

Y. L. M. I. A. CONFERENCE.

The quarterly conference of the Young Ladies' Mutual Improvement Association of this Stake was held yesterday, Dec. 5, in the Assembly Hall, under the direction of Mrs. Mary A. Freeze, Stake president of these organizations.

After the usual opening exercises the meeting was addressed by Miss Prudence Brown, her subject being—"How oft shall we forgive?" She was followed by Mrs. Minnie Snow, who said she appreciated the fact that she lived among God's chosen people. She had never met a boy or girl who was ashamed of this religion though she had heard that such cases did exist. She thought there was more danger now of our youth falling away from the truth than when this people were not thought so well of by the outside world. We must, then, rely upon the teachings of our parents in days gone by and our strength of character to resist temptation. The speaker closed by asking the blessings of God upon all, to help us to overcome the evil that is in us and to live pure lives before Him.

Miss Louie Poulton sang a sacred solo.

Mrs. Zina D. Young said if she called a vote to sustain the doctrine embraced in the "golden rule" every hand would go up. She made her point by applying this to the practice, now so common, of taking back seats and leaving the front benches vacant to face and discourage the speaker. She urged the young to make the Book of Covenants their constant companion, for there was every temptation possible in our midst to decoy the young from the path of righteousness. The example of Christ, whose life was a scene of sacrifices, should be constantly before us for our encouragement. She referred to the glorious spirit felt in the Temple, and said that each one could have that same spirit at home by seeking for it, for God was no respecter of persons. She felt to glorify God and His name for His work on earth. May His Spirit be with us forever.

President Mary A. Freeze instructed the officers not to neglect "testimony bearing" in the associations; neither should they allow other portions of the program to crowd this out; for there was nothing that made the young so humble and faithful as this. The Lord was ready and willing to pour out His gifts and blessings upon us, but we must humble ourselves before Him. The speaker suggested that the associations appoint a fast day and exercise their faith on the occasion for the sick and afflicted in Zion.

Counselor Nellie C. Taylor urged the young ladies to honor their parents, who were the noble of the earth. Do not give them cross and unkind words, but let love be all in all to you. Be lavish in your smiles; give them to the poor and oppressed as well as the happy. Be ready to forgive and be honest in your forgiveness; for he who loves his fellow-being truly loves his God.

Mrs. Jane Freeze felt to endorse the words of the previous speaker in regard especially to the cultivation of the spirit of love and kindness among our people.

Conference then adjourned until 7:30 p. m., after singing "Come let us Anew," and the benediction by Mrs. T. S. Cartwright.

Evening session opened with singing. Prayer was offered by Brother Joseph E. Taylor. After singing,

Miss Lizzie Bowman gave an address, her subject being "The Sacrament." The subject was continued by Mrs. M. Y. Dougall, who spoke of the necessity of understanding our religion better and the importance of these associations to aid us in so doing.

Dr. Ellis R. Shipp said we must make a study of our religion if we desired to better understand its principles, and this understanding would lead to all other knowledge. She referred to her experience at Ann Arbor, which showed her that our people were gaining favor with the world, and urged all to strive to gain the favor of our Heavenly Father by keeping His commandments and living up to the light we had received.

Miss Mary Price rendered a solo, The Holy City.

General Superintendent E. S. Taylor spoke of the far-reaching effects of the Gospel and the duty of prayer by which we should express our gratitude to the Giver of all Good.

Elder Joseph E. Taylor referred to the subject of the sacrament and said if every young lady understood its importance she would never let anything interfere with her attendance at the sacrament meetings. He spoke of the approaching "party season," and warned the young ladies to be prudent and avoid everything that had an evil tendency. He referred to the great responsibility resting upon mothers, for their sons and daughters alike will give honor to the mother for their prosperity and progress in life. The speaker closed by advising the young ladies on the subject of marriage, saying it was better for our young ladies to remain unmarried than to unite with those unworthy to enter the holy Temple.

President Mary A. Freeze then adjourned the conference for three months.

The choir sang "Lord Thou wilt hear me?"

Benediction by Elder Paxman.

MRS. MARY A. FREEZE, Pres.

MRS. LIZZIE S. CARTWRIGHT,
Secretary.

A WAVE OF LIGHT.

A dinner was given by a company of scientists at the Rome Hotel the other night to a distinguished newcomer to the scientific coterie in Chicago. The guest of honor was Dr. A. A. Michelson. The dinner was given, says the Chicago Herald, to celebrate as much his splendid achievements in physical science in France during the past year as to welcome him as head professor in physics and director of the Ryerson physical laboratory at the University of Chicago.

This is the first public announcement in this country of the discovery which has been refined into perfection by Professor Michelson in a year's experiments at Paris under a commission by the international committee of weights and measures. It is the establishment of a new

standard of the measure over that of the meter, and this, wonderful though it may seem, is the length of a wave of light. To such perfection have these experiments been carried that it now may be confidently asserted that if the standard meter and all its copies should be destroyed or altered in the course of time a new standard could be made whose length could not be distinguished from the original meter were they side by side, giving a natural unit of length which depends only on the properties of ultimate atoms and the universal ether which scientists say are the least changeable of all things.

The most important of Professor Michelson's many researches in light include, besides experiments for the determination of velocity, the effect of the motion of the medium upon velocity, application of light waves, the diameter of Jupiter's satellites and the separation of supposed simple lines of the spectrum into highly complex lines, thus supplementing the work of the spectroscope as the microscope does the eye.

The danger of standards of length being destroyed or changing in time has caused physicists to seek a natural standard of length. A certain portion of the earth's circumference, has been proposed, but has been found not to be practical. The wave length of light was probably first proposed by Arago a half century ago, but later by Dr. Gould. Since then various attempts have been made to use the wave length as a standard in a method which involved the use of a diffraction grating, but none has been sufficiently accurate.

About four years ago some preliminary experiments were made in Cleveland by Professor Michelson in collaboration with Professor Morley. A method was devised by which the error in using the light wave as a unit was made independent of the number of waves measured—that is, the error was the same whether 2,000,000 or 1,000,000 waves were used. The same experiments developed the fact that most light waves are highly complex. The waves of cadmium light were found to be, variably simple, these fulfilling all conditions required of a natural unit of length. This is supplemented by Professor Michelson's inferential comparator, an instrument devised by him to apply this natural unit to the measurement of lengths.

It was a year ago, at the suggestion of Dr. Gould, the eminent American member of the international committee on weights and measures, that this committee issued a formal invitation to Professor Michelson to undertake a series of experiments having for an object the exact determination of the relation of the standard meter to the length of a light wave, or the number of lengths of a wave of light in a standard meter.

Some idea of the accuracy of the work may be formed when it is stated that to be of practical use the error of comparison must not exceed one part in 2,000,000—that is to say, two separate determinations of the number of wave lengths in the standard meter must not vary more than one part in 2,000,000. The efficiency of the comparator used depends largely upon the