Utah's Schools in Front Rank of Progress and Efficiency

PROGRESS in the schools of Salt Lake City during the present year has been marked by substantial gains along the lines of distinctive work in the handling of the subnormal child, comprising corrective work for physical and mental deficiency in children between the ages of 6 to 18 years. Among the physical defects which render mental progress in school studies extremely sluggish, or quite impossible are the following: Children with defective eyesight, but not blind; children with defective hearing, but not deaf; children with defective speech, though not mute; children with defective locomotion; children with disordered nervous system, and children with other physical defects or disorders.

Many children are afflicted with mental deficiency which is depriving them of a common school education, and these are considered to be an unfair burden on the teacher, an unjust hindrance to the other pupils, and a detriment to themselves, so long as they are in the regular classes of the public schools. Among this class are children who have never attended school on account of extreme mental deficiency as shown by feeble mindedness or defective mental development, children who have been withdrawn from the schools by parent or guardian after the children have demonstrated their apparent incapacity to progress in school studies; children who have been excluded from the schools by the teacher, school board or juvenile court because of incorrigibility coupled with apparent incapacity to progress in school studies, or because of manifest incapacity to do so; children who are in school, of one of the following types: Arrested development in general, with no progress from the beginning; retarded development in general after some little progress at the beginning; arrested development in particular in arithmetic, with general progress in other studies from the beginning; retarded development in general, after general progress from the beginning. The state has provided no means for the care of subnormal children coming under any of these headings, they are unable to receive anywhere nearly the proper benefit through mass instruction, and ordinary methods available in the regular classes in the common schools, and therefore must be provided with individual instruction and special training, and possibly also medical or surgical treatment, and this is what the public schools have sought to provide, as far as possible under existing conditions. A department has been instituted in the public schools for the study and instruction of subnormal children, under the direction of George S. Gibbs, and very satisfactory progress is being made in the way of relieving the teachers and normal children of the handicap of the subnormal children, and with marked benefit to the latter.

UNGRADED ROOM.

The ungraded room is also one of the developments of the times. The course of study has been prepared as a guide for the instruction of the average boy or girl, although the needs of the child above or below the average have not been overlooked. In the ungraded room the backward child may be given special individual instruction for a time to enable him to keep up with his class, without the necessity for holding back an entire class on account of a single backward pupil.

A few years ago the board of education established in the Bryant building a department of instruction in which elective work below high school was to be carried on, overlapping the high school on one side and the grammar department on the other. While the department was discontinued for a time, the idea was revived and the work is now in effect and operation. According to the experience of the schols in the city, 75 per cent of the eighth grade graduates continue their studies in the high school. Some of the work of the higher grades in the grammer school is not adapted to the individual needs of many of the pupils, and which might be carried on to better advantage in the high school than in the earlier grades, and the plan is being carried into effect with gratifying results.

PROGRESS AT HIGH SCHOOL.

At the high school gratifying progress is being made. The attendance this year is slightly increased over last year. Physical education has become more general. Among the new features introduced this year is target practise in military tactics, and general substantial progress is being made.

With the industrial high school which is now in course of construction, is coming into realization a dream held by local educators. When the new high school on the east side shall have been built, the west side school will deal with the industrial and commercial part of the education of the youth, while the east side high school will be of the classical type. The growth of the manual training work, which was established seven years ago, has resulted in the building of the industrial school, which will be ready for occupancy next year.

One of the departments of the city schools which has attracted most favorable attention for a number of years is the art decoration work, and art exhibition in the schools. During the recent convention of superintendents in this city, Supt. Bishop of the Nebraska state schools asked that the art work exhibit of all grades in the Salt Lake schools, the construction work of the primary and sewing work of the grammar grades be shipped to Lincoln, Nebraska, for exhibition in the auditorium, where a special booth will be constructed for it. Supt. Bishop said it was the best exhibition of school work he had seen, and he was so taken up with it that he requested that he be allowed to exhibit it in the Nebraska state exhibition.

For the present year the board of education has appropriated the sum of $2,000 for the purchase of art and choice pieces of art statuary and frieze work for the walls have been placed in a number of the school buildings. Some art pieces have been contributed by residents of the city. To the Ladies' Literary society of this city is due the credit for starting the movement for art decoration in the public schools, and has resulted in the board taking the matter up with substantial evidences of approval.

SCHOOL ATHLETICS.

In the line of athletics in the grade schools, rugby football has been supplanted by the association game, which seems better suited to the needs of the younger boys. Basketball is also popular among both boys and girls in the grades.

Another distinctive feature of the present year is the institution of domestic science in the grades below high school. There are seven specially equipped kitchens in the schools, with tables, gas and cupboards complete. Miss Blanche Caine, who conducts the domestic science department at the high school, has general charge of the work, and she is assisted by Miss Margery Simons, a graduate of the Thomas school, and Miss Helen Bartlett, a graduate of the state Agricultural college. Each class of girls in the eighth grade has from one to two hours' work a week in domestic science, and where possible the seventh grade girls also receive instruction. Every new building has a special room fitted up for domestic science work. Seven of the schools are now used as centers and surrounding schools gather at these centers for receiving instruction in domestic science. These schools are the Bryant, Oquirrh, Sumner, Jefferson, Lafayette, Franklin and Wasatch.

The kindergarten work is being rapidly extended and next year every school will have its own kindergarten department. Every new building has a specially constructed room for the kindergarten department. In the new Waterloo school, which will be ready for occupancy Jan. 1, the kindergarten room is in every respect a model.

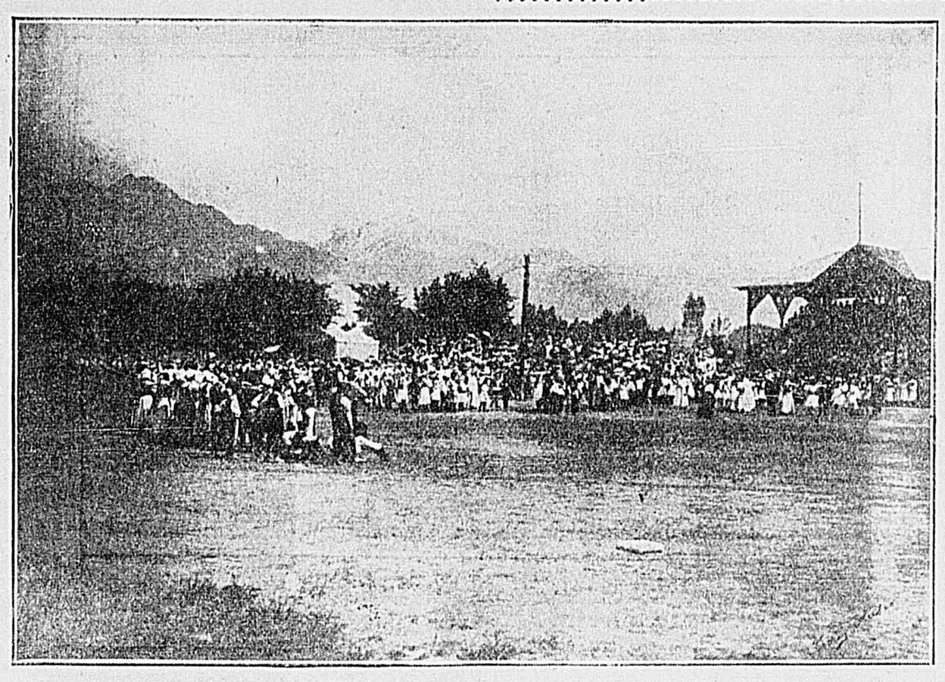
In the salary schedule of the Salt Lake public schools lies one of its secrets of success. The schedule now in force is the growth and evolution of the recognition of merit in the work of teachers, and it is recognized as one of the most rational and liberal in the country. The effect of the operation of the schedule is that the superintendent of schools now has a flood of applications for positions from the most desirable class of teachers, and in many respects the adoption of the schedule by the board of education marks the beginning of a new epoch in Salt Lake City schools.

SALARIES OF TEACHERS.

According to the new schedule, in order to be eligible to teach in the public schools of Salt Lake City, candidates must have at least normal school education, or its equivalent, and shall have had at least two years' successful experience in graded schools of acceptable rank. Regular teachers in kindergarten and elementary schools are grouped into seven classes for salary purposes, the remuneration of the classes being as follows: First class, $600; second class, $700; third class, $780; fourth class, $840; fifth class, $900; sixth class, $960; seventh class, $1,020 per year of not less than 32 or more than 40 weeks. Probationary teachers are employed at the following salary schedule: First class $480; second class $540.

For high school teachers the salary paid is based upon the schedule according to the length and character of experience and efficiency in school work of the candidates. Probationary teachers in high school receive a yearly salary of $750; regular teachers first class $840; second class, $900; third class, $960; fourth class, $1,020; fifth class, $1,080; sixth class, $1,140; seventh class, $1,200; eighth class $1,300. Department heads receive such salary as the board may prescribe, but the maximum shall be $1,500. Efficient service shall entitle the department heads to a yearly increase of $100 until the maximum has been reached. The same conditions apply to the vice-principals, until the maximum salary of $2,100 has been reached. For the supervising body a maximum salary of $2,400 may be reached.

In all the new buildings now under construction, and those yet to be erected, the needs of the child is the first consideration, and the architecture of the building is adapted to those needs. The present year has been a most successful one in the Salt Lake City schools, with prospects bright for most excellent progress in the future.



SCHOOL FIELD DAY—FOLK DANCING FESTIVAL.

State Schools During 1910

Marked by the erection of 35 new schoolhouses at a cost of more than half a million dollars; by an increase in school population of 4,048, and by an increase of property valuation of over $400,000, the year with the state schools has been a highly prosperous one. The year has also been characterized by the introduction of a new course of study, prepared by a special committee appointed for the purpose, including the study of agriculture in the eighth grades. The committee was composed of State Superintendent A. C. Nelson, Prof. Mosiah Hall of the state university, G. N. Child, superintendent of the Utah county schools; Joseph Finlinson, superintendent of the Millard county schools, and R. V. Larsen, superintendent of the Cache county schools. The new course includes comprehensive outlines of the subjects to be taught, besides many suggestions helpful to teachers. It was adopted and put into effect early in December, and is calculated to be of great benefit to the schools in the future.

The school population of the state is now 108,924. Last year the school enumeration showed a school population of 104,876, a gain of 4,048. In the high schools of the state there are 3,363 pupils in attendance. The number of pupils enrolled in the common schools in the state is 86,904, which is 79 per cent of the school population. The average number in daily attendance is 67,984. During the year the graduates from the common schools numbered 3,812, and there were 360 graduates from the state high schools. There are 2,355 teachers employed in the state schools, whose total compensation for the year amounted to $1,313,640. The average salary of male teachers throughout the state is $90.05 per month, and for female teachers the average salary is $57.56. The number of school houses owned by the districts in the state is 685. The total amount expended for educational purposes during the year was $9,832,273.29, and the total valuation of school property is $5,902,801.46, as compared with $5,591,818.99 a year ago.

Supt. Nelson has visited all the public schools in the state during the year, and has found a spirit of progress extant in all sections. New buildings have been erected for school purposes in many of the outlying districts, prominent among which may be mentioned new and modern structures in Emery county, Juab county, Rich county, Sanpete, Sevier, Tooele and Wasatch counties. The number and location of new school buildings erected during the year, together with their cost, is given herewith:

Counties and Cities.	School Houses.	Cost.
Beaver	1	$30,000.00
Boxelder	4	35,758.93
Cache	1	35,000.00
Emery	1	20,000.00
Juab	4	22,331.14
Rich	1	965.00
Jordan	1	12,919.38
Granite	1	30,000.00
Sanpete	1	25,000.00
Sevier	2	28,700.00
Tooele	2	34,882.78
Utah	5	65,842.92
Wasatch	6	7,650.00
Weber	2	12,457.41
Salt Lake City	3	179,809.20
	35	$541,366.85

Granite School District

THE people of Granite school district, which embraces the north half of Salt Lake county, outside of Salt Lake City, and which takes in the following school buildings: Blaine, Boone, Carlisle, Edison, Forest, Garfield, Hawthorne, Homer, Irving, Madison, Monroe, Morse, North, Oakwood, Parley, Plymouth, Roosevelt, Saltair, Sherman, Whittier, Wilford, Woodstock, and the Granite high school, are proud of their schools.

The schools of the district are under a school board, elected one member each from each of the five representive districts, identical with the justice of peace's districts, consisting of five members and a clerk, and are subject to practically the same school laws as cities of the second class. The district employs 112 grade teachers and eight high school teachers.

During the present year the following school buildings have been erected; The Blaine, a new four-room building situated on State and Fourteenth South; there have been four rooms added to the Garfield school at Garfield; two rooms have been finished at the Hawthorne, at Pleasant Green; two rooms have been completed at the Monroe school at Granger; the Parley school, a four-room building on Twenty-first East and near Twelfth South; the Sherman school, a new four-room building on Twenty-third East near Twelfth South; the Whittier school, a new four-room building at Hunter, have been built. One room has been finished at the Woodstock, Eighteenth South and Thirteenth East. The Irving school, a new six-room building at Big Cottonwood, and the beautiful new Granite high school on Fifth East and Fourteenth South have been completed. The high school building has six large class rooms, numerous cloak and hall rooms and a splendid gymnasium. The gymnasium is 68 by 78 feet on the inside and is provided with a theatrical stage and proper dressing rooms. Besides this the board has erected an office building on State and Fourteenth South. Altogether the board has expended $111,357.92.

For the various expenses of the year an expenditure of $257,306.26 was made including salaries and expenses for text books, school supplies, etc. The largest item in the list is that for building account, which amounted to $111,357.92.

Three supervisors besides the superintendent are engaged by the board namely: Primary supervisor, Miss Libbie Edwards; drawing supervisor, Anor Whipple; and music supervisor, Mr. M. E. Christopherson. The primary supervisor has supervision over the beginners, the first, the second and the third grades. The drawing and the music supervisors have charge of their respective subjects. The supervisors visit the schools regularly once a month and report on the work in their respective subjects to the board of education. The board holds its regular meeting every Thursday at 6:30 p.m. Supervision of the upper grades is left to the superintendent.

Each teacher attends a grade meeting once a month. The program for such grade meetings is made at the beginning of the school year. Principals also hold a monthly meeting.

The attendance and the punctuality of pupils are very satisfactory. The first month's report of attendance this year showed a total enrolment of 3,927 and 198 tardy marks for the month, an average of less than 10 a day for the entire district. The total registration of the district is 4,331. The enrolment is therefore about 87 per cent of the enumeration. Many of those represented in the remaining 13 per cent are only 6 and 7 years old and therefore exempt from the compulsory school law. Many are also going to higher schools. So that the enrolment is almost complete.

The enrolment in the Granite high school has risen from 90 last year to 141. The high school is now doing four years of regular high school work besides sewing, cooking, and shop work.

The high school grounds contain 14 acres. About four acres of this has been set aside for an athletic campus surrounded by a fence eight feet in height, and provided with seats for spectators. Most of the work on this fence and seats was done by pupils.

People who at first looked upon the county consolidation of schools plan with disfavor now see the advantage of such plan. Everything is based upon a business and methodical basis. None but the best recommended teachers are employed in the district. And the matter of compulsory attendance is so promptly attended to that non-attendance is practically a thing of the past.

Every child in the district is placed upon nearly the same educational basis of gradation and attendance. Long distance pupils and pupils in sparsely settled districts can now get to school on time. The county commissioners have been willing to help in the matter of good roads and the old "Mason and Dixon" dead line between localities has been wiped out and all "boost" for Granite.

Jordan.

THE Jordan district lies in the south end of Salt Lake county, and covers an area of about 480 square miles. The Jordan stake and the Jordan district are bounded by practically the same lines.

In 1905, the commissioners of Salt Lake county united the rural schools into two consolidated districts:one toward the north, was called Granite, and the one in the south called Jordan. The Jordan district is made up of 17 smaller unities, formerly called school districts and each presided over by three trustees. The consolidated district is managed by a board of education, made up of five members, one from each justice precinct. The management of the schools is much the same as of schools in cities of the second class. The present school year opened September 6, 1910, and will close May 22, 1911.

The board employs 97 grade teachers and eight high school teachers. The grade teachers are located in 17 buildings. Most of the buildings are quite new and all modern. In the last five years this district has spent more than $220,000 in buildings and improvements. The schools are in session nine months of the year. Principals are employed and paid for nine and a half months per year.

The school census shows an enumeration of 4,565 pupils between the ages of 6 and 18, an increase of 235 over the previous year. The enrolment for the first month in the grades was 5,121, making 68 per cent plus in attendance of the enumeration. In this connection, it should be remembered that many pupils who have graduated are still on the enumeration list, but would not attend the grade schools.

The estimated expense account of the schools for this school year, including salaries, fuel, light, supplies, etc., is $116,604.50.

JORDAN HIGH SCHOOL

The first week in September, 1908, the Jordan high school was established at Sandy, with E. Jorgensen as principal. Before this, efficient ninth and tenth grade work had been done in several villages in the district; but now the school was given a permanent home, opportunity offered for growth and the results have been most satisfactory. The school spirit has continued to live, and attendance has steadily grown, until now the school ranks third in point of attendance among the public high schools of Utah. One of the many excellent features that has been added this year is the domestic department, where every girl has the opportunity for training in practical cooking and sewing. This venture has proven successful from the very beginning.

Next year it is hoped to introduce shop work for the boys. Among the auxiliary organizations are: A good choir, a dramatic club, an orchestra which has made a name for itself in this part of the state, a brass band, and a live staff for the school paper, The Jordan Courier. The present corps of teachers is as follows: E. Jorgensen, principal; Orrin H. Dutton, Ross Anderson, Maud L. Williams, Ada M. Hartley and Eliza Jensen.

BINGHAM HIGH SCHOOL

Another live high school in the Jordan district is the one at Bingham, which opened its doors in September, 1908. It, too, has had a steady growth until now three years of regular high school work is given. Owing to the lack of room in the regular school buildings, the Bingham high school has been handicapped, and the teachers have been working under difficulties; but the district is soon to complete a $35,000 building, part of which will be used as permanent home for that school. E. E. Dudley is principal of the Bingham high school, with I. H. Masters and Effay Van Cott as associate teachers.

In the Jordan high school the total attendance is 123; in the Bingham high school, 29; the attendance in the grade schools is 3,121, making a grand total of 3,273 in attendance in the Jordan district.

Murray.

DURING the year that is nearing its close Murray has enjoyed a goodly share of prosperity and advancement. One of the most important factors is the completion of the electric car line through the heart of the city, providing a 15-minute service, which has already caused many home seekers to turn their attention to this suburb. A number of modern residences have been built during the summer, and numerous cottages are springing up in every addition that has been placed upon the market.

In order to keep pace educationally with the increasing population it has been found necessary to provide additional school buildings. To meet this demand a bond election was held in February last, and by a large majority the people voted $35,000 building bonds with which the board has partially completed two modern eight-room brick buildings, in each of which four rooms are completed and occupied. All pupils are now comfortably provided for, with ample room remaining for future growth.

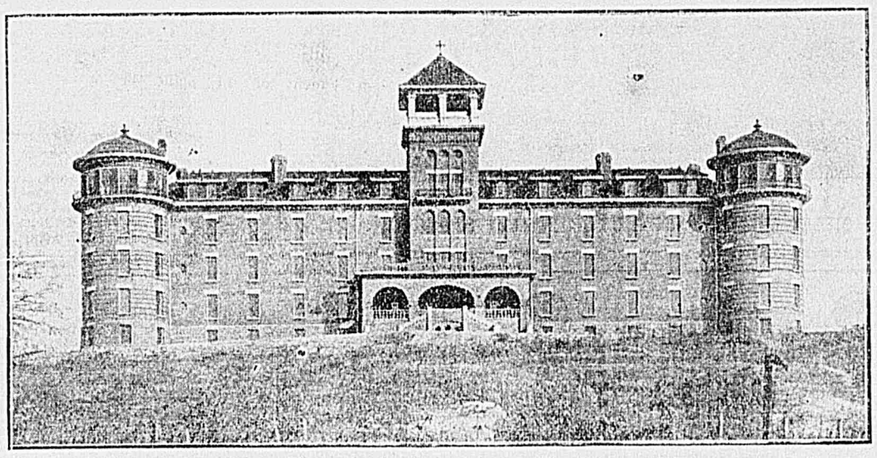
Twenty-eight principals and teachers are employed in the grades with a total enrolment of 950 pupils—an average of 35 per teacher. Professionally the teachers stand high, a majority holding either state diplomas or state certificates. The average experience is six years. With one exception the salaries paid are the highest of any city in the state. There are also three supervisors employed—one in shop work for boys and art, one in sewing and construction work in primary grades, and one in music. New lines of hand work will no doubt be taken up in the near future, as the benefits derived from this class of work are highly appreciated.

An energetic board of education stands at the head of the schools; men whose motto is, "The best in everything is none too good for the Murray schools."

Supt. G. M. Mumford is still in charge of the schools, and his lifelong experience in the public schools of the state has done much toward the development of a system that ranks among the best.

No better proof of the appreciation of the people can be given than the fact that at least $70,000 will be spent for educational purposes during the present school year.

JUDGE MERCY HOSPITAL



LOCATED on an eminence overlooking the city and commanding a magnificent vista of mountain, lake and valley is the beautiful Judge Mercy hospital. The building is constructed of pressed brick, embellished with brown stone, and presents a majestic appearance. On either end are massive Norman towers, while in the center is the main ingress, a porticoed entrance. The architecture is unique and is of the modern hospital type. There are spacious halls, large windows in all rooms, fire escapes, a perfect system of ventilation, electric elevator and two solariums on the first floor of the towers.

The institution was erected at a cost of $165,000 by the late Mrs. Mary Judge as a memorial to her husband. It was formally opened, on Sept. 12, by the Sisters of Mercy, under the direction of Mother Mary Vincent from the diocese of Los Angeles. This Catholic religious association was founded by Miss Catherine McCauley in the city of Dublin, Ireland, in the year 1827. Although the rules and constitution were not approved by papal rescript till 1835, the society under the patronage of the archbishop of Dublin had for eight years labored faithfully and zealously among the poor and the destitute sick of that city. The Sisters of Mercy now number 10,000 members, laboring in South America, Ireland, England, Scotland, the United States, Australia and Oceania. The hospitals, charitable institution and academies, under the supervision of the sisters in these countries number 600. Though their work lies principally among the poor in the congested districts of large cities and for the protection of young girls placed in morally dangerous surroundings, their conspicuous triumphs seem to be achieved in the management of hospitals. In the United States their reputation for successful conducting hospitals stands very high. The sisters have apparently a special vocation for hospital work, and their greatest institutions, the Mercy hospital, Chicago, ranks among the very highest in the United States.

NO EXPENSE SPARED.

No expense or energy was spared by the sisters to prepare the hospital for its mission—to benefit suffering humanity. The sisters made special trips to New York, and other eastern cities, to acquaint themselves with the most advanced hospital conveniences and surgical accessories. The appointments bespeak refined elegance. The furniture throughout is fumed oak; the beds are polished brass and of the latest design.

There are 240 rooms, though at present there are accommodations for only 100 patients. All the rooms and wards are connected with electric light indicators, located on each floor. Bath rooms, chart rooms, diet kitchens, and telephones are on every floor. All of the rooms are heated by steam and lighted by electricity and gas. The plumbing is of the highest type of sanitary development. The electric, steam elevator plants are stationed in the power house some distance from the hospital.

CULINARY DEPARTMENT.

In the basement, which is above the ground, is located the culinary department, supplied with every modern convenience for the preparation of delicate and scientific food. Particular care is given to the diet of patients, physician's instructions being scrupulously followed. The equipment, consisting of range, gas, electric and steam appliances, is a gift of Fred Wey, proprietor of the Wilson hotel. The four dining rooms are in the basement, one dining hall for convalescent patients and separate dining rooms for sisters, nurses and attendants.

On the first floor are the reception room and parlor, offices, pharmacy, private rooms, two maternity wards and two charity wards. The second floor which will be ready for occupancy in March, is to be devoted exclusively to private rooms. Suites of parlor, bed chamber and bath, are on these two floors. The main part of the third floor is given over to patients of the Oregon Short Line railway, and the Utah Light & Railway companies.

BEAUTIFUL CHAPEL.

The chapel with its beautiful altars and statues, is on the fourth floor. The chapel was furnished by one of Salt Lake's prominent Catholic ladies, and was dedicated by Rt. Rev. Lawrence Scanlon, D. D., on the 12th of November.

The surgical department, also on the fourth floor, is most complete in every scientific detail of any institution in the inter-mountain country. The two connected surgeries and adjoining and anesthetizing rooms, with tile floors and walls, the laboratory and X-Ray laboratory are the acme of perfection.

The equipment of the X-Ray department was installed by the medical department of the Oregon Short Line Railway company. Here are to be seen the most modern and up-to-date appliances for use in this branch of science. A six horse-power generator, which is installed in an adjoining room, is used to force the electricity through the high vacuum bulb in which the X-Rays are generated. The use of so large a machine enables pictures of the body to be made in from one to three seconds, which heretofore required as many minutes. This extreme rapidity of great importance in examining the heart and lungs, minimizing the deleterious effects of respiration, and in examinations of the stomach which is always in motion.

SCIENTIFIC INSTRUMENTS.

An interesting feature of the equipment is the sterescope, not the usual kind seen in homes, but an adaption of it where photographs of the various parts of the body may be viewed and the prospective features obtained, a great advantage in the study of fractures and dislocations. A clever piece of mechanasim is the localizer which enable the radiographer to measure the exact depth at which a bullet or other foreign body is embedded below the surface. This instrument will prove a great boon to the operating surgeon. Special facilities have been provided for dental work, which will prove a great value to dentists. Work o fthe laboratory will be under the supervision of L. A. Thody who is associated with the Latter-day Saints hospital.

THE OPERATING ROOM.

The operating tables and surgical appliances are the best obtainable. The sterilizers and the tops of the operating tables are nickel. The sterilization plant consists of instrument, utensil and water sterilizers, equipped with knee and foot levers for opening and dressing sterilizers of the drum design. There are also instrument sterilizers on each floor and in the power house is a mattress sterilizer.

The general operating room, open to all physicians is in the tower. The instrument case in the surgery is enamel ware with glass shelving and was the gift of Dr. S. H. Pinkerton, the medical director. The instruments for this room were furnished by the sisters. Dr. Pinkerton's surgery is the northwest part of the building. The instruments accumulated by him in the past quarter of a century represent an exependiture of $4,000. The lighting of the surgeries is as perfect as possible. Operations can be performed at night under as favorable conditions as in the day, as the surgeries are equipped with white incandescent light.

SPLENDID STAFF.

The nursing staff is adequate. Besides the sisters and trained nurses the student nurses assist in the care of patients. Personal attention is given to each individual case and everything known to science is carefully and kinly done to aid in expedient recovery.

The training school is presided over by Miss Anna Legris, a graduate nurse from the Mercy hospital of Chicago. The course prescribed is three years during which time the student nurses are obligated to apply themselves diligently to their studies and training. Lectures and instructions are given by members of the staff, agumented with instructions by the directress of the school. In addition to didactic training, the candidates receive practical training under the supervision of Dr. Pinkerton.

The premises comprise eight acres and in the early spring a landscape architect will be engaged to artistically lay out the grounds. On one of the terraces will be built a grotto and to the north of the building will be constructed a free dispensary where the unfortunate of all classes and denominations will be welcome to receive scientific treatment and the kind ministrations of sister and nurse.

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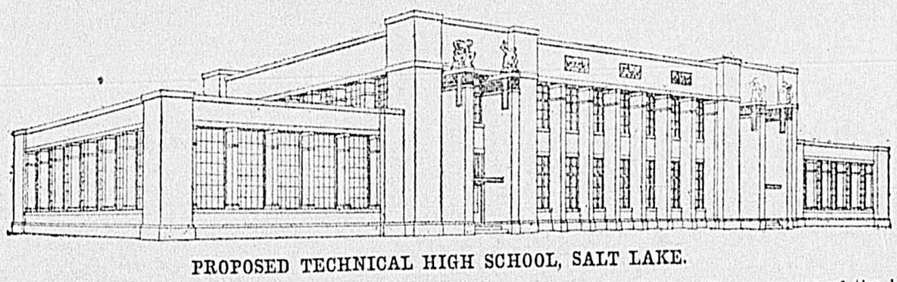

PROPOSED TECHNICAL HIGH SCHOOL, SALT LAKE.

The plans for the new technical training school to be erected on the high school grounds on Second North and Third West streets have been completed by Cannon & Fetzer, architects, and it is expected that contracts for the work will be let within the next few weeks and work will be begun.

The building will be 225 by 70 feet in size and will be erected between the present Union school building and the manual training works on the west end of the high school grounds. The building will run lengthwise north and south, the 70 foot frontage facing south. The construction will be of brick and concrete and the floors will be of concrete construction and fireproof. The ends for a distance of 37½ feet will be one story in height, while the center part, for a distance of 150 feet, will be two stories high.

The floor space is divided off into departments. In the northeast corner will be the foundry department with an entrance to the south of it. In the northwest end will be the forgeroom, which will occupy one of the largest spaces in the entire building. The lavatories will be south of the forgeroom. Still south of the lavatories will be the machine shops and south of them the wood turning department. On the east side of the building south of the foundry room will be the entrance, the pattern shop, another entrance, the finishing room, the carpenter shops and other departments. The building has been so planned that it embraces architectural beauty as well as strength.