

The water was collected in September 1852. Several other mineral springs occur in this vicinity, one of them belonging to this class, and others to the second and fourth classes.

8. This water, from the seigniory of Belœil, was collected in 1851.

§ 44. We shall now proceed to the springs which, in § 34, have been referred to the fourth class—and begin with three analyses of a mineral water from Chambly. Here, on a plateau, over an area of about two acres, the clayey soil is destitute of vegetation and impregnated with alkaline waters; which in the dry season give rise to a saline efflorescence on the partially-dried up and fissured surface. A well sunk here to a depth of eight or ten feet in the clay, which overlies the Hudson River formation, affords at all times an abundant supply of water, which generally flows in a small stream from the top of the well. Small bubbles of carburetted hydrogen are sometimes seen to escape from the water. The temperature at the bottom of the well was found in October 1861 to be 53° F., and in August 1865 to be nearly 54° F. The mean temperature of Chambly can differ but little from that of Montreal, which is $44^{\circ}.6$ F., so that this is a thermal water. Another alkaline and saline spring in the same parish has also a temperature of 53° F. The water of the spring here described has a sweetish saline taste, and is much relished by the cattle of the neighborhood. Three analyses have been made of its waters, the results of which are here given side by side. The first was collected in October 1851; the second in October 1852; and the third in August 1864, during a very dry season.

	I.	II.	III.
Chlorid of potassium,.....	undet.	.0324	.0182
“ sodium,.....	.8689	.8387	.8846
Carbonate “	1.0295	1.0604	.9320
“ lime,.....	.0540	.0380	.0253
“ magnesia,.....	.0908	.0765	.0650
“ strontia,.....	undet.	.0045	undet.
“ iron,	“	.0024	“
Alumina and phosphate,.....	“	.0063	“
Silica,.....	.1220	.0730	.0166
Borates, iodids and bromids, ..	undet.	undet.	undet.
In 1000 parts,	2.1652	2.1322	1.9917

A portion of barium is included with the strontium salt. The water contains moreover a portion of an organic acid, which