MISCELLANEOUS.

Written for this Paper.

CHURCH UNIVERSITY BUILDINGS.

The new and imposing structure erected for the joint use of the Salt Lake Literary and Scientific association and the Church university is situated on First North street, west. In architectural design and in the excellence of its appointments, it is a model. The University was founded and endowed by the First Presidency and the quorum of the Twelve Apostles of the Church of Jesus Christ of Latter-day Saints, in compliance with the request made by the body of the Church, convened in general conference, on April 5, 1892. It has for its object the education of the youth in all that pertains to a well-rounded completion of an equipment for the active duties of life.

The management have been most fortunate in the selection of an educator who stands high in the ranks of his profession to take charge of the natural sciences, and with the return of business to its normal condition it is anticipated that a corps of instructors will be added, and courses of study comparing favorably with the best institutions in the country will be projected.

The board of trustees are as follows:

George Q. Cannon, chairman; Joseph F. Smith, Lorenzo Snow, Brigham Young, Heber J. Grant, Anthon H. Lund, Priscilla P. Jennings, Maria Y. Dougall, Karl G. Maeser, James Sharp, Willard Young, Le Grand Young, J. D. C. Young, Spencer Clawson, Heber M. Wells.

CHURCH UNIVERSITY EQUIPMENT.

The building is equipped in the most modern style for the laboratory method or practical methods of teaching.

The lecture rooms are commodious and well lighted, with specially efficient arrangements for ventilation.

The building is warmed by an indirect method of steam heating.

Besides numerous recitation rooms, two rooms are specially fitted as science lecture rooms. The main lecture room is on the ground floor, running into the basement. The seats are arranged in tiers so that every spectator has full view of the operating table. A first class stereopticon is in place; and the fittings are made for all kinds of scientific work. The table is provided with gas, electric wires, motors, water tanks, draft closets, aspirators, and filter pumps. A large hood occupies the corner; and being constructed largely of glass affords full view of the operations carried on within it. Drafts for the removal of offensive vapors are operated by gas jets, which are lighted by the simple touching of an electric button. Two officials from the French department of public instruction recently visited the building, and declared that France cannot boast of a lecture room more completely or conveniently equipped than is this.

The special lecture room for physical science classes, though on a smaller scale, is no less complete. Sliding blackboards, charts and diagrams hung on rollers, and cabinet cases filled with illustrative specimens give a distinguishing appearance to the place.

The laboratories are constructed with great regard to efficacy and convenience. The students' laboratory, contrary so the usual custom, is one of the best lighted rooms in the building. The tables run diagonally, so that no worker cuts off light from his neighbor. The tables are supplied at each working place with filter pumps, and exhaust apparatus, water, gas and drainage. Each student has private possession of a tier of shelves, with a large cupboard and set of four commodious drawers, with locks. In the room, for general use, are large sinks, capacious hoods, blast lamps, and asbestos-covered tables, distilled water apparatus and laboratory balances. Work is assigned by the professor daily, printed bulletins being issued, and each student supplied with a copy.

Near the main laboratory is the dispensary, for which the custodian distributes needed supplies of apparatus and material. Each matriculated student is allowed to order all things necessary from prescribed work; he pays for nothing that is returned in good order, his cost is therefore reduced to a minimum. By making such large purchases the University has obtained supplies at greatly reduced rates, of which arrangements the students reap the benefit. Poor and rich students receive like supplies; lack of means, which so often have prevented talented students from pursuing lines of experimental work, is here no barrier.

The professor's private office is simply but admirably fitted up. Electric devices place the occupant in communication with every room pertaining to his special work; by the same power, doors are opened, seemingly without hands.

The professor's private laboratory is equipped for original, preparation, and research work. Air pumps, water heaters, hoods, gas furnaces, distilling apparatus, and a multitude of other devices remind one of the cell of an enchanter.

In one room is a table fitted for microscopical preparation and study.

The balance room contains six of the finest analytical balances; all mounted on marble in such a way as to avoid tremors. The doors leading into all these rooms are dust tight. The chemical balances are marvels of delicate adjustment. One can literally weigh a small piece of hair. By weighing a piece of paper, then making pencil marks thereon and weighing again the weight of the letters can be ascertained.

The instrument room contains three mammoth cases, in one of which twenty good sized men could be accomodated. Here are instruments varied, complicated and costly. The division set apart for matter and its laws contains instruments of measurement; verniers, compasses, plumb lines, pendulums of many kinds, including a most delicate compensation pendulum; Atwood's machine, with automatic electric attachments for determination of force of gravity, most delicate in construction and efficient in action. All the mechanical powers are illustrated by efficient models; not toys, but accurate and serviceable pieces.

Levers, inclined planes, screw models, wheels and axles, pulleys, and wedges, illustrate the elements of machinery.

Rotators, and numerous other pieces illustrate laws of motion.

The principles of hydrodynamics are shown by water wheels, air pumps, small, middle size and huge, water hammers, a magnificent hydrostatic press, fountains, hydraulic ram, spouting liquid apparatus, bell jars, and glasses almost without number. There is a most complete assortment of specific gravity apparatus, and an Archimedes' screw.

In the acoustics section are organ pipes, a fine sonometer, resonant jars, diapasons, apparatus for the production of Chladni's figures, and Koenig's flamer. There is a costly siren for the analysis of musical sound, attested by Professor Helmholtz himself.

The optical department comprises not less than a dozen fine microscopes, of American, English, and Continental make. Several of these were made to Dr. Talmage's order while in Europe last summer. There are porte lumieres, lenses, mirrors, camera-lucida, camera-obscura, cathetometers, photometers, and a superb pair of oxy-hydrogen lanterns for projection. There are also highly polished reflectors for demonstating the laws of reflected light and heat.

The section for heat includes a host of thermometers, mercurial, alcoholic and metallic, boiling and freezing apparatus, ice machines, models of steam engines, devices for demonstrating principles of latent and specific heat, pyrometers, polariscope, zoetrope, etc.

The electrical department includes magnets, batteries and coils, electric motors, fans, electric lamps, Leyden jars and induction coils capable of electrocuting a cat; telegraphic instruments, Wheatstone's bridge, voltameters, galvanometers, thermo-electric poles, resistance boxes, and dynamos. In static electricity there are three fine electric machines of the Toepler-Holtz pattern, one two-plate, one three-plate, and one eight-plate machine. With these are electric chimes, electric pistols, Geissler tubes, radiant matter tubes, luminous plates, globes, and tubes.

For meteorological work are maximum and minimum thermometers, barometers ordinary, aneroid and self registering, rain gauges, and anemometers.

The chemical cases are filled with beautiful and costly instruments, glassware from Bohemia, porcelain ware, and apparatus of copper, silver and platinum. There are distilling apparatus, condensers, flasks, caseroles, gas tubes, and bulbs, gas generators, gas holders, ovens, furnaces, water baths, oil baths, air testers, oil testers, water testers, sugar apparatus, instruments for the analysis of dye-stuffs, paints, foods, articles of clothing, etc.

Many cupboards are filled with chemicals of the finest and purest kinds. Here are the wonderful and numerous products of coal tar, aniline dyes, artificial ethers and flaming extracts, sugars, starches, cellulose, gums, resins, balsams, waxes and oils. The stock of chemicals and chemical.