

phuretted ; 4, chalybeate ; 5, acidulous ; 6, waters characterized by special ingredients (alum, sulphuric acid, borax, iodides, bromides, etc.); 7, calcareous ; 8, thermal.

Referring very briefly to these in order, alkaline waters contain as chief ingredients alkaline carbonates, especially carbonate of soda, with more or less of carbonates of lime, magnesium and lithium, and sodium chloride, and many are strongly charged with carbonic acid gas. The wide range of usefulness of such a water can be readily seen ; in acid dyspepsia, gastric ulcer, or any catarrhal condition of the stomach ; in catarrhal inflammation of the mucous membranes of the respiratory tract, by their power of augmenting and liquefying the mucous secretions ; and most of all, perhaps, in catarrhal conditions of the bladder, by neutralizing the acidity of the urine, particularly in lithæmia, by dissolving uric acid deposits, and favoring the oxidation of effete matter ; in "gout and rheumatic affections, hepatic hyperæmia, and obesity."

The saline waters are best understood if divided into sodium-chloride waters, and the so-called bitter-waters of the Germans, containing large quantities of sodium and magnesium-sulphate. This class, besides being of service from their alkaline qualities, is chiefly derivative and alterative. The bitter waters, such as Pullna, Hunyadi Janos, and Friedrichshall, are more strongly derivative, even purgative, and are high in favor as laxatives. The sodium-chloride waters are milder ; valuable alkaline digestives ; laxative, and if taken in sufficient quantity purgative ; they are also alterative, as they contain small amounts of iodides and bromides and more or less carbonate of iron in some cases. An excellent water of this sodium-chloride class is St. Leon Water, native to our own country. The St. Leon Springs are in Quebec Province, in Maskinonge County, about midway between Montreal and Quebec City, on the north side of the river St. Lawrence. The subjoined analysis shows its undoubted value in properly selected cases, and represents the quantity of solids per gallon :

Chloride of Sodium.....	677.4782	grs.
" Potassium.....	13.6170	"
" Lithium.....	1.6147	"
" Barium.....	.6099	"
" Strontium.....	.5070	"
" Calcium.....	3.3338	"
" Magnesium...	59.0039	"

Iodide of Sodium.....	2479	"
Bromide of Sodium.....	8108	"
Sulphate of Lime.....	.0694	"
Phosphate of Soda.....	.1690	"
Bi-Carbonate of Lime....	26.4405	"
" Magnesia.....	82.1280	"
" Iron.....	.6856	"
Alumina.....	.5830	"
Silica.....	1.3694	"
Density.....	1.0118	

The profession would be consulting its own interests if it prescribed the water more frequently, its comparative cheapness in addition to its therapeutic value bringing it within the reach of every one. If space allowed, a tabular comparison of St. Leon with the best European springs, such as Kreutznach, Baden-Baden, or even Friedrichshall, would impress the Canadian practitioner with the value of the home article.

The sulphuretted waters owe their name to the presence of sulphuretted and carburetted hydrogen, not usually in any large quantity, and probably owe their efficacy to their other ingredients, exerting their chief action upon the intestinal canal as laxatives.

The chalybeate waters, as their name indicates, are used mainly in anæmia, chlorosis, the complaints peculiar to women and accompanied by anæmia, hysteria, and neurasthenia, diabetes and chronic Bright's, chronic diarrhœa, etc. Many of them contain alum and are therefore peculiarly efficacious often in the treatment of the latter trouble. Iron is present either as the carbonate or the sulphate ; if the former, carbonic acid is usually abundant and the water beautifully clear and sparkling. They are contra indicated in all febrile or congestive states, and in advanced disease of the lungs, kidneys, or liver.

The acidulous waters, from their large quantity of carbonic acid gas, are excellent table-waters, relieving nausea, improving the appetite, and aiding digestion. Apollinaris and Karlsbad are perhaps the best known here.

The calcareous waters are very "hard," full of lime salts, chiefly sulphate and carbonate, and of doubtful utility. Some authorities refuse to classify them as mineral waters, while others praise them highly. It would seem that they must at least be of service in conditions in which aqua calcis is useful.

The thermal waters may be dismissed as of no service beyond ordinary artificially heated waters. They are used only for bathing.