

#### ROUTES TO THE

#### RWHITE SULPHUR SPRINGS, WEST VIRGINIA.

.- Take the Pennsylvania Railroad via Philadelphia and Washingas a day make connection in Washington with through trains to or take Old Dominion Steamship from Pier 28, North river, foot on Tuesday, Wednesday, Thursday or Saturday, to Old Point port News, connecting with through trains to White Sulphur; or a Railroad via Delmar and New York, Philadelphia and Norfolk, and Ferry to Old Point Comfort; thence C. & O. to the Springs. and full information, apply at Chesapeake and Ohio Ticket-office.

MA.-Take the Pennsylvania Railroad via Washington. Three ting with through trains in same depot in Washington, direct to or take Pennsylvania Railroad via Delmar and New York, Charles; thence ferry to Old Point Comfort, and C. & O. Ry.

'ake the Baltimore and Potomac Railroad via Washington and ee trains a day make direct connection in Washington with Springs; † or take the Western Maryland and Shenandoah nesboro'; or B. & O. Railroad via Harper's Ferry and Staunamer to Old Point Comfort or Newport News; thence via

. & O. Ry.
Take Virginia Midland Railroad and C. & O. route via Charptomac-river Steamer to Old Point Comfort or Newport News, Ry. Full information can be obtained by applying at the

Ticket-office, 513 Penna Ave.
RT, NEWFORT NEWS AND NORFOLK.—Take the Chesapeake and

a Richmond. †

S.—Take Atlantic Coast Line via Richmond; † or via Pied-nd; † or Louisville and Nashville, or Louisville New Orleans unning Pullman Palace Cars direct from New Jrleans, Baton the Mississippi Valley to White Sulphur Springs via Louis-

the Mississippi Valley to White Sulphur Sprägs via Louisy; † or Cincinnati, New Orleans and Texas Pacific Railroad
for Norfolk and Western Railroad for ristol, Tenn., via
Lynchburg and Charlottesville.
The the Louisville and St. Louis Air-Line via Louisville; † Ohia
and Assissippi via Cincinnati (Section 1) and Connecting lines to Columbus, Ohio;
thence Scioto Valley and C. & O. Railway direct.
FROM GINCINNATI.—Take the Chesapeake and Ohio Railway from Kentucky Central Depot. Two through trains to White Sulphur. From Western States all lines
to Cincinnati make close connection with the C. & O. Route. Chesapeake and Ohio
Ticket office, S. W. corner 5th and Walnut streets.
FROM GINCHARL AND NORFHERM ORIO MONTHEAM. ORIO HOLD AND MONTHEAM ORIO HOLD A

FROM CENTRAL AND NORTHERN OHIO AND MICHIGAN .-- Take Scioto Valley Route via

Columbus and Ashland, † and C. and O. Route,†

FROM LOUISVILLE AND SOUTHWEST.—Take C. and O. Route direct from Louisville via
Lexington, Ky. † Chesapeake and Ohio Ticket Office, 225 4th ave., Louisville, Ky.

FROM MINDELS.—The Louisville, New Orleans and Texas Railroad comes in from
New Orleans, Vicksburg and the South, with through Pullman Palace Cars to White
Sulphur Springs. Memphis and Little Rock Railroad comes in from Little Rock

Sulphur Springs. Memphis and Little Rock Railroad comes in from Little Rock

Lexing the Springer of the Property of the Property of the Cheraparks and Obio and and the Southwest--connecting in Memphis with the Chesapeake and Ohio and Southwestern, or Louisville and Nashville Railroads via Louisville, and thence C.

and O. solid trains to White Sulphur.

FROM NEW ORLEANS.—Take routes via Louisville † and C. & O. direct. Through Pullman Palace Cars without change, from New Orleans to White Sulphur Springs via Louisville, New Orleans and Texas Railroad; or via Montgomery, Charlottes-

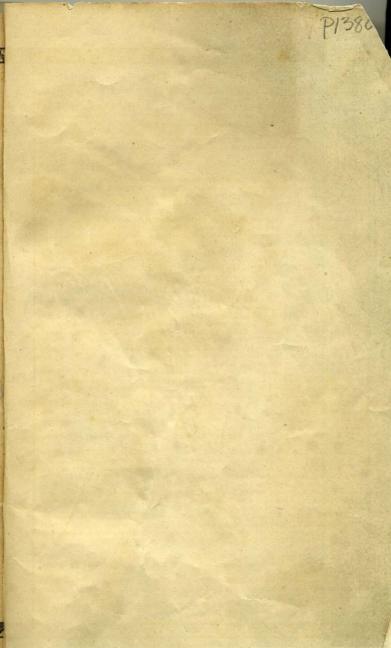
ville and Waynesboro'; † thence C. & O. direct. †

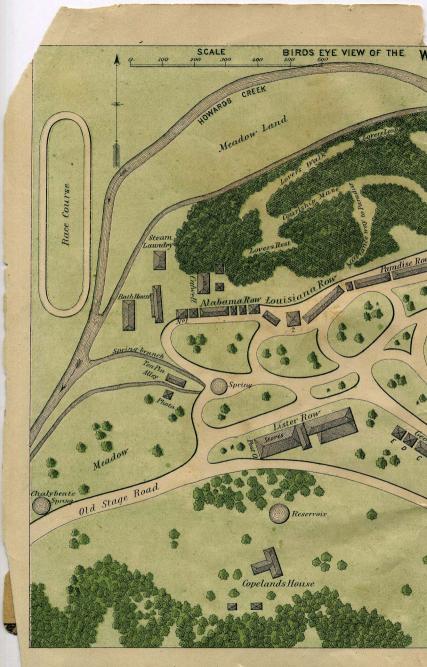
† Fullman Sleepers direct without change.

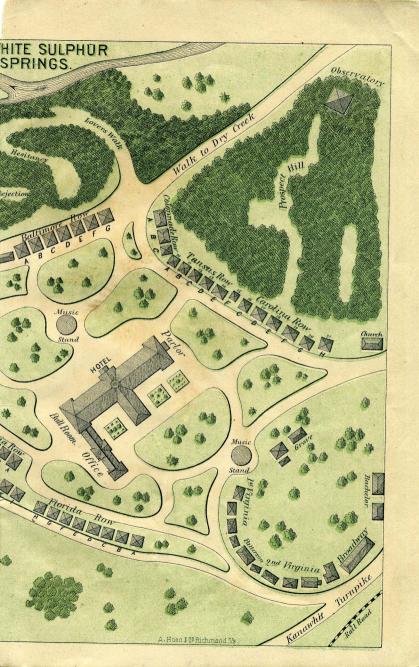
The time from all the places named in this schedule will be shortened by several hours over former years

Excursion tickets to White Sulphur Springs, or via White Sulphur to Old Point Comfort, Newport News, and other resorts along the line of the C. and O., on sale at all principal ticket offices.

For more explicit information, call at ticket offices throughout the country for Chesapeake and Ohio Time Schedules and Guide Books,









# \* Q Treatise \*

ON THE

### GREENBRIER

# White Sulphur Springs

-AND-

ITS WATERS,

WITH THE

# Annual Announgement

-OF--

& THE LESSEE, &

1887.

RICHMOND, VA.: EVERETT WADDEY & Co., Steam Printers. 1887.

## CONTENTS.

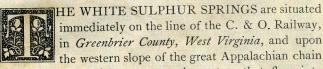
	PAGE.
Locality	3
Early History of the Springs	4
Recent Improvements	8
Extent and Character of Accommodations	9
Scenery	9
Society and its Amusements	11
Routes to the Springs Second Page	Cover
Analysis of the Water	13
Therapeutic Effects of the Water	15
Drinking of the Water	15
Baths at the White Sulphur	16
Diseases to which the Water is Applicable	18
The Diseases of Women	18
Displacement of the Womb	19
Diseases of the Urinary Organs	19
Bright's Disease of the Kidneys	20
Dyspepsia	20
Rheumatism	21
The Gout	22
Nervous Diseases	23
Use in Malarial Poisoning	23
Hay Fever	23
Diseases of the Lungs	24
Sympathetic Consumption	24
Asthma and Chronic Bronchitis	25
Diseases of the Skin	25
Piles	26
Paralysis	26
Secondary and Tertiary Syphilis	27
Mercurio Syphiloid	27
Effects of the Water in Inebriation	28
Use of the Water by Opium-Eaters	28
Characteristics of the Water	28
Directions as to the Mode of Life	29
Chalybeate Spring at the White Sulphur	30
Annual Announcement, 1886	32
	3~

# WHITE SULPHUR SPRINGS,

### GREENBRIER COUNTY,

#### WEST VIRGINIA.

### LOGALITY OF THE SPRINGS.



of mountains, which separates the waters that flow into Chesapeake Bay from those that run into the Gulf of Mexico.

The situation of the Spring is elevated and beautifully picturesque, surrounded by mountains on every side. Kate's Mountain is in full view, and about one mile to the south; to the west, and distant about one mile, are the Greenbrier Mountains, while the towering Alleghany in its magnificent proportions is found five miles to the north and east.

Its latitude is about  $37\frac{1}{2}^{\circ}$  north, and its longitude is  $3\frac{1}{2}^{\circ}$  west from Washington. Its elevation above tidewater is 2,000 feet; the immediate surrounding mountains something more than 3,500 feet. The temperature of its waters is 62° Fahrenheit, from which they do not vary during the heat of summer or the cold of winter.

The Spring yields more than thirty gallons a minute; and it is a remarkable fact that this quantity is not per-

ceptibly varied during the longest spells of wet or dry weather. The quantity and temperature of the Spring being uniform under all circumstances, give a confidence, which experience has verified, of its uniform strength and efficiency.

The locality is blessed with a most delightful, if not unequaled, summer and fall climate.

Independently of the benefit to be derived from the waters, a better situation for a residence of invalids and delicate persons during the summer and fall months can scarcely be imagined. They have the advantage of a most salubrious and invigorating air and the most agreeable temperature—cool at morning and evening, and at no time oppressively warm. The thermometer ranges here during the summer between 60° and 75°, and rarely attains a greater height than 85° at any time of the day, while the atmosphere is so elastic and invigorating as to enable invalids to take exercise in open air without inconvenience or fatigue.

#### EARLY HISTORY, ETC.

One hundred and thirty-five years ago the entire range of country extending west from the summit of the Alleghany Mountains to the Ohio river was one vast unbroken wilderness, upon whose soil it is believed the foot of no white man had ever trod.

In 1751, General Andrew Lewis, a man of brave and energetic character, made an excursion into this country from eastern Virginia. He gave the beautiful "Greenbrier" river its name, which he took from the abundant growth of green thorny vines found growing upon its borders. General Lewis afterwards became eminent in the history of Virginia, and was chief in command at the

famous battle of Point Pleasant, where the Indian power in all this region was fully broken, and they compelled to relinquish the entire country from the Alleghany Mountains to the Ohio river.

Creditable tradition asserts that the charming valley in which the White Sulphur arises was once an Indian town, and its neighboring mountains famous hunting-grounds of the Shawnees, who then owned and occupied this fair region. The numerous ancient graves and rude implements for housekeeping and the chase that used to be found in the valley, lend some probability to, and are possibly the best evidence extant of, the truth of the tradition. That a small marsh, originally contiguous to the Spring, was once a favorite deer and buffalo "lick," was well known to the early white settlers of the neighboring county, some of whom were known in their latter days to persons now habitués of the Springs; and it has been asserted by some of the same venerable class, that the Spring was regarded by the Indians as a "medicine water," and that after their migration across the Ohio, some of them have been known to seek its use for the cure of rheumatism. Whether this be fact or fiction we cannot avouch; authentic history, however, abundantly testifies to the reluctance with which they abandoned the lovely valley to the enterprise and avarice of the invading white man.

During the year 1774, the proud but ill-fated Shawnees, the prevailing tribe of this country, being gradually overpowered by the constantly encroaching colonists from eastern Virginia, and having in October of that year suffered a signal defeat at Point Pleasant by the colonial troops, were forced to abandon the occupancy of the country, and seek shelter and protection of a portion of their tribe then living on the waters of the Great Scioto; but not entirely,

nor until by frequent marauding parties, with tomahawk and scalping-knife, they had fully attested their attachment to their ancient hunting-grounds and the graves of their fathers.

The part of the property on which the Spring is situated was originally patented under what was then called a "Corn Right," to Nathan Carpenter, one of the early pioneers of the country. Carpenter was subsequently killed by a band of marauding Indians in a stockade fort where the town of Covington now stands, and his wife, "Kate," and their children, to avoid the same marauding party, were forced to hide themselves for some time in a neighboring mountain which now, and ever since, has been called "Kate's Mountain," which immediately overlooks the Spring from the south.

The precise time at which this Spring, now so distinguished among mineral fountains, was first used for the cure of disease cannot be ascertained with absolute certainty. We believe, however, that a Mrs. Anderson, known to the writer when she was far advanced in age, was the first white person that distinctly tested its medicinal virtue. This lady, in 1778, being a sufferer from chronic rheumatism, was conveyed from her residence, twelve miles, to the Springs, then entirely unimproved, where a tent was spread for her protection from the weather, and a "bathing-tub" provided by felling and excavating a huge tree that grew hard by. Here she remained, drinking from the fountain and bathing in the water heated by hot rocks, until she was quite recovered.

It is reasonable to suppose that the fame of this cure spread abroad among the "settlers," and from them into eastern Virginia, and among the few "spring-going folk" who then occasionally visited the Sweet Springs on the south-

ern side of the Alleghany. Accordingly, in 1779, and from that to 1783, there were annually a few visitors here, who spread their tents near the Spring, no houses having been erected; and with a rude trough for a bathing-tub and this protection from the weather, are reported to have spent their time both agreeably and advantageously. Some of these primitive visitors "who dwelt in tents," returned frequently to the Springs in more modern years, and took pleasure in pointing out the location of their tents some thirty or forty years before; in speaking of the benefits they had derived, and the happiness they had enjoyed in the rustic amusements of those days. In 1784, 1785 and 1786, numerous "log cabins" were erected-not where any of the present buildings stand, but more immediately around the Spring-not one of which, or the materials that composed it, is now remaining.

Mr. James Caldwell, the proprietor of this property until the year 1857, came into possession of it in 1808, but did not personally undertake its management or improvement until 1818. Up to that period the buildings for the accommodation of visitors were very rude, consisting altogether of small wooden huts, built of logs or boards. The interest and spirit of enterprise of the owner soon led him into a different and more appropriate system of improvement; and from small beginnings he went on progressing in the rapid ratio of demand, until, from the "tent accommodations" in 1779, and the "log cabins" in 1784, the place, both in elegance and extent, in a few years exhibited the appearance of a neat and flourishing village. In the spring of 1857, this property, having been greatly enlarged by the purchase of adjoining territory, making its entire area upwards of 7,000 acres, was sold to a company of Virginia gentlemen, who made various and important additions and

improvements, and, among others, erected in the centre of the Spring grounds the largest hotel building in the Southern country, its dimensions being 400 feet long by a corresponding width, and covering more than an acre of ground.

The parlor is a magnificent room, half as large again as the celebrated East Room in the President's mansion. ball room is of the same dimensions as the parlor. The dining room is more than 300 feet in length, and seats 1,200 persons.

The entire property was again sold in the spring of 1880. Immediately after getting possession, the owners proceeded to make valuable alterations and additions to the property. The new improvements thus far completed are a four story wing attached to the main hotel, in which is a large and comfortable office, ladies' reception rooms, reading rooms, telegraph office, private dining rooms, &c.; a large and well arranged kitchen, supplied with all the modern culinary fixtures and appliances; a large steam laundry, with all modern improvements complete; the erection of gas works and electric lights, lighting the entire Hotel and grounds; several most advantageous alterations and improvements in the Hotel and some of the cottages; various artistic adornments, by frescoing and otherwise, of the parlor, dining room and ball room, and appropriately refurnishing each of them.

The thorough refurnishing of the entire establishment with substantial and handsome modern furniture and with beds and bedding of the best quality contributes largely to the satisfaction and comforts of the guests.

The entire property has undergone a thorough and complete system of sewerage.

The spring-going public may well be pleased that this

property (the *Baden Baden* of America, as European travelers term it) is undergoing extensive enlargement and improvements, intended to perpetuate its long-borne prestige of preference by the spring-going public.

Evidences are annually accumulating, going to show that this place will always command a patronage in accordance with the extent and quality of its accommodations. While it is now common to enumerate its guests by hundreds during the summer months, they will just as certainly be enumerated by thousands when comfortable accommodations shall have been provided for such numbers.

#### SCENERY, ETC.

Nature, with measureless munificence, has contributed the most charming surroundings of scenery to the White Sulphur. Forest, vale and mountain are here in rare and unique combination, presenting at every turn new views of the picturesque, the beautiful and the grand, sufficient for the gratification of every taste. Indeed, here, as at Niagara, any attempt at mere art decoration would seem lost folly, if not a desecration.

The first thing that is likely to attract the visitor, and especially from the heated and dusty city, is the vast lawn of green, velvety turf, shaded by noble forest oaks, luxuriant sugar maples and venerable pines, each of which has a symmetry and beauty as distinct in its individuality as the "fair women and brave men" who dream or flirt away the happy hours beneath their leafy canopies. Next the eye wanders through the curving walks and drives, intermingling, but all tending to the great centre of attraction, the *Grand Old Fountain*, shaded by ancient oaks, and daily pouring from its exhaustless resources more than 40,000 gallons of healing waters. To this great "well-

spring of healing" come annually returning throngs, who either quaff refreshment or seek new inspiration of health, with feelings akin to the Hindoo worshiper as he approaches the banks of his sacred river. What hope to the weary mind—what joys to the ascetic dyspeptic—what activities to the halting rheumatic or trembling paralytic have been given forth by this fountain!

About the "Old White," too, there is, in a particular sense, an immensity of sky and air. Here are no unwholesome vapors; no noxious dews poison the early morn or shadowy twilight; here there is no defilement of *this* one

of nature's great sanitariums.

To the new comer or old *habitue* there is a never-failing interest, either from the novelty of impressions or the sacredness of association, in gazing upon these *old* hills, wooded with primeval forests, immediately surrounding the grounds, and sloping gracefully down to the cottages, the foliage of the trees overhanging and their flowers peeping cheerfully into the windows.

Just beyond the lawn proper, Howard's Creek flows through the gently undulating meadows, of which a glimpse is enjoyed now and then through the boughs of elms and

sugar-maples that grow upon its banks.

A striking feature in the scenery is the surrounding mountains. "Kate's," with its old family legend, is one mile to the south, and 3,500 feet above sea; "Greenbrier," the same distance to the west, and of equal altitude. To the southwest, and three miles distant, are the mountains known as "White Rock," that consist of a series of mountains, but from their complete interlocking and general height are commonly regarded by the casual observer as but one. On the summit of these mountains, in solitary grandeur, reposes the old "TITAN," or Giant of the

White Sulphur, who, mythology tells us, fell in one of the battles of the gods, and was converted by Terra, the goddess of the earth, into this huge adamantine mass.

What we have feebly attempted to set forth, together with the charming *intervales* and picturesque patterns of flowering shrubs adorning the meadow and banks of the creek, the forest-covered hills in the near and greater distance, together with the distant ranges of lofty mountains stretching beyond the power of vision, form a landscape almost or entirely unequaled, and so striking as to leave ineffable impressions of its beauty and grandeur upon the mind of the beholder.

#### SOCIETY AND ITS AMUSEMENTS.

Next to the medical value of the water of the White Sulphur, and the invigorating climate of the place, the company that annually assembles there is most worthy of notice.

The prestige of the White Sulphur for all that is elegant and refined in society is coëval with its early history. For many years it has been the great central point of reinion for the best society of the South, North, East and West, that here mingle together under circumstances well calculated to promote social intercourse and to call out the kindliest feelings of our nature.

The cottage system that has been introduced, although new to American watering places, has proved a complete success, and greatly contributed to the home-like comforts and sociality of the numerous families assembled here.

Society seems here to meet on common ground, and the different shades of feeling influencing it at home are laid aside, while each individual promotes his own happiness by contributing to the happiness of others.

Here is to be found the statesman, who, worn down with labor, and his mind unstrung by the cares of office, seeks from the bracing air, the picturesque scenery, and the genial company, not less than from the health-giving waters, that recuperation of his wasted energies, in vain sought for elsewhere. Here, too, is found the man of letters, seeking rest from thought, and strength for future effort. The poet, too, is here to quaff vigor from the sparkling fountain, and new images of beauty from nature's lavish stores that are spread around him. And here, too, come in crowds those who have ever plumed the poet's fancy to its sublimest flights-beauteous woman, by her presence brightening every prospect and gracing every scene. Following naturally in her train come those who ever love to bask in beauty's smiles, and find in such scenes the happiest of their youthful hours. Here, too, congregate the reverend clergy, the doctor, the lawyer, the judge, wearied with the burdens of the bench; the man of commerce, the financier, the thrifty planter, the sturdy farmer, and the retired man of wealth and ease. These, reckoned by thousands, make up the company that annually give tone and character to the White Sulphur, and make it at once the Athens and the Paris of America.

The amusements are various in kind and degree. No sketch can give more than a faint shadowing of the pleasures of a visit to the Springs. The freedom from care, the relaxation from bonds which have fettered us to the treadmill of business—the pure mountain air, every breadth of which swells the veins and makes the blood tingle with delight—the wild mountain scenery, awakening new thoughts of the grandeur of creation and the mighty power of God—the amenities of social intercourse, relieved from those necessary, but vexatious rules of etiquette which hem in fashionable life at home—all these combine to render a visit to

the White Sulphur an epoch in life to be looked forward to and back upon with pleasurable emotions.

The weary pilgrim, coursing over the burning sands of the East does not hail the sight of an oasis in mid-desert with more joy than the habitués of the "White," worn down by cares and trouble, welcome the first glimpse of the sparkling fountain and verdant lawns encircled by cottage homes. To him they promise rest, comfort, health, while to others they tell of pleasures past and joys to come.

#### ANALYSIS OF THE WATER.

From the report of Professor Hayes, of Boston, one gallon, or two hundred and thirty-seven cubic inches of the water contains 19.100 cubic inches of gas, having the proportion of

Nitrogen Gas .			*		14			,	*:	*	*	4.680
Oxygen Gas												1,000
Carbonic Acid.		**	4		+	4			*			11.290
Hydro-Sulph, A	ci	d.										.271

Fifty thousand grains of this water contain 115,100 grains of saline matter, consisting of

Sulphate of Lime						67.168
Sulphate of Magnesia						30.364
Chloride of Magnesium						
Carbonate of Lime						6.060
Organic Matter (dried at 212 degrees).						3.740
Carbonic Acid					1)4	4.584
Silicates (Silica 1.34, Potash 18, Soda	66	, A	lag	ne	sia	
and a trace of Oxide of Iron)						2,060

Professor Hayes remarks that the organic matter of the water, in its physical and chemical character, differs essentially from the organic matters of some thermal waters;

in contact with earthy sulphates, at a moderate temperature, it produces hydro-sulphuric acid, "and to this source that acid contained in the water may be traced." He adds: "The medicinal properties of the waters are probably due to the action of this organic substance. The hydro-sulphuric acid, resulting from its natural action, is one of the most active substances within the reach of physicians, and there are chemical reasons for supposing that after the water has reached the stomach, similar changes, accompanied by the products of hydro-sulphuric acid, take place."

Professor William B. Rogers also analyzed this water, with the following results:

with the following results:

Solid matter, procured from 100 cubic inches, dried at 212° Fah., consisting of 65-54 grains:

Sulphate of Lime	1.680	grains
Sulphate of Magnesia	8.241	"
Sulphate of Soda	4.050	"
Carbonate of Lime	1.530	"
Carbonate of Magnesia	0.506	"
Chlorine of Magnesium	0.071	
Chloride of Calcium	0.010	**
Chloride of Sodium	0.226	"
Proto-Sulphate of Iron	0.069	"
Sulphate of Aluminæ	0,012	"
Earthy Phosphates—a trace.		
Azotized Organic matter, blended with large		
	0.005	"
Iodine, combined with Sodium or Magnesium.		

Volume of each of the gases, in a free state, estimated in cubic inches:

Sulphuretted Hydrogen		·						0.66
Nitrogen					+		*	1.88
Oxygen								
Carbonate Acid								

#### THERAPEUTIC EFFECTS OF THE WATER.

The White Sulphur water acts on the kidneys, bowels, liver and skin. As a diuretic, its effects are very soon apparent, but it usually requires some days before it produces a decided action of the bowels. Its operation on the liver, too, may not be manifest for some time, and where there is much torpidity of this organ, some auxiliary means is required. Its effect upon the skin is very apparent, though not immediate. But the most decidedly controlling effect of the water over diseased action, and that which more than every other gives its highest and most valuable character as a remedy, is its ALTERATIVE POWER, or that peculiar action by which it effects salutary changes or alterations in the blood, in the various secretions, and upon the various tissues of the body.

#### DRINKING OF THE WATER.

The drinking of the White Sulphur water suggests likewise particular dietary precepts. In this case, the digestive organs suffer a primary action, and this occurs in proportion to the quantity of water imbibed. Again, the action of the water is more intense if taken fresh from the Spring; it is more stimulating, more readily absorbed, and produces its effects more promptly on certain organs than the water which has stood some time after being taken from the Spring; but in many cases the use of the latter is to be preferred, and is thus frequently prescribed.

There are periods, but *uncertain* periods, in the use of the White Sulphur water, when it ought to be suspended or discontinued; but such periods can only be judged by the *effects*, and not from any number of days during which it may have been taken.

#### BATHS AT THE WHITE SULPHUR.

Warm and hot bathing, especially in highly medicated waters, is a remedy of leading importance in a large number of the cases that resort to mineral waters for relief.

The water used for bathing at the White Sulphur flows from the Sulphur Springs from which the visitors drink. When we look at the analysis of this water and find it to contain about one hundred and fifty grains of active medicinal salts to the gallon, we cannot fail to see that, so far as the medication of waters can favorably affect the bath for which they are used, the White Sulphur baths have the strongest claims to confidence, inasmuch as no other waters in America that are used for bathing are more highly im pregnated with mineral salts.

These baths, in connection with the drinking of the Sulphur waters, although not required in every case, are a matter of the utmost importance in a large number of cases in aiding to produce the best effects of the waters.

Impressed with the great value, in fact the absolute necessity to some invalids of using such baths in connection with the drinking of the water, the proprietors of the Springs have recently greatly enlarged and so remodeled their bathing establishment as to make it in every respect satisfactory, it is believed, to those who may desire to avail themselves of its use.

The bathing-house is large, affording ample accommodations for the bather. The bathing-rooms are spacious, airy and comfortable; and in addition to the usual tub baths they have erected douche baths for the application of streams of hot or warm water to local parts of the body, and have set apart rooms arranged for receiving sweating baths.

The construction of douche and sweating baths of sul-

phur water, to be employed under proper circumstances, in connection with the internal use of the water, is a matter of the utmost importance to the successful treatment of numerous cases that resort here for relief.

The new and improved method of heating water for bathing deserves to be especially noted. This is effected by steam in the vessel in which it is used, and is a great improvement over the old method of heating mineral waters for bathing. Under the old plan of heating in a boiler and thence conveying the water to the bathing tub, much of its valuable saline matter was precipitated and lost. By this improved method of applying steam to the water in the tub the heat is never so great in raising the water to the bathing point as to cause any important precipitation of its salts; hence, they are left in their natural suspension in the waters to exert their specific effect upon the bather. Not only so, by this improved method hot steam may be let into the tub from time to time, as the water cools, so as to keep it essentially of the same temperature during the entire period of bathing, a consideration often of no small impor-This method of heating mineral waters in the tub in which they are used, in connection with the douche and sweating baths, brings hot and warm bathing at this place in favorable competition with bathing at naturally hot and warm fountains, and promises to be productive of the same good effects that are experienced from bathing in such fountains.

Persons intending to bathe in hot sulphur water should, previously to doing so, be intelligently instructed under a proper knowledge of their case, as to the precise temperature of the bath, and the length of time they remain in it. Neglect or disregard of proper instructions, the relying upon chance or the mere dictum of ignorance on the subject, has

often been the cause, within our knowledge, of the aggravation of symptoms, and in several instances of serious consequences. We state, therefore, for the benefit of bathers in sulphur waters, that such baths, to be used safely and efficaciously, must be used with careful reference to their temperature, the state of the system when employed, and the length of time the bathers remain in them.

Besides the ordinary or generally used baths, the following are used in certain cases for medical purposes: Local Baths, Diluted Baths, Mineral Baths, &c. The water from the Spring is also applied in different manners, as Douches, Shower Baths, Simple Washings, Injections, Packings, &c., &c. Sulphur Baths are eminently efficacious in rheumatism, gout, and neuralgia, atrophy of the muscles, paralysis, affections of the skin, lymphatic system, &c.

#### DISEASES TO WHICH THE WATER IS APPLICABLE.

Trial of these waters in a multitude of cases has demonstrated the fact that however insensible their properties, or unknown their combinations, they are able to overcome some of the worse forms of disease. The disease organism possesses a very different degree of susceptibility from the healthy, and the smallest thing, applied to the right place, may discover great capabilities. Thus we learn that in affections of the nervous system, stomach, bowels, liver, spleen, kidneys, bladder, and some diseases of the lungs, the White Sulphur Water is one of our most valuable remedial agents. It is also highly efficacious in diseases incident to females, especially chronic affections of the womb, while in gout and rheumatism, skin diseases, mercurial sequelæ, and dypsomnia, it is universally regarded as a remedy of immense importance.

#### THE DISEASES OF WOMEN.

In the treatment of the diseases of women, in their various chronic forms of Amenorrhæa or suppressed menstruation, Dysmenorrhæa, or painful menstruation, Chlorosis and Leucorrhæa, the waters of the White Sulphur have long enjoyed an enviable reputation.

Menstruation is a healthy function, and should be unattended with sufferings of any kind, but with the present enervating habits, and the various deleterious influences which prevail, it usually demands the careful attention of the physician and the very best hygienic surroundings. Even in females otherwise apparently healthy it may be delayed, or it may be preceded or followed by various sufferings, as spasms, cramps, hysteria and other complaints in which the waters of the White Sulphur have been employed with beneficial results.

#### DISPLACEMENTS OF THE WOMB.

Among the disorders of the generative organs none are more common or attended with more suffering than those which arise from displacements of the womb. This painful affection is frequently owing to the relaxed condition of the parts which support the organ in its natural position, and can scarcely ever be cured without a resort to mechanical support, but as auxiliary to this, the alterative and tonic effects of the White Sulphur enjoy a well merited reputation. The use of these waters is especially indicated when the following symptoms are present: Prolapus with induration, ulceration and leucorrhœa; heaviness and painful weight in the limbs, and great fatigue on walking; back aches as if it would break; burning in the soles of the feet; displacement occuring during "change of life."

#### DISEASES OF THE URINARY ORGANS.

The White Sulphur water is used with very good effect in diseases of the urinary organs; indeed, it almost always paliates such cases, and frequently, in their early stages, entirely cures them. Chronic inflammation of the kidneys, bladder and urethra are often successfully treated by a judicious use of the waters.

Spermatorrhæa, often painfully implicating the nervous system and producing extreme debility, not only of the sexual organs, but also of the general system, is often greatly benefited by these Springs. This disease is generally found complicated with a condition of the skin and glandular organs, and not unfrequently of the mucous surfaces, that eminently require the aid of alterative remedies. In such cases these waters have been long and successfully employed.

#### BRIGHT'S DISEASE OF THE KIDNEYS.

If this disease be properly treated in the incipient stage, it may terminate in complete recovery, but if from mismanagement or otherwise, it be allowed to assume a chronic form, it will be found very difficult to cure. Its progress is not very rapid; it may continue for several months, or as many years, depending upon its causes and complications. It is a form of disease in which the waters of the White Sulphur have been used with excellent effect, the relief being pretty much in proportion as the water corrects the digestive and assimilative functions, improves the blood, and brings the general economy into a natural, healthy condition, preparing the kidneys to resist foreign encroachments upon their functions. In this disease proper attention to diet, bathing, exercise and clothing is all important during the water cure.

#### DYSPEPSIA.

The whole tribe of dyspeptics, if the trouble be not the effect of organic disease, may resort with a well grounded expectation of relief to these healing waters, which will be found signally useful in those functional derangements of the digestive organs which are so common and at the same time so unmanageable, especially when connected with disturbance of the liver or a torpid state of the bowels.

The leading indications for the use of the White Sulphur water in this disease are pressure and fullness in stomach after meals; sour eructations and much acidity of the stomach; nausea and accumulation of mucous in the throat; stomach easily disordered; cramp like pains in the stomach; heat or burning in the stomach; intense thirst; capricious appetite; frequent weak spells; hard, difficult stools or early morning diarrhea; region of stomach tender; cold, damp feet, cannot sleep.

#### RHEUMATISM.

The primitive reputation of the water, and that which at an early day directed public attention to its potency, was derived from its successful employment in rheumatism.

The reputation thus early acquired has not been lost, but, on the contrary, established and confirmed by its successful use for nearly a century.

In most rheumatic cases, the employment of warm or hot sulphur baths constitutes a very valuable adjunct in their treatment.

With the Sulphur Water as a drink, and the use of the hot *tub*, *douche* and *sweating* baths of the same water, this place offers the strongest inducements for the resort of persons afflicted with chronic rheumatism, that can anywhere be found.

Want of space will not allow us to describe the various forms of rheumatic trouble, and to speak of the relative merits of the waters in the several forms of this disease. We remark, however, that while they prove eminently beneficial in all forms of chronic rheumatism, they are more decidedly so in those cases that may properly be termed muscular, in distinction from articular rheumatism, and this is so whether the cases arise from miasmatic, mercurial, or other more common causes of the disease. A full course of the waters with baths properly tempered to the demands of the case, is essential to a perfect cure.

The relation of the water to the treatment of the disease is so evident that nature could hardly explain more clearly than she has done, by laying open to us this great means of cure, in what manner we shall act as her ministers in driving out the foe that has settled in the organism.

Who is not acquainted with some member of that great army of diseases gathered together under the standard of "Rheumatism"—Rheumatism of the Joints, Rheumatism of the Muscles, Rheumatic Neuralgia, Rheumatic Bronchitis, Rheumatic Colic, Rheumatic Anæsthesia, Rheumatic Gout, Rheumatic Lassitude, Rheumatic Spasms, Rheumatic Ischiatica—all of which disappear by the use of these waters.

#### THE GOUT.

This disease which, in its appearance and behavior, exhibits so much preciseness, is confessedly obscure to the pathologist. We know that certain chemical changes occur in the blood of a person suffering from gout, but we do not know whether this "uric acid diathesis" is the principal deviation, or whether still more important disturbing influences of the blood may not be present.

But as to the treatment of either chronic or antonic gout, we find the White Sulphur water a most excellent means of cure, recognized as well by the general public as by the representatives of science. By a proper use of these waters, so as to obtain their alterative effects, the chronic form is forced to strong exacerbations, and in the case of the antonic gout, the indigestion or dyspepsia gradually decreases, the circulatory and nerval organizations strengthen each other mutually, until finally the struggle between health and disease is brought to a happy termination.

#### LIVER DISEASES.

Chronic diseases of the liver, in some form or other, is a very common disease of our country, especially in the warm latitudes and miasmatic districts. Very many affected with this complaint have annually visited the White Sulphur for three quarters of a century. In no class of cases have the effects of the waters been more fully and satisfactorily tested than in *chronic derangements of the liver*.

The modus operandi of sulphur water upon the liver is dissimilar to that of mercury, and yet the effects of the two agents are strickingly analogous. The potent and controlling influence of the water over the secretory function of the liver must be regarded as a specific quality of the agent, and as constituting an important therapeutic feature in the value of the article for diseases of this organ. Its influence upon the liver is gradually but surely to unload it when engorged and to stimulate it to a healthy performance of its functions when torpid.

The control which this water may be made to exercise over the liver, in correcting and restoring its energies, is as often astonishing as it is gratifying—establishing a copious flow of healthy bile, and a consequent activity of the bowels, imparting a vigor to the whole digestive and assimilative functions, and, consequently, energy and strength to the body, and life and elasticity to the spirits.

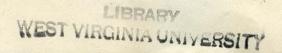
#### NERVOUS DISEASES.

Neuralgia, in some form or other, has become a very common disease in every part of our country, and the number that visit the White Sulphur suffering with this protean and painful malady is very considerable. Sometimes this disease exists as a primary or independent affection, but far more frequently as a consequence of visceral or organic derangements. Where such is found to be the case, the White Sulphur waters are used with the very best results. As an alterative, to prepare the neuralgic for receiving the more tonic waters to advantage, it deserves the largest confidence by those afflicted with this annoying malady.

#### USE IN MALARIAL POISONING.

A numerous class of patients, known under the very common but not very significant name of "bilious," will generally find relief from the use of the White Sulphur water. Many persons of this description come to the Springs from the south and southwest, whose constitutions have been shattered by the diseases incident to malarial poisoning, and they almost invariably derive benefit from the use of the water.

In such individuals there is, almost without exception, some derangement of the biliary secretions, though the functions of other organs are also often disturbed, giving rise to distressing symptoms, which are in nearly every instance alleviated or entirely removed by a judicious use of the White Sulphur water and a few weeks' residence in this pure mountain atmosphere.



#### HAY FEVER.

This disorder, periodical in its attacks, and in its symptoms much resembling an ordinary catarrh, is more or less common to all latitudes. Without being dangerous in its consequences, it is annually annoying to many persons, and especially about the period of the fall equinox. Great mountains altitudes as a summer and fall residence, with tonics as medicine, are most relied upon for modification or cure.

The elevation of the White Sulphur, 2,000 feet above the sea level, with immediate surrounding mountains of 3,500 feet, together with an atmosphere of great purity and elasticity, and the alterative and invigorating effects of the water, very happily adapts it as a place of summer and fall residence for those afflicted with Hay Fever.

#### DISEASES OF THE LUNGS.

Mineral waters, especially such as possess alterative properties, are now recommended by high authority in certain lung troubles; and it is not to be doubted that a prolonged stay in an elevated region of country has a directly healing influence over diseased lung-tissue, where no tubercular deposit has taken place. For incipient bronchial troubles, therefore, the White Sulphur, in addition to its valuable alterative waters, offers an agreeable temperature and a midmountain atmosphere, unsurpassed by any climatic cure place in this country.

The mean temperature of the White Sulphur from the 15th of April to the 15th of November is about 63° Fahr., or the same as the mean *annual* temperature of Cairo, Naples, Nice and Maderia.

#### SYMPATHETIC CONSUMPTION.

The great par vagum nerve, common to both the stomach and the lungs, affords a ready medium of sym-

pathy between these two organs. In protracted cases of dyspepsia the stomach often throws out morbid influences to the windpipe and surface of the lungs, occasioning cough, expectoration, pain in the chest, and many other usual symptoms of pulmonary consumption. So completely, indeed, does the translated affection wear the livery of the general disease that it is often mistaken for it. This form of disease is clearly the result of morbid sympathies extended from the stomach to the lungs, and the happiest results are obtained from the employment of White Sulphur water in such cases; the more so because its beneficial effects resolve a painful doubt that often exists in the mind of a patient as to the true character of the disease.

#### ASTHMA AND CHRONIC BRONCHITIS.

These troublesome diseases often take their origin in a gouty dyscracia, and in such cases the most satisfactory results may be anticipated from the use of the White Sulphur water, which constitutes an important remedy in any form of Bronchial Catarrh, especially where the mucous is freely secreted or tenacious, and the symptoms point to a thickening of the mucous membrane. But as pure air is the normal food of the respiratory organs, and therefore an important auxiliary in the cure of all pulmonary affections, we have in the mid-mountain woodlands of the White Sulphur an atmosphere well suited for such cases.

#### DISEASES OF THE SKIN.

A full course of White Sulphur water, in connection with its liberal use externally, may be said to be the sheet anchor in the various forms of chronic skin diseases. There is probably no other disease in which it manifests such distinctive remedial power; hence the Springs have been for many years a popular resort for sufferers from these annoying affections.

It would be an ostentatious display of erudition to name over the catalogue of skin diseases that have been treated successfully at the White Sulphur. Suffice it to say that a thorough course of the water is entitled to the highest degree of confidence in all such affection.

#### PILES.

The use of mild laxatives in hamorrhoids has long been a favorite practice for their relief. The beneficial effects of the water in this disease is probably to some extent due to its laxative power, but still more to its alterative effect upon the liver, through which the hamorrhoidal vessels are favorably impressed.

#### PARALYSIS.

Under this name we comprehend many different conditions. Paralysis is almost always a consequence of a variety of other affections; nevertheless it is not always possible to recognize the primary affection, so that a paralysis is frequently supposed to be an idiopathic affection, when it is in reality something else.

The symptoms occasioned by the passive ebbing of the blood into the cavity of the spine very much resemble those which are caused by organic suffering in the spine, and they lead often to false diagnosis and prognosis.

The White Sulphur water produces in the one case no special beneficial effect; in the other, however, the cases which are apparently the most hopeless frequently recover, or experience, at least, a great abatement of the paralysis, by the use of the waters. Cases of paralysis resulting from dyspeptic depravities, are almost invariably relieved.

#### SECONDARY AND TERTIARY SYPHILIS.

Primary Syphilis is in none of its forms an object for the curative power of the White Sulphur water, but in the advanced forms of the disease these Springs unfold another powerful quality, and in all such cases they perform what no other means known up to the present time, except the Hot Springs of Arkansas is able to perform.

Even in extensive damages done to bones, causing continuous pains and restless nights, these waters have been taken with great benefit. Yearly one sees many such patients come here, and often even a few weeks suffice to improve their condition essentially, or even to cure them as completely as possible.

#### MERCURIO SYPHILOID-METAL POISONING.

What physician does not know, or has not been in perplexity as to what poison was working in the body of his patient and keeping up the symptoms of the disease—the Syphilitic Dyscrasia or "strong medicines"—mercury working as poison in opposition to the affection?

It is a well ascertained fact that in poisonings through mercury and its compounds, as well as in cases of lead and arsenic poisoning, the White Sulphur Springs are of great value. The sanatory principles involved in the operation of these waters in such cases lies in the incitation of the secretions and excretions, in the bringing of critical processes, and in the strengthening of the normal vital action.

#### EFFECTS OF THE WATER IN INEBRIATION.

The peculiar influence of the White Sulphur water depends. First, upon the action of the *sulphuretted hydrogen* gas that abounds in it, and which is an active nervine

stimulant, and as such supplies the want the inebriate feels for his accustomed alcoholic stimulant; and, secondly, it depends upon the *alterative* influence exerted by the waters upon the entire organism. While, by its alterative power, the entire animal structure is brought into natural and harmonious acting, there is a consequent subsistence of the cerebral and nervous *irritation* which always prevails in the habitual drunkard, the abatement of which enables him to exert a moral power greater than he could before, and sufficient to overcome the lessened demand which his old habit, if he retains it in any degree, now makes upon him.

#### THE USE OF THE WATER BY OPIUM EATERS.

The most that can confidently be said in favor of the use of the waters in such cases—and all that ought to be said—is that when they are judiciously used, and in connection with proper adjunctive management and appliances, they essentially aid the opium eater in dispensing entirely with the use of that drug.

# PHYSICAL AND CHEMICAL CHARACTERISTICS OF THE WATER.

The water of the Spring, which constantly flows at the rate of 30 gallons per minute, is at a uniform temperature of 62° Fahr. throughout the year. It is very transparent and slightly sparkling from the gases which it contains; these are sulphurretted hydrogen, carbonic acid, nitrogen and oxygen. Its other constituents, as shown by analysis, are lime, magnesia, soda, iron, potassa, organic matter and precipitated sulphur. This latter ingredient is very abundant, and a copious deposit of it may be seen at all times at the bottom of the Spring. From the white appearance of this deposit the Spring takes its name.

Though the odor and taste of the water, from its being strongly impregnated with sulphur, is at first disagreeable to most persons, a relish for it is soon acquired, and in a short time it becomes a favorite beverage. Many persons in health declare that they prefer it to any other water, and drink it merely as a luxury.

#### GENERAL DIRECTIONS AS TO THE MODE OF LIFE.

The mode of life at the Springs should be as strictly regular as possible, and must in general agree with the prescribed regulations for the bath and drink cure. One should be prudent and moderate in the quantity of both eatables and drinkables. The invalid coming here for his health does not come to celebrate lucullic festivals.

Bathing, under any circumstances, imposes on us certain responsibilities for our body. Everyone knows that a warm bath makes the skin tender, and therefore renders one more likely to catch cold than a cold bath; and mineral water produces this effect in an increased degree. The bather must, therefore, be extremely careful in protecting himself.

Thin flannel should be work next to the skin, and the visitor coming from the north, and knowing that he is in a warmer climate, must not think he can lay his customary warmer clothing aside with impunity.

#### CHALYBEATE SPRING.

About forty rods from the White Sulphur Spring is a Chalybeate Spring, in which the iron exists in the form of a carbonate of iron, the mildest, least offensive, and ordinarily the most valuable, form in which ferruginous waters are found. For the last twenty years this water has been considerably used by the class of visitors whose diseases require an iron tonic, and its effects have realized the rational hopes that were indulged in it.

#### PHYSICIANS.

Physicians of the highest character and skill will be found at the Springs during the entire season.

#### A CARD.

We feel it due to the protection of our rights that we announce to the public that the water and grounds of the White Sulphur are reserved *exclusively* for the use of its guests, and that we cannot permit the use of the water to persons boarding outside of the establishment.

This is not intended, however, to apply to families or individuals permanently residing in the county, and who may desire the use of the water for their own family or individual use.



#### SEASON 1887,

# The White Sulphur Springs,

### HOTEL AND COTTAGES,

Greenbrier County, W. Va.

## WILL OPEN JUNE 1st, 18 ...

W. A. STUART, LESSEE.

## Terms for the Season 1887.

PER DAY,	图 的是"概要"。		5	1- 11-	\$ 3 50
PER WEEK,		4	- 107 304		21 00
PER MONTH	OF 28 DAYS,				75 00
Children o	over two and	d under	ten ye	ears, and	Colored
Servants, Ha					

White Servants, according to accommodations required.

A first-class Band will be present to enliven the Lawn and Ball Room.

TELEGRAPH OFFICE in the Hotel.

A LIVERY will be kept for the accommodation of visitors. Private teams kept at reasonable rates.

And a well organized STEAM LAUNDRY, where all washing for guests will be neatly done at low rates.

### B. F. EAKLE, Superintendent.