ITHACA, N. Y., WATER-SUPPLIES.

A 'COMMITTEE OF TEN' appointed by the Business Men's Association of Ithaca and other prominent citizens has been engaged, since the epidemic of typhoid appeared in that city and in anticipation of the taking over of the water-works system by the municipality, in exploring for artesian supplies. There are many flowing wells in the district eastward of Ithaca, especially at Freeville, some ten miles away, and on the upper levels of that section, near the city. In the city of Ithaca are two such wells, the one, which has been flowing for a number of years and, as stated by the proprietor, with increasing volume, was found when measured by the committee to deliver 403,000 gallons per day. The other is supplying the Ithaca Salt Works with water at the rate of between 600,000 and 700,000 gallons. The committee has bored one new, a flowing well, and is now engaged in boring others to depths of from about two hundred to three hundred feet, reaching strata of water-bearing gravels overlaid with heavy beds of clay and with water under pressures of considerable magnitude. The members of the committee state that there is no question that an absolutely pure, germ-free water may be obtained in ample amount to supply the city and with a large surplus.

The analysis of the water, as given by Chamot, is as follows:

	Parts per million
Free ammonia	0.480
Albuminoid ammonia	0.005
Nitrogen as nitrites	none
Nitrogen as nitrates	trace
Oxygen consumed	0.644
Chlorine as chlorides	61.640
Total solid residue	304.000
Loss of solids on ignition	78.000

"The different portions taken gave from 0 to 13 colonies of bacteria per cubic centimeter. No objectionable species were detected.

"From the chemical analysis it is be concluded that the water is free from any present contamination and is therefore a good, safe drinking water; while from the bacteriological standpoint it would be considered a well of exceptional purity."

The committee includes Professor R. S. Tarr, professor of geology, Cornell University, who has long been familiar as a specialist with the geology of the region, Mr. Edgar Kay, of the College of Civil Engineering, an expert in hydraulic and water-works engineering, Mr. M. E. Calkins, president of the Cayuga Lake Cement Co. and the Ithaca Salt Works, a business man of extensive experience in the exploration of the salt beds of the state and an expert in matters relating to deep wells and the location of water-bearing deposits, Mr. R. H. Thurston, director of Sibley College, is consulting member relative to machinery, Mr. F. M. Rites, formerly of the Westinghouse Company, an experienced mechanic, inventor and designer, and several business men more or less familiar with the conditions determining the location of deep wells at Ithaca and its neighborhood. Two are members of the City Council. The chairman of the committee is Judge Almy, now Surrogate, and the treasurer is Mr. C. D. Bouton, ex-mayor of Ithaca.

It is the plan of the committee to ascertain precisely what are the possibilities and the practicable ways of securing for the city of Ithaca such water as is above referred to. The people of Ithaca are practically unanimous in their determination to secure such a supply if possible. The indications thus far are thought to be that a gravity supply may be had from the high lands east of Ithaca or that now well-known and probably unlimited artesian supplies beneath the city itself may be availed of by pumping. Very possibly the latter may be taken as a temporary resource while exploiting the Freeville district for a permanent gravity system. Meantime, filtration will serve, if delay occurs, until pure, clear, soft and germ-free artesian water is thus obtained.

Throughout the late epidemic, an ample supply of this water has been had and freely used, with other fine spring waters. The University has supplied this water on the campus and, where called for, to students.

R. H. THURSTON.

March 12, 1903.