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Salt Sulphur Springs

Established in 1820

A brief description of the resort, the efficacy of its waters and the analyses of its several springs.

By

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SALT SULPHUR SPRINGS

THESE springs, three in number, are about twenty-four miles south from the White Sulphur, in the County of Monroe, and near Union, the seat of justice for that county. They are encircled by mountains on every side,—having Peters' Mountain to the south and east, the Alleghany to the north, and Swope's Mountain to the west, near the base of which are the three springs alluded to.

This watering place has been a popular and profitable resort for invalids for the last fifty years; having always heretofore, as now, enjoyed a high reputation, alike for the virtue of its waters and the excellence of its accommodations. It is owned by Messrs. Erskine & Caruthers, worthy and enterprising proprietors, under whose personal management the establish-

ment has been for many years, and who made the principal improvements at the place—which are both comfortable and extensive; being sufficient for the accommodation of three hundred and fifty persons.

The “*Salt Sulphur*” proper was discovered by Erwin Benson, Esq., in 1805, when boring for salt water, which he was induced to believe might be found there, from the fact that, in *old times*, the spot had been a favorite “Lick” for deer and buffalo. This spring is neatly inclosed in a marble reservoir, two feet square, and about two feet ten inches deep, and is protected from the weather by a neat and comfortable edifice.

The following is the *analysis* of this water, as furnished by Professor Rogers:—

Temperature variable from 49° to 56°.

Solid matter procured, by evaporation from 100 cubic inches,

weighed, after being dried at 212°, 81.41 grains.

Quantity of each solid ingredient in 100 cubic inches, estimated as perfectly free from water:—

1. Sulphate of lime	36.755	grains
2. Sulphate of magnesia	7.883	“
3. Sulphate of soda	9.682	“
4. Carbonate of lime	4.445	“
5. Carbonate of magnesia	1.434	“
6. Chloride of magnesium	0.116	“
7. Chloride of sodium	0.683	“
8. Chloride of calcium	0.025	“
9. Peroxide of iron, from proto-sulphate	0.042	“
10. An azotized organic matter blended with sulphur, about	4	“
11. Earthy phosphates	a trace	
12. Iodine.		

Volume of each of the gases contained in a free state in 100 cubic inches:—

Sulphuretted hydrogen	1.10 to 1.50	cu. in.
Nitrogen	2.05	“
Oxygen	0.27	“
Carbonic acid	5.75	“

The above analysis applies to the Iodine, or New Spring, as well as to the Upper, or Old Spring, as the following extract of a letter, from Professor Rogers to the proprietors, will show:—

“I inclose you a list of the ingredients in the Salt Sulphur water, which applies to the New as well as to the Old Spring, the former having rather a smaller amount of saline matter in general, though in some ingredients surpassing the other. It has been very minutely analyzed, and is the first of all the waters in which I was enabled to detect traces of iodine, which it contains in larger amount than the Old Spring, and, indeed, than most of the other waters in which I have been so fortunate as to discover this material.”

The *Iodine*, or *New Spring*, was accidentally discovered by the proprietors in 1838, while engaged in opening a drain for the water of

the "Salt," and was immediately deepened and inclosed in a marble reservoir, and covered by an appropriate building. Owing to a large deposit of sulphur in combination with some peculiar organic matter, which floats as a pellicle upon the surface of the spring, this water is less limpid than that of the "Salt." Under an intense heat of the sun, it occasionally deposits a beautiful pink sediment upon the bottom and sides of the reservoir. In taste and smell, it much resembles the water of the other springs, but being *ten degrees* warmer, is less palatable to some persons. Its temperature varies from 62° to 68° Fah.

The presence of a larger quantity of iodine in this spring, *points* it out as a superior agent in many affections for which iodine is successfully employed, particularly in scrofula, goitre, and some diseases of the skin.

The Upper, or *Old Spring*, was discovered in 1803, by Alexander Hutcherson, Esq., who was searching for salt water on Indian Creek. It soon came into high reputation as a mineral water, and was the annual resort of a large company. The house now occupied as a hotel, and several of the old cabins, were erected at that early day. The water of this spring is now almost exclusively used for the baths; the opening of the *Salt Sulphur* proper, whose waters are more strongly marked, having in a great degree superseded it as a drink.

The water of the Salt Sulphur possesses all the sensible properties of the sulphur waters in general. "Its odor, for instance," says Dr. Mutter, "is very like that of a 'tolerable egg,' and may, in certain states of the atmosphere, be perceived at some distance from the spring, and in taste it is cousin-german to a strong solution of Ep-

som salts and magnesia. In a short time, however, strange to say, these disagreeable properties are either not observed, or become, on the other hand, attractive; indeed, there is hardly an instance of an individual's retaining his original repugnance to them longer than three or four days, and some there are who become so excessively fond of the water as to give it the preference over any other liquids. Like most of the sulphurous, this water is perfectly transparent, and deposits a whitish sediment, composed of its various saline ingredients, mingled with sulphur. It is also for the most part placid; occasionally, however, it is disturbed by a bubble of gas, which steals slowly to the surface, where it either explodes with a timid and dimpling smack, or is eagerly caught up by some care-worn and almost world-weary invalid as a gem from the treasury of Hygeia!"

The Salt Sulphur water is remedial in all cases for which strong sulphur waters are successfully used; and especially in cases that require active cathartic operation. While its cathartic effects are more active than those of any other water in the geological region in which it exists, it is neither harsh nor violent; gently clearing the alimentary canal without debilitating the patient, while it actively promotes the general secretions, invigorates the appetite, and promotes digestion. The cathartic effects of the water, are so mild and certain, that the stomach is never oppressed nor the bowels irritated; but while the alimentary canal is being relieved, the functions of the system assume their physiological type, and the suspended causes of disease are gradually removed.

In the extensive range of diseases, dependent upon *visceral* ob-

structions, the Salt Sulphur is eminently useful; and in that particular form of simple *Dyspepsia*, in which constipation is a leading and troublesome symptom, I have found it to be signally efficacious.

This water, like all our sulphur waters, will sometimes distinctly reduce the frequency and force of the pulse; and while such effect upon the circulation is not characteristic of its constant action upon the economy, it is favorable to its sanative influence. As is the case with the White and other sulphur waters, this influence upon the circulation is not the effect of direct sedative action upon the heart and arteries, but of the sanative powers of the agent, as an alterative and deobstruent, in restoring the general economy to its true physiological type, and thus relieving the circulation from the causes that oppress it.

Dr. Mutter, in an instructive pamphlet on the Salt Sulphur, published in 1850, recommends these waters in *chronic affections of the Brain; in chronic diseases of the Bowels, Kidneys, Spleen, and Bladder; in Neuralgia*, as well as in the various affections termed *nervous*, such as hypochondria, hysteria, catalepsy, chorea, etc.

He found them useful in *sympathetic affections of the Chest*, dependent upon some lesion of the chylopoietic viscera; but cautions against their use in all cases of tubercles, hæmoptysis, or of great emaciation with diarrhœa.

Chronic Splenitis, often a sequela of Southern fevers, is frequently cured by these waters. Chronic gastric irritation, *Pyrosis*, or water-brash, as well as *Gastralgia*, or nervous dyspepsia, is often relieved by the Salt Sulphur.

Dr. Mutter found good effects from the waters in *constipation of*

the bowels, hæmorrhoids, and in irritation of the mucous membrane of the kidneys, urethra, prostate gland, and bladder.

Beneficial effects are derived from their use in *atonic leucorrhoea, amenorrhoea, and dysmenorrhoea*, when unconnected with general or local plethora.

Like all other strong sulphur waters, they are beneficial in *chronic Rheumatism and Gout*, as well as in *Periostitis*, and inflammation of the bones, and *chronic diseases of the Skin*.

In reference to the manner of using sulphur waters, Dr. Mutter judiciously remarks, that "a very injurious practice prevails at most of the watering places in this country. It is supposed by many that taking the water directly from the spring, contributes very much to its efficacy, and, consequently, we find the *sick and feeble*, as well as the robust, sallying forth by break of

day for this purpose. * * The water is undoubtedly more palatable when taken in this way, but it is not more *efficacious* than when drunk at the cabin." "Every invalid," he continues, "should bear this in mind, particularly those who visit the White Sulphur Springs."

THE SALT SULPHUR IODINE SPRING has attracted increased attention the last few years, and a recent analysis of its waters by Dr. David Stuart, of Baltimore, gives a sanction to medical anticipations as to its peculiar virtues and appropriate applicability. The following are the results of Dr. S.'s chemical investigations:—

IODINE SPRING.

One wine gallon of the water contains:—

Sulphuretted hydrogen	-----	19.19	cu. in.
Carbonic acid	-----	34.60	"
Oxygen	-----	00.62	"
Nitrogen	-----	04.73	"
		<hr/>	
Total gaseous content	-----	59.14	"

Solid Contents of One Gallon.

Sulphate of magnesia -----	20.00	grains
Sulphate of soda -----	24.00	“
Carbonate of lime -----	33.00	“
Carbonate of magnesia -----	07.00	“
Chloride of magnesium -----	00.28	“
Chloride of sodium -----	01.28	“
Chloride of calcium -----	00.56	“
Silicic acid -----	01.76	“
Carbonate of potash -----	02.33	“
Carbonate of soda -----	10.80	“
Sulphate of lime -----	68.00	“
Iodine -----	00.93	“
Bromine -----	00.65	“
Sesqui-oxide of iron -----	01.06	“
Alumina -----	00.18	“
Phosphate of soda and lithia -----	00.73	“

Total solid contents -----	172.48	“

Specific gravity, 1002.7—reaction alkaline. Temperature 64.75 to 65.50 Fahrenheit.

This analysis presents this water as an interesting and somewhat peculiar medical agent, differing in some respects from any of the sulphur springs in this region.

The discovery of *iodine* in this water, some twelve years ago, by Professor Rogers, has led to its successful use in various disorders for which that article is known to be a reliable remedy. In addition to the diseases already mentioned for which the *Salt Sulphur proper* is advised, the *Iodine Spring* will be found especially serviceable in the various *glandular affections*, mercurial rheumatisms, secondary syphilis, enlargements of the spleen, hepatic disease, mesenteric obstructions, and chronic exanthemata.

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