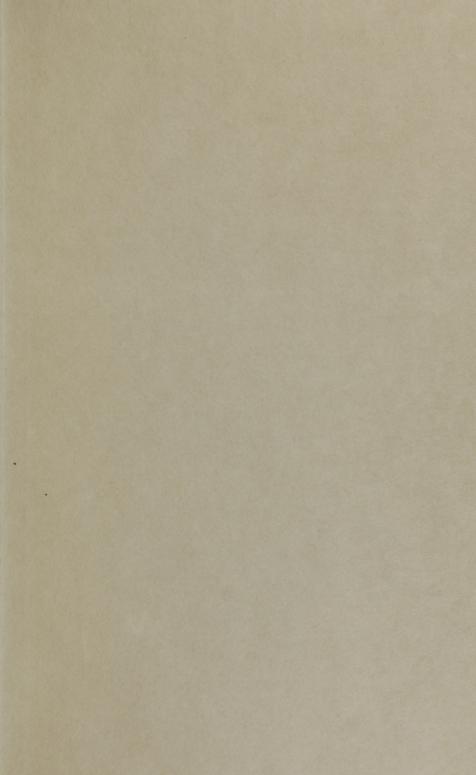


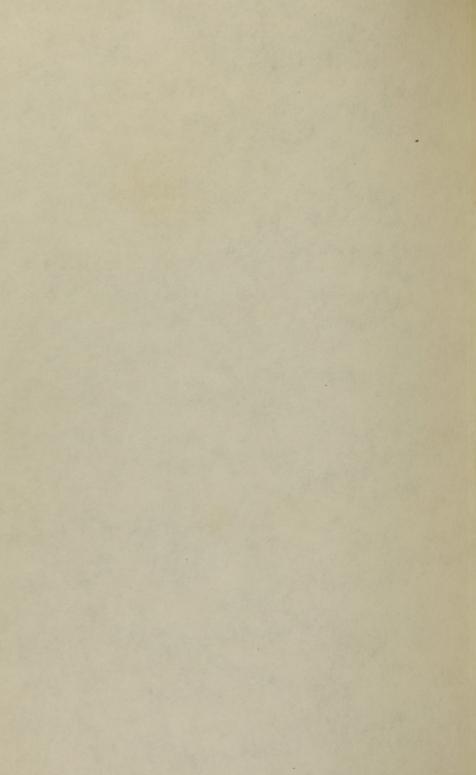
NATIONAL LIBRARY OF MEDICINE Washington



Founded 1836

U. S. Department of Health, Education, and Welfare
Public Health Service





TO

THE RED SULPHUR SPRING

OF VIRGINIA,

DURING THE SUMMER OF 1837:

WITH OBSERVATIONS ON THE WATERS.

HENRY HUNTT, M. D.

WASHINGTON CITY:
PRINTED BY JACOB GIDEON, JR.
1838.

WBI H956v 1838

A VISIT

TO

THE RED SULPHUR SPRING OF VIRGINIA,

&c. &c.

In March, 1837, I was attacked with a slight homorrhage from the lungs, attended with other symptoms indicating a diseased state of those important organs. For a time, I neglected to resort to medical treatment, and continued to pursue my professional labors, until warned by my failing strength. that the disease was gaining ground. By the application of the usual remedies, the violence of the symptoms was soon subdued, and, in a short time, I felt myself sufficiently restored to resume my usual labors; but, with the exercise, my wonted strength did not return; the cough continued, with occasional pain in the chest, and an uneasy sensation of fullness about the liver, stomach, and spleen. These symptoms, after a time, were attended with increased cough, copious, morbid expectoration, hectic chills, fever, and night sweats; my weight was reduced from one hundred and thirty-five, to one hundred and fifteen pounds.

Such was my situation, when, about the middle of July, I left home for the Red Sulphur Spring, in Virginia. On the third evening, I arrived at the Warm Spring, a distance of two hundred and thirty miles from Washington; and immediately after getting out of the stage, I plunged into the delightful bath of that place, an imprudence against which

I would earnestly caution all invalids, who arrive after a long journey, with the whole system exhausted by fatigue. The consequences in my own case warrant me in pronouncing it to be fraught with great danger. While in the bath, its effects were very grateful and pleasant; but, shortly after leaving it, I became chilly, and this feeling was followed by hot skin, intense headache, and pain in the chest. After breakfast the next morning, though still very unwell, I continued my journey, and arrived before night at the White Sulphur Spring, where I remained two days, drinking freely of the water, which seemed only to increase the cough and pain in the chest, and produce an aggravation of all the other symptoms. Leaving this place on the third morning, I passed Union at noon, dined at the Salt Sulphur, and before sunset, arrived at this celebrated fountain, for the benefit of whose waters I had left home. The Red Sulphur Spring, is situated in latitude 37° 37', in Monroe county, Virginia, about twenty miles south west of Union, which is the seat of justice for the county. The approach to the village is beautifully romantic and picturesque. Wending his way around a high mountain, the weary traveller is for a moment charmed out of his fatigue by the sudden view of his resting place, some hundreds of feet immediately beneath him. Continuing the circuitous descent, he at length reaches a ravine, which conducts him, after a few rugged steps, to the entrance of a verdant glen, surrounded on all sides by lofty mountains. The south end of this enchanting vale, which is the widest portion of it, is about two hundred feet in width. Its course is nearly north for about one hundred and fifty yards, when it begins gradually to contract and change its direction to the north-west and west, until it terminates in a narrow point. This beautifully secluded Tempe, is the chosen site of the village. The north west portion is occupied by stables, carriage houses, and shops of various sorts; the southern portion, just at the base of the east and west mountains, is that,

upon which stand the various edifices for the accommodation of visiters. These buildings are spacious and conveniently arranged; the servants are prompt and obedient; and the "Table d'Hote" is abundantly supplied with every variety of viands that can tempt the appetite. The promenades, which are neatly enclosed by a white railing, are beautifully embellished, and shaded from the mid-day sun by indigenes of the forest, the large umbrageous sugar maple, (the acer saccharinum.) The Spring is situated at the south west point of the valley, and the water is collected into two white marble fountains, over which is thrown a substantial cover.

At the distance of a few hundred yards from the Red Sulphur Spring, up the south ravine, there is another spring, supposed to be a Chalybeate of a singular character. My situation did not permit me to make a satisfactory examination of its water, but I should be highly gratified to know the particular character of the water of this spring.

The forest trees of the eastern and western mountains, have been cut down by Mr. Burke, the present worthy proprietor of the Spring, so that this delightful glen enjoys the purifying influence of the sun from seven o'clock in the morning until near five in the afternoon, which makes the grounds much drier than they formerly were, and less liable to morning fogs. Regular stages, or post coaches, arrive here daily, both from the north and south. It is but justice to the amiable and intelligent proprietor, to say, that the improvements he has made, within the short period of four years since he has had the control, give assurance that, should he live a few years longer, the Red Sulphur Spring will not be excelled by any of the numerous places of resort among the salubrious mountains of the Old Dominion, either in magnificence of scenery, beauty, taste, comfort or health.

On the evening of my arrival at the Spring, I commenced the use of its water. The next day, during a violent paroxysm of coughing, a coagulum of blood was discharged from

the lungs, which was followed by considerable hemorrhage. After this, the cough became less troublesome, but the evening exacubations of fever, and the night sweats continued, my pulse beating a hundred and fifteen strokes in a minute. I confined myself to a low diet, and drank six glasses of the water during the day, namely, two before breakfast, one at eleven, A. M., one at 5 P. M., and two at bed time. The water acted freely on the bowels, and particularly on the secretions of the liver. In ten days, the abdominal viscera were entirely relieved, the pulse reduced to seventy eight; and the fever and night sweats had ceased. The quantity of water was now increased to twelve glasses during the day, taken at the same hours, but in double doses. It acted very gently on the bowels and skin, but most powerfully as a diuretic. Thus it appears that in small quantities the water acted freely on the bowels, and but little on the kidneys, while in larger quantities, it acted freely on the latter, and scarcely affected the former. In fact, I could direct its action to the one or the other, at pleasure, by increasing or diminishing the quantity. My cough became better, but my strength still continued feeble, owing to my extremely low diet, and the copious action of the water. Unfortunately I took but little exercise, which I deem all important while using the waters.

After a residence of three weeks at the Spring, and the constant use of the water during that time, to the manifest alleviation of the most pressing symptoms of my complaint, I was unexpectedly called home, in consequence of the illness of a member of my family. In the commencement of my homeward journey, my weak state compelled me to make very short stages; but as soon as I had crossed the mountains, and resumed my usual mode of diet, my appetite and strength returned rapidly, and I completed the distance of three hundred and six miles, in five days, without feeling the slightest inconvenience. The water seemed to produce its good effects

in the improvement of my health for months after I had left the Spring.

In a conversation with Mr. Harvey, a plain, honest, and sensible man, who was the former proprietor of the Red Sulphur Spring, I gathered the following facts, which I give in his own words. He stated, "that he had lived at and about the place for upwards of forty three years. The Spring was first visited by the neighbors for itch, sorelegs, and other inveterate diseases of the skin, which were always cured by drinking the water, and rubbing the parts affected with the muddy deposite. About thirty six years ago, Dr. John Cabell, of Lynchburgh, Va., was the first person who visited the Spring for a cough, and disease of the throat, attended with chills and fevers. He remained here several weeks, and returned home much better. The next season, several other persons came, with cough and every appearance of consumption. Afterwards, the number of visiters afflicted with this disease increased every year. There are many persons now living, within my knowledge, (said Mr. Harvey,) and enjoying excellent health, who visited this Spring many years ago, to all appearance in the last stage of consumption. The visiters who were most benefited by the water, remained here five or six weeks; confined themselves to a diet of rye mush and milk; and were industrious in rising early, drinking the water and taking exercise. Others who indulged themselves in eating, sleeping late in the morning, and lounging about during the day, derived but little advantage from the use of the water, and generally returned home dissatisfied. The cold plunging, or shock bath, was used in those days with decided advantage. I never knew a case injured by the use of the cold bath. Many cases of dropsy visited the Spring, and I never knew an instance where they were not relieved by the use of the water. One of my neighbours was cured many years ago by the use of this water, and now enjoys excellent health. I have known many persons affected with complaints of the liver and bowels completely relieved by the Red Sulphur Water. From the first of May to the middle of November is the proper time for using the water to advantage, but I think it strongest in its various virtues during the months of September and October."

The following was presented to me by Dr. Saunders, the resident physician, as an analysis of the Red Sulphur Water, made at the Spring by Professor Rogers, the Geologist of Virginia; but it certainly does not satisfactorily account for the wonderful effects of the water.

"Temperature of the spring, 54° Fahr.

"Gaseous contents in an imperial gallon.

"Sulphuretted Hydrogen, 4.54, cub. in.

"Carbonic acid, - 8.75.

"Nitrogen, - 4.25.

"Solid contents of 32 cubic inches of water, gr. 1. 25, consisting of sulphate of soda, lime and magnesia, carbonate of lime, and muriate of soda. Besides these ingredients, the water contains, in considerable quantity, a peculiar organic substance which, mingled with sulphur, is deposited on the sides of the spring, and seems to increase by a species of organic growth."

The Red Sulphur Water is decidedly sedative in its effects. It subdues chronic inflammation, tranquilizes irritation, and reduces the frequency of the pulse in the most astonishing manner.

It has been considered peculiarly adapted to the cure of pulmonary diseases, and it is true, that it has a most beneficial influence in most cases of this disease; but its good effects equally extend to all cases of sub-acute inflammation, whether seated in the stomach, liver, spleen, intestines, kidneys, bladder, and most particularly in the mucous membrane. In fact, nature never yet gave to man, a remedy, capable of more extensive application, nor better calculated to relieve a larger class of diseases.

It is not uncommon for persons to arrive at the Spring, who have not been able to sleep during the night, even with the aid of opium, and who, after drinking the water for a few days, find their nervous irritation so soothed and allayed that no other anodyne is required to procure them full repose for the night. This fact is so striking, that a young lady of this place, in writing to her father from the Red Sulphur, facetiously styles it "Sleepy Hollow." The soporific effect of the water was most forcibly exemplified in the case of Mr. C. Smith, of Georgetown, D. C. a gentleman of the highest respectability, who had been for some time laboring under chronic laryngitis, and had not enjoyed sleep for months, even with the aid of large doses of morphia. He arrived at the Red Sulphur a few days after myself, and immediately commenced a free use of the water—the third night after his arrival, he slept soundly all night, without either coughing, or turning in bed, and not only continued to sleep well every night during the use of the water, but was compelled from the drowsy feeling which it produced, to indulge himself in more than one nap during the day.

In a letter, dated some years ago at this Spring, from the late F. W. Gilmer, esq. Professor of Law in the University of Virginia, he says: "These waters are far superior to all others. In a few hours they allayed my cough so as to take away all that was unpleasant in it. They diffuse a sense of coolness, freshness, and newer life over the whole system. They abate the pulse most rapidly, remove fever, lubricate and soften whatever is hard and dry, make one sleep as though he had taken an anodyne—are the safest of all waters—and, indeed, have no ill quality."

The late venerable Dr. R. H. Bradford, of Va., who practised medicine for many years at the Red Sulphur, in a communication on the subject of the water, remarks: "The effect of this water in reducing the frequency of the pulse, is one of the numerous, singular, and powerful properties be-

longing to it. It lessens arterial action to such a degree, that it seldom fails to remove fever, difficulty of breathing, and pain in the chest. When the patient is restricted to a proper regimen, this water may be taken with greater advantage, in all pulmonary cases, than any other remedy I have ever seen employed for that purpose. It is also an important remedy in enlarged liver and spleen, and in diseases of the mucous membrane generally."

The Rev. W. M. Green, a pious, good man, of Hillsboro, North Carolina, makes the following communication, dated October 15th, 1837. "In the month of March, 1830, (being then in my 32d year,) I was taken with a distressing cough, which would scarcely permit me to speak half a dozen words successively without interruption. The attack was doubtless, the effect of much exposure in travelling the preceding winters, hastened and aggravated by certain symptoms of dyspepsia, which had been increasing upon me for some months previous. The symptoms of my disease, when first taken down, and for a long time after, were an incessant, hacking cough, and clearing of the throat without expectoration, a sense of choaking or suffocation in the lower part of the larynx, which afterwards became inflamed and painfula pulse varying from 100 to 120 strokes in a minute-a stricture across the breast, preventing full inspiration-dark greenish stools-lateretious urine-copious, and exhausting night sweats-sleeplessness-great nervous irritability-a craving appetite, with oppression after eating-insatiable thirst-frequent involuntary sighing, and more or less fever during the day, especially in the afternoon.

"The medicines, first administered, were brown mixture and other expectorants of similar kind, together with the free use of tarter emetic ointment. My disease however seemed to gather force, until a temporary check was given by the exhibition of calomel in broken doses, until salivation was produced, which alleviated some of the most distressing

symptoms. As soon as I had regained sufficient strength for the journey, I set out with a kind friend to spend a few weeks near the sea-coast. The trip, however, was without sensible benefit, owing to the prevalence at the time of raw easterly winds, and I returned to all appearance the same, if not worse than on leaving home.

"Having heard much of the efficacy of the Red Sulphur Water, I determined to try them. Accordingly leaving home early in July, I reached that place about the 10th, confining myself closely to the use of the water, and of the sulphur shower bath for nine weeks. I had not been at the Spring more than two days, before I began to experience a favorable influence on my system generally, as well as an amelioration of some of the principle symptoms of my complaint. My pulse soon felt the wonder-working power of that mysterious tempest-stilling agent which resides in those waters. Arterial action was greatly reduced-the nervous system composed—the cough brought down to a mere fractional part of its former proportions-digestion improvedsleep restored—urine rendered colourless—the stricture across the breast less oppressive-night-sweats lessened-in a word, every painful, and dangerous feature of the disease was moderated, and time allowed to nature to shake off the enemy-the two most striking effects produced by the use of this water was the evident reduction of arterial action, at the same time that the general system was recovering its tone, and the total extinguishment of that burning thirst, which had been tormenting me for more than twelve months. I hesitate not to state here, what may appear incredible to many, that for nearly six months after I returned home, I felt no symptom of thirst, whereas, before my going to the Spring, scarcely fifteen minutes would elapse during the day, between my calls for water. This latter effect was still more strikingly experienced in the case of the Rev. Mr. H**t, of Halifax county, Va., who assured me after visiting this Spring a single

season he remained eighteen months a stranger to thirst. As to the effect on my pulse, although it was decidedly marked, and beneficial, yet, there were other cases under my own observation of still more striking character. One I distinctly remember, that of a Mr. Boal, a young Irishman, residing in Lynchburg, Va. He came to the Spring by the advice of his physicians, who saw in him the well known symptoms of pulmonary disease. On his arrival, the average stroke of his pulse was from 110 to 120 in a minute. In three days, without the aid of any other means than the free use of the water; it was reduced to the healthful beat of 65 strokes in a minute. The case of Mrs. B****r, of Raleigh, is no less remarkable; such was the effect of the water on her arterial system, that a single glass was known to reduce the pulse 10 beats in a minute.

"My usual habit was to drink three or four glasses of the water before breakfast—three at 11 or 12 o'clock—two about 5 o'clock in the afternoon, and two on going to bed. I am convinced that what was taken late at night, and very early in the morning, was more efficacious, than all the rest taken during the day. My exercise consisted in a ride of three miles before breakfast on horseback, another about sun-set in my carriage, and in the interval an occasional game at the shuffle board, a game, though not very refined, is unquestionably admirably adapted to exercise a weak chest.

"It may be well to mention here that on my return home, my appearance was so little improved, as to produce the impression among my friends, that my trip had been without benefit. Nor was the improvement which really had been produced, perceived in its extent, even by myself until I had been at home a week or two. I mention this, for the encouragement of other invalids, who return home dejected and hopeless, because they do not experience the immediate good effect of this and the other Sulphur waters. That effect is in many cases felt only after the fatigue of the journey is over.

and the noisy bustle of the watering place forgotten amidst the comfort and quiet of home. I will only add, that after my return, I was enabled occasionally to occupy my pulpit, and to enjoy the society of my friends.

"The next season I sought the mountains again, but finding my pulmonary symptoms, in a great measure removed, and my dyspepsia but little abated, I spent the greater part of my time at the White Sulphur. A third visit two years after the second, served to remove every unpleasant symptom and put the blessing of health once more in my reach. At this moment, the only remnant of disease, which all my friends, and nearly all my physicians pronounced to be phthisis pulmonalis, is an appetite which often needs the bridle of just moderation.

"To Him, who preserved me, be all honor and praise."

Mr. James Boal, of Lynchburg, who lost two brothers by pulmonary consumption, in a communication dated Red Sulphur, August 5th, 1837, states: "A change of life from being an active farmer, to that of a sedentary store keeper. produced constipation, and general debility, (especially in my arms and knees,) a dry tickling sensation in the throat, slight cough, and but little expectoration. The tightness increased, until on riding a refractory horse, I had an attack of hærmorrhage; the discharge at first was pretty copious of a scarlet frothy appearance, moderating to a mixture of bloody phlegm. My nights were passed with but little sleep, and that disturbed by troublesome dreams. In the month of June, 1828, had an attack of diarrhea, and was very much reduced. About the 1st of July, 1828, I visited the Red Sulphur Spring; my pulse, on my arrival, (when free from excitement) was about 120 pulsations in a minute-commenced drinking the water, and in one week, my pulse was reduced to 65 strokes in a minute, with an improvement in my strength and feelings generally. Supposing my cure effected. I omitted the use of the water a few days, and found

my pulse increasing in frequency. I again used it three weeks longer, when my pulse was reduced to its former standard, of 65 strokes in a minute. My course of diet-for breakfast, dried toast and boiled milk, or black tea-for dinner, a little venison, or mutton, rice, or cold wheat bread-for supper, cold rye mush and milk, always guarding against rich sauces or pastry-took exercise in the open air. My plan was, to drink freely, say six or eight glasses of the water before breakfast, keeping in constant motion. The general operation of the water was that of a diuretic, and by taking exercise, perspiration was very copious-my bowels were regular, once a day, and have continued so (except from casual indisposition) ever since. I visited the Red Sulphur in the summer of 1829, and had my general health so completely restored, that I am now here in August, 1837, on a visit to my old friend and benefactor, in perfect health."

The following communication is from Chief Justice Taney, of the Supreme Court, U.S., dated Baltimore, Jan. 8, 1838:

"The information you have received as to the benefit derived from the Red Sulphur Spring by Mrs. Taney and myself, is correct. We spent six weeks or more there, in the summer of 1835, and both of us were in bad health, when we went there. The journey, however, was undertaken on Mrs. Taney's account, and by the advice of Dr. Potter and Dr. Buckler. Her health had been failing for several years, and her lungs were supposed to be seriously threatened. She complained of a pain in her breast, coughed a good deal, and had an excited, and quick pulse. The alarming symptoms were entirely removed by her visit to the Red Sulphur, and she has since enjoyed her ordinary health. It is proper perhaps to remark, that although Mrs. Taney felt in some degree the benefit of the water, while she remained at the Spring, yet, we were not sensible of the extent of the improvement, until sometime after our return home. Both of us have since had much better health, than we had known for

years before, and we both have great confidence in the efficacy of those waters, and I may add, retain a lively recollection of the kind attentions of Mr. and Mrs. Burk, while we remained there."

The following four cases were communicated by a distinguished physician of South Carolina, who passed the summers of 1822-23, and part of 24 at the Red Sulphur Spring, and whose name commands as much respect and confidence as that of any other gentleman in the Southern country.

"I shall give you a few of the very many cases, that have come under my notice of the efficacy of the Red Sulphur water in pulmonary diseases. This is due to the community, and also to the intelligent proprietor, who unites in himself the good manners and politeness of a gentleman, with the capacity and disposition to add all that he can to the comfort, both of the valetudinarian and traveller who may be in pursuit of pleasure."

CASE 1. " In the winter of 1821, it became the duty of B. H. to devote himself to his friend A. B. far advanced in pulmonary disease. B. H. was in good health, and not in the slightest degree predisposed to pulmonary consumption, either by figure or inheritance. A. B. died during this winter with the tuberculous form of this disease. In the spring B. H. began to feel pains in the chest and sides, and frequently to have a tickling sensation about the epiglottis. In July a slight cough made its appearance, and after a week or ten days was followed by an attack of hemoptysis. The use of the lancet, low diet, and some mild expectorant afforded so much relief, that the usual occupation of B. H. was resumed. In August another attack more severe was experienced, and a troublesome cough excited more alarm. The usual remedies were used, and with relief. In September, a severe attack ensued, a large vessel was ruptured, nearly a pint of blood was thrown up from the lungs, and great emaciation took place. The cough could not be checked,

and in October B. H. sailed for the Island of Cuba, with little expectation of ever returning; but his situation was improved by the mild winter of this delightful climate. In April, 1822, he returned to Carolina, still coughing. His situation now became very alarming to his friends, and it was decided that a trip to Virginia should be tried. B. H. rode through the western parts of North Carolina and East Tennessee, and came into Western Virginia at Abington, and reached the Red Sulphur early in June. At this time I was called upon to visit him, and found his pulse 106, cough troublesome, pains in the chest, appetite very variable, tongue preternaturally clean, bowels much disordered and irregular, skin dry and feverish about noon. I directed three tumblers of water to be taken at bed time, 4 before breakfast, and as many as were necessary to satisfy thirst during other times of the day. In two weeks, the pulse was reduced to 84, 78, and then 75; the cough was very much diminished, the pains in the breast were gradually disappearing. The digestion became good, the bowels regular, the skin more comfortable, and the appearance of the patient much improved. The diet was very simple, and the greatest attention was paid both to the quality and quantity of it—tea and coffee were abandoned-homony, rice, or rye mush, with milk, constituted the breakfast—a small portion of mutton or venison, with rice, made the dinner, and a dry toast and water, the supper. At the end of five weeks B. H. left the Spring perfectly renovated, and apparently quite well, having gained fifteen pounds in weight.

"In 1823 and 24, he again visited the Spring, and remained several weeks; he was not sick, but unwell, and returned to the Spring rather to confirm, than to renew his health. To use his own words he returned to the Red Sulphur, as to an old friend, to whom he was under great obligations. To the present moment he has been in the enjoyment of excellent health. This is a strong case. The circum-

stances of it authorize me to make it stronger, but I am unwilling to excite any doubts of the value of the Spring, by writing extravagantly of its water."

CASE 2. "Mr. J. S. of Mississippi, reached the Red Sulphur Spring in July, 1822. I being the only Physician on the spot, was requested to visit him professionally. I found my patient the most emaciated object I ever saw to be moving from place to place. The history of his case as learned from himself was very concise. He had been a soldier at New Orleans, and bore his share in the dangers and difficulties of the campaign, had suffered much from exposure, and at the close of the war was like the rest of the volunteers sent home, and like many others, was the worse for the services he had rendered. His constitution was shattered, and he had been more or less, an invalid, until within a few months previous to his arrival at the Red Sulphur. A severe cold had left him with a cough, and after a while, this had been succeeded by homoptysis of a most alarming character-repeated attacks left him without strength and without hope. He had no hereditary pre-disposition to pulmonary disease. He had been on the road for some time, and seldom travelled more than five miles a day. His cough was very distressing, pulse quick to the touch, and counting 125 in a minute, night sweats and diarrhea, pains in the chest, and very hurried respiration with profuse expectoration, all presented themselves. To me, this seemed a hopeless case, and as I thought, beyond the reach of the profession. A large blister was applied to the chest, an expectorant mixture was prescribed-a table spoonful to be taken whenever the cough was troublesome. He was directed to commence with the water in small quantities, (for I was fearful of increasing the diarrhœa.) He took two tumblers at bed-time, and two in the morning early. Upon visiting him the next day, I was informed that he had passed a comfortable night, comparatively speaking-had slept several hours, and was not as

much harrassed as usual, either by the bowels, or cough. He was directed to live upon rice and milk, dry toast, and weak tea. The quantity of water was increased another tumbler. This plan was persisted in, as my notes show, for ten or twelve days, with a gradual improvement in the case. After this time, the water was increased to eight, and sometimes ten tumblers in the day—the pulse was soon reduced in force and frequency, and the cough much mitigated. The sweats at length ceased, and the diarrhoa disappeared. The effects of the water upon the pulse in this case was very remarkable; it seemed to control it, as you would the horse with the bridle; the patient was so sensible of this, that he used to laugh, and say, if he took an over-dose of the water, his pulse, he believed, would cease entirely. He rode on horseback at the end of a few weeks, ten miles without inconvenience—his weight was very much increased, and he thought himself well. In six weeks after his arrival, he left the Spring, certainly more improved than any one I had ever seen, with no symptoms of disease remaining except the cough, and that very much mitigated. In 1823, Mr. J. S. returned to the Spring, and I saw him daily, he stated that he had continued well until March, when a sudden change of weather for which he was not prepared, a catarrhal affection, upon the subsidence of which, a cough, and much debility ensued. He remained for three weeks, and again left us in good health, with the exception of a cough, which was by no means troublesome. From this period, I have heard nothing of Mr. J. S. but am persuaded, that he recovered entirely."

stated,) and was most unexpectedly attacked by homopty. sis, whilst in the midst of his usual occupations, which were mercantile. His strength was at this time considerable-his pulse full and strong, respiration laborious and painful, skin dry, appetite inordinate, and the cough allowing him no rest at night. I used the lancet very freely, limited the diet to bread and milk, and water, and desired him to remain quiet. Upon the ensuing day, the lancet was again used freely, the symptoms not being mitigated; on the third day, there was little or no improvement, and I desired him to proceed to the Red Sulphur, and use the water in full doses-say, 4 tumblers before bed-time, and 4 before breakfast-to live low, to take no exercise, and be as quiet as possible. In a week or ten days, I returned, to the Red Sulphur, and the first person that greeted me, was Mr. J. C., his symptoms had all subsided, which the lancet had failed to control, and yielded at once to the use of the water. This is certainly a most remarkable property in this water, but it is so well known to the surrounding country, as well as to numerous persons who have visited the Spring, that we incur no risk in making the statement we have. It is also peculiar to the water, that, although on the lowest diet, the strength improves, and the weight is uniformly increased. After some few weeks, Mr. J. C. returned home, restored to the enjoyment of health, and I have never heard of his return to the Spring, which he would certainly have done, had it been necessary to do so. I could go on, my dear sir, and add case after case, but it is unnecessary to do so; the reputation of the Spring is too well established, to require any eulogy. I will add one more case, and that, not of a pulmonary character, in which the water of the Red Sulphur evinced all the virtues that I have attributed to it in the cases stated."

CASE 4. "Genl. P. from Prince Edward county in Virginia, arrived at the Red Sulphur Spring in August, 1823, so much swollen as to be taken from his carriage with diffi-

culty. The face, hands, feet, and legs, were swollen to an enormous size—the abdomen was absolutely pendulous, and the whole appearance indicated dropsy in its most terrible form. The bowels were torpid—the urine scanty, and high colored—the appetite bad, and the digestion worse—sleep was disturbed and painful from the inability to lay down, and the strength reduced, and daily becoming less.

"The General seemed in much better spirits than could have been expected, and stated, that he had come there on a former occasion quite as sick, as we then saw him, and that he had reason to have all confidence in the water. No medicine was taken, but the water was used in such quantities as the stomach would bear. In a few days the bowels became loose, and at the same time, the kidneys began to secrete, and pour forth urine in large quantities. The swelling of course began to subside, and all the functions to assume a more healthy tone and character. The General remained until the latter end of September, and returned home apparently in good health. The patient whose case has been stated lived in a fever and ague country, and had suffered much from this disease; his liver was certainly very much deranged in function, if not in structure; his physician at home had pronounced it an incurable case of hepatitis, and did not think he could reach the Spring.

"In '24 I saw the General at the Spring again, his health was apparently good, but he complained of indisposition, and certainly improved during his residence at the Red Sulphur. I have thus, my dear sir, made from my notes the statements herewith sent you, I could multiply them to a considerable extent, but it is useless as they all go to prove the same thing, viz., the influence that the Red Sulphur Water exercises over the arterial system. I shall not attempt to reason on the subject, it would be satisfactory to me, if I could account for the facts, but it is sufficient for me that the facts do exist,"

"I do not wish to be understood as stating that the water of the Red Sulphur will cure confirmed phthisis, or tuberculous consumption; but I believe that we are very often mistaken, in supposing a case of pulmonary irritation more desperate, and hopeless, than it really is, and I believe that in most cases, if this Spring is resorted to, early, and the clothing, and diet, and exercise duly attended to, its water will be found a most powerful adjunct, and assistant in the management of these hitherto, unmanageable cases."

During my visit to the Red Sulphur, every day was devoted to the investigation of the various diseases which afflicted the visiters at that place; noting particularly the effects of the water in the different diseases.

Most of the cases, were various forms of pulmonary consumption. In the earliest stage of tuberculous disease the patients generally complained of abdominal plethora with cough, some oppression, and restless nights, with frequent pulse. In all these cases, where the water was taken in such quantities as to operate on the bowels for a week or ten days, and afterwards increasing the quantity so as to act freely as a diuretic, and the patients were abstemious in their diet, and took exercise regularly, a rapid improvement was most generally the consequence. On the contrary, those who used but little exercise, and indulged their appetite without restraint, were slow and tedious in their convalescence. Let it be impressed on the mind of all tuberculous patients, that sedentary habits are among the most powerful causes of tuberculous diseases.

Many persons arrive at the Red Sulphur, who are not prepared to use the water, in consequence of high inflammation, or congestion of the lungs, or other organs, attended with pain in the side, constriction at the breast, or hot, and restless nights, with a quick, sharp pulse; all such cases must have the vascular excitement subdued, before the water can be taken with any advantage. I saw several of those cases

under the management of *Dr. Saunders*, the resident physician of the place who treated them very successfully, by means of bleeding, local and general—emetics of ipicac before bed-time—blisters, and occasionally the blue pill.

Most of the visiters at the Red Sulphur this season were laboring under tuberculous consumption, of the second, or middle stage, many of them had visited the Spring one or two seasons, and there was scarcely an exception among them, who had not experienced one or more attacks of homoptysis; and hæmoptysis may generally be considered as an indication of tubercles in the lungs. Those who had visited the Spring before, would say, that they returned home apparently cured, cough, night sweats, expectoration, frequent pulse, all relieved—a good appetite restored, and flesh increasing daily. Towards the spring season the pulmonary symptoms would commence to kindle up again, and by June or July, it would become necessary to repeat the visit to the Red Sulphur; although the symptoms were much less aggravated, and the constitution much less enfeebled than during the previous season.

The water of the Red Sulphur seems to act by soothing irritation, lessening the frequency of the pulse, and by subduing the inflammation of the tissues in contact with the tubercles; and thereby rendering the tubercles harmless; and also by suspending that tendency of the system to generate, or deposite tuberculous matter. It is not unusual in post mortem examinations to discover tubercles in the lungs of subjects, who had never exhibited any signs of pulmonary disease during their life time; and in visiting the slaughter houses of butchers, we have been astonished to observe numerous tubercles in the liver and lungs of animals, particularly the hog, and the sheep, which were fat, and otherwise in a healthy condition.

"Dr. Carswell," says Dr. James Clark, "has remarked it as an important fact, that the mucous and serous tissues in

contact with the tuberculous matter are often found in a healthy condition, while this continues, tubercles may remain an indefinite length of time in their original state, or the softer part of the tubercle may be absorbed, leaving the more solid calcarious portion only in its site, a termination which occurs more commonly, I believe, than is generally supposed."

Among this description of patients who had visited the Red Sulphur two seasons, was Mr. Jacob S. King, of Henry county, Va. who stated that he was taken ill with influenza in February, 1835, followed by pulmonary symptoms of a serious character. "About the 7th of August following," says Mr. King, "I arrived at the Red Sulphur Spring, laboring under diarrhœa with acute pain in both sides, so much so, that I could not remain on either side for one minute at a time without great suffering. My pulse was from 120 to 130 in a minute, and my cough very troublesome. The second day after my arrival at the Red Sulphur, I was freely cupped and leeched on both sides, and at night took a pill composed of morphine, ipicac, and blue mass. The third morning I took an emetic of ipecacuanha. My diet was simply one glass of milk, and a piece of stale light bread, three times a day, for fourteen days, and drank the water freely, during this period. I gained a pound of flesh daily, and my pulse was reduced to 76 in a minute-my cough, strength, and general feelings were very much improved-bowels entirely regular, and in good condition." "I am now at the Red Sulphur, August 1837, enjoying much better health than in 1835-my cough being but very slight, although my health is not entirely restored."

The cases generally, laboring under this stage of pulmonary disease, improved in their health, particularly, if they remained long enough at the Spring, restricted themselves to a proper diet, and took sufficient exercise; but there were a few among them, who took little, or no exercise, and gave

unlimited indulgence to an inordinate appetite. In such cases, I took no interest, and observed but little change in their appearance.

On examining the visiters laboring under pulmonary disease, I observed that all those patients who drank the water so as to act freely on the bowels, for any length of time did not improve in their health, because, active purging is not proper for the lungs in this disease. The water must be drank in such quantities as to act freely on the kidneys. There seems to be an intimate association* between the lungs and the kidneys, and the kidneys seem to bu the great emunctories by which the lungs are relieved in all pulmonary diseases; this idea has been repeatedly suggested to me, in my attendance on patients laboring under this disease; on enquiring into their condition, they have frequently said, "I feel much better to-day, I have had a most copious flow of urine which has afforded me great relief." This view of the connexion between the lungs and the kidneys, has been confirmed by witnessing the diuretic effects of the Red Sulphur Water in pulmonary diseases-I have a friend who is a physician, and who has labored, more or less, under pulmonary disease for twenty years. He informed me that whenever his lungs were disturbed by irritation, he always resorted to "cooling diuretic medicines for relief."

There were but few persons laboring under the third or last stage of tuberculous disease, who visited the Red Sulphur this season, and among those few, there was scarcely a case that derived any advantage from the use of the water. When tuberculous disease arrives at this stage, and the constitution is broken down, it is not only useless but cruel to send the patient to the Red Sulphur. I am sorry to say, that several of my patients in this condition, by my advice, visited the

^{*} This association seems to exist also between the heart and the kidneys, as manifested during the use of the water in several cases of diseases of the heart.

Red Sulphur this season, and I witnessed the bad effects of the water in their cases, as well as in the cases of others of a similar character. They were laboring under that peculiar irritation, and perhaps ulceration of the bowels, so common in this stage of the disease; they were unable to drink but a small quantity of the water, and the consequence was, that the bowels were purged and griped, the secretion of the kidneys was not increased, and the patients grew worse daily.

The following case of Rheumatism of the heart, was communicated by Wallace Allen, Esq. of Richmond, Va. dated February 15, 1838:

"For some years I was a martyr to rheumatic affections, and finding no permanent relief from the various remedies, proposed either by my frends or attending physicians, I was induced as a dernier resort to visit the Hot Spring in the summer of 1821. After remaining there eighteen days I found my health so far restored, as to deem a longer stay unnecessary. From that period, my health, though not robust, suffered little apparent declention until 1835, when I began to experience a change of feeling, commencing with irregular and inordinate action of the heart. That organ, being evidently enlarged, and its vessels, together with the whole arterial system, suffering great derangement, and producing violent palpitations. During the latter part of that year, and beginning of the next, my disease gained ground to an alarming extent. I became listless, and inactive. My mental faculties seemed obscured in a cloud, and my physical energies so prostrated, that an entire suspention of my regular pursuits became imperious; under these circumstances I consulted a medical gentleman of great eminence residing in Philadelphia, who after minute investigation, pronounced my disease rheumatism of the heart, and prescribed as the only means of cure, moderate exercise, meagre diet, and a trip to the hot spring. At this time the symptoms were so severe, as almost to threaten the extinction of life-intense throbbing of the temporal arteries, great debility, and depression of spirits were the characteristic features of my complaint. In the month of July 1837, I visited the hot spring where I remained thirty days, and experienced considerable alleviation. I then determined on removing to the Red Sulphur, thinking to test by my own observations, and experience, the high renown of their medical properties, as famed for allaying arterial excitement. Accordingly early in September, with some agreeable companions (which formed a great inducement) I wended my way to that beautiful valley, where health and pleasure seem to dwell as tutelar guardians of the lovely spot. There I determined to remain some days, that I might inhale the invigorating freshness of the mountain air, and luxuriate in the delights of the mountain scenery. And well was I repaid, not only in the happy results of the experiment, as it regarded my health; but further, as it enabled me to cultivate some valuable acquaintances recently formed, among whom, I am pleased to recognize a physician who evinced no common interest and sympathy in my case. By his advice I remained three weeks, making free use of this health-restoring fluid, and receiving therefrom benefit transcending my most sanguine expectations. During my stay at this Spring I found each painful and alarming symptom gradually subsiding, and the pulsations of the heart, and greater arteries, decreased from 96 to 72 vibrations in a minute—the throbbing of the head ceased to annoy me, and I had every reason to consider myself convalescent. The last week in September I returned home with renewed health, and invigorated feelings, and am now daily growing better. My usual amount of strength has returned, and I am confirmed in the opinion that the malady under which I had so long labored, and all its distressing consecutives, have been totally eradicated by the free use of the Red Sulphur Water.

"Here, let me bear testimony to the polite kindness of the worthy proprietor of that celebrated watering place, whose

unceasing attentions to the wants and comforts of his guests call for high eulogium."

The Red Sulphur Water may be used with the most decided benefit in obstinate cases of bowel complaints, gleet, leucorrhœa, catarrh of the bladder, and uterine derangement.

It is not unusual for persons while using this water to pass calculi from the bladder, some specimens of which are in my possession, about the size of common beans. I do not pretend to assert that the water has any specific action on the stone; but, by its powerul diuretic effects, by allaying irritation, and probably by relaxing the urethra, the calculi are washed as it were from the bladder without pain. This fact is worthy the consideration of all persons laboring under calculous affections of the kidneys or bladder.

The general instructions which have been given regarding the mode of using the Red Sulphur Water, may not be considered sufficiently condensed to meet the view of the general reader. I will, therefore, recapitulate the directions. Begin the use of the water with great caution. If the system should be too plethoric, or too much excited, the use of the water should be postponed until the excitement shall be reduced to a proper state. Commence by taking one glass of water at bed-time, and one before breakfast; after a few days, take two glasses at bed-time, and two before breakfast, one at 11 o'clock A. M. and one at 5 P. M; this quantity will generally operate freely on the bowels; if it should fail to produce this effect, a little common salt, magnesia, or cream of tarter may be added. If it is desired to act on the kidneys, increase the quantity of water to three or four glasses between a light supper and bed time, and the same quantity between day-light in the morning and breakfast time, two glasses at noon, and one or two glasses about 5 o'clock, P. M. taking care to exercise freely after drinking. The most proper periods for using the water are at night before bed time, and in the morning before breakfast time.

