

nitrogen, albuminoid ammonia, oxygen of permanganate consumed, etc., as permissible or not. Distinctions drawn by the application of such standards are arbitrary, and may be misleading. Two entirely legitimate directions seem to be open for the useful examination by chemical means of the organic constituents of drinking water namely, first, the detection of very gross pollution, such as the contamination of the water of a well by accidental bursting or crushing of soil-pipes, extensive leakage of drains, etc., and secondly, the periodic examination of a water supply, as of a great city, in order that the normal or usual character of the water, having been previously ascertained, any suspicious changes which from time to time may occur shall be promptly detected and their cause investigated.

"In connection with this latter application of water analysis, there seems to be no objection to the establishment of local standards of purity for drinking water, based on sufficiently thorough examination of the water supply in its usual condition."

Buck's Hygiene, Vol. I, page 303, states that "in view of the impossibility of saying exactly what is and what is not harmful, any considerable departure from the normal character of the water in a given locality should be regarded with suspicion. It is true that various students of the matter of water supply have formulated standards which a water may not overpass. They are, however, only of relative value."

Prof. Nichols of the Massachusetts Institute of Technology holds that an absolute standard for wholesome and unwholesome water as maintained by Wanklyn, "is impracticable, and would exclude many waters which are known to be free from contamination and to be perfectly well suited for domestic use." Dr. Smart of the U. S. army maintains that water may show albuminoid ammonia as high as .25 part in 1,000,000 parts and still be regarded as harmless provided the organic impurity is of vegetable origin. It has been found that mountain streams have yielded to an analysis as much as .5 part of albuminoid ammonia in 1,000,000 parts of water without being contaminated with animal matter to which sanitary officers are most opposed. I have no doubt that some of our mountain streams before reaching down over rocks through the canyons would show a still greater amount of albuminoid than that given above, from the fact that there is much vegetation in the mountains over which the water runs undergoing decomposition. Now, is this vegetable matter detrimental to health? Nichols holds that "it must not be understood that the presence of an excess of vegetable matter is absolutely a matter of indifference. Waters thus charged may be the cause of diseases of the digestive organs without doubt. Whether they may also cause any of the so-called zymotic diseases or give rise to specific diseases of peculiar type, is doubtful."

In a discussion of chemical versus bacteriological examination of potable water in the Journal of the American Chemical Society, W. P. Mason states

that "sewage, as it occurs in practice, contains an immense deal of material other than that productive of disease, and it is upon just this comparatively harmless, but constantly present material that the chemist relies for the indication upon which he bases his opinions. "He is unable to say whether or not a sewage-laden water is disease-bearing on any particular date, for to him all sewage is alike, but he condemns the water for the reason that, although it may be harmless today, it is impossible to predict what may be its condition tomorrow. The idea herein conveyed is not that the animal organic matter is of itself productive of disease, but that its presence in the water indicates that there is seepage from animal refuse of some character, and hence the water may become contaminated at any time with disease germs. Animal life the source of this animal refuse may become at any time infected with contagious diseases. If it be determined without doubt that there is no disease germs in water in which there is vegetable organic matter, then it is doubtful indeed as to whether such organic matter will produce contagious diseases, and there would have to be considerable more organic matter present than Wanklyn gives as the limit, to render water unwholesome. Applying all that has been thus far stated regarding water to ice, the conclusion may safely be drawn that ice containing considerable vegetable matter may be used for refrigerating purposes where it is not melted and mixed with food without the slightest danger of producing digestive disturbance let alone contagious diseases.

According to my judgment no one should condemn water on the results of a chemical examination alone. The water should be collected by a competent chemist and the surroundings should be carefully inspected. The formation and the soil through which the water runs should be examined and the normal state of the water adjacent determined. Ice is somewhat different from the water. Mineral matter in the water is more or less removed during the freezing of the water. Disease germs if present may be destroyed and the use of the ice may be perfectly safe to use when the water from which it is frozen may be more or less dangerous to use. In my opinion to avoid losses to men engaged in the ice business, the ponds surrounding should be inspected in the fall and the water to be used be examined and pronounced good before it is turned into the ponds. Investigations should be made in the proper time and in the proper way that both the producer and the purchaser may have justice as exact as it is possible to meet out. Along with chemical examinations, microscopical and bacteriological examinations should be made.

Respectfully,
J. T. KINGSBURY.

DAVIS STAKE CONFERENCE

The quarterly conference of the Davis Stake of Zion was held at East Bountiful on Saturday and Sunday March 13th and 14th. There were present President George Q. Cannon and Presidents Joseph F. Smith of the

First Presidency, Elder B. H. Roberts of the Council of the Seventies, the Stake Presidency, members of the High Council, Bishops of the various wards and a large attendance of the Saints. On Sunday there was also present Elder John Nicholson of Salt Lake and Elder Charles F. Middleton of the Weber Stake.

On Saturday President John W. Hees gave a very favorable report of the Stake after which President Geo. Q. Cannon, President Joseph F. Smith and Elder B. H. Roberts addressed the conference speaking on the duties of the Latter-day Saints and giving fatherly counsel to all.

On Sunday the Sunday school of East Bountiful under the direction of Superintendent Charles R. Jones convened at 9 o'clock a.m. After the opening exercises President George Q. Cannon, President Joseph F. Smith and Elder John Nicholson talked to the children showing them the great benefit and blessings to be derived from keeping the Word of Wisdom urging them to be diligent in acquiring useful knowledge; to be obedient to their parents; to be pure and virtuous, shunning bad company. It was a rare treat to the children (as well as the older persons) to listen to the good instructions given by the servants of God, the presence of the visiting brethren was greatly appreciated the counsel sank deep into the hearts of those that listened unto them and it is hoped bring forth good fruit, the Sunday school was dismissed at 10:25 and conference reconvened at 10:30 a.m.

President Joseph F. Smith occupied the time of the morning session. Read from the Doctrine and Covenants, section 132, verse 8.

"Behold, mine house is a house of order, saith the Lord God, and not a house of confusion." President Smith spoke with much force and plainness upon the principle of obedience.

The general and Stake authorities were presented and unanimously sustained at the afternoon meeting after the opening exercises and the administering the Sacrament.

Elder John Nicholson and President Cannon addressed the congregation expressing their pleasure in meeting with the Saints in a conference capacity. Spoke of the feeling that prevailed to a large extent amongst the Saints to ignore the counsels of the servants of God and to become a law unto themselves. Exhorted the Saints to be diligent and faithful in keeping the commandments of God.

Elder Edwin Rice of South Bountiful was sustained by the conference to receive the ordination of a Patriarch to which office he was ordained by President Geo. Q. Cannon.

There is much credit due the East Bountiful choir, under the leadership of Edward Thomas, for the excellent singing and music during conference. Conference adjourned for three months to be held at Centerville.

JOHN J. SMITH,
Stake Clerk.

Rock Springs, Wyoming, Miner: James Noble went on Monday evening to Park City, Utah, in search of employment. If he fails to get steady work the chances are that he will pack up and return to Scotland.