

*(P. H.)*

# MINERAL WATERS



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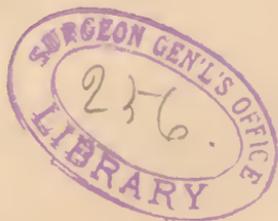
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A COMPLETE LIST  
OF  
MINERAL WATERS,  
FOREIGN AND DOMESTIC,  
WITH THEIR  
Analysis, Uses and Sources.

BY  
P. SCHERER & CO.,  
IMPORTERS,  
NEW YORK



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## INTRODUCTION.

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In presenting this list on mineral waters and products of mineral springs mentioned in this pamphlet, all of which are continually kept on hand by us, we beg leave to especially caution the profession that unless mineral waters are obtained fresh, no dependence is to be placed on their efficacy. We therefore have arranged with our correspondents to receive continual supplies by every steamer, and as it is a specialty of our house, and has been so for the last twenty years, to particularly push this branch of the business, we can, as far as quality of the water is concerned, give advantages to buyers which no other house in America is able to do. It is sufficient to say that by some of the wholesale merchants, whole cargoes of the more salable waters come in at one time, and that these houses often lay in a supply for one and even two years, for the sake of securing a large discount of the spring proprietor. This accounts for the many failures which have been obtained by trying to cure diseases with stale mineral water; and we again assure our customers that such will never be shipped by us. Hoping for a further continuance of your favors,

We remain, very respectfully yours,

P. SCHERER & CO., New York.

# INDEX.

	PAGE.
Aachner (Aix-la-Chapelle) Water.....	11
Apollinaris Water.....	11
Ballston Spa Water.....	40
Bethesda Water.....	41
Bilin Water.....	12
Birmenstorf Water.....	13
Bourboule, La, Mineral Water.....	39
Buffalo Lithia Water.....	42
Blue Lick Water.....	40
Capon Spring.....	45
Carlsbad Thermal Water.....	13
Clysmic Water.....	44
Columbian Spring Water.....	52
Contrexville.....	34
Deep Rock Water.....	44
Digestive Lozenges of Vichy.....	28
Drinking Carlsbad Waters; Diet and Smoking.....	15
Eger Franzensbrunnen.....	16
Emser Spring Water.....	17
Franz Joseph Bitter-Water.....	36
Friedrichshall Bitter-Water.....	18
Gerolstein Mineral Water.....	33
Gettysburg Katalysine.....	46
Giesshübler Water.....	19
Greenbrier White Sulphur.....	55
Haller Iodine Water.....	20
Hathorn Spring Water.....	56
Homburger Bitter-Water.....	21
Hunyadi Janos Water.....	22
Kissengen Water (Rakocky).....	22
Kreuznacher Mutterlauge.....	24
Kronthal Mineral Water.....	29
Marienbad Kreuzbrunnen.....	23
Massena Spring Water.....	55
Mattoni's Royal Hungarian Bitter-Water.....	58
Oak Orchard Acid Water.....	41
Obersalzbrunnen.....	30
Ofner Rakocky.....	39
Poland Spring Water.....	46
Püllna Bitter-Water.....	31
Pymont Steel Water.....	36
Richfield Sulphur Spring.....	47
Rippoldsauer Iron Springs.....	37
Rockbridge Alum Spring.....	48
Roisdorfer Water.....	37
Saratoga Mineral Waters.....	50
Saratoga Vichy.....	49
Saratoga High Rock.....	51
Schwalbach Steel Water.....	29
Seltzers, Genuine.....	32
Sharon Spring Water.....	53
St. Catherines Concentrated Water.....	53
Strontia Mineral Water.....	57
Summit Mineral Water.....	53
Taunus Mineral Spring.....	58
Vals Waters.....	35
Vichy Mineral Waters.....	25
Wilhelmsquelle Mineral Water.....	28
Wildungen Mineral Water.....	58

## MINERAL WATERS.

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Great curative powers have always been ascribed to certain natural sources of waters springing from the ground, and differing for the most part from ordinary sources, either by the success or remarkable character of their constituents, or by their temperature; the savage of America, the Romans, the inhabitants of Asia, not to speak of the moderns, have all expressed in various modes their conviction of the fact. The way in which some of the more important springs have been discovered—either by the congress of animals and their cure from various diseases (and there are more authentic narratives of the kind than that of Bladud and his swine), or by the fortuitous cures in man, many of which are well authenticated, is in itself a strong presumption in favor of the actual power of many mineral waters. But when we add to this the fact, that the chemical composition of many waters is that of very powerful medicinal agents; when we consider the effects which, on physiological principles, are likely to result from the imbibition of quantities of water, well imbued with mineral principles, as well as from bathing in such waters, hot or cold, little doubt can remain as to the possession of real power by mineral waters. Nor to this, that the remedy, such as it is, is generally administered with all the accessories likely to increase its beneficial action. Removal from care, good air and exercise, and improved hygienic relations, are almost always employed in conjunction with this cure.

1. The principal difficulty which we encounter at the outset of any inquiry into the nature of mineral waters, is to determine what a mineral water really is. All waters, except very carefully distilled water, contain salts. Rain water, spring water, river water, all contain salts. Malvern, one of the purest springs in England, contains about five grains of salt to the gallon. The question is, to what extent is the solution of foreign substances in a water to proceed, or how far can it depart in other respects from the characters of ordinary water, to entitle it to be called "mineral?"

Perhaps when the amount of salts and other solids held in solution in a water exceeds 50 grains in the gallon, it should be entitled to the term mineral. It is to be observed that the constituents of a water which may exercise medicinal effects, cannot be restricted nowadays to the mineral or gaseous constituents of water only, seeing that a principle or series of substances, which exist in a great many mineral waters, of an organic vegeto-animal nature, variously termed zoogine, glarine, baregine, etc., is supposed to produce considerable effects. The extractive matters derived from the earth and from plants also contribute to the action of waters. The amount of gases, or the temperature of the water,

may be sufficient to give the characters of mineral waters, where the solid constituents are in very small quantities. Thus in Germany, the waters of Pfeffers and Wildbad have been found by long experience to be capable of curing disease, although their mineral constituents are insignificant.

2. The most obvious division of mineral waters is into thermal and cold. Of the origin of the former many theories have been given. They probably arise from more than one source, and from various causes. The origin of thermal springs may be ascribed to the following causes: 1st, to water coming in contact with certain chemical agents in the interior of the earth; 2d, the proximity of volcanoes; 3d, the internal heat of the earth, and 4th, to electric charges, in which the very production of these mineral springs, and the charging of them with their various constituents, are concerned.

After thermal springs come the cold, which are variously classified, according as the writer gives more or less importance to this or that predominating ingredient. Perhaps the best and most natural division is into sulphuretted, carbonated, saline and chalybeate. The first contain large quantities of sulphuretted hydrogen gas, with or without saline ingredients. The carbonated waters are those which are highly charged with carbonic acid gas, a very valuable property in assisting digestion. These waters, besides being grateful to the palate, possess stimulating and tonic properties. In this class of waters, no country has a larger abundance than Germany, some of the waters being so highly charged, that the gas escapes almost with explosive violence. The saline waters admit of a very important sub-division, viz., into alkaline, muriated and sulphated. The first are characterized by the presence of such a quantity of the carbonate of soda, as to give them marked alkaline properties; in some cases, as Seltzers, Apollinaris, Vichy, some waters are thermal. This valuable class of waters is mostly found in Germany and France. Their alkalinity renders them especially useful in gouty and calculous affections; and being thermal, they may be considered invaluable, as they admit of the use of hot alkaline baths, and the absorption of curative agent through the skin, as well as of its internal administration. Most of the carbonated iron waters are weak; still they produce undoubted effects. The sulphated iron waters, again, are of a very different character, both because the ingredient itself is more powerful, and because, being exceedingly soluble, much larger quantities of it are held in solution. Very valuable waters of this class exist in Great Britain, some of them but little known.

Besides these classes of bodies, other substances of importance exist in mineral waters. Iodine and bromine are found occasionally in saline springs. The former element has been found so useful in scrofula and brouchocele that its presence has been considered of much consequence. No water contains more of this than the "Iodquelle" Halle, Germany. Arsenic of late years has been discovered in minute quantities in several waters in France and Germany; and in fact the only limit to the number of substances found in mineral waters would appear to be the extent to which the analysis is carried. Organic acids, as the acetic and formic, as well as others of a different kind, have lately been found by Scherer in the waters of Bruckenau. The principle termed zoogine or glairine, already alluded to, deserves consideration, and so much weight has been attached to it, that in artificial sulphur baths animal gelatine is sometimes

substituted for it. (Several species of *confervæ* have been found in this substance; *Calothrite nivea* in the sulphur springs of Yorkshirc, Durham and Aix-la-Chapelle; also in the hot sulphur springs of Greoult in Provence; *Oscillaria labyrinthiformis*, the *Tremella thermalis* of some, one of the most common species, in several of the continental thermal-sulphur and other springs. But these *confervæ* are not the sole constituents of this matter. An animal principle also exists in many cases which some have supposed to be derived from organic remains. It is that which gives the odor of chicken broth, or bad broth much rotted, as one writer calls it, to such waters as the Kochbrunnen at Wiesbaden.)

3. Of the Applications of Mineral Waters, and their Use in the Cure of Disease.—Their use is external and internal. The external use of mineral waters is almost confined to the thermal waters, and can almost only be obtained at the springs themselves, because many springs change their composition when evaporated—excepted from this are the spring salts of Marienbad, Carlsbad, which are used to an enormous extent in Europe for all the diseases for which these spring waters are also taken internally. Here the alleged superiority of natural heat over artificial again becomes a question, several of the thermal springs being nearly pure water. How much of the superiority of these baths may be ascribed to the same cause as those which tell in favor of mineral waters generally—as change of air and scene, and improved regimen—it is most difficult to say. In speaking of the waters of Lenkin the Vallais, Sir John Forbes has some excellent observations on this point in his “Physieian’s Holiday.” The springs are merely pure water, and if of ordinary temperature might be used as good drinking water. They vary in temperature from 95 to 124 degrees. The baths are employed for many chronic diseases, but their greatest reputation is in cutaneous diseases, scrofula, chronic rheumatism and indolent gout. The effect of such bathing is to stimulate greatly the pores of the skin, and so to cause free perspiration, thereby carrying off effete principle from the system, and causing a derivation from the internal organs, as the liver, lungs and kidneys; increasing also the energy of the heart’s action. Hence the thermal springs are chiefly employed in gout and rheumatism of a chronic character, in skin diseases, diseases of the joints, old wounds and diseases of the bones, tumors of all kinds, and sometimes in dyspepsia. By increasing the energy of the circulation, they tend to produce absorption. In kidney diseases, diabetes, and in chronic dropsical affections, where there is little or no disease of the heart, those springs which are sulphuretted possess, in addition to their heat, a principal, sulphuretted hydrogen, which applied in this way, powerfully excites the skin, and is perhaps absorbed into the system. This class of water is especially beneficial in skin diseases and in chronic rheumatism. Of the effect of other gases, as carburetted hydrogen, azote and carbonic acid, in thermal springs little is known, except that it produces a prickling sensation on the surface of the body, which it greatly stimulates.

Cold sulphuretted waters are sometimes heated for baths, as is practiced at Harrowgate, England, but there is in this case much escape of the sulphuretted hydrogen. This remedy is chiefly used in skin diseases, chronic liver diseases and chronic rheumatism. Few of the ordinary cold waters are used externally.

With regard to the action of cold mineral waters, it is generally what is termed alterative or tonic. In the former case the fluids are altered in character, and this is mostly done by exciting the secretions, especially those of the skin and kidneys. The effect of this increased secretion is to remove more quickly from the system the worn out constituents of the frame, and with them many morbid elements, and thus give fair play to the vital forces of the system, if these still retain sufficient energy to set about the work of reparation. Many of the saline waters, especially those containing alkaline sulphates and muriates, associated with sulphuretted hydrogen or without it, act powerfully on the bowels and promote the action of the liver. Of this class are Harrogate and Cheltenham, in England, Kissingen, Pullna, Hunyadi János, Ems, Friedrichshall, Carlsbad, which is, however, also a thermal water. (Carlsbad water contains a large quantity of carbonic acid, and is remarkable for the variety of its contents: manganese and iron, iodine and bromine, arsenic and boracic acid, copper, lead, tin and antimony, are among these. Perhaps the variety of the constituents has to do with the number of diseases in which these waters are found beneficial. Two of their best ascertained beneficial effects are in cases of recently united fractures, in consolidating the callous and in reducing enlarged livers). The saline muriated waters, many of which contain traces of iodine and bromine, besides their alterative properties, act as tonics, and are particularly suited for scrofulous affections, especially if they contain iron. In many of these waters it is possible for a patient to take into the system in the course of the day a medicinal dose of the earthy muriates long ago recommended by Hufeland as powerful remedies in scrofula, and in addition to these large quantities of muriate of soda, also a remedy in scrofula, with small quantities of bromides and iodines, whose efficacy in this class of diseases is undoubted. And it is a curious fact that the springs in Piedmont, in which iodine was first discovered by M. Canter, have been long renowned in scrofula.

The virtues of chalybeate waters are popularly appreciated, and the diseases in which they are beneficial generally known. They act by strengthening the tone of the stomach, and perhaps by some chemico-vital influence in increasing the number of red particles in the blood, in which iron forms an important ingredient, and has been supposed by Liebig to perform an active part in the phenomena of respiration. Certain it is that of all the class of tonics, none equal iron in giving a healthy bloom to the complexion. The use of chalybeates is liable, however, to congest the head, and therefore they should be employed with caution where there is any tendency to such congestion. The waters containing iron are among the few requiring some kind of medicinal preparation for their use. The bowels should be well opened previously, if possible, by some mild preparation, as the compound rhubarb pill, and their state should be attended to while the use of the water is continued. In waters containing the sulphate alumina is often present, which makes it the more requisite to observe this caution. The dose of the sulphate should not exceed one, or at most, two grains twice a day. In those waters which contain manganese as well, it may reckon as so much iron. Very powerful effects indeed are often obtained from such waters in chlorosis, anæmia, general debility, etc. (It has been proved by the experiments of Andral, Gavarret, Becquerel and others, that of 1,000 parts of blood the quantity of red globules, which was 46.6 before the use of the pre-

parations of iron, was augmented by the use of this agent to 95.7. In some cases under the use of iron the solids of the blood increase by one-half, while the water diminished in the proportion of 871 to 806.) The most wonderful results known have been obtained from the water of Pymont, which is the Mecca of all chlorotic and anæmic patients in Europe, especially women and children.

Among the prodigious list of diseases which have been supposed to be benefited by the use of mineral waters, may be enumerated phthisis and chronic bronchitis. Some of the mild thermal waters, as those of Wiesbaden, taken internally, have been found beneficial in allaying pulmonary irritations in these diseases. Hot bathing in such cases is a very dangerous remedy. Chalybeate waters in incipient phthisis have been often found beneficial; but *in this class of diseases*, as a general rule, removal to a spa should only take place when the situation affords a favorable change in hygienic conditions. The same may be said of asthma and diseases of the heart. In diarrhœa from debility, the strong astringent ferruginous waters, especially those which contain sulphate of iron and alumina, have been found beneficial. In constipation, hypochondriasis, enlargement of the liver and spleen, biliary calculi, all the saline waters, both sulphated and muriated, thermal or impregnated with sulphuretted hydrogen and carbonic acid gas, are useful, and in biliary calculi the alkaline waters, as those of Pullna, Ofen, Carlsbad and Vichy, have been found especially valuable. In catarrh of the bladder, gravel and urinary calculi, mild thermal waters, baths of these, and alkaline saline waters, especially those of Selters, Ems, Giesshübel, Vichy and Carlsbad, have been attended with the best results. In amenorrhœa and dysmenorrhœa: chalybeates; in the latter, thermal waters externally and internally; in the former, and in cases of sterility, sea bathing, especially combined with the use of the chalybeates, should be employed. The same have been found useful in certain male affections of a sexual character. In diseases of the skin especially the sulphuretted waters should be used externally and internally. In chronic rheumatism and gout the thermal waters are the best. In these diseases the principal springs are in Germany, Marienbad, Wildungen, Kissingen; in France, Barèges; in England, Buxton and Bath. Where gouty deposits are formed, there is little chance of their removal by the use of any mineral water. In those formidable diseases, diabetes and albuminaria, thermal waters (in the former especially, the waters of Carlsbad, Kissingen and Vichy) should be employed. In old wounds, and the results of contusions and fractures, the same class of waters have been found beneficial.

It has been a question how far artificial waters are able to supply the place of the natural springs. In point of fact, most of the natural mineral waters can be imitated with sufficient exactitude, but still long clinical practical experience has shown that no artificial water comes up in point of curative properties to those made in nature's laboratory. Manufactured waters are used to a large extent for want of a better knowledge. The medical profession do not prescribe them, knowing well it is as impossible to manufacture a mineral water to equal the natural as it is to manufacture a wine equal to nature's product. The question of cost is not taken into consideration when life is at stake. All the waters we have treated upon have been thoroughly tested by the most eminent physicians of the day, and no water has received so large a patronage as

the Apollinaris, the sales of which are increasing immensely upon its great merits. Many waters, however, will not keep their properties for any great length of time, and it is of the utmost importance to have them as fresh as possible. To obtain this latter result we have made contracts with different railroads in Germany, by which they forward mineral waters to our shipping agents at the different ports, at the lowest rates, thus enabling us to lay down small quantities at the same low rates as other houses would have to pay for car loads. While other houses at *certain* times can supply mineral waters just as well as we can, we can at *all times* guarantee the best, fresher filling of all our mineral waters.

We have enumerated the properties of various foreign mineral waters. From these we now pass on to the waters of the United States. To classify them in their proper order is a task we do not intend to undertake. As far as it lays in our knowledge we give them a passing notice. It is variously stated we have waters to equal the foreign. In many respects we have, for certain diseases, but as none have been so fully tested as the foreign (excepting the waters of Saratoga), we can only take a general account. Many of our readers are better acquainted with the valuable properties of the waters of the United States than we are.

The waters better known are those of Saratoga, viz.: Congress, Empire, Columbian and Hathorn Springs. They are effectual in diseases of the liver, spleen and skin; also in neuralgia, rheumatic and dyspeptic troubles.

The Saratoga Vichy is an alkaline water. Its properties are lithia, soda, magnesia and lime—valuable when used for impoverished state of the blood, dyspepsia and bilious troubles.

There are many other springs at Saratoga, the properties of which it is not necessary for us to enter upon. Of sulphur springs in general use we have Richfield, Sharon, Massena, White Sulphur and Blue Lick. The properties of these waters are well known. Waters for kidney and urinary troubles of late years have become much used, viz.: Buffalo, Lithia, Bethesda and Poland. Numbers of other springs are known in their distinctive locality throughout the United States. We cannot say more in regard to the various domestic waters, all of which claim and possess valuable properties.

The following is a list of the principal mineral waters, of which we keep a well assorted stock at all times, and hoping for the continuance of your patronage, we promise prompt execution of your orders, and request correspondence from new friends. We are always willing to cheerfully give quotations or any information desired by them, and remain,

Very truly yours,

P. SCHERER & CO., Importers,  
New York.

LIST AND DESCRIPTION  
OF  
IMPORTED AND DOMESTIC  
MINERAL WATERS.

KEPT CONSTANTLY FRESH, ON HAND BY

P. SCHERER & CO., Importers,

NEW YORK.

**AACHNER (Aix-la-Chapelle) WATER**

Is especially indicated in cases of Gout, Rheumatism, remnants of Syphilis, consequence of the continued use of Mercurials, also Chronic Diseases of the Air Passages and Abdominal Cavity, Stiffness of Joints, etc.

This water owes its exhilarating and refreshing influence to a large amount of Carbonic Acid, its resolvent and tonic action to the different salts and its especially strengthening influence to the bi-Carbonate of the Protoxide of Iron and to another most beneficial Iron Salt very rarely met with, the Arseniate of the Protoxide of Iron.

It is used with great advantage in Chronic Catarrh of Larynx and Pharynx, and Asthma. Analysis by Dullor in 10,000 parts:

Soda bi-Carbon.....	12.1607
“ Sulphas.....	6.9807
Chloride Sodium.....	1.1650
“ Potassium.....	0.0450
Carbonate Lime.....	4.8590
Phosphate “.....	0.0667
Carbon Magnes.....	1.5400
“ Iron.....	0.2553
“ Manganese.....	0.276
Arseniate Iron.....	0.0154
Silicic Acid.....	0.9095

In cases of 50 quart bottles.

**APOLLINARIS WATER**

Is bottled and imported from Apollinaris Brunner, Ahrweiler, Germany; it is exceptionally valuable and pleasant as a table water, in hygienic as well as dietetic respects; its pleasant taste and richness in pure carbonic acid gas favorably distinguish it from other similar mineral waters. Being a refreshing beverage, this water is mostly used as a table water, and exerts also some favorable influences as adjuvant in various complaints and diseases. “Exhilarating; good for dyspepsia and loss of appetite.”—P. SQUIRE, Chemist to the Queen. “The type of purity.”—PROF. BARTLETT, F.C.S. “The exquisite

Apollinaris."—DR. MILNER FOTHERGILL. Testimony in favor of this celebrated water has been given by some of the most eminent physicians of the day; therefore it is impossible for us to say more in regard to a water so well known.

This refreshing beverage shows in 10,000 parts :

FIXED CONSTITUENTS.

Carbonate of Soda.....	12.57
Chloride of Sodium.....	4.66
Sulphate of Soda.....	3.00
Phosphate of Soda.....	Traces
Salts of Potash.....	Traces
Carbonate of Magnesia.....	4.42
Carbonate of Lime.....	0.59
Oxide of Iron, with Alumina.....	0.20
Silicic Acid.....	0.03
	<hr/>
	25.52

VOLATILE CONSTITUENTS.

Free and semi-combined Carbonic Acid.....	27.76
Combined Carbonic Acid.....	8.07
	<hr/>
	35.83

It is mostly used in cases of nervous irritation attended with Dyspepsia.

In cases of 50 quart bottles.  
" " 100 pint bottles.

In cases of 50 quart jugs.  
" " 50 pint jugs.

## BILIN MINERAL WATER.

The Springs of Bilin are situated in Bohemia, nine hours from the city of Prague, and are celebrated for their excellent mineral waters, produced by four springs, of which the most prominent is the so-called "Joseph spring." On account of the large volumes of carbonate of soda and carbonate acids contained in said water, the Bilin Spring is one of the most prominent mineral springs in Germany and Europe, and is only surpassed by the celebrated springs of Vichy, in France. The application and drinking of the water is of greatest usefulness in Catarrhs and affections of the Bronchial System, the bladder, the stomach, and in Bright's Disease of kidneys, gout, rheumatism, in the beginning of the stone disease, scrofula, and in the first stages of tubercula.

The composition of the Bilin water is found by Prof. Redtenbacher as follows:

Carbonate of Sodium.....	30.035
" Lime.....	4.024
" Magnesia.....	1.431
" Iron.....	0.094
" Lithia.....	0.188
Sulphate of Soda.....	8.260
" Potash.....	1.283
Chloride of Sodium.....	3.823
" Lime.....	0.084
Silica.....	0.317
	<hr/>
Solid parts.....	49.598
Free Carbonic Acid.....	17.247
Combined Carbonic Acid.....	15.092
	<hr/>
Total of parts.....	81.937

In cases of 50 quart bottles.

## BIRMENSTORF BITTER-WATER.

FROM CANTON, AARGAU, SWITZERLAND.

The Birmenstorf Bitter-water is a natural mineral water; its healing and purgative effect has been acknowledged by the first medical authorities of Switzerland and foreign countries. In all cases in which "Bitter-waters" are generally used, whether as a simple purgative or in special cases, its extraordinary success is unquestioned, and exceeds all known bitter-waters of Bohemia, and is quite similar to those of Hungary.

It has been chiefly employed for the following diseases, and always with good success; for example, against habitual costiveness with hypochondria, jaundice, subacute inflammation of the liver, enlargement of the liver, different attacks of hæmorrhoids, the formation of gravel in the bladder, fatty degeneration of the heart and the diseases of the female organs, etc. Instead of all further recommendations we give in special circular a few opinions of several practical physicians, who by conviction have employed the bitter-water of Birmenstorf for years in their practice, and who recommend it for its sanatory power and beneficent action.

	BIRMEN- STORF	S A I D S C H Ü T Z			SEID- LITZ	P U L L N A	
	BOLLEY	STEINMANN <sup>4</sup>	STRUVE 3	BERCELIUS 1	BOUILLON LAGRANGE	DARRUEL 2	STRUVE 3
Sulphate potash.....	0.1042	2.986	0.637	0.5331	0.0000	0.000	0.623
“ soda.....	7.0356	3.530	3.009	0.0940	0.3230	9.682	16.119
“ lime.....	1.2692	0.325	0.195	1.3122	0.460	0.938	0.339
“ strontian....	.....	.....	0.006	.....	.....	.....	.....
“ magnesia....	22.0135	10.252	10.833	10.9592	15.624	16.476	12.120
Nitrate magnesia....	0.0000	2.636	1.029	3.2778	0.000	0.000	0.000
Chlorure sodium....	0.0000	.....	.....	.....	.....	3.000	.....
“ magnesium	0.4604	0.339	0.212	0.2825	0.000	1.860	2.560
Carbonate lime.....	0.0133	0.629	0.899	0.0900	0.22	0.010	0.100
“ magnesia .	0.0324	0.143	.....	0.6492	0.141	0.540	0.848
“ strontian...	.....	0.003	.....	.....	.....	.....	.....
Protoxide iron.....	.....	0.014	.....	.....	.....	.....	.....
“ mangan....	.....	0.004	.....	indices	.....	.....	.....
Magnesia.....	0.1010	0.000	.....	0.1389	.....	.....	.....
Phosphor lime.....	0.0000	0.000	.....	0.000	0.000	.....	.....
Peroxide iron.....	0.0107	0.000	0.002	indices	0.000	.....	.....
Phosphate magnesia .	0.0000	0.002	0.002	0.000	.....	.....	.....
Aluminium.....	0.0277	0.000	0.001	.....	.....	.....	.....
Silicate.....	0.0302	0.008	.....	0.0047	0.000	0.000	0.023
Resinous matter.....	0.0000	0.000	0.015	0.0000	0.084	.....	.....
Humus.....	0.0000	0.050	0.000	.....	.....	0.000	.....
	31.0982	20.921	16.845	17.2519	16.8520	32.506	32.732

In cases of 50 quart bottles.

## CARLSBAD THERMAL WATER.

FROM CARLSBAD (BOHEMIA, AUSTRIA).

The springs of Carlsbad are termed Alkaline-Saline, and are held in the highest estimation by the medical profession and the public.

The water is clear and colorless, without any characteristic smell, and with a slight acidulous taste.

The specific gravity of these waters, according to Berzelius, is 18 degrees C. 1004.975.

Professor Ehrmann has proved by the use of the Electrometer and Magnetic Needle that electro-magnetic streams of a negative character issue from the Springs.

It is in respect to temperature that the various springs chiefly differ, ranging as they do from 32 degrees R. (in the Kaiserquelle) to 60 degrees R. (in the Sprudel), and it is on the temperature that the slight chemical differences depend.

There are no sources which can be described as relatively weaker or stronger, but only as cooler or warmer—the former containing a greater, and the latter a smaller quantity of carbonic acid.

The various analyses hitherto made demonstrate the perfect identity of the respective springs.

The analysis of Professor Ragsky, in 1862, gave the following results:

In 16 ozs. = 7,630 grains, the following constituents were found:—

Sulphate of Potash .....	1.2564	grains.
Sulphate of Soda .....	18.2160	“
Chloride of Sodium .....	7.9156	“
Carbonate of Soda .....	10.4593	“
Carbonate of Lime .....	2.2870	“
Carbonate of Magnesia .....	0.9523	“
Carbonate of Strontia .....	0.0061	“
Carbonate of Iron .....	0.0215	“
Carbonate of Manganese .....	0.0046	“
Phosphate of Alumina .....	0.0030	“
Phosphate of Lime .....	0.0015	“
Fluoride of Calcium .....	0.0276	“
Silica .....	0.5590	“
Total solid parts .....	41.7099	“
Free and half-free Carbonic Acid .....	5.8670	“

or 11,892 cubic inches, at a temperature of 0 degrees, and at a barometrical height of 0.76 M.

The chief agents of therapeutical efficacy of the hot wells of Carlsbad are the sulphate of soda, the chloride of sodium, the carbonate of soda, and the high temperature.

Medical experience shows that the Carlsbad waters relieve pain and cramps proceeding from heartburn, gall-stones, colics, bilious attacks, etc., increase the secretions of the respiratory organs and stomach, and promote the alvine evacuations, causing the latter to be regular and easy.

In cases where the intestinal canal has been impaired by purgatives, the effect of the water does not become manifest until taken for some time, and much benefit is derived by the addition of Sprudel salt to the water; whilst, on the contrary, persons of weak or delicate constitution generally suffer from diarrhoea at the beginning of the “cure.”

The Carlsbad waters also limit the alvine evacuations, and more especially where chronic diarrhoea has originated from hyper-oxygenation of the intestinal secretions. The amelioration in respect to the diarrhoea continues long after the discontinuance of the use of the waters. In cases where the alvine evacua-

tions or respiratory secretions are increased by the use of the waters, they also increase in a slight degree the secretion of the kidneys.

They regulate and increase the secretions of the liver or of any of its component parts (including the coloring ingredients—"gall-pigment"), even in cases where there is no evident liver complaint particularly requiring the waters; for example, in simple cases of jaundice, produced by any violent emotions of the mind.

Carlsbad has obtained a world-wide reputation for the cure of diabetes.

The waters exercise an influence on the absorption of adipose or fatty formations, such as are found at times in the liver, etc., frequently causing a rapid absorption of the diseased products.

They exercise also considerable influence in respect to a variety of complaints arising from inefficiency of change of substance, or from defective oxidation, as in gout, which, more particularly in its primary stage, is generally relieved by the use of the above waters.

Diseases in which the Carlsbad waters are strongly recommended are

**STOMACH COMPLAINTS.**—Chronic catarrh, heartburn, dyspepsia.

**BOWEL COMPLAINTS.**—Chronic costiveness, chronic diarrhœa.

**LIVER COMPLAINTS.**—Hypertrophy of the liver, caused by obstruction of the portal veins, when not caused by organic disease; fatty liver; jaundice resulting from congestion or gall-stones.

**DIABETES MELLITUS.**—Not only the general symptoms, such as tormenting thirst, excessive appetite, costiveness and dry skin, often disappear in a very short time, but the sugar in the urine is also considerably lessened, and even totally disappears after a longer or shorter use of these waters.

**COMPLAINTS OF THE SPLEEN.**—Congestion, tumor, or the so-called "ague cake" after intermittent fevers, typhus, etc., from residence in hot climates or on marshy soil.

**COMPLAINTS OF THE KIDNEYS AND URINARY ORGANS.**—Gravel, sand in the urine, stone in the bladder, chronic catarrh of the kidneys or bladder.

**COMPLAINTS OF THE PROSTATE.**—Chronic enlargement of the prostate kept up by congestion, habitual costiveness, piles, etc.

**GOUT.**—Especially in the early stages.

## DRINKING THE WATERS, DIET, SMOKING.

The usual dose is one bottle per diem—equal to four small tumblers—to be taken before breakfast, on an empty stomach. The water must be imbibed slowly, and an interval of from fifteen to thirty minutes (or more, if necessary) should elapse between each glass, to admit of its being properly digested. During these intervals some bodily exercise may be had recourse to, but there is no necessity for it, and in any case, it must be of a moderate kind.

It is not advisable to drink the waters during the other portions of the day, or in the evening.

Patients should not take breakfast until fully half an hour has elapsed after drinking the last glass.

The rules we lay down for a Carlsbad "cure" are based on general dietary principles, keeping in view the nature of each complaint and the chemical con-

stitution and therapeutic tendency of the Carlsbad waters. It is evident that patients must refrain, not only from such nourishments as, on account of their frequent use, may be set down as the originating cause or basis of their complaints, but also from such as neutralize the chemical efficacy of the waters, special care being taken to limit the quantity of such kinds of food as are allowed. As the waters promote secretions, loosen obstructions, and reduce obesity, as well as agglutinate the acids of the first course, and diminish the adipose organic substance, every kind of food of a nature to impair or prevent the action of the springs in question must be avoided.

The following descriptions of food are absolutely forbidden :

Fat, acid and acid-producing food ; salt, smoked or pickled meat ; sausages, heavy fish, strongly spiced dishes, etc., etc. Well fermented beer and a light kind of wine are allowed in small quantities, but spirits should be strictly avoided. Supper should be a moderate meal, and not taken at too late an hour.

Only a light kind of tobacco may be smoked, and none whatever previously to or whilst taking the waters, nor for some little time afterwards.

*When taken cold, the Carlsbad waters are more aperient than when taken hot*; consequently, in their former character they are to be preferred in the preliminary cure (Vorkur) when employed by plethoric persons, or by such as suffer from obstinate chronic costiveness.

Generally speaking, from thirty to fifty bottles are requisite for a "course." A bottle contains four tumblers, each tumbler six ounces.

The heating of the mineral water is effected in the following manner :

Open the bottle, cork it with a light cork, place it in boiling water and keep it there until the required temperature, as indicated on each bottle, is obtained.

In order to increase the aperient efficacy of the exported waters, it will only be necessary to add a teaspoonful of "Sprudel salt." This salt, which has been known and celebrated for ages, for its aperient and mild purgative power, cannot be replaced by Glauber's salt, which forms only one of the constituent parts of the former. The genuine, unadulterated Sprudel salt is produced only in Carlsbad, and under the supervision of the municipal authorities, and is sold only in glass bottles of 500, 250 or 125 grammes each. It is neutral white and transparent, and forms, when crystallized, hexagonal prisms of an oblong shape. Its taste is bitter and salty. It has a mildly dissolving effect.

In cases of 50 quart bottles.

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## EGER FRANZENSBRUNNEN.

The springs of the Franzensbrunnen-water are situated at *Franzensbad*, a town in immediate vicinity of the city of *Eger*, in Bohemia. Said watering place had centuries ago acquired a world-wide fame for the medicinal merits and superiority of its mineral waters and baths, as well as for the specific compounds of its Trousaltmoor (eisensaltmoor); and has within the last twenty years become one of the most frequented and most fashionable resorts in Austria.

They are not identical in their composition, but all contain parts of iron, the most considerable quantity being found in the *Wieserquelle*, and in the *Salzquelle* only little of it, the latter being highly rich in carbonic acid, sulphate of soda, bicarbonate of soda and chloride of sodium.

According to Tromsdorff and Berzelius, the analyses of the *Franzensquelle*, *Louisenquelle* and *Kalte Sprudel* are as follows:

## SOLIDS IN 16 OUNCES.

	FRANZENSQUELLE, 52.9 degrees.	KALTE SPRUDEL, 51 degrees.	LOUISENQUELLE, 53.9 degrees.
Sulphate of Soda.....	24.50	26.930	21.416
Chloride of Sodium.....	9.23	8.600	6.766
Carbonate of Soda.....	5.17	7.173	5.498
Carbonate of Lime.....	1.82	1.600	1.600
Carbonate of Strontia.....	0.003	0.001	0.
Carbonate of Magnesia.....	0.67	0.013	0.
Carbonate of Lithia.....	0.03	0.	0.
Carbonate of Protoxide of Iron.....	0.23	0.200	0.328
Carbonate of Protoxide of Magnesia....	0.04	0.004	0.
Phosphate of Lime and Magnesia.....	0.032	0.028	0.
Silica.....	0.47	0.056	0.228
Total.....	42.180	44.606	35.836
GAS.—Carbonic Acid, cubic inch.....	40.84	39.40	32.53

*Franzensquelle*, being considered the most prominent of the springs, has been known as spending one of the most digestible, ferruginous mineral waters; has proved to exercise the most beneficial and curative influence in diseases originating from defective sanguification, in such forms of diseases and complaints caused by considerable loss of blood and vires, especially after childbed, in nervous fevers, in all forms of scrofula, rachitis, and in most cases of general debility.

In cases of 50 quart bottles.

## EMSER SPRING WATER.

FROM EMS, SITUATED IN THE PROVINCE OF HESSEN, NASSAU, ON THE BEAUTIFUL RIVER LAHN.

The Emser mineral water is used with good result in various diseases, but it is particularly celebrated on account of its specific effect against catarrhal and other affections of the mucous lining of the throat and lungs, and all the diseases peculiar to them. It has for a number of years been a favorite recuperating spring of all the crowned heads of Europe, and its effect upon aged people seems to be a prompt alleviation of all diseases like piles and habitual constipation. It is furthermore recommended by specialists in Europe for all female diseases, and particularly in cases of hypertrophy and swelling of the uterus, and sterility subsequent to this. The "Victoria" Spring especially has a European reputation for these last diseases.

It is the one which is given to all patients who have a tendency towards miscarriage, or difficulties during menstruation. Under the supervision of the Government the spring-water, Ems, is evaporated and formed into lozenges,

which offer the effective solid parts of the water in a very handy and concentrated form, and the sale of which, under the name Pastilles of Ems, has reached a consumption of over 4,000,000 boxes per year. We always have them on hand fresh.

## ANALYSIS IN 10,000 PARTS.

Temperature.....	35.16
Bicarbonate of Soda.....	19.7901
Bicarbonate of Lithium.....	0.0404
Bicarbonate of Ammonium.....	0.0235
Sulphate of Soda.....	0.3354
Chloride of Soda.....	9.8312
Bromide of Soda.....	0.0034
Iodide of Soda.....	0.0002
Phosphate of Soda.....	0.0146
Sulphate of Potash.....	0.3677
Bicarbonate of Lime.....	2.1617
Bicarbonate of Magnesia.....	2.0698
Free Carbonic Acid.....	10.3997

In baskets of 50 quart jugs.

In baskets of 50 pint jugs.

## FRIEDRICHSHALL BITTER-WATER.

FROM FRIEDRICHSHALL, NEAR HILDENBURG, HAUSEN, PROVINCE SACHSEN.

Regulates the functions of the digestive organs, furthers the process of absorption, regulates the bowels and the circulation of the blood, promoting the renovation of the organic tissues, and thus mitigates and cures many diseases.

It is particularly recommended as an effectual remedy in disorders accompanied by inactivity of the intestinal canal, producing habitual or temporary constipation.

The dose of the water is determined by the purgative effect in each individual case, as may be gathered from the following general directions:

The Friedrichshall Bitter-water will generally produce watery evacuations, in the dose of from a half to one tumblerful. When used for some time this dose will only produce one or two easy motions.

The usual doses are: for children under 8 years of age, one to two tablespoonfuls; from 8 to 15 years, from four to six tablespoonfuls; and for adults, one gill or half a tumblerful, in all cases to be taken early in the morning. When it produces diarrhoea the dose must be diminished; if no effect another dose should be administered before going to bed; and if this is not sufficient, another at noon the next day.

It is only in exceptional cases that the water taken in the above mentioned quantities does not succeed. With a little attention, however, it is easy to regulate the dose so as to produce only one or two mild evacuations.

The Friedrichshall Bitter-water should not be taken too cold; the best temperature is from 50 to 60 degrees Fahrenheit. If its taste is found slightly disagreeable, a few drops of lemon juice or a small quantity of red wine may be added.

## ANALYSIS IN 10,000 PARTS.

Sulphate of Magnesia.....	39.55
Sulphate of Soda.....	46.51
Sulphate of Potash.....	1.52
Chloride of Sodium.....	61.10
Carbonate of Lime.....	0.11
Carbonate of Magnesia.....	3.99
Sulphate of Lime.....	10.34
Chloride of Magnesium.....	30.25
Bromate of Magnesia.....	0.87

194.24

Carbonic Acid, free and half combined.....	5.32
Oxide of Iron and Argillaceous Earth.....	latent

In cases of 24 pints.  
In cases of 30 quarts.

## GISSHÜBLER,

FROM GIESHUBEL, NEAR CARLSBAD—THE PUREST ALKALINE ACIDULOUS SPRING.

The *Giesshubler* Water, according to the exhaustive *analysis* lately made by *Professor Liebig* and others, and with respect to the widely published results of trials made with it by experienced clinical teachers (*Krompholz*, *Oppolzer*, *Losemer*, *Seegen*), forms not only a *highly valued medical remedy*, but also an *exquisite beverage*. It is generally applicable in cases of *catarrhal affections of the stomach and intestines, sometimes followed by jaundice; dyspepsia, heartburn, vomiting and diarrhæa, caused by a surplus of acid; gravel in the kidneys, piles, gout and catarrhal affections of the bladder.*

The *Giesshubler*, on account of its agreeable taste and its mild and yet decided action, is especially adapted for children, delicate and weak ladies, and for gentlemen enervated by long standing illness. The patients at *Carlsbad* use it exclusively as their *favorite beverage*, and are strongly advised to continue its use at home.

The *Giesshubler* stands *foremost among all other natural sodaic waters* as a *common beverage*, with or apart from meals, because it quenches the thirst and causes a *highly refreshing, strengthening and invigorating sensation*. It may be taken alone or mixed with wine, either with or without sugar, and yields an excellent drink, similar to Champagne, especially suited for the hot season.

The *Giesshubler* keeps unchanged for years, if stored in cool places, the bottles being laid on their side either on dry sand or on a wooden rack.

According to the analysis by PROFESSOR LIEBIG, the proportion of the solid and liquid constituents of this water is shown in the following table:

TEMPERATURE 7.2 to 7.5 R = 45 to 45.5 DEGREES F.

	In 10,000 grammes.	In the pound = 7,860 grains.
Bicarbonate of Soda.....	12.622986	9.6944532
Chloride of Sodium.....	0.399775	0.3070264
Sulphate of Soda.....	0.489785	0.3761548
Sulphate of Potash.....	0.676734	0.5197317
Bicarbonate of Lime.....	3.619080	2.7794533
Bicarbonate of Magnesia.....	2.694628	2.0694743
Bicarbonate of Protoxide of Iron.....	0.061000	0.0468486

	In 10,000 grammes.	In the pound = 7,860 grains.
Bicarbonate of Protoxide of Manganese.....	0.048868	0.0375306
Silicic Acid.....	0.593333	0.4456797
Bicarbonate of Lithia.....	0.093957	0.0714685
Alumina.....	0.026250	0.0201600
Organic Matter.....	0.002666	0.0020474
<b>Total of Solid Constituents.....</b>	<b>21.329062</b>	<b>16.3700285</b>
Real free Carbonic Acid Gas.....	26.864270	20.6317593
<b>Total Constituents.....</b>	<b>48.193332</b>	<b>37.0017878</b>

Measured by volume, we find at the normal temperature and at the normal standard of the barometer:

- (a) Of real free Carbonic Acid in 10,000 cubic centimetres.....14,110.4 cubic cent.  
 In the pound = 32 cubic inches..... 45.15 cubic inches
- (b) Of so-called free, *i. e.*, free and half combined Carbonic Acid Gas in 10,000 cubic centimetres.....17,236.2 cubic cent.  
 In the pound = 32 cubic inches..... 55.15 cubic inches

*The taste of the GIESSHUBLER WATER is more prickling and agreeably refreshing than that of any other effervescing water containing Carbonic Acid; and is also free from bad taste or smell.*

The principal constituent of the GIESSHUBLER WATER is the BICARBONATE OF SODA, which is well known to be of the utmost importance to the human system. Contained in the blood, it is in close contact with the albuminates, keeps the caseine and fibrine in solution, is partly eliminated by the urine and partly by the intestinal organs in another chemical form, *i. e.*, with the bile as glycocholate and taurocholate of soda.

The water is more agreeable, far more effective, and preferred by all connoisseurs to Vichy or Seltzer water.

In cases of 50 quart bottles.

## HALLER IODINE WATER.

Upper Austria furnishes us the justly celebrated "Haller Iodine Water." This spring has been known for centuries, but only within the last 20 years has the Government thought it expedient to defray the expenses of making it a free and general bathing and drinking place for all patients whose diseases make it necessary to be treated by the administration of iodine or bromine in its original state dissolved in mineral waters. Its efficacy has particularly become famous in all forms of Scrofula, Rachitis, old Syphilis, Mercurial Cachexic, and all diseases of nervous irritation. The experience of many years shows that the Haller Iodine Water is a specific for the following complaints: Diseases of the Glandular System, Swelling, Hardenings, Enlargements and Inflammations, or Suppurations of the Lymphatic Glands in any part of the body.

Secondly—Diseases of the Skin, Mucous Membrane and the Cellular Tissue, such as Abscesses, Ulcers, Scrofula, Lupus, Scrofulosis, Elephantiasis and all enlargements or thickenings of the Mucous Membranes.

Thirdly—All Mercurial affections of the nasal or pharyngeal cavities.

Fourthly—Diseases of the Eyes and Ears, and Serofulous Inflammation have been cured with wonderful rapidity by the use of these waters.

Fifthly—It has also given the same result in Diseases of the Nose and Ears, where the tissues and bones were already attacked by Necrosis; Diseases of the sexual organs.

Sixthly—Enlargements or Hardenings of the Testicles, or inflammatory enlargements of the Prostate Glands, and Urinary difficulties consecutive to them. In Hypertrophy of the Uterus, Menstrual Anomalies, etc., it has been frequently observed that soft Fibroids of the Uterus and Ovaries diminish and eventually disappear entirely, and thus prevent the formation of the Ovarian Cysts.

Seventhly—In diseases of the bones and joints, in all cases of which the Haller Iodine water acts with equal certainty.

#### ANALYSIS IN 10,000 PARTS.

Chloride of Potassium.....	0.397
Chloride of Sodium.....	121.720
Chloride of Magnesium.....	2.426
Chloride of Calcium.....	4.009
Chloride of Ammonia.....	0.733
Bromide Magnesium.....	0.584
Iodide Magnesium.....	0.426
Carbonate of Iron.....	0.044
Alumina.....	0.147
Silica.....	0.249
	<hr/>
	130.715

In cases of 25 pint bottles.

## HOMBURGER BITTER-WATER.

FROM HOMBURG, A BEAUTIFUL TOWN SITUATED ON THE TANUS MOUNTAINS, PROVINCE HESSEN.

Is indicated in all affections of the Mucous Membrane, as Bronchial Catarrhs, Dyspepsial Catarrh of the Stomach, or Stomachic Intestinal Catarrh (particularly of the large intestines). Further, in enlargements and swellings of the Liver, Jaundice, Plethora, and their consequences; as obstinate Constipation, disturbances in the menstruation, and Piles, Gout and Congestions of the head or heart under certain conditions. It is to be used with the greatest care in organic diseases of the heart, Tuberculosis, Pneumonia, and especially in Inflammatory and Febrile diseases.

#### ANALYSIS IN 10,000 PARTS.

Chloride of Sodium.....	98.6090
Chloride of Potassium.....	3.4627
Chloride of Lithium.....	0.2163
Chloride of Ammonium.....	0.2189
Chloride of Calcium.....	6.8737
Chloride of Magnesium.....	7.2886
Iodide Magnesium.....	0.0003
Bromide Magnesium.....	0.0286

In hampers of 50 quart bottles.

## HUNYADI JANOS WATER,

FROM BUDA-PESTH, HUNGARY,

Is considered one of the best and cheapest natural aperients. The testimony of eminent medical men we give as follows: "The richest natural aperient water."—Baron Liebig, in *Lancet*. "Speedy, sure and gentle."—Prof. Roberts, M.D., F.R.C.P. "The potent Hunyadi Janos."—Dr. Milner Fothergill.

*Hunyadi Janos Mineral Water* is, according to opinions of eminent authorities, of some influence in congestive and gouty disorders, in chronic affections of the organs of respiration and circulation. It is also a remedy against hæmorrhoids, against portal and hepatic congestion, in bilious attacks, in many female disorders, and especially during pregnancy, in organic diseases resulting from fatty degeneration, in habitual constipation, and in the uric acid diathesis, and prevention of urinary calculi in treatment and against the evil consequences of indiscretion in diet.

### ANALYSIS IN 10,000 PARTS WERE FOUND:

Sulphate of Soda.....	160.58
Sulphate of Magnesia.....	159.148
Sulphate of Potash.....	0.849
Double Carbonate of Soda.....	13.050
Double Carbonate of Stronthian.....	0.270
Double Carbonate of Oxyde of Iron.....	0.006
Double Carbonate of Lime.....	7.960
Chloride of Soda.....	7.967
Silicious Salts.....	0.106
Carbonic Acid, free and half combined.....	5.226

In cases of 50 pint bottles.

In cases of 24 pint bottles.

It is most efficacious when taken in the morning, fasting, warmed to a temperature not below 60 degrees, or when an equal quantity of hot water is added to it.

## KISSINGEN WATER (Rakoczy.)

FROM BAVARIA.

The most important of all the springs of Kissingen which comprises all the curative properties is the Rakoezy. It is especially used in all diseases of the abdomen, which are caused by debility of the stomach, originating from irritations and weakness, and constipation of the peristaltic motion, causing Piles, habitual constipation, loss of appetite, Wind Colics, etc.

It is also used in trouble of Gall Stones and diseases of the Liver, and Jaundice, and especially as a specific in obesity. On account of the amount of Iron which it contains, it is not as weakening as a great many other waters, and is also used with great advantage in all diseases of the Kidneys and Bladder Stones, and affections of the Prostate Gland. It is an excellent remedy in diseases of the Skin, Impurity of the Complexion and Eruptions which are caused by digestive troubles. It ought to be taken in tumblers of one-half pint each, starting at first with two and gradually rising to four. This quantity is sufficient to produce one or two evacuations, which, with a majority of diseases in which the Rakoezy is used, is sufficient.

## ANALYSIS IN 7,680 PARTS.

Chloride of Calcium.....	2.2034
Bromide of Sodium.....	0.0644
Chloride of Lithium.....	0.1537
Sulphate of Magnesia.....	4.5088
Sulphate of Lime.....	2.9904
Carbonate of Lime.....	8.1482
Silicic Acid.....	0.0991
Chloride of Sodium.....	44.7133
Nitrate of Sodium.....	0.0715
Chloride of Magnesium.....	2.3331
Carbonate of Magnesium.....	0.1309
Phosphate of Lime.....	0.0431
Carbonate of Iron.....	0.2425
Ammoniac.....	0.0070
	65.7024

Iodide of Sodium, Bromide of Sodium, Sulphate of Strontia, Fluoride of Calcium, Phosphate of Calcium, Carbonate of Manganese.

In cases of 25 quart bottles.

## MARIENBAD KREUZBRUNNEN.

CROSS SPRINGS OF MARIENBAD.

This mineral water is by chemical analysis exhibited as a saline-chalybeate water, containing chiefly sulphate of soda and only a moderate quantity of carbonic acid and iron.

As, according to the experiments of PROFESSOR DONDERS and others, a solution of sulphate of soda is slowly absorbed (more slowly than a solution of common salt), it consequently acts on a great part of the intestines and has a sure opening effect, three glasses of six ounces each being generally sufficient for this purpose.

Such a quantity, as just mentioned, is almost entirely absorbed by the capillaries of the stomach and intestines, and acts on the blood and blood-vessels, first of the abdominal organs and then of all parts of the system, exciting and altering more or less their functions. The constituent parts of the water concerned in the formation or the functions of the blood and textures, may for such purposes be retained in the system, the rest of them are eliminated by the kidneys and other secretory organs.

When taken in a larger quantity—from four to six glasses—the mineral water proves a gentle, or more powerful purgative.

The Kreuzbrunnen counteracts excessive acidity in the stomach or other parts and in the chronic cases of inflammatory or gastritic dyspepsia it is a most appropriate remedy; nervous symptoms, such as cardialgia and vomiting, when they occur in such cases, often cease literally after the first glass.

The Kreuzbrunn water acts powerfully on the liver, the secretion of bile is augmented in cases where it was diminished, by sluggishness either of the circulation of blood through the organ, or of the secreting function itself, the volume of the enlarged liver is in general reduced and gallstones pretty frequently passed. Rather a stronger operation on the bowels improves an irritated or sub-inflammatory state of the organ in question.

The Kreuzbrunn water, acting as a moderate and peculiar internal stimulus on the blood-vessels of every part and on the part itself, improves the circulation of blood there when sluggish, or when the part is in a congested state. At the same time it undoubtedly renders the thickened blood fitter for circulation and unloads the blood-vessels of a part of their too abundant contents by augmented secretions.

A frequent cause and element of chronic complaints, and often the principal object of treatment, is abdominal plethora or congestion of the organs between which a communication exists, by means of the vena portæ—its roots and ramifications. Congestion in the roots of the portal vein and in the corresponding organs is unquestionably produced by disease of the liver, by sedentary habits, involving diminished respiration, by rich living and general plethora. Congestion of the abdominal organs is an almost constant element of the gouty constitution and leads to various diseases of the organs concerned. In the stomach and intestines it produces irritation and inflammation of the mucous membrane, Dyspepsia, Costiveness, Hæmorrhoidal symptoms and Piles; in the Liver, disturbed secretion of bile, engorgement and enlargement; in the Pelvic Organs, mucous discharges, engorgement of the Uterus, affection of the Urinary Bladder, etc. For the treatment of these disorders, the Kreuzbrunn water is a most appropriate remedy, and it is more particularly required when the habit of body is plethoric, and the abdominal congestion considerable or merging into a sub-inflammatory state.

#### ANALYSIS IN 10,000 PARTS.

Sulphate of Soda.....	38.040
Sulphate of Potash.....	0.401
Chloride of Sodium.....	13.065
Carbonate of Soda.....	9.024
Carbonate of Lithion.....	0.036
Carbonate of Lime.....	3.990
Carbonate of Strontian.....	0.006
Carbonate of Magnesia.....	3.332
Carbonate of Iron.....	0.270
Carbonate of Manganese.....	0.024
Phosphate of Alumina.....	0.038
Phosphate of Lime.....	0.614
Silicia.....	0.630
Extractive matter, Brom and Fluor-Combinations.....	0.056
	68.926
Free Carbonic Acid Gas in a hundred parts of water.....	.105

In cases of 50 quart bottles.

## KREUZNACHER MUTTERLAUGE.

IN THE RHINE PROVINCE OF PRUSSIA.

It is testified by experience of many years that the *Baths* prepared with this mineral water salt, called "*Kreuznacher Mutterlauge*," are of the greatest usefulness and efficacy. Therefore very large quantities of this Kreuznacher Mutterlauge are coming annually in the market for export to all quarters of the world, and are sold in tin cans at ca. 14 litre.

The water is a powerful specific in all forms of serofula, in all affections of

the mucous membranes, in chronic diseases of the eye and ear, in inflammations of the bones and muscles, rheumatism, in diseases of the skin, of the female constitution, especially in diseases of uterus, in gout; and not a specific in diseases of the heart, in inflammations and ulcerations of the intestinal organs.

The spring mostly in use is the Elizabethquelle, having a temperature of 10 degrees C., and contains in 10,000 parts, according to Loewig's analysis, the following components:

Chloride of Sodium.....	94.4000
Chloride of Calcium.....	17.4362
Chloride of Lithia.....	0.7989
Chloride of Potash.....	0.8125
Chloride of Magnesia.....	5.3038
Bromide Magnesium.....	0.3620
Iodine.....	0.0456
Carbonate of Lime.....	2.2044
Carbonate of Baryta.....	0.0221
Carbonate of Magnesia.....	0.1380
Protoxide of Iron.....	0.2005
Protoxide of Manganese.....	0.0078
Silica.....	0.0325
	0.1679
Total.....	121.9292

Water in cases of 50 quart bottles.  
Salt in cases of 10 pounds.

## VICHY MINERAL WATER.

In central France, department of Allier, we find, on an elevation of about 797 feet above the sea, the watering place of Vichy, about 216 miles south of Paris. In nearly every part of the civilized world the reputation of the baths and waters of Vichy is well established. There are nine springs in principal use, having not all the same temperature, for they differ from 53 to 110 degrees Fahrenheit. An unusual combination of a high degree of thermality, with a very large quantity of alkali, and with no inconsiderable parts of carbonic acid gas, and in some of the waters, with quantities of iron, renders this water palatable and exceedingly valuable for medicinal purposes.

THE HOPITAL.—Temperature 31 degrees C. (F. 87 degrees). This spring was formerly called the "*Gros-Boulet*," and is situated in the Place Rosalie. It produces 60,000 litres per day; a great quantity of these waters supply the baths which bear their name.

The water has a taste pronounced to be of sulphureted hydrogen, and has great analogy with the "*Grande-Grille*," but is less exciting and more adapted for delicate patients of nervous susceptibility or disposed to pulmonary congestion or hemorrhagè. It renders the best services in cases of indigestion, want of appetite and ovarian tumors, and is particularly applicable to jaundice and to certain diseases peculiar to women.

THE GRANDE-GRILLE.—Temperature 42 degrees C. This spring, which gives 98,000 litres per 24 hours, was formerly called the "*Gros-Bouillon*."

It is situated at the north-east angle of the north gallery of the 1st class establishment.

A portion of its water is used for drinking and the rest supplies the baths.

The water of the Grande-Grille is particularly employed with success for persons suffering from the digestive organs, congestion of the liver, spleen, obstructions of the viscera, biliary calculi, gravel, etc., etc. It occasionally causes a light purge. It does not undergo any alteration by transport in bottles.

THE CELESTINS comprise *three* springs: The old spring, which has a temperature of 12 degrees C. and gives 150 litres per day; that of the grotto, temperature 14 degrees, produces 7,000 litres per day; and the new spring, which was discovered in 1870, temperature 12 degrees, produces 16,000 litres. All three are situated at the extreme end of old Vichy, above the bridge of the Allier, to the south of the site of the convent of the Celestins. They are just below a fine park, on the right bank of the river.

The waters of the old and new springs are very agreeable, sparkling and slightly sourish: they are prescribed for gravel, calculi diabetie, gout, rheumatism, etc., etc.

THE HAUTERIVE SPRING.—Temperature 14 degrees C. It is situated at a distance of four and one-half kilometres from Vichy, and forms part of the concession to the Company.

It yields 30,000 litres per day. The chemical composition and virtues of the waters are the same as those of the Celestins.

The spring contains a greater quantity of carbonic acid, and is therefore more suited for foreign use and patients at a distance from the springs, on account of its portable qualities. Its remarkable sapidity and the ease with which it is supported by the stomach recommend it, in addition to its excellent therapeutic qualities. The waters of this spring are the best adapted for exportation. The total number of bottles exported during 1875 was 696,948.

#### CHEMICAL ANALYSIS OF THE SPRINGS BELONGING TO THE STATE.

QUANTITIES OF SALINE INGREDIENTS CONTAINED IN EACH LITRE OF THE SEVERAL SPRINGS.

	GRANDE GRILLE	HOPITAL	CELESTINS	HAUTERIVE
Free Carbonic Acid.....	.908	1.067	1.049	2.183
Bicarbonate of Soda.....	4.833	5.029	5.103	4.687
Bicarbonate of Potash.....	.352	.440	.315	.189
Bicarbonate of Magnesia.....	.303	.200	.328	.501
Bicarbonate of Strontia.....	.303	.005	.005	.003
Bicarbonate of Lime.....	.434	.570	.462	.432
Bicarbonate of Protoxide of Iron.....	.004	.004	.004	.017
Bicarbonate of Manganese.....	traces	traces	traces	traces
Sulphate of Soda.....	.291	.291	.291	.291
Phosphate.....	.130	.046	.091	.046
Arseniate.....	.002	.002	.002	.002
Borate.....	traces	traces	traces	traces
Chloride of Sodium.....	.534	.518	.534	.534
Silica.....	.070	.050	.060	.071
Organic Bit. Matter.....	traces	traces	traces	traces
Totals.....	7.914	8.222	8.224	8.956

## ACIDS AND BASES CONTAINED IN EACH LITRE OF THE SEVERAL SPRINGS.

	GRANDE GRILLE	HOPITAL	CELESTINS	HAUTER- IVE
Carbonic Acid.....	4.418	4.719	4.705	5.640
Sulphuric Acid.....	.164	.164	.164	.164
Phosphoric Acid.....	.070	.025	.050	.625
Arsenic Acid.....	.001	.001	.001	.001
Boric Acid.....	traces	traces	traces	traces
Hydrochloric Acid.....	.332	.324	.234	.334
Silica.....	.070	.050	.060	.071
Protoxide of Iron.....	.002	.002	.002	.008
Protoxide of Manganese.....	traces	traces	traces	traces
Lime.....	.169	.222	.180	.168
Strontia.....	.002	.003	.003	.002
Magnesia.....	.097	.064	.105	.160
Potash.....	.182	.228	.163	.098
Soda.....	2.488	2.500	2.560	2.368
Bituminous Matter.....	traces	traces	traces	traces
Totals.....	7.997	8.302	8.327	9.039

The best time for taking the waters at home is in the morning, fasting; but if that manner is attended with any inconvenience, they may be taken at meals; in the latter case they may be mixed with wine, spirits or tea.

In the different forms of Gravel and other forms of Kidney Disease, it has long been recognized that alkaline waters have a most surprising effect, and foremost among these is the ELISABETH WATER.

In diabetes the SAINTE MARIE water has been found very useful. This disease is the result of an imperfect assimilation caused by a deficiency of the natural alkaline elements existing in the system. By supplying this want the Sainte Marie waters restore the natural functions of assimilation, while at the same time the iron contained in it strengthens the whole system by enriching the blood, which is usually in a deteriorated condition.

## ANALYSES OF THE SPRINGS OF ELISABETH AND ST. MARIE, OWNED BY A COMPANY AT CUSSET, NEAR VICHY.

TABLE OF THE RESULTS OBTAINED FROM ONE LITRE OF WATER FROM EACH SPRING.

	ST. MARIE	ELISABETH
Temperature.....	16 degrees C.	16 degrees C.
Carbonic Acid Gas.....	0.610 gr.	0.280 gr.
Density.....	1.006	1.0057
Total Dry Residuum (1).....	5.77	5.14
Chloride of Sodium.....	0.515	0.503
Bicarbonate of Sodium.....	6.121	5.843
Bicarbonate of Potassium.....	0.258	"
Bicarbonate of Lithium.....	0.002	"
Bicarbonate of Magnesium.....	0.161	0.133
Bicarbonate of Calcium.....	0.353	0.365
Sesquioxide of Iron.....	0.033	0.010
Sesquioxide of Aluminium.....	0.0015	traces
Sulphate of Calcium.....	0.300	0.294
Silica.....	0.019	0.016
Arsenate of Sodium.....	0.002	0.002
Phosphoric Acid.....	traces	traces
Copper.....	traces	traces
Organic Matter.....	traces	traces

Vichy waters are in cases of 50 quart bottles.

## DIGESTIVE LOZENGES OF VICHY.

They are composed of a mixture of sugar and gum with natural salts extracted from the Vichy waters; it is to those salts which exist in the lozenges in a very large proportion that they owe their efficacy. The salts, as is generally known, are extracted from the springs by means of special evaporating apparatus; the State, in the interest of the public health, has imposed on the Company the control of a Government commissioner, charged with superintending the extraction of the salts and verifying their purity, and when chemically analyzed, are found to contain all the mineral properties of the Vichy waters.

### TO WHAT STOMACHS ARE THE VICHY LOZENGES SUITED?

The Vichy Lozenges should be taken by—

1. Those persons whose digestion is difficult, painful or laborious, and who feel after eating a weight on the stomach for a more or less considerable time (atonical dyspepsia).

2. By those persons in whom the digestion is accompanied by a greater or less generation of gas (flatulent dyspepsia).

In cases of slow or difficult digestion six or eight of the lozenges should be taken before each repast. Experience shows that alkalines taken fasting and in small doses increase the gastric juice, which is precisely what is wanting in those cases. (*Traité des maladies de l'estomac*.—Dr. Carnet, 1865).

If there is a generation of gas, the same dose of Vichy Lozenges should be taken after each repast.

This superabundance of gas often depends (when not arising from indigestible food) on the atony and inertia of the digestive organs. The lozenges assist the work of digestion and prevent the formation of gas.

The lozenges are flavored with peppermint, lemon, vanilla, rose, tolu, orange flowers or anisette; they may also be had unflavored.

The dose consists of six or eight taken before or after each meal.

## THE WILHELMSQUELLE.

The *Wilhelmsquelle* (Wilhelms-Spring) is located in the *Taunus Mountain*, at *Kronthal*, near Frankfort-on-the-Main. It mixes admirably with wines, liquors, fruit syrups and milk, without in the least deteriorating their color or flavor. It serves to stimulate gently the action of the bowels and of the glandular system, invigorates the blood and promotes digestion. It may also be considered almost a specific against gout, rheumatism, and certain forms of kidney diseases.

### ANALYSIS OF THE WILHELMSQUELLE,

MADE IN DECEMBER, 1878, AND JANUARY, 1879, BY PROF. FREKENIUS.

1,000 parts of weight contains the following constituents:

Temperature at the Spring . . . . .		13.54 degrees C. or 56.21 degrees F.
<small>SOLIDS.</small>		<small>GRAINS.</small>
Chloride of Sodium . . . . .		1.690965
Chloride of Potassium . . . . .		0.036578
Sulphate of Potassium . . . . .		0.023632
Bromide of Sodium . . . . .		0.000641

SOLIDS.	GRAINS.
Iodide of Sodium.....	0.000010
Phosphate of Sodium.....	0.000954
Carbonate of Sodium.....	0.051037
Carbonate of Lithium.....	0.003539
Carbonate of Barium.....	0.000385
Carbonate of Strontian.....	0.002019
Carbonate of Lime.....	0.418333
Carbonate of Magnesia.....	0.096472
Carbonate of Iron.....	0.029675
Carbonate of Manganese.....	0.002368
Silicic Acid.....	0.101090
<hr/>	
GASES: Total.....	2.457703
Carbonic Acid, combined with certain Carbonates to form Bicarbonates.....	0.270724
Free Carbonic Acid.....	2.249736
<hr/>	
Total per mille.....	4.978163

In cases of 50 quart bottles.

In cases of 100 pint bottles.

## SCHWALBACH STEEL WATER.

The city from which this water derives its name is *Schwalbach* or *Langenschwalbach*, in the Prussian province Hesse, Nassau, and is located two miles from Wiesbaden. There are seven mineral springs, but two of which are the most prominent, the "Stahlbrunnen" and the "Weinbrunnen." The composition of the waters of these two springs is, by the analyses of Prof. Frescanis, ascertained and fixed in the following proportions in 10,000 parts:

	STAHL- BRUNNEN	WEIN- BRUNNEN
Bicarbonate of Soda.....	0.2062	2.4534
Bicarbonate of Lime.....	2.2130	5.7212
Bicarbonate of Magnesia.....	2.1223	6.0512
Bicarbonate of Protoxide of Iron.....	0.8377	0.5710
Bicarbonate of Manganese.....	0.1841	0.0908
Chloride of Sodium.....	0.0672	0.0863
Sulphate of Soda.....	0.0792	0.0619
Sulphate of Potash.....	0.0374	0.0786
Silicic Acid.....	0.3207	0.4650
<hr/>		
Free Carbonic Acid.....	6.0678	15.5824
	29.8167	27.1087
	0.0011	0.0011
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(Bicarbonate free of water taken.)	35.8856	42.6922

In casks of 50 quart bottles.

## KRONTHAL MINERAL WATER.

The *Kronthal* Springs are in a small romantic valley of the Taunus Mountain, in Hesse-Nassau, some miles from Frankfort-on-the-Main. The water

is recommended by the medical profession as the best table water, for the favorable composition of its ingredients and its abundance of carbonic acid gas. Next to this appears the large quantity of chloride of sodium and carbonate of magnesia in the Kronthal water.

ANALYSIS IN 1,000 PARTS, MADE BY DR. J. LOEWL.

Chloride of Sodium.....	3.541946
Silicate of Sodium.....	0.054106
Chloride of Potassium.....	0.088287
Muriate of Lithium.....	traces
Muriate of Ammonium.....	0.006061
Muriate of Colodium.....	0.021872
Carbonate of Lime.....	traces
Sulphate of Lime.....	0.664184
Phosphate of Lime.....	0.030545
Arsenate of Lime.....	0.001509
Chloride of Magnesium.....	0.061615
Carbonate of Magnesia.....	0.095008
Silicate of Alumina.....	0.000550
Hydrated Silicic Acid.....	0.072627
Carbonate of Manganese.....	0.001362
Carbonate of Iron.....	0.008901
Organic Matter.....	0.001993
Free Carbonic Acid.....	2.317394
Total.....	6.968149

In cases of 50 quart bottles.

In cases of 100 pint bottles.

In cases of 50 quart jugs.

## OBERSALZBRUNN MINERAL WATER.

FROM SALZBRUNNEN, PRUSSIA.

Salzbrunn Obersalzbrunn has been known as a place of renown for two hundred years. Numerous springs being in operation, the two main ones, "Oberbrunnen" (discovered since 1499) and the "Muhlbrunnen," are used for drinking purposes. The analysis made about 264 years ago, in 1602, and that of 1866, have exhibited quite identical results. The Oberbrunnen showing amongst the constituents a very large quantity of alkalies, is therefore adapted, as all alkaline muriatic mineral waters are, to exercise a favorable influence in many cases of chronic laryngeal catarrh.

By the experience of centuries the action of these Salzbrunn waters has proved to be of relieving and healing results in all diseases of the lungs, in bronchitis and abdominal complaints, chronic catarrhs, bronchial catarrhs, weakness of the lungs, hæmorrhage caused by erring hæmorrhoids, menstrual secretions, asthmatic complaints, consumption; in piles and hæmorrhoids, melancholia, hysteria, liver and spleen complaints; in gravel and stone diseases; in infarctions, costiveness, heart complaints, impaired digestion, scrofula, exanthema; in mucous and gallic fevers.

## ANALYSIS.

CONTENTS IN 10,000 PARTS.

	OBER- BRUNNEN	MUEL- BRUNNEN
Sulphate of Potash.....	0.268	0.081
Sulphate of Sodium.....	4.773	3.408
Chloride of Soda.....	1.719	0.856
Bicarbonate of Soda.....	24.240	18.033
Bicarbonate of Lithia.....	0.138	0.077
Bicarbonate of Lime.....	4.781	5.843
Bicarbonate of Strontian.....	0.047	0.088
Bicarbonate of Magnesia.....	5.044	5.823
Bicarbonate of Protoxide of Iron.....	0.003	0.011
Phosphate of Alumina.....	0.007	0.003
Phosphate of Silica.....	0.255	0.323
Total.....	41.275	34.546
Free Carbonic Acid.....	0.732	0.628
Temperature.....	7.5° C.	25-7.5 ° C.

In cases of 50 quart bottles.

**PÜLLNA BITTER-WATER.**

There are in Germany different purgative wells, generally known as Bitter-waters, on account of the taste of the water. The most celebrated among them is the Püllna Water. Püllna is situated about an hour from Brüx in Bohemia, on the road from Teplitz to Carlsbad.

There are actually five circular wells giving this water. According to the most minute analysis by Barruel, the Püllna Bitter-water contains in one litre of water the enormous quantity of sixty-two grammes of salts in a crystallized state, of which twenty-one are sulphate of soda, and thirty-four sulphate of magnesia. This quantity is more than sufficient to explain the purgative qualities of the Püllna Water. The other salts, especially the lithium and the bromide of potassium, increase in a high degree its medicinal effects, in giving to it the peculiar qualities by which a natural mineral water is distinguished from an artificial solution of salts.

The Püllna Water is only fit for drinking; its low temperature and the nature of its salts do not render it proper for bathing; *but there is no mineral water better qualified to be sent to all parts of the world.* Every effort is made to conserve it in its natural state; it is filled in stone jars, which previous to use are scrupulously examined, and only when found quite faultless are taken and closed with a capsule bearing the stamp "Püllnaer Gemeinde-Bitterwasser" (Bitter-water of the Community of Püllna); these three words indicate the name of the well, that of the proprietor, and the characteristic bitter taste of the water.

The dose of the Püllna Water to be taken must be accommodated to the nature of the disease, and also the age, sex and constitution of the patient; generally the dose differs from one glass to half a jar; smaller doses are given to children and weak persons. It is not necessary to enumerate all the cases in

which the Püllna Water is used as medicine ; they are sufficiently well known ; it is prescribed to ease the evacuations, be it to exert influence upon the bowels or their neighboring parts. We certainly do not exaggerate in saying that the Püllna Bitter-water is one of the mildest and most efficacious purgatives known in medicine.

1. This mineral water can be used in every season and weather (no exercise in open air is necessary), and may also be drank in the room and the bed.

2. It can be taken cold or warmed.

3. The dose is adapted to the individuality. The daily dose for a child under seven years is from one to two tablespoonfuls, and for adults from one to two wine glasses. The water should be taken fasting.

4. To improve the taste little admixtures of white or red wine, or of a fruit liquor, or of milk, coffee or tea, are allowed to be used.

5. The water is free from gas ; therefore the opened bottle, if recorked, can be preserved for a long time without injury to its medicinal qualities.

#### ANALYSIS IN 10,000 PARTS.

Sulphate of Magnesia.....	93.08
Sulphate of Soda.....	123.89
Sulphate of Potash.....	4.80
Carbonate of Lime.....	0.77
Carbonate of Magnesia.....	6.40
Sulphate of Lime.....	2.60
Chloride of Magnesium.....	19.66

In cases of 50 pint jugs.

In cases of 20 pint jugs.

In cases of 20 quart jugs.

## THE GENUINE SELZER WATERS.

FROM BRUMMEN, AT GROSS KARBEN, IN GERMANY.

This natural mineral water has been famous for the happy combination of its agreeable, digestive and restorative ingredients ever since the Roman warriors in Cæsar's and Augustus' time first entered Germany, and became acquainted with the spring. Proofs of their having used the water extensively are plentiful on the spot, consisting in remnants of quercy-shaped bottles, vases, etc.

The Selzer water is most agreeable to taste, stimulates digestion, purifies the blood, and contains nothing injurious to health, but is used very often as a medicine, on account of the properties of the water, to strengthen the digestion, tone and secretions, and produce eliminations of inert or unhealthy matter. It thus exercises a very beneficial influence, and is particularly indicated in Catarrhs of the Mucous Membrane, of the Air Passages, in Fevers, in Lung troubles, in Diseases of the Chest, Abdomen, and those of a Chronic character, without inflammatory symptoms. It has lost, however, from the great use it was put to, and is in a matter superseded by the Giesshübler.

## ANALYSIS IN 10,000 PARTS.

Bicarbonate of Soda.....	12.3661
Lithic Acid.....	0.0499
Ammoniac.....	0.0684
Baryta.....	0.0020
Strontia.....	0.0283
Lime.....	4.4384
Magnesia.....	3.0810
Iron.....	0.0417
Manganese.....	0.0070
Chloride of Potash.....	0.1763
Chloride of Soda.....	23.3461
Bromine of Sodium.....	0.0090
Iodide of Sodium.....	0.0003
Sulphate of Potash.....	0.4630
Phosphate of Soda.....	0.0023
Nitrate of Soda.....	0.0611
Phosphate of Albium.....	0.0043
Silicic Acid.....	0.2125
Suspended Ochre.....	0.0156
	<hr/>
	44.3733
Entirely Free Carbonic Acid.....	22.3542
Nitrogen.....	0.0408

In casks of 100 quart jugs.

In hampers of 50 quart jugs.

In hampers of 50 pint jugs.

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## GEROLSTEIN.

The Schlossbrunnen Gerolstein is an absolutely pure and natural mineral water. It rises in a powerful stream from an Artesian well, sunk to a considerable depth in a bed of limestone and slate.

Situated between the Rivers Kyll and Moselle, a country of extinct volcanic craters, the spring derives its chemical components, the saline and alkaline ingredients, from the layers of Balsalt and Porphyry rocks of the volcanic Eifel Mountains, and is entirely free from all organic matter or impurities.

### ANALYSIS OF THE GEROLSTEIN WATER.

The following analysis of the Gerolstein water by the eminent analytical chemist, Mr. Kyll, of Cologne, showing the mineral and alkaline ingredients, with an exceptionally large proportion of fixed carbonic acid, convincingly speaks in favor of this water as a successful competitor with the most renowned Continental springs :

Carbonate of Soda.....	0.694561
Carbonate of Lithia.....	0.001018
Carbonate of Lime.....	0.674897
Carbonate of Baryta.....	0.000061
Carbonate of Magnesia.....	0.237724
Carbonate of Iron.....	0.000263
Carbonate of Manganese.....	0.000199
Sulphate of Potash.....	0.002871
Sulphate of Soda.....	0.131065
Chloride of Sodium.....	0.111041

Bromide of Sodium.....	0.000220
Iodide of Sodium.....	0.000004
Phosphate of Soda.....	0.000189
Silicic Acid.....	0.044400
<b>Total of Solids.....</b>	<b>1.898513</b>
Carbonic Acid in combination with Carbonates as Bicarbonates.....	0.610579

It gently stimulates the action of the bowels, restores the essential saline constituents of the blood, promotes digestion, and is, therefore, of the highest value in all forms of indigestion and dyspepsia, resulting from over-indulgence in heavy meals, wines, spirits, etc.

The proportions of Carbonate of Lithia, Iron, Manganese, and the traces of Bromide and Iodide, increase its medicinal action in Gout, in Rheumatism, Neuralgia and Chronic Affections of the Liver and Kidneys.

It quenches the thirst and allays the craving for alcoholic drink, promotes the secretions of the Glandular System, and acts beneficially upon the Respiratory Organs.

In cases of 50 quart bottles.

In cases of 100 pint bottles.

## CONTREXVILLE MINERAL WATER.

*Contrexville* is located in France, Department of Vosges, 235 miles from Paris.

The Contrexville water (Source du Pavillion) is valuable in affections of the Urinary Organs, viz., Catarrh of the Bladder, Gravel, and all Deposits of the Urine, Gout, Maladies des Reins (néphrites aiguë et chronique, albumine, saug, sucre ou pus dans les urines, Maladies de la Prostate).

The quantity to be taken should be under the advice of a physician.

One pint of the water contains the following solid constituents :

Temperature.....53.6 degrees F.

	GRAINS.
Carbonate of Soda.....	1.438
Carbonate of Magnesia.....	1.606
Carbonate of Iron.....	0.066
Carbonate of Manganese.....	—
Carbonate of Lime.....	4.927
Carbonate of Strontian.....	traces
Chloride of Potassium }.....	1.022
Chloride of Sodium }.....	0.292
Chloride of Magnesium.....	traces
Sulphate of Potassa.....	0.949
Sulphate of Soda.....	1.387
Sulphate of Magnesia.....	8.395
Sulphate of Lime.....	—
Sulphate of Strontia.....	—
Phosphate of Lime }.....	0.511
Organic Matter and Arsenic }.....	—
Loss.....	—
Alumina.....	—
Silica.....	0.876
Residue, Fatty Matter.....	—
<b>Total.....</b>	<b>21.469</b>

## GASES.

	CUBIC IN.
Carbonic Acid.....	0.29
Oxygen.....	not taken
Nitrogen.....	—

In cases of 50 quart bottles.

## VAL'S WATERS.

FROM ARDECHE, FRANCE.—APPROVED BY THE ACADEMY OF MEDICINE, PARIS.

The alkaline gaseous waters of Val's are to be found in a circumference of about half a mile. Notwithstanding the small distance in which they emerge from each other, the differences they present are sufficiently notable, with reference to their quantity and the composition of their mineral elements.

The waters are clear, limpid, sparkling for the most part, of an agreeable taste and a little piquant. They have also a very alkaline flavor, nearly salty, the result of the presence of carbonic acid, and are classed, 1st, reconstitutive tonics (Magdeleine and Rigolette); 2d, the laxative (Desiree and Precieuse); 3d, the sedative temperant (Saint Jean). The waters are prescribed for Diseases of the Stomach and Liver, Chlorosis, Amenorrhœa, Gravel, Rheumatism, Gout and Diabetes. The waters lose none of their properties through transportation. The common dose is one bottle per day, more marked in the effect if the waters are drunk fasting, two or three glasses at an interval of thirty minutes.

The Acid Ferro-Arsenical Water of Vals is the Spring Dominique, prescribed for intermittent fevers and maladies of the skin.

The following compositions are based on 1,000 grams of the liquid :

### SUBSTANCES CONTAINED IN THE SPRINGS.

	SAINT JEAN	PRECIEUSE	DESIREE	RIGOLETTE	MAGDELEINE
Constant thermality at spring ..	15 degrees	15 degrees	16 degrees	16 degrees	15 degrees
Free Carbonic Acid.....	0.4250	2.218	2.145	2.095	2.050
Bicarbonate of Chalk.....	0.3100	0.630	0.571	0.259	0.520
Bicarbonate of Magnesia.....	0.1200	0.750	0.900	0.259	0.672
Bicarbonate of Soda.....	1.4800	5.940	6.040	5.800	7.280
Bicarbonate of Potasse.....	0.0400	0.230	0.263	0.265	0.255
Bicarbonate of Lithine.....	indice	traces	not dosed	traces	traces
Bicarbonate of Protoxide Iron with trace of Manganese....	0.0060	0.010	0.010	0.024	0.029
Arsenate of Soda.....	very sensib	traces	sensible	sensible	sensible
Alkaline Iodide.....	indice	indice	sensible	sensible	sensible
Chlor. of Sodium et Potassium	0.0600	1.080	0.100	1.200	0.016
Sulphate of Soda.....	0.0540	0.185	0.200	0.220	0.235
Sulphate of Chalk.....	0.0700	0.185	0.200	0.220	0.235
Alumine.....	0.0110	0.060	0.058	0.060	0.097
Organic Matter.....	indeterm.	little	traces	traces	little
	2.576	8.885	9.142	7.826	9.248

In cases of 50 quart bottles.

## PYRMONT STEEL WATER.

Pyrmont is situated near the River Wesner, four leagues from Hamelet, in Westphalia. It has six principal springs, all of the temperature of 55 degrees F. The waters are eminently tonic.

The use of the Pyrmont Steel Water is indicated in all diseases which are caused by anæmic composition of the blood. In such states of debility which occur after long-continued intestinal, uterine or vaginal catarrhs, from the direct loss of blood in consequence of wounds, or after frequently repeated confinements. It is the most advisable way for introducing iron, in its natural state, into the system, and acts with the best effect on many nervous diseases, as Hypochondria, etc.

### ANALYSIS IN 10,000 PARTS.

Sulphate of Limo.....	7.7076
Sulphate of Baryta.....	0.0028
Sulphate of Strontian.....	0.0035
Sulphate of Potash.....	0.1520
Sulphate of Magnesia.....	4.3776
Sulphate of Soda.....	0.4013
Bicarbonate of Lime.....	9.9480
Bicarbonate of Magnesia.....	0.7792
Bicarbonate of Protoxide of Iron.....	0.7502
Chloride of Soda.....	2.1643
Silica.....	0.3030
Free Carbonic Acid.....	23.6750

In cases of 50 quart bottles.

## FRANZ JOSEF BITTER-WATER.

FROM BUDA-PESTH, HUNGARY.

The spring is situated about two miles from the twin towns of Buda-Pesth (separated only by the Danube), at the foot of Block and Adlersberg, in the heart of a charming valley, surrounded by vineyards and widely celebrated for its picturesque scenery and bracing air.

The water is used for diseases of the digestive organs, such as gastric and intestine Catarrh, habitual constipation and abdominal plethora; headache, palpitation; also for disorders of the liver.

The quantity of the water to be taken by patients will naturally depend upon their individual age. For adults, half a wine glass; for children under ten years, a teaspoonful. If the effect is too sudden decrease the dose; on the contrary, increase.

### CHEMICAL COMPONENTS OF FRANZ JOSEF SPRING BY BERNAT AND BALLO.

ONE COMMON POUND (= 7,680 GRAINS) CONTAINS:

	Grains.
Sulphate of Magnesia.....	190.34
Sulphate of Natron.....	178.09
Sulphate of Kali.....	0.05
Sulphate of Lime.....	10.39
Double Carbonate of Natron.....	9.10
Chloride of Magnesium.....	13.49

	Grains
Oxide of Iron.....	0.03
Argillaceous Clay.....	0.04
Silicate.....	0.08
Chlor-natrium (Chloride of Sodium).....	—
Carbonate of Lime.....	—
Carbonate of Magnesia.....	—
Nitric Acid.....	—
Bromide.....	—
Total.....	401.62
Free and half-combined Carbonic Acid.....	4.19

In cases of 50 pint bottles.

## ROISDORFER WATER.

FROM RHINE PROVINCE, PRUSSIA.

The Roisdorfer Mineral Spring takes an important place among the springs of Germany, on account of its richness in table salt and its high percentage of natural Carbonic Acid, and is not surpassed by any other spring in regard to taste, property of causing digestion, and durability of the water itself. The Carbonic acid is peculiarly combined to it there, and is so united to the water that it only slowly escapes in fine bubbles. It is highly useful in diseases of the digestive organs and air passages, and taken with milk or wine, forms one of the most refreshing beverages, especially when given in warm weather, and is very grateful to patients and convalescents.

ANALYSIS OF 10,000 PARTS, BY DR. FREYTAG.

Carbonate of Soda.....	0.8769
Sulphate of Soda.....	0.4638
Chloride of Sodium.....	1.8423
Carbonate of Lime.....	0.2743
Carbonate of Magnesia.....	0.3068
Sub-Carbonate of Iron.....	0.0026
Silicic Acid.....	0.0092

In cases of 50 quart bottles.

In cases of 100 pint bottles.

In hampers of 50 quart jugs.

In hampers of 50 pint jugs.

## RIPPOLDSAUER IRON SPRINGS.

IN THE GRAND DUTCHESS OF BADEN.

The waters of Rippoldsau are indicated in all diseases where it is essential to tone the mucous membranes of the digestive apparatus, together with causing gentle passages in habitual constipation. Furthermore, in all anæmic troubles of especially the female sex, consequent to losses of blood, frequent confinements, etc.

## ANALYSES OF 10,000 PARTS CONTAIN :

Bicarbonate of Lime.....	16.8517
Bicarbonate of Magnesia.....	0.7070
Bicarbonate of Iron.....	0.5142
Bicarbonate of Manganese.....	0.0429
Sulphate of Lime.....	0.5573
Sulphate of Magnesia.....	2.4300
Sulphate of Soda.....	12.0885
Sulphate of Potash.....	0.6054
Phosphate of Lime.....	0.1771
Chloride Magnesium.....	0.8463
Alumina.....	0.0442
Silicic Acid.....	0.5716
Free Carbonic Acid.....	19.4480
Nitrogen.....	.....

In cases of 50 quart bottles.

## MATTONI'S ROYAL HUNGARIAN BITTER-WATER.

FROM BUDA-PESTH, HUNGARY.

This well-known water is prescribed in diseases of the bowels, congestions of blood in the head, giddiness, palpitation of the heart, difficulty of breathing, fever caused by irregularity of the bowels; against the development of scrofula and a predisposition to fat, and in many female diseases.

The water is not alone applied as a laxative, but also on account of its excellent combination of chemical ingredients. Persons with a weak stomach can use it easily, and without any disagreeable consequences.

### ANALYSIS MADE AT THE LABORATORY OF THE IMP. AND ROY. INSTITUTION OF GEOLOGY, VIENNA, IN 10,000 PARTS.

(COUNSELLOR OF MINES: CHARLES OF HAUER.)

Sulphate of Magnesia.....	173.59
Sulphate of Soda.....	175.32
Sulphate of Potash.....	2.84
Sulphate of Lime.....	4.60
Carbonate of Soda.....	17.65
Bicarbonate of Soda.....	8.35
Bicarbonate of Lime.....	0.93
Bicarbonate of Magnesia.....	0.06
Chloride of Sodium.....	25.24
Silicious and Argillaceous Earth.....	traces
Oxide of Iron, Strontia.....	1.85
Total of fixed Component Parts.....	410.43
Carbonic Acid.....	13.01

#### DIRECTIONS.

The dose is for adults, a wine-glass full, to be taken on an empty stomach. For children, a tablespoonful, with milk.

As the water contains very little gas, an open bottle can be kept for some time, without losing any of its medicinal qualities.

In cases of 24 pint bottles.

**OFNER RAKOCZY.**

FROM BUDA-PESTH, HUNGARY.

Amongst the variety of mineral springs from Hungary, we have the Ofner Rakoczy, a water that is highly valued in diseases of the Digestive Organs, Chronic Catarrh of the Stomach and Bowels, and in Jaundice; in congestions and diseases of the organs of circulation; in Gout, to hasten the elimination of the abnormal secretions pervading the system; in skin eruptions of long standing, and in the milder forms of Scrofula; also in Obesity or general fatty degeneration, and uterine diseases.

## ANALYSIS IN 10,000 PARTS.

Sulphate of Magnesia .....	207.85
Sulphate of Soda .....	144.62
Sulphate of Potash .....	1.52
Chloride of Sodium .....	16.89
Carbonate of Soda .....	4.56
Carbonate of Lime .....	10.89
Silicic Acid .....	.13
Argillaceous Oxide of Iron Parag free and partly combined Carbonic Acid Gas .....	.07 1.96

In cases of 50 pint bottles.

**LA BOURBOULE MINERAL WATER.**

La Bourboule, situated about 250 miles south from Paris (in the neighborhood of Moulins), is a celebrated thermal establishment. The waters and baths are used for Anæmia, Scrofula, Rheumatism, Gout, Diabetes and Affections of the Lungs.

## ELEMENTARY ANALYSIS.

	Grains.
Saline Residuum, per quart .....	4.938
Metallic Arsenic .....	0.00705
Carbonic Acid, free and combined .....	1.7654
Chlorohydric Acid .....	1.8517
Sulphuric Acid .....	0.1175
Arsenic Acid .....	0.01081
Silicic Acid .....	0.1200
Soda .....	2.4121
Potash .....	0.1025
Lithia .....	indicated
Chalk .....	0.0739
Magnesia .....	0.0135
Alum .....	indications
Peroxide of Iron .....	0.0021
Oxide of Magnesia .....	traces
Organic Matter .....	indications

Total . . . . . 6.46951

In cases of 50 quart bottles.

## ✓ BALLSTON SPA WATER.

The waters of *Ballston Springs*, being situated at Ballston, Saratoga County, New York State, are quite equal to those of Saratoga, as regards their composition, save that the Lithia well exhibits the exceedingly large quantity of 134 grains of solid matter in the pint, and has the most highly impregnated mineral ingredients of any in the country.

### CHANDLER'S ANALYSIS OF THREE OF THE SPRINGS.

ONE PINT CONTAINS :

SOLIDS.	LITHIA ARTESIAN WELL 52° F. Grains.	FRANKLIN ARTESIAN WELL 52° F. Grains.	UNITED STATES WELL 50° F. Grains.
Carbonate of Soda .....	1.034	8.200	2.982
Carbonate of Magnesia.....	13.378	13.175	11.729
Carbonate of Iron.....	0.143	0.146	0.208
Carbonate of Lime.....	20.675	17.565	15.494
Carbonate of Lithia.....	0.701	0.613	0.950
Carbonate of Strontia.....	0.083	traces	0.018
Carbonate of Baryta.....	0.397	0.125	0.484
Chloride of Potassium.....	4.159	4.241	1.154
Chloride of Sodium.....	93.753	82.418	80.685
Sulphate of Potassa.....	....	0.001	traces
Sulphate of Soda.....	0.065	....	traces
Phosphate of Soda.....	....	....	traces
Iodide of Sodium.....	0.015	0.029	0.028
Bromide of Sodium.....	0.455	0.583	0.296
Fluoride of Calcium.....	traces	....	traces
Biclorate of Soda.....	traces	....	traces
Alumina.....	0.009	0.032	0.049
Silica.....	0.095	0.092	0.128
Organic Matter.....	traces	traces	traces
Total.....	34.968	127.315	114.205
Gas.—Carbonic Acid, cubic inches.....	53.26	57.51	44.79

In cases of 4 dozen pints.

## ✓ BLUE LICK WATER.

The *Blue Lick Springs*, being located at Maysville, Kentucky, produce an incomparable alterative and aperient water well known for its medicinal qualities throughout the South and West. The Blue Lick Water is adapted to every variety of acute or chronic disorders requiring a mild and efficient *Tonic*, *Diuretic* and alterative *Aperient*. It is particularly indicated as an efficient remedy in *Dyspepsia*, especially indigestive troubles; in *Liver Derangements* and *Biliousness*; in *Congestions of the Brain*, accompanied by dizziness, headache and other promotory symptoms of Apoplexy and Paralysis; in *Kidney Complaints* and other disorders of the genito-urinary apparatus, irritable bladder, gleet, gravel, spermatorrhœa, difficult urination, brick-dust deposit, cloudy urine, etc.; in *Constipation of the Bowels*, with congestion of the liver, obstructed secretion and piles; in *Constitutional Diseases* and disorders of the blood, rheumatism, gout, serofula, syphilis, together with every variety of chronic and some forms of acute skin diseases.

According to a reliable analysis, calculated both in 1,000 grains of the water and in the wine pint of 7,680 grains, the composition of the Blue Lick Water is as follows :

Solid Constituents in 1,000 Grains.	In the Wine Pint, Grains.
Carbonate of Lime.....	0.3350900
Carbonate of Magnesia.....	0.0022065
Alumina, Phosphate of Lime and Oxide of Iron.....	0.0058330
Chloride of Sodium.....	8.3472930
Chloride of Potassium.....	0.0226690
	2.9568000
	0.0169459
	0.0447974
	6.41072102
	0.1740979

In barrels of 20 gallons, or per gallon or doz. quart bottles.

## ✓ OAK ORCHARD ACID WATER.

*Oak Orchard Acid Springs* are located in Genesee County, New York State, 6 miles from Medina, the next railroad station. The water, containing considerable quantities of Sulphuric Acid in a free state, a composition seldom found in this country or in Europe, has been used with beneficial effects in various kinds of diseases. Possessing decidedly tonic, refrigerant and astringent properties, they are more particularly indicated in chronic affections of the digestive and urinary organs, and some of the cutaneous diseases, chronic dyspepsia, chronic diuresis, cystitis, diabetes; in ulcers; in cases of passive hæmorrhage, such as purpura hæmorrhagica; in diarrhœas depending on a relaxed or ulcerated state of the mucous membrane of the intestines; in calculous affections, or lithiasis, attended with phosphatic sediments, the water is of beneficial influence, being more solvent and less apt by continued use to disorder the stomach. In febrile diseases it can be used, properly diluted, as a refrigerant to diminish thirst and preternatural heat. In cases of Colico-pictorum and other injurious consequences arising from the action of lead, this water will prove to be an admirable antidote. Relieving influences were also tested in chronic pharyngitis, laryngitis, chronic mucous catarrh and humid asthma; in chronic ophthalmia (externally), as a gargle in ulcerated sore throats, in cases of salivation and in leucorrhœa, gleet and piles. When taken internally a wine glass full of the water, diluted, taken three times a day, is sufficient for an adult.

According to an analysis made by I. R. Chilton, M.D., one pint of the water contains:

Solids.	Grains.
Sulphate of Magnesia.....	1.035
Sulphate of Alumina.....	1.210
Sulphate of Lime.....	4.950

In pint bottles.

## ✓ BETHESDA MINERAL WATER.

The springs are situated at *Waukesha*, Waukesha County, State of Wisconsin. The waters of these springs belong to the class of alkaline waters, although the calcareous salt is highly predominating.

The *Bethesda Water* is a most effectual remedy in a number of diseases of the *Kidneys, Bladder, and Urinary Diseases*. It restores the urinary organs to

strength and power. In diseased and poisoned systems from malaria it is an unfailling antidote; in a variety of other diseases—in debility, nervous prostration, and in female weakness and hysteria—it acts with unerring certainty in giving life to a languid and overtasked system.

By many certificates of practitioners of high character the Bethesda Water is especially recommended as being of the most value and healing effects in the following diseases:

In *Liver and Bilious Affections* the water separates the bile from the blood, allowing the blood to become pure and healthy; in *Albuminuria*, Bright's Disease and Dropsy, it causes an increased flow of urine; in *Inflammation* of and *Stone* in the kidneys, as well as in the bladder; in *Diabetes*, with sugar in the urine; by a 15 days' use of the water all traces of the sugar may be eradicated.

#### ANALYSIS OF PROF. C. F. CHANDLER.

In one U. Gt. or wine gallon of 231 inches there are solids:	Grains.
Bicarbonate of Lime.....	17.022
Bicarbonate of Magnesia.....	12.388
Bicarbonate of Soda.....	1.256
Bicarbonate of Iron.....	0.042
Chloride of Sodium.....	1.160
Sulphate of Potassa.....	0.454
Sulphate of Sodium.....	0.542
Phosphate of Soda.....	traces
Alumina.....	0.122
Silica.....	0.741
Organic Matter.....	1.983

Total.....35.710  
 Temperature.....60 degrees F.

In barrels, pints or quarts, still or carbonated.

### ✓ BUFFALO LITHIA WATER.

As to the medicinal properties and uses of this water, produced by three springs located in Mecklenburgh County, Virginia, 500 feet above the level of the sea, and 12 miles from the Scottsburg Depot on the Richmond & Danville Railroad. It is testified by the experience of many years that the water of this spring is one of the most potent remedies in chronic diseases, and that it has displayed its greatest usefulness in gout, rheumatism, stone, gravel and eczema of uric acid origin. In inflammation, ulceration, hæmaturia, diabetes and affections of the kidneys and bladder, requiring an alkaline diuretic, it may safely claim at least to have no superior as a remedial agent. Combining in an eminent degree *tonic* and *alterative* properties, it will also be found especially efficacious in that form of indigestion known as *Nervous Dyspepsia*.

The addition of twenty-five per cent. of this water to cream or milk will make these articles nutritious and entirely acceptable to many persons to whom they are otherwise highly injurious. In malarial cohexia, as well as in chronic gonorrhœa, gleet, secondary syphilis, and all affections of like character, it is regarded as an unsurpassed and never-failing remedy.

The Buffalo Lithia Water has a well-established reputation as a valuable remedial agent in many of the affections peculiar to women, and especially in

all disorders of menstruation, albuminuria in pregnancy, diseases of the uterus, nausea in pregnancy. In malarial poisoning remarkable cures have been affected. Uric acid, gravel, urinary calculi and hæmorrhage from the bladder are relieved by the use of this water.

SUGGESTIONS AS TO QUANTITY OF WATER TO BE TAKEN, ETC.

From six to eight glasses of the ordinary size is about the average quantity of this water taken by invalids a day, and this is supposed to be sufficient in most cases; some, however, take from ten to twelve; others only three or four. In derangements of the digestive organs especially, *the lesser quantity* has often been productive of great good. In gout, rheumatism, stone, gravel or eczema it should be taken freely.

It is impossible to prescribe a standard that would be applicable to all cases. Experience will, perhaps, prove the best guide in the matter. Nor can any general rule be laid down as to the length of time for which the water should be used. While in some cases it is prompt in its action, in others it requires *continuous use for weeks and sometimes for months*, to make any decided impression upon the system.

ANALYSES OF THE WATERS OF THREE OF THE BUFFALO SPRINGS, IN MECKLENBURG COUNTY, VIRGINIA, MADE BY PROF. WM. P. TONRY, OF THE MARYLAND INSTITUTE, BALTIMORE, MARCH 17, 1874. [RESULTS EXPRESSED IN GRAINS PER IMPERIAL GALLON.]

SPRING No. 1.	GRAINS.
Sulphate of Magnesia.....	1.530
Sulphate of Alumina.....	8.180
Sulphate of Potash.....	0.463
Sulphate of Lime.....	19.251
Bicarbonate of Lime.....	39.277
Bicarbonate of Lithia.....	1.484
Bicarbonate of Iron.....	0.500
Chloride of Sodium.....	1.256
Chloride of Silica.....	1.725
Phosphoric Acid.....	traces
Phosphoric Iodine.....	traces
Organic Matter.....	small amount
<hr/>	
Total number of grains per gallon.....	73.693
Sulphureted Hydrogen.....	5.9 cubic in.
Carbonic Acid Gas.....	69.1 cubic in.

SPRING No. 2.	GRAINS.
Sulphate of Magnesia.....	0.885
Sulphate of Alumina.....	9.067
Sulphate of Lime.....	33.067
Carbonate of Potash.....	29.300
Bicarbonate of Lime.....	14.963
Bicarbonate of Lithia.....	2.250
Bicarbonate of Baryta.....	1.750
Bicarbonate of Iron.....	0.300
Chloride of Sodium.....	4.921
Chloride of Silica.....	1.873
Phosphoric Acid.....	traces
Phosphoric Iodine.....	traces
Organic Matter.....	small amount
<hr/>	
Total number of grains per gallon.....	98.376
Sulphureted Hydrogen.....	8.3 cubic in.
Carbonic Acid Gas.....	59.2 cubic in.

SPRING No. 3.	GRAINS.
Sulphate of Magnesia.....	0.150
Sulphate of Alumina.....	3.035
Sulphate of Lime.....	2.353
Carbonate of Potash.....	1.852
Bicarbonate of Lime.....	2.524
Bicarbonate of Lithia.....	traces
Bicarbonate of Iron.....	3.774
Chloride of Sodium.....	0.217
Chloride of Silica.....	0.570
Phosphoric Acid.....	traces
Organic Matter.....	small amount

Total number of grains per gallon.....	14.475
Sulphureted Hydrogen.....	3.4 cubic in.
Carbonic Acid Gas.....	11.6 cubic in.

In half-gallon bottles, one dozen in case.

## ✓ DEEP ROCK SPRING WATER.

One of the most remarkable peculiarities of the *Deep Rock Water*, the springs of which are located at *Oswego*, State of New York, is the large proportion of Chloride of Potassium, of which it contains 149 grains to the gallon, a larger quantity than is found in any other mineral spring in the known world.

It has been found very useful in kidney or bladder affections, particularly in Gravel or Stone in the Bladder. It is also an effectual remedy in Rheumatism (both inflammatory and chronic), Dyspepsia, and in all cutaneous or other diseases arising from a disordered condition of the blood.

It is prescribed for kidney diseases, Gravel, Diabetes, Dyspepsia, Jaundice, Erysipelas, Rheumatism, Scrofula (in all forms), fever sores, liver complaint, sea-sickness, and in all affections of the lungs.

In one gallon the composition of the water is found by an analysis as follows:

	Grains.
Chloride of Sodium.....	308.183
Chloride of Potassium.....	149.084
Chloride of Magnesium.....	10.244
Carbonate of Lime.....	18.191
Silica.....	71.698
Sulphuric Acid.....	traces
Peroxide of Iron.....	traces
Free Carbonic Acid.....	not determined
Loss.....	1.780
Total Solids in Gallon.....	559.180

In cases of 1 dozen pints.

In cases of 1 dozen quarts.

## ✓ CLYSMIC MINERAL SPRING WATER.

This water comes from Clysmic Spring, located in the village of *Waukesha*, State of *Wisconsin*, 20 miles from Milwaukee. It is prescribed for the following diseases: Inflammation of the Bladder or Kidneys, Stone or Gravel in the Bladder or Kidneys, Catarrh of the Bladder, Congestion of the Kidneys,

Bright's Disease, Diabetes, pains in the kidneys or loins, hæmorrhage of the kidneys, incontinence of urine, stoppage of urine, brick-dust deposit, Dropsy, Albuminuria, gouty swellings, torpid liver, Bilioussness, Dyspepsia, Indigestion.

As to the analysis, there are in one wine gallon of 231 cubic inches :

	GRAINS.
Chloride of Sodium.....	1.170
Sulphate of Potassium.....	0.456
Sulphate of Soda.....	0.560
Bicarbonate of Lime.....	16.044
Bicarbonate of Magnesia.....	13.563
Bicarbonate of Iron.....	0.038
Bicarbonate of Soda.....	1.261
Phosphate of Soda.....	0.032
Alumina.....	a trace
Silica.....	0.722
Organic Matter.....	1.616
<b>Total.....</b>	<b>35.462</b>

In cases of 50 quart bottles.

In cases of 100 pint bottles.

## CAPON SPRING WATERS.

*Capon Springs and Baths* are located in Hampshire County, West Virginia, 15 miles from the Capon Road Station.

This water, being without smell or taste, seems only a soft, light water, but has been found useful in a great number of diseases, viz.: Catarrhal affections of the organs of respiration, diseases of the kidneys, in calculous affection, in chronic inflammation, thickening and catarrh of the bladder, irritation of the prostate gland, chronic rheumatism, gout, and in many forms of dyspepsia. It is further indicated as a corrective and restorative in the irregularities incident to the female constitution, as well as in all diseases of the skin.

By a complete analysis, making the usual assumptions as to the distribution of acid and basis constituents, the following result was obtained :

### GRAINS PER IMPERIAL GALLON.

	No. 1.	No. 2.
	MAIN SPRING	BEAUTY SPRING
Sodium Carbonate.....	0.591	0.631
Lithium Carbonate.....	distinct trace	faint trace
Calcium Carbonate.....	8.325	8.355
Magnesium Carbonate.....	1.441	1.269
Ferrous Carbonate.....	0.041	0.052
Manganous Carbonate.....	traces	traces
Cupric Carbonate.....	—	traces
Sodium Chloride.....	0.056	0.054
Potassium Sulphate.....	0.170	0.163
Strontium Sulphate.....	traces	traces
Calcium Sulphate.....	0.593	0.408
Calcium Phosphate.....	0.062	0.062
Calcium Fluoride.....	traces	traces

In cases of 1 dozen half-gallon bottles.

## ✓ POLAND MINERAL WATER.

The spring from which the Poland water flows, is located in South Poland, State of Maine, 30 miles north of Portland, 4 miles from Lewiston Junction on the Grand Trunk Railroad; it flows about eight gallons per minute.

Poland Spring water has cured numerous cases of Bright's disease of the kidneys, as well as other forms of diseases resulting from blood poison, such as malarial fever, rheumatic fever, dyspepsia, constipation, gravel, diabetes, scrofula, dropsy, etc. Although an exceedingly pleasant water to drink, it possesses those peculiar properties that restore to action the kidneys, liver and other internal organs that may have become sluggish in their movements. Thus, by cleansing the blood the body is restored to its original vigor and the complexion to its original freshness and beauty. Were it more generally in use there would be far less demand for drugs and patent medicines. Being clear and bright, having no foul smells of gases held in solution, the water is to be recommended as a most wholesome and delicious drinking water. Careful qualitative examinations have revealed the following principal constituents in the matter held in solution, namely: Lime, Alumina, Iron, Potash and Phosphoric Acid.

In one United States gallon of 231 cubic inches, the water contains the following solids, according to the two analyses made by the experts F. L. Bartlett (1879) and C. F. Chandler (1875), of New York.

	Bartlett's ANALYSIS Grains.	Chandler's ANALYSIS Grains.
Carbonate of Lime.....	1.355	1.2287
Silica.....	1.072	1.1197
Carbonate of Magnesia.....	0.306	0.5412
Chloride of Sodium.....	0.469	0.2636
Sulphate of Potash.....	0.176	0.1562
Carbonate of Soda.....	0.093	0.1333
Organic and Volatile Matter.....	0.281	0.2332
Total.....	3.852	3.6759

One gallon contains 22.08 cubic inches of dissolved gases, consisting of Oxygen and Nitrogen, with traces of Carbonic Acid Gas. From the relatively large quantity of Silica contained in this water, it will be proper to call it an Alkaline Silicated Water. It is perfectly odorless, tasteless and highly aerated.

Sold in barrels of 40 gallons, also by the gallon or quart bottles.

## ✓ GETTYSBURG KATALYSINE WATER.

This spring is situated near the historic town of Gettysburg, Adams County, Pennsylvania. It appears in a little valley formed by the interruption of one of a succession of ground swells extending north and south for several miles westward of this town.

The water is essentially ungasous, and holding its salts firmly in solution, undergoes no change by transportation, either in taste, general appearance or medicinal efficacy.

An analysis by Dr. F. A. Genth, Consulting Chemist and Geologist, Univer-

sity of Pennsylvania, West Philadelphia, shows that one gallon of 231 cubic inches contains :

	GRAINS.
Sulphate of Baryta.....	trace
Sulphate of Strontia.....	0.00427
Sulphate of Lime.....	0.83145
Sulphate of Magnesia.....	6.77904
Sulphate of Potash.....	0.20836
Sulphate of Soda.....	2.46776
Chloride of Sodium.....	0.65790
Chloride of Lithia.....	trace
Bicarbonate of Soda.....	0.70457
Bicarbonate of Magnesia.....	0.54260
Bicarbonate of Lime.....	16.40815
Bicarbonate of Iron.....	0.03585
Bicarbonate of Manganese.....	0.00669
Bicarbonate of Nickel.....	trace
Bicarbonate of Cobalt.....	trace
Bicarbonate of Copper.....	0.00050
Boreate of Magnesia.....	0.03492
Fluoride of Calcium.....	0.00954
Alumina.....	0.00380
Silicic Acid.....	2.03078
Organic Matter, with traces of Nitric Acid, etc.....	0.70870
Impurities suspended in the water, like Clay, etc.....	1.10069
Total.....	32.54272

The Gettysburg Water has produced signally curative and restorative effects in different forms of Dyspepsia, Sickness of the Stomach, Heartburn, Water-brash, Acute Neuralgic Pains, Loss of Appetite, Chronic Diarrhœa, Torpid Liver, Gout, Chronic Rheumatism, Nodosities of the Joints, Approaching and Actual Paralysis, Diabetes, Kidney Disease, Gravel, etc.

Those afflicted with acute diseases, or with diseases of recent origin, or with general derangements or disorders of like origin, or with sub-acute attacks of old chronic diseases, should take the water in large doses.

For the eradication from the system of old *dormant* chronic diseases small doses, say three gills per day, should be taken, and continued through a longer period of time.

In cases of 2 dozen quart bottles.

## RICHFIELD SULPHUR SPRING WATER.

*Richfield Springs* are located in the village of Richfield, standing on an elevated plateau 1,700 miles above tide-water, on Canadarago Lake, Otsego County, New York State. There are sixteen of these springs, each differing in properties from all the others; and the most famous of these mineral springs at Richfield is the Great White Sulphur Spring. The waters have proved of great usefulness in the cure of all diseases of the blood and rheumatic affections, and especially Sulphur Spring is confidently recommended as a powerful remedy in all cases of chronic deforming rheumatism, gout, neuralgia, disorder of the liver and kidneys, as well as in cases of eczema, psoriasis and of other inveterate skin-diseases. If the water should be found indigestible, it ought to be warmed

slightly before drinking. In obstinate chronic cases the water should be taken in connection with the hot sulphur baths.

The Sulphur Spring at Richfield, New York State, belongs to the most powerful sulphur springs of the country. Nearly one-half the amount of sulphur contained in the water is combined with an alkaline and an earthy case, which renders the water eminently qualified for bathing purposes.

#### ANALYSIS OF THE RICHFIELD SULPHUR SPRING.

BY THEODORE DEECKE, SPECIAL PATHOLOGIST, NEW YORK STATE.

Temperature, 9 degrees C. = 48 degrees F.

1,000 grammes = 1 quart =  $\frac{1}{4}$  gallon.

Yields:

	Grammes.	Grains.	
Sulphureted Hydrogen (free).....	0.0588	= 0.9072	= 2.16 cub. in.
Sulphureted Hydrogen (combined).....	0.0414	= 0.6388	
Carbonic Acid (free).....	0.0483	= 0.7353	
Carbonic Acid (combined).....	0.1501	= 2.3160	
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Sulphate of Lime.....	1.0919	= 16.8480	
Sulphate of Magnesia.....	0.5317	= 8.2041	
Sulphate of Soda.....	0.3612	= 5.5733	
Bicarbonate of Lime.....	0.3964	= 6.1165	
Bicarbonate of Magnesia.....	0.0974	= 1.5028	
Bicarbonate of Protoxide of Iron.....	0.0038	= 0.0596	
Hydrosulphureted Sodium and Calcium Sulphide.....	0.1008	= 1.5553	
Chloride of Sodium.....	0.3521	= 5.4329	
Chloride of Potassium.....	0.1334	= 2.0574	
Silicic Acid.....	0.0219	= 0.3379	
Alumina.....	0.0017	= 0.0262	
<hr/>			
	3.0927	= 47.7204	
Solid Constituents (by evaporation).....	3.1071	= 47.4924	

In cases of 2 or 4 dozen pints.

### ROCKBRIDGE ALUM SPRING WATER.

There are in Rockbridge County, Virginia, about seventeen miles north-west of Lexington, four springs. At that watering-place an excellent mineral water, called the Rockbridge Alum Water, is remarkable for its most conspicuous constituents, aluminium, free sulphuric acid, proto-sulphate of iron and silicic acid, thus showing many of the best ingredients that are found in the most valuable mineral waters of Europe, especially in that of Aix-la-Chapelle (Aachen). Acting as an astringent and tonic, the water has proved to be adapted to the cure of chronic dysentery, diarrhœa, chronic bronchitis, catarrh of the throat and nasal passages, hæmorrhage from the kidneys and anæmia. The said Alum Water also proves highly beneficial in several other diseases. In scrofula it has effected many cures; in incipient phthisis the symptoms often disappear; in diabetes mellitus the urine ceases to be saccharine, and the strength and flesh return; in dyspepsia it is well indicated for complete cures, and so in leucorrhœa and chronic eczema.

## ANALYSIS OF SPRINGS Nos. 1, 2, 3 AND 4.

GRAINS OF ANHYDROUS CONSTITUENTS IN ONE GALLON OF 231 CUBIC INCHES.

	SPRING No. 1.	SPRING No. 2.	SPRING No. 3.	SPRING No. 4.
Aluminium Sulphate .....	31.246	42.60887	43.95506	72.37335
Silicic Acid.....	3.54627	3.69750	3.12807	4.38346
Free Sulphuric Acid.....	3.239	3.82512	2.04041	3.06633
Sulphate of Calcium.....	1.73110	3.22302	2.63598	2.31527
Iron Persulphate.....	1.01850	1.94443	1.75922	2.90122
Sulphate of Magnesium.....	0.88761	5.60586	6.37371	7.36110
Sulphate of Manganese .....	0.888	5.60586	6.37371	7.36110
Sulphate of Nickel.....	0.16298	0.14062	0.23969	0.21871
Sulphate of Potassium.....	0.17248	0.41290	0.38351	0.17586
Sulphate of Zinc.....	0.11951	0.38906	0.20525	0.22748
Chloride of Sodium.....	0.07547	0.10565	0.10565	0.14246
Copper.....	0.040	0.04024	0.09287	0.10370
Sulphate of Lithium.....	0.01852	0.02006	0.02006	0.03241
Sulphate of Sodium.....	0.02134	0.02743	0.02130	0.03463
Sulphate of Cobalt.....	0.03547	0.01432	0.08082	0.08124
Phosphate of Calcium.....	0.01725	0.17251	0.20671	0.05174
Total.....	43.19185	62.35936	61.77342	94.83748
CUBIC INCHES OF THE GASES IN A GALLON OF THAT WATER:				
Carbon Dioxide.....	12.37	10.89	11.95	12.72
Oxygen.....	1.53	1.49	1.65	1.64
Nitrogen.....	4.19	3.98	4.10	4.12
Total.....	18.09	16.36	17.70	18.48
Temperature, Fahrenheit.....	56°	54.5°	54.5°	54.5°
Specific Gravity at 60° F.....	1.00084	1.00119	1.00118	1.00174

In cases of 12 half-gallon bottles.

## ✓ SARATOGA VICHY WATER.

Located on Ballston Avenue, in Saratoga, State of New York, the Saratoga Vichy Spring—discovered in March, 1872—contains more soda and less salt than any other Saratoga water, and takes a prominent rank amongst the valuable mineral waters of this famous spa, from its similarity to the Vichy waters of France. It is the only alkaline water found at Saratoga, and a specific in those troublesome affections arising from acidity of the stomach, dyspepsia, kidney and bladder difficulties. This water contains more Bicarbonate of Soda (82,873 grains), and is more highly impregnated with Carbonic Acid Gas, and more agreeable to the taste than any other Saratoga water.

The *Lithia* and *Alkaline* properties of this Vichy water are well known for their therapeutic effects in diseases of the kidneys and bladder, by relieving all chronic inflammatory action therein, and are efficient remedies in chronic forms of rheumatism, and in rheumatic gout. In obstinate cases of dyspepsia a single glass of this water should be drank an hour after or between meals.

In *Biliary Calculus* and *Bilious Colic* it has a high reputation; in cases of

gravel, whether uric acid or phosphatic, four or six glasses should be taken daily. In the first stages of Diabetes Mellitus the production of sugar may always be arrested by the proper use of the Saratoga Vichy. Many cases, even in the second stage, are probably cured when all hopes of cure must be abandoned; this alkaline water restrains the production of glucose.

In the Saratoga Vichy the alkaline properties—Lithia, Soda, Magnesia, Lime, etc.—overbalance the saline properties—Chloride of Sodium (Salt)—and is recommended as a specific remedy, when the blood is impoverished from want of proper assimilation of food, and feeble tone to the stomach generally—when the system is below the normal standard, and requires “toning up.” *Saratoga Vichy* is at the same time an excellent table water, as it contains natural Carbonic Acid Gas and mixes readily with all wines.

The following analysis of the Saratoga Vichy, made by Prof. C. F. Chandler of Columbia College School of Mines, demonstrates its value as an alkaline water. It contains in one U. St. gallon of 231 cubic inches:

Bicarbonate of Soda.....	82.873
Bicarbonate of Magnesia.....	41.503
Bicarbonate of Lime.....	95.522
Bicarbonate of Strontia.....	trace
Bicarbonate of Baryta.....	0.593
Bicarbonate of Iron.....	0.052
Sulphate of Potassa.....	trace
Phosphate of Soda.....	trace
Bichlorate of Soda.....	trace
Alumina.....	0.473
Silica.....	0.758
Chloride of Sodium.....	128.689
Chloride of Potassium.....	14.113
Bromide of Sodium.....	0.990
Iodide of Sodium.....	trace
Fluoride of Calcium.....	trace
Bicarbonate of Lithia.....	1.760
Organic Matter.....	trace
Temperature.....	50 degrees F.
Carbonic Acid Gas in one gallon.....	383.071 cubic inches.

In cases of 4 dozen quarts or 6 dozen half-pints.

## ✓ SARATOGA MINERAL WATERS.

Saratoga, the principal watering-place of the United States, situated in the State of New York, possesses many valuable springs. The principal ones are Congress, Geysler, Red Spring, Star, Empire, Hathorn, High Rock, Saratoga Vichy, Washington and Columbian.

In 1826 the first bottling of the waters for exportation began.

In all the Saratoga waters the principal constituents are Chloride of Sodium, the alkaline carbonates and Carbonic Acid Gas.

The waters are used with beneficial results in dyspepsia, and in cases of enlarged conditions of the abdominal viscera, and in jaundice; also in cases of gall-stones, with a tendency to their continual formation and passage.

## ANALYSIS OF FIVE SARATOGA SPRINGS.

	GEYSER	CONGRESS	RED SPRING	STAR	EMPIRE
	46° F. Chandler's Analysis Grains.	52° F. Chandler's Analysis Grains.	Appleton's Analysis Grains.	Chandler's Analysis Grains.	Chandler's Analysis Grains.
One pint contains the following Solids:					
Carbonate of Soda .....	6.175	0.934	1.107	1.097	0.782
Carbonate of Magnesia .....	10.322	9.019	2.618	4.586	3.182
Carbonate of Iron .....	0.089	0.031	....	0.110	0.079
Carbonate of Lime .....	14.793	12.449	7.324	10.795	9.520
Carbonate of Lithia .....	0.549	0.374	0.016	0.124	0.163
Carbonate of Strontia .....	0.041	trace	....	trace	trace
Carbonate of Baryta .....	0.206	0.095	....	0.010	0.008
Chloride of Potassium .....	3.079	1.006	0.686	1.212	0.536
Chloride of Sodium .....	70.260	50.055	8.699	49.795	63.328
Sulphate of Potassa .....	trace	0.111	....	0.675	0.346
Sulphate of Soda .....	....	....	....	....	....
Sulphate of Magnesia .....	....	....	....	....	....
Phosphate of Soda .....	trace	0.002	....	trace	0.003
Phosphate of Lime .....	....	....	....	....	....
Iodide of Sodium .....	0.031	0.017	....	....	....
Bromide of Sodium .....	0.276	1.069	....	0.071	0.001
Alumina .....	trace	trace	0.219	trace	0.052
Silicate of Potassa .....	....	....	....	....	....
Silicate of Soda .....	....	....	....	....	....
Silica .....	0.013	0.105	0.339	0.160	0.182
Organic Matter .....	trace	trace	....	trace	trace
Total .....	105.834	75.267	21.008	68.650	78.215
GASES, cubic inches:					
Carbonic Acid .....	57 (1870)	49 (1871)	....	50	43 (1879)

The *Congress* and *Empire Spring* waters of Saratoga are the best of all the Saratoga waters for the use of persons of constipated habit; they act promptly and pleasantly without producing debility, and their effect is not weakened by continued use. At the same time they are not too cathartic, but sufficiently so for daily and healthful use, and not strong enough to produce reaction. The *Columbian Spring Water* seems to be the best chalybeate water known. Where the blood requires iron, this water supplies it in the best possible form. A grain of iron in this water is, in the opinion of a celebrated physician, more potent than twenty grains exhibited according to the Pharmacopœia.

The waters are put up in cases of 2 dozen quarts or 4 dozen pints.

## ✓ SARATOGA HIGH ROCK SPRING.

*Saratoga High Rock Spring* is a wonderful mineral fountain on Spring Avenue, in the northern part of the village, and its water has been proved as one of the most valuable mineral waters by the test of over a century. High Rock Water is a superior tonic and cathartic, as well as alterative, and has exercised beneficial influence by its healing operation upon the kidneys and liver; also in cases of rheumatism, scrofula, dyspepsia and constipation. It is a wholesome and safe remedy for purifying and renovating the whole system and blood vessels.

Prof. C. F. Chandler's analysis of the High Rock Water demonstrates its wonderful chemical properties, and its great value as a medicinal remedy.

It contains in one U. St. gallon—

	Grains.
Chloride of Sodium.....	390.127
Bicarbonate of Lime.....	131.739
Bicarbonate of Magnesia.....	54.924
Bicarbonate of Soda.....	34.888
Chloride of Potassium.....	8.497
Sulphate of Potassa.....	1.608
Bicarbonate of Iron.....	1.478
Bicarbonate of Strontia.....	trace
Bromide of Sodium.....	0.731
Iodide of Sodium.....	0.086
Fluoride of Calcium.....	trace
Phosphate of Lime.....	trace
Alumina.....	1.223
Silica.....	2.260
Bicarbonate of Baryta.....	trace
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Total solid contents.....	628.039
Carbonic Acid Gas.....	409.458 cubic inches

In pint bottles.

## THE COLUMBIAN SPRING,

SARATOGA, NEW YORK,

originally tubed about the year 1805, is a chalybeate mineral water, possessing active diuretic, tonic and alterative properties, especially valuable in liver complaints, dyspepsia, erysipelas, and all cutaneous disorders. As a tonic water, for frequent daily use, no spring is so popular as the Columbian.

This water has become widely known for its virtues in various affections of the kidneys and bladder, particularly in inflammatory conditions of these organs, and when debilitated by long disease. It also acts as a dissolvent in the distressing disease of gravel in a singular manner, and is a valuable remedy in diabetes, and in numerous diseases known only to the female sex. Its use is found to strengthen the stomach and to increase the red particles in the blood, which, according to Liebig, perform an important part in respiration.

### ANALYSIS OF COLUMBIAN WATER.

BY PROF. E. EMMONS.

The specific gravity of this water is 1007.3; its solid and gaseous contents as follows:

	Grains.
Chloride of Soda.....	267.00
Bicarbonate of Soda.....	15.40
Bicarbonate of Magnesia.....	46.71
Hydriodate of Soda.....	2.56
Carbonate of Lime.....	68.00
Carbonate of Iron.....	5.58
Silex.....	2.05
Hydro-Bromate of Potash.....	scarcely a trace
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Solid contents in a gallon.....	407.30
Carbonic Acid Gas.....	272.06 inches
Atmospheric Air.....	4.50 inches

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276.56 inches

In pint bottles.

## SHARON SPRING WATER.

In *Schoharie County*, New York State, 59 miles west of Albany, there are located the *Sharon Springs*. Upon the slope from which the fountains gush a curious phenomenon is exhibited: within the space of a few rods are five different springs—chalybeate, white sulphur, red sulphur, magnesium and pure water; the two principal springs are white sulphur and magnesium. The waters are comparatively light, and for this reason may be taken in greater quantities.

### ANALYSIS.

One pint contains in Solids:	WHITE SULPHUR SPRING	RED SULPHUR SPRING	MAG- NESIA SPRING
	43° F. Grains.	48° F. Grains.	48° F. Grains.
Carbonate of Soda .....	....	0.043	0.042
Carbonate of Magnesia .....	....	0.051	0.100
Carbonate of Lime.....	....	1.122	0.842
Chloride of Sodium.....	0.28	0.041	0.154
Chloride of Magnesium.....	0.30	0.091	0.054
Chloride of Lime.....	....	0.008	0.020
Sulphate of Magnesia.....	5.30	2.370	2.469
Sulphate of Lime.....	13.95	12.050	11.687
Hydrosulphuret of Sodium } Hydrosulphuret of Calcium }	0.28	....	....
Hydrosulphuret of Magnesium } Hydrosulphuret of Calcium }	....	0.111	0.781
Silicic Acid.....	....	0.056	0.050
Total.....	20.11	15.973	16.190
GASES:	cubic in.	cubic in.	cubic in.
Carbonic Acid.....	....	0.57	0.277
Sulphureted Hydrogen.....	2.00	1.31	0.750
Atmospheric Air.....	....	0.50	0.375
Total.....	2.00	2.38	1.402

In cases of 4 dozen pints.

## SUMMIT MINERAL WATER.

The *Summit Mineral Spring* is situated in Harrison, Cumberland County, State of Maine, 9 miles west of Norway Station, on the Grand Trunk Railroad; it is on a *summit* nearly 1,000 feet above the sea. Uniformly 33 gallons per minute, at a temperature of 46 degrees F., summer and winter, the water of the spring is flowing, and is not impaired in taste or healing virtue by transportation. Being pure, pleasant to taste, and not becoming stale or flat from long keeping, the Summit Mineral Water has proved to be neither laxative nor astringent, an energetic diuretic, tonic and alterative, thus a valuable aid to ordinary medical treatment. Results experienced in great number of cures are recommending the water as an effective specific in many of the most tenacious diseases. It has proved good, relieving or curative in some diseases of the genito-urinary system, in dyspepsia, in diseases of the kidney, stomach and liver,

in dropsy, in Bright's disease, chronic albuminuria, in scrofula, constipation, stone in the bladder and inflammation of the bowels.

## ANALYSIS.

One U. St. gallon = 231 cubic inches, dried at 212 degrees F., contains—

Solids,	Grains.
Carbonate of Soda and Potassa .....	1.4019
Chloride of Sodium .....	0.1713
Carbonate of Lime .....	0.9904
Carbonate of Magnesia .....	0.2476
Oxide of Iron and Alumina .....	distinct traces
Silica .....	0.9800
Silicic Acid (in solution) .....	—
Organic and Volatile Matter .....	0.2375
Total .....	4.0287

In barrels of 35 gallons, or quart bottles charged with carbonic acid gas.

### ✓ ST. CATHARINES CONCENTRATED WATER.

*St. Catharines*, being a station on the Great Western Railroad of Canada, belongs to the Canadian Province of Ontario, and is 13 miles west of Niagara Falls, and within 3 miles of Lake Ontario. The water of this spring has a particular reputation for its concentrated form, being similar to the Mutter-lauge (mother-lye) of Kreuznach, in Germany, and produced by evaporation.\*

The analysis of the *St. Catharines Concentrated Water* has exhibited, according to I. F. Chilton, M.D., the following constituents in one pint of that water.

	Grains.
Carbonate of Magnesia and Lime .....	2.08
Chloride of Sodium .....	781.36
Chloride of Magnesium .....	1,289.76
Chloride of Calcium .....	2,950.40
Protochloride of Iron .....	13.76
Sulphate of Lime .....	16.32
Iodide of Magnesium .....	2.11
Bromide of Magnesium .....	2.01
Silica, Alumina and Lithia .....	2.47
Total .....	5.060.27

The waters of *St. Catharines Spring* have proved to be of favorable and curative results in gout, rheumatism, scrofula, and in certain forms of neuralgia. They are commonly employed in form of warm baths, but, when used internally, they are to be mixed with ordinary water—one-eighth to one-fourth of a glass of the well water.

In pints and half-pint bottles.

\* Such mother-lye contains the largest amount of Chloride of Potassium, as this salt does not readily crystallize and is easily soluble. In the mother-lye of Kreuznach 168 grains of it are found.

## GREENBRIER WHITE SULPHUR WATER.

The *White Sulphur Springs*, from which that water derives its name, are in Greenbrier County, West Virginia, and is a station on the Chesapeake & Ohio Railroad, 65 miles east of Cincinnati, in a beautiful valley, about 2,000 feet above the sea. Having a certain similarity with the cold sulphur waters of Bad Neundorf, in the Prussian Province Hanover, it is an excellent aperient and alterative sulphur water, combining the purging sulphates with the salts of lime and sulphureted hydrogen, and exercising a relieving and curative influence on the kidneys, and in cases of engorgements of the liver, in dartsous skin-diseases, in chronic poisoning by metals, in diseases of the bladder, as Catarrh and Gravel, and as an adjuvant in cases of secondary and tertiary syphilis. It is of relieving influence in dyspepsia and jaundice if caused by congestion of the liver. Besides the drinking of the mineral water, the use of warm or hot baths may not be neglected, to be sure of the most beneficial results in these diseases. In organic diseases of the heart, as well as in phthisis pulmonalis (consumption) of the lungs, and in scirrhus of the stomach, the use of the water seems to be more or less injurious.

There are two analytic examinations of the mineral water made by Prof. A. A. Hayes and Prof. W. B. Rogers, according to which the following constituents have been found in one pint of the said water.

Solids:	Analysis of Prof. Hayes. Grains.	Analysis of Prof. Rogers. Grains.
Carbonate of Magnesia.....	.....	0.146
Carbonate of Lime.....	0.884	0.441
Chloride of Sodium.....	.....	0.065
Chloride of Magnesium.....	0.125	0.020
Chloride of Calcium.....	.....	0.003
Sulphate of Soda.....	.....	1.169
Sulphate of Magnesia.....	4.427	2.379
Sulphate of Lime.....	9.794	9.148
Sulphate of Alumina.....	.....	9.003
Protosulphate of Iron.....	.....	0.019
Silicates.....	0.432	.....
Organic Matter.....	0.545	0.001
Total.....	16 207	13.394
GASES:		
Carbonic Acids.....	1.41	1.06
Sulphureted Hydrogen.....	0.03	0.37
Oxygen.....	0.06	0.05
Nitrogen.....	0.58	0.54
Temperature.....	62 degrees F.	
Flow.....	30 gallons per minute.	

In cases of 2 dozen quart bottles.

## MASSENA SPRING WATER.

*Massena Springs* are located in St. Lawrence County, New York State. The mineral waters produced by these springs belong to the class of saline-sulphur waters, much resembling those of Eilsen, in Germany, Schannsburg-Lippe,

but being far richer in Chloride of Sodium. They have proved of decidedly beneficial results in dartrous diseases of the skin, scrofula, catarrh of the bladder, and in gravel. In most cases their use should be combined with the tepid and warm bath. Furthermore, the waters have been found effectual remedies in affections of the kidneys and liver, chronic dyspepsia, chronic ophthalmia, calculous affections and chronic rheumatism.

## ANALYSIS BY PROF. F. MEYER.

ONE PINT CONTAINS:	
Solids.	Grains.
Carbonate of Iron.....	0.045
Carbonate of Lime.....	0.422
Carbonate of Potassium.....	0.063
Carbonate of Sodium.....	9.961
Carbonate of Magnesium.....	3.741
Sulphate of Soda.....	0.437
Sulphate of Lime.....	7.616
Hyposulphite of Soda.....	0.526
Phosphate of Soda.....	0.165
Bromide of Magnesium.....	0.084
Sulphuret of Sodium.....	0.176
Silicate of Soda and Organic Compounds.....	1.397
Total.....	24.633
Gas.—Sulphureted Hydrogen, cubic inches.....	0.663
In cases of 2 dozen pints.	
In cases of 2 dozen quarts.	

## ✓ THE HATHORN SPRING WATER,

OF SARATOGA, NEW YORK.

This spring was discovered in the late fall of 1868, from which time it has progressively grown in favor as a medicinal water, of efficient power in the cure and alleviation of diseases of a certain class, known among medical men as functional derangements of the digestive system.

## ANALYSIS OF THE HATHORN SPRING.

	Grains.
Chloride of Sodium.....	509.968
Chloride of Potassium.....	9.597
Bromine of Sodium.....	1.531
Iodide of Sodium.....	.198
Fluoride of Calcium.....	a trace
Bicarbonate of Lithia.....	11.447
Bicarbonate of Soda.....	4.288
Bicarbonate of Magnesia.....	176.463
Bicarbonate of Lime.....	170.646
Bicarbonate of Strontia.....	a trace
Bicarbonate of Baryta.....	1.737
Bicarbonate of Iron.....	1.128
Phosphate of Soda.....	.006
Biborate of Soda.....	a trace
Alumina.....	.131
Silica.....	1.260
Organic.....	a trace
Total solid contents.....	888.403
Carbonic Acid Gas in one gallon, inches.....	375.747
Density.....	1.009

It will be observed that the quantity of salts contained in this water, excepting the chloride of sodium, is comparatively small. Its therapeutic action, however, when taken in the usual quantity, is much greater than the small amount of the salts would produce if combined artificially. In its remote action it is, like other mineral waters, a powerful alterative, when taken in moderate quantities, for a considerable time.

This spring may be classed among the alkaline-saline waters, and is prescribed for Dyspepsia, Gout, Gravel, Constipation, Rheumatism and Diabetes.

Sold in cases of 4 dozen pints or 2 dozen quarts.

## ✓ STRONTIA MINERAL WATER.

This water is but little known, except in its immediate locality. The spring is located near Brooklandville, Baltimore County, Maryland. All that is claimed for the water is no doubt well sustained from the testimony given in its favor. It is prescribed for diseases of the stomach, liver, kidneys; gout, rheumatism, headache and genital weakness. To get the desired benefit the water should be drunk from two to eight weeks, to the extent of from four to eight glasses per day, always taking one or two glasses before breakfast. It removes oppression after eating and assists digestion.

### ANALYSIS BY DR. W. SIMON,

OF LABORATORY MD. COLLEGE OF PHARMACY, BALTIMORE.

The temperature from 50 degrees to 51 degrees F. Amount of gaseous constituents, not including Carbonic Acid, present as Bicarbonates:

	In 100,000 parts.
Oxygen .....	0.82 cubic inches
Nitrogen .....	1.22 "
Carbonic Acid.....	3.50 "

### SOLIDS HELD IN SOLUTION.

	In 100,000 parts.
Nitrate of Potassium .....	4.66 parts
Nitrate of Sodium .....	1.43 "
Chloride of Sodium.....	12.87 "
Chloride of Magnesium ..	6.72 "
Chloride of Calcium.....	35.46 "
Bicarbonate of Calcium...	6.75 "
Sulphate of Strontium.....	0.22 "
Bicarbonate of Strontium...	1.86 "
Bicarbonate of Iron.....	0.88 "
Alumini.....	1.86 "
Silicic Acid.....	2.05 "
Phosphoric Acid .....	traces
Iodine .....	"
Ammonia .....	"
Organic Matter.....	"
<b>Total Solids .....</b>	<b>74.76 parts</b>

In barrels or quart bottles.

## TAUNUS MINERAL SPRING.

FROM GROSSKARBEN, NEAR FRANKFORT-ON-THE-MAI

The Taunus Natural Mineral Water flows from the Taunus-Brunnen, a spring in the Grand Duchy of Hesse, on the slope of the valley popularly called the "Golden Ground," which name it derives from its extraordinary fertility. The Taunus range of mountains commences in the neighborhood, and hence the spring derives its name. The railway station at Grosskarben, near Frankfort, is within three minutes' walk from the spring,

The Taunus Natural Mineral Water, although not a medical water, will be found beneficial in cases of dyspepsia, acidity of the stomach, and liver and kidney complaints. It will also be found a great relief in cases of sickness, if taken with milk in the morning.

The Taunus Spring was bored in 1872 by Dr. Otto Volger, of Frankfort, and gives a daily quantity of 51,684 litres, which shows it to be by far the richest spring in Germany. The following analysis, made by Dr. Thomas Taylor, F.R.C.S., late Professor of Chemistry at the Middlesex Hospital Medical College, London, shows the rich constituents of the Taunus Water. It contains in 1,000 parts by weight—

### FIXED CONSTITUENTS.

Chloride of Sodium .....	2.57
Chloride of Potassium .....	0.27
Carbonate of Lime .....	1.37
Carbonate of Magnesia .....	0.17
Carbonate of Soda .....	0.02
Sulphate of Lime .....	0.05
Silica .....	traces
Alumina .....	traces
Phosphate of Lime .....	traces
	4.45

### VOLATILE CONSTITUENTS.

Carbonic Acid, Compressed .....	2.89
Carbonic Acid, by Estimate, in Solution .....	1.74
	4.63

In cases of 50 quarts.

In cases of 100 pints.

## WILDUNGEN WATER.

FROM PROVINCE OF HESSE, NASSAU.

This alkaline mineral water does not affect the teeth. It creates and preserves good appetite, and facilitates and augments the natural secretions, and diminishes the excretion of mucus and albumen. Used for some length of time, it dissolves the urea and uric acid, hippuric acid, phosphates of ammonia and magnesia. In this way it effects a perfect cure in all kidney diseases—such as gravel-stones, and especially kidney-stones. It acts as a tonic on the muscles of the abdomen, and exercises a very salutary influence upon abdominal and

hæmorrhoid stagnations. It will cure the uterine congestions by stimulating all the secretions. It has a general salutary influence, because by opening the pores it relieves the strain put on the kidneys by inactivity of the epidermis.

It is also almost a specific in gout and rheumatism, which it cures on the same principle. In such cases, where deposits in the joints have to be dissolved, it is essential, during the use of this remedy, to forego all acid food and drinks, such as salad and unripe fruits. Also, it is advisable not to use too much meat, and especially liquors of any kind whatever. The spring has proved exceedingly favorable for catarrh of the bladder especially, and idiopathic or rheumatic diseases, such as have been produced by beer or wine. It has also a salutary effect on enlargements of the prostate gland.

#### ANALYSIS OF 10,000 PARTS.

Sulphate of Potash.....	1.1089
Sulphate of Soda.....	0.6874
Chloride of Sodium.....	0.0777
Bicarbonate of Soda.....	0.6433
Bicarbonate of Iron.....	0.2102
Bicarbonate of Manganese.....	0.0256
Sulphate of Lime.....	—
Bicarbonate of Lime.....	7.1244
Bicarbonate of Magnesia.....	5.3558
Silicic Acid. . . . .	0.1958
Bicarbonate of Ammonia.....	0.0151
Bicarbonate of Baryta.....	0.0031

Otto Spring, in hampers of 50 bottles.

Helene Spring, in cases of 50 quart bottles.



We are the largest Dealers and Importers of Mineral Waters in the  
United States.

PRICE \* LIST

OF

WINES AND LIQUORS.

BY

P. SCHERER & CO.,

SUCCESSORS TO JOHN SATTIG.

ESTABLISHED 1841



TRADE MARK.

11 BARCLAY STREET,

BETWEEN BROADWAY AND CHURCH ST.,

NEW YORK.

# INDEX.

Advantages of our System.....	6 and 7
American Wines.....	14
Ale.....	15
Burgundy Wines.....	9
Brandies.....	12 and 13
Champagnes.....	14
Clarets.....	8
Constituent Parts of Wines.....	6
Gins.....	13
Hollands.....	13
Hungarian Wines.....	12
Introduction.....	3, 4, 5, 6
Lager.....	15
Moselle Wines.....	10
Port Wine.....	10
Rhine Wines.....	9
Rum.....	14
Sauterne Wine.....	8
Sherry Wine.....	10 and 11
Stout.....	15
Sundry Wines.....	11
Soda Water.....	15
Tokay Wines.....	11

## WINES.

Wine, that glorious juice of the grape, elegantly designated by an ancient poet as a "récompense given for the miseries incurred by mankind through the Deluge," has puzzled poets and historians in all ages to account satisfactorily for its discovery. It has been ascribed to Noah and many other ancient celebrities.

We cannot attempt to unravel the history, but propose to come at once to a description of its best known varieties, and of the chief characteristics of those kinds with which we are now most familiar. The vine is capable of producing many varieties of wines, possessing different qualities, the result of peculiarities of soil and climate, as well as of the aspect it presents to the sun, and other causes, many of which are not yet well ascertained.

Thus it happens that one vineyard, perhaps separated from the next by merely a few stakes, and without particular difference of soil, culture or aspect, may produce a far superior wine to its neighbor.

The richest wines of France, Italy, Hungary, Madeira and Teneriffe are grown on the sites of extinct volcanoes.

The vines of Medoc, near Bordeaux, are attached to low espaliers rising about two feet from the ground, and producing grapes which look like over-ripe black currants. Yet these unpromising grapes are those which produce the renowned wines of Lafitte and Chateau Margaux.

October is the wine month in this district; for weeks previously the weather is anxiously watched from day to day; for upon a continuance of weeks of fine weather the savor and bouquet of the wine essentially depend. Warmed by the glare of an unclouded sun, tempered by mild westerly winds and moistened by dews, the grapes ripen and attain their exquisite flavor.

The French are generally considered the best vine cultivators in the world. The wines known in France as Vins de Bordeaux are with us classed under the general name of Claret, a name signifying that it is a mixed tonic of a clear red color. The dry white wines are known as Sauternes.

The district in which these wines are produced was the ancient province of Gaseony (now the department of Gironde), and is estimated to possess above 37,000 acres of vineyard, thickly planted, and constituting one of the most valuable wine districts of France.

The generality of the wines of Bordeaux, though containing little alcohol, will stand and keep well. They are greatly improved by a sea voyage.

It often happens that wines of a lower growth will become so much improved as to almost equal the finer growths. The characteristics of the best growths are a deep bright ruby or violet color, exquisite bouquet of the flavor of the raspberry and violet, a soft, silky taste to the palate, and possessing the quality of endurance.

Ordinary claret is one of the most refreshing and invigorating of beverages.

It is easy of digestion and well suited for general use, especially in warm climates, being a mildly stimulating drink.

The Bordeaux district has been estimated to produce upwards of 85,000,000 gallons of wine.

Continuing the wines of France, we now turn to Champagne. This wine is distinguished, according to the site of the vineyards, into river or mountain growths, the former being for the most part white, the latter red.

The vineyards on the banks of the Marne produce the best Champagne. *Champagne* is divided into sparkling or *mosessex*, demi-sparkling (*crémans* or *dem-mosessex*), and still Champagne or *non-mosessex*. They are white, straw-colored, gray, rosy, or red.

Still Champagne is infinitely the best. Sillery has no sparkle at all. That which froths only slightly is the best.

Ice improves Champagne by diminishing its effervescence.

Enormous quantities of this wine are consumed. It is said the cellarage of one firm alone is five miles in extent, all cut out of calcareous rock, and contains on an average 5,000,000 bottles of wine. There are others equally as vast, and carrying the same amount of stock.

Champagne wine has been recommended by the faculty as a valuable medicine for keeping up the system during exhaustion. It stimulates without subsequent depression. It is easily digested.

Champagne should not be drunk till the active effervescence is over.

The Champagne district is estimated to produce annually, on an average, 52,000,000 gallons of wine.

Burgundy, a wine of great character, is much in request. The district from which it is grown is estimated to produce annually 75,000,000 gallons of wine.

Burgundies are stronger than elaret, and possess an exquisite aroma and delicious flavor.

They are pleasant, healthful, and invigorating.

We come now to the light and most excellent wines of the Rhine, known as Hocks or Rhine wines.

The Rhine and the vine have for centuries been associated together, and the Germans are as fond of their wines as they are of their river, which they fondly call the father of wine.

The durability of the wines of the Rhine are remarkable. The peculiar qualities of these wines appear to form an exception to the prevalent chemical theories; their sharpness of flavor occasions a suspicion of acidity, yet they are highly agreeable, abounding in delicate aroma, and are also dry and sound, while they contain very little alcohol.

Whoever desires a sound, honest wine, which will impart cheerfulness instead of pressing on the brain, let him drink Rhenish wine.

The Moselle wines have a peculiarity in their musk-like or elder flower-like bouquet.

They will not keep as long as Rhine wine, but are very pleasant and wholesome. These light wines are more refrigerant than any others, and are excellent for persons in low fevers and when there is great nervous exhaustion.

Port wine is produced from a district in Portugal called the Cima de Douro, or Alto Douro. The vintage season begins in September and ends in October,

and is capable of producing, in favorable years, 70,000 pipes of wine, each pipe averaging about 115 gallons.

The color of port wine varies from a dark red to a deep tawny brown, when old. When it has become tawny it loses much of its astringency. It derives its color from the skin of the grape, without the aid of any foreign ingredient.

Good port wine, duly kept, is, when taken in moderation, one of the most wholesome of vinous liquors; it strengthens the muscular system, assists the digestive powers, accelerates the circulation, exhilarates the spirits and sharpens the mental energies; but when taken in excess is injurious to the digestive organs.

Sherry wines are the produce of the vineyards of the triangular district formed by Xeres de la Frontera, Santa Maria and San Lucas de Barameda. The vine district is about twelve miles square, and watered by the rivers Guadalquivir and Guadalete.

The finest and driest sort of sherry wine is Amontillado, and the peculiarity of its flavor is a mystery of nature that has not been correctly solved.

When the farmer intends making this wine, the grapes are plucked about a fortnight before the general vintage, and the product kept apart; out of 20 butts, however, it generally happens not above two will have the quality so much desired. Sometimes, as if by caprice, a butt of wine from the general vintage will assume the Amontillado flavor. Brandy added to Amontillado would ruin it. Sherries should be judged by their taste, not by their color.

Sherry, when pure, contains less free acid. It is not so stimulating as most wines, and agrees well with most constitutions. It is also much used as a pharmaceutical agent for the extraction of the medicinal properties of some drugs, which require spirit for their solution.

Some idea may be conceived of the vast amount of wine stored in Xeres by the fact that in one well-known warehouse or bodega is stored on an average 15,000 butts of wine, each butt averaging 108 gallons, bottling from 50 to 52 dozen to the butt.

The Xeres grape has been planted in many places, but nowhere does it produce such fine wine as it does in its own native soil.

Of Andalusian wines the best known is Rota Tente; it is used as a sacramental wine.

There are many excellent red and white Spanish wines. The estimated produce of Spain averages upwards of 136,000,000 of gallons.

Madeira, the product of the Island, so called, is a first-class wine, darker than Sherry.

Malmsey Madeira is a very choice rich wine, and capable of being kept many years. It is produced from a grape which will only flourish on a small spot in Madeira—the valley of the Camal de Lobos, on the south of the island. Old Sherry and old Madeira rank very high as perfect wines. They ought to be destitute of acidity and astringency, but stimulating and nourishing, these qualities being so nicely proportioned that the spirit they contain assists their digestion. It is principally on these grounds that they constitute an excellent beverage for the dyspeptic, the sedentary, and the invalid generally.

Malaga is chiefly a dry wine, similar to sherry, but much inferior to it in flavor, being sweet-tasted.

Tokay or essence wines are largely prescribed as a tonic. They are expensive, but, considering the small quantity required to produce the desired effect, it reduces the cost to about the same as other wines used for the same purpose.

Imperial Tokay is a very rich, luscious wine, of peculiar flavor and exquisite delicacy.

It is very choice. This wine is a product of Hungary, that is estimated to produce 96,000,000 gallons of wine—wine being the universal beverage of the nation, of which the best known is Tokay, as the wine of that particular district is called.

Wines vary according to the quantities of sugar, alcohol and acid they contain. When wines contain much sugar they are called "sweet," when little, "dry." The quantity of alcohol depends on the amount of sugar charged during fermentation. Tartaric acid formed on the inside of wine casks is collected in the continent of Europe, hence the Tartaric acid of commerce.

The constituent parts of wines are as follows: One imperial pint contains--

WINES.	WATER.	ALCOHOL.	SUGAR.	TARTARIC ACID.
Port.....	16 oz.	4 oz.	1 oz. 2 grs.	80 grs.
Brown Sherry.....	15½	4½	0 360	90
Pale Sherry.....	16	4	0 80	170
Claret.....	18	2	0 0	161
Burgundy.....	17½	2½	0 0	160
Hock.....	17½	2½	0 0	127
Moselle.....	18½	1½	0 0	140
Champagne.....	17	3	1 333	90
Madeira.....	16	4	0 400	100

In submitting our list of wines and liquors to the public, we have been careful to enter upon all the necessary instructions relative to supplying and setting forth the article we know is wanted, in quality and price. A general idea prevails that wines are manufactured. Wines are prepared to suit the different tastes of consumers, we grant, but not made up by respectable houses; good wines keep, bad deteriorate with age. Our pamphlet has been carefully made up to guide the consumer as to the article required, and in all cases we give the value and quality. We beg to thank our friends and customers for their kind recommendations; upon this, and strict attention to business principles, we have built up our trade.

The following are some of the advantages of our system, namely—

**PURITY.**—The purity of every article is guaranteed upon the reputation we have made in this special business.

**QUALITY.**—Quality is guaranteed, and is the same whether the wines and spirits are obtained direct from us or our Agents.

**VALUE.**—The utmost value given at a fair profit.

**AGENTS.**—Consumers save time, trouble and expense by buying at the Agents, rates same as direct.

**MEASURE.**—Five bottles of still wines (except Hock) make one gallon.

**SINGLE BOTTLES.**—At same price as larger quantity.

**TERMS.**—Strictly cash; prices and profit arranged upon this basis.

**BOTTLES.**—Charged in with price of wines and liquors (at 3 cts. each); they are returnable at that price, freight deducted; for beer bottles we pay 2 cts. each.

**BOXES.**—Charged at the following rates:

One box for two bottles, 10 cts.

One box for four bottles, 12 cts.

One box for six bottles, 15 cts.

and at the rate of one cent per bottle up to one dozen; boxes returnable at prices charged, freight deducted.

**CONDITION.**—On receipt of wines or beers after traveling, let them rest for a few days, with a temperature of 60 degrees; it improves the brilliancy.

**DELIVERY.**—New York or Brooklyn, Jersey City and Hoboken free.

**NAME AND ADDRESS.**—Please be particular to send correctly to ensure a prompt delivery.

**SECURITY.**—All bottles bear our special label, with trade-mark, namely—



**CORKS.**—Are branded on the side: P. Scherer & Co., and the number of the wine. The number of the wine is also on the small seal on neck of bottle.

**PAYMENTS.**—On direct orders to us—to P. Scherer & Co., New York.

## CLARETS.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Claret, No. 1.—A full-bodied young wine for dinner use.....	\$0.38	\$4.50
<b>P. SCHERER &amp; Co.</b> 2	Claret, No. 2.—A full-bodied wine from the Medoc district. Has a peculiar softness and strongly recommended..	0.42	5.00
<b>P. SCHERER &amp; CO.</b> 3	Claret, No. 3.—A fine, soft wine, of delicate character.....	0.5	6.00
<b>P. SCHERER &amp; CO.</b> 4	Claret, No. 4.—A fine wine from the district of St. Emilion. Has a splendid body and bouquet.....	0.59	7.00
<b>P. SCHERER &amp; CO.</b> 5	Claret, No. 5.—Grown in the Medoc district. A delicious, delicate wine....	0.67	8.00
<b>P. SCHERER &amp; CO.</b> 6	Claret, No. 6.—From one of the finest vineyards of the Medoc district. Very soft and with great fragrance.. . . .	0.75	9.00
<b>P. SCHERER &amp; CO.</b> 7	Claret, No. 7.—A good, sound wine of great body, excellent bouquet.....	0.88	10.50
<b>P. SCHERER &amp; CO.</b> 8	Claret, No. 8.—Exceedingly fine wine. A choice production and good value...	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 9	Claret, No. 9.—A wine of rare value, strong and very sound.....	1.13	13.50

## SAUTERNES (White Bordeaux Wine).

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Sauterne, No. 1.—From Bordeaux. A fine delicate wine, excellent for table use.....	\$0.55	\$6.60
<b>P. SCHERER &amp; CO.</b> 2	Sauterne No. 2.—A wine with a soft, delicate flavor.....	.63	7.50
<b>P. SCHERER &amp; CO.</b> 3	Sauterne, No. 3.—A light, rich wine, with a good bouquet.....	.71	8.50
<b>P. SCHERER &amp; CO.</b> 4	Sauterne, No. 4.—From Bordeaux; old, in bottle, well matured.....	.80	9.60
<b>P. SCHERER &amp; CO.</b> 5	Sauterne, No. 5.—Haut Barsac, from a well-known vineyard; possesses a good body.....	.84	10.00
<b>P. SCHERER &amp; CO.</b> 6	Sauterne, No. 6.—Chateau D'Arch; rich and of delicate flavor.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 7	Sauterne, No. 7.—Chateau Yquem; a choice, sound wine of great body and delicate bouquet.....	2.00	24.00

## BURGUNDY WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Burgundy, No. 1.—A good sound wine for dinner use.....	\$0.63	\$7.50
<b>P. SCHERER &amp; CO.</b> 2	Burgundy, No. 2.—Has a good bouquet and color.....	.75	9.00
<b>P. SCHERER &amp; CO.</b> 3	Burgundy, No. 3.—A fine, full-bodied Burgundy.....	.92	11.00
<b>P. SCHERER &amp; CO.</b> 4	Burgundy, No. 4.—An excellent red wine.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 5	Burgundy, No. 5.—Can be highly recommended.....	1.25	15.00
<b>P. SCHERER &amp; CO.</b> 6	Burgundy, No. 6.—Great body and very delicate; splendid color.....	1.50	18.
<b>P. SCHERER &amp; CO.</b> 7	Burgundy, No. 7.—A wine of rare character; possesses an exquisite aroma, deep color, and a delicious flavor....	1.67	20.00
<b>P. SCHERER &amp; CO.</b> 8	Burgundy, No. 8.—This is a grand old wine, of great character.....	2.17	26.00

## RHINE WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—A pleasant white wine, excellent for the price.....	\$0.50	\$6.00
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—An excellent Niersteiner white wine; good body and aroma.....	.59	7.00
<b>P. SCHERER &amp; CO.</b> 3	No. 3.—A fine, delicate Geisenheimer wine, from one of the noted districts of the Rhine.....	.67	8.00
<b>P. SCHERER &amp; CO.</b> 4	No. 4.—A good sound Rudesheimer, considered one of the finest growths made.....	.75	9.00
<b>P. SCHERER &amp; CO.</b> 5	No. 5.—This is an excellent wine of good value; as a Hocheimer it cannot be beaten at price.....	.92	11.00
<b>P. SCHERER &amp; CO.</b> 6	No. 6.—A wine of great body and good character.....	1.0	12.00
<b>P. SCHERER &amp; CO.</b> 7	No. 7.—A splendid Johannisberger wine.....	1.25	15.00
<b>P. SCHERER &amp; CO.</b> 8	No. 8.—A rich, red wine from the Ingelheimer district.....	.90	10.80
<b>P. SCHERER &amp; CO.</b> 9	No. 9.—A wine of fine body, from the Assmanshauser district.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 10	No. 10.—From same district as No. 9. Vintage, 1868.....	1.34	16.00

## MOSELLE WINE.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Moselle, No. 1.—A sound wine; has a muscat grape flavor.....	\$0.67	\$8.00
<b>P. SCHERER &amp; CO.</b> 2	Moselle, No. 2.—A soft, delicate wine, of good value.....	.84	10.00
<b>P. SCHERER &amp; CO.</b> 3	Moselle, No. 3.—A light, delicate wine.	1.00	12.00

## PORT.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Port, No. 1.—A good sound wine, pure and wholesome.....	\$0.40	\$4.80
<b>P. SCHERER &amp; CO.</b> 2	Port, No. 2.—A good wine, with a ruby color; excellent at the price.....	.45	5.40
<b>P. SCHERER &amp; CO.</b> 3	Port, No. 3.—A stout-bodied wine, rich and of good flavor.....	.60	7.20
<b>P. SCHERER &amp; CO.</b> 4	Port, No. 4.—A fruity wine, especially adapted for invalids; splendid body.	.80	9.60
<b>P. SCHERER &amp; CO.</b> 5	Port, No. 5.—A grand old fruity wine, of soft and delicate flavor.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 6	Port, No. 6.—A fine, rich wine, fruity and of great age.....	1.25	15.00
<b>P. SCHERER &amp; CO.</b> 7	Port, No. 7.—A choice wine of great age in bottle.....	1.50	18.00

## SHERRIES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Sherry, No. 1.—A good, pure, wholesome wine, sweet, and to many preferred to a dry wine.....	\$0.40	\$4.80
<b>P. SCHERER &amp; CO.</b> 2	Sherry, No. 2.—A full-flavored wine, good for ordinary use.....	.45	5.40
<b>P. SCHERER &amp; CO.</b> 3	Sherry, No. 3.—Excellent wine for general use.....	.50	6.00
<b>P. SCHERER &amp; CO.</b> 4	Sherry, No. 4.—Brown wine, dry and good body.....	.55	6.60
<b>P. SCHERER &amp; CO.</b> 5	Sherry, No. 5.—A very superior wine, excellent for invalids.....	.75	9.00
<b>P. SCHERER &amp; CO.</b> 6	Sherry, No. 6.—Amontillado; beautiful pale Sherry, fine body and delicate aroma.....	1.00	12.00

## SHERRIES (Continued).

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 7	Sherry, No. 7.—Oloroso; an elegant, rich, soft wine, well matured, pale in color, and fine bouquet.....	\$1.25	\$15.00
<b>P. SCHERER &amp; CO.</b> 8	Sherry, No. 8.—Montilla; old-soft wine, dry and delicate .....	1.42	17.00
<b>P. SCHERER &amp; CO.</b> 9	Sherry, No. 9.—A selected old pale wine; can be highly recommended..	1.67	20.00

## SUNDRY WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Malaga, No. 1.—(Rich mountain); this dark brown wine is produced in the district around Malaga, in Spain; it is a sweet, luscious wine.....	\$0.50	\$6.00
<b>P. SCHERER &amp; CO.</b> 2	Malaga, No. 2.—A sound wine, of greater age than No. 1.....	.84	10.00
<b>P. SCHERER &amp; CO.</b> 1	Madeira, No. 1.—A rich wine, beautiful golden color.....	.50	6.00
<b>P. SCHERER &amp; CO.</b> 2	Madeira, No. 2.—Of fine fragrance and body.....	.80	9.60
<b>P. SCHERER &amp; CO.</b> 1	Sacra Tent, No. 1.—An unfermented wine, for sacramental purposes. This is supplied by the gallon, at \$3.50 per gallon .....	.75	9.00

## TOKAY OR ESSENCE WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—An excellent Tokay wine.....	\$1.25	\$15.00
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—A wine of great virtue and body.....	1.50	18.00
<b>P. SCHERER &amp; CO.</b> 3	No. 3.—An old cabinet wine, very delicious; prescribed largely by the medical faculty.....	2.00	24.00
<b>P. SCHERER &amp; CO.</b> 4	No. 4.—An imperial wine of great age, rare and elegant.....	2.50	30.00

## RED WINES FROM HUNGARY.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—A good Karlowitz wine.....	\$0.55	\$6.50
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—A wine of good body and aroma.....	.63	7.50
<b>P. SCHERER &amp; CO.</b> 3	No. 3.—Has a great body, and excel- lent for medical purposes. ....	.80	9.60
<b>P. SCHERER &amp; CO.</b> 4	No. 4.—A soft, mellow wine, pleasant and of delicate bouquet.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 5	No. 5.—A wine that can be highly re- commended.....	1.34	16.00
<b>P. SCHERER &amp; CO.</b> 6	No. 6.—From one of the finest districts of Hungary; old in bottle.....	1.67	20.00

## WHITE HUNGARIAN WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—A cheap, sound and good din- ner wine.....	\$0.46	\$5.50
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—A sound wine, of very excellent properties.....	.63	7.50
<b>P. SCHERER &amp; CO.</b> 3	No. 3.—A wine possessing a muscat grape flavor.....	.75	9.00
<b>P. SCHERER &amp; CO.</b> 4	No. 4.—A fine flavored, fully matured wine.....	.88	10.50
<b>P. SCHERER &amp; CO.</b> 5	No. 5.—A wine of good body and age; can be highly recommended.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 6	No. 6.—A rare old white wine, soft and mellow, of great character.....	1.50	18.00

Special prices given on higher grades.

## BRANDIES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	Brandy, No. 1.—Excellent pale brandy for ordinary use.....	\$0.65	\$7.80
<b>P. SCHERER &amp; CO.</b> 2	Brandy, No. 2.—Good sound spirit, pale in color, good and wholesome.....	.88	10.50
<b>P. SCHERER &amp; CO.</b> 3	Brandy, No. 3.—Of soft mellow flavor, golden color.....	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 4	Brandy, No. 4.—Good body, pale color, mild; can be recommended as a sound spirit.....	1.25	15.00

## BRANDIES (Continued).

BRAND ON CORK.			Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 5	Brandy, No. 5.—Brown color, good, sound and wholesome.....		\$1.25	\$15.00
<b>P. SCHERER &amp; CO.</b> 6	Brandy, No. 6.—Pale; fine aroma, and excellent character.....		1.42	17.00
<b>P. SCHERER &amp; CO.</b> 7	Brandy, No. 7.—Carefully selected; old golden color, mellow and rich....		2.00	24.00

## WHISKIES.

BRAND ON CORK.			Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—A very fair sound whisky.....		\$0.50	\$6.00
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—Rye Whisky; good, wholesome liquor.....		.60	7.20
<b>P. SCHERER &amp; CO.</b> 3	No. 3.—Bourbon Whisky; a good, pure whisky, can be relied upon.....		.75	9.00
<b>P. SCHERER &amp; CO.</b> 4	No. 4.—P. Scherer & Co.'s blending; a fine old whisky, of good value.....		1.00	12.00
<b>P. SCHERER &amp; CO.</b> 5	No. 5.—Sound, mellow whisky, of great body and fine flavor.....		1.25	15.00
<b>P. SCHERER &amp; CO.</b> 6	No. 6.—Old in bottle, mellow; excellent for medical purposes.....		1.50	18.00

## HOLLANDS.

BRAND ON CORK.		Name on label.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	<b>Holland</b> 1	No. 1.—A good, sound Holland gin.....		\$0.80	\$9.60
<b>P. SCHERER &amp; CO.</b> 2	<b>Holland</b> 2	No. 2.—Excellent quality, from one of the best distilleries in Holland.....		1.00	12.00

## GIN.

BRAND ON CORK.		Name on label.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	<b>Gin</b> 1	No. 1.—Good domestic gin, pure and of good value.		\$0.50	\$6.00
<b>P. SCHERER &amp; CO.</b> 2	<b>Gin</b> 2	No. 2.—A better article than No. 1; wholesome and pure.....		.65	7.80

## RUM.

BRAND ON CORK.	Name on label.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	<b>Rum</b> 1	No. 1.—A good sound New England rum.....	\$0.45	\$5.40
<b>P. SCHERER &amp; CO.</b> 2	<b>Rum</b> 2	No. 2.—A sound rum, from St. Croix.....	.50	6.00
<b>P. SCHERER &amp; CO.</b> 3	<b>Rum</b> 3	No. 3.—A Medford rum, good, sound and wholesome.....	.75	9.00
<b>P. SCHERER &amp; CO.</b> 4	<b>Rum</b> 4	No. 4.—A new Jamaica, with an excellent flavor.	1.00	12.00
<b>P. SCHERER &amp; CO.</b> 5	<b>Rum</b> 5	No. 5.—A rich old Jamaica, excellent for medical purposes.....	1.25	15.00

## CHAMPAGNES.

Of these wines we are able to supply any of the known brands in pints or quarts at the lowest prices.

## AMERICAN WINES.

BRAND ON CORK.		Per bot.	Per doz.
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—Angelica Wine.....	.50	\$6.00
<b>P. SCHERER &amp; CO.</b> 1	No. 1.—Catawba Wine.....	.40	4.80
<b>P. SCHERER &amp; CO.</b> 2	No. 2.—Catawba Sweet Wine.....	.40	4.80

## ALE AND STOUT, &amp;c.

The following articles are frequently prescribed by the medical profession, therefore we are particular to recommend what we know to be pure and reliable :

Bass Ale, bottled by Ihlers & Bell .....	Per Doz. \$1.80
Guinness' Stout, bottled by Ihlers & Bell.....	1.70
Milwaukee Lager, bottled by P. Scherer & Co.....	1.15
Soda Water, specially prepared by P. Scherer & Co.....	1.25

We trust our price list will be preserved for future reference.

**P. SCHERER & CO.,**

11 BARCLAY ST., New York.







