

if one becomes familiar with its workings one is prone to judge it unfit for a large population. But the contrary is the result of careful investigation. The fact is that every dry hill, every high mountain, every out of the way place from rivers and natural perennial springs and streams are even better adapted for cities and villages than are the valley and plains. The latter always require great care and much labor to keep the water off and to keep them from being fever beds and emitters of a cloud of poisonous miasma, while the former, the high and dry places, are the very places where nature has built its sanitariums. There you will find no stagnant pools or accumulations of foul waters to poison the fresh breezes from the distant sea or water spreading over a swampy meadow, breeding malaria. On the other hand, the mountains and hillsides are washed and purified by the copious rains of winter and prepared for a coming season when rain is not needed.

To be sure, the Arabs and the Bedouins know but little of the great blessings which yearly pass over their heads, and of the blessing of water which is yearly poured upon this land only to find its way gradually to the great ocean there to mix with the blue billows unused and having done no good beyond wetting the parched ground and washing off the dusty trees. Indeed, that is also one of its functions. But it may be stored and used for culinary purposes and domestic animals, and then is when it is the making of the country. A distant spring, a running stream of water is of but small consequence for the immediate need of a common city or village. True, where a water supply can be had for a water system it is all well and good and needed. But for a city built on the plans of most of our towns in Utah and elsewhere in America, every house only needs a commodious cistern kept properly clean and cool. Then in the rainy season the Lord sends such a supply of water that all cisterns can be filled and clouds of it to spare to go to the sea. And this water I find is after all the best. When the cistern is properly built it is always cool and clean. It is near at hand and can be pumped up into the house for all purposes, and is far superior to most of the spring water of Palestine. There are some good springs and wells, but many are also bad. Some are healthy, and some salty, and nearly all are small and located in such places that the villagers cannot live by them, but must choose higher altitudes for a habitation, thus necessitating the carrying of the water long distances for house supply. From this it will be seen that the rainy season is the natural water supply and that it must be watched, and the water gathered then and stored in sufficient quantities to supply all want, until the rains return again the next fall. Springs and wells on the property is good to water cattle at, that is their chief value; and where a stream can be owned, of course, it may be utilized for irrigation and be made to produce oranges and lemons and numerous articles which cannot get along without water in the summer. Such places can be found nearly everywhere. But we cannot live near them as a rule. In these low places it is too unhealthy, wherefore the higher elevations must be sought; and to supply water easily and pure, cisterns must be had or the water carried from the low lands to a higher home. The Arab women furnish the water system here now. They can be seen all times of the day and night going, to and fro from the wells and springs carrying water mugs upon their heads. While in Nazareth last week I noticed that the women of the poorer classes were carrying water hours before daylight in order to get what

they needed. The waters at Mary's well is very low now, so that they must all wait their turn to get their jugs filled. This is, as any one can readily see, a hard way to drag out an existence.

The hotel Nazareth, and all well-to-do people, have cisterns, and the water is excellent in these places. It is rain water stored from last winter's fall. A steam flour mill is in operation in Nazareth. It likewise stores its water supply. Thus it may be seen that there is no real limit to the use that this storage may be applied. Water can be stored hand had for almost everything, even to the irrigation of gardens.

In Lamarin, a Jewish colony in Mt. Carmel, to the south, have besides their cisterns a steam water pump, so that they have a city water system. There is no doubt but that the former Israelites were very much behind in their knowledge. Solomon built reservoirs toward Hebron, south of Bethlehem, by which he supplied the city, but ordinarily it is hard to find a sufficient supply of water anywhere in Palestine much higher than the locations of the cities. The cities themselves must be located high to insure health, hence there is not much of a chance to get water except from Libanon, which is far off. Still I can readily see that the Jews, or any other people, with means and skill and energy combined, will eagerly solve the water question when the times comes, as the rains furnish plenty when taken care of, thus making it a well watered land.

This also is the cause of the country being terraced. If the hills and mountains are to produce oil, wine and figs, they must be terraced in order to retain the water supply, otherwise the water would run off without doing much good. The soil, which should be well cultivated from year to year, would also be carried off in its loose state. But by arranging the land to suit the conditions of the country, the moisture of the winter, thus forced to remain largely on the soil, combined with the heavy dews of summer, is sufficient to the needs of vegetation. I fancy many will say this is a great labor and that it will require a great deal of energy and patience to work out a "problem" like that. True there is no excellency without labor, and I would ask how many hundreds of thousands of dollars are now spent in the great West in building canals, fringing ditches and water drains. These are not required here. It is only employing our time and talents in another way to produce the same results, i. e., that man may live and have comforts.

Travelers are not always favorably impressed with this system of supplying water, because they are often forced to drink filthy and foul water from some cistern or cave along the route. This should not be allowed to govern our judgment upon this important subject. These cisterns are built by the government or by some charitable person or persons to assist the weary traveler who may be in need of water, and for the use of animals. For these purposes these pools and cisterns answer these ends well in a country thickly inhabited and sparsely furnished with water. But water put up right, by careful persons, is quite different. Here in Haifa good water may be had in every house from cisterns. Some are under the house—such as Brother Hills is—and the water can be kept very clean. Others are built in the courtyard and are covered up neatly, with an opening left to draw it out, or a pump may be used.

At Jerusalem and Jaffa it is the same, and I am surprised that the water tastes better now than it did than it did in the spring. It seems that it has improved. It should be understood that the formation of the country—lime

stone—is of the best for the purpose; not very hard to work in, and when finished the cisterns, which may be square or bottle-shaped, and of the latter the natives build many, are perfectly watertight. It would also seem as though the cool and clear rock walls had a purifying and cleansing effect upon the water. For instance, the water used during the day is often put in a jug and set to cool. This earthen vessel has a splendid effect upon the water. If kept in the shade the water is always cool and the flavor is materially improved. I remember that while we visited at at Hebron we were treated to a drink of water by the people in charge of the Russian tower, built near the traditional tree under which Abraham sat when the Lord and his two angles visited him at Mamre. And we all spoke in terms of praise of this water. It was from a huge cistern under the front of the house. Such cisterns are huge caverns with pillars in the center and arched over for a covering; while on the top they are neatly finished in flat lime rock, or even marble where it can be afforded, and no one would suspect, by walking over its smooth surface, that it contained a real treasure, were it not for the small channels dug in the rocks on the edges, leading the rain to the openings, carefully arranged to receive the water, and yet free from all danger of anyone falling into them.

People more careful strain the first rain fall or two, until the roof and water sheds are perfectly cleaned. The first shower is, of course, not used. This care cannot be taken with the cisterns along the roads, which are filled by water from the surface of the ground, hence more or less filthy. Whereas water carefully strained is clean and pure.

This system has its drawbacks and its advantages, but this is sure, that people here are not taxed out of their possessions with an excessive water tax; each house owns its own supply, and when once built can be maintained with but small cost. These few facts are penned for the benefit of the Saints, that they may make a comparison of these conditions with those of Zion, and to see how the people here manage without rain in summer and also without irrigation, and still live and do well.

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Sept. 23, 1893.

IN DEFENSE OF MORMONISM.

In the Boston Herald of Oct. 23, the following appears. It is reproduced in the "News" by request:

"A New York correspondent reported in last Sunday's Herald an interview with Wm. R. Campbell, a Presbyterian missionary in Salt Lake City and a 12-years' resident of Utah, on the subject of Mormonism. The statements made by Mr. Campbell were in general a denial of the good faith of the Latter-day Saints in their declaration against polygamy, made shortly before Utah was admitted as a state, and a reiteration of the somewhat prevalent opinion that the Mormon Church makes claims upon its members which are contrary to the spirit of American institutions.

"It will be an interesting surprise to people living in this vicinity, and especially to those of the college community, to learn that a Mormon, a great-grandson of Brigham Young, and himself an Elder in the Mormon Church, is now a student of Harvard. Mr. Levi Edgar Young—for that is his name—is the first student admitted to Harvard from the University of Utah, and is taking advantage of the resources offered at Cambridge for the study of history and especially for the study of American history and institutions.

"A reporter called upon Mr. Young, who readily consented to give The Herald his comments on the reported state-