other studies, should so inform the board at the time of filing application for renewal.

2. Applicants will bear in mind that the possession of a state certificate, a primary or special teacher's certificate, or a state diploma, will not in any sense lessen their duty to comply with all the rules and requirements of the county superintendent of the county in which they are teaching.

3. Candidates are advised to arrive the day before at the place of examination, as no allowance can be made for delayed trains or for poor physical and mental condition, caused by illness or loss of sleep.

4. The examination at the times announced, will be restricted to the published program given in this circular.

5. All necessary paper, pens, and pencils will be furnished each candidate at the time of the examination.

6. Lists of old questions are not sent out to applicants, as such questions are no guide to the next examination.

7. The law governing this board can be found in sections 2628-2634 of the code, and amendments enacted by the Twenty-seventh, Twenty-eighth and Twenty-ninth General Assemblies.

Applicants for state, primary state, and special state certificates may be admitted to any examination fixed by the board. Diploma applicants will be given special examinations at times fixed by the board.

STATE CERTIFICATES AND DIPLOMAS MUST BE REGISTERED.

To Holders of State Certificates, Primary State Certificates, Special State Certificates, Two Years State Certificates and State Diplomas:

Your attention is called to the following section of the law establishing a state board of educational examiners:

"Section 2632. Each holder of a state certificate or diploma shall register the same with the county superintendent of the county in which he or she is to teach, before entering upon the work, and the county superintendent, in his annual report to the superintendent of public instruction, shall include therein an account thereof."

The above is construed that you are, *once each year*, to have your certificate or diploma registered at the office of the county superintendent, and that it is unlawful for you to commence your school until this has been done. Please note this requirement carefully, as failure to comply with it may cause you trouble afterwards.

The fact that a teacher holds a state certificate, a primary state certificate, a special state certificate or a state diploma, does not in any way exempt him from the same obligations imposed by the law upon other teachers. It is the duty of all teachers to attend the county normal institute and to support the county superintendent in all measures calculated to improve the schools and to advance the interests of education in the county.

Holders of state certificates, primary state certificates, special state certificates, two year state certificates or state diplomas are not exempt from reporting to the county superintendent, or complying in every respect with requirements made of other teachers, except as to examinations for certificates.

Note as to correspondence—In order to facilitate office work, graduates of the state normal school, and the state university, conduct their business correspondence regarding diplomas, and state certificates, with the presidents of their respective institutions. All other official correspondence for the board must be with the president.

Your state license to teach cannot be revoked by the county superintendent, but may be by the board of examiners. The causes for which the board would be disposed to revoke said license are, in general, failure to comply with the requirements of the law, well-founded charges against the character or scholarship of the holder, or evidence that he lacks ability to teach and govern children.

The board takes this occasion to express the hope that the holders of state licenses will be leaders in the educational work of their county. The annual institute and the county association should be the better for your presence.

Do not forget that if state licenses imply additional honor, they also imply additional responsibility.

RICHARD C. BARRETT,
President State Board of Examiners.

DATES OF EXAMINATIONS FOR STATE CERTIFICATES.

1901			
Cedar Falls.....	November	25-26	
Des Moines.....	December	27-28	
1902			
Cedar Falls	March	4-5	
Des Moines.....	June	5-6	
Cedar Falls.....	June	5-6	
Mount Vernon.....	June	6-7	
Fort Dodge.....	June	10-11	
Council Bluffs	June	27-28	
Cedar Falls.....	July	24-25	
Iowa City.....	July	24-25	
Shenandoah	August	1-2	
Ottumwa	August	5-6	
Des Moines	August	14-15	
Cedar Falls	November	25-26	
Des Moines.....	December	30-31	
1903			
Cedar Falls.....	March	10-11	
Council Bluffs	March	27-28	
Cedar Falls.....	June	4-5	
Mount Vernon.....	June	5-6	
Des Moines	June	18-19	
Cedar Falls.....	July	23-24	
Shenandoah	July	27-28	
Iowa City	July	30-31	
Des Moines.....	July	30-31	
Independence	August	20-21	

DATES OF EXAMINATIONS FOR STATE DIPLOMAS.

1901	
Des Moines.....	November 29-30
1902	
Des Moines.....	November 28-29

STATEMENT

Showing record of examinations held by the state educational board of examiners together with fees received and deposited with the state treasurer.

STATE CERTIFICATES.

Date of Certificate.		No. of applicants.		No. of certificates granted.		Number failed.	Fees received and deposited.
		Males.	Females.	Males.	Females.		
December 2, 1901			3		1	1	\$ 4.50
December 2, 1901	Renewals	3	3	3	3		18.00
January 1, 1902		21	10	10	6	15	70.50
January 1, 1902	Renewals	6	6	6	6		42.00
April 1, 1902		3	5	3	4	1	22.50
April 1, 1902	Renewals	1	3	1	3		12.00
July 1, 1902		38	75	31	68	14	318.00
July 1, 1902	Renewals	23	43	23	43		198.00
August 1, 1902		33	47	30	42	8	228.00
August 1, 1902	Renewals	11	6	11	6		51.00
September 1, 1902		19	29	6	9	88	94.50
September 1, 1902	Renewals	2	3	2	3		15.00
December 1, 1902		1	3	1	3		12.00
December 1, 1902	Renewals	4	5	4	5		27.00
January 1, 1903		14	10	9		15	49.50
January 1, 1903	Renewals	14	11	14	11		75.00
April 1, 1903		4	9	3		3	34.50
April 1, 1903	Renewals		2		2		6.00
July 1, 1903		28	68	20	50	26	249.00
July 1, 1903	Renewals	14	13	14	13		81.00
August 1, 1903		10	30	10	30		120.00
September 1, 1903		38	91	31	53	45	319.50
September 1, 1903	Renewals	16	34	16	34		150.00
Totals		303	510	248	404	161	\$2,197.50

PRIMARY STATE CERTIFICATES.

January 1, 1902			6		5	1	\$ 16.50
July 1, 1902			50		42	8	138.00
August 1, 1902			27		27		81.00
September 1, 1902			19		12	7	46.50
January 1, 1903			11		11		33.00
April 1, 1903			9		9		27.00
July 1, 1903			19		19		57.00
July 1, 1903	Renewals		8		8		24.00
August 1, 1903	Renewals		8		8		24.00
September 1, 1903			36		33	3	103.50
September 1, 1903	Renewals		12		12		36.00
Totals			205		186	19	\$ 586.50

SPECIAL STATE CERTIFICATES.

Date of Certificate.		No. of applicants.		No. of certificates granted.		Number failed.	Kind.	Fees received and deposited.
		Males.	Females.	Males.	Females.			
January 1, 1902			1		1		Music	\$3.00
August 1, 1902			1		1		Latin	5.00
September 1, 1902			1		1		History	3.00
January 1, 1903			1		1		Music	3.00
January 1, 1903			1		1		Literature	3.00
January 1, 1903			1		1	1	History	1.50
September 1, 1903		1				1	Music	1.50
Totals		1	6		5	2		\$18.00

TWO YEARS STATE CERTIFICATES.

Date of Certificate.		No. of applicants.		No. of certificates granted.		Number failed.	Fees received and deposited.
		Males.	Females.	Males.	Females.		
July 1, 1903			2		2		\$ 4.00
September 1, 1903		1	2	1	2		6.00
Totals		1	4	1	4		\$ 10.00

STATE DIPLOMAS.

December 2, 1901		2		2			\$ 10.00
January 1, 1902		1		1			5.00
September 1, 1902			1		1		5.00
December 1, 1902		3	1	3	1		20.00
Totals		6	2	6	2		\$ 40.00

SUMMARY.

Kind of Testimonial.	Number of applicants.			Certificates and diplomas granted.			Number failed.	Fees received and deposited.
	Males.	Females.	Total.	Males.	Females.	Total.		
State certificates	303	510	813	248	404	652	161	\$2,197.50
Primary state certificates		205	205		186	186	19	586.50
Special state certificates	1	6	7		5	5		18.00
Two years state certificates	1	4	5	1	4	5		10.00
State diplomas	6	2	8	6	2	8		40.00
Totals		811	727	1,038	255	601	182	\$2,852.00

**CERTIFICATES AND DIPLOMAS ISSUED UNDER THE PRESENT
LAW BY BIENNIAL PERIODS ENDING SEPTEMBER 30, 1903.**

	1882-1883.	1884-1885.	1886-1887.	1888-1889.	1890-1891.	1892-1893.	1894-1895.	1896-1897.	1898-1899.	1900-1901.	1902-1903.	Total.
State certificates	7	9	53	141	238	252	440	509	680	774	652	3,755
State diplomas			38	44	52	88	54	41	42	39	8	356
Primary state certificates									114	173	186	473
Special state certificates										3	5	8
Two year state certificates											5	5
Total	7	9	91	185	290	290	494	550	836	989	856	4,597

STATEMENT

Of Examination Fees Received and Deposited with the State Treasurer for the Biennial Period Ending Sept. 30, 1903.

Date of Deposit	Number of Treas. Receipt.	Amount.
February 5, 1902.....	124	\$ 163.00
April 24, 1902.....	136	36.50
August 8, 1902.....	153	490.50
September 3, 1902.....	155	163.50
November 15, 1902.....	166	510.50
July 7, 1903*.....	199	309.50
September 15, 1903.....	208	1,178.50
TOTAL.....		\$2,852.00

* This deposit includes no fees received and deposited after June 30, 1903.

EXAMINATION FEES

Received and deposited with the State Treasurer during biennial periods ending July 1.

1884-85.....	\$ 42 00
1886-87.....	33 00
1888-89.....	766.00
1890-91.....	856 50
1892-93.....	1,140.00
1894-95.....	1,282.00
1896-97.....	1,800.50
1898-99.....	2,456.50
1900-01.....	3,268 00
1902-03.....	2,508 00
1903*.....	1,178 00
Total.....	\$15,331.00

*From July 1, 1903, to September 30, 1903.

PAID FOR EXPENSES,

During Biennial Periods Ending July 1.

1882-83.....	\$ 237.05
1884-85.....	72.55
1886-87.....	318.12
1888-89.....	539.50
1890-91.....	786.92
1892-93.....	549.81
1894-95.....	964.95
1896-97.....	1,052.28
1898-99.....	1,660.57
1900-01.....	2,377.60
1902-03.....	2,193.88
1903*.....	366.79

Total..... \$ 11,120.02

SUMMARY.

Number of state certificates issued to September 30, 1901.....	3,103
Number of state certificates issued during the biennial period ending September 30, 1903.....	652
Total number issued to September 30, 1903.....	3,755
Expired by limitation to September 30, 1901.....	1,373
Expired by limitation during the biennial period ending September 30, 1903.....	611
Total number expired to September 30, 1903.....	1,984
Number of state certificates in force September 30, 1903.....	1,771
Number of primary state certificates issued to September 30, 1901.....	287
Number of primary state certificates issued during the biennial period ending September 30, 1903.....	186
Total number issued to September 30, 1903.....	473
Number expired by limitation to September 30, 1903.....	45
Number of primary certificates in force September 30, 1903.....	428
Number of special certificates issued to September 30, 1901.....	3
Number of special certificates issued during the biennial period ending September 30, 1903.....	5
Total number issued and in force September 30, 1903.....	8

* From July 1-1903, to September 30-1903.

Number of diplomas issued to September 30, 1901.....	348
Number of diplomas issued during the biennial period ending September 30, 1903.....	8
Total number issued and in force to September 30, 1903.....	356
Number of two years' state certificates issued during the biennial period ending September 30, 1903.....	5
Total number issued and in force September 30, 1903.....	5

STATE CERTIFICATES.

Number granted to University graduates.....	36
Number granted to Normal School graduates.....	331
Number granted to Private Normal School graduates.....	44
Number granted to College graduates.....	72
Number granted to High School graduates.....	52
Number granted to Academy graduates.....	6
Number granted to Non-graduates.....	111
Total certificates issued.....	652

STATE DIPLOMAS.

Number granted to University graduates.....	1
Number granted to State Normal School graduates.....	0
Number granted to Private Normal School graduates.....	3
Number granted to College graduates.....	4
Total diplomas issued.....	8

PRIMARY STATE CERTIFICATES.

Number granted to University graduates.....	0
Number granted to Normal School graduates.....	64
Number granted to Private Normal School graduates.....	12
Number granted to College graduates.....	18
Number granted to High School graduates.....	53
Number granted to Non-graduates.....	40
Total certificates issued.....	187

SPECIAL STATE CERTIFICATES.

Number granted to State Normal School graduates.....	1
Number granted to Private Normal School graduates.....	3
Number granted to Non-graduates.....	1
Total certificates issued.....	5

STATEMENT

Of the expenses of the State Board of Educational Examiners from October 1, 1901, to October 1, 1903.

WARRANTS ISSUED—TO WHOM.

From October 1 to December 31, 1901.

1901			
November 12.	Geo. E. McLean.....	\$	3.95
November 12.	W. F. Giesseman.....		13.30
November 29.	Ole O. Roe.....		12.00
December 4.	H. H. Seerley.....		10.20
December 4.	Alice Bradrick.....		18.05
December 5.	H. H. Freer.....		16.15
December 31.	Alice Bradrick.....		21.30
December 31.	J. F. Mitchell.....		6.75
December 31.	Hattie Moore Mitchell.....		6.80
Total.....		\$	108.50

From January 1 to December 31, 1902.

1902			
January 7.	Grace Troutner.....		10.00
January 7.	Fannie Shaffer.....		10.00
January 10.	H. H. Freer.....		15.80
April 30.	W. F. Giesseman.....		5.60
April 30.	Alice Altona.....		111.00
May 24.	H. H. Seerley.....		14.15
May 31.	Alice Altona.....		72.00
June 4.	H. H. Freer.....		60.70
June 4.	Geo. E. MacLean.....		12.39
June 30.	Alice Altona.....		97.46
July 17.	Bertha L. Marsh.....		3.75
July 17.	Bertha L. Patt.....		2.50
July 17.	Karl F. Geiser.....		6.00
July 17.	Sarah F. Rice.....		4.75
July 17.	Geo. W. Newton.....		5.50
July 17.	Geo. W. Samson.....		5.25
July 17.	Mamie F. Hearst.....		3.00
July 17.	C. P. Colgrove.....		5.00
July 17.	H. C. Cummins.....		5.50
July 17.	A. W. Rich.....		14.00
July 17.	D. S. Wright.....		7.50
July 17.	Ira S. Condit.....		6.00
July 17.	Sara M. Riggs.....		3.50
July 17.	Louis Begeman.....		5.50
July 17.	M. F. Arey.....		3.75
July 17.	L. W. Parish.....		2.00

July	17.	Anna E. McGovern	1.50
July	17.	G. B. Affleck	2.00
July	17.	G. W. Walters	4.00
July	17.	Grace W. Knudsen	.50
July	17.	Eva L. Gregg	.75
July	17.	Laura E. Falkler	1.00
July	17.	Edith C. Buck	1.00
July	17.	C. A. Fullerton	3.00
July	17.	Myra E. Call	3.00
July	17.	R. M. Arey	6.00
July	17.	R. M. Arey	11.25
July	17.	H. H. Seerley	2.00
July	17.	Henrietta Thornton	.50
July	17.	A. C. Page	78.00
July	29.	Alice Altona	6.00
August	1.	H. C. Dorcas	2.55
August	1.	Geo. E. MacLean	6.00
August	1.	Emma C. Moulton	2.25
August	8.	H. C. Cummins	9.00
August	8.	Stella Satterthwaite	2.25
August	8.	G. W. Samson	4.50
August	8.	K. F. Geiser	2.25
August	8.	M. F. Arey	3.00
August	8.	C. A. Fullerton	2.25
August	8.	Louis Begeman	2.25
August	8.	Bertha L. Marsh	3.00
August	8.	G. W. Walters	1.50
August	8.	G. B. Affleck	2.25
August	8.	L. W. Parish	3.00
August	8.	Grace W. Knudsen	29.25
August	8.	R. M. Arey	7.50
August	8.	A. W. Rich	3.00
August	8.	I. S. Condit	10.50
August	8.	C. A. Wise & Sons	40.85
August	15.	H. H. Freer	9.40
August	15.	H. H. Freer	25.50
August	23.	F. L. Douglass	6.00
August	23.	Jos. S. Hofer	31.75
August	23.	Fannie Shaffer	4.00
September	10.	Dudley Griffith	6.00
September	10.	William Wilkinson	83.04
September	10.	Alice Altona	33.00
September	10.	W. F. Giesseman	18.25
September	10.	H. H. Freer	3.00
September	10.	Frederick E. Bolton	25.74
October	17.	H. H. Freer	69.35
October	31.	Alice Altona	4.90
November	29.	W. F. Giesseman	57.00
November	29.	Alice Altona	9.80
December	17.	H. H. Seerley	
Total			\$ 1,136.98

From January 1 to September 30, 1903.

1903			
January	1.	Alice Altona	39.00
January	16.	Laura M. Graves	6.00
January	16.	Mrs. Hattie M. Mitchell	7.10
January	16.	J. F. Mitchell	10.10
January	16.	Emma C. Moulton	6.00
January	28.	Alice Altona	66.00
January	28.	L. G. Weld	3.00
February	2.	H. H. Freer	11.27
March	5.	Alice Altona	31.50
April	4.	J. B. Knoepfler	6.00
April	4.	A. W. Rich	3.00
April	4.	W. F. Giesseman	1.50
May	8.	H. H. Seerley	11.10
May	8.	O. J. McManus	29.92
May	14.	W. F. Giesseman	6.80
May	14.	Geo. E. MacLean	11.98
May	29.	Alice Altona	42.00
June	2.	S. L. Thomas	12.00
June	2.	O. J. McManus	69.70
June	2.	Charles Benson	24.00
June	25.	G. W. Samson	3.00
June	25.	H. C. Cummins	2.25
June	25.	Laura Falkler	3.00
June	25.	K. F. Geiser	3.00
June	25.	Mamie F. Hearst	1.50
June	25.	Bertha L. Marsh	3.00
June	25.	C. A. Fullerton	8.25
June	25.	M. F. Arey	2.25
June	25.	G. W. Walters	4.50
June	25.	C. P. Colgrove	1.50
June	25.	Bertha L. Patt	1.50
June	25.	G. B. Affleck	1.50
June	25.	S. F. Hersey	1.50
June	25.	G. W. Newton	2.25
June	25.	Grace Knudsen	4.50
June	25.	A. W. Rich	9.00
June	25.	Sara M. Riggs	3.00
June	22.	W. W. Gist	7.50
June	25.	I. S. Condit	9.00
June	25.	L. W. Parish	8.25
June	27.	State Normal School	7.10
June	27.	Emma C. Moulton	9.00
June	27.	Alice Altona	85.00
August	1.	Emma C. Moulton	15.00
August	1.	Laura R. Moulton	6.00
August	1.	Alice Altona	109.34
August	7.	Emma C. Moulton	18.00
August	7.	Laura R. Moulton	9.00

August 7.	F. E. Goodell.....	9.00
August 10.	C. A. Wise & Sons Co.....	2.50
August 10.	D. S. Wright.....	4.50
August 10.	W. W. Gist.....	3.00
August 10.	Sara M. Riggs.....	4.50
August 10.	Sara F. Rice.....	3.00
August 10.	L. W. Parish.....	3.00
August 10.	Ralph Rigbey.....	3.00
August 10.	H. C. Cummins.....	3.00
August 10.	Ira S. Condit.....	3.00
August 10.	M. F. Arey.....	6.00
August 10.	J. B. Knoepfler.....	3.00
August 10.	L. Begeman.....	3.00
August 10.	G. W. Newton.....	3.00
August 10.	Bertha L. Patt.....	3.00
August 10.	G. W. Walters.....	3.00
August 10.	C. P. Colgrove.....	3.00
August 10.	Nellie P. Wallbank.....	3.00
August 10.	Mrs. Maud H. Palmer.....	3.00
August 10.	Mary E. Simmons.....	1.50
August 10.	A. W. Rich.....	12.00
August 31.	Alice Altona.....	88.45
September 29.	Alice Altona.....	39.00

CERTIFICATES AND DIPLOMAS.

STATE CERTIFICATES.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1901		1902	
Dec. 2	Rhodella Kiriland	April 1	Margaret C. Myers
Dec. 2	Edith K. Kellogg	April 1	Ernest C. Smith
Dec. 2	Blanche Simmons	April 1	Hattie H. Timmerman
Dec. 2	Myrtle Jamison	April 1	Lillie Johnson
Dec. 2	Henry M. McKeen	July 1	L. H. Ford
Dec. 2	Amos Huffman	July 1	Agnes Hess
Dec. 2	John M. Crinklaw	July 1	E. Beth Achenbach
1902		July 1	Emma M. Ackerman
Jan. 1	Amy L. Dougherty	July 1	Beth Allen
Jan. 1	Jennie B. Austin	July 1	Alice L. Armstrong
Jan. 1	John L. Ballenger	July 1	May C. Achenbrenner
Jan. 1	Joseph E. Bell	July 1	Mae Myrtle Barr
Jan. 1	Mildred Clark	July 1	Maude L. Barr
Jan. 1	William E. Chase	July 1	Anna E. Barrett
Jan. 1	A. M. Deyoe	July 1	Mildred O. Bates
Jan. 1	Margaret Dorweiler	July 1	Maude A. Bortell
Jan. 1	Walter M. Gaddis	July 1	Vesta Burbank
Jan. 1	H. L. Hampton	July 1	B. Henry Callison
Jan. 1	Lillian S. Haggott	July 1	Mary E. Caster
Jan. 1	F. L. Mahannah	July 1	Mabel A. Christian
Jan. 1	M. C. Morrison	July 1	Stella C. Clinite
Jan. 1	C. A. Pillsbury	July 1	Jeannette E. Cushman
Jan. 1	Frank P. Reed	July 1	Ida May Fell
Jan. 1	Winnifred Rhodes	July 1	Ralph A. Fenton
Jan. 1	Lillian Smith	July 1	Mamie E. Foster
Jan. 1	H. T. Bushnell	July 1	Lucy B. Francis
Jan. 1	W. H. Blakely	July 1	Florence E. Freeman
Jan. 1	Effie G. Burt	July 1	Maude Edith French
Jan. 1	Cordelia Kyle	July 1	Raymond A. French
Jan. 1	Jeannie Robertson	July 1	Margaret Gittins
Jan. 1	C. W. Bacon	July 1	Albert Graham
Jan. 1	Margaret Buchanan	July 1	Alta K. Green
Jan. 1	Wesley N. Clifford	July 1	Lottie Wade Green
Jan. 1	Gertrude Howell	July 1	Philo F. Hammond
Jan. 1	Ida Hammons	July 1	Ida L. Harmon
Jan. 1	Junia R. Henderson	July 1	Inez Harmon
Jan. 1	A. T. Rutledge	July 1	Mary C. Harris
Jan. 1	James E. Vertz	July 1	U. Grant Hayden
April 1	Frank C. Popham	July 1	Charlotte Henninger
April 1	Agnes E. Wallace	July 1	John K. Hirst
April 1	Bella Hostetter	July 1	Eva A. Hochstetler
April 1	Ella C. Hartshorn	July 1	Emma Hoebel
April 1	Eleanor M. Garrison	July 1	Laura Hopkinson
April 1	Harry H. Kent	July 1	Alice J. Hunt
April 1	Oscar O. Mueller	July 1	Julia M. Hunt

STATE CERTIFICATES - CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1902.		1902.	
July 1	Mary L. Jensen	July 1	Grace E. Curtis
July 1	Sara E. Kaye	July 1	John F. Doderer
July 1	Elda M. Kemp	July 1	Minnie Edwards
July 1	H. O. Kessau	July 1	Edith Eighmey
July 1	John O. Kirkpatrick	July 1	Albert F. Evers
July 1	Chas. E. Kroesen	July 1	Mary A. Gordon
July 1	Iva A. Lamb	July 1	Joseph Graham
July 1	Abbie F. Laughlin	July 1	Hannah Houghton
July 1	Jennie Leonard	July 1	Jessie A. Hoffman
July 1	William A. Longley	July 1	Emma Huffman
July 1	Alta Mathews	July 1	Carrie Johnson
July 1	Lucy H. Miller	July 1	C. F. Kuehne
July 1	Walter E. Moss	July 1	Clara N. Martin
July 1	Anna R. Moule	July 1	Ellen O'Brien
July 1	Jessie MacDonald	July 1	Ethel L. Osler
July 1	C. J. Olsen	July 1	Juliette Pierce
July 1	John C. Parish	July 1	William H. Reeve
July 1	Marie J. Peterson	July 1	Lou L. Romey
July 1	Deila M. Pettit	July 1	Nellie M. Scott
July 1	Anna Philpot	July 1	Anna M. Singer
July 1	Mabel F. Quire	July 1	Anna L. Sotler
July 1	Ida Lydia Riecke	July 1	Mary H. Smith
July 1	Florence O. Rigby	July 1	William Sparks
July 1	Velma Roadman	July 1	Rosa E. Sparr
July 1	Walter E. Rorabaugh	July 1	Ida A. Wagner
July 1	D. H. Rummel	July 1	Ella D. Williams
July 1	Nellie M. Runyon	July 1	Margaret Young
July 1	William F. Schregardus	July 1	Clarence McCracken
July 1	Winifred Selser	July 1	William C. Kennedy
July 1	Grace J. Simpson	July 1	Seeley W. Rowley
July 1	Mabel C. Smith	July 1	Eliza F. Mitchell
July 1	Elbert E. Stedman	July 1	Lillian Lambert
July 1	Tressa Tighe	July 1	Isabelle McIntosh
July 1	Nellie E. Tice	July 1	Sarah E. Archer
July 1	Arthur L. Vincent	July 1	Katherine Crim
July 1	Marjorie Wallace	July 1	Howard W. Moody
July 1	E. E. Waters	July 1	John E. Ricke
July 1	Emery E. Watson	July 1	Mary Stanley
July 1	Mamie Vaala	July 1	Nelson J. Evans
July 1	Sara Whitfield	July 1	Christiana Althouse
July 1	Winifred Williams	July 1	Fannie O. Ames
July 1	Clara E. Williamson	July 1	John D. Adams
July 1	Willis T. Wolfe	July 1	Sada C. Dougherty
July 1	Esther S. Wolzsmith	July 1	Ruby E. Calderwood
July 1	Mary L. Wright	July 1	Chas. E. Blodgett
July 1	P. A. Long	July 1	R. B. Crone
July 1	Jas. P. Daughton	July 1	William J. Flint
July 1	Martha B. Stilson	July 1	William Fortune
July 1	Mattie Kizer	July 1	Ida Gillaspie
July 1	I. J. McDuffie	July 1	A. Laura Humphries
July 1	Arthur H. Wright	July 1	Ernestine Houston
July 1	Celia M. Bell	July 1	Jennie E. Post
July 1	Anna Bernard	July 1	Jennie E. Pollock
July 1	Chas. W. Cavett	July 1	Harriet Mae Pollock
July 1	Berten M. Cobb	July 1	John A. McIntosh
July 1	Alice B. Curtis	July 1	S. W. Myers

STATE CERTIFICATES - CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1902.		1902.	
July 1	Clementine Otto	Aug. 1	Nellie M. Rosond
July 1	Mary C. Rolfs	Aug. 1	Clyde O. Ruggles
July 1	Ethel Randall	Aug. 1	Emma C. Schoelerman
July 1	Louis B. Stewart	Aug. 1	Rosa Schreurs
July 1	Dora H. Shinn	Aug. 1	Jennie M. Speer
July 1	Bernard Schulte	Aug. 1	Nellie B. Sterrett
July 1	Fannie Shaffer	Aug. 1	Wilson F. Stichter
July 1	Clemmons Sutton	Aug. 1	Miles D. Sutton
July 1	Eda B. Toenjes	Aug. 1	Walker W. Templeton
July 1	Albert van der Ploeg	Aug. 1	Christine A. Thone
July 1	John E. Witmer	Aug. 1	Abbie Thurner
July 1	J. M. Ireland	Aug. 1	Forrest Z. Wheeler
Aug. 1	Grace Adcock	Aug. 1	Fred L. Whitney
Aug. 1	Bertha L. Anderson	Aug. 1	Bertha B. Wilson
Aug. 1	Gail M. Anderson	Aug. 1	Grace E. Wilson
Aug. 1	James H. Atkinson	Aug. 1	Helen Williams
Aug. 1	Lynne Barnum	Aug. 1	Margaret H. Wolf
Aug. 1	Anna D. Belzer	Aug. 1	James A. Woodruff
Aug. 1	Cicelia Bergen	Aug. 1	Charles Yeager
Aug. 1	Edna E. Black	Aug. 1	Altha Stone
Aug. 1	Mabel Black	Aug. 1	Anna E. Jacobs
Aug. 1	Lee E. Campbell	Aug. 1	Frederick T. Thompkins
Aug. 1	J. Ernest Carman	Aug. 1	Randolph E. Scott
Aug. 1	Guy D. Clevenger	Aug. 1	Lauren W. Soth
Aug. 1	Tally M. Clevenger	Aug. 1	Luther C. Bryan
Aug. 1	Emma Curtis	Aug. 1	Mary K. Hobbs
Aug. 1	Melville G. Danskin	Aug. 1	Jessie F. Lias
Aug. 1	Reuben M. Estes	Aug. 1	John Meissner
Aug. 1	Maude L. Fretz	Aug. 1	Lewis H. Minkel
Aug. 1	George A. Glenny	Aug. 1	Ole N. Olesen
Aug. 1	Marcia H. Greenlees	Aug. 1	Joseph R. Parks
Aug. 1	Alma E. Harris	Aug. 1	Bertha Pratt
Aug. 1	Clara E. Hoyt	Aug. 1	Minnie D. Reed
Aug. 1	William H. Kolkofen	Aug. 1	Hugh S. Buffum
Aug. 1	Florence Ketcham	Aug. 1	Henry C. Johnson
Aug. 1	Susan F. Kilpatrick	Aug. 1	Anna E. Kierulff
Aug. 1	Edith R. Lee	Aug. 1	M. Imo Moler
Aug. 1	Lora Lighthall	Aug. 1	Mae Calderwood
Aug. 1	Vera Lighthall	Aug. 1	William T. Dick
Aug. 1	Mildred L. Lyon	Aug. 1	Homer H. Hankins
Aug. 1	Daniel R. Marling	Aug. 1	James F. Holiday
Aug. 1	Nellie Martin	Aug. 1	B. J. Horchem
Aug. 1	Clarence B. Mericle	Aug. 1	Fred E. King
Aug. 1	Walter Mitchell	Aug. 1	J. W. W. Laird
Aug. 1	Alosco W. Moore	Aug. 1	Mary E. Rice
Aug. 1	Ida H. Morrill	Sept. 1	Lahuna E. Clinton
Aug. 1	Amy E. Miller	Sept. 1	Wilbur Fike
Aug. 1	Kutie A. Murphy	Sept. 1	Stella H. Graves
Aug. 1	John R. McComb	Sept. 1	Mrs. J. E. McCormick
Aug. 1	Timothy E. McDonald	Sept. 1	Maud Reynolds
Aug. 1	Nellie E. McLennan	Sept. 1	Lettie E. Shepherd
Aug. 1	Allen Peterson	Sept. 1	Estella May Boot
Aug. 1	Emma Raine	Sept. 1	Effie E. Cameron
Aug. 1	Grace M. Rhoades	Sept. 1	John C. DeMar
Aug. 1	Jesse C. Richter	Sept. 1	Jessie Eden
Aug. 1	Sherman E. Robinson	Sept. 1	Eugene Henely

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1902.		1903.	
Sept. 1	Ira J. Scott	Jan. 1	Alexander A. Taylor
Sept. 1	Jennie Garriss	April 1	Matilda A. Behrens
Sept. 1	J. O. Marts	April 1	M. Alora Lowe
Sept. 1	Marion R. Powers	April 1	Ellen S. Oleson
Sept. 1	Anna L. Burdick	April 1	Daniel B. Prather
Sept. 1	Julia M. Lynch	April 1	Hattie M. Roberts
Sept. 1	Martha Meacham	April 1	Susan E. Scofield
Sept. 1	Paul M. Ray	April 1	Edna S. Balderson
Sept. 1	Orion O. Vogenitz	April 1	Jessie I. Miller
Dec. 1	Ola Anne Logan	April 1	Daniel E. Brainard
Dec. 1	Luke C. Rhoads	April 1	Cora May Gretzer
Dec. 1	Caroline Wesley	April 1	Ida L. Moore
Dec. 1	Dora E. Douglass	April 1	Charles S. Stoakes
Dec. 1	Benj. S. Asquith	July 1	Alison E. Aitchison
Dec. 1	Flora E. Davis	July 1	Jennie I. Berg
Dec. 1	Lydia B. Eckhard	July 1	Lucile K. Brimhall
Dec. 1	Ida B. Gordon	July 1	Edith J. Bailey
Dec. 1	Margaret J. Mitchell	July 1	Ethel M. Brooks
Dec. 1	Elizabeth Klein	July 1	Ceva B. Bezold
Dec. 1	Harvey A. Welty	July 1	Florence Cady
Dec. 1	Lewis H. Andrews	July 1	Florence G. Conner
Dec. 1	William O. Reed	July 1	Elmer Cahow
1903.		July 1	Lou E. Conover
Jan. 1	Anna C. Brown	July 1	Lena M. Chandler
Jan. 1	Lillian L. Crosley	July 1	Fanny F. Cornell
Jan. 1	Bertha L. Engel	July 1	J. Foy Cross
Jan. 1	Eugar A. Ford	July 1	Fannie Dunleavy
Jan. 1	Ella Norris	July 1	Rebecca G. DeNoon
Jan. 1	Amplias H. Avery	July 1	Lucretia Eighmey
Jan. 1	Sidney J. Backus	July 1	Will Francis
Jan. 1	Le Roy J. Barton	July 1	Eugene J. Feuling
Jan. 1	George R. Buckles	July 1	Erret M. Fox
Jan. 1	Edmund W. Davis	July 1	Mabel M. Fouts
Jan. 1	A. H. Earhart	July 1	Mae G. Finch
Jan. 1	Charles V. Ryan	July 1	Bessie A. Forrester
Jan. 1	Lawrence J. White	July 1	Lottie B. Farr
Jan. 1	Wilbur York	July 1	G. Melville Grimes
Jan. 1	I. B. Allard	July 1	Ray Golly
Jan. 1	Wilhelmine C. Hegner	July 1	Emily M. Gardner
Jan. 1	Perry M. Hersom	July 1	Pearl V. Giddings
Jan. 1	Frank L. Hoffman	July 1	Cora E. Gardner
Jan. 1	Maurice P. Kenworthy	July 1	Elizabeth Hagerty
Jan. 1	George H. Mullin	July 1	Jay O. Huntley
Jan. 1	Esther V. Nicholson	July 1	Emma J. Howarth
Jan. 1	Millie Palmer	July 1	A. C. Joy
Jan. 1	Chas. R. Scroggie	July 1	Grace A. Jeffers
Jan. 1	Zenas C. Thornburg	July 1	Mary L. Kuhns
Jan. 1	Ulysses G. Brown	July 1	Kate Lester
Jan. 1	Mary M. Hughes	July 1	Victorine Mead
Jan. 1	Sarah Nunamacker	July 1	Annie G. Marsh
Jan. 1	Elizabeth H. Whitney	July 1	Ada B. Montgomery
Jan. 1	Elmer L. Coffeen	July 1	Bertha D. Meier
Jan. 1	Fred E. Hansen	July 1	Carrie E. Martin
Jan. 1	Ellis J. Hook	July 1	Clarence W. Moore
Jan. 1	Thomas J. Cowan	July 1	Maude Minnich
Jan. 1	Mary A. Tate	July 1	Agnes M. McCracken

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1903.		1903.	
July 1	Jennie M. McCall	Aug. 1	Inez S. Croasdale
July 1	Blanche McIntosh	Aug. 1	Amelia F. Hieber
July 1	Ella Paulger	Aug. 1	Cora Learned-Hursey
July 1	Bessie Korabaugh	Aug. 1	Melville E. Logan
July 1	Effie M. Raymond	Aug. 1	Maud Landis
July 1	Anna M. Rinertson	Aug. 1	Rose A. Morris
July 1	Kathryn Stiles	Aug. 1	Frank D. McIlravy
July 1	Caroline P. Schoch	Aug. 1	Elizabeth Parmenter
July 1	Linnie E. Schloeman	Aug. 1	Minnie Quist
July 1	Harry P. Trumbo	Aug. 1	Edger S. Smith
July 1	C. G. Unbaugh	Aug. 1	Jennie H. Slawson
July 1	Anna Wenstrand	Aug. 1	Daisy D. Wood
July 1	Jeannette S. Wooley	Aug. 1	Ida F. Leydig
July 1	Henry B. Hetzler	Aug. 1	Benj. Boardman
July 1	Otto E. Gunderson	Aug. 1	Genetta B. Bushyager
July 1	Lucy Taff	Aug. 1	Alice Benson
July 1	Beulah Crawford	Aug. 1	Marie F. DeGraffe
July 1	Harry C. Heath	Aug. 1	Martha E. Emry
July 1	Charles E. Persons	Aug. 1	Clara Funston
July 1	Lena B. Phillips	Aug. 1	Charles Henry
July 1	Alice Rigby	Aug. 1	Emma S. Heverly
July 1	Cora Ross	Aug. 1	Arthur L. Lyon
July 1	Maude A. Stroble	Aug. 1	Rose Mintier
July 1	Adolph H. Anton	Aug. 1	Maud E. Miller
July 1	Edward B. Berger	Aug. 1	Lulu Newcomb-Knapp
July 1	Louise A. Boden	Aug. 1	Emma P. Pritchard
July 1	Carl D. Kiser	Aug. 1	Emma Sherrett
July 1	Nellie Alexander	Aug. 1	Herbert E. Wheeler
July 1	Mary Allison	Aug. 1	Minnie Carlson
July 1	Iva Beck	Aug. 1	Jennie Culbertson
July 1	Mary E. Berry	Aug. 1	Jessie M. Hartsock
July 1	Nella J. Brydolf	Aug. 1	Harriet A. Kimbell
July 1	Eva M. Byerly	Aug. 1	Sara M. Ney
July 1	Fred H. Dawson	Aug. 1	Elizabeth Platt
July 1	Calvin S. Dodds	Aug. 1	James J. Sharpe
July 1	Vicor Levi Dodge	Aug. 1	Edwin T. Sheppard
July 1	Frances M. Drake	Aug. 1	Nettie A. Kepler
July 1	James H. Dutton	Aug. 1	Samuel L. Thomas
July 1	Albert S. Fulton	Sept. 1	Bessie M. Allen
July 1	Alfred R. Gardiner	Sept. 1	John R. Bagge
July 1	Gladys I. Goddard	Sept. 1	Floy M. Bennett
July 1	Wm. H. Lancelot	Sept. 1	Maud Bozarth
July 1	Frank L. Martin	Sept. 1	Eva C. Brown
July 1	Walter B. Munson	Sept. 1	Lyle M. Burgess
July 1	David P. Repass	Sept. 1	Gertrude Crane
July 1	Nellie Richards	Sept. 1	Eva L. Cole
July 1	Henry E. Ronge	Sept. 1	Emma L. Cook
July 1	Fred Steinmetz	Sept. 1	Julia Connelly
July 1	Ella C. Truman	Sept. 1	Wm. W. Crawford
July 1	Minnie A. Van Petten	Sept. 1	Nell Corrigan
July 1	Lottie L. Wallace	Sept. 1	Avie E. Daily
July 1	Frank Waninger	Sept. 1	Eva L. Edgar
July 1	Frank E. Fowle	Sept. 1	Louis E. Eickelberg
July 1	Alice G. Peters	Sept. 1	Lilyan M. Francy
Aug 1	Ida M. Brewer	Sept. 1	Marguerite J. Foglesong
Aug 1	Cora G. Curtis	Sept. 1	Vienna H. Gaylord

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1903.		1903	
Sept. 1	Emma Hawks	Sept. 1	Vivien B. Graham
Sept. 1	Mabel Hilton	Sept. 1	Joel E. Johnson
Sept. 1	Annie L. Hosmer	Sept. 1	John M. Mahaffy
Sept. 1	Marie E. Hunt	Sept. 1	Frank H. Randall
Sept. 1	Celestine Incze	Sept. 1	Theodore J. Saam
Sept. 1	Mary I. Jarman	Sept. 1	Margaret J. Safley
Sept. 1	Ressie Jordan	Sept. 1	Sophia Schott
Sept. 1	Flora Kester	Sept. 1	Ethel R. Golden
Sept. 1	Mabel L. Kleckner	Sept. 1	Clara Gonwick
Sept. 1	A. D. King	Sept. 1	Lulu C. Holson
Sept. 1	Kathryn Knopfler	Sept. 1	Evangeline Rankin
Sept. 1	Louise M. Latchem	Sept. 1	Frank Linderman
Sept. 1	R. M. Lampman	Sept. 1	Charles W. Bays
Sept. 1	Cleora A. Lemon	Sept. 1	William A. Brandenburg
Sept. 1	Nellie V. Loonan	Sept. 1	Emma C. Budde
Sept. 1	Mads H. Madsen	Sept. 1	William O. Daily
Sept. 1	Francis M. McClintock	Sept. 1	Roy E. Farrand
Sept. 1	Clara E. McCullough	Sept. 1	Clement V. Frazier
Sept. 1	Jessie Nordstrom	Sept. 1	Silas Johnson
Sept. 1	Elsie T. Ottosen	Sept. 1	Henry H. Linton
Sept. 1	Cora Belle Price	Sept. 1	Della McFerren
Sept. 1	Bess M. Rowe	Sept. 1	Samuel T. Neveln
Sept. 1	Eva M. Shartle	Sept. 1	Alfred Peterson
Sept. 1	Margaret Stimson	Sept. 1	William L. Powers
Sept. 1	Earle S. Smith	Sept. 1	Will Shirley
Sept. 1	Harriet Wood	Sept. 1	Herbert R. Smith
Sept. 1	Marie T. Whitmell	Sept. 1	Anna White
Sept. 1	Grace D. White	Sept. 1	William R. Andrews
Sept. 1	Fred E. Welstead	Sept. 1	Amelia H. Atkins
Sept. 1	Margaret I. Berry	Sept. 1	Abbie L. Blakely
Sept. 1	Bird Bundy	Sept. 1	Freeman H. Bloodgood
Sept. 1	Verna Bernard	Sept. 1	Anna Boden
Sept. 1	A. O. Christopher	Sept. 1	Ida May Brusie
Sept. 1	Willis E. Lamb	Sept. 1	Nancy G. Carroll
Sept. 1	Charles Meyerholtz	Sept. 1	Lemuel H. De Witt
Sept. 1	Lina H. Moore	Sept. 1	Ella B. Finley
Sept. 1	Katherine Pollard	Sept. 1	Kittie B. Freed
Sept. 1	Walter W. Bell	Sept. 1	May Goodrell
Sept. 1	Ella Flater Francis	Sept. 1	Mary Gorman
Sept. 1	Perry O. Cole	Sept. 1	M. Perdena Jay
Sept. 1	Lewis A. Warwick	Sept. 1	Charles A. Kent
Sept. 1	Blaine T. Youel	Sept. 1	Nora B. Lockwood
Sept. 1	Dora M. Larson	Sept. 1	Mary E. Lundgren
Sept. 1	Willard Salisbury	Sept. 1	Nellie Luther
Sept. 1	Myrtle E. Putnam	Sept. 1	Mary Marker
Sept. 1	Finette Ferris	Sept. 1	Lizzie Marley
Sept. 1	Kate H. Knoche	Sept. 1	Ida A. Mosher
Sept. 1	H. A. Glackemeyer	Sept. 1	Amine E. Quackenbush
Sept. 1	Alfred J. Albin	Sept. 1	Emilie C. Reisner
Sept. 1	Herbert C. Erown	Sept. 1	Winifred H. Sloan
Sept. 1	May Gibson	Sept. 1	J. B. Steinmetz
Sept. 1	May Grabill	Sept. 1	Byron J. Still
Sept. 1	Mamie Zaelke	Sept. 1	Sylvia J. Westcot
Sept. 1	Tillie Zaelke	Sept. 1	Manzer J. Goodrich
Sept. 1	Charles D. Curtis	Sept. 1	Ida B. Hullerman
Sept. 1	Thomas Farrell	Sept. 1	Anna Moloney

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
1903.		1903.	
Sept. 1	May D. Ratchford	Sept. 1	May L. Stevens
Sept. 1	Lucy G. Shea	Sept. 1	Gerda Wheeler

PRIMARY STATE CERTIFICATES.

1902.		1902.	
Jan. 1	Sadie Alexander	Aug. 1	Clara Bauman
Jan. 1	Hadda E. Horton	Aug. 1	Louise C. Boehning
Jan. 1	Flora B. Purcell	Aug. 1	Lola M. Britton
Jan. 1	Maytie Schuetz	Aug. 1	Mary E. Bruce
Jan. 1	Anna White	Aug. 1	Marguerite L. Casey
July 1	Ida Cohen	Aug. 1	Susie H. Church
July 1	Alice Dawson	Aug. 1	Susie A. Craft
July 1	Clara Hastings	Aug. 1	Rana C. Dan
July 1	Margaret A. Hogan	Aug. 1	Jennie Gilroy
July 1	Alma Horning	Aug. 1	Maybelle Haley
July 1	Elberta Knapp	Aug. 1	Ella L. Howland
July 1	Florence Reilly	Aug. 1	Minnie E. Johnson
July 1	Minnie Rozelle	Aug. 1	Elizabeth Kempkes
July 1	Alma Walder	Aug. 1	Carrie B. King
July 1	Bertha Cadwell	Aug. 1	Mary King
July 1	Annette Moore	Aug. 1	Catherine A. Norris
July 1	Cora Brandt	Aug. 1	Mary R. Notton
July 1	Alta M. Harris	Aug. 1	Mayme E. Schuneman
July 1	Mae Heinrich	Aug. 1	Nelle L. Spellman
July 1	Jessie M. Hoenig	Aug. 1	Anabel Thompson
July 1	Margaret Huston	Aug. 1	Harriette M. Wilbur
July 1	Margaret McCarty	Aug. 1	Paula Wilcke
July 1	Alice M. McElroy	Aug. 1	Harriet Williams
July 1	Elsie I. Petheran	Aug. 1	Burnie L. Woodruff
July 1	Berthel E. Rhodes	Aug. 1	Mary J. Nugent
July 1	Clara J. Seller	Sept. 1	Clara B. Allen
July 1	Marguerite Shannon	Sept. 1	May Richardson
July 1	Annie L. Shaw	Sept. 1	Mary B. Trotter
July 1	Anna R. Smith	Sept. 1	Stella C. Urèy
July 1	Jane M. Spear	Sept. 1	Clara R. Wagner
July 1	Grace O. Stevenson	Sept. 1	Mary F. Brown
July 1	Bess G. Streeter	Sept. 1	Ida Alice Hebener
July 1	Margaret E. Thompson	Sept. 1	Anna P. Hillis
July 1	Belle Vinall	Sept. 1	Flora Laird
July 1	Edith M. Sadler	Sept. 1	Alice J. Macy
July 1	Luella M. Wright	Sept. 1	Coral Meek
July 1	Ada Ainsworth	Sept. 1	Maude I. Rines
July 1	Ella Albright	1903.	
July 1	Sue L. Badollet	Jan. 1	Nellie E. Barton
July 1	Winifred A. Besley	Jan. 1	Clara E. Cadwell
July 1	May A. Caldwell	Jan. 1	Mary F. Connelly
July 1	Hannah L. Carson	Jan. 1	Margaret Fetherston
July 1	Lillie Cherniss	Jan. 1	Mary Fetherston
July 1	Edith B. Field	Jan. 1	Alice E. Fluke
July 1	Lizzie O. Gleason	Jan. 1	Nettie Martin
July 1	Nelly Jacobs	Jan. 1	Nette B. Meade
July 1	Josephine M. Shea	Jan. 1	Inez McFarland
Aug. 1	Kathryn M. Arnold	Jan. 1	Fannie Painter
Aug. 1	Emma C. Adolphson	Jan. 1	Iva L. Waterbury

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate.	To Whom Issued.
1903.		1903.	
April 1	Wilma Cave	Sept. 1	A. Etta Hall
April 1	Josephine Creelman	Sept. 1	Kate Irwin
April 1	Emily J. Kempthorne	Sept. 1	Blanche J. Keller
April 1	Lizzie A. McDonald	Sept. 1	Luella E. Kittle
April 1	Rae Sewell	Sept. 1	Eliza V. Stillians
April 1	Ira Walster	Sept. 1	Elizabeth Wilson
April 1	Lucie Wixstead	Sept. 1	Mary D. Korinke
April 1	Myrtle C. Barndt	Sept. 1	Viola Mann
April 1	Ona Kendle	Sept. 1	Daisy E. Donovan
July 1	Bertha Abbey	Sept. 1	Mabel L. Ferguson
July 1	Lorenza Cajacob	Sept. 1	Lena A. Gordon
July 1	Orpha M. Ensign	Sept. 1	Mary E. Hodges
July 1	Carrie E. Erickson	Sept. 1	Lela M. Howland
July 1	Bertha M. Kelly	Sept. 1	Josie Huffman
July 1	Etta M. Kelly	Sept. 1	Othelia Johnson
July 1	Edith Kuebler	Sept. 1	Addie Maulsby
July 1	Kathryn V. Mornin	Sept. 1	Nettie Morrissey
July 1	Gertrude Riggs	Sept. 1	Estella Reynolds
July 1	Coral M. Smith	Sept. 1	Lena Schonhood
July 1	Anna M. Walker	Sept. 1	Florence M. Snyder
July 1	Edna F. Williams	Sept. 1	Lottie B. Wheeler
July 1	June Chidester	Sept. 1	Grace Allen
July 1	Laura Grimes	Sept. 1	Alice B. Barger
July 1	Frances M. Hoskins	Sept. 1	Edith M. Barger
July 1	Allie Lank	Sept. 1	Dora Barker
July 1	Ida N. Reynolds	Sept. 1	M. Maude Bingham
July 1	Merte C. Rogers	Sept. 1	Martha M. Hall
July 1	Cornelia H. York	Sept. 1	Carrie Hays
July 1	Sadie A. Bollen	Sept. 1	Pearl Head
July 1	Minnie W. Dungan	Sept. 1	Clara M. Henry
July 1	Lois Moberg	Sept. 1	Emma E. Howland
July 1	Kittie M. Mulhern	Sept. 1	Lora L. Johnson
July 1	Effie Schuneman	Sept. 1	Caroline B. Noble
July 1	Emily Trent	Sept. 1	Clara L. Porter
July 1	Carrie A. VanGilder	Sept. 1	Jessie Pitcher
July 1	Anna L. Wertz	Sept. 1	June Renne
Aug. 1	Charlotte A. Choate	Sept. 1	Amelia H. Rhynsburger
Aug. 1	Ida A. Davis	Sept. 1	Dora A. Waters
Aug. 1	Anna C. D. Hansen	Sept. 1	Irene A. Wescott
Aug. 1	Bertha Pike	Sept. 1	Lida M. Williams
Aug. 1	Florence C. Richmond	Sept. 1	Florence White
Aug. 1	Mary Kiley	Sept. 1	Grace Baker
Aug. 1	Stella E. Smith	Sept. 1	L. Ruth Colt.
Aug. 1	Clara A. Hunt	Sept. 1	Bessie Pattee.
Sept. 1	May Crapser		

SPECIAL STATE CERTIFICATES.

1902.		1903.	
Jan. 1	Rilla Shoemaker, (Vocal Music).	Jan. 1	Louise De Tar, (Vocal Music).
Aug. 1	Margarette A. Ball, (Latin).	Jan. 1	Harriett Sayers, (Literature).
Sept. 1	Kate S. Reed, (History).		

STATE CERTIFICATES—CONTINUED.

Date of Certificate	To Whom Issued.	Date of Certificate	To Whom Issued.
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TWO YEARS STATE CERTIFICATES.

1903.		1903.	
July 1	Viva M. Henderson.	Sept. 1	Roy Snodgrass.
July 1	Pearl Rees.	Sept. 1	Carrie S. Taylor.
Sept. 1	Mae Harmer.		

STATE DIPLOMAS.

1901.		1902.	
Dec. 2	Merton E. Crosier.	Dec. 1	John W. Agans.
Dec. 2	William C. Farmer.	Dec. 1	Milo Hunt.
1902.		Dec. 1	Minnie B. King.
Jan. 1	O. W. Herr.	Dec. 1	Samuel G. Richards.
Sept. 1	Fanny C. Burling.		

SAMPLE LISTS OF QUESTIONS

Prepared and used by the state board of educational examiners.

STATE CERTIFICATE.

U. S. HISTORY.

Include in a discussion of America's colonial policy the answers to the following questions:

1. What is a colony?
2. Give briefly our colonial or territorial policy as outlined in the Ordinance of '87.
3. What acquired territory has thus been incorporated into the United States? Mention in order of acquisition.

GRAMMAR.

1. Give the classes of incomplete verbs and write sentences illustrating each. What difference, if any, between a copula and a copulative verb?
2. Choose the correct word in the following and give your reasons:
 - (a) I wish I (was, were) there.
 - (b) (Who, whom) can you get to do the work?
 - (c) Nobody but the speakers (sit, sits) on the platform.
 - (d) They thought it to be (he, him).
 - (e) I have nothing (farther, further) to say.
3. What are the uses of diagramming sentences? What abuses often follow? Why is thought analysis a harder process than diagramming? Why more beneficial?
4. Analyze the following sentences and explain fully the difference in use, if any, of the words "is deceiving" in each sentence. The man is deceiving himself. The height of the mountain is deceiving.
5. Discuss fully the points of similarity and difference between participles and infinitives.

READING.

1. What is the value of reading in the course of study compared with other branches? Your reason for your answer.
2. What relation does physical culture bear to the art of expression? What are correct standing and sitting positions.
3. What should be the main points for the student to emphasize in preparing a reading lesson? How far should the teacher aid him in this preparation?
4. Suggest a good plan for training pupils to read at sight.
5. Read a selection chosen by the examiner.

GEOGRAPHY.

1. Locate the climate circles. Why so located? Give width and name of each zone they enclose.
2. In the study of this branch which does the child do first, generalize or particularize? Illustrate by example. In what grade should instruction in geography begin?
3. In what direction do the noonday shadows fall at the following places on the 21st of March? Hammerfest, Chicago, City of Mexico, Quito, Mozambique, Melbourne.
4. What are the trade winds? What causes them? Their direction?
5. Draw a map showing the routes of the Nicaragua canal and the Panama canal. Which route was decided upon by the United States and how and when was the question decided?

CIVICS OF THE UNITED STATES.

What do you understand by the term bi-cameral as used in connection with our general legislative body?

Name *the three general* powers of the senate and tell when it exercises each.

2. How is a vacancy in the U. S. senate filled? State the qualifications of a U. S. senator; a representative.

3. Distinguish between a pardon and a commutation. Who has the power to pardon? Is there any limit to this power in the United States?

4. What new department has recently been established by congress and who has been appointed as head of the department? How many members in the president's cabinet?

5. Of what duration is the "life of a congress"? When did the fifty-seventh congress expire? Which branch of congress is a perpetual body? Why?

CIVICS OF IOWA.

1. When was Iowa organized as a territory? As a state? By what process does a territory become a state?

2. What is the Board of Control? When was it established? How many members? Duties of the board?

3. How many and what officers constitute the Executive Council? What are the duties of this body.

4. What state officers are to be elected at the fall election of 1903? For how long a term will each of these officers be elected and what compensation does each receive?

5. Who can be impeached in the state of Iowa and what is the process of an impeachment trial?

SCHOOL LAWS OF IOWA.

1. State five powers of the board of directors.
2. What does the law provide concerning kindergarten department?
3. What is the contingent fund? For what may it be used?
4. What are the legal qualifications of a teacher?
5. Discuss in full the manner of raising school taxes.

ECONOMICS.

1. What qualities should any article possess in order to make it desirable for use as money?
2. Define fixed and circulating capital and give examples of each.
3. Name some arguments in favor of a protective tariff and state objections to such a tariff.
4. Explain co-operation and profit-sharing.
5. Define wealth, value, price, rent.

MUSIC.

1. Is ability to sing well a necessary qualification in order that one may teach vocal music? Discuss fully.
2. Is music of any value in school discipline? If so, explain in what way.
3. What is the difference between a major diatonic scale and a chromatic scale?
4. Define Da Capo; Fortissimo; Largo; Piano; Tempo; Staccato; Vivace.
5. Write the signatures for the key of D, key of Bb, key of F, and key of G. Write a chromatic scale in key of D.

ARITHMETIC.

Show all the work.

1. (a) Divide $720 - (\frac{1}{2} \times 28 - 7\frac{1}{2})$ by $40\frac{1}{2} + (\frac{1}{10} \div \frac{1}{2}) \times (\frac{1}{2})^4$.
(b) If 25 men, working 8 hours a day, do $\frac{1}{4}$ of a piece of work in 24 days, in how many days of 10 hours each will 30 men finish the piece of work?
2. (a) The sum of \$1,196 was divided between eight men in such a manner that each man after the first received \$12 more than the one next preceding him. How much did the first man receive? The last man?
(b) A tree 125 feet high is broken off; the top touches the ground 25 feet from the base of the tree, the other end remaining on the stump. How long was each part?
3. How much must I pay for railroad 6's that my investment shall yield 7 per cent?
4. (a) I receive a remittance of \$13,195 to be spent, after paying the commission of $1\frac{1}{2}$ per cent, in the purchase of coal. Required my commission.
(b) How much must I mark cloth which cost \$2.50 so as to gain 20 per cent, and still fall 25 per cent from the marked price?
5. Find the entire surface and the diagonal of a cube containing 262,144 cubic inches.

ALGEBRA.

1. Simplify $\frac{x^2 + x + 1}{(x+1)^2 - x^2} \div \frac{x + \frac{1}{1+x}}{1 + \frac{x}{1+x}}$
2. Factor $a^4 - 2a^2 + 1$, $12m^2 - 7m + 1$, $6a^2 - 2ab - 3a + b$, $81 - a^4$.
3. Solve $ax^2 + bx = c$.

What is the interpretation of $a^{\frac{n}{m}}$; a^{-n} ; a^0 ?

4. A boat's crew rows $3\frac{1}{2}$ miles down the river and back again in one hour and forty minutes. If the current of the river is two miles per hour, determine the rate of rowing in still water.
5. The difference of two numbers is 6, and their product is to the sum of their squares as 2 to 5; what are the numbers?

BOOKKEEPING.

1. State the advantages of double entry with regard to (a) verifying the ledger; (b) gain or loss in particular lines of business.
2. The following is a memorandum of the Drake Hardware Co., Friendship, N. Y., July 16, 1902. Sold John Perry woven wire fencing, 140 rods at 35 cts. per rod; 40 pounds staples at 4 cts. per pound. He paid cash \$25.60 and gave his note for the balance; time 30 days, payable at Friendship National Bank.

Make an itemized bill of this transaction and receipt for company.

3. Write the note mentioned in question 2. Mention three ledger accounts which show loss or gain.

4-5. The following is a ledger abstract:

	Dr.	Cr.
Proprietor.....		\$5,800.00
Mdse: (Inventory \$1,200).....	\$ 5,989.00	6,218.00
Cash.....	10,745.20	6,484.25
Expense.....	836.05	
John Ames.....	670.00	455.00
Bills receivable.....	1,450.00	520.00
Bills payable.....	1,040.00	1,250.00
Int. and discount.....	4.25	7.25

(a) Make from the above a statement of resources, liabilities, net capital, net gain or loss. (b) Make a second statement of gains and losses and net gain or loss to verify your answer to (a).

PHYSIOLOGY.

1. Explain fully the respiratory organs, the processes of respiration, and the purposes of breathing.
2. Give the structure of all the tissues and vessels in one of the limbs of the body.
3. Describe the digestive organs in the abdomen.
4. Represent by a drawing twelve parts of the eye.
5. Give the effects of alcoholic stimulants on digestive organs, and state the evil effects of the use of tobacco.

BOTANY.

1. Roots—origin, structure and functions.
2. Give the parts of a flower and the use of each part.
3. Make a comparison of the internal structure of monocotyledonous and dicotyledonous stems as shown by the microscope.
4. Make a drawing showing the important parts of the leaf. Give an account of some of the special modifications of the leaf.
5. Define the terms monoecious, dioecious, polygamous, apetalous, sterile as used in botany.

PHYSICS.

1. Distinguish between atoms and molecules.
Define force, mass, weight.
What do you understand in physics by C. G. S.?
2. Define parallelogram forces.
Draw diagram illustrating how the resultant may be found when three forces are acting. Explain briefly.
3. Give Pascal's law. How would you find the specific gravity of a body which is soluble in water? Of a body lighter than water?
4. Define sound. What is the velocity of sound in air at 0° Centigrade? Define beats.
5. Describe the Leyden jar. Its use. Describe a gravity cell. When this cell is in good condition what appearance does it present? Give laws of resistance for electrical conductors.

DRAWING.

1. Name three colors most commonly found in nature.
What is the tool commonly used for laying out or measuring angles?
Name of the polygon which has nine equal sides and equal angles.
2. Draw in masses to represent a pitcher, cup and dipper, or a horizontal cylinder, a pyramid, and cube.
3. What is the principle of receding parallel lines. Illustrate.
4. Of what value to a teacher is drawing? To pupils?
5. Make a drawing of your own selection.

DIDACTICS.

1. Make the psychological distinction between perception and apperception.
2. What are the true aims of education? State your opinion of how these are best attained.
3. Name six educational writers and mention one production of each.
What do you understand by educational classics? Name one.
4. Discuss proper incentives which a teacher may employ to induce pupils to study.
5. In what ways is moral instruction a possible attainment of public instruction.

PRIMARY STATE CERTIFICATE.

PSYCHOLOGY.

1. What is meant when it is said that the teacher should "vitalize" knowledge?
2. State clearly the difference between a percept and an image.
3. What is sub-consciousness? What evidence have we that the mind is always active.
4. What is reflex action? Distinguish between an inherited reflex, an acquired reflex and a deliberate action.
5. Show that what we remember depends upon attention.

PRIMARY SCHOOL MANAGEMENT.

1. What is the value of questioning as a device in teaching? Give the kinds of questions, how they should be asked, and how answers should be treated.
2. Explain how you use suggestion with younger pupils, in directing their activities.
3. How do you know when and how children are fatigued? Give your ways of relieving the forms of fatigue you mention.
4. Give reasons why the emotions of fear and anger should be avoided in dealing with children.
5. What are the best tests of good school work? To what degree and in what ways is the teacher responsible for the moral instruction of pupils?

HISTORY OF EDUCATION.

1. Name an educational classic that you have read, and summarize its leading principles.
2. What does modern education owe to Francis Bacon, Comenius, Locke, Horace Mann?
3. What are the main advantages of the kindergarten? What do you consider the chief faults of the primary education of today?
4. What are the advantages to the teacher of a good knowledge of the history of education? What educator do you most admire? Why?
What are the chief characteristics of the "New Education"?

SCHOOL LAW.

PRIMARY.

1. With what legal conditions must a teacher comply before she can draw her salary?
2. Into what funds are the school moneys of a district divided? For what purposes may each fund be used? Of what is the semi-annual apportionment composed?
3. Name three duties incumbent upon the board of directors.
4. When may the board expel a pupil?
5. What is the institute fund? What does the law say concerning its disbursement?

PRIMARY METHODS.

1. State all the modes of expression which the child may use to show that he has observed.
2. Name all the arguments you can why spelling should be taught orally.
3. Would you use objects in teaching number? If so, what? State reasons for your answer.
4. On what is the Speer system of numbers based? From what basis is it to be rightly accepted or rejected?
5. What is the educational value of myths and stories?

DRAWING.

PRIMARY.

1. Make a drawing of street or roadway showing relation of receding lines.
2. Make a drawing in light and shade.
3. Name some books of reference for picture study.
4. What time do you think should be given to clay modeling? What are some of the advantages and disadvantages of the use of clay?
5. In picture study what kind of subjects will appeal to children, and how would you present the subject to them?

PLANT STUDY.

1. Name six plants that are excellent for nature study. Give reasons why?
2. Name the trees you would study during different portions of the year and state your reasons.
3. Discuss plant study with reference to its value to the child and its effects upon the child.
4. Draw longitudinal and transverse sections of a stem to illustrate its internal structure and name the parts.
5. What are the functions of the root? How may these functions be demonstrated? Name the five functions of the leaf.

VOCAL MUSIC.

(PRIMARY.)

1. Write the notes and rests in common use, the *time* signatures in common use, and the key signatures for C sharp and B flat.
2. Write a chromatic scale, ascending and descending, in the key of E flat.
3. Tell how children's voices are most likely to be injured in school singing. Give suggestions for cultivating musical tones.
4. Give detailed directions for presenting the major scale to a primary school and for developing skill in singing all the intervals.
5. Name three good songs for primary schools and tell why you consider them good.

PHYSICAL TRAINING.

1. Discuss the value of physical training as an aid to discipline.
2. At what time or times during the school day is physical exercise most needed.
3. Name the amount of sleep per day required by each pupil and state some of the physiological changes which take place during sleep.
4. Compare relative value of free work and work with light apparatus.
5. Name some precautions that should be observed in giving physical exercise to young pupils.

SPECIAL STATE CERTIFICATE.

VOCAL MUSIC.

1. Write a chromatic scale in each of the following keys: E flat, E.
2. Write the three different forms of the minor scale in the key of F minor, naming each.
3. Name two of the most commonly used systems of music books for the public schools and discuss the merits and defects of each.
4. Discuss good music and poor music, giving examples of each from well-known hymns, from general school songs, and songs from primary grades.
5. Using G flat as the lower note in each interval, indicate on the bass staff (1) a diminished seventh; (2) an augmented fourth; (3) a minor sixth; (4) a diminished third; (5) an augmented second.
6. What should be attempted in music during the child's first year in school? Give specific directions for conducting the work.
7. Discuss the origin of the opera and the oratorio, naming three of the leading composers of each.
8. If you were putting music into a graded system of schools where it had never been taught, state definitely how you would proceed to get the school adjusted to a graded series of books. (Discuss fully.)
9. Give three cautions for teachers to observe in regard to children's singing. To what extent would you use note reading? How would you develop the sense of rhythm?
10. (a) Define: (1) accidental; (2) double sharp; (3) double flat; (4) interval; (5) diatonic scale; (6) metronome mark; (7) key note; (8) relative keys; (9) transpose; (10) signature.
(b) Give the meaning of the following musical terms: (1) tenuto; (2) molto; (3) legato; (4) espressivo; (5) calando; (6) sforzando; (7) dal segno; (8) ritenuto; (9) pianissimo; (10) cantabile.

DRAWING.

1. Arrange in a group and draw a hexagonal prism, a cone and a sphere. (Develop by light and shade).
2. Make a group of two or more objects, and paint with water-colors.
3. Make a simple water-color landscape study in tones of one color.

4. Represent a very flat country, with a river or road placed conspicuously. (The student may use any medium he prefers.)
5. Make a drawing from memory or imagination of at least two objects, one of which shall be cylindrical in form.
6. Reproduce from memory an historic design, and tell when, where and how it was originally used.
7. Give the chief characteristics of Greek art, telling about its origin and influence.
8. Where and when did Gothic architecture originate? How is it usually employed? Mention five conspicuous examples of this style.
9. Make a design for an oblong space and designate for what purpose it is intended.
10. Make a construction drawing of the desk or table upon which you draw.
11. Make an architectural perspective drawing of a house or barn.
12. Sketch a corner of the room in which you are located.

PENMANSHIP.

1. What are the qualifications of a good teacher of penmanship? What system of penmanship do you teach?
2. What is meant by vertical writing? What are its advantages? Its disadvantages?
3. Outline a lesson in penmanship for classes from fourth to sixth grade.
4. a. What are the characteristics that mark a well-written page of manuscript?
- b. Would you advise that pupils be urged to practice at home in learning to write, and how would you be able to secure that practice from them?
5. Mention four difficulties with which a teacher has to contend in teaching writing, and tell what way you would overcome them.
6. What proportion of the time would you give to the movement exercises in each penmanship period? Which movement do you deem most practical?
7. Put the small letters into the best groups for teaching them, and show the order in which you would present these groups.
8. Copy the following as a specimen of your best penmanship: "Books are the legacies that a great genius leaves to mankind, which are delivered down from generation to generation as presents to the posterity of those who are yet unborn."

TWO YEARS STATE CERTIFICATE.

The questions for this examination are selected by the board from those issued by the state department of public instruction for use in the county examinations.

STATE DIPLOMA.

GEOMETRY.

1. Prove: If two parallels are cut by a third straight line, the alternate interior angles are equal.
2. Prove: The lines joining the middle points of the sides of a triangle divide it into four equal triangles.
3. Prove: An inscribed angle is measured by one-half its intercepted arc.
4. Given the three sides of a triangle to construct the triangle. Explain.
5. Prove: Two triangles are similar when they are mutually equiangular.
6. Prove: In any triangle the square of the side opposite an acute angle is equal to the sum of the squares of the other two sides diminished by twice the product of one of these sides and the projection of the other side upon it.
7. Prove: The area of a regular polygon is equal to one-half the product of its perimeter and apothem.
8. Describe a circle through two given points tangent to a given straight line.
9. Show how you obtain the formula for finding the volume of a circular cone.
10. The sum of any two face angles of a trihedral angle is greater than the third.

TRIGONOMETRY.

1. Name and define all the general trigonometrical functions.
2. Illustrate by diagram all the natural functions of an arc in the third quadrant.
3. Give the sine of 30° ; the cosine of 240° ; the tangent of 135° ; the secant of 330° .
4. Derive an expression for the sine of $x+y$ in terms of the sine and cosine of x and y .
5. Prove $a : b :: \sin a : \sin b$.
6. Indicate the process of finding the angles of a triangle the sides of which are given,—writing out all the formulae required.
7. Show that $\cos. x \tan. x + \sin. x \cot. x = \sin. x + \cos. x$.
8. Discuss in full Napier's Circular Parts.
9. Given the sides about the right angle of a right spherical triangle to find the other parts—write formulae and indicate process of solving.
10. Write formulae employed and indicate process of finding the sides of a spherical triangle, the angles of which are given.

CHEMISTRY.

1. With what does the science of chemistry deal?
2. What is a chemical compound? A chemical element?
3. What are some of the characteristics that distinguish chemical forces from other forces?

4. Describe oxygen in its various forms.
5. What is meant by a "trivalent element?"
6. Give an explanation of the phenomena of combustion, as observed in a candle flame.
7. Describe the action of zinc on hydrochloric acid, naming the products and stating to what class of chemical substances each belongs.
8. Define the terms acid, base, salt. What is meant by water of crystallization?
9. What is a "saturated" solution, and how does it differ, if at all from a concentrated solution?
10. Give the names of the following substances: CO , HF , H_2S , CaC_2 , Fe_2O_3 , H_2SO_4 , H_2O , HCN , H_3N .

ZOOLOGY.

1. Name and define the essential parts of an animal cell. What is the name of the group to which all one-celled animals belong?
2. To what sub-kingdom does the hydra belong? Make a sketch of one, naming the principal parts.
3. Name an animal belonging to the Echinodermata. Describe its water-vascular system.
4. Tell what you know about the anatomy of the clam, or fresh-water mussel.
5. What are the principal points of difference between a crustacean and an insect?
6. Name and define the principal parts of the eye of a vertebrate animal.
7. Name and define the class to which each of the following animals belong: Fish, frog, turtle, bird, man.
8. Define the following sciences: Embryology, histology, morphology, paleontology, zoogeography.
9. Name and locate the bones in the mammalian head.
10. Describe the origin of the central nervous system of a typical vertebrate.

GEOLOGY.

1. What is geology? What are the subdivisions of the science?
2. What are rocks? Name ten of the common rock-forming minerals.
3. Into what kinds and classes are rocks divided? What kinds are most common in Iowa?
4. What is coal? History of a coal seam? To what geological age does the coal of Iowa belong?
5. What useful minerals besides coal are found in Iowa? Where? In what geological formations?
6. Construct table showing, in order of age, the successive geological formations as these are recognized in North America.
7. What geological work is accomplished by rains? By rivers.
8. Geological work of glaciers? Of icebergs? Of ice in general?
9. Geological work of the atmosphere? What gases are most active in effecting geological changes?
10. What geological work is accomplished by plants and animals? Describe especially the work of marine animals.

ASTRONOMY.

1. Give the distance and dimensions of the moon. Give a proof that there is no atmosphere upon the moon's surface.
2. Briefly outline the appearance and probable physical conditions of one of the planets.
3. Why is Mercury never seen except as morning or evening star?
4. What is meant by solar parallax?
5. Briefly describe a sun spot.
6. Briefly describe the two kinds of telescopes in use.
7. What is meant by sidereal time, and mean solar time? Which is the longer, the solar or the sidereal day.
8. Give a short description of a comet and its orbit.
9. Give a probable explanation for the November meteors.
10. What can you say regarding the distance, dimensions and arrangement in space of the stars?

POLITICAL ECONOMY.

1. Discriminate between wealth and capital; fixed and circulating capital.
2. Discuss the production of immaterial wealth.
3. Define economic rent. Explain the conditions regulating economic rent.
4. State in full the various theories on the wages fund. Give your authority in each case.
5. Outline the history of trade unions, giving an exposition of their advantages and disadvantages.
6. Cite some instances of successful co-operative societies in America, and explain why they were successful.
7. Discuss in full the history of banking in the United States.
8. State arguments for and against Henry George's theory of taxation.
9. Discuss feudalism from an economic standpoint.
10. Discuss the tramp problem. Suggest a remedy.

RHETORIC.

1. Write a formal definition of rhetoric. What other branches of language are closely related to rhetoric, and how?
2. What should characterize a good description? A good narrative? A good scientific essay? A devotional hymn?
3. What means would you employ in a course of study to awaken in a child the emotions of the beautiful?
4. What is criticism? Real criticism? Verbal criticism? Logical criticism? Give examples of each.
5. What instruction would you give regarding the choice and determination of a subject for a discourse?
6. Write ten lines showing how energy can be secured. In what kinds of discourse is energy most important?
7. Write fifteen lines showing the difference between wit and humor. Name good examples in literature of wit and humor.

8. Classify according to purpose the several kinds of poetry. To what classes do the following belong? "Evangeline," "Merchant of Venice," "Hail Columbia," Pope's "Essay on Man."
9. What is rhythm? Rhyme? Metre? A poetic foot? Blank verse? A sonnet? A verse? A stanza?
10. Construct the framework of an essay on, "The Value of Good Literature."

LITERATURE.

1. Characterize early colonial literature. Name the principal writers of that period.
2. Explain fully how you would teach the Cotter's Saturday Night.
3. What place should Washington Irving have in a high school course? Write an abstract of fifteen lines of one of his works suited to high school study.
4. Classify the following into novels, criticisms, etc., and tell the author of each: Tanglewood Tales, Over the Tea Cups, Bonaventure, Ben Hur, Bigelow Papers, Home Sweet Home, the Concord Hymn.
5. Tell of the life and works of James Russell Lowell.
6. Give an outline of the Lady of the Lake.
7. Tell how King Arthur and the Round Table obtained their place in English literature.
8. What are the leading characteristics of Paradise Lost?
9. Explain the influence on English literature of French authors and German writers.
10. How would you study Hamlet? How would you teach it? What helps would you use?

QUESTIONS IN HISTORY.

1. Why did not the protestant movement in England cause a civil war as it did in those continental countries which became protestant?
2. Was Charles the Great (Charlemagne) a French or a German? Give the reason for your answer.
3. In the history of the Holy Roman Empire, what was the Great Interregnum?
4. In the history of the papacy what was the Babylonian captivity?
5. Why did the Calvinists finally outnumber the Lutherans in protestant Europe?
6. How did the policy of the Stuarts in England differ from that of the Tudors?
7. State the chief features in Oliver Cromwell's government in England.
8. What charges of violated rights did the American colonies bring against the mother country?
9. State the points of contrast between John Adams and Thomas Jefferson.
10. What were the issues between the democratic and whig parties from 1840 to 1860.

CHAPTER VII.

IMPROVEMENT OF RURAL SCHOOLS.

CONSOLIDATION OF SCHOOLS.
 TABLES SHOWING ATTENDANCE.
 SALARIES OF TEACHERS.
 GUTHRIE COUNTY HIGH SCHOOL.
 LLOYD TOWNSHIP CENTRAL SCHOOL.
 TRANSPORTATION OF PUPILS.
 A RURAL SCHOOL'S ARBOR DAY.
 AGRICULTURAL HIGH SCHOOLS.



The cut above represents all the school houses on a twenty mile drive taken in Southwestern, Iowa.

IMPROVEMENT OF RURAL SCHOOLS.

In the last biennial report of this department an entire chapter was devoted to the subject of the consolidation of districts and the transportation of pupils. So great has been the call for copies of the report that it has been thought best to again give prominence to the subject.

The reports given are only illustrative of the work being done by interested friends of education to improve existing conditions and afford more nearly equal educational advantages for the sons and daughters of our farmers. A careful reading of these reports will show the plans to improve the system are not uniform, and that local conditions govern. In one county two or three districts are united; in another, subdistrict schools are closed and pupils are conveyed to a school of a higher grade in an adjacent district; while in several townships the pupils attend a central graded school.

Farm journals have shown a very commendable interest in the improvement of rural schools during the past two years. Many strong editorials have been published showing the need of improvement in rural schools and the benefits resulting. We quote from one of them the following:

"Recently considerable attention has been paid to the consolidation of country school districts in the various sections of the country, the aim being to centralize a number of school districts where the attendance is small, or where school facilities are meager, making a central school where modern methods of building with good equipment, and competent teachers can be afforded. Let us look at some of the benefits that may be derived from such a system. In the country schools lack of time on the part of the teacher to hear the large number of classes is marked, and there is necessarily lack of time to introduce additional studies as are necessary to meet the requirements of the farmer's needs, also a lack of a proper supply of apparatus, while in large schools proper apparatus may be obtained, that can be used to demonstrate the work to a much larger number of pupils. The children are less exposed in stormy weather, and avoid sitting in damp clothing. Fewer teachers are required and better teachers may be obtained, and higher salaries paid. The attendance becomes more regular, and of longer

continuance. Better opportunities are afforded for special studies. The cost of sustaining the school is in nearly all cases reduced: the school year made longer, and the whole community in a social way drawn together, and the larger graded schools, through this system, brings within the reach of the children manual training, and household science—two desirable branches which, at present, are restricted to town and city schools.

"Aside from the direct educational benefits of a well organized central school, there are outgrowths which are worthy of consideration.

"First, might be mentioned the question of 'good roads.' Good roads are a necessity in order to make the system a complete success, and means accessibility to markets, which increases the value of the farms. Second, it affords a stimulus of public interest in the schools, that brings together the boys and girls of the township to an institution in which all can have an equal interest and a worthy pride. Third, studies can be introduced into these schools that tend to direct the mind along the line of nature studies, and the things of the farm, rather than divert toward the things of the city, creating a desire to remain upon the farm and sustain farm work as it should be sustained. It makes the farm labor honorable, because of the advantages of proper rural training."

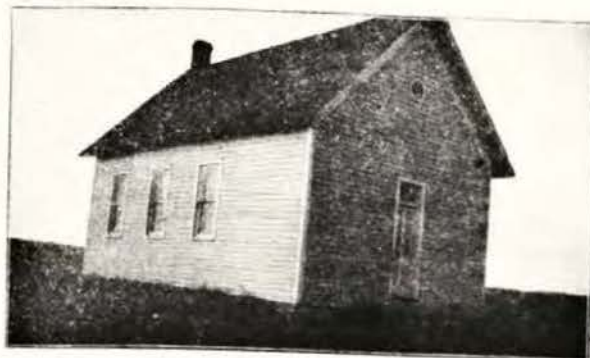
PROPOSED LAW.

The following bill drawn and presented to the last legislature in response to what seemed to be a demand of the public, passed the house of representatives in 1902. It is a meritorious measure, and if enacted into law would enable many communities to improve existing school conditions:

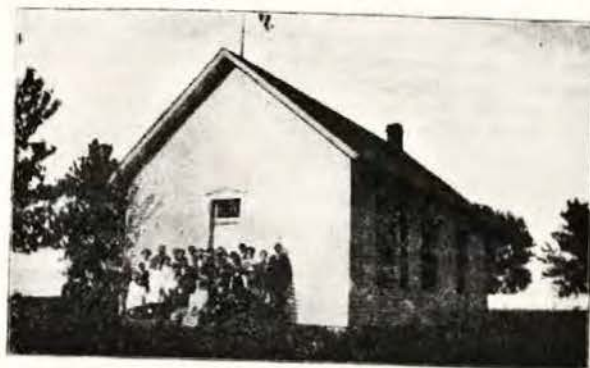
Be it Enacted by the General Assembly of the State of Iowa:

SECTION 1. School corporations located contiguous to each other may unite and form one school corporation, and subdistricts adjacent to independent districts or rural independent districts may also unite with the same and form one school corporation, in the following manner: At the written request of any ten legal voters residing in each of said school corporations, or the said school corporations and the adjacent subdistricts, or, if there be not ten, then one-third of said voters, their respective boards of directors shall require their secretaries to give at least ten days' notice of the time and place for a meeting of the electors residing in each of such corporations or subdistricts, by posting written notices in at least five public places in each of said corporations or subdistricts, at which meeting the electors shall vote by ballot for or against a consolidated organization of said school corporations, in said school corporations and adjacent subdistricts, and if a majority of the votes cast at the election in each shall be in favor of uniting said districts, then the board of the corporation having the largest school population by the last preceding school enumeration, shall give notice of a meeting of the electors to choose a board of directors.

Districts consolidated under the provisions of this act having a population of less than five hundred shall be governed by a board of directors consisting of three members, and those having a larger population by a board



A neat comfortable new school building in Northwestern Iowa.



A school and school building in Southeastern Iowa. The school grounds are well shaded and the site one of the most beautiful.



A country school house in Northeastern Iowa. This building is in a wealthy community and was built thirty years ago.

of directors consisting of five members, the same to be chosen in accordance with the provisions of sections 2797 and 2795 of the Code, so far as applicable.

SEC. 2. School townships, and civil townships composed of rural independent districts, may be consolidated and organized as independent township districts in the following manner: Whenever the board of directors of any school township shall deem the same advisable, and also whenever requested to do so by a petition signed by one-third of the voters of the school township, the board shall submit to the voters of said school township, at a regular election, or one called for that purpose, the question of consolidation, at which election the voters of the school township shall vote for or against consolidation. If a majority of votes cast shall be in favor of such consolidated organization, such school township shall organize on the second Monday of March following as an independent township district, by the election of five directors from the township at large, one of whom shall be chosen for one year, two for two years and two for three years; provided, that in townships which have been divided into rural independent districts, the duties in this section devolving on the board of directors, shall be performed by the trustees of the township to whom the petition in such cases shall be addressed; and, provided further, that nothing in this section shall be construed to affect independent districts composed wholly or mainly of cities, towns or villages.

RURAL SCHOOLS.

In the twenty-ninth biennial report of this office there was given information regarding the number and size of small schools in the different counties of the state. That report shows that there were 333 rural schools with an average daily attendance of less than five; 2,577 less than ten; 6,373 less than fifteen and 9,329 less than twenty.

For the present report the accompanying table has been prepared. The statement herewith given shows the number of school townships and rural independent districts for the year 1901—1902 having an average daily attendance of less than five, less than ten, etc., in each school room, and the highest and lowest amounts paid teachers per month.



School in Monona County, winter scene.



School in Webster County, winter scene.



School in Monona County, winter scene.

RURAL SCHOOLS.

County.	Number of townships.	Number of sub-districts.	Number of Townships					No. Rural Independent Districts.					Monthly Compensation Paid Teachers.					Total Amount Paid Teachers for the Year 1901-1902.
			Daily attendance each school less than—					Daily attendance each school less than—					Highest amount paid in any school township or rural independent district.					
			5 10 15 20 25					5 10 15 20 25					5 10 15 20 25					
			Lowest amount paid in any school township or rural independent district.					Lowest amount paid in any school township or rural independent district.					Lowest amount paid in any school township or rural independent district.					
Adair	15	127	1	10	14	14	7	0	20	\$35.00	\$25.87	\$	45,747.18					
Adams	9	110	0	8	9	9	1	15	18	24	37.22	25.00	37,871.49					
Allamakee	9	58	1	8	9	9	1	11	39	52	36	37.20	16.00	39,863.40				
Appanoose	13	94	0	9	12	12	1	1	1	1	34.21	30.00	40,484.61					
Audubon	12	106	2	9	12	12	3	25	41	73	83	40.00	20.00	70,499.31				
Benton	10	77	1	7	10	10	12	29	47	53	43.33	24.43	91,809.75					
Black Hawk	11	93	3	10	11	11	3	2	30	45	38.75	23.50	90,707.29					
Bremer	6	44	1	5	6	6	2	15	11	15	35.00	20.00	23,824.91					
Buchanan	9	78	7	9	9	9	10	20	44	46	37.18	22.50	59,067.49					
* Buena Vista	20	132	2	15	19	20	2	7	22	38	38.03	20.00	52,046.98					
Butler	11	99	1	7	9	11	1	1	1	1	38.25	28.00	60,715.05					
* Calhoun	16	135	1	14	16	16	6	9	12	15	35.25	25.00	57,738.61					
Carroll	15	120	8	9	12	13	2	3	9	9	38.33	26.00	71,830.67					
Case	13	109	0	12	13	13	3	15	23	31	41.40	25.00	66,657.97					
Cedar	12	103	1	12	12	12	1	7	6	18	19	40.00	23.29	60,497.48				
Coar, Gordo	15	129	12	15	15	15	1	5	7	7	40.00	25.00	57,432.17					
Cherokee	5	53	5	5	5	5	1	8	24	40	49	35.00	22.00	38,860.78				
Chickasaw	9	77	1	6	9	9	4	15	19	23	34.66	26.00	49,927.42					
Clarke	16	124	5	10	16	16	3	11	16	18	37.22	22.00	61,185.80					
* Clay	17	147	1	9	17	17	4	11	15	19	43.33	24.17	113,100.90					
Clayton	20	168	2	17	19	20	3	10	15	19	39.00	26.58	90,590.80					
* Crawford	13	114	5	13	13	13	1	2	6	15	19	39.50	27.18	71,079.19				
Dallas	8	82	1	8	8	8	4	5	8	16	33	46	35.00	18.00	24,204.38			
Davis	9	67	2	7	9	9	3	10	25	32	40	37.50	20.00	39,886.52				
Decatur	14	112	2	7	14	14	1	7	7	7	45.00	25.00	47,134.11					
Delaware	5	5	1	5	5	5	1	5	5	5	45.00	25.00	68,467.56					
Des Moines	10	68	3	9	10	10	3	7	20	35	39	43.00	13.23	105,441.13				
* Dickinson	10	67	1	8	10	10	3	7	20	35	39	43.00	13.23	105,441.13				
Dubuque	10	67	2	8	8	8	9	40.00	29.74	7,657.44								
* Emmet	12	103	7	12	12	12	1	9	33	60	64	42.50	24.00	62,867.02				
Fayette	11	103	1	11	12	12	1	10	19	24	25	35.00	25.00	49,592.91				
Floyd	12	102	1	11	12	12	1	10	19	24	25	35.00	25.00	49,592.91				
Franklin	11	102	1	11	12	12	1	10	19	24	25	35.00	25.00	49,592.91				
Fremont	14	129	1	14	14	14	1	14	14	14	37.50	24.45	51,261.33					
Greene	10	84	2	10	10	10	3	15	26	33	40.00	22.30	44,518.96					
Grundy	15	134	2	17	15	15	8	6	6	6	37.50	26.53	59,138.54					
Guthrie	15	108	1	7	14	14	2	9	14	21	47.00	28.00	55,408.78					
Hamilton	14	115	2	12	14	14	1	14	14	14	37.50	24.45	51,261.33					
* Hancock	8	77	1	4	8	8	0	20	22	00	40.00	22.00	40,591.73					
Hardin	16	118	1	4	16	16	2	2	10	18	47.50	27.50	71,430.40					
Harrison	4	32	2	4	4	4	1	12	12	53	45.00	22.00	40,591.73					
Henry	11	90	1	9	11	11	3	4	7	7	38.00	24.30	35,016.08					
Howard	10	84	2	9	10	10	1	10	10	10	32.00	27.35	40,060.51					
Humboldt	12	96	1	10	12	12	1	10	12	12	38.50	30.52	44,709.67					
* Ida	10	76	1	5	9	9	9	7	23	50	50	40.00	18.00	32,555.84				
Iowa	14	106	2	7	12	12	1	18	22	25	40.00	20.00	38,860.78					
Jackson	17	159	1	11	14	16	1	6	13	15	42.80	23.07	78,084.39					
Jasper	9	98	1	1	9	9	1	6	14	17	45.00	22.50	38,132.41					
Jefferson	19	168	2	17	19	19	3	10	15	19	39.00	26.58	90,590.80					

RURAL SCHOOLS—CONTINUED.

County.	Number of townships.	Number of sub-districts.	Number of Townships					No. Rural Independent Districts					Monthly Compensation Paid Teachers.					Total Amount Paid Teachers for the Year 1901-1902.
			Daily attendance each school less than—					Daily attendance each school less than—					Highest amount paid in any school township or rural independent district.					
			5 10 15 20 25					5 10 15 20 25					5 10 15 20 25					
			Lowest amount paid in any school township or rural independent district.					Lowest amount paid in any school township or rural independent district.					Lowest amount paid in any school township or rural independent district.					
Johnson	16	114	1	12	14	16	9	2	31	40	\$ 0.00	\$22.60	\$	65,424.10				
Jones	9	70	2	8	9	9	1	15	33	39	40.00	22.00		54,060.33				
Keokuk	2	24	1	2	2	2	2	18	44	60	43.15	22.50		58,805.77				
* Kosuth	28	212	9	20	28	28	2	1	3	3	47.80	28.00		74,182.57				
Lac	11	67	1	3	3	7	1	3	3	7	34.47	19.33		71,016.24				
Linn	11	105	5	10	11	11	5	22	14	49	35.00	23.00		140,556.05				
Louis	9	60	1	8	9	9	1	8	15	15	40.00	23.00		55,183.78				
Lucas	4	33	1	4	4	4	0	10	33	48	31.50	22.50		54,559.65				
Lyon	12	82	5	9	12	12	1	2	4	37.50	26.33		60,086.05					
Madison	12	103	3	11	12	12	1	8	10	15	31.50	25.00		45,032.92				
Mahaska	9	67	3	7	9	9	2	17	6	51	45.00	25.00		74,280.30				
Marion	12	92	1	4	4	4	8	34	40	74	41.00	22.33		51,524.55				
Marshall	12	90	8	12	12	12	2	1	3	14	41	50.00	31.87		100,000.11			
Mills	4	19	1	2	4	4	0	2	4	4	60.00	27.01		45,511.55				
Mitchell	8	51	1	5	8	8	2	8	22	35	35.00	22.14		80,002.74				
Monona	18	122	1	13	15	18	4	7	7	44.50	26.00		54,241.01					
Monroe	6	50	1	5	6	6	3	15	25	38	33.00	20.00		83,847.46				
Montgomery	10	85	6	10	10	10	6	12	16	17	43.88	28.00		52,849.86				
Muscatine	11	68	4	10	10	10	1	1	11	15	42.50	22.50		70,230.32				
* O'Brien	15	119	1	11	14	14	1	1	1	1	25.00	27.50		60,111.50				
Oscoda	11	91	2	9	11	11	1	1	1	1	40.00	30.00		10,721.80				
Page	11	82	1	3	9	11	6	13	20	36	30.00	30.00		64,012.30				
* Palo Alto	16	123	3	13	16	16	1	1	1	1	35.00	27.50		45,154.61				
* Plymouth	23	153	6	14	23	23	1	1	1	1	35.00	28.10		67,733.33				
Pocahontas	15	128	1	12	14	15	2	5	7	8	42.92	26.50		48,385.15				
Polk	13	92	1	10	11	11	1	4	10	12	45.00	27.14		395,607.00				
Pottawattamie	25	217	1	15	25	25	3	9	14	15	43.10	28.00		102,871.71				
Poweshiek	14	117	1	9	11	12	1	6	11	4	46	40.00	27.14		62,206.74			
Ringgold	12	95	6	12	12	12	2	13	38	24	38.28	22.33		42,300.52				
* Sac	16	132	1	14	16	16	1	1	1	1	35.00	28.05		55,068.70				
Scott	13	78	5	11	12	12	6	6	10	10	63.42	32.50		140,761.12				
* Shelby	16	133	1	13	16	16	1	1	1	1	39	44		58,621.76				
* Sioux	21	118	1	16	20	21	1	1	1	1	33.33	27.82		78,814.95				
Story	11	113	1	11	11	11	6	11	12	12	38.70	28.00		49,151.67				
Tama	12	96	2	10	11	12	1	12	37	34	33.33	25.00		70,644.72				
Taylor	13	99	6	9	13	13	2	4	10	15	39.57	27.14		49,653.17				
Union	10	88	6	9	10	10	2	7	13	16	32.50	22.43		52,648.30				
Van Buren	8	66	1	3	7	8	2	6	17	23	30.00	19.87		30,538.48				
Wapello	8	54	1	3	4	8	1	7	15	28	45.00	18.00		34,998.54				
Warren	6	52	1	5	6	6	1	6	25	47	40.00	22.00		40,017.00				
Washington	10	59	1	5	6	6	5	21	40	65	38.00	20.00		49,151.67				
Wayne	15	91	5	10	11	11	8	16	23	36	38.00	30.00		41,129.74				
Webster	18	137	2	14	16	17	1	4	27	31	34.00	25.00		74,200.13				
Winnebago	10	80	8	10	10	10	1	5	5	5	25.00	25.00		32,988.45				
Winnechick	14	97	7	12	14	14	2	10	24	30	32	37.38	22.43		45,324.98			
Woodbury	17	134	2	14	17	17	3	19	26	27	40.00	26.87		161,232.76				
* Worth	12	87	6	11	12	12	1	1	1	1	33.33	26.00		24,855.10				
Wright	15	118	10	15	16	16	1	2	4	8	38.00	29.72		67,758.19				
Total	1187	9,487	1	97	4	4	38	4	3	4				\$5,081,092.41				

COMMENTS ON TABLE.

The table shows 732 townships in the state having an average daily attendance in each school of less than fifteen pupils, the townships consisting of nine sub-districts having an average daily attendance of less than one hundred and thirty pupils. This number of pupils could be easily taught by four teachers, and in many cases by three, instead of nine, if transported to a central graded school. On the average there are seven townships in each county in the state where educational conditions could be improved by lessening the number of schools and increasing the number of pupils per teacher.

The table also shows that there are 1,072 rural independent districts with an average daily attendance of less than fifteen pupils. In many instances two or more small country districts could be benefited financially and educationally by consolidating.

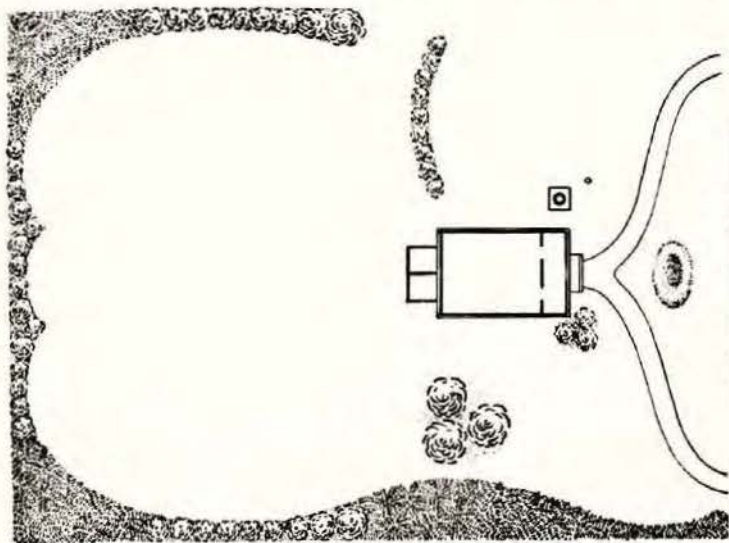
This department has repeatedly through the press and from the platform urged the benefits to be derived from the consolidation of districts, the transportation of children, the establishment of central graded schools, and township high schools. The question of what is best to do is a local one, and local conditions alone must control. A safe rule to follow, however, is to centralize where schools are small, and to retain present schools where the school population is large. Where the latter condition exists, high school advantages for all who desire to pursue studies beyond the eighth grade should be provided.

SALARIES.

The discussion of the average monthly salaries paid teachers has suggested the giving of some information concerning the subject.

The average monthly salary paid in any particular county can be learned by referring to the reports of county superintendents in appendix. Any results in the way of increased wages paid teachers will not be very noticeable in statistical tables until tabulations are completed in 1904. In agitating for an advance in salaries the effect has been wholesome and in many instances wages advanced.

In Pennsylvania the following law governing the wages of teachers has been enacted:



The above represents plan No. 1 completed. Courtesy of Youths' Companion.

PENNSYLVANIA LAW.

SECTION 1. Be it enacted, etc., that on and after the first day of June, one thousand nine hundred and four, the minimum salary paid school teachers, teaching in the public schools of this commonwealth, shall be thirty-five dollars per month.

SEC. 2. It shall be the duty of the president and secretary of the school board, of each school district in the commonwealth, to make report under oath, to the superintendent of public instruction, that the requirements of this act have been fully complied with.

SEC. 3. Every school district of this commonwealth failing to comply with the requirements of this act, shall forfeit its state appropriation for the whole time during which this act has been violated.

If the law of Pennsylvania were enacted in Iowa the average monthly wages paid, even taking "the highest amount paid" as a basis, would have to be increased in twelve counties. On the basis of "the lowest amount paid in any school township or rural independent district" an advancement would have to be made in every county in the state. On the basis of "average compensation per month paid females" for the entire year, salaries would need to be increased in ninety-two counties.

In order to retain teachers and encourage men and women to enter upon the work of teaching a greater financial inducement is necessary.

The law of Pennsylvania does not fix the standard of wages the same for all teachers regardless of education, experience or success. It will be noted that it only provides the minimum monthly salary.

In this connection there is given below the average annual salaries of teachers and supervising officers in cities of over eight thousand inhabitants in the north central group of states as shown by the report of the National Commissioner of Education for 1901.

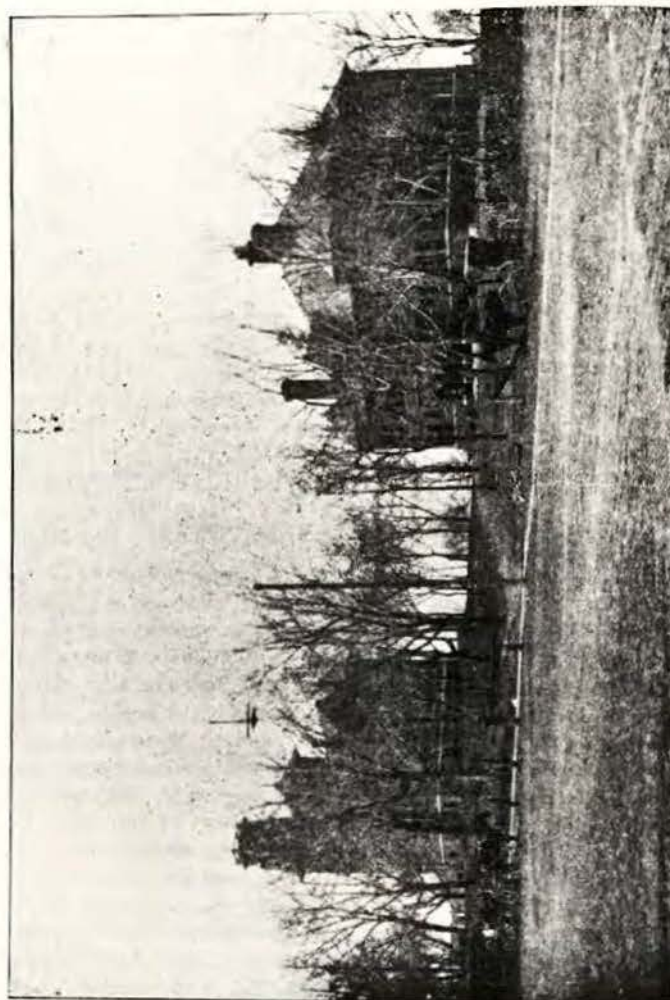
North Central Division.	Number of teachers and supervising officers.	Expenditure for supervision and teaching.	Average annual salary.
Ohio.....	5,952	\$ 3,830,405	\$ 643.55
Indiana.....	2,578	1,469,373	566.47
Illinois.....	8,371	6,404,339	765.06
Michigan.....	3,109	1,738,872	559.33
Wisconsin.....	2,478	1,393,689	562.41
Minnesota.....	2,016	1,291,102	640.43
Iowa.....	1,920	935,885	487.44
Missouri.....	3,086	1,826,775	591.96
North Dakota.....			
South Dakota.....	56	27,590	492.68
Nebraska.....	672	436,790	649.98
Kansas.....	809	435,511	538.33

The following table taken from the Commissioner's report for 1902 gives the average monthly salaries for all teachers in the same group of states:

North Central Division.	Average monthly salaries of teachers.	
	Male.	Female.
Ohio.....	\$42.00	\$37.00
Indiana.....	66.80	48.00
Illinois.....	64.55	54.18
Michigan (1900-1901).....	48.68	36.68
Wisconsin (1900-1901).....	53.33	39.52
Minnesota.....	53.56	37.21
Iowa.....	43.66	30.17
Missouri.....	42.67	42.89
North Dakota.....	42.70	37.14
South Dakota.....	40.03	33.52
Nebraska.....	49.15	38.51
Kansas.....	44.24	36.55
Of the North Atlantic Division:		
Pennsylvania.....	44.92	33.78
New Jersey.....	87.15	52.06
Connecticut.....	99.29	44.51
Rhode Island.....	116.01	51.99
Massachusetts (1900-1901).....	140.94	52.75

THE GUTHRIE COUNTY HIGH SCHOOL.

Guthrie county has the distinction of having the only county high school in the state. The school which is located at Panora, was established in 1876, for the purpose of providing a place where those who had completed the course of study in the rural schools and smaller towns, might continue their studies. Such courses of study have been provided as will best meet the wants and qualifications of those who wish to enter. Many pupils are here fitted to teach in rural schools. The school is governed by a board of trustees consisting of seven members. They are by law required to make such an apportionment of the students among the different school corporations of the county as is just and equitable, based upon the number of pupils that can be reasonably accommodated. Pupils who have a county diploma of graduation from a country school or who have teachers' second class certificates are admitted without examination, and others are classified according to advancement. Two hundred and thirty-one pupils have graduated since the school was organized. The class of 1903 was the largest in the history of the school and numbered twenty-eight. The institution enrolled



Guthrie County High School, Panora.

187 pupils in 1903 and employed six teachers at an annual cost of \$3,530.

Elsewhere will be found information regarding agricultural high schools. If in the Guthrie County high school, and other schools that may hereafter be designated or established, if any, there could be given a course in elementary agricultural, manual training, domestic science, together with instruction in the science and art of teaching, much greater good could in my opinion be accomplished for the people of the state whose interests are so largely agricultural.

ANNUAL REPORT OF THE SECRETARY OF THE BOARD OF HIGH SCHOOL TRUSTEES.

To the Honorable Board of Supervisors of Guthrie County, Iowa:

GENTLEMEN,—In compliance with the law I hereby submit the annual report of the Guthrie County High School Trustees for the year ending July 1, 1903, covering the period from July 1, 1902, to July 1, 1903:

Balance on hand July 1, 1902.....	\$1,851.76
Amount received from county treasurer.....	4,650.10
Tuition from non-residents.....	381.93
Tuition from residents.....	240.00
Tuition from Panora Independent District.....	49.50
Total.....	\$ 7,173.29

DISBURSEMENTS.

Salary of principal.....	\$1,100.00
Salary of assistant principal.....	630.00
Salary of four assistant teachers.....	1,800.00
Salary of janitor.....	315.00
Per diem of board.....	82.00
Salary of secretary and treasurer.....	80.00
Supplies and incidental expenses.....	1,070.19

Total..... **\$ 5,107.19**

Balance July 1, 1903..... **\$ 2,066.10**

Number of students enrolled.....	187
Number of males.....	67
Number of females.....	120
Average number belonging.....	151
Average daily attendance.....	143
Number of teachers employed.....	6

Tuition to be charged non-resident pupils and pupils in excess of the quota from townships and districts within the county was fixed at \$2.25 each per month.

You are requested to levy one mill on the dollar of the taxable valuation of Guthrie county to defray the running expenses of said school for the ensuing year.

Respectfully submitted,

S. A. SMITH, *Secretary*.

LLOYD TOWNSHIP CENTRAL SCHOOLS.

BY PRINCIPAL F. T. TOMPKINS, TERRIL, IOWA.

The town of Terril is situated in the township of Lloyd, county of Dickinson, and state of Iowa.

The central school of which we are to speak is located in this town, which is centrally placed in the township, being at the center east and west, and forty rods north of the central point north and south.

Previous to the erection of the central school, Lloyd township had seven schools in operation, and a tax had been voted and raised for the eighth. It is doubtful whether the ninth would have had the required number of pupils to secure a school even now, but it is a fact that the children of that ninth district have at present the benefits of a school.

The first steps toward centralization were taken in the spring of 1901, when a 10-mill tax was voted by the township for the purpose of erecting a school building in the town of Terril to be used as a township school.

The school board then declared the rural schools closed for a period of one year, and proceeded to secure transportation for all of the children to the central school, with the understanding that if the trial was found not satisfactory, they would return to the former system.

In the course of a few months the school building was completed and school began therein the 28th of October. The building is a modern four-room frame structure 46x48 feet and 24 feet high, erected at a cost when completed of \$3,600. In addition to this the site cost \$500, of which the town gave \$250. At the beginning the stoves and desks from the rural schools were used to furnish the building. Since then stoves for all the rooms, desks for one room, library books, physical apparatus, maps, etc., have been added to the amount of \$350.

Following are compiled some figures which I believe to be as nearly correct as it is possible to make them. The figures for rural schools were taken from the daily registers of the different sub-districts.

RURAL SCHOOLS FOR THE MONTHS DECEMBER, JANUARY AND FEBRUARY, 1900-1901.

Total enrollment.....	145
Average daily attendance.....	118.4
Seven teachers at \$35.00 per month.....	\$245.00
Coal per month.....	54.25
Janitor work per month.....	7.00
Total cost of seven schools per month.....	306.20
Cost per pupil per month.....	2.58
With the eighth school in operation at the same rate the cost would be per month.....	349.25
Cost per pupil per month, then.....	2.95

CENTRAL SCHOOLS FOR THE MONTHS NOVEMBER, DECEMBER AND JANUARY, 1901-1902.

Total enrollment.....	158
Average daily attendance.....	146
Principal per month.....	\$ 70.00
Three teachers at \$40.00 per month.....	120.00
Six haulers, one at \$40.00 per month, three at \$35.00 per month and two at \$34.00 per month.....	213.00
Janitor work per month.....	5.00
Total cost per month.....	425.25
Cost per pupil per month.....	2.92

COMPARISON BY YEARS.—RURAL SCHOOLS 1900-1901.

Total enrollment.....	151
Average daily attendance.....	90
Amount paid teachers.....	\$245.00
Tuition.....	2.72

CENTRAL SCHOOLS 1901-1902.

Total enrollment.....	191
Average daily attendance.....	124.1
Tuition.....	\$ 1.33
Number transported.....	137
Cost per pupil for transportation.....	1.65

CENTRAL SCHOOLS 1902-1903.

Total enrollment.....	194
Average daily attendance.....	111.6
Tuition.....	\$ 1.74
Number transported.....	132
Cost per pupil for transportation.....	\$ 1.96
Number of pupils of school age in township.....	216
Number of resident pupils enrolled.....	182



Principal and Graduating Class of the Lloyd Township, Central School, 1903.

THE PRESENT ENROLLMENT OCTOBER 1st 1903

Number transported.....	91
Number resident in town.....	43
Number non-resident.....	3
Total enrollment.....	137

SALARIES.

Principal per month.....	\$ 80.00
Three grade teachers each per month.....	40.00
Janitor per month.....	13.00

The financial condition of Lloyd Township Central School is shown by the treasurer's report of September, 1903.

Total indebtedness is in form of bonds.....	\$2,500.00
On hand in teachers' fund.....	1,720.27
On hand in school house fund.....	96.05
On hand in contingent fund.....	304.94
Total amount on hand.....	2,121.26

To show that our schools are no more expensive than the rural schools of the other townships, we give the per centum levied for school purposes in the several district townships in Dickinson county by the Board of Supervisors at their meeting in September, 1903. The following abbreviations T., C., and S. H., will be used for Teachers' fund, Contingent fund, and Schoolhouse fund.

CENTER GROVE TOWNSHIP.

T., 6.1; C., 8.8; S. H., 1.7; total.....16.6

DIAMOND LAKE TOWNSHIP.

T., 5.7; C., 1.8; total.....7.5

EXCELSIOR TOWNSHIP.

T., 11.2; C., 2.8; S. H., 2.3; total.....16.3

LAKEVILLE TOWNSHIP.

T., 5.9; C., 2.9; S. H., .9; total.....9.7

LLOYD TOWNSHIP.

T., 4.3; C., 7.7; S. H., 1.6; total.....13.6

MILFORD TOWNSHIP.

T., 10.3; C., 1.9; total.....12.2

OKOBOJI TOWNSHIP.

T., 12.5; C., 2.7; S. H., 3.7; total.....18.9

RICHLAND TOWNSHIP.

T., 9.3; C., 2.4; total.....11.7

SILVER LAKE TOWNSHIP.

T., 11.0; C., 2.9; S. H., 10.0; total.....23.9

SPIRIT LAKE TOWNSHIP.

T., 7.9; C., 3.4; total.....11.3

SUPERIOR TOWNSHIP.

T., 6.8; C., 3.1; S. H., 3.7; total13.6

WESTPORT TOWNSHIP.

T., 14.9; C., 3.1; total18.0

The total levies for the independent districts in which towns are located are as follows: Spirit Lake, 23.8; Milford, 23.7; Arnold's Park, 28.9; Superior, 14.6.

These figures show what?

- (1) That the average daily attendance is greater.
- (2) That the total enrollment is larger. (Many took up their studies anew, who had "quituated" from the country schools two or three years previous.)
- (3) That the per cent or average daily attendance is not as good as in the city graded school because of the great number who attend only during the winter months.
- (4) That the attendance is better is shown by the comparison of the figures of December, January and February, 1900-1901, with those of November, December and January, 1901-1902.
- (5) That more than the ordinary per cent of the pupils of school age enrolled last year.
- (6) That the total cost per pupil per month is rather more than less than it was under the old system. (I will venture, though, that not a patron will say he is not getting more for his money than ever before.)
- (7) That the tax levy of six townships is below, four above, one the same, and that in every district where a graded school is maintained the levy far exceeds that of Lloyd township.
- (8) That the school financially is in good condition, and there is no necessity of a township becoming deeply involved in order to inaugurate the central school system. We received from the sale of rural schoolhouses, etc., \$1,300.00. Several of the buildings are very old and could be used only for outbuildings.

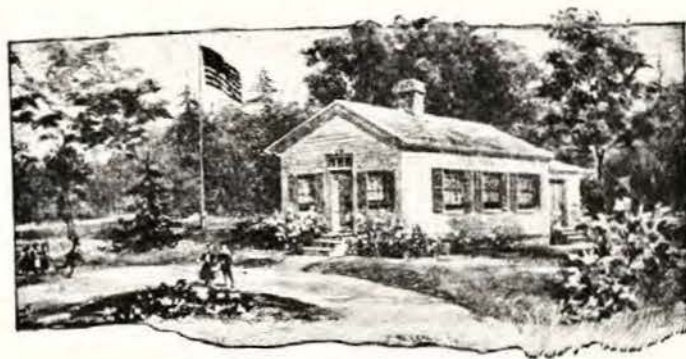
'BUS DRIVERS.

By a great many it is thought impossible to secure 'bus drivers at reasonable wages.

At present we are paying five drivers \$35.00, one \$30.00, and the other \$48.00. There is one patron who is not near the route, and at his own suggestion we give him \$5.00 per month to allow his children to drive their own rig.

The drivers must sign a contract which requires them to start at the farthest end of their route, drive not faster than a trot, arrive at the school building between 8:20 and 8:50 in the morning; be there again at 4:00, maintain good order in the 'bus, and they must furnish a team, closed 'bus, and a means of keeping the children warm—all to be subject to the approval of the board.

Most of our 'bus drivers provide their rigs with a small oil heater, which keeps the children so warm that they may ride four or five miles without either overcoats or mittens.



Country schools can all be beautiful like the above.



An abandoned school house in Lloyd Township, Dickinson County.

Each of these drivers begins to gather in his load at the farther end of his route, and has a drive of from four to six miles to reach the town. Five miles is about the average length of the route.

The children living farthest from town start at from 7 to 7:30 A. M., and arrive home in the evening from 5:30 to 6 P. M. During the months of December, January and February, the school day is from 9:15 A. M. to 3:45 P. M., therefore during the short days they neither start so early nor get home so late.

The time that pupils must spend upon the road is an objection much talked of by some, who have had no experience with the system. Here, we seldom hear this objection, as most pupils will not complain. They would rather ride the required distance than walk a shorter one. Not a pupil can be found in the whole school who would rather attend school in the rural district. To the parent who fails to get as much work from his children morning and evening, we would say: Your child will complete the common school course of eight years in from one to five years less time than he will ever be able to in the rural schools where there is a change of teachers every term, saying nothing about the teacher's qualifications; thus these years will more than compensate you for the time lost morning and evening. The most conclusive proof of the satisfaction the school has given was manifested by the action of the voters last February.

For the following reasons: The gradual depreciation of rural school property; the statute by which school property reverts to the original owners with improvements thereon if not used for school purposes; and the entire satisfaction the school has given, the school board gave notice of an election to be held February 2, 1903, to vote on the question, "Shall the rural school houses, sites and outbuildings of the named districts be sold?" Although a small per cent of the voters of the town of Terril voted upon the proposition, the question carried by a vote of 79 to 21. A great many who at the organization of the school were opposed to the system, voted for the above question.

Notwithstanding the fact that the roads in Lloyd township are no better than those of other rolling prairie districts of northern Iowa, we find the attendance much larger, and the punctuality almost perfect. With consolidation the classification is better, the supervision easier, the equipment for the same amount of money larger, and the competition and enthusiasm among the students greater.

We have faithfully described the workings of consolidation in our schools, with the hope that facts and figures from actual experience in our great state of Iowa, might accomplish something in the way of interesting others in the securing for our rural school children better facilities for education.



Central school building in Lloyd Township, Dickinson County.



Hacks for transporting children in Lloyd Township, Dickinson County.

TRANSPORTATION IN STORY COUNTY.

BY C. R. SCROGGIE, SUPERINTENDENT CITY SCHOOLS, AMES.

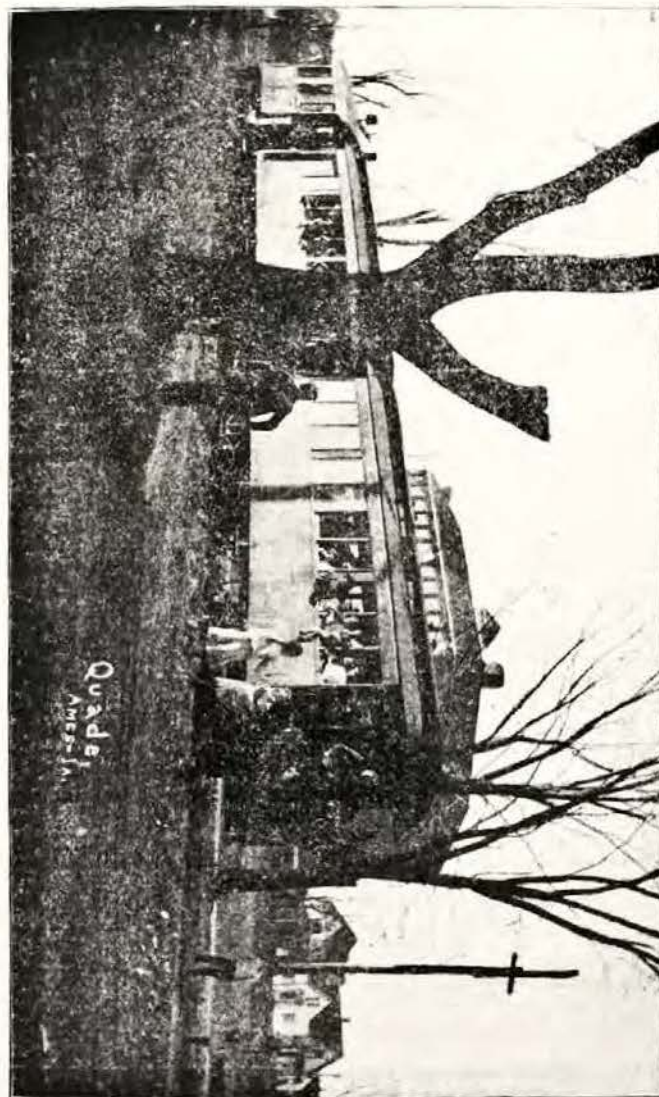
Iowa State College with its surrounding settlement is situated about two miles west of the business part of Ames. The college grounds and adjoining territory, including one rural school district, have been annexed to the city of Ames, and the whole annexed part now forms the Fourth Ward. When annexation brought seventy-five pupils living two miles from a school-house into the Independent District of Ames, it became necessary to provide schools for them. Suitable ward schools could not be provided as there was an average of only seven children to each grade below the high school. The board of education overcame the difficulty, however, by giving the children of the Fourth Ward free transportation from the college to the central city schools. The children are carried to school in the morning, home to lunch at noon, and again to school and home in the afternoon. The Ames and College railway receives \$50.00 a month for this service, and the patrons are well pleased. The children enjoy better school advantages than they could possibly have in ward schools so far removed from special teachers and supervision. There is also a saving of at least a hundred dollars a month to the district, for two ward schools could not be conducted for less than \$150.00 a month. Besides, the children spend the noon hour at home, and are not necessarily exposed to the contaminating influences sometimes existing on the way to and from school. Strict rules govern the behavior of the pupils on the cars, and "Hank" Wilkinson, the motorman, sees that they are enforced. If all experiments with free transportation of pupils are as satisfactory as this, the system will surely grow.

REPORT OF POTTAWATTAMIE COUNTY.

BY O. J. MCMANUS, CO. SUPT.

In Pottawattamie county considerable interest has been taken in consolidation of school districts and the transportation of pupils. No attempt has been made to centralize all the schools of a township because this does not seem to be feasible owing to the condition of the roads. The western part of the county, bordering on the Missouri river, is quite hilly, and presents obstacles not common in the eastern portion. The city of Council Bluffs being located in the extreme western part of the county, has always drawn to its schools many pupils from the adjacent townships. Knowing that the pupils received better instruction in the graded schools of the city, the people began to consider the feasibility of joining two or more schools into one where it seemed evident that pupils would receive increased educational advantages.

Motor line used in transportation of children at Ames in Story County. High school building in back ground.



In 1900 the board of education of the independent district of Council Bluffs took the initiative by closing one of the suburban schools. Before the school was closed the special teacher of music, the special teacher of drawing and the City Superintendent of Schools were compelled to make frequent visits to this school. This was extremely inconvenient, as there was no street car running in the vicinity of the school, and the school claimed more than its proportion of the time of the special teachers and the superintendent. The school was closed and the pupils, twenty-eight in number, were transported to the different schools of the city at a less expense to the district by fifty dollars per month than was required to maintain the suburban school. The teacher was assigned to a grade in one of the other schools of the city. Thus a beginning of consolidation was made and there is abundant evidence to show that the system is more efficient, convenient and economical.

Soon the township of Garner, contiguous to the city of Council Bluffs, made a levy for two two-room buildings which were built in 1902 at a cost of \$5,600. These are modern buildings, scientifically lighted, and heated by furnace according to the most approved plan. The slate blackboard on the wall, and the presence of single seats for the pupils, give them the appearance of modernly equipped schools. These schools accommodate over two hundred pupils. No pupils are transported at the expense of the school corporation. Only a few pupils have two miles as a maximum distance to travel in order to reach the school; the major portion have less than one mile to travel. Suitable graduation exercises were held in June, 1903, at which time eight pupils were graduated from these schools. They are all now in attendance at the Council Bluffs High School. The plan is meeting with favor and promises much for educational progress in Garner township.

In Crescent, the township contiguous to Garner, the people have taken special interest in improving the educational conditions of the rural schools. In Crescent City, a small village in Crescent township, the tax-payers have erected a four-room modern school building at a cost of \$4,500. To this school, from the two adjacent districts, the pupils, thirty-eight in number, are conveyed at the expense of the entire township. The plan is more efficient and economical. The cost of transportation is much less than was expended in maintaining the separate schools. The new building was opened last winter for an evening school and literary work where the patrons of the district come into closer touch with the work. The school is being recognized as an organ of the community and not a mechanical attachment. Thus it appears that the consolidated school is going to fill a very important place in rural community life of the not-far-distant future.

LAKE TOWNSHIP CENTRAL SCHOOL, CLAY COUNTY.

BY H. F. FILLMORE, COUNTY SUPERINTENDENT.

On August 10, 1903, there was begun in Lake township, Clay county, the first term of the township consolidated school. The schoolhouse is located on the northeast corner of Section Twenty-one, in the geographica



Two room building in Pottawattamie County.



Two room building in Pottawattamie County. Both are winter scenes.

center of the township. The building is frame and was erected at a cost of \$3,040 00 and displaces seven district schools heretofore maintained by the township. The building contains four rooms, all on the ground floor, but at present only three are in use.

It is impossible to give figures which will show any relation between past and present cost, for the reason that the township has heretofore had but four months of school in each district, with poor buildings, no interest and poor attendance. The school has been running but two months, but it has demonstrated even thus soon several advantages over the old system. Tardiness is absolutely unknown, and the attendance is better than that of the average city school.

It permits of graduation superior to the old system and this improvement has even at the start inspired the pupils with ambition.

It secures teachers of far better ability and secures them for a whole year instead of two months. The teachers now employed are of such training and ability that they could not have been secured in any district in the township at the salary previously paid. At the head is a man of training and ability, an individual with whom the pupils under the old system never came in touch.

It has centralized and vitalized the educational interest of a township. It has been a wonderful stimulus to other items of progress. A Sunday school has been started, the first ever held in the township. It is proposed to organize a lyceum, one of the most powerful agents in developing individual ability.

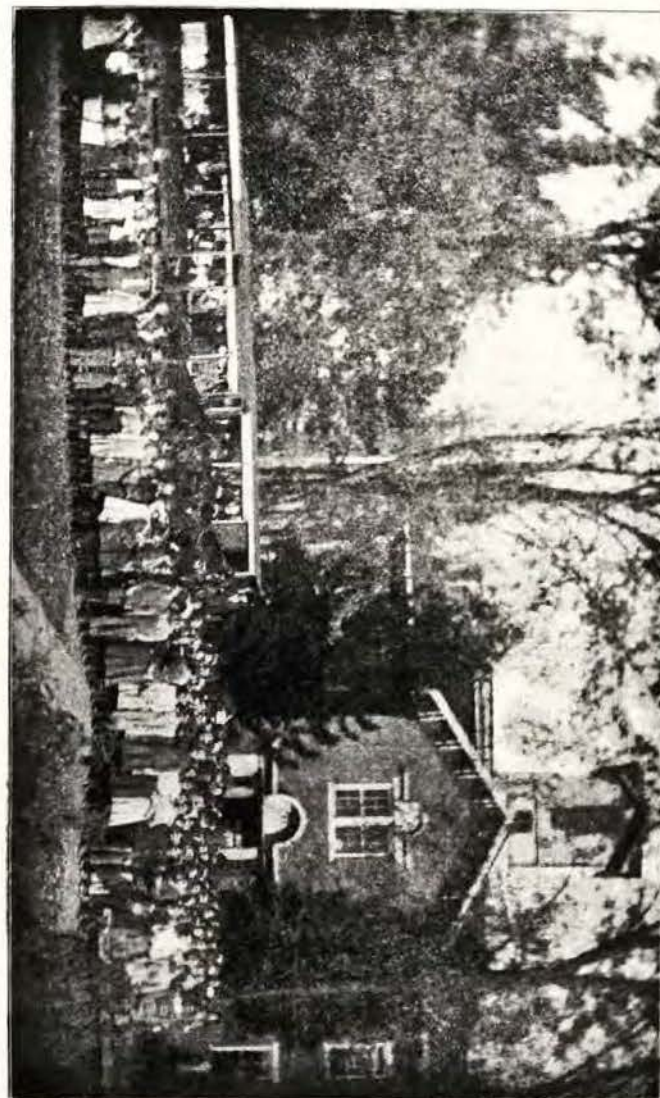
The enrollment last year in the seven schools at this time was sixty-eight. This year it is ninety-three, and gives every indication of being much larger. The increased attendance is boys of twelve to eighteen who did not go at all under the old system.

The children are carried in seven closed vehicles. The drivers receive from \$40.00 to \$60.00 per month. This is the greatest expense and will, in our opinion, make the cost per pupil greater than the old system. But it must be borne in mind that while the cost is greater, instead of seven schools with nine pupils each, one teacher two months and then another for two, there is now a graded school with regular attendance for eight months and an able teaching force provided.

The matter of hauling the pupils is the principal item of cost. In our judgment this can be accomplished in most places at less expense.

The system has its opponents who have fought it from the beginning, and who have said as did the croakers at Robert Fulton,—“It won't go. You can't do it,” etc. The road supervisor has absolutely failed to fulfill the plain commands of the law. If some evil genius had been selecting a township in the fair state of Iowa for the trial of consolidated schools, he could not have selected one in which the plan would have been better calculated to fail. Three large lakes from six to ten miles in circumference dot the landscape, and the township is covered with marshes. The roads are abandoned in some instances. But in spite of all these adverse conditions “It does go” and the “new fangled idea”—new here—has been proven to be what it was claimed, a graded school with all the advantages of a village graded school, while the pupil can enjoy all the benefits and infinite blessings of the rural home.

Central school at Allion, Marshall County.



TRANSPORTATION IN MARSHALL COUNTY.

MARY E. HOSTETLER, COUNTY SUPERINTENDENT.

Iowa township is five miles long and four miles wide—minus about four square miles in the southwestern part.

Albion, a town having a population of about five hundred, situated in the southwestern part of the township, is an independent school district.

The school township is divided into five sub-districts.

The school situated in sub-district No. 3 adjoining Albion on the north, was a small school. Transportation was begun by sending this school to Albion.

In the fall of 1902 the schools in sub-districts Nos. 1, 2, 3, and 4 were closed and the pupils transported to Albion. The wagons were furnished by private individuals interested in the schools. They have a capacity of about twenty pupils each, are covered, and provided with oil stoves for the winter. The drivers are paid by the board of directors of Albion at the rate of about thirty dollars per month.

For each sub-district closed, Iowa Township pays to Albion what it would actually cost to maintain the sub-district school.

The school building in Albion is a substantial brick structure of six rooms valued at about \$8,000. The schools are in charge of an especially strong corps of teachers. One gives special instruction in music throughout the building and another takes charge of the drawing.

This fall (1903) Iowa township maintains one sub-district school having an enrollment of nine pupils. Seven of the pupils from this district go to Albion, paying for their own tuition and transportation.

Last spring, Taylor township, composed of six sub-districts, voted a tax of \$4,000 to build a central school. There were 141 votes cast, eighty-nine men and fifty-two women taking part in the election. The men carried the proposition by one vote and the women by four votes.

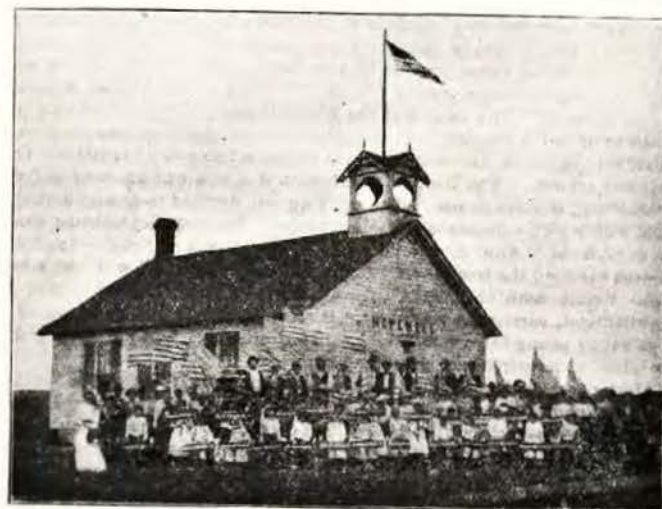
Marietta township has closed two of its schools on account of small attendance. The pupils are provided for in adjoining districts.

Jefferson, Washington and Bangor townships each had one school closed last year—the few pupils attending schools in adjacent districts.

A RURAL SCHOOL'S ARBOR DAY.

BY ALICE WALTON BEATTY, FRUITLAND, IOWA.

During the spring of 1901, Mr. D. D. Hill, the famous evergreen dealer of Dundee, Illinois, made the offer of thirty young evergreen trees to any rural school that would agree to properly cultivate and care for them as they grew. We accepted the offer and secured thirty fine specimens of choice varieties. The large boys of the neighborhood promised to do the



View of Hopewell school at Fruitland, Muscatine County.

necessary weekly hoeing. But serious trouble arising from their first attempt, afterwards did it myself, and knew that it was thoroughly done. The trees made a fine start, and on July 5th every one was growing thriftily. Then came the scorching drouth and in three weeks' time all were dead.

The next spring Mr. Hill replaced the trees with Scotch pines, and the two following summers being wet seasons, at this writing—September, 1903, every tree is living, some of them making a growth of two feet in one year.

When planting the first trees it was determined to name them after the presidents of the United States. For this purpose the Huttig Sash and Door Company of Muscatine prepared and donated wooden tree labels of two feet in length mounted on pointed stakes. Mr. William Halstead, the veteran sign painter of Muscatine, painted and lettered the labels free of charge.

The last day of the spring term of school was selected as "Tree Dedication Day," and this fact reported to the Youth's Companion Company. Thereupon this company presented our school with a six foot, genuine bunting flag, to be raised on tree-naming day. Upon the schoolroom wall hang two large pictures, one of "The Presidents of the United States," and the other of "The Ladies of the White House." From these, for the month prior to the eventful day, the little children had been selecting their individual presidents, for each child was to own a tree and a president. The great day arrived. The Youth's Companion flag was run up early to float in the strong western breeze. The morning was devoted to a neighborhood social with a picnic dinner in the schoolhouse. The large schoolhouse stove was carried out. After dinner a procession was formed of twenty-four little children carrying the tree labels, each label being decorated with two small flags. Beside each child marched an older boy or girl of the school or neighborhood, carrying a large flag. It was a sight never to be forgotten—those happy young faces, the bright, crisp, fresh flags, and the dark green tree labels with their white, glistening letters.

After passing out of doors, they were grouped in front of the schoolhouse and photographed by Mr. F. M. Witter, now president of the Iowa state teachers' association and superintendent of Muscatine county. The procession next marched to the tree to be named George Washington, the little child handed the label to the school director, who placed it in position, and the child's mate carrying the large flag, read a brief sketch of Washington's life, comprised of the home of his native state, date of inauguration, principal event and length of his term of office, and the date of his death. This ceremony was performed at each of the trees named. After the tree naming came the program prepared by the teacher and pupils. The completing feature of the day was the firing of a salute to the new flag by the local members of the G. A. R.

Now for the after effect upon the entire community. It has been surprising and gratifying. Although the first trees died, the names remained in the school yard. Then came the death of William McKinley. During the period of national mourning McKinley's name was draped in black, and standing thus in that little prairie school yard, brought an impression of personal sorrow and loss to each loving childish heart, and a clearer sense of the greatness of the great tragedy to their elders, at the sight of that black symbol while passing along the highway. The memory of that draped name will remain with those children to the end of their lives.

Each child "owns a president" and a tree, which are guarded most zealously. By this very ownership the presidents have stepped down from their high places in history, and have become as it were, the living personal companions of the children. If any accident happens it is reported to me in great seriousness, somewhat after this fashion: "Mrs. Beatty, Thomas Jefferson is lying on the ground. His stake is broken, and he ought to be fixed up right away."

Every autumn the children take up the labels and store them from the snow in the loft of the schoolhouse. Then in the spring the teacher sets a day for cleaning the school yard. As many of the lady patrons of the school as can leave their homework assemble with the children, and the entire yard of one acre is raked over. The dead grass is carried out upon the sandy road, and the good roads idea at the same time cultivated in the minds of the children. Then we take down the tree labels, each child claiming its own, form a procession, and plant them out again for the summer. We generally have enough time left to spell down once at least before dispersing to our several homes. This ends our annual Arbor Day.

These efforts of the children and women so affected the township school board that it ordered the hiring of the cutting of the grass of each school yard once a year during July or August. The general appearance of the school property and the neighborhood pride therein have very greatly increased, so that after one of these periodic cleanings it looks as if that property belonged to a civilized community.

AGRICULTURAL HIGH SCHOOLS.

(From the Year Book of the Department of Agriculture, 1902.)

With a view of bringing secondary education in agriculture closer home to the farmers of the different localities, a movement has been begun for the establishment of county or district agricultural high schools. In Wisconsin the first two county agricultural schools have recently opened their doors to students. These schools are the outcome of a report made by Hon. L. D. Harvey, state superintendent of public instruction in Wisconsin in 1900. From his studies of the rural schools in this country, as compared with those in Europe, Mr. Harvey became convinced that as regards "instruction in the principles of agriculture in grades of schools below the agricultural colleges," "we are far behind foreign countries both in the scope of the work attempted and in the extent to which it has been organized." It did not seem to him feasible to introduce the teaching of agriculture into the common rural schools at present, owing largely to the lack of trained teachers. "Whenever we have in our rural schools," he says, "a body of professionally trained teachers who have had specific instruction in this subject and modes of teaching it, we may then hope to make some progress in the rural schools, but until then we must look elsewhere for this instruction." He therefore recommended that the state legislature should "provide for the establishment of county schools for instruction in agricul-



Main building of the Marathon county school of Agriculture and Domestic Economy,
Wausau, Wisconsin.

ture and domestic economy." The legislature adopted this suggestion at its session in 1901, and passed a law authorizing the county board of any county "to appropriate money for the organization, equipment and maintenance of a county school of agriculture and domestic economy," or "the county boards of two or more counties may unite in establishing such a school." The character of these schools is shown in the following sections of this act:

SECTION 6. In all county schools of agriculture and domestic economy organized under the provisions of this act instruction shall be given in the elements of agriculture, including instruction concerning the soil, and plant life, and the animal life of the farm. A system of farm accounts shall also be taught. Instruction shall also be given to manual training and domestic economy and such other subjects as may be prescribed.

SEC. 7. Each such school shall have connected with it a tract of land suitable for purposes of experiment and demonstration, and not less than three acres in area.

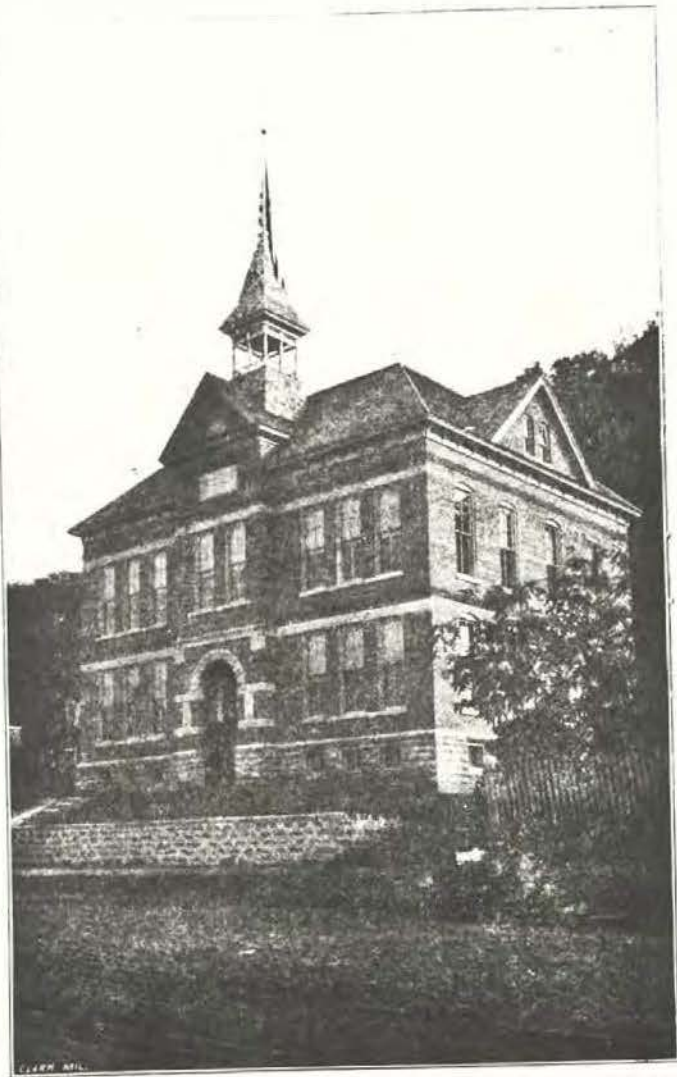
SEC. 8. The schools organized under the provisions of this act shall be free to the inhabitants of the county or counties contributing to their support who shall be qualified to pursue the course of study, provided they shall have at least the qualifications required for completion of the course of study for common schools. Whenever students of advanced age desire admission to the school during the winter months in sufficient number to warrant the organization of special classes for their instruction, such classes shall be organized and continued for such time as their attendance may make necessary.

These schools are by the law put under the general supervision of the state superintendent of public instruction, who, "with the advice of the Dean of the College of Agriculture of the State University shall prescribe the courses of study to be pursued and determine the qualifications required of teachers employed in such schools." Upon the approval of the state superintendent the state will pay a share of "not to exceed one-half the amount actually expended for instruction in such school" in any county.

Two schools have already been established under this act.

The Marathon County School of Agriculture and Domestic Economy, located at Wausau, Wis., was opened Oct. 6, 1902. The buildings and equipment provided for this school cost \$20,000. The school grounds cover six acres. The course of study for boys includes soils, plants, animal husbandry, rural architecture, blacksmithing, carpentry and mechanical drawing. The course of study for girls includes cooking, laundering, sewing, floriculture and home management and decoration. Both courses include English language and literature, United States history, civil government, and commercial arithmetic with farm accounts. Tuition is free to students living in Marathon county. The cost of board and rooms runs from \$2.50 to \$3.00 a week. On November 26, 1902, this school was reported to have sixty-two students—fifteen boys and forty-seven girls. The average age of the students was sixteen years. The principal of the school is R. B. Johns, a graduate of the University of Wisconsin.

The other school is located at Menomonie, and is known as the Dunn County School of Agriculture and Domestic Science. This school is centrally located in the county and is equipped with a fine brick main building



Buffalo County Wisconsin Training School for Teachers, Alma. Erected in 1902.

erected by the county at a cost of \$16,000 for the joint use of this school and the County Teachers' Training School, and a frame building for shopwork, which, with the grounds surrounding the school, cost \$5,000. The farm work is done on the county asylum farm, one mile distant from the school.

The course of study for boys includes instruction regarding soils, fertilizers, plant life, horticulture, field crops, animal husbandry, dairying, poultry, economic insects, farm accounts, blacksmithing and other metal work, carpentry and rural architecture.

The course of study for girls includes work in sewing, cooking, home economy and management, drawing and designing, domestic hygiene, chemistry of foods, poultry, farm accounts and horticulture.

Both courses include studies in civil government, United States history, library readings, English, and elementary science.

Only two years will be required to complete the full course for either boys or girls, and shorter courses may be pursued.

Tuition is free to students living in Dunn county. Others will pay \$25 per year, except that the first ten students from other counties will be admitted for the first year on the payment of only \$10 each.

Students may find board and room in private families in Menomonie at prices ranging from \$2.25 to \$3.75 per week. Students can board themselves for about \$2 per week.

The school opened October 20, 1902, and by December forty-four students had registered (thirty-two boys and twelve girls), of an average age of 18½ years. They are from the country schools with few exceptions. The principal of the school is Dr. K. C. Davis, a graduate of the Kansas Agricultural College, and recently horticulturist of the West Virginia Agricultural Experiment Station. He pursued post-graduate studies in agriculture at Cornell University, where he received the degree of doctor of philosophy.

It is interesting to observe that this county agricultural high school is joined to a school especially established for the training of teachers for the country schools. In this way many teachers will be brought into sympathy with the movement for the introduction of agriculture into the public school system and many elementary country schools will be recruiting stations for the agricultural high schools.

CHAPTER VIII.

MISCELLANY.

ANNUAL ADDRESS BY STATE SUPERINTENDENT
RECOGNITION IN ISSUING STATE CERTIFICATES
SCHOOL HYGIENE.

ANNUAL ADDRESS.

1902.

RICHARD C. BARRETT, SUPERINTENDENT OF PUBLIC INSTRUCTION.

Under a republican form of government all law is enacted voluntarily by the chosen representatives of the people.

Public education is the voluntary and sincere effort of the people to rise to a higher and a better order of civilization.

Schools are maintained voluntarily and always at the expense of the people, either directly or indirectly. Institutes must be held and examinations conducted, but attendance upon either is voluntary and at the expense of the individual. Teaching is a voluntary business. This association, representing more than twenty thousand teachers and 728,000 pupils is the largest voluntary organization for the general improvement of mankind within the bounds of the commonwealth. To address such a gathering composed of men and women of loftiest purposes and holiest ambitions is a privilege to be almost coveted. Other years have given to us manifold reasons to rejoice, but "the year that has closed has been," indeed, "one of peace and overflowing plenty," * * * "and of honor, of wonderful growth and unexampled prosperity, of health, content and happiness."

Seldom, if ever, has so much been undertaken and accomplished in a single year. Labor has been employed, farms have increased in value and produced in rich abundance, business has prospered, new industries have been established and factories opened. In education changes have been less frequent, amounts expended for school purposes larger, the average daily attendance upon the schools increased, teachers paid nearly a quarter of a million of dollars in excess of any other year, and colleges and private schools have enjoyed an increased attendance. Two hundred eighteen new school-houses have been built, nearly \$50,000 have been paid for records and apparatus, more than one hundred thousand choice books placed in school libraries and three million and a half dollars paid for the maintenance of schools exclusive of the amounts paid teachers.

The generous and unstinted aid given the general cause of education by the outgoing and the incoming governors during the year, merits our warmest praise. The messages of both were strong, inspiring and helpful. They urged the consideration of many matters considered essential by the leaders in educational work. They pointed with pride to past accomplishments, but urged a full and comprehensive review of the whole subject of education at the hands of the legislature. Governor Albert B. Cummins said: "It is

to be feared that we have been so well contented with laurels already won that we have forgotten that eternal vigilance is the price of other things than liberty." Partisanship in the legislature was unknown. The clearly expressed purpose of each member was to do all for education that state funds and the constitution would allow and wisdom would sanction. The temptation to say words of praise is almost irresistible. I would delight to dwell on the achievements of the past, to bring before you the wonderful achievements of the men and women who have made possible these greater days; who did their best, wrought worthily, gained renown, and have entered the school of life or new labor beyond the battlements of Heaven. But a duty felt to be both official and moral prompts me to the discussion of present laws, conditions and needs.

NEW SCHOOL LAWS.

The school laws enacted by the Twenty-ninth General Assembly deserve notice. More important laws relating to education in this state were never passed. The more generous appropriations made for the higher institutions of learning have met with general approval. Any fear that taxes for the support of these institutions will become burdensome is groundless. The annual cost for each inhabitant of the state for the maintenance of each student in the State University is only four-hundredths of one mill, and the same is approximately true of the two other educational institutions. The most important single statutory enactment was the compulsory attendance and truancy law. This law has been launched upon the tide of public sentiment only a few months, but in that time it has been at least partially proven to be both wise and beneficial. That it can be enforced with effect and excellent results has already been demonstrated. That it may be strengthened is conceded by its friends.

There are found to be 392,151 pupils in the state of the ages of seven to fourteen years inclusive, and subject to the law; or 18,048 more than the total average daily attendance in public schools.

There need be no fear nor anxiety regarding the child that goes through the grades regularly, but for the child that disobeys parents and teachers and becomes a truant, and loiters about public places there should be the deepest solicitude. Truants soon become juvenile criminals. It is largely from this class that come the violators of law, the disturbers of public peace, criminals and paupers.

That every lover of the true cause of good citizenship will co-operate to maintain the law wisely and justly is devoutly to be hoped.

For years college graduates—men and women—of rich and scholarly training have been denied admission to examination for state certificates. They have been required to teach, if they entered the profession, on the lowest grade of county certificates. Under the law as amended they are permitted to write the examination upon proofs of graduation and instruction in pedagogical subjects, during the college course.

The board of state educational examiners was given authority to inspect, recognize and supervise schools designed for the training of teachers upon application from such schools. All schools meeting the requirements of the board of examiners with reference to course of study, equipment and

faculty are known as accredited schools. The purpose of this law is to provide trained teachers for the rural or small graded schools. Graduates of any of the accredited schools are eligible to the examination for a two-year certificate, covering the studies required for county certificate. Eleven schools have been approved.

Statistics show that the high schools, seminaries and academies graduate or instruct more than one-fourth of all the teachers. Of this number presumably 80 per cent come from the accredited high schools.

Desirous of executing the new law in the highest and best way, and being anxious to provide a better trained body of teachers for the state, the board of educational examiners has provided that the graduates of high schools fully accredited by the college department of the State Teachers' Association, and having at least one year in the science and art of teaching, may also be admitted to the examination for a two-year state certificate. The movement is a sincere attempt to utilize all present agencies to train teachers, and to give the state a stronger, better qualified class of teachers. With some it is an open question whether the high schools should be made training schools. Since nearly five thousand teachers now go from these schools to the school-rooms, it is believed by many that the introduction of such studies as will give them a more practical knowledge of child life and nature, school management, methods and the science and art of teaching, should be made speedily. A number of the best city schools have for years supported normal training classes with great success and profit. That others can do so is not to be doubted. To a degree the new law is experimental. It should be given a thorough trial. Any minor mistakes may be easily remedied by the board of examiners, or the general assembly.

SCHOOL LIBRARIES.

During the past two years more than 219,000 volumes have been added to the libraries in school corporations. Under the law the teacher becomes the librarian. The duty of determining the character of the books a child shall read carries a great responsibility. While all of the books are selected from a carefully prepared list, the task of choosing the particular books for individual pupils is largely in the hands of the teacher. The harmful habit of reading books of a light and frivolous character is common with some children. The future success of the school library rests largely with the teacher, and it should be a well-defined purpose of every one to lead her pupils to read much of the good literature now placed in easy access of every country home.

CO-EDUCATION AND SHORTER COLLEGE COURSES.

The year has been made noteworthy, educationally, by the discussion of co-education and shorter college courses.

In nearly all Western states economy had much to do with the founding of co-educational institutions. The recent discussions have not related to the economical phase of the question, but rather to the educational and social. With us the controversy is lifeless and not likely to affect educational institutions in the West to any very great extent at the present time. Far more important is the discussion of college courses.

Like courses of study in general they are not perfect. While I am not one who believes that public opinion is nearly ready to discard the present college system, there is a quite widespread belief that a course requiring twenty-one years to complete, including two years in the kindergarten, and three years in the professional school, is too long. The claim that this is a material and commercial age and that young men and young women become restive and anxious to begin the struggle for the mastery is true, and must be reckoned with. In this, as in public school courses, there is no insurmountable reason why courses should be of uniform length for all classes of students.

Colleges fix a minimum entrance requirement, but seldom do any students entering have the same degree of knowledge, or the ability and power to master the course or achieve success in life. Progressive college men fully appreciate this, and have already begun to take cognizance of it.

MANUAL OR INDUSTRIAL EDUCATION.

Twenty-eight years ago the general assembly of this state, recognizing the value and importance of industrial education, enacted a law which today remains, providing that boards shall under the direction of the county superintendent, introduce and maintain in each school an industrial exposition. As originally intended, these expositions were to consist of articles made by the pupils, including samples of sewing, cooking, knitting, crocheting and drawing, iron and wood work of all kinds, "from a plain box or horse shoe to a house or steam engine in miniature." The whole purpose of the law is to encourage pupils to do something with their hands.

We are just beginning to learn that a mental act is incomplete unless through its "feelings and thinkings" it reaches the corresponding deed. If, as one has said, the hand is the projected brain through which the directing thought achieves the heart purposes, and that it mediates inwardly and outwardly between man and his environment, makes him and his environment one, stimulates thought, awakens brotherly love, then how imperfect and inadequate is the present day school which devotes so much time to the consideration of the course of study which deals entirely with the memory.

Manual or industrial training teaches that education should not be divorced from industry; and that only when the hand is guided by science that highest results are obtained. May we soon come to a full realization of the value of the industrial element in the education of children.

The lack of trained teachers to give instruction is now the most serious drawback to the rapid introduction of manual training. To overcome this, courses of study should be provided in our normal schools and other institutions designed for the training of teachers. So important do I consider this subject that a leaflet giving detailed information will soon be issued by the department of public instruction.

COURSES OF STUDY.

□ Courses of study are not sacred. None of them is perfect. As conditions change, they should be modified. This opinion is quite general, and those to whom the public look for leadership in educational matters may not,

without injustice, permit courses to remain long unchanged. It is believed that they should be more elastic, and made to fit the child, instead of attempting to have all the children, regardless of mental strength and physical health, pursue the same one. The school should be a miniature world in which the eye, hand and heart should be educated, as well as memory.

RURAL SCHOOLS.

The policy of the state regarding rural schools has been to provide for their establishment and to leave their maintenance and control largely to the local committee. With the exception of providing libraries for the benefit of pupils and teachers and residents, the state has taken no very aggressive steps to improve rural schools in the past quarter of a century. So many excellent reports have been issued and articles written that but little new can now be said.

These schools are not meeting the needs of the people. They are often too numerous, population considered; too small in area, and too expensive for the benefits resulting. They are still the experimental teaching stations of the world.

But a very marked improvement is occasionally noted. In numerous localities the rallying cry is "city advantages for country children."

The consolidation of school districts and the transportation of children continue to engage the attention of a large number of citizens. This great movement to give to the country pupils the school privileges enjoyed by city pupils should receive most careful consideration. It began in Massachusetts in 1889, and has been followed in seventeen other states. Twenty-three townships in Ohio now have their schools completely centralized, and in hundreds of others there is partial centralization. In Indiana more than twenty-five hundred pupils are transported by the use of 182 wagons in fifty-one counties.

In Iowa consolidation has been tried in twenty-eight counties; transportation in thirty-five, and both in nineteen. Sixty-three districts have adopted consolidation, and eighty or more have transported pupils at the expense of the district. In nine counties districts have consolidated without providing transportation at the expense of the district while pupils have been transported in sixteen counties where there was no consolidation. Similar reports are given in other states. The popularity of the plan is shown by the annual expenditure of \$142,000 in one of the states for the conveyance of children. Amounts nearly as large have been expended in others.

As the merits of the plan become known it grows in favor, prejudices and imaginary objections are overcome and hearty co-operation given. One corporation in this state now transports by a motor line forty pupils, and in another the teacher has taken the contract to transport the pupils with his own team. Consolidation makes it possible to give the children a better education. Not so many teachers are needed; consequently better teachers may be employed for the same amount. Money saved in fuel, repairs, interest and sets of apparatus can be otherwise invested. The extension of the new system rests with the people themselves. If they want to continue on their farms and be free from the feverish life of the city and at the same time give to their children the best possible education, they will do well to

investigate the advantage of consolidation. In the country is the ideal home, and any plan which tends to keep the boys and girls there may well be encouraged.

Township high schools maintained for the benefit of the pupils who have completed the elementary courses of study for the first eight grades in sub-district schools have been established in fourteen counties. In these instances schools are always under the control of local boards of directors. Usually transportation is at the expense of the individual. Under this plan the principal of the high school exercises to some extent supervision of all other schools of the township. Townships densely populated, with large schools, are urged to consider this plan. The law authorizes and justice demands it.

To give equal school privileges should be the anxious purpose of the state. I have yet to find a single individual willing to contend against such a self-evident fact. The child of the humblest parent in the remotest school corporation is entitled to the modern text-books and apparatus, a beautiful schoolroom, an artistic schoolhouse, playgrounds planted with trees and flowers, a library stored with the choicest literature, and as competent a teacher as the children in the best city schools. This may be ideal, but the teacher and the citizen should have ideals. He who is not an idealist; who does not long to be beyond the commonplace; who is content to live in the atmosphere of the past; who is always saying in all that is good we now have the best; who is satisfied to let well enough alone, is not destined to become a leader in his trade or profession. Of all persons teachers should not live among the tombstones of yesterday. But go forth as searchlights of a great and glorious, prosperous tomorrow. Like the great Polar star, they should stand as guiding lights directing the faltering steps of all learners found upon the limitless plains of knowledge.

SCHOOL CENSUS.

The school census for the year is not satisfactory. Without apparent cause the school population is considerably less than last year. The fact that the general federal census of 1900 gave the state 36,716 more pupils between the ages of five and twenty-one years than the school census for the same year shows error on the part of either state or federal enumerators. The statements of school officials and others lead me to the opinion that the school census as ordinarily taken in rural school corporations, is not in conformity with law, and too often is only a guess. Since the interest on the permanent school fund is apportioned to the different corporations on the number of pupils, it is important that an exact enumeration be taken. While it is no part of the teacher's official duty to aid in the taking of the census, he should have the same interest that all intelligent citizens have in matters so essential.

PARTISANSHIP IN SCHOOLS.

The fierce controversy incident to political parties should never be permitted to gain entrance into the teacher's work. The public school and all connected with it should be forever free from dogmatic partisan instruction. Boards of education should be chosen and teachers employed because of their special fitness. County superintendents who are now chosen to administer

public school affairs in this state should, for the benefit of the schools, be put under civil service rules and regulations, and permitted to perform their duties until incompetency is manifested. The present system is antiquated. The fact that a county superintendent has served acceptably for two terms should be the strongest evidence of his fitness, and his services should be continued. To remove biennially nearly one-half of the county superintendents, who too often have only become familiar with existing conditions and able to render the best service, is one of the greatest educational wastes connected with all public education.

Boards of education whose policy is to employ and retain teachers regardless of political consideration act wisely and for the best interests of education. Their examples are to be commended and should be adopted generally.

TEACHERS' WAGES.

The subject of teachers' wages deserves the most thoughtful and considerate attention of the people of Iowa. Flaming forges, smoking chimneys, whirring wheels of industry tell of prosperity. Larger granaries increased herds of cattle, and open bank accounts bespeak greater comforts and happiness for the people. The general prosperity of the country, and especially in Iowa, which has brought to labor in general a fair increase in wages, has not materially affected the wages of teachers.

Great private corporations, recognizing the increased expense of living, often voluntarily increase the wages of their employes. The state has made increased appropriations for the maintenance of collegiate faculties and increased the annual salaries of supreme and district judges. This is only just.

A reduction of the number of male teachers during the past year shows a slight advance in the average monthly salary paid, but an increased number of female teachers shows a slight decrease in the monthly salary. In twenty years the monthly salary paid teachers has risen only forty-three cents a year for men and fourteen cents for women.

The average daily salary paid to teachers of all classes, including principals and superintendents in this state for each working day in the year, has for years been less than one dollar. This is found by dividing the total amount (\$5,981,652) paid teachers by (19,203) the number of teachers necessary to supply the schools, and this quotient by (313) the number of working days in the year.

The average annual salary paid teachers in the cities of the state having eight thousand or more population, according to the report of the national commissioner of education, is \$470.88. This is only one-half the amount paid in California, and lower than any other state north of the Ohio and west of the Mississippi river. Of the states of Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Tennessee and Texas, only the first named pays a lower salary in cities of the above named class.

For the four-year period ending last September, nearly seventeen hundred men abandoned teaching in this state. Normal school principals and presidents report a comparatively small number of inquiries concerning normal courses. Our president reports fifty letters regarding commercial and business to one for the normal course.

The very general complaint is that a sufficient number of teachers may not be had to supply the schools. The young people claim that they find it not only more remunerative to engage in other work, but pleasanter.

Entering into the salary question is the question of matrimony. Marriage is regarded as a divine ordinance in Christian nations and even to retain teachers there is not likely to be legal restraint.

So long as women teach, and they should not be limited in numbers, nor excluded on account of age or conjugal relation since capacity to teach is neither conferred nor taken away by marriage, or anything else save fitness alone, so long may it be expected that the inexperienced teacher to a greater or less extent will continue to enter the ranks of the profession annually. Thirty-seven hundred and five teachers without experience were licensed during the past year. These possess in rich abundance the vigor, charm, energy, sweetness and beauty of youth, but lack successful experience, which largely fixes the salary.

The average age of applicants for certificates is the same today as it was twenty years ago. This tells the story of the constant change of teachers. Rarely is a teacher once licensed ever excluded. If she abandons the profession it is a voluntary act.

The railroad companies of the state employ 37,836 men to whom they pay annually \$22,253,822.79, or nearly double the average daily compensation paid teachers. I cannot think that our citizens believe it requires a higher order of skill to do the work of the average railway employe than it does to train the hand, stimulate the brain and inculcate into the very soul the everlasting principles of right and truth.

When we comprehend that the lessons taught reach beyond the veil which separates time from eternity, we begin to understand something of this great problem of teachers.

Doubtless hundreds enter the profession for the love of the work or the good they can do. They possess the spirit of all great teachers, and we honor and respect them. Their reward is not measured by the salary paid. We must always, however, in dealing with so practical a question, take cognizance of facts and conditions. Where there are hundreds of this class there are thousands who, like men engaged in other professions, are anxious to succeed financially as well as professionally. The retention of successful teachers is not probable unless the period of employment for which they are efficient is lengthened, and the salary made equivalent to that paid in other lines of work. Both are possible, but not probable, so long as the incompetent can so easily gain admission to the ranks.

In the business world an inexperienced laborer receives a lower salary than the experienced. This is a general rule and is applied in a most practical way by those employing teachers. Experience of a high order should never be overlooked by boards in employing teachers and fixing salaries.

The apprentice system which formerly took the boy and the girl at an early age and taught him or her in the office, shop or store, is now seldom followed. The business college or college of pharmacy, of dentistry, or mechanics, or schools of technology now teach in a more thorough and practical manner, and as a consequence the graduates of such schools are more fairly remunerated than were those trained in the old way. Normal or

teachers' training schools are designed to give the young men and young women of the country practical instruction and drill in practice-teaching under skilled critics.

To provide schools in which those who contemplate teaching may be trained in practice-teaching, as well as given instruction in theory, should be the anxious and eager purpose of the state. Since the law now requires children to attend school, the people may demand educated teachers.

Unfortunately I think there has been drawn into the salary discussion the question of more normal schools. It were as well to argue that the building of more colleges, academies and high schools which furnish four times as many teachers, will lower the wages as to contend that more normal schools will not aid in the solving of this problem. The diffusion of knowledge among the people is very essential, and in doing this the trained teacher will always be a strong factor. It may be that Iowa will not soon have another normal school or that wages will soon advance; but it should be known that states which have from four to sixteen normal schools pay from ten to one hundred per cent higher wages than Iowa.

Can the state afford to increase the wages of teachers? The answer given will depend upon one's understanding of the power and meaning of education. If men are considered educated who can read and write and keep the simplest accounts, the negative answer will be given by those who levy the taxes and employ the teachers. On the contrary the affirmative answer will be given by those who have grasped the true meaning of education as enunciated by a distinguished and eloquent American educator and citizen.

"I comprehend under this noble word, such a training of the body as shall build it up with robustness and vigor, at once protecting it from disease and enabling it to act formatively upon the crude substances of nature—to turn a wilderness into cultivated fields, forests into ships or quarries and clay-pits into villages and cities. I mean also to include such a cultivation of the intellect as shall enable it to discover those permanent and mighty laws which pervade all parts of the created universe, whether material or spiritual. This is necessary because, if we act in obedience to these laws, all the restless forces of Nature become our auxiliaries and cheer us on to certain prosperity and triumph; but if we act in contravention or defiance of these laws, then Nature resists, thwarts, baffles us, and in the end it is just as certain that she will overwhelm us with ruin, as it is that God is stronger than man. And finally, by the term education I mean such a culture of our moral affections and religious susceptibilities as, in the course of Nature and Providence, shall lead to a subjection or conformity of all our appetites, propensities, and sentiments to the will of Heaven."

Whenever the citizenship of this land becomes thoroughly imbued with the idea of education, the salary question—in fact the whole teacher problem will be solved.

In the meantime I am convinced that higher wages must be paid. Ninety-nine cents and five mills, the amount paid in 1900-1901, for each working day for all teachers will not give the state a class competent to teach even the elementary principles of the rudimentary branches.

As we have grown in material wealth we have been careful to keep the pay of teachers down and to crowd them into the background more and more with each succeeding year. In many localities it is now a most diffi-

cult thing for a teacher in a rural community to obtain a comfortable place to room and board. Can we long hope to retain the services of men and women of exalted ideas in a profession which brings scarcely a living under such conditions? The answer must be in the negative. We have been too long content to pay the teachers of the children of this state a salary insufficient to buy food and clothing and provide shelter, a sum not equal to that paid the farm laborer or the man who drives the grocer's wagon. What shall it profit a man if he gain many fold in farms and bank stock, and fail to give his sons and daughters the opportunity only presented to youth to develop manly qualities and womanly virtues under skilled teachers? While of the opinion that wages must be increased, I concede that some teachers may be found who are worth no more than the compensation now given.

My opinion based upon a most careful examination of the conditions and laws is that no general and rapid advance in wages may be reasonably expected, especially in rural communities, until a truer and more just conception of the teacher's work, duty and responsibility is had by the people, or wages are fixed by law.

So long as the citizens of any community or state are content with the inexperienced and admittedly incompetent teachers, wages may not be expected to rise very perceptibly.

Any great advance made effective at once would not immediately give to the state a better prepared class of teachers. While thousands now teaching are entitled to and should have their salaries increased, any general advance for the entire body should be fixed at a future date. The enactment of a law in Iowa similar to that in Indiana, which provides that the daily wages of teachers shall not be less than an amount determined by multiplying two and one-half cents by the general average of scholarship and success given the teacher on his certificate at the time of contracting, would in my opinion be wise. If made operative a year or two after passage, young men and young women could prepare for teaching with a definite knowledge of the salary to be paid.

EDUCATIONAL EXHIBIT AT ST. LOUIS.

The universal exhibition to be held at St. Louis in 1904 is to be conducted on purely educational lines. The influence of the Columbian Exposition held in Chicago a decade ago is still felt and noted in the schools of our state. The general assembly has made an appropriation for the purpose of making a suitable display of our resources. I am creditably informed that the commissioners are planning an exhibit from this state in harmony with the general plans. I bespeak for the commissioners your co-operation in all their endeavors to make Iowa's exhibit among the first. Any exertion upon our part will be so much seed sown which in good time will bring forth bountiful harvests. Any half-heartedness on our part may mean failure and in turn deepest humility. Iowa, which was completely within the limits of the Louisiana Purchase, should endeavor to maintain her exalted position in the sisterhood of states at the coming exposition.

IN MEMORIAM.

During the past year this association in particular and the teachers' fraternity in general have been called to mourn the death of two of its former presidents, William M. Beardshear and William Wilcox. The former served in 1894 and the latter in 1896.

I shall not attempt to recount their many manly virtues. This has already been done. They were warm-hearted, scholarly, helpful, active members of this body and the memory of their lives and works will ever be a precious legacy of influence.

CONCLUSION.

I conclude this, my fifth annual address, as an officer of this great state with the profound impression that the world is growing steadily better; and with the belief that the masses are possessed of more of the finer qualities of true manhood and true womanhood than ever before. It is my firm conviction if the world depended upon the students of the high school, or the young men and young women of the common schools, for its criminals, gamblers, burglars, suicides, corrupters of municipal governments and state legislatures, that the days of the millennium would be hastened. I would urge teachers to give to all children the broader, brighter, happier outlook. To teach them that the door of opportunity is still open; that justice is one of the divinest attributes; that hope is the manna that feeds us in our extremities; that the weak and the unfortunate are worthy the sympathy and the charity of the strong and fortunate; and that the hand that guides the planets in their courses and causes the lilies to bloom and the flowers to send forth sweet odors cares for them.

DESCRIPTION OF HIGH SCHOOL BUILDING AT GRINNELL, IOWA. ERECTED, 1903

Length of building—140 feet.

Depth of building—101 feet, 8 inches.

Height of building—Three stories, including basement which is 13-foot ceiling.

First story is of Bedford stone rock-faced.

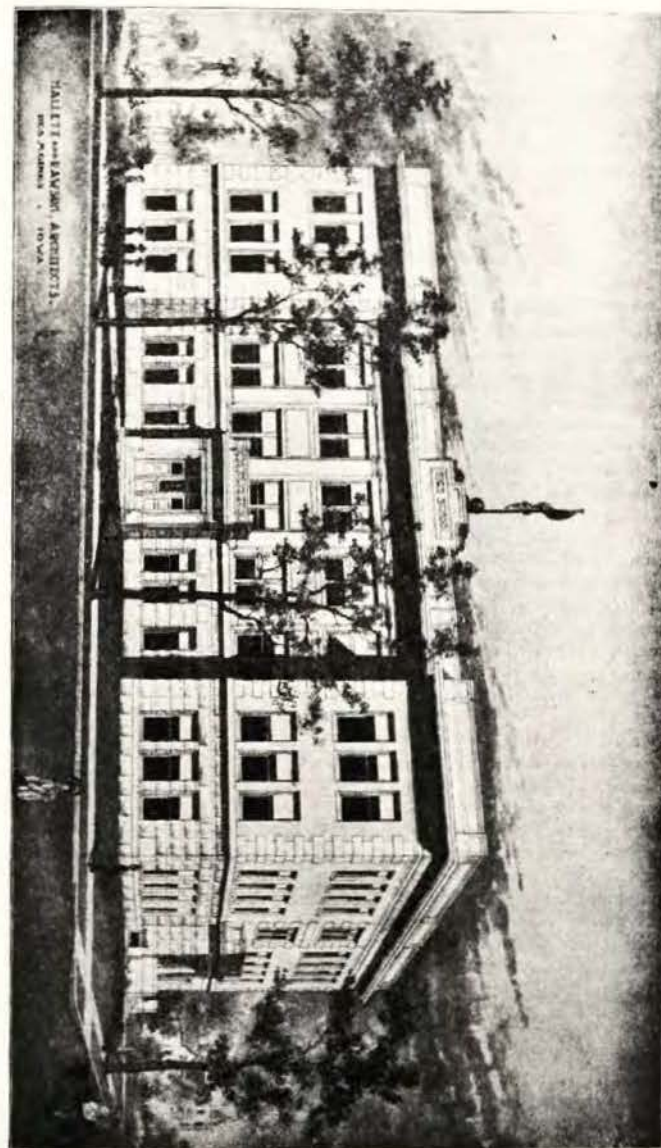
Second and third story of finest quality steel gray pressed brick.

ROOMS

An assembly room and study hall, seating capacity 290; a large basement room intended for manual training, nineteen class rooms, one large lecture room, three large laboratory rooms for science with a private laboratory off from each one, and three fine office rooms.

Cost of building and equipment, \$50,000.00.

New High School Building, Grinnell, Iowa.



RECOGNITION OF COLLEGE AND NORMAL SCHOOL TRAINING IN STATE CERTIFICATION OF TEACHERS.

GEORGE H. BETTS, MT. VERNON.

Examinations to determine fitness to enter the calling of teaching originated in the New England colonies in response to a need for some means of shutting out the incompetent, and thereby protecting at once the children and the public treasury. Add to these reasons that of setting a standard of scholastic attainment, and the consequent elevation of the profession, and we have the reasons for requiring examinations of teachers today. In so far as examinations minister to these ends they are to be defended; failing in these, they have no excuse for being. Certification of teachers, originating as it did in the period of extreme decentralization in our school system, has been the function at different times of the district, the town or township, the county, and the state. Indeed in some localities it has been the function of all these at the same time. The trend at the present time is, wisely, toward state certification. The certificate issued by the state, admitting as it does to a larger number of schools and having back of it a higher authority than the others, should be carefully guarded by some test which will reveal the applicant's fitness to be a representative of the state in our public schools.

Fully one-half of the teachers in Iowa schools enter the work without scholastic or professional ideals other than those furnished by the examination requirements. No discipline has been required of them more severe than that demanded in the preparation for the teachers' examination. The education which they possess is no different in either amount or quality from that of any intelligent citizen who has had the advantages of the common schools. It requires no argument to prove that this class, before they can be given a certificate by the state, should be subjected to an examination, for the triple purpose mentioned above, the protecting alike of the child and the public treasury, and the setting of a professional standard.

Another considerable fraction belong to the class of those who, by their own efforts, or in the high schools, academies, or other schools of various grades, have attained a relatively high degree of proficiency in scholarship. But because of the present lack of uniformity of courses, requirements, and standards of scholarships and teaching in these schools, and for the further reason that they do not offer any adequate instruction in psychology and the science and art of teaching, the state must protect its certificate by confronting applicants of this class also with an examination.

There is another and all too small class whose scholastic and professional attainments are considerably above those possessed by the other two classes. These are the graduates of our best institutions of higher learning—univer-

sities, colleges, and normal schools. These students have pursued all the branches required by the state and its examination for a state certificate either preparatory to entering the institution of higher learning, or in the course after entrance, and hence their diplomas of graduation represent full three or four years of study in advance of that required for a state certificate. These applicants have been in daily association with efficient faculties for several years, and have during that time been subjected to many tests and examinations calculated to measure both their scholastic attainments and their mental grasp. Nearly every branch required for the state certificate, besides being offered at entrance to the college or normal school, has been pursued in the course after entrance by the applicant, either by repeating the same branch in advanced form, or in the pursuit of some related study directly dependent on the mastery of the lower branch. Granting that these institutions maintain a high standard of work both on academic and professional lines, is it necessary that their graduates shall, in common with the first two classes mentioned, be required to take an additional examination before the state is warranted in giving them its certificates? If the conditions supposed below should obtain, yes; if those conditions do not obtain, it is not only unnecessary, but unwise.

1. *If the state is able to maintain a higher standard academically or professionally than that of these institutions, then the state manifestly should give an additional examination.* But no well-informed person will claim for a moment that our college and normal school courses do not set the standard both on academic and professional lines clear above what can possibly be set in one examination by an examining board.

2. *If the faculties of these institutions either through interest in their own graduates or any other disqualifications, are not as well fitted to judge on the preparation and fitness of the candidates as is an examining board, then the state should examine through its own board.* But it is entirely safe to say that interest in its own graduates would never lead an institution to recommend to the state for a certificate those who, in its estimation are unworthy, for the success of its graduates is the success of an institution, and their failure is its failure. Further, there is no one else so well fitted to pass upon the qualifications of an applicant as the faculty of the institution where he has had his training. While the examining boards have been highly efficient in Iowa, it is not too much to say that the faculties of our institutions of higher learning have not been less so. Indeed, a perusal of the names of those who have served the board as readers of examination papers reveals the fact that these faculties figure pretty largely on the real examining board of the state. And at times, in order to secure variety in the questions for the state examination, the instructors in the different institutions have been asked to furnish lists of questions for use by the board. Thus in some sense the examinations have been but a repetition of those held for the same candidates during the several years spent in the college or the normal school, except that the state is obliged to hold its examinations under far less favorable conditions for determining the real strength of the candidate than when the examination is held in connection with the regular work. If the faculties which have the training of these applicants are not able to judge their qualifications in classroom work, it would seem hardly worth while to ask them to read the hurried answers to four or five questions, or to call in a

board of strangers and require them to pass judgment after the applicants have graduated from college or normal school. The natural interpretation to put on this feature of certification is that the state discredits the work of these institutions, or the integrity of their faculties.

3. *If it should appear that the examination required by the state has the effect of raising the professional standard of the teaching force, then it should surely be required.* But the probability is that so far as it has any effect on the standard of the profession, the examination tends to lower rather than raise it. It does this in that it discourages where it should encourage the best prepared and most promising candidates who seek admission into the calling—namely, the college and the normal school graduate. Quoting one of the state superintendents whom I asked for an opinion: "So great is the need of more college and normal school graduates in the teachers' ranks that I think we should offer every possible inducement to graduates to engage in the work."

4. *If there is danger of teachers who have graduated from higher courses of study attempting to teach the lower branches required in the high school or the grades without having an adequate knowledge of them, then it is well to require an examination in order to enforce preparation on those subjects on which they have become "rusty."* But the work in the preparatory schools is better now than it has ever been before, both in the grades and in the high school, and it is constantly improving in efficiency. Now after a student has once passed on all the branches of the state certificate either as admission subjects, or in the college or normal school course, and then continued in further study for four years longer, is it necessary to require him to pass another examination in these branches in order to make sure that he will not attempt to teach them without knowing them? Or would it be safe to assume that the zeal in scholarship which prompted him to push through the years of advanced study is a sufficient guarantee of the mastery of the elementary branches as they are needed? Is it not rather the attainments in culture and mental grasp than the immediate store of knowledge that counts, the mental assets of power which the candidate has behind him rather than the small change of facts which he may have in the pockets of his memory?

5. *If the additional examination acts as a safeguard in giving us teachers academically and professionally fit, so that boards in securing a teacher may take the certificate as a want of success, then all would hail the examination.* But even the most optimistic of us would hesitate to claim this much for the present system. The president of a leading normal school expressed himself as follows in a recent letter: "The present state certificate is no protection worthy the name to the people or to the school board, as no person selecting a teacher can afford to take these licenses as evidence of success." The state certificate at best stands only for so much preparation on the academic and theoretical side, coupled in some cases with a modicum of experience which is attested to as successful, but often by those who have had no adequate opportunity to judge, and who would not be competent judges if they had the opportunity. Any first certificate stands only for so much *work done*, not for what the holder can do. This last is, in any case, a variable, which can be determined by experience alone. Then why should the state refuse to certify what it knows regarding a candidate, namely, that he has had an amount of academic and scholastic training certified to by a

responsible institution, which warrants his beginning the work of teaching? What is gained by leaving this to the county, and requiring the applicant to obtain from the county superintendent a certificate which will entitle him to teach in precisely the same schools that he might enter if he held a state certificate? What is gained by shifting the responsibility? What is there sacred about a state certificate which is not about a county certificate? If it is argued that the professional aspect of the state certificate must be protected, then the reply must be as before stated, that the state certificate issued to the college or normal school graduate on examination today points only to the past, and not to the future, and hence has no really professional aspect to be protected. But in any case all this phase of the objection can be covered by the state's having a second certificate or diploma as it has at present which will be granted only on proof of continued success testified to by some competent and trustworthy authority.

6. *If it is true that all who wish a state certificate should be served alike on the matter of the examination in order to be fair, then there might still be an argument for making it general.* But it is an altogether illogical assumption that impartiality consists in compelling all who wish to enter the calling of teaching to pass through the same gateway,—that of a special examination before an examining board. There is no fundamental reason why the fit and the unfit, the trained and the untrained, the product of rural and village school, and of college and normal school should be made to answer the same examination questions and then be accredited to each in the same schools. Fearing that the unfit will enter the calling through the doors of our best institutions of higher learning, legislation has interposed the flimsy barrier of a special examination. Not trusting the faculties and courses of study of these institutions, a board of strangers is called in to pass on the fitness of the candidate. In other words, we seem to be either worshipping a fetish, or to be chained by tradition or circumstances to an unnecessary, cumbersome, undesirable, inefficient, and annoying method of admitting the most promising of our candidates into the teaching profession.

It is sometimes urged that all this is a trivial matter at best, and that the well prepared college or normal school graduate has nothing to fear from examinations, it being only the weak who will shrink from them. This is, however, hardly a fair putting of the case. If it were possible to so arrange an examination as to give an absolutely fair test of the candidate's scholarship and ability, then there would be some foundation for this assumption. But it is absolutely impossible to give any adequate test of either under the present arrangement, which requires candidates to write on seventeen branches in two days, answering four or five set questions on each, a failure on one question constituting a failure on the branch. Granting that the questions are wisely framed, the necessary limitations in scope and time allowed render the inefficiency of such a method too obvious to require discussion. Said a noted professor of education in a recent letter on this question, "It is not so much the fact of the examination as the limitation of the examination to which I object."

Of course the limitations mentioned are in great degree inherent in the system and cannot be avoided, and they fall alike on all who take the examination, both the graduate and the non-graduate. There is this condition,

however, which makes it rather harder for the graduate who has just finished school than for other candidates. He has come from advanced studies which have fully occupied his time and attention, and not allowed time for review on the branches of the examination. They usually come not only from a study of the branches, but a special cramming for this occasion which has often extended over weeks. It is said, let the college and normal school graduate wait for his certificate from the state until he has had time to review, and in the meantime secure one from the county superintendent which will serve him temporarily. But just here is where the greatest mistake is made. We make it as hard as possible instead of as easy as possible, for our best material to enter the profession. The time when the young graduate of the college or the normal school most needs consideration is when he is first seeking to enter the calling. When he is applying for his first position, the guarantee of his scholastic and professional equipment vouched for by some authority which will command respect will be worth more to him than it will ever be later. Here is where he needs some recognition for the years he has spent in advanced study, and something tangible to show for it when he seeks a position. This certificate need not be, and should not be, the highest grade given by the state, but it should free him from the annoyance and expense of asking a certificate from a county superintendent, often a hundred miles from the place he resides when he secures his position. Some county superintendents take the liberty, it is true, to grant a certificate on the basis of the college or normal school diploma, but these officers have no more warrant for doing this than has the state, and have far less adequate facilities for knowing the worth of the diploma presented by the applicant.

A number of years ago a reform movement was initiated in the state by granting state certificates to all graduates of the state normal after they had taught successfully for thirty-six weeks, and a life diploma after five years of successful experience. This plan looked so reasonable and worked so well that other schools in the state, and particularly the colleges which were offering standard courses in psychology and pedagogy, thinking that they also deserved recognition, desired a similar measure to include them as well. Then followed a clash of the different educational interests of the state, some schools not wishing to have such a privilege extended, and others willing to have it extended if the extension included them as well, otherwise not. When legislation was proposed in the assembly of the state, rival educational interests became so insistent that the legislators despaired of bringing order out of chaos and, unwilling to offend by advanced legislation or yet by leaving things as they were, they solved the matter by repealing the law then in force, and requiring an examination of all applicants for a state certificate. Thus the foundation that had been fifteen years in laying was destroyed without the superstructure ever having been reared upon it. Iowa's forty-four colleges and normal schools have proved too much for her educational interests.

Under the present law in Iowa allowing the state to certificate teachers, the *state certificate* was provided for in 1882, and in the twenty-two years intervening 3,755 certificates have been issued; the *diploma* was first issued in 1886, and since then 356 have been granted; *primary state certificates* were first granted in 1898, and 473 have been issued; *special certificates* were

first issued in 1900, only eight having been granted. In all, the state has issued 4,592 of these certificates on its own authority, from a fourth to a fifth of the number of teachers required by our schools at one time at the present. The number of these certificates in force on September 30, 1903, was as follows: State certificates 1,771, diplomas 356, primary certificates 428, making a total of 2,555, or from a seventh to an eighth of the teachers now in our schools. From these numbers it will be seen that the state has not gone excessively into the certificate business as yet. Further, the state superintendent's forthcoming biennial report will show that there was a falling off of 122 in the number of state certificates issued in the biennial period closing September 30, 1903 as compared with the biennial period just preceding, a loss of over 15 per cent. During the same period there was a falling off of 80 per cent in the state diplomas, and a gain of 7 per cent in the primary certificates, or a loss of 14 per cent on the three classes combined. On the state certificate and the diploma alone, the falling off is something over 21 per cent.

The financial feature concerned in these certificates, though small, may be worthy of notice. Up to September 30, 1901, under the present law the teachers of the state had paid in fees for the different certificates \$12,479, while the expenses of the examining board connected with the work had been \$8,928. This leaves a profit of \$3,551, or 28 per cent of all moneys paid in by the teachers. This means that the state, which has an overflowing treasury, which is proud of furnishing free education to all the youth within its borders, and which is drifting toward free text-books as well, is still willing to make a profit off of the most poorly paid of its servants, and this in a line where every encouragement should be held out for the worthy to enter the calling. Be it further said that the men and the women who have served on the examining board have worked almost without pay, so it is the state and not the examining board which has been making the profit.

After this brief survey of the conditions in Iowa, it is instructive to note the conditions in some of the other states.

Graduates of the Wisconsin state university and state normal schools, or of other schools of like grade, either in or outside of the state, are issued a special license for two years, after the expiration of which the holder may apply for a life certificate, which is granted him on proper evidence of his success in teaching, without further examination.

In New York, students entering the normal schools must be from accredited high schools or pass an entrance examination. No further examination than that required in the normal course is required for state certification. College graduates from approved institutions which have requisite courses in psychology and pedagogy are granted a three-year certificate without examination, this being renewed on proof of professional success.

New Jersey grants ten-year certificates to normal school graduates, without examination, with the privilege of applying for a life certificate after the expiration of two years. College diplomas are accepted for all the required branches they cover.

Massachusetts does not have state certification as a system, but is now looking toward that plan, giving her first state examinations on the 25th and 26th of September. The examination is by towns, and each board is allowed to accept a normal school diploma in lieu of an examination. I quote the following from a letter from John T. Prince, agent of the board

of education of Massachusetts: "A recognition of the normal school diploma by the state as final evidence of fitness to teach in the elementary schools seems right. It would also seem right for the state to give the same recognition to a college diploma, provided the college course covered a full year of professional training. In the case of such a diploma, it ought not, of course, to limit its operation to elementary schools as a normal school diploma may."

Colorado gives certificates on her own normal school diploma, and all districts of the first class (over 1,000 children of school age), may provide for their own examinations, and these usually accept college and normal school diplomas for examination when the candidates are to teach in the high schools.

South Dakota gives certificates to graduates of her own university and normal school, and also to graduates of other standard colleges in or outside of the state if they have had courses in pedagogy approved by the state superintendent.

North Dakota gives state certificates to graduates of her state normal school on graduation, and to those of other normal schools on proof of two years of successful teaching experience. She gives a professional certificate to graduates of reputable colleges and universities on proof of five years' experience if these institutions are without the state, or with three years' experience in case of her own colleges.

Indiana state normal graduates are given life certificates on proof of two years of successful experience after graduation. Graduates of other institutions of higher learning must pass examination in a few subjects pertaining to the professional side of the work.

Minnesota issues certificates to graduates of universities, colleges and normal schools which maintain as high a grade of work as the advanced course in her own normal schools, providing the applicants furnish proof of adequate teaching experience. A temporary permit is given upon graduation without experience. Superintendent Olsen expresses himself as in favor of state reciprocity on the question of state certificates.

Rhode Island gives state certificates to graduates of such institutions of higher learning as are approved by a state board of education.

Kansas has practically the same plan as Rhode Island.

Vermont issued state certificates to graduates of her state normal school, and to graduates of such other institutions as are approved by a state board of education.

Nebraska grants state certificates to graduates of colleges and normal schools on proof of successful teaching experience. It is not necessary that the institution shall be within the state, but the teaching must be.

Michigan has just put the whole question of the certification of normal school graduates into the hands of a state board of education. Superintendent Fall encloses the copy of a bill which failed to pass their last legislature, but on which he says the board will base their action. This bill contemplates certification of normal school graduates without examination. Michigan already has a law which provides for a like certification of university and college graduates on proof of successful teaching experience.

California issues a list of accredited schools to whose graduates she will grant state certificates without examination, admitting them to teach in

schools of certain grades in California. Thus the graduates of our own normal school are given certificates to teach in the grammar schools of the state.

Illinois, Ohio and Connecticut issue state certificates only on examination, although Connecticut is soon to modify her plan.

It will be seen from these statements that graduates from Iowa institutions can receive much better recognition away from home than at home. Graduates of our colleges can go into the high schools of Minnesota upon a state license and begin teaching without examination, and receive a permanent certificate upon experimental proof of professional success. Graduates of our state normal can go into any of the common schools of California without examination, but they cannot enter the rural schools even of Iowa with any such immunity. And what is true of conditions in these states is true in many others of similar rank educationally. And no matter how loyal we may be to our own state, we can hardly claim that Iowa leads her neighbor states in her requirements of her teachers. Indeed it is rather a serious commentary on the educational status of Iowa that we so often hear the complaint that we train up so many efficient men in our schools, and then lose them to other states.

It is not the claim of this paper that state certification of college and normal school graduates without examination would be a panacea for our educational ills, but only that it would be one step in the right direction. Iowa has a university, a normal school, and colleges which rank favorably with like institutions throughout the country, and these have a clientage which can be excelled in no state or country in the world. With these facts in her favor, there seems to be no good reason why she should not profit by the example of so many of her sister states, and devise some safe and fair system by which these institutions might receive recognition of their efficient work in training teachers for the schools of the commonwealth, and by which the teachers who have had the best training the state affords should receive like recognition for their ambition and attainments.

I am aware that it is hazardous to undertake to lay down rules for the conditions or organization under which certificates should be granted as I have suggested. There are a few general principles, however, which seem to underlie the plan followed in the various states which I have cited. I have gathered those principles together into a few conclusions which follow:

1. If the state is to stand responsible for the certification of teachers without examination on the recommendation of institutions of learning, it must have some means of satisfying itself of the courses offered and the instruction given in these institutions. This renders necessary some authority in the state, presumably a state board, which has power to inspect and accredit such institutions as meet the requirements. This board must have some criterion by which to judge the institutions which wish to be accredited. The state university and the state normal school furnish such criterion. Institutions which are to be accredited must offer work equal in quality with these schools, the minimum quantity to be determined by legislation or by the board, but should include as a minimum requirement one full year each of psychology and pedagogy four or five days a week. Institutions whose work is of high quality, but lacking in pedagogical lines may be put on a partially accredited list, and the diplomas of their graduates be accepted in

lieu of the examination in so far as they cover the required branches, examination being required in other branches.

2. The state board should issue certificates to graduates of these institutions as provided above upon presentation of a diploma from said institutions, provided that the diploma is accompanied by a recommendation from the president, the department of education, or some other responsible authority of the institution commending the holder as worthy to enter upon the work of instructing our youth. This statement should refer to the character, general ability and the course pursued by the applicant.

3. State certificates may be of the following classes: (a) The general state certificate, covering the usual school branches; (b) the special state certificate, covering music, drawing, manual training, the foreign languages, etc.; (c) the primary state certificate, covering the work of the elementary grades, and (d) the state diploma, which should be for life, and should be granted only for professional success in actual school work. The diploma should follow only the highest grade of state certificate, and should come without additional examination. All these certificates except the diploma should first be issued for short terms, and should be renewed only upon application accompanied by proof of success in teaching.

4. The general state certificate should be of two grades, first and second. The first grade should be issued only upon college graduation or its equivalent, and should admit to teach in any public school of the state. The second grade should be issued to graduates of accredited institutions below college grade, and should admit to teach in all the common schools of the state, and in high schools which offer a two or three years' course.

5. All these certificates should be issued by the state free of charge, but if this is not feasible, the funds now used in holding examinations and grading manuscripts should be used by the state board in inspecting and accrediting schools and in looking up the success of those who are seeking advancement in certification. In order that these lines of work may be successfully carried on, the board should be provided with a salaried secretary, who should be a practical school man of high attainments and broad professional training, and should give his entire time to the work of the board.

If it be said that these conditions could not be realized in Iowa, even granting their desirability, the answer is that they are realized in many states where conditions are no more favorable to their realization than they are in Iowa. If it be said that Iowa has too many diverse educational interests to permit such a plan to work, the answer again must be that many of the states already using such a plan have educational interests almost if not quite as diverse as those in Iowa. Are not the educational institutions of Iowa great enough and magnanimous enough that the educational interests of the *whole* state may be allowed to triumph? I believe they are.

SCHOOL HYGIENE.

A. L. WRIGHT, M. D., CARROLL.

In the brief time allotted me to discuss some of the sanitary problems presented in the interest of better schools and a higher intellectuality, you must not expect me to cover the entire field of thought along these lines. Nor can I present for consideration a panacea for all the evils of sanitary defects in the location of our school buildings, their construction, the shortcomings in the method of heating, lighting and ventilating the same. Nor can I discuss all phases of the intellectual side of the mental development of the untrained and untutored charge that is turned over to you in its early infancy, in fact before it has shed its swaddling clothes. This question is a vast one. In order that I might do it justice would require the "encyclopedic mind of a chancellor." The subject is of such importance that I shall devote a considerable part of my paper to the consideration of the necessity of a sound body to a healthy and vigorous mind. Without the one the other cannot possibly exist. "To turn out of school on the day of graduation an intellectual giant, and call such a man or woman, was an absurdity."

The little one whose mind is in the formative stage has as yet hardly taken shape. The nerve elements that enter into the essential parts of the brain of the future intellectual giant are not acquainted with the function or capacity of the nerve cells next door. This little craft must be thoughtfully piloted through the shoals to the open sea, the better to enable him to meet and surmount the obstacles encountered all through the voyage of life. Difficulties are encountered all along the line. At the onset they seem insuperable owing to the inability of the child's mind to grasp and comprehend the same. This of necessity is part of the school curriculum. It is food for the youthful brain to feed upon, and as assimilation progresses the brain assumes a more concrete form. The inability to carefully consider and analyze gradually increases until the different problems of life "melt away as the morning dew before the rising sun."

It is for the purpose of better equipping our embryotic men and women for the trials of life, the making of better citizens, and to enable them to do something for themselves and those who may be dependent upon them, that vast sums of money have been spent in building and equipping our public schools that the child might and should be properly trained, so as to know how to use that which has been given him and not be as—

Lo, the poor Indian; whose untutored mind
Sees God in clouds, or hears him in the winds:
His soul proud science never taught to stray,
Far as the solar walk or milky way.

This little mind must have a strong and healthy body as well as environment both in the school and at home that contributes to the same end in

order to accomplish good results. Science teaches us that the mind and body are inseparable. That if the organism is overworked the mind responds with great difficulty. The fatigue may be carried to the extent of causing complete suspension of all mental operations. As related by "Sir Henry Holland who states that on one occasion he descended on the same day two deep mines in the Hartz mountains, remaining some hours in each. In the second mine he was so exhausted by hunger and fatigue, that his memory utterly failed him, he could not recollect one single word. He recovered fully after partaking of food and wine." This experience emphasizes the importance of not exhausting the economy to the extent of producing a complete suspension of function. However, I suspect that much of Sir Henry's fatigue was due to his long confinement in an atmosphere surcharged with noxious gases, and not to muscular exhaustion alone. The influence of environment upon an active and vigorous mind cannot be overestimated. To illustrate; there is not a teacher present who has not more than once experienced great difficulty in effecting concentration of the child's attention and thought when bodily weary. The same difficulty has often been noted when the child has been subjected a long time to the pernicious influence of inhalation intoxication as when confined in an atmosphere surcharged with carbon dioxide and other exhalation impurities.

The child is full of life and energy if in good health, he is bubbling over with mirth and fun unless his activity is shackled by disease or unsanitary surroundings. His capacity for work is unlimited, and he is perfectly willing to do it if kept busy and has some definite object in view. The child is not materially different from the adult, he expects results and must have them.

I have heard much twaddle about the injury done to children by the methods in vogue at the present time in our public schools, that of overcrowding or cramming the child. Too many studies, too close application, trying to teach the child in one year what formerly required two. Now then, teachers, this is all bosh. I do not believe that any child was ever hurt by study.

No one ever died at the top first. I have repeatedly asked physicians when making general statements to be specific and not in a single instance could they. Essayists have depreciated the curriculum of our public schools and colleges but when asked to put their finger on a single instance where study alone has done harm have utterly failed. Within a year I was called to see one of the brightest pupils in our school. She was suffering from headache, dizziness, even to fainting while at her studies. Her appetite was poor, she was pale and anaemic, had lost flesh, felt tired and unequal to her task. was nervous and irritable, apprehensive lest her parents would take her from school, and cause her to drop behind her class. This girl's condition was due to the great amount of work exacted from her in school, so her father informed me. An examination revealed that the child was suffering from an error in refraction. A properly adjusted glass removed entirely the pernicious effect of the modern course of study. Such cases could be multiplied without number, but I will not burden you. The point I wish to emphasize is that "study is like the heaven's glorious sun" strengthens and beautifies everything that comes in contact with it. Study develops the brain and mind and rounds out into a symmetrical whole the

intellectuality of the individual the same as physical culture develops and symmetrizes the body. It is unsanitary environment and hereditary defects that give rise to all of the trouble attributed to overstudy. Excessive hours in the schoolroom, improper ventilation, a diet that is inadequate, an insufficient amount of outdoor exercise, a lack of personal hygiene, being poorly clad, all contribute toward results that will ultimately be laid at the door of overstudy if not corrected. If the few sanitary laws with which all are familiar are ignored disastrous consequences will come sooner or later. If the dictates of common sense are followed no amount of study will ever cause an individual to break at the top first. It is misdirected work and unsanitary surroundings that produces the poor student and causes the health of others to give way.

The physical welfare of the children in our public schools is as a rule neglected. This is especially true in the rural districts. Much more attention should be paid to manual training and physical culture. Only today I was consulted by a lad of fifteen whose chest is as badly warped by rapid growth, faulty position in school, and neglect, as an oak board exposed to the elements. Harm can come from overtraining quite as well as from neglect of the same, and all laid at the door of overstudy. The development of the muscular system at the expense or neglect of the nervous, circulatory, digestive and other systems of the body is as disastrous as requiring constant application to books. Overtraining of any one of the anatomical systems of the body is at the expense of the rest. Scholars should not be permitted to engage in athletic sport until a physical examination has been made. An injustice would be done a boy to permit him to enter a severe physical contest when suffering from an organic heart lesion, or a commencing tuberculosis might be followed by hemorrhage. Athletes are always short lived. Prize fighters never live to a ripe old age for the simple reason we do not have the symmetrical man, his muscular system is developed at the expense of all else. With proper physical training given daily, commencing when the child first enters school and continuing until graduation, the result would be so startling in a few years that all would be surprised.

The ancient Spartans were so thoroughly satisfied of the importance of physical training as being the mainstay of their tribal supremacy that they assumed entire charge of the young at seven years. The father of every new born babe was required to take the child before a tribunal consisting of some of the elders of the tribe to which the child belonged that they might pass judgment after carefully viewing it. If it were stout and well formed they gave general orders for rearing, but if puny and ill shaped they gave orders for its disposal, thinking that the best interest of the child itself and the tribe would be subserved if it were destroyed. Every precaution was taken from birth to adolescence to produce a perfect physical being. As contributing toward this end they bathed their children with wine, believing that it would improve the physique, make it healthy and strong. There was also another tradition among the Spartan women, that epileptics and weakly children, would waste away and die with this treatment. As the children grew older they were enrolled in classes, for the purpose of physical training. While reading and writing was taught a greater part of the education was directed toward the physical well being of the child. As a result of this strenuous training the Spartans have maintained their place in history as physically a magnificent tribe.

As we have maintained from the beginning a strong and healthy body is essential to have a strong and vigorous intellect. We might learn to our advantage from this ancient people the importance of physical training. See to it that the child is not exhausted and overworked out of school any more than you would overtax its capacity. The result will be ideal. There should be some elementary instruction on sanitation of the individual, the house and school, the better to enable the child to comprehend the importance of a few health laws, the returns would be vast were these rules carried out in a strong and healthy race.

Much has been written concerning the advisability of having a regularly appointed medical officer who shall examine both teachers and scholars and report upon their intellectual fitness as teachers and physical well-being as pupils. Teachers should be required to qualify physically as well as mentally, before receiving a certificate entitling them to teach. Their immunity from tuberculosis and other communicable disease set forth. Such an officer would control all that belonged to school hygiene and matters that are now overlooked or permitted to pass would be inquired into. The physically weak would be held back and kept apart from the more robust and vigorous. Instruction for their physical development would be given. Supervision would be had over those suffering from disease. In as much as the state educates the children and compels their attendance in public buildings, the state should see that they are not subjected to any preventable cause of disease. Many defects in the schoolroom must be overcome by a house to house inspection as practiced in Denver. This would prevent the spread of contagious disease and result in disinfection of books and clothing that are now taken into the schoolroom. It will be impossible to correct errors in sanitation in the homes of many of those most in need of the same, but by inculcating a few sanitary principles in the child succeeding generations may profit thereby.

In 1876 Dr. Henry Bowditch, of Boston, made an estimate of the annual cost of unnecessary sickness, sickness due to neglect of the more simple laws of health and placed the figure at one hundred million of dollars. These figures have since been revised and placed at the incomprehensible sum of three hundred million dollars, all on account of preventable disease. The question I desire to ask is how much of this vast sum of money and time could have been saved had the sanitary condition of the schoolroom been what it should. I am of the opinion that many, many millions of dollars, much suffering and the most valuable of all, a vast number of precious lives would have been saved.

There can be much said regarding the construction of our schoolhouses, both in town and in the country, from a sanitary standpoint pure and simple. The defects are many and palpable and it is high time a halt be called. From a hygienic and sanitary standpoint there is not a school in Carroll county in which some fault cannot be found, and many are absolutely unhygienic in every respect. The building should be attractive outside and in. It should be inviting to the scholars, the schoolroom should be attractive and create in the pupil a desire to be there and take part in everything going on. Plants should be in evidence and used to teach botany as well as make the room cheerful and homelike. Pictures on the walls contribute to the same end, music and musical instruments stimulate the child and inter-

est him in his school work, and impress him that the schoolroom is not all drudgery. The building should be pleasantly located and not stuck down in a slough as is too often the case. I know of many, many of our country schools that are all but in the water in a wet season, simply because the sections corner at that point. How unfortunate, instead of going in one direction or the other a few rods and placing the building on a hilltop so that the child's expectations and spirits can find room to expand.

A damp, wet, chilly soil cannot do otherwise than produce a sour disposition and limit the range of vision. A child's capacity for seeing depends upon the extent of his range of observation. Drainage is out of the question in these slough schoolhouses. All of the miasm of animal and vegetable decomposition from the surrounding farms is floated down in front of the schoolhouse and breathed or drunk in by some ones loved ones. Build the schoolhouse on top of the hill and not at the bottom, so that the child's mind and body as well as his overflowing spirits may have room to expand and manifest themselves as is their wont. There are so many questions entering into the location of schoolhouses in cities, towns and country that we can not take your time to consider all now, nor can we go into detail and show the pressing need of a complete remodeling of our schoolhouses, the water supply to each and every school. Many diseases are water born and the urgency of a pure supply is apparent at every turn. Typhoid fever is almost invariably contracted by impure drinking water. How easy to prevent it. A strict observation of these laws requiring vaccination and the quarantining of children from families where contagious and infectious diseases exist, should be more rigidly enforced.

There seems to be a consensus of opinion that the schoolroom should not be too large, and that the light should enter from the side of the room, preferably from the left; additional light from the right and back of the room is advantageous when necessary. The pupils ought not to be required to face the light when studying. The blackboards should not be placed between the windows, and be finished without a gloss. The bad effect of cross rays of light must be guarded against. The windows should not come down to the floor but extend to the ceiling, so as to admit the light well above the heads of the children, and not be obscured by window shades or awnings. If the shades are necessary to shut out the direct rays of the sun, raise them as soon as the bright sunlight is out of the way. Do not obstruct or obscure the direct rays of light. The side walls ought to have some neutral tint on them, or a delicate shade of green or blue so as to soften the effect of the light. The ceiling may be white as it can be made. Glaring white side walls and a bright light give rise to cross rays that are certainly unpleasant if not injurious to the child's eyes, and on a bright day are fatiguing.

The effect of a badly lighted schoolroom on the eye is a mooted one. It is maintained by some that it is a fruitful source of error in refraction, in fact gives rise to most of the defects in vision encountered in the normal appearing eye. Upon this point, however, I am skeptical. All deviation from normal vision is due to an abnormally formed eyeball. Out of twenty-three hundred very young pupils examined in one of the schools in New York only one hundred and twenty-two were found to have perfect eyes. The exact anatomical form of the eye is not known, as a rule, prior to the child's entering school. It is detected early or late by the teacher or

by the frequent occurring headache, sickness at the stomach, and fainting spells necessitating the calling for aid from the family physician who detects the error and adjusts glasses. Some years ago Dr. Ely of New York examined one hundred cases of infants' eyes with the ophthalmoscope and found a very small number with normal eyes, showing beyond the question of a doubt that the eyes of a vast majority are abnormal at birth and when called upon for close application manifest the defect in headache, dizziness, sickness at the stomach, or in fainting spells. The eye was abnormal at birth and did not acquire the error in refraction in a badly lighted schoolroom. The reflex symptoms are manifest much earlier in a badly lighted room owing to the greater difficulty in accommodation. So there is little doubt but that comparatively few eyes are injured in the schoolroom. The defect exists at birth and manifests itself when the eye is called upon for continuous work.

There are very few schools properly or sufficiently ventilated. The arrangement made for getting fresh air into the room, and the foul air out is the poorest possible. In the country schools there is absolutely no provision made except by raising and lowering the windows or by opening the door. To ventilate by this means in this climate is fraught with danger to the health of the pupils and is ineffective. The proposition that a large collection of persons requires a large amount of air is a safe one, and none will dispute it. In the construction of our schools those having the matter in charge seem to look upon this thought as a secondary one. If provision is made for ventilating, the flues are too small, or not suitably placed. They may become stopped up or discharge into the attic, if provision is not made for causing the air to rise in them. The amount of air that should be allowed each pupil per hour has been variously estimated at from two hundred to three thousand cubic feet, depending upon the age of the pupil and the frequency with which the air is changed.

In the construction of our school buildings in the cities where a large number are gathered together the question of ventilation centers about the one problem of expense. I have seen it stated that the cost of heating a properly ventilated occupied building is about fifty per cent greater than when the same is shut up and closed, the temperature being the same. It is also stated that the capacity of the pupil for work is double in a properly ventilated room thereby greatly reducing the cost of his schooling, and effecting a saving to the taxpayers. There is also another and greater saving to the loving and fond father who complains bitterly of the burden of his taxes, in the freedom of his children from catarrhal colds and infectious diseases. These incidents are not taken into consideration but are unjustly charged to the account of Divine Providence. Where the intake and egress of air is not automatically regulated the loss of heat is apt to be great. The room is overheated, then the waste in raising and lowering windows is beyond computation. This difference in cost might be gotten at could we estimate the expense of a well ventilated and occupied building, and one badly ventilated and occupied.

I have never seen a schoolroom containing forty or fifty pupils properly ventilated. The stifling influence of foul air in a poorly ventilated room is soon felt. The scholars cannot study. They complain of headache, dizziness, colds and catarrh and the contagium of infectious disease is soon spread

from one to another. Dullness and lassitude are apparent at every turn, also inability to concentrate the attention. Study is irksome. Having the temperature of the room too hot has the same effect, and interferes with study. It is a fact but not generally known that we can take heat as well as cold; the result is the same.

The foulness of the atmosphere of the schoolroom depends upon the presence of carbon dioxide, sulphuretted hydrogen, carburetted hydrogen, and organic filth that is thrown off by the lungs and skin in great quantities. The patrons of our schools pay little or no attention whatever to the subject, and I question in my own mind if they care. I base my opinion on what I have seen of their home life. The only means of entrance of the pure air of heaven to their living and sleeping rooms is as religiously guarded against as though it were a viper. I have many times entered the homes of my people and found the atmosphere so dense and offensive, teeming with the products of wear and tear thrown off during the night, that it almost stifled me to enter, let alone living there. This concentrated iniquitous dose of human poison has a very disastrous effect upon the nerve centers of the growing child. This vitiated air is the most expensive commodity that can be taken into the body, the amount of money expended in loss of time and sickness each year amounting to a large fortune. No doubt the money expended in caring for those sick with preventable diseases contracted at school, would pay the additional cost of correctly ventilating every overcrowded school room.

In the construction of the country schoolhouse there is absolutely no provision for ventilating the same. The fresh air must enter through the doors and windows. In the construction of the district schoolhouse there seems to be but two principles involved, the first economy in building, and last economy in operating. We must meet these conditions and overcome them as best we can, hoping that future generations will profit by the past and your instruction in sanitary science, and not be so parsimonious in the construction of their school building. A very easy way of partly remedying a poorly ventilated schoolroom is to place a four-inch board under the lower sash and permit the air to enter at the junction of upper and lower sash. It is a fact proven by experiment that the outside air will flow in for a time and that within will pass out alternating. This prevents a draft on the pupils. The air from outside should enter above the heads of those in the room so as to prevent a draft. If it enters near the floor it cools a limited area of the body by evaporation, and the result is a cold.

The ideal system of ventilating the schoolroom is to take air from the outside and pass it over heated pipes, not hot enough to bake the life out of it but to have it of the desired temperature when it reaches its destination. The cold air of winter should be introduced warmed, provision being made for withdrawing the foul air at the same time on the principle that two bodies cannot occupy the same space at the same time. The hot air should be forced into the room and the impure air already there withdrawn sufficiently rapid to change the same every few minutes. In this way only can the child escape the pernicious effects of exhalation impurities and the poisonous effluvia that is carried into the room and thrown off by the skin.

The desk and chairs in use in our public schools are very imperfect. The desks should be of the required size to fit the child and not require the child

to adjust himself to the desk. The height of the desk should come to just below the elbows. The top should be movable to pull up to the child when sitting erect. The back of the chair ought to fit the small of the back and support it well, the back and seat should be movable, the seat fitted to the curve of the thighs. The necessity for stooping over in the ordinary school desk compresses the chest, limits respiration and gives rise to air stagnation in the lungs that favors bacterial growth and pulmonary tuberculosis as well as being a direct cause of spinal distortion so frequently seen in children. Spinal curvature in the young is often due to the distorted position they take at the desk and this in time distorts the chest and acts as an etiological factor in the production of many diseases of the lungs. In France and Germany the desk is adjusted to the required age, size and wants of the child so that he can sit erect and not stoop over while studying.

The importance of children's eating wholesome food and at regular intervals cannot be over estimated. The habit of going to school without eating a sufficient amount of food in the morning, is a cause for the health of many to fail. Their precarious condition of health is supposed to be due to overstudy, when it is in fact pastry and sweets. Teach them to eat good, substantial, nutritious, and easily digested food, and the child will then come to you fortified for work.

The subject of school sanitation is a vast one, volumes have been written and much more said, and the end is not yet. In a brief paper like this we cannot enter into a discussion of the entire subject of sanitary science in the school, but simply touch upon a few of the more salient points. I have purposely omitted the discussion of the age of admitting children into the schools, as well as the length of time for continuous application required of these little tots. The character of their work, the importance of diversity so as not to fatigue and disgust the child with what is before him at the outset. The number of hours per day, the importance and great difficulty of making play instead of work out of the school effort. To my mind the position of the primary teacher is one of the most difficult to fill, and each and every one of those so engaged who make a success of their chosen profession should have a crown of glory, if unable to get a raise in their salary. With each advancing step the capacity and capability of the child for work increases. If the directing hand has led aright, by the time the scholar is eighteen, no amount of work can hurt him, except he has neglected some of the sanitary laws you so early began to teach. We cannot live in filth with out sooner or later paying the penalty. Retribution will just as certainly overtake those who ignore the crying needs of the economy as day follows night.

In conclusion let me add one word that bears indirectly upon the subject under consideration. If there is any place in the public service where an honest and intellectual servant is required, it is in the selection of school directors; civil service rules should apply to school boards. As we are at present constituted, politics, personal prejudice, sects in religion, party preferment too often influence the public in the selection of ignorant, inexperienced, and incompetent men as members of our school boards. This ought not to be. In the interest of better sanitation in our schools the most intelligent and thoroughly equipped men in the community should be selected.

APPENDIX.
