shrug of the shoulders, or a sneering remark about things which the children have been taught at home to hold sacred, are things which no wise or conscientious teacher will ever be guilty of before his pupils.

ORGANIZATIONS.

EDUCATION, in order to become more effective in its operations, is subject to modes of systemization the same as any other great principle of enlightenment and progress. Although systems vary according to the conditions of civilization, countries, times, localities, and purposes, there is observable nevertheless, a unifying tendency toward the attainment of ulterior aims; toward the adoption of a universal system, containing within itself the elements that constitute that happy condition of mankind looked forward to by all of us as something to be realized in the Millennial reign.

All modes, systems, laws, and endeavors in this connection are, however, empirical and experimental, notwithstanding psychological foundations claimed by educators for their particular theories and the logical deductions therefrom by which they seek to build upon those foundations.

Man will have to keep on experimenting and prospecting, so to speak, in educational systems and organizations, as well as in everything else mundane, finding "here a little and there a little, line upon line, and precept upon precept," until he commences to learn the language of that "still small voice" that teaches all truth, and to comprehend it so clearly that to him it will be a constant voice of revelation.

The stars that have shone thus far upon the educational firmament from ancient times until these latter days, will then fade away in the light of the rising sun of eternal truth, and mankind shall have on earth an educational system such as is now already enjoyed by the children that are in heaven.

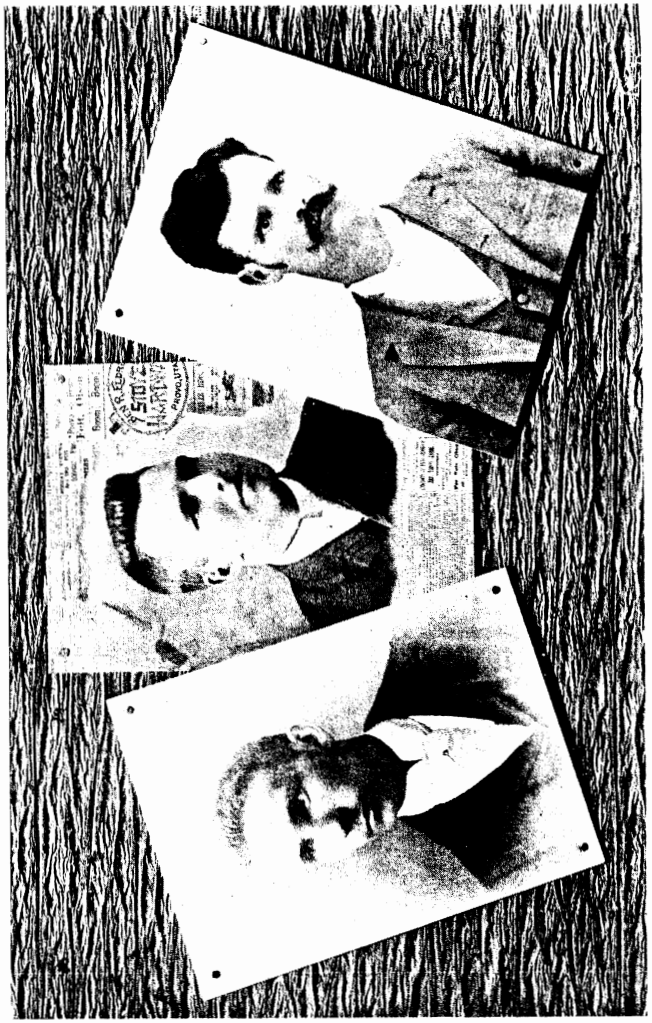
CHAPTER I.

PRIVATE TUTOR SYSTEM.

THERE is no system known to us that has not its advantages and disadvantages. It is from this point of view that all representation concerning any system ought to be made.

The Private Tutor System is the system according to which individual pupils may enjoy exclusively the privilege of a special teacher, either for a particular course of studies, supplementary or additional to public instruction, or for the entire field of elementary and preparatory education. Royalty and the aristocracy of birth and wealth indulge largely in this mode of education. In some instances the adoption of such a course is dictated by state policy, in others by the necessity of "catching up" for the requirements of a pending examination, while in still others nothing but snobbish vanity suggests the exclusiveness.

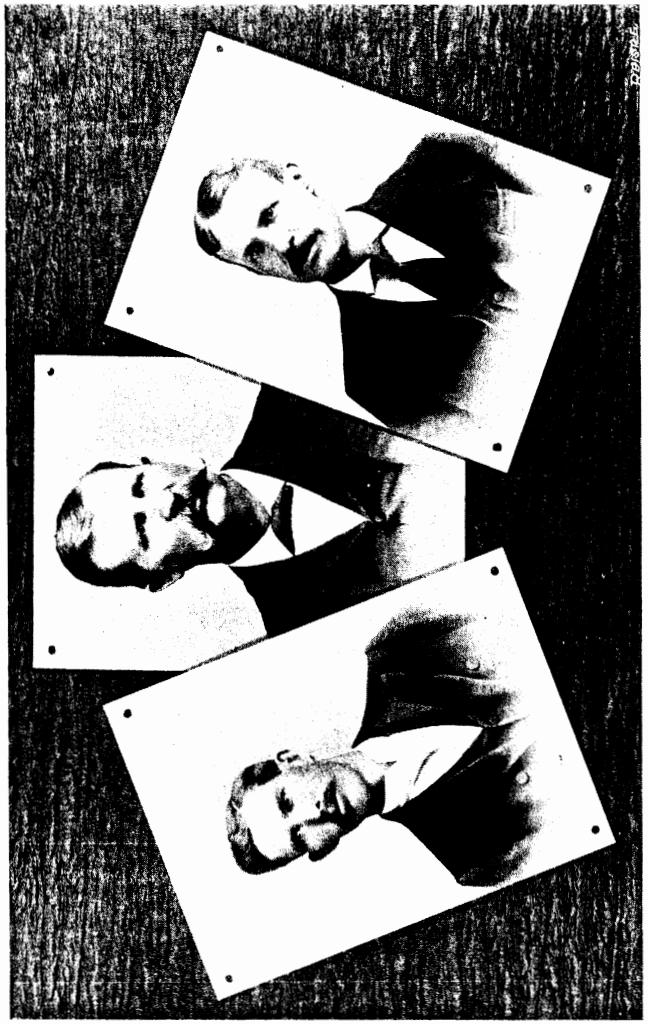
Specialties in music, fine arts, languages, and all technical accomplishments depend largely for their cultivation, as yet, upon tutor instruction, although efforts are being made to systematize instructions in these branches by the establishment of special institutions for such purposes; as for instance, conservatories of music, polytechnic and agricultural schools, schools for domestic science and household work, etc. Private tutors, however, can never be dispensed with entirely; for conditions of localities, times, environments, and individual capacities and needs are diversified to such an extent as to make the establishment of a system dispensing with the necessity for tutorage in all cases, an absolute impossibility.



Edward L. Jones, Clerk Fourth Judicial District Court, Utah.

J. M. Jensen, Secretary Provo Board of Education.

Emil Maeser.



Barlow Furguson.

Canute W. Peterson.

James R. Rawlins.

The great advantage of the private tutor system consists in the fact that the teacher is enabled not only to concentrate his entire attention upon the comparatively few pupils under his charge, but also to arrange his subject matter and mode of treatment more in accordance with the individualities of his pupils. He can, moreover, study and influence the development of their moral and intellectual capacities with greater care, and can cultivate a thoroughness which, when equalled in public institutions, depends far less upon the teacher's efforts than upon the pupil's own resolution.

There are some dark lines in this otherwise bright picture of private tutorage. In the first place, the selection of an efficient and suitable tutor is subject to so many eventualities that too frequently serious mistakes are made both in regard to professional efficiency, and what is worse, in regard to moral trustworthiness. In the former instance, much precious time is often wasted before the insufficiency of the tutor is discovered, and sometimes the discovery is not made until after time, means, and opportunities have been irretrievably lost. In the latter case the danger is greater yet, in as much as the evil influences of an immoral and untrustworthy character make themselves felt only when it is too late to repair the damage.

Another serious drawback connected with private tutorage is found on the part of the pupils themselves. Having but limited opportunity of comparing themselves in regard to effort and progress with other students of their grade, they are apt to fall into the error of self-sufficiency and conceit, which are conditions adverse to real progress, falling like mildew upon the soul, and hindering all mental growth. This unfortunate disposition in a pupil may be cured sometimes by the painful shaking up which he is sure to get when he seeks entrance into a public institution of learning, or when he is brought in contact with the requirements of

practical life; but in most instances the crippled condition of a self-conceited mind becomes chronic,—apparent in all its absurdity to everybody except to the unfortunate victim himself.

Judicious tutors, therefore, take pains to bring their pupils into frequent contact with other students of the same grade, arousing thereby a spirit of emulation and presenting them with a common standard of efficiency by affording them opportunities for comparison.

The private tutor system, taken at its best, can never be more than supplementary to public education, and must, therefore, remain subordinate to it, and, perhaps, it ought even to be made subject to it, to be regulated, systematized, and controlled by legislative enactments in the interest of the students as well as of the studies pursued.

CHAPTER II.

THE PUBLIC SCHOOL SYSTEM.

THE gradual formation of a public school system constitutes, under its various forms and grades of development, one of the most important factors in human progress, and engages as such the earnest consideration of philosophers, educators, statesmen, patriots, and lovers of their race. The time has come when the educational interests will demand a lion's share of the labors of legislative bodies, and the largest canals from the main stream of a nation's revenues must be directed into the educational regions.

True to its Angelo-Saxon origin, the United States has kept apace with the Germanic and Scandinavian families of nations in the matter of education, even bidding fair to take the lead by and by, if older nations do not make haste to emancipate themselves from the stereotyped forms of scholasticism.

The survey for a grand educational system of the future has been made, the stakes are driven, and the work has begun in various sections, and so successfully too as to enable local operations to be carried on here and there on a small scale, while along the old roads temporary improvements stimulate thinking minds for renewed exertions. These exertions will never cease any more, until the work is carried on along the new lines throughout.

The vast progress made in the modes of public instructions, in the laws for regulating them, in the financial support extended to them, and in the devotion exhibited toward them, is a prophecy of a glorious future in which education is destined to perform an important mission for the amelioration of the human race.

Our own country is to be the standard bearer for that mission, and will, no doubt, discharge that duty with a faithfulness worthy of her antecedents.

There are, however, dangers lurking alongside the path leading to that glorious destiny, dangers which must be guarded against and avoided, and every teacher ought to be found in the vanguard to give the danger signal wherever needed.

Broad as the laws are that regulate our public school system, they are by far, not yet perfect and their very liberality exposes them to divers influences for evil.

Among the first of these evil influences is *politics*. Politics is necessary and, therefore, good in its place, but in education it is a curse, pure and simple, every time.

To make the appointment of teachers and educational officers dependent upon party proclivities, is not only preposterous but actually injurious to the best interests of education. All good citizens of whatever political inclination should unitedly protest against such attempts and denouce them as treason against the welfare of the people.

Professional fitness, intellectual as well as moral, should be forever the only criterion for officers and teachers. Upon this basis a public system of education may be built up that will invite the devotion of the best talents and noblest elements from among the people, and provide the rising generation with worthy examples of imitation, safe counselors, and wise leaders. Stability will take the place of unreliable fluctuations characterizing our present educational affairs. The attainment of knowledge will be accompanied by a careful cultivation of character, which constitutes the best guarantee for the maintenance of the free institutions of our country; for with teachers of sterling character the waves of political turmoil and corruption will dash harmless against the steps of the educational sanctuary.

Another danger threatens the healthful progress of education in our country, viz: the rapidly spreading epidemic of infidelity that at the present time under the new disguise of agnosticism is sweeping over the civilized nations of the earth.

The unsectarian character of our educational system is a safeguard against attempts of any denomination to gain control over the public schools of the land to the injury or exclusions of other beliefs. In thus carefully guarding pupils against sectarianism, the law but feebly protects them against the common enemy of all religion.

To counteract the possible results growing out of the insiduous influences exercised by infidel or so-called agnostic teachers, a negative provision, that no infidelity shall be

taught in the public schools, has been incorporated into the school law. Just as well try to keep the chilling frost out of a flower garden by putting a rail fence around it.

This great defect in our public school system can be remedied only by providing for religious instructions in some way. I respectfully suggest that the privilege be extended to every religious denomination of a district, to instruct in their faith their own children attending such school, at a certain hour every day, and under such regulations as the legislature and the local school board may prescribe.

It is very questionable, however, that this proposition will meet with much favor just now, but it is a point that must obtain general recognition sooner or later.

THE UNIVERSITY OF UTAH.

The history, aims, and present condition of this apex of the pyramidical structure of our public school system, is best illustrated by subjoined extracts from a contribution to "The American University Magazine," of June, 1895.

THE UNIVERSITY OF UTAH.

By George Q. Coray, B. S. C., Librarian of the University.

"A good history of the University of Utah, when such shall be written, will be a pretty good philosophical history of the Mormon people up to this date. At the beginning of their colonizing labors, they acquired the excellent habit of associating inseparably the problem of education with the serious questions of government, religion, and the practical affairs of life. With Brigham Young, the recognized founder of the commonwealth, higher education was almost a mania. His first notions on the subject, as they have been handed down, indicated clearly the bent of his mind, and what the character of his labors might have been had he lived a little later in the Territory's history; they showed that he believed in

education as a necessary auxiliary of both government and religion. Notwithstanding the fact that his own educational acquirements were extremely meager, he had measured pretty accurately the power of knowledge over ignorance, all else being equal, and his transcendent ability was recognized by men of learning.

Under such leadership, it might almost be assumed that the scheme of a system of higher education in Utah was coexistent with the arrival of the pioneers, which was, indeed, the signal for the beginning of civilization in the great West.

On the sixth day after the first arrival the ground for the Salt Lake Temple, since errected at a cost of several millions of dollars, was solemnly located and set apart, and the general plan of the city as it now stands was decided upon. Though no specific mention of the University has been discovered in the scraps of record and tradition preserved from that eventful week, subsequent actions of the great pioneer, whose energy and genius were the mainspring of the whole marvelous performance, prove conclusively that a scheme of education such as had never before been attempted was in his mind, and must have had a place in the original plan. On this point, it is enough to say that three months after the resting of the pilgrims from their wilderness expedition, a school was in successful operation for the instruction of children; and among the first documents which Brigham Young signed, as head of the provisional government of the new commonwealth, was an act incorporating "The University of the State of Deseret." This was done February 28, 1850, about two years and a half after the arrival of the pioneer company. By the terms of this charter, the said University was to be located in Salt Lake City, and was to receive an annual appropriation of $5,000 from the public treasury. The control of the institution was invested in a

chancellor and a board of twelve regents, to be elected annually by the Legislature. A treasurer was likewise chosen. An indication of the importance which the founders attached to these offices appears in the provision requiring the chancellor and regents to qualify with a bond of ten thousand dollars each; while the bond exacted from the treasurer was in the sum of one hundred thousand. It is quite evident that whatever of frailty or incapacity may have manifested itself in the earlier progress of the institution, there was no spirit of trifling amongst its designers. The same Legislature which created the charter elected a chancellor, and a board of regents. The first meeting of the regents was held March 13, 1850. At this session, a committee was appointed to officiate with Governor Young in the selection of a site for the permanent home of the University, and also to choose locations for "primary schools," to operate as feeders to the "parent school," as it was called.

The first opening of the "parent school" seems to have been effected in the fall succeeding its incorporation, a beginning which for meagerness of detail might also compete with the first opening of Harvard or Yale. But the whole story, so far as the designers were concerned, was not in the beginning, as appears in the following paragraph from Governor Young's message to the Legislature which met in December of the same year:

"Under the fostering care of the government, the subject of education is fast assuming an importance that will reflect great credit upon our exertions. The Board of Chancellors and Regents of the University have already established schools in various parts of the state without incurring any expense to the institution. The enlightened course pursued by the Board will redound to the benefit of the institution, as well as to a general system of education throughout the state, and must certainly meet with your cordial approval, and warrant your encouragement."

Lieutenant J. W. Gunnison makes some interesting references to the subject in his "History of the Mormons," written in Utah about a year later, which throws a flood of light on the hopes then entertained of the future of the University. He says: "In Utah, or Deseret, the arrangements for the cause of education are upon an extensive scale. Hitherto all exertion has necessarily been bestowed upon the means of living, to fence fields, build houses, and tend their crops and herds. But as soon as this pressure slackened we find them appropriating liberally for a University which shall be eminently practical in its character, and designed to teach the useful branches first to all and allow those who have the leisure and means, to acquire the ornamental afterwards. The selected grounds for the University buildings are beautifully located on the first broad terrace of the temple city, and overlook the dwellings of the town." Pursuing his discription the author says: "A large square is to be allotted and fitted to athletic and equestrian exercises; an observatory for practical astronomy and the instruments already collected, are to be freely used to instruct on the grounds. In the several departments of engineering, mechanics, and surveying—the agricultural department, liberally patronized; and the living spoken languages of all peoples, thoroughly taught to the proper students. A peculiar feature in their instruction is the introduction of a 'Parent School' for the heads of families; and at the time of the organization the President (Young), is said to have avowed his intention of attending it as a scholar, which is gladly mentioned as a thing redounding to his praise and showing his strength of character." "Their philosophers," continues the writer in another paragraph, "already aspire to something more than has yet been accomplished, and they state that they shall revolutionize the kingdom of science, and surpass the most learned in mathematics, philosophy, and the sciences of

observation. The geologist and chemist must directly come to them to learn the wonders developed from below and in the mineral kingdom. and the botanist and the naturalist to study the arcana of the principles of life, elaborated in the vegetable and animal. For, having 'sought first the kingdom of God and its righteousness,' they look now for the promise of having all other things and knowledge added; but they sensibly add, that the Lord helps them who help themselves, and their minds will only be quickened to perceive by the most intense industry." In this connection the historian graphically introduces an extract from a public oration of one of the Regents. "Beseeching the whole church to pray the Lord, our Heavenly Father, to send down some of the Regents from the great University of Perfection, as he did to Noah, Moses, and others, to unfold to his servants the principles of wisdom, philosophy, and science, which is truth." "But," the speaker goes on, "what will all the precious things of time—the inventions of man, the records, from Japhet in the Ark to Jonathan in Congress, embracing the wit and gist, the fashions and the folly which grace the libraries of the elite of nations—really be worth to a saint when our Father sends down His Regents, the angels, from the grand library of Zion above, with a copy of the history of eternal lives; the records of worlds; the geneology of the Gods; the philosophy of truth; the names of our spirits from the Lamb's Book of Life; and the songs of the sanctified."

As is thus apparent, the University of Utah owes its origin to the great power of religious fervor; and in this respect the institution is in company with some of the leading universities of the country. Harvard and Yale had similar beginnings, and, like the University of Utah, without it they would not probably have begun when they did, or within the same century.

The great difficulty in the way of the institution at the

time of its opening seems to have been the want of competent teachers.

The original design was to have a separate school for women, consequently only males were first admitted. But this idea was soon abandoned, and the school was thrown open to both sexes.

The school was assuming at least the appearance of success, but two obstacles confronted the regents at this point which experienced educators are in the habit of considering as something prodigious, especially for a young institution. First, there was no money in the treasury and not likely to be any more very soon. Produce was the principal exchange among the people, and in a great measure constituted their tax money. Second, there were no feeders for such a school, and little immediate prospect of sufficient patronage to justify its continuance, consequently the inevitable day of its suspension soon came. But a chancellor and board of regents were, nevertheless, regularly appointed by the Legislature. Meanwhile the board was authorized by an act of the Assembly to appoint a superintendent of primary schools, and throughout the long suspension of fifteen years, their exertions were given to the building up of a public school system throughout the Territory.

In November, 1867, the University work was resumed, and until March, 1869, was kept in successful operation as a commercial school. Under the new regime the University at once assumed a position of prestige and influence. The work was laid out in five courses; preparatory, normal, commercial, scientific, and classical. It was not until the second year, however, that the full system were in operation. The sudden rise of popularity brought at once to the aid of the institution the best educational material of the Territory. Under such auspicious conditions its success seemed to be assured. Liberal appropriations were made from year to

year by the Legislature, and in due time the city deeded to the regents a block of ten acres near the center of trade for a building site. Under this encouragement $20,000 had been expended toward the erection of permanent quarters, when the very existence of the University was suddenly imperilled through a political brawl between the Governor and the Legislature, which resulted in an absolute veto of the biennial appropriation bill. For a time this hostile action seemed to be a death blow to higher education in Utah. The President and professors being first to see the seriousness of the situation, came forward and offered their services without pay, till something could be done to remove the embarrassment. In the meantime the merchants and bankers came to the relief of the institution, and a fund, sufficient to keep the school open till the sitting of the next Legislature, was in a short time placed at the disposal of of the regents. In 1884 the Legislature amended the charter, giving the institution definite power to confer degrees, and in 1892 a new charter was enacted, reducing the membership of the governing board to nine, including the chancellor, and changing the name of the institution from "The University of Deseret" to "The University of Utah."

The present Board of Regents is a most able body, comprising a number of very prominent men. This board completely sustains the reputation of its predecessors, for marked energy, ability, and a willingness toward personal sacrifice in the interests of the institution placed under its charge.

Thus, from a beginning so small that the entire work of instruction was performed by a single teacher, the institution has grown steadily to its present creditable proportions, with about 500 students enrolled, and a faculty of twenty able specialists, exclusive of the instructors in the Training School for Teachers, the Art Department, and the School for the Deaf. In all, thirty-five teachers are directly engaged in the

work of instruction. The work of the University as now offered includes, besides a three years' preparatory course, and a preparatory normal course of the same extent, regular and full college curricula in General Science, Liberal Arts, Letters, and Mining, each with its own degree, and two courses in advanced normal work, leading to the degrees of Bachelor of Science in Pedagogy, and Bachelor of Letters in Pedagogy. The present site of the University covers an entire city block—ten acres in area. The main building is a large, substantial structure containing the library and reading room, working museum, and the class rooms for general instruction and for the special courses in literature, history, and natural science. The Deseret Museum building, new and handsome, affords a home for the extensive and valuable collections of that institution, beside laboratories, lecture rooms, and offices for the work in physical science. The Deseret Museum, though owned by a private corporation, viz: the Salt Lake Literary and Scientific Association, is of free access for the work of the University. Another large building is used for the work of the Normal Training School, beside serving its special purpose as a school for the deaf. Through an act of the Territorial Legislature, a very incongruous association was effected, by the placing of the instruction of the deaf mutes in charge of the University; it is almost certain, however, that a separation of this department will be made in the very near future. At present, some work in manual training is carried on in connection with the work of the school for the deaf.

But a fairer location and a more commodious home are promised the institution. The general government, by a recent act of Congress, has given for the future University campus a magnificent site of sixty acres on the east bench lying at the foothills of the Wasatch range, overlooking city and valley and lake. A more commodious or more beautiful

place could not be found in the valley of the young and growing University of Utah.

In April, 1894, the University became the recipient of a valuable endowment, the first of its kind in the history of the institution. The Salt Lake Literary and Scientific Association, an educational society of Utah, endowed the chair of Geology in the amount of $60,000, this fund to be kept intact, and the proceeds to be used for the support of the chair named. In addition to this, Dr. John R. Park, about the same time, donated to the University his splendid private library of nearly four thousand volumes, and an extensive collection of natural history specimens, etc. This gift, together with the miscellaneous works of the Territorial library, transferred to the University by act of the Legislature in 1890, have made the University library one of the best in the State.

If now local self interest, and the baneful influence of small politics, can be forced to yield their empire to education, and a line of public policy be adopted to consolidate the scattered interests of higher learning upon one substantial foundation, Utah may easily become the educational centre of the inter-mountain region, which, by the laws of natural and social supremacy, is her just and proper inheritance."

AGRICULTURAL COLLEGE OF UTAH.

The aims and organization of this institution are best represented by subjoined extract from its circular for the academic year 1895–1896.

Establishment of the College.

An Act of Congress, approved July 2, 1892, provided that public lands should be granted to the several states, to the amount of "thirty thousand acres for each senator and representative in Congress," for the establishment and mainten-

ance of an agricultural college in each state. By the terms of the act providing for the admission of Utah as a state, the amount of public lands granted to the Agricultural College of Utah was increased to 200,000 acres.

The national law provides that from the sale of this land there shall be established a perpetual fund "the interest of which shall be inviolably appropriated, by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the Legislatures of the states may respectively prescribe, in order to promote the liberal pursuits and professions in life." The act forbade the use of any portion of the aforesaid fund, or of the interest thereon, for the purchase, erection, or maintenance of any building or buildings.

This land became available upon the admission of the Territory to statehood.

The Legislature of Utah in 1888, accepted the provisions of the national law by the passage of an act which founded the College, defined its policy, prescribed its work, and indicated its sphere.

Sec. 12.—The course of instruction shall embrace the English language and literature, mathematics, civil engineering, agricultural chemistry, animal and vegetable anatomy and physiology, the veterinary art, entomology, geology, and such other natural sciences as may be prescribed, technology, political, rural, and household economy, horticulture, moral philosophy, history, book-keeping, and especially the application of science and the mechanical arts to practical agriculture in the field.

Sec. 10.—In the appointment of professors, instructors,

and other officers and assistants of said college, and in prescribing the studies and exercises thereof, no partiality or preference shall be shown by the trustees to one sect or religious denomination over another; nor shall anything sectarian be taught therein; and persons engaged in conducting, governing, managing, or controlling said College and its studies and exercises in all its parts, shall faithfully and impartially carry out the provisions of this act for the common good, irrespective of sects or parties, political, or religious.

It is clear that the Agricultural College was founded in the interest of the industrial classes in the several pursuits and professions of life, to give not alone a technical education, but, in the language of the law, a "liberal and practical education." The legislative founders of this institution sought to place within reach of the producing classes, an education that the older institutions had not, as a rule, made provisions for.

The instructional policy of the College is in consonance with the letter and spirit of the laws upon which it was founded. Its courses of instruction represent the five great vocations of the people of Utah: agriculture, the mechanic arts, commerce, and home work.

The act of 1862, says Senator Morrill, "proposed a broad education by colleges, not limited to a superficial and dwarfed training, such as might be had in an industrial school, nor a mere manual training such as might be supplied by a foreman of a workshop, or by a foreman of an experimental farm. If any would have only a school with equal scraps of labor and of instruction, or something other than a college, they would not obey the national law."

Under an act of Congress, approved March 2, 1887, the College receives $15,000 annually for the maintenance of its experimental work in agriculture. This is in charge of the department known as the Agricultural Experiment Station.

Under an act of Congress, approved March 30, 1880, the College received, for its more complete endowment and maintenance, "the sum of fifteen thousand dollars for the year ending June thirtieth, eighteen hundred and ninety." The act provides that this amount shall be increased by $1,000 each year until the annual appropriation reaches $25,000. The amount received under this law for the present year will be $22,000.

The Legislature of 1888 gave $25,000 for buildings. The county of Cache and the town of Logan gave one hundred acres of land on which to locate the College. The legislature of 1890 appropriated $48,000 for apparatus, for the employment of teachers, and for the construction of a house, barn, two laborers' cottages, and an experiment station building. The Legislature of 1892 gave $108,000 for an addition to the College building, for two houses, for apparatus, and for salaries of teachers. The Legislature of 1894 appropriated $15,000 for the purchase of apparatus, for a greenhouse, for a veterinary laboratory, and for the employment of teachers. The Territorial auditor reports the value of the College property now in possession, at the conservative figure of $211,947.

The Constitution framed by the Territorial Convention, for the new State of Utah, provides:

Sec. 4.—The location and establishment by existing laws of the University of Utah and the Agricultural College are hereby confirmed, and all the rights, immunities, franchises, and endowments heretofore granted or conferred, are hereby perpetuated unto said University and College respectively.

Requirements for Admission.

1. Graduates of the Eighth grade of the district schools are permitted to enter the Sub-Freshman year without examination.

2. To enter the Freshman year the student cannot be under fifteen years of a age, and must pass a satisfactory examination in the following subjects using the text named or their equivalents:

1. Reading and Spelling.
2. Geography—Appleton's Higher.
3. Either Physical Geography, Maury's or Houston's, or United States History, Barnes'.
4. Grammar—Maxwell's Higher.
5. Arithmetic—Harper's Second Book.

Students may be admitted without an examination from an accredited high-school, academy, or other institution, if they present certificates of the completion of the subjects named above.

Courses of Study.

1.—*The first two years.*

The first two years of all the four year courses are the same.

The studies and training of these years have been laid out with care; the students are not permitted to vary from the course shown in the outline except as herein provided.

1. Lady students in either course in Domestic Arts take sewing and dressmaking in the freshman year, in the place of shop work in wood and iron, as indicated by the footnote on page 22. In the sophomore year, second term, lady students take lectures on cooking and laboratory practice in cooking in the place of trigonometry and electricity and magnetism; and in the third term, the science of nutrition, and laboratory practice in cooking instead of surveying and elementary mechanics.

2. In the several short courses, the studies of the first two years are varied far enough to meet the requirements of this class of students.

The studies of the first two years are planned to meet the requirements of our most numerous class of students, the majority who attend for two years or less after completing the studies of the district schools, These two years, as now planned in our schedule, provide as broad a culture in a genera lway, and as thorough a preparation for the special courses which follow, as we are at present able to offer. Whatever college course, profession, or occupation the student may afterwards undertake, the first two years as planned represent the best preliminary training the College affords. We cannot assume, therefore, to vary the course further than is indicated above, and students must pursue the studies, or as many of them as they are able to pursue, as here laid down.

The figures denote the number of recitations or the hours of laboratory practice per week.

Courses in Agriculture.

The student of agriculture unceasingly deals with nature, and is thereby brought into daily contact with life and the sciences relating to life. In the management of soils and in the use of tools he comes in contact with physical and mechanical laws, and in the markets, with commercial and political laws. Agriculture deals with more of the sciences than does any other industry; a thorough agricultural education has become more nearly a liberal education, than that necessary to any other industry or profession; and a well educated farmer is also liberally educated as a citizen.

In the course of instruction in agriculture, few studies are involved that are not essential to the most successful farmer. It may be termed a course in the applied sciences.

Heretofore agriculture has been without guiding laws. It is now rapidly becoming the most learned of the industries or professions. The fascination of its living forms and the

certainty of its laws may fairly be expected to attract the highest talent. It is one of the best fields for industrial enterprise and for the development of the highest order of intellectual and physical manhood.

The principal and most profitable industry of the valleys of Utah and adjacent states, for many years to come, will probably be that of farming. We therefore recommend to students generally the agricultural course, which has been especially planned for practical, well-educated, and broad-minded agriculturists.

Course in Mechanical Engineering.

The course in mechanical engineering aims to equip the student with the especial training in pure and applied mathematics that shall qualify him to deal with the engineering problems of his profession. He is made acquainted with engineering practice and thus given a proper ground-work for a professional career.

A thorough course in physics supplements the training in pure and applied mathematics; the subjects of heat, steam-engine, steam-boilers, electricity, etc., added to the two years of elementary physics, are thought to constitute a good scientific basis for the study of engineering.

The shopwork of the course includes carpentry, pattern-making, forging, filing, and machine-tool work.

The work in drawing comprises the solution of problems involving geometric principles and the principles of projection; sketches of machines and accurate drawings of them; shading, tinting, and descriptive geometry.

Course in Civil Engineering.

The instruction in this course extends over a period of four years, and is designed to afford a training of a practical as well as theoretical nature to such students as are preparing

to enter the profession of civil engineering. The course is also intended to qualify young men to fill other positions in life.

In Western America the design and construction of irrigation works, the need of competent managers and superintendents to operate them, and the supervision and control of the public waters, require men trained in body and theory and the practice of hydraulic engineering.

In the construction and operation of municipal works, trained specialists are rapidly taking positions; so that there is reason to hope that in the course of a few years the street supervisors, building and sanitary inspectors, water, sewer, and gas superintendents, and members of the boards of public works in American cities, will be appointed solely on the basis of efficiency in their respective departments.

For the reasons outlined, greater prominence has been given to the studies included in hydraulic and municipal engineering.

Farm Irrigation and Irrigation Engineering.

The College aims to make a specialty of these subjects. As early as the sub-freshman year, lectures on irrigation engineering are given to students in physical geography, in place of much other matter usually studied in that class. Drainage and irrigation, as applied to farms and orchards, are treated at length in the course in agriculture. Irrigation engineering extends over two terms in the civil engineering course. The publications of the College on irrigation represent much original investigation of important problems, and the results are of great value to students. Irrigation as a special course is open to those who desire to investigate this subject with practical ends in view; and it is likely that in the near future a four-year course in Irrigation engineering may be offered.

Commercial Course.

Four years ago, after mature reflection, a commercial course of two years was placed in association with the other courses of the College. This course offered a broader general education than is common in commercial courses. Last year a commercial course of four years was offered, making an entirely new departure in the history of commercial education in this country. This departure was based upon the success of the two years' course and a desire to bring it into harmony with the aim of the institution. This aim is a liberal and practical education for the industrial classes—education for citizenship and for industrial life. No other large industrial class has a more direct and important relation to the material, social, and political life of the nation, and it seems that if a general education should be associated with technical education in agriculture, mechanic arts, civil engineering, and domestic arts, it certainly should be associated with the commercial course. The success of the courses has exceeded expectation. This success is ascribed to the practical character of the technical work, and to the fact that associated with the instruction or other studies which give to the student an enlarged view of his varied relations as a citizen of the state. The course is broad enough to prepare the student for teaching, or for entering upon the study of law.

Course in Domestic Arts.

The course for young women is in general the same as for young men in the four years' course in agriculture, except in the hours devoted to shop, farm, or horticultural work. In the place of these there are special studies adapted to woman's work.

The value and necessity of special training in household economy are too well known to require explanation.

It will be seen that special attention is given to these branches of study which tend to adorn life in the sphere in which they move.

If the place given to horticulture, floriculture, and economic botany, should require explanation, it may be sufficient to say that this line of work has a fascination for all classes, and everywhere claims the admiration and almost the affection of every person of refinement. Household plants and the farm and village garden are always objects of interest and of importance to women, and often the source of physical health, inducing, as they do, exercise in the open air. This does not necessitate the added drudgery of physical work in the garden any further than pleasure may dictate. A special class is taught in floriculture, especially as adapted to window gardening; in the preparation of soil, and in the growth of vegetables and small fruits.

Exercises in the application of the knowledge acquired in the lecture-room are a regular feature of the work. Lectures on chemistry are succeeded by cooking. The cooking exercises are accompanied by practice in table-setting, table-waiting, and presiding at the table as hostess.

A term's work is given to the study of foods, with reference to their special effects on the human system in both health and disease; and about twenty-four lessons on cooking for the sick are offered in the last term.

In dressmaking, gowns are cut out, basted, fitted, draped, trimmed, and entirely finished by the student. Regular practice is given in the care of the machine, and its mechanism is illustrated. The students furnish materials and make their own clothing.

Dairying: Very decided attention is given to this most important field of work, over which woman has general charge. Fortunately, the more exacting work of the dairy now falls to other hands, but the necessity remains for mastery by the women of the philosophy of darying.

A special course of lectures on hygiene is given to the young women of this course.

A term in geometrical drawing and a term in advanced drawing have been included, in order that those students who have a taste for these accomplishments may acquire them.

A term in æsthetics, the science of taste and beauty, and a term of ethics have been added to this course, in the belief that these studies would give culture and refinement, besides furnishing wholesome, mental discipline in the analysis of philosophic theories, and systems of health.

THE DISTRICT SCHOOLS.

The district schools constitute the basis of the educational structure in Utah, and as such demand the combined solicitude, protection, and fostering care of the legislative, judicial, and educational powers of the people.

The common schools reflect, in the average, better than anything else, the intellectual standard of a people. Nations in antiquity as well as in modern times, have produced men and women of great erudition, mighty in intellect, and of wonderful achievements in science, literature, art, statesmanship, strategy, and mechanism, while yet the majority of the people have been left to grovel in ignorance, superstition, misery, and spiritual and temporal servitude.

The enlightenment of the few out of the many creates merely an intellectual aristocracy. That kind may be preferable to the aristocracy of birth, and is certainly superior to the despicable aristocracy of wealth, but it is an aristocracy still, with all its arrogant presumption and assumption of privileges over the rights of the less favored.

A people can realize the full meaning of liberty only when common education is extended, so that every child may have

a chance to acquire a degree of culture that shall give his abilities an even show among his fellow-men.

The drafts upon the public treasury for the various purposes of the great machinery of state management, are sometimes a heavy burden upon the people and constitute the subject of animated discussion by legislators, the public press, and the people generally. Whatever the merits or demerits of many of these items of direct or indirect taxation may be, there is one regarding which no diversity of opinion should exist to weaken the efforts made to carry it to a successful issue. This item is the liberal support of our district schools.

Great nations may spend the greater part of their whole revenue for military purposes as a testimony of the strength of the fragments of barbarism still remaining in our modern civilization. Others may direct it into the channels of material interests and improvements, which is a step higher in the scale; but to spend it for the intellectual and moral advancement of the people, is an investment which anywhere will make more than a hundred fold returns.

Although finances are considered the *nervus rerum* in all public affairs and constitute in educational matters a no less important factor, there is another agent of equal force, that has not received, as yet, so general a recognition as the importance of the case requires; I refer to the moral and intellectual efficiency of teachers.

Erect a magnificent school building and furnish it with all the appurtenances of modern education, and yet the school may prove a failure, because the teachers employed in it do not possess the qualifications which a progressive community has a right to expect from the instructors of its children.

Where rests the blame? Without any circumlocution, I shall answer this question by saying: It rests with the people themselves. There are several causes at work to interfere

with the engagement of efficient teachers, the most prominent among them being politics. As long as the people will consent to the handling of educational affairs in the interest of political parties, so long will the public school be a shuttlecock for politicians, and real merit and professional efficiency come into consideration only so far as they can be made subservient to partisan politics.

The second great obstacle in the advancement of the district school to a higher grade of efficiency, is the annual change of teachers. From among the many disadvantages of this mode of procedure, I select only some of the most glaring.

The system of obliging teachers to perambulate around the country from school to school and of being subject to the whims and political proclivities of trustees, whose tenure of office is also dependent upon partisan preferences, discourages many self-respecting young people whose moral and intellectual endowments would eminently qualify them for the educational profession, and causes them to choose other careers.

It should be the endeavor of school authorities to reach as nearly as possible, permanency of engagement of efficient and trustworthy teachers, by establishing periods of, say, five years of continuous service, after which a teacher should not be discharged except for cause or by mutual agreement.

The short periods during which so many district schools are kept open each year is another drawback to educational interests. Not alone that by three or five months "schooling" a year, the amount of education furnished a child is inadequate to the requirements of the present state of civilization, but that also the kind is in many cases far below the average. The reason for this is plain. Teachers engaging in such schools will be under the necessity either of following some other occupation for the rest of the year in order to

make a living, or of taking up teaching only to fill out the time when work is slack in their other lines of business. In both cases interest, sympathy, and energy are divided, and the school is the heavy loser.

Unfortunately many communities labor under the hallucination that the term "free schools" means running the district school just as long as their share of the school fund will carry it, instead of regarding this allotment only as a subsidy to their own endeavors for its maintenance during the full school year. As soon as this erroneous view can be corrected, a vast step forward will have been made toward getting better teachers and, consequently, better schools.

This imperfect condition of things produces another deteriorating effect. Many teachers, after having become efficient by experience, devotion, and study, are forced eventually to quit the profession for more lucrative pursuits, just when their services have become most valuable. Their places have to be filled by comparatively inexperienced beginners, and thus the mill keeps on grinding, turning out efficient teachers for other professions and everlastingly beginning anew with novices. Education pays the bill.

Let us make it worth while for the best elements from among the educated classes to choose the teacher's profession rather than any other, and then stay with it. Let us raise the standard of moral and intellectual requirements for teachers as high as possible, and make the compensation in proportion.

Whatever superstructure in the shape of high schools and university it may then be desirable to raise upon this foundation, there will never be wanting fine material for it. The general intelligence and sound moral principles of the citizens of Utah, will make themselves felt in the legislative halls, the courts of justice, in every sphere of public activity, and last but not least of all, at the firesides of the people.

HIGH SCHOOLS.

For a long time, the gap between the district schools and the University was periodically sought to be filled by district school teachers who attempted to conduct higher classes, especially in mathematics, but were able to do it only to the detriment of their more legitimate work. Various denominational schools also did some creditable work in this direction. But the real preparatory labor for university courses had to be done at the University itself; for the preparation done elsewhere proved, in too many instances, unsatisfactory.

This necessity and the limited means at disposal proved serious drawbacks to the advancement of our chief educational institution. The necessity of establishing separate High schools as connecting links between the district schools and the University, became, in consequence, apparent to the most casual observer.

To the honor of the Board of Education of Salt Lake City be it said, that they ventured upon the undertaking in the face of formidable financial difficulties, and organized a High school that is a worthy pattern for all schools of the same grade everywhere.

But the defect, spoken of already in connection with the district schools, is yet more serious in its consequences in these High schools. This point is treated upon more explicitely in subjoined contribution of mine to "The Utah University Quarterly" of June, 1895, inserted here by kind permission of the publishers of that periodical.

DENOMINATIONAL TEACHING FOR PUPILS OF HIGH SCHOOL GRADE.

By the General Superintendent of Latter-day Saint Schools.

That the influence of education is paramount to every other agency in the construction and further development of civil-

ized society, goes without saying; and, on that account, the noblest efforts of divines, philosophers, and statesmen, have been engaged in the consideration of this all-important subject. They all have had to follow the principle of a surveyor who starts out to locate a railroad or a canal. He ascertains his starting point and his terminus and then shapes his course according to the conditions of the intervening ground. The starting point, therefore, and the terminus, determine the direction of the whole survey. This is exactly the proposition that confronts education.

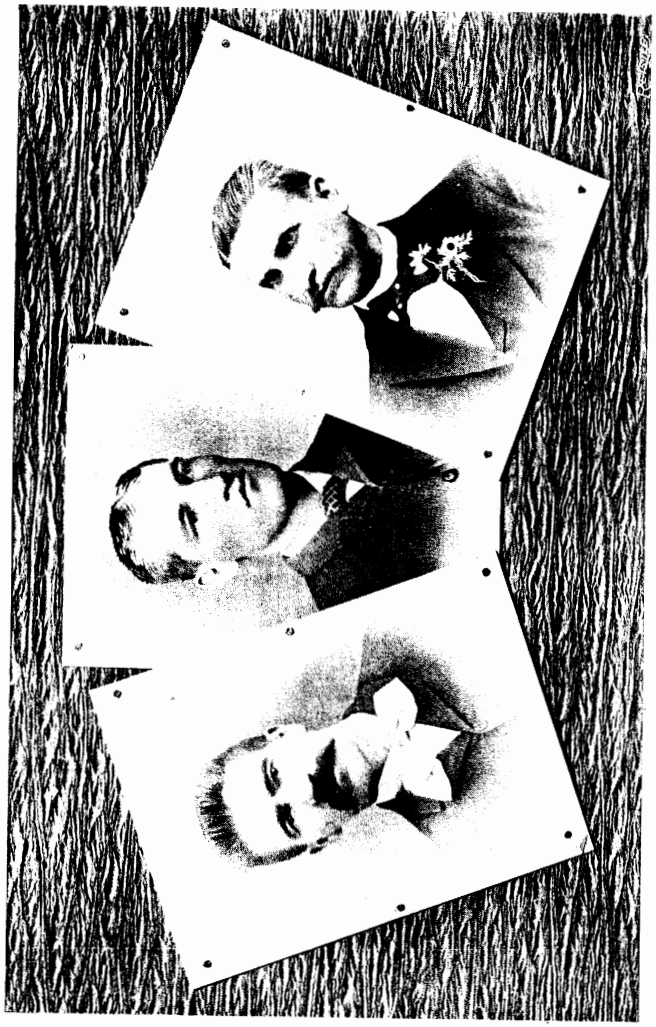
What is the ultimate aim? Where is the most suitable starting point? These are questions the solution of which furnishes the keynote for the tendency of the whole course connecting the ends.

Lycurgus considered the cultivation of the material propensities of the citizens of a warlike state, the crowning glory of education, hence his austere training of the youth has become proverbial, as Spartan, until our day. Plato, by his trancendental philosophy, contributed much to the laxity of Grecian morals, while Socrates came nearer to the discovery of the true motive power of education than any philosopher before or after him. There is Seneca, the moralist of refinement, whose educational efforts suffered such a terrible fiasco in his pupil Nero; and Confucius, whose code of ethics, lacking spirituality, laid the foundation of the stereotyped condition of the Chinese. There are also the self-styled, but falsely styled, philosophers of our day, especially of the unphilosophical and rampant evolutionary school with its disintegrating tendencies. This influnce upon the cause of education is not only pronounced in the halls of universities and colleges, but after having established itself also in high schools, is reaching down into the common schools of our land, whence it will enter to the firesides of the people and control, finally, the civilization of the age.

George Cluff, Probate Judge, Graham Co., Arizona.

H. M. Warner, B. Pd.

Abraham Johnson, Mayor, Mt. Pleasant, Utah.



Wallace W. Billings.

A. B. Anderson, B Pdg.

Joy W. Dunyon.

The ultimate tendency of this extreme kind of teaching would lead to the pessimism of the Schopenhauer philosophy, expressible in the simple formula: "Life is not worth living." A philosophy of education with such a conclusion as its outcome, is compelled to look around for some animating principle to give cohesion to its interpretation of life. This modus vivendi is believed to be found in emulation.

Thoughtful educators, however, discovering that this principle is likely to develop into unbridled ambition, have endeavored to check its deteriorating tendency by the introduction of ethics. Now, ethics, without a foundation of positive religion, is itself empirical in its nature, and the outgrowth instead of the shaper of civilization. Ethics, pure and simple, substitutes respectability for character, decorum for virtue, and measures purity of the soul by a utilitarian standard.

This principle of emulation, propped up by the "soft and pliant pillow," ethics, has proven, therefore, an insufficient motive power for education to prepare mankind gradually from generation to generation more thoroughly for its final destiny. This destiny is expressed in the words of the Great Teacher of Nazareth: "Be ye therefore perfect as your Father in heaven is perfect." There is more vitality in these words, spoken by "one having authority," than can be gathered from all the philosophers of ancient and modern times, and education finds in them a surer guide, than the skepticism of agnostics can furnish with its ethics.

But the uncertainty in the matter of final aims is not the only objectionable feature of this mere secular education. There is a greater danger connected with it. According to the educational maxim, that no teacher can give what he does not himself possess, an agnostic or infidel teacher, being devoid of religious faith , can not cultivate it in his pupils.

I speak not here of any particular faith or profession: Sec-

tarian bias should not be considered in the argument. It is much better for a human being to have a mis-directed faith, than to have no faith at all. Faith operates on the same principle as the forces of nature. Light and heat, for instance, when once generated, may be misapplied, occassionally, yet are capable of being put to proper use; when there is no light or heat at all, a proper use is impossible, and their absence may prove of serious consequence in certain emergencies. Thus it is with religious faith. Though misapplied, or degenerated into bigotry, fanaticism, or superstition, it yet may be turned to the comprehension and practice of divine principles of salvation: but when infidelity has taken root in the mind, or skepticism has thrown its withering blight over the heart, a mental condition ensues comparable to consumption in the physical body. Consumption incapacitates a man for physical exertion; skepticism produces the same effect in regard to spiritual efforts.

I, therefore, would sooner see a pupil in the early stages of his school life exposed to the dangers of an infectious disease, and trust to medical treatment or other means for recovery, than to see him exposed to the influence of an atheistic teacher, or one infected with the skepticism of agnostics. The symptoms in the former case are sooner discovered and more easily counteracted, while in the latter instance, they make their appearance mostly when the patient is too far advanced in this malady.

In consideration of these facts, divines of many churches haye emphatically protested against the exclusively secular system of education prevailing in our country, particularly in secondary or high school grades, and have sought a share in the educational interest.

The necessity for this demand is especially apparent in the schools of secondary grades, where the students, in the most susceptible period of their lives, are removed from the purifying influences of the parental hearth. According to the testimony of workers in such schools, corroborated by that of other trustworthy witnesses, the moral standard of a great number of students in some of these institutions is deplorably low. From these schools are expected to issue forth men that are destined to be leaders in state affairs, sciences, arts, commerce, and society, and yet they carry with them the virus of corruption and unbelief. What wonder then, that integrity, purity, and self-sacrifice for the welfare of the public, are supplanted by selfishness, gratification of sensual or low desires, and betrayal of public trust.

To stay this flood of corruption and disregard of the Divine Word, which threatens to overflow the glorious achievements of modern civilization and the institutions of our country, conscientious teachers, and far-seeing statesmen, recognize the necessity of introducing the religious element, cleansed from sectarian prejudices, into at least the secondary departments of our educational system. In lower grades, the children ought to be, and usually are, more truly the subjects of home care. In the institutions of most advanced teaching, the pupils are generally men and women, with at least the lines of their character defined, and, withal, more capable of looking after themselves. If those lines, developed through the schools of lower grade, and the influences of a pure home atmosphere, have been directed toward a God-seeking life, the danger of spiritual dwarfing through subsequent influences will be less alarming. Of all divisions of our public school organization, the High school is least provided for; and it is in the effort to fill this gap in the system, that denominational academies and seminaries flourish as they do. This is the most promising and desirable field for such institutions to work in. The High school student should be urged to seek religious instruction according to the denomination whose doctrines he chooses to follow. The requirement wisely

established by law that in schools maintained by the state, and supported by the taxation of all classes, no sectarian instruction shall be allowed, is no bar to a proper course along this line of necessary culture. Clubs, classes, or other organizations may be established outside of, yet in harmony with, the schools, for the benefit of the pupils and others of sufficiently mature years, by any and all denominations that profess a standing in the community. Religious study can be followed, as the writer knows from ample experience, subject to the same rules of order, attendance, and efforts toward progress, as are required in other branches of study; and all such instruction should be directed toward the exclusion, and the final banishment of the baneful spirit of sectarian animosity. Everyone should be willing to accord to his neighbor's beliefs and practices the respect he desires for his own. Neither secular nor religious duties ought to be neglected; training on each of these lines is essential to the harmonious development of the soul indicated in the admonition of Christ, already quoted.

The realization of so glorious an end is devoutly to be wished; and it would seem that the experiment is worthy the consideration of thinking men. Its success would indicate the dawning of a day of peace in Utah.

Willard Done.

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