

Surv., vol. II, 1886, p 12 T), showing the water to contain the following :

Potassa.....	trace	Ferrous oxide.....	trace
Soda.....	fairly large quantity	Sulphuric acid.....	very large quantity
Lithia.....	trace	Phosphoric acid.....	trace
Strontia.....	small quantity	Silica.....	"
Lime.....	very large quantity	Chlorine.....	very large quantity
Magnesia.....	large quantity		

The water at 15.5° C. had a specific gravity of 1.0269, and contained 2.925 parts of dissolved saline matter in 1000 of water.

*Sandwich, Essex Co.*—At this place is located a sulphurous spring, near which was erected an hotel and baths ; owing, however, to the loss of the hotel and bathhouses by fire, the spring has of late years fallen into disrepute. The water is highly sulphurous and flows from an artesian boring made some years ago for oil.

The analysis, according to Prof S. P. Duffield, gave the following result :

Chloride sodium.....	0.070	Carbonate lime.....	4.813
“ calcium.....	0.007	“ magnesia.....	1.618
“ magnesium.....	19.220	Silica.....	0.014
Sulphate lime.....	15.479		
Carbonate soda.....	6.070	Grains in one pint.....	47.291
“ potassa.....	traces		

#### GASES.

Carbonic acid, cubic inches.....	1.25
Sulphuretted hydrogen, cubic inches.....	4.72
Nitrogen, cubic inches.....	0.09

As may be seen on reference to the above, the waters of this well contain a considerable proportion of chloride of magnesium and sulphuretted hydrogen.

*St. Catharines, Lincoln Co. (a)*—Some years previous to 1863 an attempt was made to obtain brine, for the manufacture of salt, at St. Catharines. With this object, a well was drilled in the town to a depth of about 500 feet, the drill penetrating the Hudson River shales to a distance of 50 to 60 feet.

A brine of low saturation was obtained but owing to the contained lime and magnesia salts was never used in the making of salt.

This water was analysed by Prof. Croft of Toronto as given below I.

In 1861 a second boring was made by Mr. E. S. Adams resulting in the discovery of a water of similar character. Analysis II.