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EXCURSIONS
TO THE
ENGLISH SPAS

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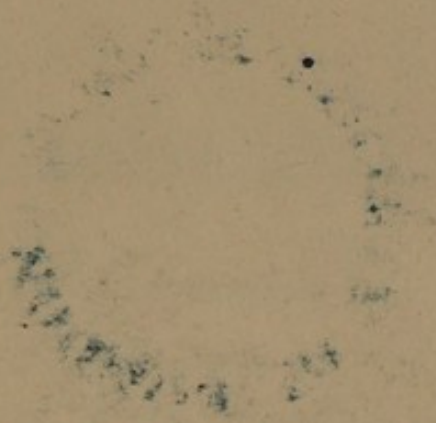
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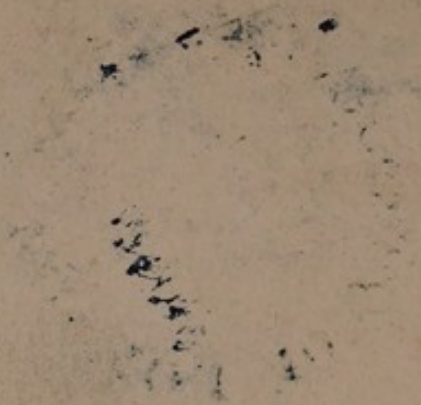
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EXCURSIONS

TO THE

PRINCIPAL MINERAL WATERS

OF

ENGLAND,

IN PURSUIT OF

HEALTH AND INFORMATION.

BY JAMES JOHNSON, M.D.

PHYSICIAN EXTRAORDINARY TO THE LATE KING, ETC. ETC.

LONDON:

S. HIGHLEY, 32, FLEET STREET.

MDCCCXLIII.

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PREFACE.

Medical Men are now so frequently consulted respecting Mineral Waters, that they are obliged to direct more of their attention to that subject than formerly. For several years past the Author of this small volume combined the advantage of travelling in pursuit of health, with that of acquiring information in regard to various mineral waters, abroad and at home. The information thus acquired on the spot, for his own personal use, has been here freely communicated, in a very succinct and condensed state to others, for their own benefit. The nature of the work neither required nor lays claim to genius, erudition, talent, or even originality. Attention, discrimination, and concentration are all that have been aimed at, and the result may perhaps prove more useful to the public than larger TOMES with loftier pretensions.

The Bibliopolists and Book-makers of the present day will be not a little astonished to find that I have been only able to collect materials for one small volume from such a wide field. But they may see that, whereas it is their object to mix a bushel of chaff with every handful of grain, it has been mine to extract the handful of grain from the bushel of chaff. This makes all the difference.

*Suffolk Place, Pall Mall,
1843.*

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EXCURSIONS
TO
ENGLISH SPAS,

&c. &c. &c.

THERE are so many points of comparison and contrast between the foreign and domestic spas, that an ingenious casuist would have little difficulty in proving, with much plausibility, the superiority of the German waters over the English, or the *latter* over the *former*, according to the party by which he was retained, or his own fancy. But the medical casuist should plead for truth, and not for victory—for the good of suffering humanity, not for self-interest. It must be confessed, in limine, that the English mineral waters cannot compete, with the Continental, in strength, flavour, or high temperature. But it is not the most potent or the most palatable medicines that are the most useful or efficacious. It is the same with mineral waters. The Soolen-sprudel, at Kissengen, contains three times as much weight of ingredients as the Kochbrunnen at Weisbaden, yet it is not one-tenth so useful as the latter. Many of the most celebrated waters of the Continent, as Pfeffers, Gastein, Teplitz, Wildbad, &c. have scarcely any active ingredients in their composition.

But there is another important point to be taken into consideration. There is not one in one hundred of our British invalids requiring the remedial agency of a spa, who can afford either the time or expense necessary for a journey to even the nearest of the German mineral waters. The expense of an English passport, leaving aside the worry of getting it countersigned by the repre-

sentatives of half the potentates of Europe, would pay the fare of a London citizen to the most distant spa in England! It is very easy, but it is very useless, to tell a man with a large family and limited income, that venison and turtle are better fare than mutton and codfish—or, that Champagne and Burgundy are superior beverages to Marsalla and porter. Ordinary people must put up with ordinary provender—and many hundreds of our countrymen and women must be content with Bath instead of Baden—Harrogate in lieu of Aix-la-Chapelle—Cheltenham instead of Marienbad—and Tunbridge Wells as a substitute for Schwalbach or Bruckenaau.

For the real or supposed inferiority of British spas, the middle classes have some compensation, or at least consolation, in the saving of time and money—the security from a sea-voyage and sea-sickness—the trouble and expense of embarkations and disembarkations—the scrambles at foreign hotels—the vexations of passports, police, and douanes—the rough roads, slow journies, and violent concussions—unaccustomed diet—ignorance of the language—the long and wide separation from friends and native home; at a time, too, of sickness and anxiety. It must be acknowledged that these are only negative advantages—but HEALTH itself is no more than the absence of disease. These negative advantages of the home spa-goer, of middle rank, and which would be converted into positive evils abroad, are little felt by the aristocracy and the opulent classes of this country, who travel to the continental waters in their own carriages—with their own servants and couriers—and with every *portable* comfort which money can procure. To them the inconveniences alluded to, are, perhaps, more useful than otherwise, as breaking the monotony of their lives, dispersing ennui, and abstracting the mind of the invalid from his own gloomy meditations. To all these I would say, go and travel to the spas of Germany, and when you can swallow no more, ascend the Alps and take air instead of water—exercise instead of lounging—and occupy the mountain chalet rather than the splendid cursall.

But has the home spa-goer no *positive* advantages over the continental pilgrim in pursuit of health? I apprehend that he

has—though he may not appreciate them unless he has crossed the Channel.

Is the superb travelling, whether by rail, stage, or post, through a country, unequalled in Europe, for beauty, cultivation, and fertility—*nothing*? Are Macadamized roads, on which we are neither blinded by dust, splashed with mud, or contused in body and limbs—*nothing*? Is the comfortable hotel, where plain and wholesome food can be procured at ten minutes' notice, by day or by night—*nothing*? Are beds, six feet in breadth, by eight in length—*nothing*? Is the box-seat of a splendid stage-coach, which whirls us through the fresh air, at the rate of 12 miles an hour, amid scenes and landscapes of exquisite beauty—*nothing*? There is, at all events, *nothing* of the kind on the Continent. Are the chalky cliffs, the boundless ocean, and the balmy atmosphere of our sea-girt shores, which may be approached in a few hours from any spa in England—*nothing*? Is the daily post, through which we communicate with our family and friends—by means of which we can direct our concerns as easily and readily at Harrogate, as if we resided at Hampstead or Highgate—and all for one penny—*nothing*? He only who has experienced the tiring delays and heavy expences of foreign post-offices, can appreciate the blessings of the British penny post!

Is the consciousness that, in the hour of peril, sickness, and distress, our nearest and dearest relations can fly to our succour in a few hours, even from the distant Metropolis—*nothing*?

Finally, is there nothing consolatory in the anticipation that, should the hand of death press upon us, when absent from our family in quest of health, we shall have the consolations of religion administered by our own clergy, and our native soil as a lasting sepulchre where our ashes may repose with those of our friends and relations?

RAIL-ROAD.

The reader need not fear the description, or rather the infliction of a Euston Square terminus, with all the bipeds, quadrupeds,

bags, and baggage that assemble there on a fine morning. These delineations I leave to the pictorial tourist. I take my station at once on the *outside*, close to the conductor, where, if it be a dead calm, we cleave through the air, as though we were running against a brisk gale—and if the breeze be adverse, we are sailing right in the wind's eye, against a furious hurricane. This is the way to undergo a thorough ventilation—a sanitary purification from the mephitic atmosphere of London, impregnated with all the poisons that ever issued from Pandora's box,—and a great many others, of which Pandora knew nothing—for instance, that odoriferous distillation from coal, which perfumes the air in every street and shop, and takes the high-sounding and scientific designation of “CARBURETTED HYDROGEN GAS.” It is in the “MAIN-TOP” of a flying train like this, that we can most effectually take “PRATIQUE” from a London Lazaretto—and disengage from our persons and clothes those noxious vapours that have emanated from at least one hundred millions of living things, besides the incalculable masses of dead animal and vegetable matters in the transit of decomposition from a solid to a gaseous form of existence!

Having travelled on almost every rail-road of this country and the Continent, I cannot discover anything injurious to health in this mode of locomotion. The vibrations are more rapid and confined than those of a carriage, and the succussions of the latter on rough roads, are entirely absent on the rail. In this mode of travelling I see nothing prejudicial to the functions of the heart, the lungs, or the brain. Those whose heads are easily turned, should avoid looking at such objects as are very close to the train. A contemplation of scenery at a distance is not different from that on common roads, excepting that it is more frequently interrupted by cuttings and tunnels.

I was a little surprized at an opinion of Dr. Granville, namely that—“to a traveller who is in a hurry, and desires to *enjoy* as many of the *comforts* of a rail-road as he can procure, the *night train* is unquestionably to be preferred.” Undoubtedly travelling by night, the same as working by night, saves time, and, in that way money; but I do maintain that it is at the expense of *com-*

fort, as well as of health. It never was designed by Nature that we should work or travel by night. The night air is proverbially insalutary, especially to invalids; and as the greater number of collisions and frightful disasters have occurred in the night, the very idea of such an accident is enough to destroy the *comfort* of a night train.

HARROGATE.

I SUSPECT that Harrogate, like Tunbridge Wells, owes some of its reputation to the salubrity of its air, as well as to the remedial agency of its waters. Over this high table-land, consisting of cultivated grounds and flowering heaths, the breezes sweep with freedom from every point of the compass, carrying health and invigoration to the human frame, enfeebled by the shop, the counting-house, or the factory, on one hand, or the senate, the bar, the pulpit, the studio, the theatre or midnight madrigals, on the other. I have visited many localities,

“ Abroad and in my native land,”

but never experienced more bracing and exhilarating feelings than at High Harrogate.

THE WATERS.

I. THE OLD SULPHUR SPRING.

The efficacy of the waters themselves is by no means problematical. The mal-odorous smell and nauseous taste of Aix-la-Chapelle and Harrogate waters alone, contribute greatly to their remedial agency. It was an observation of the late Dr. Gregory, that the more stinking the medicine, the greater effect would it

be likely to produce—and that camphor, musk, assafoetida, valerian, castor, &c., should always be liberally administered—especially to females—if we wished to impress our patients with a high opinion of the curative power of the drugs.

Now I would pit the OLD WELL of Harrogate, as well as the more modern Sulphur-well at Leamington, against any compound that ever issued from the chemist's shop—or any mineral water that ever sprang from the bowels of the earth, for the valuable properties so much lauded by Dr. Gregory. If a venerable and rusty gun-barrel, which had not been loaded or fired since the Spanish Armada, were well scoured out with boiling sea-water—and if to these washings were added a few stale or rotten eggs—and, finally, if a stream of sulphuretted and carburetted hydrogen from one of the main gas-pipes in Regent Street were directed through this witches' caudle till it was supersaturated, then we should have as perfect an imitation of Aix-la-Chapelle, Leamington, and Harrogate water, as Schwitz himself could manufacture in his laboratory at Brighton. Indeed, the "Fontaine Elisée" itself at Aix is little better than milk and water compared with this "Yorkshire-stingo." The following is the chemical composition of the OLD or SULPHUR SPRING in a pint.

	grs.
Muriate of soda (common salt)	108—4
Bicarb. of soda	2—4
Muriate of lime	10—8
Sulphate of lime	1—0
Carb. of lime	1—5
Muriate of magnesia	5—3
Total ..	129—5

GASEOUS CONTENTS.

	Cub. Inches.
Sulphuretted hydrogen gas	1—7
Carbonic acid gas	1—2
Azote and carburetted hydrogen gas.. ..	0—7
Total ..	3—6

The sulphur of this water is supposed by some to have its source in a peat-bog near Harrogate, and the water filtering thence through the ground, springs to light in the low village perfectly transparent in appearance, but well impregnated with sulphur in smell. The spring is amply sufficient for all the bibbers of the season, and for considerable exportation. To the taste, the water is very saline—and no wonder, when the pint contains nearly a quarter of an ounce of common salt. But the disagreeableness of the taste appears to be more owing to the gases than to the salts. It is astonishing, however, how soon our palates and olfactories get reconciled to the most nauseous mineral waters! The first time I ever sipped at the “*Fontaine Elisées*” in Aix, I almost vowed I would never put it to my mouth again. Yet in three days I became quite accustomed to the water.

The Harrogate water soon loses its transparency when exposed to the air, and becomes partially decomposed; but, if bottled immediately, and well corked, it will keep a long time unimpaired.

The fame of this spa has been long on the increase. My late able but somewhat visionary friend, Dr. Armstrong, considered these waters as almost a panacea for every chronic disease.

“During a series of years, I have traced the operation of the sulphuretted hydrogen gas from one organ of the body to another;—from the skin, joints, and eyes to the viscera of the head, chest, and belly—and the sum-total of my observations authorize me to declare that it is one of the most powerful antiphlogistic agents which can be found.”

This is strong language; but in another place he urges the necessity of removing all states of active inflammation, before the use of the waters. The fact appears to be, that the sulphur waters of Harrogate have no specific power over inflammation; but that they remove chronic inflammation or congestion by their *alterative* virtues—by opening all the secretions—by acting on the liver, kidneys, bowels, and various other excretories. But as the muriate of soda is almost the only aperient component in the waters, it will be found judicious here, as well as at most other spas, not only to prepare for the waters by proper aperients, but to combine the use of the latter with the former occasionally. And an

alterative aperient pill over night, is often preferable to the custom of adding Cheltenham salts, or other saline medicines, to the natural waters.

Harrogate, like Ems, is a place of many springs. Close to the "OLD SULPHUR WELL," which is, or was, "open to all parties, and influenced by none," is a pump and a room—but it is eminently entitled to the Bath appellation of a "DRY PUMP." There are no visitors—except from curiosity—and no water is drawn from the Hygeian spring! It may be termed the lawyer's well—the law having taken from it every thing but the pump and an unfurnished room. Like Rome and Carthage, the Old Well and the New could not co-exist. "Delenda est Carthago," cried the limbs of the law—and the new Carthage was demolished.*

II. MONTPELLIER WELLS.

Not far from the lawyer's well, in the gardens formerly attached to the Crown Hotel, (now Montpellier Grounds) stand two pumps, in a small but neat pump-room—the one a sulphur water scarcely differing from the Old Well, the other a chalybeate saline. They are called the Montpellier Springs, and are very much in use. The Saline, which is also called the Cheltenham Spring, contains 110 grains, or thereabouts, of solid matters in the pint, of which, there are

	Grains.
Muriate of soda	81—5
Sulphate of soda	2—4
Muriate of lime	21—8
Muriate of magnesia	4—3
Oxyde of iron.	0—4
Total	110—4

* When the New Well was sunk by the late Mr. Thackery, the Corporation, to whom the Old Well belonged, brought an action against him for injuring the Old Sulphur Spring, although the pumping of the new source caused no diminution of the old, and the composition of the two waters differed!

There is a small quantity of carburetted hydrogen gas, azote, and carbonic acid in this water, but the sulphur is scarcely if at all perceptible, though the iron leaves a ferruginous smack on the palate.

Its neighbour, the SULPHUR-WATER, is very similar, as before-mentioned, to that of the Old Well, but it is the great resort of the better classes—chiefly because it is paid for, and consequently is more fashionable.*

The gardens are small, but pleasantly laid out, and the baths of this establishment (twelve in number) are highly respectable and well appointed.

The two pumps, though in close proximity, come from very different sources, and will not amalgamate. The moment the waters are mixed, they become inky—an experiment which the pumper shews occasionally to the gaping multitude.

III. ROYAL PROMENADE, OR CHELTENHAM SALINE.

A short walk of two or three hundred yards from the Old Well and the Montpellier Springs, brings us to a great lion of Harrogate—the “ROYAL PROMENADE, OR CHELTENHAM PUMP-ROOM.” This spring is now enclosed in a kind of Grecian temple, 100 feet in length, by 30 in breadth, well lighted, and serving as a pump-room, ball-room, music-room, and reading-room. Extensive gardens and walks lie behind this temple, where fire-works and fetes are exhibited in the season. The pump is in one corner of the room, and its waters, as analysed by Dr. Hunter and Mr. West, contain in the pint,

	Grains.
Muriate of soda	24—
Muriate of lime	18—4
Muriate of magnesia	10—3

* It contains a few grains less of muriate of soda, but two cubic inches in the gallon more of sulphuretted hydrogen gas. It has also the advantage of a little superiority in muriates of lime and magnesia. There is more azote in the Old Well.

Carb. of soda	1—4
Oxide of iron	0—5
Total.. ..	54—6

In perusing the accounts of the mineral springs, especially of the saline chalybeates, at Low Harrogate, such changes have taken place in the names of the springs, of their owners, and of the localities in which they are situated, that a stranger is puzzled beyond measure to discriminate and identify them. In the topographical summary, a little farther on, I think I have given a clue to unravel the labyrinth.

IV. WALKER'S STRONG, OR LEAMINGTON SALINE.

It is situated in a small niche or Hygeian temple, between the Old Sulphur Well and the Promenade Cheltenham Pump-room. Its contents are as follows—in a pint :

	Grains.
Muriate of soda	76—2
Carbonate of soda	6—6
Muriate of lime	5—5
Muriate of magnesia	2—0
Total	90—3

In this there is about a cubic inch of azote, and very little carbonic acid gas.

There are various other springs for supplying the baths ; but hardly any other for internal use in Lower Harrogate, with the exception of the Hospital Well, which is situated in the midst of the peat-bog adjoining the Old Well, and is not materially different from it. It serves the Hospital, a neat and well-regulated establishment, for baths, &c.

CHALYBEATES PURE.

The only one in Lower Harrogate (in the garden of the promenade) is shut up, and therefore requires no notice here. Those who require or desire a pure chalybeate, have only to walk or drive about a quarter of a mile from the lower village to the eastern extremity of the Common, where they will see the ruins of a small cottage, in a marshy spot, and close to it a small stone shed, in which springs up one of the first and original spas of Harrogate—now—

Deserted in its utmost need,
By those its former bounty fed,

and doled out to those few who frequent the Hygeian fountain by an old dame, who makes, I fear, scanty maintenance by her avocation. This is the

V. "TEWIT WELL."

It contains a quarter of a grain of oxide of iron in the pint, held in solution by carbonic acid gas, with scarcely any saline ingredients. It is a pleasant chalybeate.

VI. OLD, OR SWEET SPA.

Ascending to the summit of the Common, and nearly opposite the Granby Hotel, we observe the oldest of all the spas—"the SWEET SPA"—discovered in 1631, and enclosed in a small circular building. It is the chalybeate most in request at Harrogate—not that it is a better one than its humbler neighbour below, as it only contains half a grain more of iron in the gallon than the TEWIT; but it is much more convenient to the principal hotels in the upper village.

A mile and a half from the Old or Sweet Spa near the Granby,

and a small distance off the Knaresbro' road, we find the Starbeck Spas, two in number—one sulphur, the other chalybeate.

VII. STARBECK SULPHUR.

This contains only 18 grains of solid matters in the pint, of which muriate of soda forms 15 grains—one and a quarter of muriate of lime—one muriate of magnesia—a fraction of the muriates and carbonates of soda. It presents five cubic inches of sulphuretted hydrogen gas in the gallon, and eleven of azote, with some carbonic acid. Thus this spa is only about one-seventh the strength of the Old Sulphur Well, or the Montpellier in Lower Harrogate. But it is often extremely useful at the commencement of a course, both for drinking and bathing, in weakly constitutions, or where the skin is irritable or sensitive.

VIII. KNARESBOROUGH CHALYBEATE.

The neat, clear, and pleasant little chalybeate spring here is a good deal resorted to, though weaker in iron than either the Sweet Spa or the Tewit Well.

Thus, then, we see that Harrogate presents a great number of mineral waters, and a great variety of them. We have pure chalybeates—saline chalybeates—pure salines—and sulphuretted salines in abundance.

A short recapitulation of their names and localities may not be useless, to the stranger when visiting this celebrated spa.

Coming from Knaresborough to Harrogate, and midway between the two places, a little to the left of the road, we have, 1st. The Starbeck Sulphur Spa, greatly weaker and milder than the sulphur springs in Lower Harrogate. 2dly. The Starbeck pure and mild chalybeate, close to the former. 3dly. Advancing a mile and a half, and when abreast of the Granby Hotel, if we look to the left, we see the circular little temple of the Old or "SWEET SPA," standing in loneliness on the middle of the Common.

4thly. Continuing our course to the westward along the Common, and leaving Upper Harrogate on our right, together with the Queen Hotel, and line of buildings connecting the upper with the lower village, we descend the Common, the ground becoming more and more marshy, till we light upon the Tëwit Chalybeate Spring, close to the walls of a ruined and dilapidated cottage, and scarcely protected from the winds and rains by a rude and wretched stone shed!

5thly. Turning from this, nearly due East, towards the lower village, and along a narrow carriage-road, we enter Low Harrogate, and, if we have a good scent, we soon come to the "OLD SULPHUR WELL," lying in a hollow, near the Crown Hotel, surrounded by a low stone parapet, and covered by a dome supported by several pillars. If it be the morning, we will find ten or a dozen females inside of the parapet, busily employed in baling out the mal-odorous and nauseous, but highly medicinal fluid, to numerous applicants:—some drinking it cold, others mixed with some hot water of the same quality. I tried both, and though the lukewarm mixture may, in many cases, be the best, I liked the cold draught better than the tepid. Here a considerable number of the better and middling classes of society are seen quaffing, as well as their more humble and indigent fellow-sufferers:—for sickness, like love, levels all distinctions. Close to the Old Well are two or three others, covered over, with kind of trap-doors, and serving for supply to the baths.

6thly. At a distance of 82 feet from the Old Well, is the DRY PUMP of the late Mr. Thackery, or as it may be called, "the LAWYERS' WELL." You peep in through a window at it; but it may be considered as defunct.

7th. At a very little distance from the "DRY SPA," we enter the Montpellier pleasure-grounds, and, in a kind of Chinese temple, we find two pumps, within a foot or two of each other—one, the "SULPHUR WELL," very nearly the same as the Old Well, and the other, the "CHELTENHAM CHALYBEATE SALINE, which, however, differs materially from the Cheltenham Waters in its deficiency of the sulphates of soda and magnesia.

8th. Returning out of the Montpellier grounds, and while pro-

ceeding towards the "ROYAL PROMENADE," we stumble upon "WALKER'S STRONG SALINE, or LEAMINGTON SPA," pumped up in a small temple on our left, and close to Mr. Walker's wine-vaults. It is quite free from iron and sulphur—not unpleasant to the taste—but not by any means so aperient as the Leamington Waters, or even as the sulphur springs in the neighbourhood. It is, however, a very valuable water.

9thly. We are now in view of the Doric temple of the Royal Promenade, and, on entering it, we see a small library on our right, and the "CHELTENHAM SALINE CHALYBEATE" pump, in the opposite corner, on our left. In the back of the temple or pump-room, the extensive pleasure-grounds are tastefully laid out.

With this short topographical description in his hand, and taking the route here prescribed, any stranger may ascertain the sites of all the principal springs now in use at Harrogate. The Hospital Well, in the midst of the morass, is easily found by inquiry for the Hospital or the bog itself—distant some five or six hundred yards from the Old Well, in a southern direction. This neat little hospital stands on the very verge of the morass, in the middle of which rises the Hospital Sulphur Well—and indeed innumerable other small springs.

DISORDERS TO WHICH THE WATERS OF HARROGATE ARE APPLICABLE.

Before adverting to the mode of using the Harrogate Waters, it may be as well to glance at the various maladies which they are employed to cure. Dr. Hunter, of Leeds, has collected some curious specimens of those afflictions to which our ancestors were subject, and indebted for their cure to the "OLD SULPHUR SPRINGS" of Harrogate. Dr. Dean, in 1626, thus alludes to them.

"The common people drink them, and they expel *reef and fellon*: they soon help and cure, by washing and bathing, itch, scab, morpew, tetters, ring-worms, and the like."

Nearly 200 years ago, Dr. Neale, of Leeds, speaks thus of the Old "SWEET SPA," or Chalybeate on the Common.

"As to the virtues of this spring there is scarce any disease incident to mankind wherein its inward or outward use may not be of service. I have been an eye-witness of its effects nearly forty years, and I have not neglected drinking it myself any one season all that time ; and though I am now in my 66th year, yet I am strong and vigorous, free from the complaints of old age. But because a general and just commendation of this spring will not be satisfactory, without condescending to enumerate the diseases wherein it's proper. It's good therefore, to restore a lost appetite and digestion, to mitigate the scurvy, correct all acid humours in the lymphæ, blood, nervous and pancreatic juices. It cleanses the kidneys and ureters of slime, sand, gravel, and great stones, and is very assistant in curing ulcers in those parts. It removes the Hyppo's melancholy, opens obstructions of the lungs, liver, spleen, mesentery, and glands. It purifies the blood, and renders the spirits in the body more cheerful and lively. Several short-winded, ashmatic, weak, and lame people, have had their lungs and limbs restored to their former strength and usefulness. It relieves inveterate head-aches, especially if at the same time you use the cold bath. It is also very serviceable in the gout, by restoring the use of lame hands, knees, legs, and feet. It revives the memory, clears the brain from viscous humours, and helps the eyes, by drying up rheums. It relieves sharpness of urine, strangury and disury, if there is no large stone or other stoppage in the urinary passages. It corrects acidity in any part of the body ; as in the heart-burn, belchings, sourness at the stomach, gripes, cholic, and borborigmos. It opens the breast and lungs, cuts tough flegm, promotes expectoration, and has often been successful in the cure of blood-spitting, hectic fever, too great heat and dryness of the skin and body."

But its neighbour, and probably its senior, the TEWIT Chalybeate, was not without a historian of its virtues. Dr. Stanhope, more than two centuries ago, records the wonders which it worked—not on A, B, C, D, &c. according to the modern mode of case-stating, by spa-doctors and others ; but in real chapter and verse.

“ In 1626, Mrs. Rolf, of Hadley, in Suffolk, fell into the gravel, got the best advice she could ; but found no relief, till she was brought to the Tuewhet Well ; in a fortnight’s time she voided an hundred stones of several sizes ; her pain went off, she recover’d, and continued well. Henry Curra, of Whardale, in the West of Yorkshire, aged about fifty years, servant to Sir Peter Middleton, was a great sufferer many years,—could neither ride, walk, nor move : he came here, and in a month’s time, by the use of the same spaw, he voided many stones, several of them as big as peas : he also recovered a firm state of health. Henry Rowley, of Linton, near Wetherby, aged sixty years, was long tormented with a stoppage of water, till this spaw opened the flood-gate, and let off great quantities of mucus and gravel, whereby he was restor’d to health. But most remarkable, and next to a miracle, was the recovery of Mrs. Barker of Dore in Derbyshire, aged thirty-four years : she had long a dangerous ulcer in her kidnies, a very obstructed, weak, emaciated body, could not walk over the house, without one or two to support her, had neither appetite nor digestion, no, for the smallest broths. In this weak, low, hopeless state she was brought hither ; she, to her poor, small ability, drunk the water ; in a few days after, she discharged an incredible quantity of purulent matter, whereby she was so relieved, that she got strength, recover’d appetite, and her obstructions open’d, and in five weeks was restored to a healthy strong habit of body, and next year returned to the spaw perfectly well. In melancholy, and splenatic illnesses, few, if any at all have missed of perfect cure ; instance, Mr. Sacheverell, near Hopton, in Derbyshire, who had long led a most miserable, languishing, despairing life. Mr. Ayre of Ramton, in Nottinghamshire, in the like most wretched condition. Mr. Wallis, aged fifty years, was cured of an asthma by this water. Mr. Thompson, Post-Master of Weatherby, who had been ill twenty-eight weeks of a hectic ; and in spite of the best and most suitable advice, was given up for death ; yet applying himself to this water, in the middle of Winter, was entirely cured in a fortnight. The Countess of Buckingham, (all other means failing,) repair’d hither for the cure of a severe asthma, and went back cured. Mrs. Fairweather, of York, having long been

troubled with a swimming in her head, finding no relief from the best advice and means, till she came hither, and met with a very acceptable cure. The Lady Hoyh of York, after she had born four children, in her 5th was taken with a swelling, redness and knobs in her face, about the eleventh week after conception; the pain whereof was so great, that she miscarried of this, and two other conceptions successively. After some years spent in this languishing condition, physick availing nothing, she came to this spaw, was cured and had several children after. Mrs. Sadler, the daughter of that famous lawyer Sir Edward Coke, came hither for a long and violent pain of her head, and found relief." "The Lady Vavasor had lost in a manner the use of all her limbs, through what distemper I know not, but she was brought to such a degree of weakness, that child-like, she was rockt in a cradle. There were no means unassayed which might reinable her, but all in vain. In this estate she was brought to the spaw water, by the use whereof, (by God's mercy) she was restored to strength and health."

Now although, in modern times, STEEL has been compelled to cede its laurels to sulphur, yet I think the forlorn TEWIT has great reason to complain of ingratitude on the part of their High Mightinesses—the Corporation of Harrogate, and, when they erected a pump-room over the Old Sulphur Well, (as they have done), it should address them in the well-known lines—

" Should auld acquaintance be forgot,
And never brought to mind?
Should auld acquaintance be forgot,
And days of Lang Syne!!!"

Modern science, and a better knowledge of diseases and their remedies, have greatly curtailed the interminable catalogue of maladies for which the Harrogate and other mineral waters were formerly prescribed. Not one half of the complaints included in the above passages would now be considered proper cases for chalybeate springs of any kind.

Mineral waters are like other remedies—capable of doing much good, if judiciously administered—but great mischief if impro-

perly taken. They have many advantages, however, over drugs from the chemist's shop. 1^{mo}. The mystery which hangs over their origin and manufacture, aided by the doctrine, as old as Homer, that they are special agents sent by the Deity himself on healing missions to mankind, engender HOPE, which leads to FAITH, and this last works little less than miracles. 2^{ndo}. As the good works of spas are engraved on brass or marble, so their evil ones are written in water, and are seldom seen or remembered. Hence their reputation goes on increasing, and the more it is exaggerated, the greater the confidence of the pilgrim who travels to the Hygeian fountains. 3^{tio}. The relaxation from business, and a temporary separation from the scene of anxiety and care, add their mite to the accomplishment of the hoped-for cure. 4^{to}. The journey itself, especially if a long one, works wonders in a large class of human maladies engendered by sedentary habits or mental ennui. I once sent a gentleman of this class, whom I had no hopes of curing at home, with a letter to Dr. Wolzikosky, of Carlsbad, whom I represented as the only physician in Europe, who was likely to cure the host of Proteian symptoms with which my patient was afflicted. He undertook the journey, with sanguine expectations of relief, and, on arriving at Carlsbad, made immediate inquiries for Dr. Wolzikosky:—but no such person had ever been heard of in that place by the oldest inhabitant. In his astonishment he broke open the letter, and found it a blank! Enraged beyond measure, at the supposed cruel hoax, he vowed vengeance against the doctor when he arrived in England. In returning home he made a detour through Switzerland, and, after two or three months' travelling, reached London, and presenting himself in my library, demanded, in rather a surly tone, if I recollected him? "No, Sir," was the reply, "I never saw you before this moment." "What, Sir! not remember the patient you sent to your friend Wolzikosky?" "Oh, aye! Bless me, how you are altered for the better! No wonder I did not know you again; you are quite another man." "Yes Sir," said he, and the D——I thank you and your friend Wolzikosky for the change. You knew he was a man of moonshine; but I will bring an action against you for the expenses of my journey to

Bohemia." I encouraged him to do so, protesting that I would put himself into the witness-box, to prove the efficacy of my prescription. The action was never brought.

The same experiment was once tried by a late eminent physician, but on a smaller scale, by only a journey to Inverness, to consult an imaginary Dr. Robertson there. The experiment was also successful; but, at the same time, I would not recommend the example to be followed by any of my junior brethren, as success might be wanting, and the consequences rather unpleasant.

5^{to}. The increased quantity of water (independently of its mineral ingredients) and the diminished quantity of wine that are taken at the spas, contribute very much to the removal of obstructions and the restoration of health.

6^{to}. The early hours which are absolutely necessary during a course of mineral waters—not only as respects the getting out of bed in the mornings, but the times of eating, and the retirement to rest, prove adjuvants of no mean efficacy, when assisted by the various other auxiliaries to recovery of health.

7^{mo}. The easy and familiar intercourse of society, at the wells in the morning—the walks in the forenoon—the table-d'hôtes at dinner—and the assemblies in the evening—create a greater or less degree of cheerfulness of mind, than under very different circumstances in domestic life, the turmoil of business, and the wear and tear of avocation and profession. Even the sight of sickness and suffering in others, is not, I fear, unaccompanied by some inexplicable feeling of satisfaction, not to say pleasure, in ourselves! Then there is the luxury of comparing notes with, and relating our symptoms to, our invalid companions! Many dyspeptic and hypochondriacal people repair annually to the spas almost on purpose to pour their grievances into the ears of those who have not been already wearied with the recital of their doleful ditties. The pleasure, great and indescribable as it is, which the baby derives from the sucking of its thumb, is nothing compared with the delight which the hypochondriac experiences in the rehearsal of his miseries!

8^{vo}. The state of solution and dilution, in which the active ingredients of mineral waters are taken into the body, renders them

infinitely more efficacious than larger and more potent doses of the same ingredients exhibited in draughts and pills at home. Thus a quarter of a grain of iron in a pint of mineral water, held in solution by carbonic acid, will act more efficiently on the human constitution than ten times that quantity taken in pills, powders, or potations, as prepared by the chemist. I have little doubt that all the solid and gaseous contents of mineral waters follow the same rule. Thus, we know that 30 or 40 grains of Epsom or Glauber salts dissolved in a pint of water by the process of Nature in the bowels of the earth, will act more efficiently, or, at all events, more beneficially on the bowels, than four or six times that quantity dissolved, as it usually is, in one-fourth of a pint by the apothecary. In minute division and extended solution, the saline particles irritate the mucous membrane of the stomach and bowels *less*, and permeate through the whole circulation *more*, than when concentrated in smaller compass in the laboratory of the chemist.

In almost all the spas of celebrity we find a considerable number of ingredients—often ten or a dozen—besides those which chemistry has not been able to detect. Now these, instead of neutralizing or impairing the qualities of each other, co-operate, in my opinion, to exalt the remedial efficacy of the whole composition. Modern physicians have greatly erred by simplifying too far the forms of their prescriptions—few of the *scientific* (in contra-distinction to the *practical*) among them venturing on more than two or three efficient articles in one formula. This is not the practice of Nature, as the chemical analysis of any spa will shew. Nor is it the practice to be imitated by those who wish to effect the speediest cure of human afflictions.

There are a great many other circumstances attendant on a course of waters at a spa, which increase their medicinal efficacy, but the foregoing are the chief, and the others require no enumeration.

Before returning to the specific complaints against which the Harrogate waters are considered efficacious, I may just allude to a curious malady to which certain spa-doctors themselves are subject at Harrogate, and at almost all the mineral watering-places.

I know of no other appropriate name for it than that of plumbo, or rather PUMPOPHOBIA—a dread of lead, and an antipathy to pumps. They are delighted to see a spa rise from the earth, like the Sprudel at Carlsbad, or the Kalt Sprudel at Franzensbad, and leap into the ladles of the Hygeian nymphs, thence to be poured into the fancy glasses of the drinkers. But the sight of a pump seems to strike them at once with the dry belly-ache, or painter's colic, produced by the leaden pipes. Now if any of the plumbo-phobic doctors were to examine the leaden tubes which conduct or raise the waters—say at Cheltenham, they would find them coated internally with an amalgam that completely defends them from the action of the waters. But even if this were not the case, I will venture to aver that all the lead which is swallowed at Harrogate or Cheltenham by the whole of the company in an entire season, would not poison a single individual if it were taken at one dose. What becomes of the inhabitants of towns who drink their water from year to year, as well as their ale and porter, after it has passed through leaden pipes?

And is there no drawback on open and unprotected wells? Any mischievous vagabond might throw half a pound of arsenic into the Old Well at Harrogate, by night, and poison every one of the bibbers the next morning! When there are villains in this world who will throw logs of wood on a rail-road, and thus endanger the lives of hundreds by wholesale, there is no very great stretch of imagination in supposing the possibility of poisoning a well. Be this as it may, the Corporation of Harrogate are preparing to erect a pump-room over the Old Sulphur Well, and raise the water through pipes, despite the PUMPOPHOBIA above alluded to. And they have nothing to fear from the procedure—unless it be the anathema of the spa-doctor. The neighbouring sulphur well in the Montpellier Gardens has worked well, and clear, and effectually, though the water is pumped from the well beneath.

But to return. The catalogue of diseases said or supposed to be relieved or cured by the Harrogate waters, is nearly as long as that appalling list which Cullen drew up in his Nosology, for the edification or rather terror of mankind, as powerful checks on in-

temperance and other sins. Yet it is now perfectly well known, that, with few exceptions, mineral waters are only calculated for *chronic* complaints, with little or no inflammatory action remaining, and with no material change of structure in the internal organs of the body. In other words, they are only calculated for *disordered functions*, and not for *alterations of organic texture* in the living machine. And why is this? The question is easily answered by those who have paid attention to the nature and operation of mineral waters. Very few of these, even the most aperient, as Carlsbad, Marienbad, Kissengen, Cheltenham, Leamington, and Harrogate itself, are free from a large admixture of stimulating or exciting ingredients, saline, chalybeate, or both, which disqualifies them for all complaints into which inflammatory action enters as an element. Thus, in the pint of Harrogate sulphur water, there are 110 grains of sea salt, with scarcely any other ingredient of an aperient nature. It is quite clear then that the stimulation or excitement produced by a pint or even less of this water, must be very considerable, and were it not that the muriate of soda acts very generally on the bowels, it would be a dangerous agent even in chronic disorders, while it would be positively injurious in all inflammatory complaints, or where there is a tendency to local congestion in any organ or structure of the body. The physiological action of mineral waters generally is excitant, aperient, and alterative—varying in the degree of these actions according to the nature and composition of the spa. The excitant and the aperient qualities can be easily understood; but the term “ALTERATIVE” is much more indefinite and even obscure. It appears to me to be the result of the other two qualities combined. This is supported by analogy. We know that mercury is both an excitant and an aperient:—it is the most powerful alterative in the Pharmacopœia. So it is with the great majority of mineral waters. They excite the organs (especially the glandular organs) into increased action, and, at the same time, promote the evacuation of the morbid secretions. The consequence is, an *alteration* or improvement in the functions, as well as in the secretions, eventuating in a purer state of the blood itself, and an invigoration of the powers of life—in other words

of HEALTH. This is the best explanation I can give of an alterative, and of the general effects of medicinal springs. In acute or inflammatory affections, they are not only inferior to other agents in our possession, but on account of their stimulating properties they are positively injurious. These general observations will apply to the great majority of spas, as well as to the waters of Harrogate, and may save repetitions hereafter.

The great variety of mineral waters at Harrogate enables the practitioner there to treat a wider range of maladies than if there had been but one or two. Thus the pure aperient saline at Walker's Well may be employed almost in inflammation, so sparing are its exciting properties; while, on the other extreme, the pure chalybeates of the Tewit and Sweet Spa are applicable to pale chlorosis, tottering debility, complete loss of appetite, impaired digestion, and numerous female obstructions. Between these are several springs which are capable of useful application to a large class of ailments, provided they are free from acute or even sub-acute inflammation. I shall here introduce an extract from a recent edition of Dr. Adam Hunter's work on the Waters of Harrogate.

"In almost every kind of cutaneous affections, accompanied with the use of the warm bath, I have repeatedly witnessed the most marked results; and in complaints connected with biliary and stomachic derangements, their use, of late years, has become greatly extended.

"The *Sulphur Water* speedily and safely carries off the effects of intemperance in those who, having spent the Winter and Spring in festivity, resort to Harrogate with their system loaded with impurities, from the excesses of the table, and whose stomachs are debilitated by these and similar causes. Its use is acknowledged in those predisposed to apoplexy. In chlorosis or green sickness, it has been usual to drink the sulphur water for some time, and then take the chalybeate. In diseases of the skin, especially the order squamæ of Willan, who mentions his having seen some very obstinate cases of lepra, alphas, and psoriasis, completely cured by this water; in porrigo, herpes, and the impetigines; scrofula, scurvy, secondary syphilis, and ulcers, its use has been equally

efficacious. In gout also, in both its principal divisions of regular and irregular, or atonic ; in the first, the constitution is sound and vigorous, the fits are severe and regular, and there is generally plethora and inflammatory diathesis : in the second, the constitution is debilitated and diseased ; the fits irregular ; the alimentary canal, head, breast, and urinary passages, affected with various complaints, alternating with the fits. In the former the water may be taken as an habitual laxative ; in the latter, its use requires considerable caution, the warm or vapour bath in conjunction with it will frequently prove useful. In the numerous list of complaints now comprehended under the term dyspepsia, or indigestion ; in many of which, however, the saline chalybeate water is preferable. In flatulent and bilious cholic, habitual costiveness ; hypochondriac affections ; jaundice ; hemorrhoids or piles ; worms ; in chronic rheumatism, with the warm bath ; and lastly in some cases of dropsy, by active purging. In stone and gravel, the weaker sulphur water at Starbeck has been much extolled.

“ Having already detailed the properties of the *Saline Chalybeate Water*, its general effects will be readily understood. In most of the diseases already mentioned, where the sulphur water is found to occasion relaxation and weakness, or where the strength is not recruited under its use, this will be found a proper substitute. In all female weaknesses, I am disposed to give it the preference. In chlorosis ; atonic gout ; hepatic and nervous affections ; diabetes ; and some cases of tic douloureux, it has likewise been of the greatest advantage.

“ The effects of the *Saline* or *Leamington Waters* have likewise been stated, it is unnecessary therefore that I should further advert to them.

“ The action of the *Pure Chalybeates* is more distinctly tonic than either of the former. In all cases, therefore, where the system is relaxed, these waters properly administered, produce the happiest effects. When the sulphur or saline waters have carried off the previous obstructions, a short course of one of the chalybeate springs will brace the solids, and give tone and vigour to the system.”

Here, as at other efficient spas, the individual should be care-

fully examined as to the conditions of the head, chest, and abdomen, in order to ascertain whether there is any, and what organic disease—and whether any local inflammation or congestion exists in any organ or part, so that such topical conditions be removed before a course of the waters is entered on. The following preparatory and auxiliary medicine I have found to be useful before and during courses of mineral waters.

℞ Ext. col. comp.

Pil. rhei comp. āā, ʒij.

Pil. hydrarg. . . ʒss.

Ant. tart. . . . gr. j.

Ol. caryophill. . gr. vj.

Ft. pil. xx.—capt. j. vel ij. hora somni.

The early hours inculcated at other spas, and especially those of Germany, should here be attended to. Seven in the morning is the latest hour at which an invalid ought to repair to the fountain. When it is desirable that the water should act on the bowels unequivocally, the pill should be taken over night, and a glass of the water, somewhat warm, varying from four to six ounces, should be taken early, and another dose in half an hour. In half an hour or an hour after the last dose, the breakfast may be taken, when the bowels will generally act soon afterwards. But where the more slow and alterative effects are preferred to the more steadily aperient process, then the second dose of the water should be taken a couple of hours after breakfast, which is best of black tea. As heat throws off much of the gases from the water, it may be taken cold if the stomach bear it well. I confess that I doubt the propriety of taking the whole morning dose at twice. At almost all other spas, small quantities are taken in several potations, with ten or fifteen minutes exercise between. Still we must bow to experience; and those who have longest practised at Harrogate adopt the mode abovementioned, in preference to the German.

As sulphur and skin complaints have long obtained an association in men's minds, so Harrogate was long resorted to, chiefly by people afflicted with cutaneous defædations; but its application to the broad and indefinite class of "DISORDERS OF THE DIGESTIVE

ORGANS," having now become general, there are specimens of almost every ill seen daily hovering round the Hygeian fountains of both the villages. As at Aix, however, lepra, psoriasis, and numerous tribes of the scaly and pimply breed are distinctly traced by the least experienced eye. I saw many who must have been ill-advised to come here, since their complaints required cooling aperients and starvation, rather than the large doses of common salt which they were swallowing at the wells, while bathing in brine that increased their maladies instead of alleviating them.

Chronic obstructions of liver, spleen, and other abdominal organs, appear to be the most prominent features at the Sulphur Wells—and where the waters are assisted by proper alteratives, there is no doubt that great numbers are annually benefited at this place.

I coincide entirely with the following remarks of Sir Charles Scudamore.

"It is important that the patient, on his arrival at Harrogate, should use some treatment preparatory to the drinking of the water. One of a sanguineous temperament, and most certainly if labouring under plethora, should lose a few ounces of blood, which may be taken from the arm or by cupping, as circumstances shall indicate. The gaseous properties of the water are considerably stimulating, and, from the neglect of this precaution of moderately reducing the circulation in certain constitutions, it is apt to occasion some heat and unfavourable excitement.

"As a general rule, it will be expedient to administer a mercurial cathartic, consisting of a gentle dose of calomel and the compound extract of colocynth, in conjunction with the usual draught of senna and sulphate of magnesia. In any marked case of congestion in the circulation of the vena portarum, with a large abdomen, and a sluggish state of bowels depending either on the deficient and defective quality of the bile, or upon the failure of its due excretion, it becomes important to pursue a course of the *pilula hydrargyri* and the above extract combined, every other night, upon an alterative plan. Or, if any circumstances in the constitution of the patient forbid even this mild and guarded use of mercurial preparation, some suitable purgative pill will be the

proper auxiliary. This water, it will be seen from the analysis, contains but a small proportion of the active aperient salt; and, with many persons, fails to afford sufficient excitement to the bowels, so that some aid is absolutely required. This aid is in general more usefully given by joining the use of a stimulating purgative pill, rather than by adding either the sulphate of soda or magnesia to the water, unless some particular circumstances in the case suggest the propriety of doing this. In many instances, also, it is our wish that the water should act more decidedly as an alterative, and not pass off rapidly by the bowels."

P. S.—Since the foregoing observations were written, great improvements, or, at least alterations, have been made at Harrogate. A pump-room has been erected over the Old Sulphur Well, and the water drawn up by pumps of the most unobjectionable construction. Dr. Bennett has also contrived to impregnate the Old Tewit, or Chalybeate Spring, with carbonic acid gas, so as to make it as brisk as soda water, and very agreeable to the palate—more so indeed than the far-famed waters of Schwalbach, Franzensbad, or Marienbad.

THE BATHS.

There is a great deal more injury done by improper bathing in, than by improper drinking of, mineral waters, both abroad and at home. The skin is a very extended surface, and one that possesses a great chain of sympathies with all the most important organs of the body. Independent of the excitement produced on the skin by the saline or mineral contents of medicinal waters, the bath itself, both warm and cold, induces two tides in the circulation of the blood, which will be beneficial or otherwise, according to the state of the constitution at the time. Thus, the cold bath drives the blood with great force from the exterior to the interior—from the capillaries of the skin to the great trunks of the arteries and veins. After the bath, there comes a re-action (or ought to come) when the tide rushes again to the surface, and distends

the capillary vessels beyond their usual calibre. This is attended with a pleasant glow, and a feeling of comfort.

In using the warm-bath, the above order is reversed. Allowing the temperature to be 96° or 98° , that temperature, though the heat of the blood, is considerably above the heat of the surface. The tide of the circulation is therefore outwards at first; and, after the bath there is a necessary recoil of the blood towards the centre. Now it is hardly necessary to observe that, in either of these processes, any weak organ or structure in the body may be endangered by the sudden oscillation of the vital current—and the fact is, that many hundreds are annually injured, and even some lives lost, by the imprudent use or rather abuse of both hot and cold bathing. In all organic diseases, or changes of structure, bathing is hazardous. The tepid shower-bath is the least dangerous; but even that should not be taken without the advice of a medical practitioner, who is able to ascertain the existence or non-existence of any internal malady. The danger of using baths of any kind, during the existence of local inflammation, is well understood at all the great spas abroad and at home. And yet a very common practice in this country is to plunge a patient labouring under acute rheumatism, or rheumatic fever, into a bath at 98° , by which the inflammation of the joints is often relieved, at the expense of a translation of the disease to an internal organ, frequently the heart, in which the foundation of fatal organic disease is frequently laid!

In respect to the Harrogate Baths, Dr. Hunter considers them as only inferior to the waters taken internally—"in almost all the diseases already mentioned, particularly in cutaneous affections." But it must always be borne in mind that the sulphur waters of Low Harrogate are very stimulating, on account of the immense quantity of muriate of soda dissolved in them, as well as the sulphuretted gas itself, and therefore, the Starbeck water is by far the safest to begin with, whether there be eruptions on the skin or not. These eruptions, numerous and unnameable as they are, very generally present an irritable or even inflammatory character, which ill comports with the strong sulphur waters, internally or externally. The saline springs of Lower Harrogate, for drinking,

and the Starbeck for bathing, will be the best for a week or two, when the stronger waters may be cautiously tried.

The vapour-bath, which is now coming into such general use, and which may be employed at a much higher temperature than the liquid bath, has its apparatus here, and at almost all the watering establishments of England. It is in much greater request in the East than in the West. One would suppose that Dr. Granville, while describing the Bath of Wildbad, had been studying Volney's Ruins.

According to this lively writer (Volney), opium-eating, and even opium-smoking, must hide their diminished heads, when compared with the vapour-bath!

“Coming out of the stove, surrounded by hot and moist vapour, where the perspiration gushes from every limb, and transported to a spacious apartment open to the external air, the breast dilates, and you breathe with voluptuousness; perfectly mashed, and as it were regenerated, you experience an universal comfort, the blood circulates with freedom, and you feel as if disengaged from an enormous weight, together with a suppleness to which you have hitherto been a stranger; a lively sentiment of existence diffuses itself to the very extremities of the body, while it is lost in delicate sensations; the soul sympathizing with the delight, enjoys the most agreeable ideas—the imagination wandering over the universe which it embellishes, sees on every side the most enchanting picture, and every where the image of happiness. If life be nothing but the succession of our ideas, the rapidity with which they then recur to the memory, the vigour with which the mind runs over the extended chain of them, would induce a belief, that in the two hours of that delicious calm that succeeds the bath, one had lived a number of years.”

My friend Dr. Madden, who has travelled farther than Volney, describes the effects of the vapour-bath and shampooing, in vivid colours.

“Of all remedies the vapour-bath is the first and most efficacious in rheumatic and cuticular disease. I have seen them removed in one fourth part of the time in which they are commonly cured with us. In such cases I cannot sufficiently extol the ad-

vantages of the Turkish bath. The friction employed is half the cure, and the articulations of every bone in the body are so twisted and kneaded, that the most rigid joints are rendered pliant. I have trembled to see them dislocate the wrist and shoulder-joints, and reduce them again in a moment. Their dexterity is astonishing! In further elucidation of the almost universal adoption of vapour bathing, we are informed that it is much in request in the towns of Canada, and found of much service during Winter, when the cold seals the pores and checks perspiration. They build the bath of rude stones, by the banks of a lake or river, and in it kindle a fire, and keep it up until the stones be hot; they then sprinkle some water, and bring forth the patient, having stretched him or her in the rude bath; water is poured against the hot stones, which flies hissing on the body: when this is done the individual is wrapped up in buffalo skins, and a profuse sweat thereby obtained."*

ILKLEY FOUNTAIN;

OR,

THE YORKSHIRE MALVERN.

At the distance of a few miles from Harrogate on the steep side of RUMBOLDMOOR, a crystal stream issues from the solid rock at the rate of some sixty gallons in the minute—almost, if not quite as pure as the celebrated Malvern water—and in a locality very much resembling that place, but more wild and romantic—huge fragments of rock, or boulders, being strewed along the face of the mountain in fantastic confusion. The water rushing out in a round stream, and from a considerable height, is admirably

* Travels in the East.

adapted for the douche ; and this kind of bath is that which is chiefly used at the place. The temperature of the water is about 46° or 47° —forty degrees below that of the blood, and therefore is well calculated to produce a great shock and a quick re-action—the two phenomena that are most desirable and advantageous in cold bathing, whether partial or general. If an arm or leg be held under the stream, the first sensation is that of extreme cold, then pain, and lastly heat. The following is an extract from an Essay on the Ilkley Water by Dr. Hunter, of Leeds.

“ The shock, on plunging into Ilkley bath, is excessive, and an irresistible impulse to escape from its influence is the first sensation produced. When this is accomplished, and the bather begins to dress, re-action almost immediately takes place, which is soon followed by a pleasant glow and lightness throughout the whole system. The body feels as relieved from a previous load, and unwonted energy and activity are communicated to the muscles of voluntary motion, while the mental sensations equally participate in the general animation. These feelings continue to a greater or less extent during the day, and are terminated by a night of calm and refreshing sleep. If, however, the body be kept still and quiet, some time after leaving the bath, a tendency to drowsiness is perceptible : this seems to arise as well from the previous excitement, as from the ease and freedom from irritation which is almost universally experienced. I prefer assigning it to these causes, rather than to any undue determination of blood to the head or thorax, from observing that headach or similar complaints, are rarely experienced by those bathing in this water.

“ Though one of the coldest natural baths to be met with, it is used by the most delicate and infirm individuals, a proper degree of re-action seldom failing to occur. This may justly be attributed to the body being so immediately withdrawn from its action, and to the heat being evolved in the same ratio with the previous cold. Indeed, as the benefit derived from every species of cold bathing arises chiefly from the shock sustained, and the subsequent re-action ; by leaving the bath as soon as possible, the necessary excitement must always be more speedily and certainly established. Consequently, where the water is very cold, there

is no temptation for remaining in the bath ; persons with great apparent debility are thus enabled to use it with safety ; while, if the temperature of the water were several degrees higher, it might induce them to continue in the bath till the powers of excitement were exhausted.

“ In its general effects, this water, used as a bath, is highly invigorating ; it promotes the different secretions and excretions, and gives a keen edge to the appetite. In this respect, it excels any water with which I am acquainted. But a share of this quickening power must, in justice, be attributed to the bracing qualities of the mountain breeze, which sweeps along the strath in such ethereal purity.

“ Few directions are necessary for the use of this bath. It ought not to be used above once in the twenty-four hours, and for very infirm persons once in two days will be sufficient. As a topical application, twice or thrice daily will answer every good purpose. For those in good health, or who are tolerably strong, the morning, before breakfast, is the most suitable period for immersion. Weak and debilitated habits generally feel languid till they receive breakfast ; for such, the forenoon is most proper ; the natural heat of the day tending to produce re-action, besides rendering their feelings more comfortable on leaving the bath.— Nothing requires to be stated respecting the period of continuance in the water, as no one, whose external feeling is not completely torpid, will remain in it a moment longer than till he can get out. It should, in all cases, be particularly inculcated upon those using the cold bath, not to desist till, by dry-rubbing, exercise, or the use of warm liquids, they have produced a sensation of heat upon the surface ; which will seldom or never fail to be induced by a steady perseverance in these measures.”

Here then is a locality, the very counterpart of Graefenberg, with a more bracing air than that of Malvern, and water quite as pure. We have no doubt that it will soon be occupied by some Preisnitz proselyte, and that the price of blankets will rise in Leeds and other manufacturing towns of that ilk.

SCARBOROUGH.

“ Hail, Scarbro’ hail ! whose castled steep
Frowns on the agitated deep—
Who, when old Ocean storms thy shores,
And loud and wild the tempest roars—
When thunders roll and lightnings fly
In vivid terrors through the sky,
Opposeth, with dilated form,
The billows’ rage, the angry storm.”

VITAL statistics have removed many prejudices, corrected many errors, and established many truths. That branch of knowledge has clearly proved that the sea is more salubrious than the shore—and the borders of the ocean more conducive to health than the inland counties. Thus the crews of ships belonging to the home, or Channel station, but which are employed in carrying despatches to foreign parts, as to the Mediterranean, America, or even the West Indies, are much healthier than the crews of ships employed in the Channel, and in harbour duty. Not that there is any thing in the sea itself that renders it more conducive to health than the land ; but its atmosphere is purer, and the temperature of the air over it more equable than on shore. The ocean air is not more damp than that of the earth, while it is free from the ten thousand different kinds of exhalations that daily and nightly rise from the crowded city, the marshy soil, or the decay and death of vegetable and animal matters. Even the particles of salt that rise with the evaporation from the glassy surface of the briny deep, are probably conducive to health.

The immense line of sea-board which England enjoys, and the comparative proximity even of inland parts to that coast, are no mean items in the causation of that robustness of constitution and duration of life which so distinguish these haughty islanders.

Nay, that *mutability* of our climate, the theme of lamentation and vituperation in every mouth, foreign and domestic, namely, *the frequent change with narrow range*, so far from proving detrimental to the human frame, is a prolonger of our existence. Under the blue skies of Italy and of many other countries, the thermometer and barometer will present little variation for days, weeks, or even months. Then we admire and bless the happy climate. But when the change does occur—when we shiver under the Tramontane in the morning—become stewed or par-boiled in the Sirocco at noon—and scorched by an almost tropical sun in the afternoon—these are the changes, for which the constitution is unprepared by daily and hourly vicissitudes on a small scale, as with us. It is from those grand transitions, *with long intervals*, that the human machine receives shocks that undermine the health and curtail the duration of life. Some idea of comparison between the effects of foreign and British vicissitudes of climate, may be formed by comparing *hourly* discharges of musketry against the walls of a fortress with a weekly broad-side from a ship of the line.

The sea renders the ranges of the atmospheric transitions still more limited than in the interior of the country, and the coast holds the intermediate station. It is no wonder, then, that so many thousands annually desert the city, the factory, the desk, the senate, and the bar, to breathe the pure air of the sea, and renovate their strength by a dip in its waves.

There are very few, if any watering-places in England, that can eclipse or cope with SCARBOROUGH. Its airy cliffs, castled crags, its silver sands, its murmuring surge—

“ That on th’ unnumber’d idle pebbles chafes”—

its bracing breeze, and its boundless deep, all combine to invigorate the languid frame—relume the lack-lustre eye—and raise the drooping spirits of the valetudinarian, on visiting this “*QUEEN OF BRITISH WATERING-PLACES*,” as Dr. Granville has not inaptly termed SCARBOROUGH.

In addition to the advantages of sea-air and sea-bathing, Scarborough possesses two springs of mineral water, which, in former

days, must have been in considerable repute—and even now maintain a fair reputation, considering the numerous rivals with which they have had to contend, of late years, as well abroad as at home. Both of these springs are chalybeates; but the South Well is called the Saline or Salt-well; though its taste is very little indicative of saline ingredients. The iron taste is more marked, however, in the North than in the South spring.

The waters of both are limpid and colourless. They each contain about a quarter of a grain of carbonate of iron in the pint. The North Well yields 46 grains of solid matters in the pint, of which muriate of soda constitutes $3\frac{1}{2}$ grains, sulphate of lime 18 grains, carbonate of lime $6\frac{1}{2}$ grains, sulphate of magnesia 18 grs.

SOUTH OR SALT WELL.

Muriate of soda	..	..	..	..	$3\frac{3}{4}$ grains.
Sulphate of lime	..	..	..	..	28 ..
Carbonate of lime	.	..	..	..	6 ..
Sulphate of magnesia	..	..	..	..	28 ..
Carbonate of iron	..	..	..	..	$\frac{1}{4}$..
					66 ..

If the above be the actual ingredients in these wells (and we have the authority of Phillips on this point) they are entitled, especially the South Well, to some rank on the scale of aperient and tonic waters. They are evidently well calculated for the hosts of bureaucracy, shopocracy, and manufacturing classes, who resort to Scarborough for a month or six weeks in the Autumn, for renovation of shattered health, or as an excellent nach-cure, or invigorator, after a course of the powerful waters of Harrogate.

The practitioners on the spot generally direct a dose or two of brisk opening medicine before the waters are commenced—a practice that will appear barbarous to our French and German brethren of the spas, but which we know to be judicious. A pint and a half, or more, in divided doses, usually taken as the daily dose, will contain between forty and fifty grains of aperient

salts (sulphate of magnesia), with a quarter of a grain or more of iron, and some alterative ingredients—a combination well calculated to open and improve the secretions, clear the bowels, and strengthen the digestion. Dr. Granville found the South-well water very beneficial after dinner, as a correcter of acidity and heartburn, as well as a digester of all the good things he had stored up at the substantial TABLE-D'HÔTE. Mr. Dunn, the clever and experienced surgeon of Scarborough, recommends one or two brisk aperients to precede the use of the waters, and afterwards to take them in the quantity above-mentioned. He has known many instances where constitutional and obstinate constipation has been removed by these waters, and the patients remain afterwards regular without the assistance of medicine. This is a great desideratum. The waters may be considered as applicable to the long catalogue of dyspeptic complaints, where no active inflammatory action is going on in any organ or part of the body. The North Well, as containing less aperient properties than its southern neighbour, is more adapted for cases of pure debility, or female irregularities.

BATHING.

But the fame of Scarborough will be based more solidly on its air and sea-baths, than on its medicinal springs. The air of the sea and sea-bathing are here enjoyed with the greatest advantage—*where they are proper*—but the sea-water bath, both hot and cold, are too often employed in cases where they are actually injurious, rather than beneficial. A few practical remarks on this important, and not always well-understood subject, may not be unworthy of notice.

It is to be recollected that, although the temperature of the blood is about 98° of Fahrenheit, that of the body's surface, where clothed, is only about 90°, or eight degrees lower than the internal organs. A bath, then, at 80°, as at Buxton, for example, being 18 degrees below the heat of the blood, and eight below that of the body, must, and does feel chilly, or even cold, except

to the hands or face, which are exposed to the air, and always colder than the chest or abdomen. The physiological effect of a bath at 80° , then, is a slight sensation of chilliness, as far as the nerves are concerned, and a trifling determination of blood from the capillary vessels of the skin to the internal vessels of the body. In a few minutes we get reconciled to the sensations occasioned by the water, and very soon after leaving the bath, or even before, there is a slight re-action or glow, proportioned to the preceding chill and retrocession from the surface—provided the bath agrees. Now every degree that we lower the temperature of the water, from 80° down to 52° , the temperature of the sea, we have an increase of the above phenomena. Thus, when we plunge into the ocean, or any other cold bath, the sensations on the surface, from the rapid abstraction of animal heat, are so overpowering, even to pain—and the torrent of the circulation is driven with such force, or rather violence, from the surface of the body to the internal organs and large vessels, that we become for a few seconds almost breathless, with rapid action of the heart, smallness of pulse, tremor, and shrinking, paleness, and coldness of the whole surface of the body. If the constitution be tolerably vigorous, our feelings become considerably reconciled, after a few minutes, to the dense and frigid element in which we are immersed, especially if we are able to move briskly about, or swim—and a degree of re-action commences even before we leave the water. Very soon after drying the surface, resuming our dress, and beginning to walk about, the re-action becomes evident, or even strong. The heart and large vessels drive the blood with great force back to the capillaries of the skin, which become filled beyond the normal condition—the face flushes—the skin glows—the sensible or insensible perspiration breaks out—and we feel a degree of animation, strength, and elasticity, considerably beyond the point at which these stood anterior to the plunge. With these phenomena of re-action, which are patent to the senses, there are other physiological actions affected, which are concealed from view, but not the less real or important. The activity of all the secreting organs is considerably increased, as well as the action of the heart and arteries. The liver, the mucous mem-

branes of the stomach and bowels, and the innumerable glands that stud this immense interior surface—all take on an augmentation of function, during this period of re-action, and the individual experiences an increase of vigour, buoyancy, and animal spirits. The absorbents, too, which play such an important part in the animal economy, participate in this general increase of activity.

Let us now start from another, and very different point. Let a person in ordinary or fair health, plunge, at once, into a bath of 100° of Fahrenheit—two degrees above the heat of the blood, and ten above that of the surface of the body. The sensations resulting from such a bath are extremely pleasant. The whole cutaneous surface expands—the capillary vessels become distended—wrinkles disappear—the skin assumes a certain degree of rosy tint as well as plumpness—the heart acts vigorously—the face flushes—the temples often throb—and, in addition to many other phenomena, the secretions are augmented in the same manner as during the re-action after the cold-bath—together with that of the transpiratory vessels on the surface of the body.

After leaving the bath, if the constitution be sound and vigorous, and especially if moderate exercise be taken, the recoil of blood from the surface to the interior is slow and gradual, and, at length, the equilibrium of the circulation is restored. But if the constitution be weak, or there exist any organic disease, the inward current of the circulation will quickly occur, after removal from the warm-bath, attended with circumstances which are now to be described.

The various phenomena of cold and warm bathing above-enumerated are exhibited when people are in fair health, and free from organic disease or considerable functional disorder. Not so when there is any change of structure in any of the internal viscera, or in weak and delicate health, without tangible or appreciable disease. In such people, the afflux of blood from the periphery to the centre, produced by the plunge into cold water, will injuriously affect internal organs, as the lungs, heart, head, liver, &c., producing congestion in those parts, with uneasiness, chilliness, pain, malaise, headache, stupor, cough, languor, and

many other symptoms indicative of mischief. Similar symptoms, variously modified, will result from the recoil of the blood, after the warm-bath, when that bath is improper—and it is not only improper, but actually dangerous, whenever the aforesaid symptoms, or any of them, follow the bath.

Generally speaking, both hot and cold-baths are improper, wherever there is actual *inflammation*, whether acute, subacute, (and perhaps I might add) *chronic*, in any internal organ of the body. Neither ought these baths to be employed, where there are evidences of *congestion*, or fulness of blood in any internal viscus or structure, as the head, chest, or abdomen. But there are numerous complaints so occult and so incognizable by the senses, that neither the patient nor the physician can detect them, and which are, at the same time, injured by bathing, whether in hot or cold water. How, then, are we to avoid the evil consequences of improper bathing? The means are easy and obvious—the rule safe and philosophical. In the first place, no bath can be proper where there is *evidence* of inflammation, congestion, or organic disease, as I before stated. In the second place, where there is any doubt on the subject, or even where there is no proof whatever that there exists any counter-indication to bathing—the following is the rule to pursue. About 12 o'clock let a bath be taken, for ten minutes, at a temperature of 90° Fahr. The water being about the same heat as the surface of the body, no tide in the circulation will be produced *outwards* by the bath—no *afflux* or *recoil* of the blood towards the central organs afterwards. From this starting-point, if the cold-bath be desirable, the temperature of the water should be lowered two or three degrees daily, till that of the ocean is reached. On the other hand, if warm-bathing be the object, the heat of the bath should be raised one degree daily, till that of the blood is attained—and should rarely go higher.

Now in travelling along this ascending or descending scale, the transitions are so gradual that little or no mischief can happen, even to the most delicate invalid, *before* the warning phenomena manifest themselves, when the bath should be instantly abandoned

or return be made to the original neutral starting-point (90) and travers worked cautiously in the opposite direction.

The general reasoning here will apply to the shower and the vapour-bath—except, that the starting-points in these, especially the latter, may be higher.

Many treatises have been written on the utility of bathing (warm and cold) in various *diseases*. The range of cures performed by this remedy in *actual diseases*, is, in my opinion, extremely limited. Will baths of any kind cure organic changes (constituting disease) in the brain or its membranes—in the lungs—the heart—the stomach—the liver—the bowels—the kidneys, or any other viscus? They will not. Nay, they are by no means always safe in *disordered function* of any of those parts, when that *functional disorder* is considerable. It is in that valetudinary or weak state of general health, so widely diffused among all classes of society, where there is no evident, tangible, visible, cognizable *disease of structure*, that bathing, especially sea-bathing, is so valuable a restorative of health—and so potent a preventive of corporeal maladies. It is true that there are certain changes of structure, the sequences of gout, rheumatism, cutaneous affections, &c. in which bathing, particularly warm-bathing, is extremely efficacious. But in changes of structure, that is to say, in organic diseases of any of the internal viscera, especially when attended with inflammatory action or congestion, bathing is hardly ever useful, and most commonly detrimental. Thus, in *acute rheumatism*, the warm-bath is often employed—but far more frequently with danger than with safety. Even in peritoneal inflammation of the stomach or bowels, the warm bath is hardly ever admissible, unless preceded by copious depletion. In inflammation of the lungs, heart, or pleura, warm-bathing is almost certainly pernicious. It is a stimulant where a sedative is wanted. In neuralgic and painful affections, of a chronic nature, and unattended by inflammation, baths, especially those of the sea, and of some mineral springs, are valuable auxiliaries. But still, it is in those countless deviations from health, resulting from the wear and tear of body and mind, in the complex state of society, as now existing, that

BATHING, carefully commenced, and cautiously conducted, works wonders in renovating the strength and improving the looks.

The *modus agendi* of bathing is an interesting question. We have seen that, in every bath whose temperature is much above or much below that of the surface of the body, there is a considerable impression on the sensations—some of them pleasant, others (as the cold bath) rather dolorous. These impressions on the nervous system must exercise a great influence on the internal functions as well as on the functions of the skin, through sympathy between the exterior and the interior. This sympathy or consent, conjoined with the two tides in the circulation invariably produced by warm or cold baths, rouse the languid actions of the great viscera, as well as of the skin, into increased energy, and thus give a new, and, when properly conducted, a healthy impetus to the movements of the whole living machine.

To these may be added the medicinal or chemical agency of sea-water, and of various other waters impregnated with numerous saline, chalybeate, or sulphureous matters. It is impossible for the bather not to perceive the different effects of sea-water—of Harrogate water—of Aix-la-Chapelle—Weisbaden—Spa—Schwalbach—the Soolensprudel—Franzensbad, and many other medicinal springs, as compared with plain water-baths, hot, cold, vapour, or shower. That there is absorption from medicated baths there can be little doubt—but even the stimulus of saline, chalybeate, or sulphureous impregnations must exercise a considerable influence on the interior organs through sympathy with the skin.

But one of the greatest benefits resulting from bathing has been very little adverted to by balneological writers. A great number of our maladies, and those of the gravest character, too, are connected with, or dependent on thermometrical, hygrometrical, and barometrical transitions:—in plainer language, on changes in the temperature, humidity, and pressure of the medium in which we “live and move and have our being.” Now these vicissitudes we cannot escape; but we can habituate ourselves to *artificial* ones, by which we may, in a great measure, neutralize, or even nullify the effects of those to which we are daily exposed in our necessary avocations. Bathing is a valuable mode of accustoming ourselves

to, and yet securing ourselves from, the evil consequences of atmospheric mutations. Those who can stand the shower or cold bath will resist the changes of our changeable climate far better than those who encounter them without any artificial preparation. This artificial preparation may be commenced without risk, and often continued with safety, on the plan of precaution which I have already laid down. Where the individual cannot bear the bath, or cannot go to the coast, "the CALIDO-FRIGID LAVATION," or sponging, may be practised at home without the least danger. It is now several years since I promulgated the practice of sponging the face, throat, and upper part of the chest, daily, with hot water first, and then immediately with cold. Tens of thousands are now practising this easy and salutary fortifier against the "skiey influences" of this our foggy, and much abused climate. Parents are now applying this PREVENTIVE to their young offspring, and thus providing against that destroying angel, consumption, by which nearly a fourth of the human race are annually swept away in Europe.

Independent of the ocean, Scarborough abounds in artificial baths of all kinds—warm, cold, vapour, shower, douche, and plunging baths. I only inspected the establishments of Travis and of Harland. They are both well arranged and appointed. Dr. Harland's Baths might be called DANDY-BATHS, so elegantly and tastefully are they fitted up. But Dr. Travis's establishment, though not so ornamentally decked out, contains every thing that is useful—every thing that is necessary for the bather.

More than thirty years had intervened between my last and preceding visit to Scarborough. In that time it had altered so much in appearance that I could scarcely recognise more than the tottering castle and the rugged cliffs. New terraces, crescents and villas now constitute a "WEST-END," or rather a SOUTH-END, where the aristocracy, resident and visitant, have pitched their permanent or temporary tents. The new Assembly-room and foul-weather promenade, adjacent to the Wells, the lofty bridge of communication between the Cliffs and the Mineral Waters, and the Museum, are all of recent construction, and add much to the beauty as well as convenience of Scarborough. The sands are so

hard that horses and carriages are seen flying along them at low water, far from the shore. The very gradual manner in which the sands shelve, render bathing at certain times by no means very easy. Unless the machines are run far into the water, it is difficult to get a good plunge, and ladies are often seen at a considerable distance from their watery tents. The bay and sands to the North of the Castle have been lately brought into repute by a noble lady, who did not like to associate, even under water, with the crowd of sub-aristocratic and plebeian dippers of the Southern beach. Scarborough altogether, especially when surveyed from Mount Oliver, presents a very striking picture; but I think my friend Dr. Granville was in a very good-natured mood when he exclaimed that "he did not expect to find a Bay of Naples on the East Coast of England." The expectation would have been somewhat extravagant, and I suspect that it was not fulfilled. For my own part I confess that I could not *realize* Vesuvius in Mount Oliver—St. Elmo in the keep of Scarborough Castle—MISENUM in Flamborough Head—VIRGIL'S TOMB in the oaken sarcophagus of the "Ancient Briton"—POMPEII in the mouldering walls of the old and dismantled fortress—the lazy LAZERONI in the weather-beaten seamen—the vortex of the TOLEDO in the pallid saunterers or promenaders—nor the translucent wave of the tideless Mediterranean in the boisterous billows of the German Ocean. But Scarborough may be well content with the honourable designation—"THE QUEEN OF BRITISH WATERING-PLACES," which it deserves, without challenging comparison with the far-famed Parthenope.

The walks and drives round Scarborough are numerous and pleasant, while the Museum and private collections afford rich food for the scientific enquirer and the philosophic moralist. The Museum, though small in size, is full to the brim with beautiful specimens of animals, minerals, and birds, so ingeniously arranged that we ascend from the solid granite in the bowels of the earth, up through the various strata, with all their "organic remains of a former world," till we find ourselves in the air with the feathered tribes themselves! In this Museum we observe many fine specimens of the Sauri, one of which must have been eighteen feet in length when alive!

THE "ANCIENT BRITON" IN HIS OAKEN SARCOPHAGUS.

This is the lion of the Museum, and is one of the greatest curiosities in this country. A few years ago, a tumulus near Scarborough was opened, and to the astonishment of the explorers, a huge trunk of an oak tree came to view, in which was enclosed a human skeleton complete and entire.

"Ingentem quercum decisis undique ramis
Constituit tumulo, fulgentia induit armis."—*Virg.*

The trunk of oak being split longitudinally, one portion was excavated by rude instruments to form the coffin, and the other half constituted the lid. The skeleton was found doubled up, and the bones as black as ebony—being soaked in fluid as black as ink. Some few weapons were found in the coffin, most of them arrows or javelins, tipped with flint; but only one metallic implement. This fluid was, in fact, ink. The rain of two thousand years had percolated through ground containing iron ore, and getting into the coffin through the roughly-adapted sides, formed, with the tannin of the oak, an ink that rendered the bones of the "ANCIENT BRITON," as black as jet. This same fellow must have been rather a *superior* personage in his day, being six feet three inches in height, and interred with more than usual honors, having not only his arms, rude as they were, to protect him on his journey to another world, but a basket of meat to appease his hunger on that dreary way, and a sheep-skin wrapped round him to defend him from cold, in case his route lay in a contrary direction to that which is supposed to have no small share of "fire and brimstone" as a pavement.

Not the least remarkable feature in the countenance of this "Ancient Briton" is a complete set of thirty-two teeth, as white as snow, and without a single speck of caries in any one of them!! In fact, he has a mouth like an elephant—full of ivory! Now from certain indubitable criteria, as the ossification of cartilages, &c. this ancient gentleman must have been at least fifty or more

years of age—and one inference we may safely draw, namely, that, in his time, there were no Cartwrights, Koeckers, nor Cantons in the East Riding of Yorkshire, else Master Le Breton would have stood but small chance of exhibiting such a magnificent set of grinders in the Scarborough Museum two thousand years afterwards!

When we reflect on the anxiety which all nations have evinced for the preservation of their mortal remains, or memorials of their earthly existence, we cannot but admire the success with which the rude sepulture of the "ANCIENT BRITON" was crowned. Where are now the bones of Cæsar, of Augustus, Nero—or of Homer, Horace, Virgil, &c.? All mouldered into dust and lost in the surrounding elements—or converted into parts and parcels of animals or vegetables in ten thousand mutations! But the heart of a British oak, hollowed out by rude hatchets and chisels of flint, has preserved the bones of a savage for more than twenty centuries! It would have been not a little interesting to have had the name, date, and quality of this ancient personage transmitted to us with his tomb and arms. It would have saved a world of conjectures, some of which I heard with a good deal of amusement. In a company of mixed society, one evening at Scarborough, the subject of the black skeleton called forth a great deal of speculation, respecting the former occupier of this remarkable and sable tabernacle. One of the company (who was a bit of a wag) undertook to explain the whole mystery. "When JULIUS CÆSAR (he observed) invaded these shores, he brought with him a faithful Mameluke (as Napoleon did long afterwards) of Æthiopian origin. This is the skeleton of that very Mameluke." "Oh (replied one of the auditors), although this Mameluke of Cæsar's may have had a black skin, for aught we know to the contrary, who ever saw an animal with black bones?" "I have," said the original speaker, "and so may you, if you sail up one of the mouths of the Ganges to Chittagong. There you will find most excellent cocks and hens and chickens with skins and bones as black as the ace of spades. And why may not certain tribes of Æthiopians have sable skins as well as sable skeletons." "But I do not," he continued, "rest my hypothesis on

this foundation alone. I will bring historical facts to its support. Every one knows that Julius Cæsar was grievously afflicted with epilepsy. Now there can be no doubt that the Roman Emperor had the very best advice which the mistress of the world could supply, and that medicine at that period was cultivated with great success, as is evinced by the writings of Celsus, who has anticipated every supposed modern improvement. There can be no question, therefore, that *nitrate of silver* was prescribed for Cæsar's fits, and that the faithful Mameluke, seeing his master take the silver pill daily, concluded that it was a "LIFE PILL," like those advertised at the present time, and dipped his fingers even more frequently into the box than did the imperial patient himself. The blackness of the Æthiopean's own complexion would prevent him from perceiving the discolouration produced by the nitrate of silver, and thus he went on with the "life pills" till the day of his death, although his bones had become black many years before that period." This ingenious explanation of the black skeleton, or rather this quizz on antiquarian speculations, afforded a hearty laugh to the company, and was probably as true a theory as many that had been started by more learned brains.

DINSDALE SULPHUR WATER.

A RUN of a couple of hours per rail from York, brings us to the Croft Station, three miles short of Darlington, from whence we drive along the river Tees for four or five miles, when we come to a Spa whose reputation is spreading very fast. The spring rises within forty yards of the river, on the North bank, and is conveyed by pipes to the Bath-house, where it is used internally and externally by a number of visitors annually. It was discovered

about fifty years ago, by men who were searching for coal, but it was not until it had acquired much local renown, that good baths, &c. were constructed in the year 1824, for the accommodation of invalids.

The Spa is situated in a beautiful plantation extending nearly a mile along the bank of the Tees, intersected with shady walks, with seats at intervals. A few hundred yards above and behind the Spa there is a magnificent hotel, resembling a nobleman's country mansion rather than a caravansera for the sick sojourners. From this point there is a fine view of pleasing and picturesque scenery, terminated by a range of the Cleveland and Hambleton Hills, and meandered by the Tees. Half-a-mile from the Spa the village of Middleton, one row, presents another hotel, and numerous lodging-houses.

ANALYSIS.

Mr. Walker, an intelligent medical practitioner residing at *Harworth*, two or three miles from Dinsdale, analysed the water of this Spa, and also that of Croft, and has stated the contents as follows :—

GAZEOUS CONTENTS IN A GALLON.

	Cubic Inches.
Sulphuretted hydrogen gas	20—0
Carbonic acid gas	9—2
Azote	6—4
Total	35—6

Or about $4\frac{1}{2}$ cubic inches to the pint.

SOLID CONTENTS.

	Grains.
Muriate of lime	9—0
Muriate of soda	17— $\frac{1}{2}$
Muriate of magnesia	3—0
Carbonate of lime	40—0

Sulphate of lime	..	..	..	..	..	145— $\frac{1}{2}$
Extractive matter	..	..	..	..	..	4—0
Total	..	..	..	..	..	220—0

Or 55 grains to the pint.

We see that, although the solid contents of the Dinsdale water are large, yet lime constitutes the chief ingredient, and aperient salts are in very small quantity. But although chemical analysis is a good and a necessary piece of knowledge, we can seldom predicate the medicinal effects of a mineral water by that alone, but by observation and experience at the spa itself. Here, as at all other places of the kind, the water is taken under the most favourable circumstances. They are taken when the stomach is empty—their medicinal ingredients are in the greatest state of dilution and subdivision—regularity of hours and temperance in diet are observed—the air is pure—exercise is attended to—and last not least, hope steps in as a powerful auxiliary to the spa. At Dinsdale, as elsewhere, some preparation is necessary. The bowels should be cleared, and the secretions brought, if possible, to a somewhat healthy condition. In plethoric or full habits—especially where there is tendency of blood to the head, some depletion is necessary, as the gases are apt to cause giddiness, &c. When the bowels are habitually sluggish an aperient pill every night, or every second night, will be proper during the course of the water, which, in some constitutions, passes off by the kidneys instead of the bowels. In these cases a pill over night is better than an addition of salts to the mineral water. Where the bowels are inclined to a lax state, the Dinsdale water should be used sparingly at first, and no more taken than what is sufficient to procure one free evacuation daily. The same rule obtains when the waters are employed as baths.

The following directions of Mr. Walker are judicious and plain.

“ As a general rule, when it is wished that the water should act upon the bowels; the patient should rise early, repair to the well, and drink the water at the fountain; the medium dose may

be stated at from three to four tumblers. A single tumbler of the water may be drank every quarter of an hour, taking exercise in the open air, if the weather permits, otherwise under cover, between each dose. After the proper quantity has been swallowed, it is useful to walk about for half an hour, or an hour, before taking any food.

“It happens occasionally, that the stomach does not receive the water so well in its natural state of coldness; and when such is the case, it may be warmed a little, by the addition of a small quantity of the warm water; but its gaseous properties are more perfect in its original temperature.

“When the water does not pass off readily by stool, then one half of the dose prescribed, may be taken warm, and the remainder cold, this will in general make it active; but if it is desired that the water should act as an alterative, rather than as an aperient, then only one half of the quantity before-mentioned should be taken before breakfast, and smaller quantities repeated at intervals during the day. According to the particular circumstances of the case, the age, constitution, &c., of the individual, the quantity now stated, may be increased or lessened. The quantity of water should not be increased, if it produces oppression or distention of the stomach, giddiness in the head, or difficulty of breathing. The best signs of any given quantity agreeing with the system, are a moderate increase in the natural evacuations, by stool and urine; and when the constitution has reached the point of saturation, the use of this water should not be suddenly discontinued, but diminished as regularly as the dose was increased. It is not prudent to drink the Dinsdale Sulphur Water, or use the warm bath *in the evening*, as the doing so is sometimes followed, particularly in irritable habits, by fever, headache, and a sleepless night.

“In order that the invalid may derive permanent benefit from the use of this water, he ought to persevere in its use for a month or six weeks. It frequently happens, that during a course of this water, a papular eruption makes its appearance upon the skin, an occurrence which I have always hailed with pleasure, as immediate relief from gastric or enteric irritation is the immediate conse-

quence. This eruption usually disappears in a few days after discontinuing the water, leaving the skin soft, pliable, and healthy.

“The water will bear removal, and will keep, without any material diminution of its gaseous properties, provided proper care be observed in corking and sealing it down in pint bottles, and putting it in a cool place. By adopting these precautions, the use of it may be resumed at intervals when the individual has returned home.”*

Mr. Walker considers the Dinsdale Spa as alterative in addition to its aperient qualities, and also antiphlogistic. Hence its utility in indigestion and in chronic inflammatory affections. The late Dr. Armstrong indeed considered sulphur waters as one of the most powerful agents in the removal of chronic inflammation wherever situated.

“In Dyspepsia (says Mr. Walker) and Hypochondriasis, the Dinsdale Water is a remedy of decided efficacy: but too much caution cannot be observed in the use of it, particularly in the latter form of the complaint. When the disease depends upon a debilitated state of the digestive organs, the water ought to be taken as an alterative, rather than as an active aperient. But when, as is more frequently the case, the disease arises from a course of repletion, or from the habitual use of vinous or spirituous potations, the water may be taken more freely with advantage; but in this, as in every other case, particular care ought to be taken not to distend the stomach, by drinking too much of the water at one time. In both cases, a due preparation must be observed previous to making use of the water at all; and I wish in this place, once for all, to impress upon the invalid, *the absolute necessity of a proper preparation in every case.*”

“Individuals labouring under diseased action of the liver, whether arising from chronic inflammation, or obstruction of the biliary secretions, will derive great benefit from the use of the water; upon this organ, it has a specific effect, rapidly subduing inflammation, and producing healthy action; at the same time, the

* Walker, pp. 16—18.

continued use of it does not produce debility, and the other unpleasant symptoms induced by a course of medicine."

In palpitation of the heart arising from sympathy with the digestive organs, Mr. Walker has found the Dinsdale Water useful; but great care must be taken to discriminate between palpitation from sympathy and that from organic disease of the heart itself.

Mr. Walker has met with a good number of diabetic patients, where animal food, vapour-baths, and the Dinsdale Waters cured eight cases out of nine.

In incipient pulmonary consumption, the Dinsdale Waters, by improving the digestive organs and the general health, have been thought to check the progress of that dire disease, especially when the bowels have been carefully regulated, and prussic acid employed as auxiliary to the waters.

"In all painful affections of the limbs, as the remains of Rheumatism, Palsy, or Gout, this water is of infinite service; in many cases restoring the limbs to their wonted vigour, after every other means has failed in doing so.

"In Rheumatism, particularly in the chronic form of the disease, the Dinsdale Water possesses a high and well-merited reputation."

Like most mineral waters those of Dinsdale are least beneficial where there is any febrile or inflammatory action going on. This state should be removed before the baths are employed; but the waters themselves may be taken, with due attention to an open condition of the bowels.

Where the patient is gouty, Mr. Walker has often observed a paroxysm brought on by the use of the Dinsdale Waters, internal and external. In such cases the waters are to be discontinued till the acute symptoms have subsided. He thinks that after an attack of this kind, there is a longer interval than usual between it and the next.

It is in the sequelæ of gout, however, stiffness, weakness, &c. that the Dinsdale Waters are most useful, especially when aided by diligent friction.

"In the diseases incident to the fair sex, as Chlorosis, Ame-

norrhœa, Mænorrhagia, Fluor Albus, &c., the Dinsdale Water is of infinite service; and when no disease of the uterine organs exists, it may be used with safety and advantage."

Mr. Walker avers that a course of these waters not only regulates the bowels during that time, but tends to keep them regular afterwards. This spring acts powerfully on the skin, and the sulphur not only causes its peculiar odour to exhale from the pores, but tinges or tarnishes all gold and silver articles worn by the individual. In a large proportion of cutaneous diseases, especially when in a chronic state, the Dinsdale Waters are very powerful.

The best season is the Summer and Autumn, when air and exercise are considerable auxiliaries to the medicinal agency of the waters.

CROFT WATERS.

CLOSE to "CROFT STATION," and three miles South of Darlington, stands the "SPA HOTEL," to which I repaired, and inquired for "John Emerson, the very civil and obliging landlord, in manners far superior to persons of his class," as characterized by Dr. Granville. I was grieved to find this worthy personage had been promoted to a larger and much stronger mansion—YORK CASTLE, for debt! About half-a-mile from the hotel a very respectable suite of baths have been erected over the NEW SPRING, discovered by boring through the rock to a depth of twenty-six fathoms, in the year 1827. The water of the OLD WELL is beautifully transparent, and sparkles when poured into a glass. It smells but slightly of sulphuretted hydrogen gas, and is by no means nauseous. On the contrary, it is rather agreeable to the palate. The supply is "prodigious,"—300 gallons per hour—and the temperature always remains at $51\frac{1}{2}^{\circ}$. It is situated a quarter of a mile from the New Spa and Baths.

GASEOUS CONTENTS IN A GALLON OF THE OLD WELL.

	Cub. Inches.
Carbonic acid gas	13—6
Sulphuretted hydrogen	1—8
Azote	3—6
Total ..	19—0

SOLID CONTENTS.

	Grs.
Muriate of lime	9—6
Carbonate of lime	42—4
Sulphate of magnesia	74—0
Sulphate of lime	28—0
Carbonate of iron	1—1
Total ..	155—0

The above analysis will shew that the Croft Spa of the Old Well, though much weaker in sulphur and aperient ingredients than the Old Well at Harrogate, yet contains "an excellent combination of saline ingredients," as Mr. Walker observes. The Well, however, is situated in such a wild and forbidding locality, that few, except the country-people, go thither to drink the water. It is led by pipes to the New Baths erected over the New Spa, situated close to the high-road.

THE NEW SPA.

This (as before stated) was discovered by boring to a considerable depth in the year 1827. The water is transparent, sparkles in the glass, and gives out a stronger smell of sulphuretted hydrogen gas than either Harrogate or Aix-la-Chapelle. It gradually loses its transparency while standing exposed to the open air—becomes milky—and deposits a minute powder, consisting of sulphur. The temperature of the water is 52 always.

GAZEOUS CONTENTS, (One Gallon.)

	Cub. Inches.
Sulphuretted hydrogen	22—2
Carbonic acid	15—2
Azote and carburetted hydrogen ..	4—8
Total ..	42—2

SOLID CONTENTS.

	Grs.
Muriate of lime	19—2
Sulphate of magnesia	67—2
Carbonate of lime	64—0
Sulphate of lime	8—0
Total ..	158—4

From the above analysis of Mr. Walker, it will be seen that the New Croft Spa contains a greater portion of sulphuretted hydrogen gas than any water in Great Britain. The saline ingredients, too, are of a very active character. It is aperient and alterative, independent of its gaseous contents. It is nauseous to the taste, leaving a metallic sweetness on the palate.

“ Taken to the extent of a pint, it acts on the bowels; and, in consequence of its strong gaseous impregnation, great care and caution must be observed in exceeding this quantity to a dose; and also in being properly prepared by purgative medicine, previous to commencing a course of it.

“ An omission on this point, especially when the water has been taken in a large quantity, is frequently followed by head-ache, distention of the stomach, and sickness. It must therefore be used with caution; and a previous preparation on no account neglected.”

We were informed by Mr. W. in the Autumn of 1842, that he is still more cautious now than when he published his treatise in 1837, as the Croft Waters are very apt to affect the head and also the bowels, unless much care is taken, and the waters used

sparingly. Like the Dinsdale Spa it is applicable to the disorders for which sulphuretted hydrogen springs are prescribed. Being alterative and aperient, it corrects disordered states of the digestive organs and restores natural secretions when they are depraved.

As a bath, however, Mr. Walker has found the Croft water peculiarly effective in certain cutaneous affections, viz :—Prurigo formicans—prurigo senilis—lepra vulgaris—lepra alphoides—psoriasis inveterata—scabies.

The suite of baths here—cold, tepid, warm, shower, and vapour, are fitted up with great neatness and convenience. The spring-head is only a few feet from the building, to which it is conveyed by pipe. Those who labour under the PLUMBO-PHOBIA, or dread of lead, may here drink at Nature's font, without any risk of painter's colic or other real or imaginary consequences of leaden pipes. The fear of lead, however, at Dinsdale, Croft, or Harrogate, is baseless, since, in a very short time the pipes become lined with an amalgam completely insoluble in water.

GILSLAND SPA.

BETWEEN Newcastle and Carlisle, and on the line of railway, there is a mineral spring which enjoys some reputation in its neighbourhood, though it is little likely to extend its fame through a wider circle. The vicinity to "MUMPS HALL," the scene of exploits performed by MEGG MERRILIES and her worthy associates, and also to the ancient Roman wall of Severus, renders the locale of Gilsland somewhat interesting, as calling up historical and romantic associations. These are not diminished by the knowledge that it was here the Wizard of the North first met with his first love and ultimate consort.

The Spa issues copiously from the foot of a cliff on the banks of the little river IRTHING, which here struggles, frets, and foams

through fragments of rock that had rolled at various times from the precipice above. The water is clear as crystal, and exhales the unequivocal odour of sulphuretted and carburetted hydrogen gas. It leaves no other apres-gout than that of sulphur.

The imperial pint contains rather more than two cubic inches of sulphuretted hydrogen gas, and nearly two inches of free carbonic acid gas. The solid contents are two grains of muriate of soda—half a grain of carbonate of soda—a trace of carbonate of lime, and the same of silica.

This water, like others of a similar kind, produces fætid eructations sometime after being swallowed, and even slight headaches, which is not wonderful considering the quantity of gas in the pint. It does not, of course, act on the bowels, as there are little or no saline ingredients in it, but it acts on the kidneys. This Spa is little frequented by the upper classes, for whom there is small accommodation;—and even the lower and middle classes seldom go through a regular course of the waters. One circumstance may enable us to form an estimate of the reputation of Gilsland Spa :—there is not a doctor, surgeon, or even a chemist, within many miles of the Hygeian font!

MONKSWELL.

AMONG the minor or minimum Spas of England, there are two near Lincoln, which may be slightly noticed, though they are very unlikely to attract bibbers from any great distance.

The MONKSWELL SPA is nearly a pure chalybeate, springing from the earth at a short distance from the capital of Lincoln, in an abundant stream, limpid and tasteless, though it contains nearly two grains of oxide of iron in the pint, slightly suspended by carbonic acid, and quickly falling down when exposed to the air. The other ingredients are chiefly magnesian, and amounting to only seven or eight grains.

Such a water, when taken at its source, will prove useful in all those complaints where a pure chalybeate is wanted—as in chlorosis, anemial affections, debility, and many forms of dyspepsia, unaccompanied by any inflammatory, congestive, or febrile condition.

WOODHALL, OR IODINE SPA.

At Kirkstead, near Horncastle, a spring has been discovered, some years ago, when certain speculators were boring for coal. The brackish water, which sprang from a depth of 500 feet, was allowed to find its way into the nearest stream, till the neighbouring country-people became acquainted with its medicinal rather than its chemical properties, and gave to it “a local reputation and a name.” The water was pumped up through iron tubes from a great depth, and became chalybeated in its ascent, which it is not at its source. This inconvenience has been obviated by an apparatus suggested by Dr. Granville. The Woodhall Spa has since been analysed by Mr. West (1840) of Leeds, and found to contain the following ingredients in the pint imperial.

	Grains.
Muriate of soda	189 $\frac{1}{2}$
Sulphate of soda	0 $\frac{1}{4}$
Bicarbonate of soda	0 $\frac{3}{4}$
Muriate of lime	3 $\frac{1}{3}$
Muriate of magnesia (dry)	1 $\frac{1}{2}$
Iodine	0 $\frac{1}{8}$
Bromine.. .. .	1 $\frac{1}{8}$
Total	196 $\frac{1}{4}$

GASES.

							Cubic Inches.
Carburetted hydrogen gas	..	..	..	..	..	..	$0\frac{1}{2}$
Azote	..	..	..	..	..	..	$2\frac{1}{2}$
Carbonic acid gas	..	..	..	..	..	..	$2\frac{1}{8}$
Total	..	..	..	..	..	..	$5\frac{1}{8}$

Mr. W. remarks that the largest quantity of iodine, hitherto found in any British spring, is one tenth of a grain in the gallon. In the above there is one eighth of a grain in the pint—a very great difference. The taste is very briny; but not bitter or unpleasant. The appearance rather turbid. It sparkles like champagne, and reminds us of the fine waters of Franzensbad, and Marienbad. To the touch the water feels oily, and froths much when agitated. A pint, sometimes less, generally acts as an aperient. It is best used warm. There are baths erected at the place, when there is also a good hotel.

The chemical composition of this water indicates the important role which it will probably play in the cure of several diseases of this climate, especially scrofula, glandular swellings, gout, and rheumatism. Its combination with iron, in many of these maladies, will be desirable, rather than prejudicial; and therefore the iron pipes might be left in partial play, with advantage.

Although situated in the midst of a dreary flat, and that in the fenny county of Lincoln, yet the country is now so well drained, that no apprehension of the ague fiend need be entertained.

HORLEY GREEN.

THIS is a resuscitated spring; having disappeared, like the fountain of Arethusa, was dug up again, after great labour, by Dr. Alexander, of Halifax, who is now the Apollo of the Hygiene font. It is situated on the slope of a pretty valley, a few miles from Halifax, and has recently been analysed by Mr. West, of Leeds. An imperial gallon, at a temperature of 48° , contains $5\frac{1}{2}$ cubic inches of carbonic acid gas— $7\frac{1}{4}$ ditto of nitrogen gas—total $12\frac{3}{4}$ cubic inches. Of solid contents, there are 40 grains (in round numbers) of sulphate of iron—15 grains of sulphate of lime—5 of sulphate of magnesia—with some fractional parts of muriate of lime, silica, and alum;—in all, 63 grains.

The neighbourhood of Horley Green abounds in pyrites, a binary compound mineral consisting of iron and sulphur, from the solution of which, by the hand of Nature, the spa in question is doubtless supplied.

PHYSICAL AND MEDICINAL PROPERTIES.

“ Scire potestates Aquarum, usumque bibendi.”

Dr. Alexander, who resided ten years at Scarborough, and wrote a treatise on the waters of that place, has lately published a small brochure on the spring of Horley Green. He affirms that this water possesses a strong claim to our attention, as a “powerful tonic and chalybeate.” This certainly cannot be denied. The water, in fact, is only too powerful. Five grains of sulphate of iron, with less than an inch of carbonic acid gas in the pint, is of prodigious strength.

“ The mode (says Dr. A.) in which the Horley Green water acts upon the living tissue I conceive to be; *first*, by exerting a direct impression upon the nerves distributed over the surface and coats of the stomach, thence instantly extended by the connecting

tract to the medulla spinalis and encephalon, which operation, in common parlance, obtains the name of *sympathy*; and *secondly*, it is conveyed by absorption, *undecomposed*, into the system, through the medium of the circulation and lymphatic vessels. It thus effects a change upon the organism and functions of the human body, affecting digestion, nutrition, and secretion, and modifying, though perhaps insensibly, them all. The water, independent of its saline impregnation, received into the blood, will dilute that fluid and produce alteration in its qualities, occasioning a determination to the kidneys and skin, and the saline ingredients, by their extreme divisibility and the tenuity of their menstruum, be rendered more diffusible over the system, penetrating the capillaries, and resolving obstruction in the secretory organs. Hence it is necessary in estimating the therapeutical agency of a spa-water, to ascertain what is to be referred to the mere water, its influence as a vehicle to the saline contents, and what to the foreign contents themselves therein contained. Nor is this all, for it is important to consider its several relations as a *whole* formed by the hand of Nature, its temperature, the exercise taken to aid its operation, and the moral effect of its use upon the mind."

As a nearly pure chalybeate, the Horley Green Spas is indicated in leucophlegmatic or relaxed habits, marked by feebleness, loss of appetite, atony of the whole system, and depression of vital power. Its physiological effects will be an increase of force in the circulation—an improvement in digestion, assimilation, secretion, and absorption, with diminution of nervous susceptibility, and augmentation of muscular contraction. Dr. Alexander observes that the grand features of disease which present themselves at the Halifax Dispensary are indigestion, chlorosis, and anæmial (bloodless) affections. In these latter complaints especially, chalybeates are the chief remedies, and it seems fortunate for the immense mass of manufacturing population in that great laboratory, that so powerful a tonic, prepared by the hand of Nature, should be within their reach. It is evident, however, that such a potent chalybeate as that of Horley Green, uncombined as it is with any saline aperients, must prove an engine of

mighty mischief, if applied indiscriminately, or even indiscreetly, in diseases where an inflammatory character is engrafted on, or associated with, *DEBILITY*—a complication much more common than is generally supposed. Here, as at all ferruginous springs, the bowels should be cleared before the waters are commenced, and the secretions watched during the whole of the course.

ASKERN SPA.

THE village of Askern lies between Doncaster and Selby, seven miles from the former, and is built on the edge of a rocky declivity bordering on a plain. The village now boasts of a large hotel, and of several good houses for the accommodation of invalids and their friends, while drinking the mineral water of the place. The first account of this spa was given by Dr. Short in 1734. In 1821 Mr. Murray published an analysis of the water, but it was a very imperfect one. Dr. Lankester and Mr. West have examined it recently, and we may therefore depend on the present account.

The smell of the various springs here is of the true Harrogate odour—washings of a rusty gun-barrel and rotten eggs. It is bright and clear when taken from the spring; but becomes milky after standing for some time, with a slight film over the surface. These increase after several hours, and then a deposite of sulphate and carbonate of lime, with traces of sulphur, takes place. It then loses its smell, which occurs, in some degree, even when well bottled. The water discolours all substances containing lead or silver, indicating the existence of sulphuretted hydrogen gas and hydro-sulphuric acid gas.

The solid contents of the Manor Well, in the imperial gallon, were ascertained by Messrs. Lankester and West to be as follows:—

	Grains.
Sulphate of magnesia	34
Chloride of calcium.. ..	3
Sulphate of lime	110
Carbonate of lime	6
Carbonate of soda	26
Total ..	179

Or 23 grains and one half in the imperial pint, with from two to nearly four cubic inches of gaseous contents—chiefly sulphuretted hydrogen gas. In respect to the diseases for which these waters are used, they will be chiefly those for which the Harrogate and Dinsdale Spas are prescribed. It is evident, however, that, in point of aperient properties, they are very inferior to the Old Well at Harrogate. Dr. Lankester has given the following statistical table of cases treated at the Bath Charity from 1832 to 1836.

Diseases.	Cured.	Relieved.	Not benefited.	Total.
Rheumatism	305	78	25	408
Cutaneous Diseases	60	11	3	74
Indigestion	16	2	4	22
Paralysis	8	0	3	11
Scrofula	7	0	2	9

In the reports from 1838 to 1840, no distinction is made between the cured and relieved :

Diseases.	Cured or Relieved.	Not benefited.	Total.
Rheumatism	240	20	260
Cutaneous Diseases	56	8	64
Indigestion	24	4	28
Paralysis	8	5	13
Scrofula	7	5	12

Mr. Brewerton, who resided many years at Askern, and wrote

on its waters, informs us that rheumatism has been more benefited than any other malady—the chronic form of course, where there is rigidity of the joints with swelling. A course of the baths at a temperature varying from 95 to 105°, will frequently effect a cure. Where pain alone is left after an attack of acute rheumatism, a lower temperature may be employed, beginning at 82°, and lowering it gradually to tepid or even cold. The sequelæ of gout, where proper regimen is observed, are often removed by the Baths of Askern. Cutaneous diseases, next to chronic rheumatism, derive the greatest advantage from a course of the baths. The forms of cutaneous diseases chiefly treated at Askern, are lepra, psoriasis, impetigo, eczema, scabies, lichen, prurigo, and acne. In these cases the waters are recommended both internally and externally. It is averred by Mr. Brewerton and Dr. Lankester that the Askern Baths are superior to those of Harrogate in irritable cutaneous affections, as containing so much less of saline ingredients. The above writers recommend both the baths and the waters in various forms of indigestion.

The medicinal injunctions laid down by the Askern medicos do not differ materially from those of other spa-doctors. Temperance—simplicity of diet—early hours—daily exercise in the open air when the weather permits—these are the essentials. One, two, or three glasses of the water are to be taken before breakfast. The same quantity may be taken also between breakfast and dinner. “The evening is favourable for a third dose.” It is best taken cold, where the stomach will bear it—if not, some heated water is to be added. The bowels are to be attended to in the meanwhile.

MATLOCK.

IF mineral waters be organised and living beings, as the German philosophers assert, they are very fortunate creatures. If they contain active and powerful chemical ingredients, their reputation for the cure of diseases is certain on that account. If, on the other hand, they are free from all impregnation, then they are renowned for their medicinal virtues on account of their purity from all chemical agents. Should they present to the chemist a moderate portion of common saline substances, then are their great powers in the cure of human maladies ascribed to their mysterious vitality, caloricity, telluricity, or to some hidden qualities imparted to them in the great subterranean laboratory of Nature. The fact appears to be that chemistry has done little more than excite curiosity in the examination of mineral waters. Their powers can only be determined by experience and observation, and not by experiments or analysis. Mineral waters were employed in the cure of diseases before chemistry was capable of determining their composition. Aurelian's legions hung up votive tablets at Baden-Baden in gratitude for recovered health, when their mineral impregnations were totally unknown.

In this country, the waters of Malvern, Matlock, and even Buxton, owe their reputation to the experience of ages, and not to their chemical composition. From Saunders downwards, the pure waters of Matlock have been recommended in dyspeptic complaints, gravel, and such others as were likely to be benefited by "a pure diluent drink." Sir Charles Scudamore does not feel authorised to "extol the water as a relief for any particular class of disorders." "It's purity," he observes, "it's agreeable temperature (68°) and its freshness, ensure to the invalid that, while it may possibly prove useful, it cannot possibly disagree." This water is beautifully clear, but does not sparkle, though it contains some minute portion of carbonic acid. All the waters of this place,

however, produce incrustations on the surfaces of dead substances, but they have little chance of encrusting the stomach with marble or depositing a calculus in the bladder.

Matlock presents a closer resemblance to the scenery of Saxon Switzerland than any locality which I have ever visited.* It has more wood—less water—and quite as much rock—but the Derwent, it must be confessed, is a smaller stream than the Elbe. Matlock Baths is really much more beautiful and romantic than the Bastei—it is not quite so wild and awful. The natural and geological features of both places are precisely the same. Stratified rocks rising to a height of six or seven hundred feet, and evidently formed at the bottom of an antediluvian ocean, with a river winding through the huge crevasse. But at Matlock Baths there is a profusion of wood among and above the rocks, with numerous beautiful villas peeping out from ledges of rock—some of them (Abraham's Heights) more than a thousand feet above the level of the Derwent. A somewhat laborious and steep ascent, of about three-quarters of a mile, amid umbrageous woods, brings us to the "ROMANTIC ROCKS," presenting a close epitome of the splintered pinnacles, seen at the summit of the Bastei. They have been severed from each other by time or earthquakes—are chiefly covered with moss—some of them apparently on the very point of tumbling down into the Derwent, and are extremely worthy of a visit. They consist, as usual, of mountain limestone.

From the "ROMANTIC ROCKS" we mount about a quarter of a mile higher up the precipices, and then we are led through several dark caverns, sparkling, when the torches are lit, with every kind of spar, for which this region is celebrated. Stalactites are numerous, but on a small scale, and lead ore is still being quarried out of these bowels of mother earth.

On emerging again into daylight, the indefatigable mules carried us by rude and rugged zig-zag paths to the Heights of Abraham, from whence a splendid view of the Derbyshire Bastei is seen, and will well repay the toil of the visitor.

* It bears a close resemblance also to the banks of the Avon, about Clifton.

BUXTON.

A CHEERFUL and delightful drive of twenty miles from Matlock, the Anglo-Saxon Switzerland, brings us to the far-famed Buxton. It is astonishing what the industry of man may effect in meliorating climate and improving the scenery of a place. Buxton, which formerly presented little else than dreary barren heaths and a cold climate, now exhibits a vicinity of undulating hills and dales—wood and water—corn and meadow—river and rill—the whole forming a most *riant* prospect, while the bracing air of this elevated region imparts elasticity to the body and hilarity to the mind of man! In front of the Crescent, a series of gravel walks, rising one above the other, affords excellent exercise for those invalids who are unable to take longer promenades, whilst, to the Westward of the Baths, and along both sides of the sparkling Wye, a beautiful piece of woodland—a scene of fairy Sylvan shade, extends for nearly a mile, laid out in numerous serpentine or curvilinear walks, and affording complete shelter from sun, rain, and wind, to the valetudinarian in search of health—to the contemplative philosopher—to the billing and cooing lovers—to the dreaming poet—and to the melancholy hypochondriac.

Buxton is more than a thousand feet above the level of the sea, and although much rain must necessarily fall in so hilly and elevated a country, yet the air is not damp—colds are seldom caught—and epidemic diseases are nearly unknown. The inhabitants are considered to be healthy and long-lived.

Buxton, like almost all other thermal springs, was known to the Romans, as various ruins and vestiges prove. Its tepid springs must have been grateful to the legions after their journey from the shores of Italy to this cold and dreary station. It is also pleasant to the bather here, to know that Mary, Queen of Scots, refreshed her polished limbs in these waters, stiffened as they must have been by long and rigorous confinement. Leicester and

Burleigh, two stars of the first magnitude in their times, resorted to Buxton for renovation of health.

But it is not very flattering to the Heaven-born mind of man to reflect that, because the virtues of these waters were considered miraculous, and owing to the sanctity of their tutelar patron, St. Anne—and because votive crutches were suspended on the walls of her chapel, as historical proofs that they were no longer wanted by their former possessors, the sanctimonious bigots of the Commonwealth should have wreaked their vengeance on the healing springs of Buxton, by way of punishment on their Popish Saint! Nay, the waters were prohibited by public authority for some time, as smacking of the Romish Church!

Nevertheless the intrinsic virtues of the waters restored their reputation again, while tortured and halting victims of rheumatism, with hobbling paralysis, flocked to this fountain of Hygeia, and there threw their crutches in the fire.

“ *Hæc resoluta senum, confirmat membra trementum,
Et referret nervos totrex hæc lympa gelatos.*”

But the late and present Dukes of Devonshire proved better tutelar saints than St. Anne—erecting splendid buildings round the spas—improving the roads—planting the hills—and cultivating the adjacent vales.

The baths are several in number—some at the natural temperature—others artificially heated to the degree required—while a drinking well, close to the Crescent, supplies all bibbers with ample potations. There is one large or public bath (for both sexes alternately) capable of accommodating ten, fifteen, or more persons, at a time, in a gloomy reservoir, into which the water springs copiously, and runs off at the sides. It is supplied with a powerful douche or pump, &c. Near this are two private baths, (natural temperature,) one for gentlemen, the other for ladies, with dressing-rooms, &c.

In the other wing of the building, are several private baths, with water at any temperature that is desired.

The temperature of the Buxton Waters is 82° at their source, but they lose two or three degrees before they can be used either

for bathing or drinking. The causes of their heat have given rise to many theories, none of which, however, are so extravagantly ridiculous as the vitality doctrines of the Germans. The temperature of thermal waters is now pretty generally attributed, on this side of the Channel, to volcanic agency, or to the internal heat of the globe itself; but how the *supply* of these subterranean reservoirs is obtained—whether from air, earth, or ocean—no man can tell.

The chemical composition of the Buxton Waters can throw but little light on their physiological action, or remedial agency. A gallon contains only 15 grains of saline matters, viz.

	Grains.
Muriate of magnesia	0—58
Muriate of soda	2—40
Sulphate of lime	0—60
Carbonate of lime	10—40
Extractive matters	0—50
Loss.. .. .	0—52
Total ..	15—0

or about two grains in the pint.

In respect to gaseous contents, Sir Charles Scudamore, assisted by Mr. Garden, found in the gallon, one cubic inch and a half of carbonic acid, and four and a half of azote.

But, as Sir Charles Scudamore justly observes, “we ought not to estimate the powers of any mineral water merely in reference to the weakness of its impregnation with metallic, saline, or gaseous ingredients. The Bath water contains only one-sixth of a grain of the oxide of iron in a gallon, held in solution by carbonic acid; and yet no one will call in question its efficacy as a stimulating chalybeate.”

In fine, every candid enquirer must come to the conclusion that mineral waters have, each their distinctive characters, derived solely from *experience* of their effect on the human frame, and not from *experiments* on their chemical composition—thus

exemplifying the truth of the old precept—" *ars tota in observationibus.*"

The water, as seen at the drinking well and elsewhere, has neither taste, smell, nor colour. Its properties, as a medicinal agent, are much less determinable when taken internally than when used as a bath. Still it has appreciable physiological and medicinal effects when taken into the stomach. These effects are favourably exerted by the extreme state of solution in which the saline and gaseous constituents are held, and by the empty state of the stomach at the time they are drunk.

" With regard to the Buxton Waters, (says Sir Charles Scudamore,) it certainly happens that, simple as it appears in composition, it does prove inconveniently stimulating to some persons of full habit and of the sanguineous temperament. They complain of flushing, headache, and slight giddiness, and are deterred, by such symptoms, from proceeding in the course of drinking it. Many instances have come under my observation in which the exciting power of the water has been proved in the gouty patient; symptoms of a paroxysm having occurred in a few days after its commencement; subsiding, also, upon its being discontinued, and from the aid of medicine.

" Others, and those especially who have a weakened condition of the nervous energy and of the muscular power of the stomach, complain that the water is felt as a dead weight on the stomach, that it is slow in passing off, and that, until it does so, they are much oppressed and inconvenienced.

" These, however, are the exceptions, and not the rule; for, in general, the water agrees remarkably well, and is drunk freely without any unpleasant result; but, on the contrary, with benefit and satisfaction."*

The effects of this water on the bowels is variously stated by different patients. Some representing it as aperient—others as constipating. The probability is, that the water has no specific action either way, but that other circumstances occasion the apparent discrepancy. Sir Charles Scudamore attributes its active

* Second edition.

properties, taken internally, to the azotic gas which it contains. The water acts unequivocally on the kidneys; and Sir Charles considers it often as useful in the various grades of indigestion, where there is no disposition to an inflammatory or congestive state of the vessels.

Generally speaking, the first dose of the water should be taken at least half an hour before breakfast. A quarter of a pint in the morning, and the same quantity at one or two o'clock in the day, may form a general rule, modified by the particular state of the case. Moderate exercise, if practicable, should be taken after each dose. It has been observed that these waters do not leave the stomach so soon as waters more strongly impregnated with saline matters, or with carbonic acid gas. Hence if a large glass, say half a pint, be taken at once, it lies heavy on the stomach, producing a sense of oppression there, and sometimes a feeling of fulness about the head, attended with giddiness or flushing. A pint in the day is an average quantity. Sir Charles Scudamore thinks that, except a little tincture of ginger or cardamoms, in weak stomachs, no medicine should be taken with the water. In painful affections of the urinary organs, arising from gravel, Buxton water has been found useful. The same remark applies to gouty persons, in whom the renal secretion is disordered, and deposits a red sediment. The purity, indeed, of the Buxton, as well as of the Matlock water, is regarded by many writers as contributing not a little to their medicinal efficacy in many complaints. On account of the azotic gas, however, it is not prudent, perhaps, to use Buxton water as an ordinary beverage. For domestic and culinary purposes, water is brought to Buxton from a distance of one or two miles, free from azote or lime.

The waters of Buxton, however, like those of Pfeffers, Gastein, Teplitz, Schlangenbad, &c., are chiefly prized as baths, and not as potations. The supply is extremely copious. Thus the public bath (at a temperature of 82°) contains 8612 gallons of water, and, when emptied, fills itself in two hours and a half. It changes itself at the rate of 60 gallons in the minute. The air of the apartments varies from 72° to 74° , and the dressing-rooms of the private warm and cold baths are very neatly furnished.

The Buxton bath is lauded by various writers as possessing highly tonic and restorative qualities—and, as happily intermediate in its temperature (82°) between the warm and cold. The large or public baths are also considered as greatly superior to small private baths, on account of the facilities which they give for freedom of motion in the water. The steadiness of temperature, like that of Pfeffers and Wildbad, where the influx and efflux are constantly going on, contributes to the efficacy of the waters. “It is indeed that very desirable medium of temperature between the warm and cold bath, neither exciting by too much stimulus of heat, nor depressing by too much sedative influence of cold, which renders the Buxton water so favourable a tonic to weakened limbs, and also to the whole body.”—SCUDAMORE.

The qualities of the water, small in force as they may appear, are not to be overlooked. The skin is a sensitive and a very extensive organ, connected by sympathy with almost every other organ in the body. The sensations produced on this great surface by different kinds of fluid are very various. Sea water—rain water—saline waters—sulphur waters, &c., all convey different impressions, one from the other.

The first time I bathed in the natural waters of Buxton, some nine or ten years ago, I certainly felt a slight shock or chill, which went off in less than a minute, the remainder of the immersion being very comfortable, and a gentle glow or re-action soon succeeding the bath, attended with that peculiar feeling of *bien-etre* which baths that agree generally excite. In August, 1841, I again used the bath at the natural temperature, and although the weather was wet and cold for the season, and I was a good deal fatigued, the bath produced no sense of chilliness at all, and to the hands and face felt warm. The natural water, however, did not produce in me the sensation of being “anointed with warm cream,” to use the expression of Dr. Saunders. But on going into the warm-bath next day, at a temperature of 98°, my favourite degree of heat, I experienced more agreeable, not to say pleasurable sensations, than I ever did in Pfeffers, Teplitz, Wildbad, or any other water in which I ever dipped. I cannot compare it to any thing better than to a warm-bath of new milk.

When the hands were rubbed over the surface of the body, or against the marble sides of the bath, it appeared as if the latter were oiled, so lubricating and glossy did the waters render them. I cannot help thinking, therefore, that had the water of Buxton possessed five or six degrees of higher temperature from the great kettle at their source below, they would have been more agreeable, more extensively applicable, and not the less efficient than they now are—*pace tantorum virorum*, as Scudamore and Robertson, the latest and best writers on the subject, and the optimists as to the present heat of their favourite Naiad. Sir Charles seems to attach considerable importance to the azote in the waters, even when used as baths, and there may be some foundation for the opinion. But as the natural temperature of the waters is 16° below that of the blood, and ten or twelve below that of the cloathed surface of the body, some caution should be used at first with delicate constitutions, and where there is the least tendency to congestion or disease in any vital organ. I would therefore recommend such individuals to take a bath or two at 92° , which is about the heat of the skin itself in all parts not habitually exposed, as the hands and face. These preparatory immersions might be made on the thermal side of the building, and in one of the small private baths.

LEAMINGTON.

LEAMINGTON is a place of many medicinal springs; but the main spring of the place is a medicinal doctor. Physicians, like other people, sometimes build houses, but few, if any, have ever founded cities or towns. The father of physic, indeed, enriched his native isle by attracting strangers thither for the benefit of his advice, but the Coan sage constructed no town out of the profits of his profession. Virgil is said to have written his own epitaph, part

of which ran thus: "MANTUA me genit—ROMA me fecit." If the far-famed Hippocrates of Warwickshire were to commence his epitaph with "LEAMINGTON me genit," the grateful town, had it as many tongues as it has tiles, would instantly respond—"JEPHSON me fecit," and thus interrupt the epitaph writer. But, however the final inscription may run, or whatever the doctor's contemporaries may think or say, it seems unquestionable that HE must have possessed no mean degree of skill and talent, who could convert grains of salt and steel into tons of gold and silver.

The medicinal springs of Leamington all lie within the range of a musket-shot from the bridge over the Leam. And yet their names have undergone such changes within a few years, that it took me a whole morning to decypher Dr. Loudon's account of them, published in 1831. The worthy and talented doctor enumerated them according to their ages, but fortunately annexed their localities, which enables the stranger to recognize them in despite of the changes in their titles. Passing over the little bridge that spans the almost stagnant Leam, and leaving two great spas on our right hand, we come to the "Old Well," or No. 1, the father of them all, and whose origin is shrouded in the mists of antiquity. It is in front of an old church, near the river, in Bath Street, and has two spouts or pumps—one on the outside, *pro bono publico*, the other inside of a little pump-room, for all who can afford to pay, either by the day, week, or month.

The water of this well presents (in the pint) the following ingredients:—

	Grains.
Sulphate of soda	40 $\frac{1}{3}$
Muriate of soda	40 $\frac{3}{4}$
Muriate of lime	20 $\frac{1}{2}$
Muriate of magnesia	3 $\frac{1}{4}$
Peroxide of iron	a trace.
And the same of iodine and bromine. ———	
Total	105

This pint also contains a small quantity of oxygen, half a cubic

inch of azote, two cubic inches of carbonic acid gas, but no sulphuretted hydrogen.

II. FORMERLY ABBOTT'S—NOW GOOLD'S.

This was discovered in 1784, and is situated a little farther on, on the opposite side of the same street, and to the south of the Bath Hotel. It is called "Goold's original Spa or Baths." When first sunk, it caused the water in its ancient neighbour (the Old Well) to subside several feet. Its contents, as might be expected are almost exactly the same as No. 1, except that it presents five or six grains more of common salt. Here the first baths were erected in Leamington, and are now in fair and respectable condition. It has a large Turkish bath, in addition to cold, warm, vapour, and shower-baths.

III. WISE'S, NOW CURTIS'S WELL.

This was sunk in 1790, and is situated at the corner of Bath Street and the Royal Parade. Its analysis, and that of the other two wells, was published by Dr. Lamb, then residing in Warwick, and tended to bring Leamington into more repute, though still local. Its constituents differ only from those of the others, in shewing less muriate of soda, by twenty grains—and more muriate of magnesia by the same quantity.

IV. ROBBIN'S WELL, NOW THE VICTORIA.

This was opened in 1804, and is one of the two grand pump-rooms on the banks of the Leam, and close to the bridge, but on the south side of it. It was now that a revolution took place in the Spas of Leamington. From being drunk at the original fonts, and as they issued from their subterranean reservoirs, they were then enclosed in buildings—pumps inserted into the natural wells

or fountains—the medicated streams foamed from silver cocks—and were distributed to invalids by the hands of fair priestesses of the respective temples of Hygeia.*

As the reputation of the springs rose, so did the number of houses and hotels. Two years after the opening of the VICTORIA, two other springs in the same locality—

V. AND VI.

READ'S, now LEE'S WELLS—sprang into existence—one a strong sulphureous—a second Harrogate water—the other a saline chalybeate.

ANALYSIS.

The SULPHUREOUS Spring shews better than three cubic inches of carbonic acid gas—and more than an inch of sulphuretted hydrogen gas in the pint. It contains 28 grains of sulphate of soda—25 muriate of soda—15 muriate of lime—9 muriate of magnesia—in all 79 grains in the pint. Its taste is not quite so nauseous as that of Harrogate; but it is much used both as baths and for drinking.

The SALINE neighbour shews $103\frac{1}{2}$ grains of solid matters in the pint, of which $30\frac{1}{2}$ are sulphate of soda—43 muriate of soda—18 muriate of lime—10 muriate of magnesia— $\frac{1}{3}$ of a grain per-oxide of iron. Its taste is unequivocally chalybeate.

Hitherto the medicinal springs were all confined to the Old Town, on the South side of the Leam. In 1808, a spring was found on the North bank, exactly opposite to the Victoria, to which the name of

VII. OR “ROYAL SPA,”

was given, and over it was erected an elegant pump-room, with

* This well contains ten or twelve grains less of sulphate of soda (viz. 28 grains in the pint) than the original well, but presents no other differences worth notice.

extensive suites of baths—and a large piece of ground for promenades, music, &c. This spa also presents two springs—one sulphureous (weak), and the other saline chalybeate. The SULPHUREOUS only contains fifteen grains of solid matters in the pint, of which six are sulphate of soda—five muriate of soda—three muriate of lime. The sulphuretted hydrogen gas amounts to one cubic inch and a fraction. The taste, or rather the flavour, is, however, decidedly sulphureous—the taste very weak.

The SALINE Chalybeate Well here is the strongest in Leamington, affording 136 grains of solid matters in the pint. Of these, thirty-two are sulphate of soda—sixty-seven muriate of soda—twenty muriate of lime—twelve muriate of magnesia—one grain nearly of peroxide of iron—three cubic inches of carbonic acid gas. This is the Spa that appears to attract the greatest number of drinkers—partly from the strength of the saline chalybeate—partly, from the size of the pump-room—and partly for the pleasure-grounds and music.

But it was in 1819, that the good fortune of Leamington was supposed to have been consummated by the discovery of three springs in Clemens Street, close to the Royal Parade—one chalybeate—one pure saline—and one sulphureous. The chalybeate was found to contain the enormous quantity of eight and a-half grains of peroxide of iron in the pint, held in solution by silica!!! The imperial gallon of this water contained $1,085\frac{1}{2}$ grains of solid matters—of which 274 were sulphate of soda—442 muriate of soda—200 muriate of lime—31 muriate of magnesia—silica 68—peroxide of iron 68 grains!

We anxiously directed our steps to this wonderful spring; but what was our astonishment to find it closed up—as we were informed, for two or three years past. No one could tell us how or why. The “IMPERIAL FOUNT,” as it was termed, and as is still written up on the house—had vanished into air, or gone back to its hidden source in the earth! After puzzling our brains for a good while, the solution of the enigma suddenly burst on our mind. It was Dr. Jephson’s powerful MAGNET that had drawn the steel out of the Imperial Fount—and hence the “MAGNETIC IRON” which he has so freely prescribed for many years past.

The alteration which even ten or a dozen of years have produced in Leamington, is absolutely astonishing ! A new town—JEPHS-TOWN, it ought to be called—has spread up from the lazy Leam, in parades, crescents, and elegant streets, till they have enclosed the mansion of their architect, which used to stand alone in its glory. The place, however, is overbuilt—and for this good reason, that its prosperity and increase of visitors do not rest so much on the efficacy of its waters as on the reputation of its MAGNUS APOLLO. Let the SUN withdraw his beams, and Leamington will experience a sad falling off !

Still, it must be acknowledged that the waters of Leamington are powerfully remedial agents, and are formidable rivals of those at the far-famed Cheltenham. They may be taken with perfect safety at all seasons of the year, though the most usual period is from the beginning of May till the end of October—on account of the auxiliaries which air and exercise bring to the spas. The best time for taking the waters is before breakfast—and next to that about noon.

THE SALINE SPRINGS.

Some preparatory steps ought to be taken, both in respect to aperient medicine, and the reduction of vascular fullness when any such exists.

“ The preparatory steps being premised, a common pint of the water may be taken ; one half about seven o'clock in the morning, on an empty stomach ; the other in about twenty minutes afterwards ; walking exercise being used between the first and second part of the dose, and after both have been taken. For children of twelve years of age, one-half of this quantity will be sufficient ; for those of six, one-fourth. Under the age of six, they should scarcely ever be employed.

“ The immediate effects of the saline waters, when taken internally, in aperient doses, are of three kinds. Either they produce an increased action of the kidneys, or bring on nausea, sickness, headache, flushings of the face, distention of the stomach,

determination to the head, and other disagreeable symptoms ; or, finally and most frequently, they act on the bowels without inducing any of these signs. In the first case, they require only to be increased in the dose, to produce the aperient effect ; while, in the second case, their use is not prohibited by the unfavourable effects arising from their employment, unless the remedies resorted to for removing them should prove ineffectual. The second class of symptoms frequently supervene from a deranged state of the alimentary canal ; and by a little attention to the digestive organs, and to the dissipation of the gases, may be avoided. When they pass off by the kidneys, their use may always be regarded as pretty safe, and their action as salutary."—*Loudon*.

The saline waters of Leamington are most frequently resorted to for affections of the digestive organs, and where aperient effects are desired and desirable. Also, in several external diseases, as chronic ophthalmia—ulcerations—and some cutaneous complaints, for which, however, the sulphureous waters are more adapted.

"The saline waters of Leamington are also entitled to great regard as alterative agents ; by which is meant a class of substances that possess the power of gradually improving the condition of the system without affecting the patient very sensibly at the time they are taken. The minute division of the ingredients affording a very easy entrance for the particles into the vascular system, necessarily renders their influence very extensive over every tissue of which the animal frame is composed ; and that this absorbent action does take place there can be little doubt, from the diuretic power which they possess. It is thus, chiefly, that the saline waters are so much celebrated for those disorders, which, in their first and most inflammatory state, affect the whole system ; and which, afterwards, leave a weakness and loss of motion, with transient pains, and other adynamic symptoms in the limbs. In these affections, however, of which gout and rheumatism may be adduced as examples, no patient should venture on the internal use of the class of remedies under consideration, until every discernible sign of the active state of the gouty and rheumatic diathesis shall have completely subsided. Nor should a slight exacerbation of the disease, more especially of the gout,

induce the patient to abandon the use of the water. Such a consequence is an occasional occurrence, and it has, with some propriety, been referred to the stimulating properties of the muriates. It will be prudent, therefore, to suspend the use of the springs during the attack, and to resume them at some after period, when these symptoms have passed away."—*Loudon*.

Dr. Loudon considers these saline waters as extremely useful in cachexy—strumous swellings—abdominal tumefactions—mesenteric disease—white swellings—spinal affections, &c. not from any specific powers or qualities of the waters, but from their alterative effects and improvement of the general health.

"Mild as the saline waters usually are, an indiscriminate use of them, like the abuse of every other medicine, proves very hurtful to the constitution. When repeated too often, a febrile state is induced by the application of the saline particles to the mucous membrane of the intestine, which, by withdrawing at the same time a quantity of fluid from the general circulating mass, is followed by a diminution of the vital functions, an effect which, it is evident, in enfeebled constitutions, it is of the greatest importance to avoid. Not less frequently do the harassing and painful symptoms of hemorrhoids follow the immoderate use of the waters. When employed in drastic doses, diarrhœas, of the most troublesome nature, frequently supervene; more especially in habits of a peculiarly irritable nature."—*Loudon*.

SULPHUR SPRINGS.

These waters are taken in the same doses, and in the same manner as the salines; but as the taste is not very agreeable, some peppermint or cinnamon water is often used with them. The palate, however, soon gets reconciled to them.

"When the sulphureous waters are likely to be serviceable, they excite, immediately after they are taken, no very particular sensation of any kind. On the other hand, when they sit unpleasantly on the stomach, occasion head-ache, dryness of the tongue and fauces; or sickness, and do not pass off by perspiration, or excite

some of the excretions, their operation may be looked upon as unfavourable; and they ought, after the auxiliary means have been fairly tried, to be discontinued."—*Loudon*.

Dr. Loudon advises that heat should hardly ever be applied to the sulphur waters, as the gases are thereby dissipated, and much of their virtues lost. When they are found to be too strong for the stomach, some hot saline water should be added, and the mixture drunk immediately off. We recommend the following passage to the attention of our *Anglo-Germanic* spa-doctors who are horror stricken at the idea of any medicinal auxiliary to a mineral water. The fact is, that most of these pharmaco-phobists know extremely little of the practice of medicine.

"In almost every case for which the sulphureous wells are resorted to, the preparatory plan, pointed out for the saline water, is necessary. In order, also, to produce the full effect, it will be proper, in numerous complaints, to assist the waters by some medicine calculated to act as an adjuvant during the whole period of the course. Not unfrequently it happens, with regard to the sulphureous waters, as well as the others, that, instead of the aperient effect which they are all primarily calculated to produce, there is, simply, a fluid discharge from the intestines; which, by being deceitful to the patient himself, at the same time leaves the cause of the disease lurking in the constitution. If the object be to evacuate completely the contents of the alimentary canal, recourse is frequently had to a quantity of the prepared salts.* But, valuable as these are as laxatives to obtain a free expulsion of the contents of the bowels, some more active aperient medicine must be substituted. Nor should it be forgotten, that in every ailment there is usually more than one indication to fulfil, towards effecting the recovery of the patient; and hence, in a variety of cases, arises the advantage of combining a suitable auxiliary treatment along with the water, by means of which the disease may

* "The salts, however, dissolved in water, are an excellent substitute for the springs. They are prepared at Mr. Smith's Establishment, in Bath-street, and sold by him, and at the different Chemists in Leamington; and in London, at Messrs. Barclay and Son's, Fleet-market."

be cut short in a much less period of time than if the mineral fluid was simply employed.”—*Loudon*.

An alternation of the sulphureous, with the saline or chalybeate waters is recommended by Dr. Loudon. In cutaneous complaints, these waters require to be continued, both internally and externally, much longer than the others.

“ The sulphureous waters are contra-indicated in *acne rosacea* and *punctata*. When employed as purgatives, they are also, in large doses, improper in old people with leuco-phlegmatic habits ; for, as in the previous kind of water, by diminishing the quantity of fluids from the circulating mass, emaciation, low spirits, general debility and dropsy, may succeed. In very large doses they produce emesis similarly to the saline and the chalybeate.”—*Loudon*.

CHALYBEATE SPRING.

Dr. Loudon makes many judicious observations on the use and abuse of the Chalybeate Spring at Leamington ; but as this well is shut up, and as I have introduced sufficient remarks on the action of chalybeates already in this article, I shall pass over this chapter, with the exception of the following short passage.

“ Although, generally speaking, before commencing the saline and sulphureous waters, it is advisable, in the greater number of cases, that the bowels should be regulated by some suitable medicine, this preparatory step is more particularly called for previous to a course of the chalybeate water. The astringent effect which the iron spring possesses, is apt, now and then, to produce a much less aperient action on the bowels, than the composition of the spring would lead to infer ; and hence, for the same reason, it is necessary to continue some aperient medicine during the whole course of the water.”—*Loudon*.

Leamington, as we before observed, is well supplied with bathing establishments of every description. It is a quiet—we had almost said a very dull place : but the vicinity, especially Kennilworth, Warwick Castle, &c. afford agreeable and interesting excursions. Leamington is an aristocratic watering-place, and, as such, will

be preferred by that class of society to Cheltenham, which, like Brighton, has become strongly tinctured with democracy.

“ The importance of Leamington, as a watering-place, may be inferred from the extreme rapidity with which it has risen from obscurity to be a town of such considerable magnitude. This has, with some degree of justice, been attributed to the number, variety, and abundance of its mineral streams. Having eleven different wells, and uniting, in a single spot, waters similar to those of Harrogate, Tunbridge, and Cheltenham, the sick are neither necessitated to wander about from place to place, seeking that which is most applicable to the complaint under which they labour, nor obliged to add foreign ingredients to increase their powers.”—*Loudon.*

Considering, however, that Dr. Loudon's favourite spring, the Strong Chalybeate, is shut up, and that, at Harrogate there are two, and at Cheltenham one very good chalybeate, the exclusive advantages of Leamington cannot, without partiality, be maintained.

CHELTEHAM.

WHO is not as familiar with the name of CHELTENHAM, as with that of the street in which he resides? What man, woman, or child, in Great Britain or in any of her colonies, has not heard of No. 4? What planter in the Antilles, who had ever chewed a sugar-cane, flogged a nigger, or swilled sangaree, has not repaired to “No. 4,” in the hope of washing out the bile from his liver, and all record of Wilberforce from his memory? What NABOB of the East, who had eaten curry till his skin was as yellow as a star pagoda, did not ply “No. 4,” on his return, in order to expel the mulligatawney from his complexion? What Alderman who had gobbled green fat and callipee till his abdomen outmeasured a huge turtle, does not “clear out,” at “No. 4,” preparatory to the

re-shipment of a new cargo? In fine, every individual, old or young, in this country or our dependencies, who keeps an eye to No. ONE, must keep the other eye on "No. 4," at Cheltenham,—if he mean to live long, feed well, and sleep soundly. And yet "No. 4" is nearly *no more!* A new NAIAD has opened a shop within a short distance of the old Hygeian Goddess, and entitles herself "No. 4, A." running away with three-fourths of the custom from her ancient neighbour.

Cheltenham, in my opinion, is one of the cleanest, most cheerful, and handsome provincial towns in England, or in Europe. It is sheltered and nearly surrounded by moderate hills, cultivated to their summits, and presenting a most picturesque panorama from the cupola of the Pittville Pump-room. It has been bruited that the reputation of the waters has declined. The rapid increase of the population from 23 thousand, in 1831—to 35 thousand in 1841, would seem to negative this report.

"The principal thoroughfare from the High-street is the Colonnade, which leads to one of the most beautiful promenades in Europe, at the extremity of which is the Queen's Hotel, a majestic building, and, as an establishment, stands without a rival. On this spot formerly stood the Sherborne Spa. Around this neighbourhood are some of the most lovely and delightful rides and walks in the kingdom. These embowering shades and pendant woods, form an enchanting retreat during the Summer months, and are the general resort of all the rank, beauty, and fashion of Cheltenham, where

' From Courts and Senates each may find repose.'

"The Promenade Terrace is much admired for its elegant and classic design. An opening from the Terrace conducts the visitor to the entrance of the Old Wells, as well as to the Bay's Hill Estate. The stately avenue of Elms, planted in 1739, and now in the pride of luxuriant foliage, are here seen to the greatest advantage. They are justly the theme of admiration; and contribute, in no small degree, to the beauty of the landscape. It is in visiting such enchanting scenes as these that

‘ The smiling God is seen ; while water, earth,
And air attest His bounty.’ ”

The streets, terraces, crescents, villas, and parks are now rapidly stretching away towards the Cotswold Hills, which they will probably one day climb, in pursuit of cool air.

The Springs of Cheltenham are numerous ; but they are easily traced—not indeed to their sources, but to their exits in the various pump-rooms. Many acres of the rising grounds about Lansdowne Crescent are *mined*, as it were, and the waters conveyed for more than a mile by subterranean conduits to the Montpellier Rotunda and the Laboratory of Mr. Thompson, for the preparation of Cheltenham Salts. Into some of these medicinal mines we descended, and saw the genuine waters gushing into the wells at a depth of 40 to 80 or 100 feet, and thence gliding away to their respective destinations, for the benefit of mankind. How different the results of these hygeian mines from those which disgorge their gold and silver for the corruption of the human race !

“ Effodiuntur opes irritamenta malorum.”

But we must glance at the Spas themselves.

THE OLD WELL.

This ancient spa, (at which our good old GEORGE the THIRD quaffed,) together with its magnificent avenue of elms, is sorely eclipsed by its more modern neighbour, the MONTPELLIER, and nearly left alone in all its glory ! The contents of a pint are as follows :—

	Grains.
Muriate of soda	58—20
Muriate of lime	6—21
Muriate of magnesia	2—54
Sulphate of soda	14—56
Total ..	81—51

There is a very small proportion of carbonate of iron in this well. At this spa there is also a

"STRONG CHALYBEATE SALINE."

	Grains.
Muriate of soda	17—60
Muriate of lime	3— 0
Muriate of magnesia	3—30
Sulphate of soda	43—20
Carbonate of iron a large quantity.	————
Total	67—18

The Old "No. 4," of the Old Well contains :—

	Grains.
Muriate of soda	47—0
Muriate of lime	4—0
Muriate of magnesia	7— $\frac{1}{2}$
Sulphate of soda	59—0
Total	117— $\frac{1}{2}$

This also contains some iron. It is evidently a most valuable water, however eclipsed by its new neighbour.

The Old Wells also present sulphuretted salines, which need not be noticed.

SALINE CHALYBEATE.—(No. 1. Montpellier.)

	Grains.
Sulphate of soda	14—7
Sulphate of lime	1—3
Sulphate of magnesia	4—0
Muriate of soda	27—0
Bicarb. of soda	1—1
Oxide of iron	0— $\frac{1}{3}$
Carbonic acid gas $2\frac{1}{2}$ cubic inches.	————
Total	48—4

This is evidently an excellent saline chalybeate, since the aperient salts and muriate of soda must check the bad effects of iron, in inflammatory habits.

SULPHURETTED SALINE.—(No. 2, at the Montpellier.)

Gaseous Contents, 1.6 cubic inch of sulphuretted hydrogen.

SALINE CONTENTS.

	Grains.
Muriate of soda	35—3
Sulphate of soda	28—4
Sulphate of magnesia	7—2
Sulphate of lime	3—1
Oxide of iron	0—4
Hydriod. of soda	0—15
Total	74—57

The next saline (No. 3) at the Montpellier is merely a weaker one than No. 2.

No. 4, or PURE SALINE.—(Montpellier.)

This was long the lion of the Spas at Cheltenham—and is still a very valuable water.

COMPOSITION.

One and four-tenths of a cubic inch of carbonic acid.

	Grains.
Muriate of soda	52—4
Sulphate of magnesia	14—2
Sulphate of soda	17—2
Bicarb. soda	1—2
Sulphate of lime	2—7
Carbonate of lime and of magnesia ..	1—1
A trace of hydriodate of soda.	
Total	88—0

No 4, A., or the reigning favourite at the Montpellier Wells.

“IODURETTED SALINE.”

COMPOSITION.

Carbonic acid 1.6 cub. inch. A trace of sulphuretted hydrogen.

	Grains.
Muriate of soda	51—4
Muriate of lime	8—3
Muriate of magnesia	7—3
Sulphate of soda	14—0
Sulphate of magnesia	17—1
Sulphate of lime	2—1
Bicarb. soda	2—4
Carb. of lime and carb. of magnesia ..	3—2
Hydriodate of soda.. .. .	0—25
Total	106—25

It will be seen that this water contains the same quantity of aperient salts (both sulphates and muriates) as No. 4, besides a larger quantity of lime, and $7\frac{1}{2}$ grains of muriate of magnesia. The iodine, too, is in much larger quantity than in No. 4. It is not without reason, therefore, that it is more generally taken than any of the other waters here.

There are two other pumps here in the Rotunda, No. 5 and No. 6—the former called “THE CHALYBEATED SALINE,” and contains 47 grains of sulphate of magnesia—ten of muriate of magnesia—and only nine of muriate of soda—with nearly half a grain of oxide of iron, with some iodine and bromine.

The other (No. 6) shews a large proportion of muriate of soda (59 grs.) with $4\frac{1}{2}$ grs. of muriate of magnesia, and only twelve grains of sulphate of soda. It is called the “MURIATED SALINE.”

There is also a “CHALYBEATE” at Thompson’s Laboratory, containing one-third of a grain of oxide of iron in the pint, with various salines, and about half a cubic inch of sulphuretted hydrogen gas, which keeps the iron at the *minimum* of oxidation.

CAMBRAY WELLS.

Not far from the Montpellier Gardens, at the southern end of Rodney Terrace, are two wells, called the "CAMBRAY WELLS"—one the "ORIGINAL CHALYBEATE," containing nearly a grain of carbonate of iron in the pint, with about seven grains of saline matters—two grains of muriate of lime and magnesia—three of sulphate and muriate of soda—one of lime—and one of magnesia. This may, therefore, be considered as nearly a pure chalybeate, and shews three cubic inches of carbonic acid gas in the pint.

"THE PURE SALINE"—(Cambray,)

Contains 77 grains of saline in the pint, viz.—

51 Muriate of soda.

8½ Muriate of lime.

17 Sulph. sodæ.

A mere trace of iron.

PITTVILLE WATERS.

Descending to the High Street from the Old Wells, Montpellier, and Cambray, we ascend on the opposite side of the town, full half a mile, to one of the most magnificent pump-rooms in Europe, with gardens, ponds, shrubberies, and a lofty dome, from which a splendid panorama bursts on the eye, bounded by the beautiful Cottswold Hills. Here are three springs—a strong and a weak saline, together with a sulphuretted saline. The latter has not been yet analyzed. Both of the former, however, are very weak. The stronger contains only 46 grains of saline matters in the pint—viz. sulphate of soda, 17 grains—muriate of soda, 27 grains—with hardly anything else.

The weak saline shews 7 grains of sulphuric acid—26 chlorine—17 sodium—3 soda—1 gr. lime.

Thus then we see that there is a great variety of medicinal waters at this place—enough indeed to answer almost every indi-

cation. We have heard that the waters are found to vary occasionally, in some of their sensible qualities, especially the taste ; but we have no proof, or even presumption, that their chemical constituents undergo any material variation in consequence of time or season. Much less do we give any credence to the absurd and scandalous tale about cart-loads of Epsom salts being weekly imported for the supply of the springs, or rather of the laboratory for making the Cheltenham salts.

The last time I visited Cheltenham (Aug. 1841) I observed that a general impression prevailed there that Dr. Granville had depreciated the waters. I must candidly say that, a perusal of his work has not led me to any such conclusion. He avers, indeed, that the waters of Cheltenham will not cure all diseases—and that they are not proper in the acute or active stage of any disease. These are truths which will apply to any or all of the most celebrated waters of Germany, or any other country. Dr. Granville admits (a most remarkable admission on his part) that MEDICINES are not only useful, but absolutely necessary, in those diseases for the cure of which Cheltenham is renowned ; and that in the good old days of his early practice, patients were only sent to Cheltenham when they were convalescent, and when the London or provincial doctor found that he could do no more.

“ I would illustrate my position by a single example taken from what, in our days, may be considered as an almost every-day occurrence in medical practice. There was a time, say twenty years ago, when a patient labouring under extensive disease of the liver, commonly so called, and no matter how produced, whether by a residence in a tropical climate, or from sedentary life and anxiety of mind, or through frequent imprudence committed at the table, would first undergo that suitable treatment under a skilful physician, which sooner or later, and *alone*, does successfully overcome this class of disorders. But inasmuch as even the skilful physician and the most appropriate treatment could not do all in such cases ; and as after having cancelled the positive disease by remedies, the medical attendant often found it difficult, if not impossible, to restore by the ordinary means the

constitution to its normal state—a thing only to be obtained through the agency of such chemical combinations as were found ready at hand in the Cheltenham waters; our patient was generally recommended to go thither, where he seldom failed to complete his recovery in the short space of four or six weeks. Vast numbers of cases of this description have come to my knowledge.

“Of late years, however, as I before remarked, a patient under similar circumstances would not think it necessary to submit his case to any preliminary treatment, but would at once proceed to Cheltenham. Your sickly, jaundiced, and deeply-damaged orientals, on their return from their baneful Presidencies to England, will frequently act in this way, and when once at Cheltenham, will instantly begin their own cure by means of the water, and the water principally,—in the expected good effects of which, however, they are disappointed. How could it be otherwise? Failure indeed might have been expected; for the Cheltenham water *per se* is incapable of curing any disorders (except indeed some slight cases of indigestion,) though admirably calculated to assist in completing the cure of almost every disease and functional malady of the organs of digestion.

“Viewed in this light, Cheltenham offers an immense resource to the medical practitioner; and thus recommended to invalids and convalescents, Cheltenham may be certain of a constant and vast concourse of visitors, who will there find what they require—health—and will be pleased and praise Cheltenham accordingly.”

I believe, however, that very few invalids from tropical or other climates proceed to Cheltenham, without consulting some physician before they go there, and without acting under the direction of a medical man on the spot. I presume that the physicians of Cheltenham are quite capable of prescribing remedies as well as waters.

The PLUMBO-PUMPO-PHOBIA I have already disposed of in the Harrogate part of this work. The disease haunts Dr. Granville wherever he goes. The sight of six cocks in the Montpellier Rotunda nearly sets him into hysterics, and when he gets his breath, he exclaims—

“Now all this display calls largely upon the faith and credulity

of the bibbers. It is not thus that matters are managed in Germany; for there the *good, honest, and unsophisticated people of the country* could not be persuaded to swallow *a single drop of any water which should be presented to them in so mysterious a manner, or the source of which they could not plainly see.* Here, on the contrary, I firmly believe, that were the enumeration of the taps or spouts to be carried out to three figures of numbers, there would be found people enough to drink, and feel convinced at the same time that they drank different waters."

Indeed! What! has Dr. Granville, in all his peregrinations, never visited the FONTAINE ELYSÉE at Aix-la-Chapelle, where the waters are delivered by two cocks to thousands and thousands annually of eager bibbers ("good, honest, and unsophisticated people") who never did, and never will see the "source" of the medicinal springs? These waters run a considerable way from their sources, through the dreaded and denounced "pipes," which Dr. Granville kindly overlooks, although they are in Germany! And in what way could the valuable waters of Cheltenham be raised from a depth of 50 to 100 feet, but by pumps? In what way could they be transported from Lansdowne Road to the Laboratory, or to the Rotunda, but by pipes? Would Dr. Granville leave them to lie on their beds of Lias to the end of time, rather than employ a pipe or a pump to bring them within the reach of suffering mortals? And what does he dread? A nonentity! Dr. Christison has shewn that lead cannot exist in saline waters. I suspect that we shall hear no more of the "PLUMBO-PUMPO-PHOBIA."

"Upon mature and deliberate reflection I hold that at the Montpellier Rotunda, the invalid who is sent to Cheltenham to drink its peculiar mineral water, will find it in perfection by using the old No. 4; or even 5, where a small quantity of iron added to the saline, is not incompatible with his complaint."

It is the poor "CAMBRAY CHALYBEATE" that has found least favour in the Doctor's eyes, because it is not as pregnant with carbonic acid gas as the Bocklet or Bruckenau; and yet it contains twice as much of that sparkling gas as any other spa at Cheltenham.

“ But to render it a paramount source of general patronage and important results, like the chalybeates in Germany, it should, like them, be sparkling with a profusion of carbonic-acid gas, instead of lying, as it does, flat and stale at its source, with its heavy mineral.”

Steel, however, though held in solution by a very moderate amount of carbonic acid, often proves extremely useful. Nay, where it is not in solution at all—for instance the carbonate—its medicinal efficacy is proved by the experience of mankind in all countries. The Cambray Chalybeate is not to be despised because it contains only three cubic inches of carbonic acid gas in the pint.

The Cheltenham waters may be ranged or classed under three heads—the Saline—the Sulphureous—and the Chalybeate. They all contain saline matters, and all exhibit carbonic acid gas. It must have been observed, on looking over the analyses, that muriate of soda is at the head of the saline ingredients—and next to that are the sulphates of soda, and of magnesia. Though they present several other substances, it is to the above that they owe their virtues. The purest salines are Nos. 1 and 4, at the Old Well—No. 4, at the Montpellier—and the waters of Pittville and Cambray.

These, therefore, are the waters most used in all ordinary cases of disordered stomach, liver, or bowels—in dyspepsia, nephritic complaints, dropsical affections, uterine irregularities—and in some cases of gout and rheumatism. These saline waters open all the secretions, as well as the bowels, and thus prove eminently *alterative*. Where it is judged prudent to combine with these waters a light tonic, the No. 4, A. of the Montpellier answers the purpose well.

Of the sulphureous waters I shall not say much, as they certainly appeared to me much less malodorous than those of Harrogate, or even of Leamington. The Cheltenham physicians, however, maintain that these springs, especially No. 5, at the Old Well, and No. 2, at the Montpellier, are little if at all inferior to the waters of Harrogate.

“ Many persons have been inclined to doubt their efficacy, from

the circumstance of their saline ingredients depriving them of the strong sulphureous taste and smell possessed by the waters of Harrogate; but this is a mistake which experience will correct, and to all those afflicted by cutaneous diseases, scrofula in its various forms, ulcers, rheumatism, gout, hæmorrhoids, worms, &c. and many female complaints, we can confidently recommend these waters as a very valuable remedy, when taken as directed under the several heads of these diseases; in many cases they will effect a complete cure, and in almost all they will afford sensible relief. They do not act particularly upon the stomach or bowels, or at least it is in a very gentle manner; but they act very sensibly on the skin, kidneys, and lungs."

The above is stated by an anonymous physician, but I am privately informed that the writer was a man of talent and integrity, who had much local knowledge of the waters.

The same authority avers that the chalybeates, especially that of the Cambray Spa, are not inferior in efficacy, in those cases where they are indicated, to any chalybeates in England—"not even to those of Tunbridge."

"In female complaints especially they are of infinite service in restoring suspended or perverted function, and in generally strengthening the system. In most of the forms of scrofula they are highly valuable; and, in many instances, in convalescence from diseases which have left great debility, a course of these waters is extremely useful; and in many cases they are indicated after one or two courses of the saline or sulphureous waters; but in proportion as the chalybeate waters are beneficial in those cases to which they are adapted, so are they prejudicial if improperly and incautiously taken, and may produce the very worst effects. They never should be had recourse to but under medical advice, as it is impossible for any other than a medical man to judge in what cases and constitutions they may be useful or prejudicial. As a general remark it may be observed that they seldom or ever agree with persons of active circulation, florid complexion, and sanguine temperament; or persons subject to cough, spitting of blood, determination of blood to the head, &c.; but are well adapted to cold and phlegmatic habits, where there is languid

circulation, torpor of the system, &c., whenever they produce headache, flushings of the countenance, giddiness, &c. their use should immediately be discontinued. The strongest chalybeates at Cheltenham are those of the Cambray Spa, and at the Montpellier Laboratory; and are therefore best adapted for cases in which the use of steel medicines are clearly indicated, and female complaints attended by great debility, scrofula, those cases of dyspepsia in which tonics are indicated, many nervous affections, convalescence from diseases, &c. The saline chalybeate, such as No. 1, at the Montpellier Spa, and No. 3, at the Old Wells, will be found very serviceable in those cases where it is necessary to conjoin gentle purgatives with steel medicines."

The Cheltenham waters may be taken at any period of the year, when the weather is mild; but when taken as means of prevention, from the middle of March till the end of October is the best season. But, in every case, medical advice should be taken on the spot, before the course is commenced.

" In all cases where they are had recourse to, it is absolutely necessary to premise one or two doses of *medicine* of some kind, for if the stomach and bowels are loaded at the time of their commencement, they will not act, and will be sure to disagree; the choice of the medicine will depend upon the circumstances of the case, and the constitution of the patient; in general a calomel pill of three, four, or five grains at bedtime, with a black draught the following morning, or simply, pills of calomel and colocynth at bedtime will suffice.

" The *saline* and *sulphureous* waters should be always taken in the morning, fasting, and in such quantities or with such adjuncts as will ensure a proper effect upon the bowels; for when this does not take place, a sense of fulness, distention and swelling will be felt, with flushings of the face, drowsiness, head-ache, &c. The quantity usually taken is from one to two pints. It is generally requisite to add to the first glass, sometimes to both or all, a small quantity of what is termed *solution*, (which is the water concentrated by evaporation;) this is done at the discretion of the Pumper, and frequently in cases of great torpor of the alimentary canal even this is not found sufficient, and it becomes requisite

to take a pill every or every alternate night on going to bed. These waters should be taken *early* in the morning ; formerly, when Cheltenham was less a place of fashionable resort than it is at present, the waters used to be drank as early as six, or at the latest seven o'clock in the morning ; *now* it is no uncommon thing to see the lazy votary of fashion and the pale-faced victim of the last night's ball crawl to the well to take their *first* glass at nine or even half-past, but this is not doing justice to themselves or to the waters ; the most proper hours for drinking them are undoubtedly from seven to nine in the morning. Two or three half-pint glasses, or sometimes ten or twelve ounce glasses, according to circumstances, are taken, allowing an interval of about twenty minutes between each glass ; and a full hour should be allowed to intervene between the *last* and breakfast ; the whole of which time may be very agreeably spent in the walk, and in listening to the excellent music which is to be heard at most of the Spas. Some persons find that they cannot walk immediately after taking the waters without a feeling of giddiness ; those persons should sit down for a quarter of an hour afterwards, during which the tendency would subside."—*Anonymous*.

The chalybeates here, as at other spas, may be taken at all times of the day—beginning with a morning dose, and repeating it afterwards, once or twice in the day. Simplicity in food, early hours, abstinence from fruit and vegetables, and regular exercise, are no mean auxiliaries to the waters. The internal use of all the mineral waters at Cheltenham is beneficially attended by a warm bath once or twice a week. There is excellent accommodation, in this respect, at Mr. Thompson's Establishment adjoining the Laboratory, in Bath Street. The following quotation contains judicious advice.

" Before proceeding to speak of the *special diseases* in which the Cheltenham waters have been found beneficial, it may be advisable to say a few words on a state of the system very commonly prevailing, and which, although not amounting to actual disease, inevitably, if neglected, lays the foundation of serious organic and functional affections, and is the fruitful source of acute suffering and premature decay of the vital powers ; but which, if

attended to in time, is very easily overcome, and in which two or three courses of the Cheltenham waters very seldom fail to effect a cure. We allude to a state of *mal-aise*, which usually commences with, or has its foundation in, *constipation of the bowels*; the bowels act perhaps daily, or once in two days, but not sufficiently; after the evacuations have for some time been defective in quantity, the *quality* of those likewise becomes altered; they are too dark or too light in colour, or they are mixed with mucus, frequently in small white threads, resembling worms; after this has continued for some time, listlessness and languor is felt, especially in a morning; the appetite fails; head-aches are occasionally, in some cases frequently, troublesome, and the patient feels universally out of order, without being able to say that he has anything in particular the matter with him. If this state is neglected, it will lay the foundation of obstinate dyspepsia, of disease of the liver, or of the mucous membrane of the stomach and bowels, according to the constitution of the individual; but if judiciously treated in its commencement, and whilst the disorder is simply one of *function*, it will very readily yield to remedies.

“ In these cases the patient should, in the first instance, take at bedtime, a three, four, or five grain calomel pill, according to the age and sex of the individual, followed the next morning by a black draught of salts and senna; the morning after this a course of the waters may be commenced. In these cases we should give the preference to the *pure saline*, taking from sixteen to twenty ounces every morning, with or without *solution*, according to its effects on the bowels: two or three evacuations should be produced every day; and in order to insure the evacuation of the solid as well as the watery contents of the bowels, it is very desirable every *second* night during the *first*, and perhaps the *second* course of the water, to take a pill composed of five grains of the compound extract of colocynth, with three, four, or five of the blue-pill, and where there are any reasons why the blue-pill is inadmissible, the compound extract of colocynth may be taken alone, or combined with three or four grains of Castile soap. The number of courses of the water required to restore the functions to their natural state will depend upon the time the disorder

has lasted ; when it has been of short continuance—one course of three weeks, or two of a fortnight each, may suffice ; but frequently a third course may be necessary, and even a repetition of them the succeeding Autumn or Spring may be advisable ; and in some persons the tendency to functional disorder of the stomach and bowels is so inveterate, that an annual course of the waters, nay, in some cases one or two courses each Spring and Autumn, is absolutely necessary to keep the system in any thing like order. Nor let the invalid in whose case this may be necessary complain, if he possesses the means of visiting this favoured spot ; rather should he rejoice that Nature has provided such a pleasant and health-restoring beverage, which not only preserves him in a state of comfort, and allows him the enjoyment of the blessings of this life, but also does away with the necessity for drenching his stomach with drastic purgatives, tonic bitters, carminatives, and the endless list of medicines to which a dyspeptic invalid has recourse for a temporary alleviation of his sufferings, and in lieu of them imposes upon him the pleasure of an annual visit or two to one of the most delightful watering-places in the world, where every thing is combined that can heal the body, soothe the mind, delight the eye, and amend the heart.”

The aperient qualities of the Cheltenham waters—especially the pure saline—render them admissible in cases of plethora, or even local congestion, where the generality of other spas containing exciting ingredients, would be dangerous.

“ There is another state of the system, not amounting to actual disease, in which a spring or autumnal course, annually, of the Cheltenham waters, is strikingly useful in preserving the balance of health, and warding off serious disorders ; we mean that state of *plethora* to which many persons of stout make and full habit are liable. This affection is of *two* kinds : viz. *absolute* plethora, or general fulness of blood, which occurs commonly in persons of robust habits, florid complexion, full pulse, good appetite, and rather constipated habit of bowels. These cases are not only completely relieved by one or two full courses of the waters, but as there is in these persons a tendency to make blood too rapidly, and in too large a quantity, local congestions, or determinations of

blood are prevented; and the absolute quantity of the mass of blood is diminished, by the saline qualities of the water acting copiously upon the exhalants of the bowels and carrying off the watery parts of the blood. When this habit of body prevails, an annual visit to Cheltenham is of essential importance, which, when joined to a moderate and rather spare diet, with regular exercise, will suffice to prevent the necessity of those frequent abstractions of blood, to which such invalids are but too apt to have recourse, and which, however necessary they sometimes may be, have an inevitable tendency to re-produce the necessity for their repetition. There is another state of *plethora* which has been termed *relative*, implying not that the *quantity* of the blood is absolutely too great, but that it is so relatively to the powers of the constitution for appropriating or disposing of it. In this case the deviation from health is very gradual, and at first excites but little attention; there is languor and debility, a chilly state of the surface of the body, cold feet, and very languid circulation; the internal and large blood-vessels having thus an unusual load thrown upon them, local congestion takes place; producing, according to the part affected, head-ache, difficulty of breathing, indigestion, constipation, pains in the stomach or bowels, and alternation of flushed and pale countenance, sometimes ulcers of the legs, &c. Indeed, if this state continues long, some *local ailment* is sure to arise. Persons not acquainted with the nature of this complaint; are apt to consider it as one of *pure debility*, consequently they take tonic medicines, full diet of beef-steaks and porter, port wine, &c., thus adding fuel to the disorder; whereas it must be treated, sometimes even by general or local bleeding, but always by a course of purgatives, for if in this state there is not costiveness of the bowels, there is *invariably* a very foul state of the secretions; those from the bowels are dark-coloured and offensive, and the urine is high-coloured and loaded. In these cases the Cheltenham saline water, aided by the colocynth and blue-pills, are sure to effect a cure—but they require great perseverance, two courses Spring and Autumn, for several successive seasons being frequently necessary before the system can be brought to its natural state. We are acquainted with several instances of both these forms of

plethora, where the subjects of them were in the habit of visiting Cheltenham at first twice, and now continue it regularly *once* a-year, and by this means keep themselves in perfect health ; when previously to being made acquainted with the virtues of these waters in such cases, they had been in the habit of losing large quantities of blood every year, besides taking quantities of drugs of various kinds, but the necessity for which is now by the regular use of these waters done away with."

It is for the Proteian forms of indigestion and biliary derangements, however, that the waters of Cheltenham are chiefly had recourse to. Cheltenham, in fact, forms a kind of valetudinarium for the tropical invalids, of both hemispheres, as well as for a numerous class of invalids who have never left the English shores, but whose digestive organs become impaired by sedentary habits, anxiety of mind, and the wear and tear of professional, commercial, and political pursuits. It is here, too, that we see hypochondriasis on a tolerably large scale. Speaking of the hepatic complaints which accumulate here from hot climates, the physician already quoted observes :—

" In these cases, especially, when they are the consequence of residence in a warm climate, a steady use of the Cheltenham waters for a considerable time, (at least two or three courses of three weeks each) and aided by the occasional remedies, will seldom fail to overcome the disorder. As usual it will be requisite to commence by one or two doses of purgative medicine. During the first course it will be desirable to take one of the colocynth and blue-pills every night, and sixteen or twenty ounces of the pure saline water every morning ; taking care, by the addition of solution if necessary, to ensure three or four evacuations from the bowels daily ; if there is progressive amendment, the pill may be taken every *second* night only during the second course, and the water may with great propriety and advantage be changed for the No. 4 A, of the Montpellier Spa. During the third course the pills may be omitted, and the last-mentioned water taken in such quantity as to produce at least two evacuations daily."—*Anonymous*.

PUMP-ROOM.

The fixed population of this thriving town consists almost entirely of a great JOINT-STOCK COMPANY for scouring complexions, and darning holes in the human constitution. Hence it is resorted to from all parts of the British dominions. It is a superb "house of recovery," or MAISON DE SANTÉ, for convalescents from the capital and the colonies—a splendid ESTABLISHMENT for killing TIME, and curing liver-complaints—for dispelling vapours, and drowning blue-devils! Here we find the miraculous pool of Bethesda, for cleansing lepers—nay, the wonder-working fountains of Hygeia, all numbered and labelled, for expurgating the four humours of the ancients, besides a great many other bad *humours* engendered among the moderns, and unknown, even by name, to our forefathers.

REVERIES.

Having often visited Cheltenham and other Hygeian springs in search of health or information, and having, from long experience and observation, acquired a kind of intuitive insight into the physical and sometimes the moral condition of invalids, I sometimes made notes of the various personages whom I saw at the Spas, and speculated on the real or fancied ills under which they laboured. Several of the following sketches were published by me in a little work, now many years out of print, and first ushered into the world under a fictitious name. Other notes and memoranda have been since added at various times and in various places; but I must protest against their being taken for anything more than reveries or waking dreams, while musing and meditating among the various Hygeian fountains of this and other fashionable sanatoria.

Mark that blanched and starched personage, with nankeen countenance, swilling goblet after goblet, of No. 4. It is a factor from Macao, endeavouring to wash away the taste of that cele-

brated leaf which he has *chewed* for twenty years (during each "season") at Canton, to guide the sales in Leadenhall-street, and direct the taste of Europe and America. It will be some time, I imagine, before these waters restore natural gusto to his tongue, and healthy tone to his nerves! He has wisely preferred the pump-room of Cheltenham to the Cave of Camoens at Macao—the triste conversation, even of hypochondriacs, to the pompous edicts of mandarins—the mutton of Cambria to the birds'-nest soup of the Philippines—the malt of old England to the samsoo of the Celestial Empire—the silver forks of his native land to the slippery chop-sticks of the Hong-merchants.

On the right of the SUPERCARGO, and equally thirsty of No. 4, behold the NABOB from Bengal, with mullicatawny complexion—double allowance of liver, but only half-ration of appetite—with full purse, but empty stomach—with high notions, but very low spirits! He has plucked the fruit of the blighted pagoda tree—and behold the withering effects! He has breathed the fiery atmosphere, and swallowed the pungent spices of the East, till he is as shrivelled as a mummy, and yellow as curry-powder! He sighed for his native land when he was on a foreign shore—and now he regrets the loss of Asiatic luxuries on a soil which he scarcely recognises as his own! This is one of the many miseries attendant upon a long expatriation from the land of our birth. Every one may hope, but few need *expect* to realize in the North those dreams of happiness which are engendered beneath a vertical sun in the South, after that luminary has rolled, for twenty or thirty years over his head, and shed its baleful influence over mind and body!

Who is that pale, melancholy, and musing figure, who paces the pump-room in muttering soliloquy? It is the disappointed politician, who has shattered his health in defence of rotten boroughs—or tampered with his own constitution while tinkering that of the state! Whether Whig or Tory, it is evident, from his soured looks, that he has lost his seat. But he is likely to be soon again *returned*—not indeed by the sheriff to the Commons' House of Parliament—but by the sexton, to that larger house of commons, where bribery and oratory will be of no avail.

Panting up the shady walk that leads to the Montpellier Spa, behold that moving mountain, with copper-coloured nose and protuberant abdomen. He is (or was) a rich boroughmonger, who is come to Cheltenham, hoping to dispose of *one particular corporation*, which has never made him any profitable returns, and is now become a dead weight on his hands!—*He* certainly has a right to “do as he likes with his own.”

In his wake, follows a tall, emaciated, sun-burnt invalid, with a most rueful countenance. And no wonder! His sugar-canes were suddenly, and by Act of Parliament, metamorphosed into sour-kROUT—his rum-puncheons into water-casks—and, worst of all, his niggers into neophytes!

Nothing could exhibit a greater contrast to the last than the succeeding sacrificer at this shrine of Hygeia! A portly lady slowly advanced, with benignity in her countenance, and benevolence in her heart. Her metamorphoses were very different from those of the poor Caribbean planter. Her billet-doux were changed into bank-notes—her farthings into crowns—and her crowns into coronets!

I was rather startled at seeing, close to me, a noted HIGHWAY-MAN—now so rare a character in this country. He was an old acquaintance of mine—had often thrown dust in my eyes—but never demanded my purse. I asked him, in reverie, what he was doing at the Spa? “Watering the roads,” said the merry man of granite, “and much need have my *primæ viæ* of a sprinkling from Thompson’s pumps.”

Sauntering slowly in one of the shady walks, my attention was rivetted on a thin and pallid personage, with a most singular countenance, in which there was a strong expression, but of what character I could not form the most distant idea, though a physiognomist from my infancy. He held a sprig of birch in his hand; and I thought I saw flashes of satire, if not cynicism, playing about his eyes and mouth. I did not apply to my familiar spirit, till I had exhausted all my ingenuity for a solution of the living enigma that paced solemnly before me. I gave it up in despair. “That personage,” said my friend, “may well arrest your observation. He was formerly an eminent schoolmaster, but is now

the superintendent of a most extensive establishment for the reception of lunatics.* None but the insane (with their doctors and keepers) domiciliate in his asylum. The former class lose their senses, of course, before they apply for admission—and their property is pretty sure to share the same fate as their reason! The doctors and keepers, however, have acquired great renown by the number of cures which they perform. Their practice is strictly depletory—consisting almost exclusively, of bleeding, purging, and starvation. It is ‘kill or cure’ with these practitioners. If the patient survive the remedial process, his mental delusion is pretty sure to disappear. Relapses are rare; and if they do occur, the patient seldom re-enters the same asylum.

“Between the superintendent of this vast asylum and the keepers, there is not the most cordial harmony. He frequently applies his birch-Broom to the backs of the doctors, instead of the shoulders of the madmen confined in his mansion, and discourages that Sangrado system of depletion by which they had so long been in the habit of reducing their patients to ghosts and skeletons.”

My attention was strongly attracted to a tall and venerable personage, grey with years, blanched with cares, and “Sicklied o’er with the pale cast of thought,” standing in profound meditation, with a goblet of the strongest chalybeate before him. If the emotions of the mind could be recognized by the expression of the countenance, there were feelings of pride not unmingled with mortification—of joy not unalloyed by sorrow—of triumph not untinctured with disappointment. I eagerly inquired who he was. “He is,” said my familiar, “one of those few and fortunate mortals who, having dedicated a long life to the pursuit of an object which many considered as visionary, and more as destructive, at length attained all that he wished, and far more than he expected. Like Phaeton, when guiding the chariot of the sun, or rather like a magician who conjures up a spirit which he finds it difficult to coerce, the arm of the wizard trembles under

* Court of Chancery, in 1834.

the weight of a slender wand, and the startled necromancer half regrets the success of his potent spell!"

I was greatly surprised, on turning into one of the pump-rooms, to meet an old acquaintance—"a fellow of infinite jest," whose humorous sallies for ever set the table in a roar—a veritable YORICK—drinking salt and water at Cheltenham! This exceeded all credibility! I would have been less astonished to see—

"The Parthian and the German climates change,
This Arar drink, and that near Tigris range"—

than Yorick substituting Cheltenham waters for Champagne and Tokay! I asked for a solution of the metamorphosis. "You must know," said Yorick, "that the vile influenza, last Spring, nearly made a hole in my lungs, and the doctors wrote for me Pindar's Greek prescription in the pump-room at Bath.* The remedy was terrible; but the disease was dangerous. Here I am, consoling myself with the averment of Bernardine de St. Pierre, that 'all contrasts produce harmonies'—and also with the hope that, by means of the curious transactions going on in this fashionable place, I shall be able to work a miracle yet before Christmas—namely, to convert water into wine—and Thompson's salts into generous Burgundy, through the instrumentality of the press."

A tall gentleman, with two ladies, (apparently his wife and daughter,) advanced to the pump, and each drank off a goblet of the medicinal waters. There was a peculiar unhealthiness in the aspect of these three individuals, which attracted my notice. It differed from the half-jaundiced sallowness of the Anglo-Indian invalid—and also from the pallid and faded complexion of the fashionable and dissipated SEASONERS of the metropolis. It had a sickliness, *sui generis*, and beyond my power of analysis. As soon as they began to converse with each other, I recognised the accent of the Emerald Isle—and this increased my wonder. I applied to my aerial CICERONE for information. "That gentle-

* "Water is best."

man," said he, "is a great landlord and squire in Ireland. His numerous tenantry are ignorant, and therefore semi-savage—disagreeable to the eyes of the fashionable family; and somewhat dangerous besides. Under these circumstances, it was opportunely discovered that the constitution of a daughter was delicate, and that the climate of Ireland was damp—that the skies of Italy were bright—the society there aristocratic—and expenses very little more than in Castle Rackrent. The conduct to be pursued admitted of no question. The middleman was ordered to take charge of the rents, and the courier was ordered to prepare for the journey. Paris was visited—the Simplon was scaled—and Florence, Rome, and Naples were explored. Years passed away on the classic soil, and yet curiosity was not sated, nor pleasure exhausted. But, on a fine Summer's evening, while the family were sitting on the heights of Albano, inhaling the balmy zephyrs, and enjoying the superb panorama of the Campagna, with its scattered ruins and surrounding Apennines, one of the young ladies inspired the deadly poison that so often floats on the fragrance of Italian gales! The tide of happiness, like that of fortune, has its affluxes and effluxes. The current of affliction now took its turn. The hapless and innocent victim of an Italian climate, (to speak of nothing else,) fevered, faded, and ultimately sunk beneath the pestiferous influence of the syren soil! Her spirit fled to Heaven—her mortal remains lie on the banks of the Tyber, near the pyramid of Caius Cestius.*

"The long-inhaled poison of Italian malaria—the heart-rending scenes attendant on the protracted sufferings of the beautiful girl—and feelings, which are best known to the unhappy survivors, have produced the frightful ravages in the minds and bodies of the party before you, which have rivetted your attention. The

* This is no imaginary picture. It is only a specimen from a large class. See the "Three Years' Residence (of an Irish family) in Italy," where a parallel instance is painfully detailed. It was probably the perusal of "Anny's" history, and some melancholy instances of death in foreign climes, within my own knowledge, that conjured up this reverie in my mind on the present occasion. J. J.

waters of Lethe may, but those of Cheltenham never can, wash out the mental and corporeal sufferings of that wretched TRIO."

The next figure (a political economist), was busily employed in calculating the grains of muriate of soda that were expended during an Autumn at this fashionable rendezvous. When he had completed his calculus, he gravely "gave notice" to the pump-maid, that he would move for a return of all the waters drunk in Cheltenham during the last seven years, in order to shew the prodigal waste of culinary salt at this Spa, and how much might be saved to the nation by shutting up the pumps and evaporating the waters.

An elderly friend of his, of most aristocratic appearance, though of popular propensities, remained. He seemed to be labouring under the agony of a discharge of gall-stones. I understood that he was subject to periodical attacks of "black bile," ever since he had opened a Transatlantic grave in quest of a subject for a new "age of reason."

I was agreeably surprised to see in this place one of the great bulwarks of our glorious constitution and our enviable laws. He had spent a considerable portion of his life in the arduous task of disentangling equity from iniquity—and had often found it impossible to *make up his mind* on some knotty points, till one of the inferior officers of his court (SERJEANT BEGGARY) stepped in to solve the problem! The venerable senator had come down to Cheltenham, partly for his health, but principally to drink a farewell to the constitution and laws of his country, having lived to see all reverence for precedents abolished, and the besom of Reform sweeping away the cobwebs of antiquity from every shelf of his well-stored archives! He has since ceased to doubt!

A tall, thin, and erect figure now approached the Hygeian fountain. There was something so singularly triste in the expression of his countenance, and distrustful in the eye, which constantly glanced around, as if in suspicion, that I set him down as a character at once. He hastily finished his three goblets of No. 4, walking about hurriedly but silently, between each libation, and then disappeared. My familiar could give me no account of this remarkable personage, except that he repaired every second

morning to the Spa, but where or how he spent the intervening day, no one could tell. Accident brought me in contact with this sufferer a year afterwards, and prussic acid terminated a life of unparalleled misery! The *cause* of that misery was revealed only to myself, and involved no kind of guilt or even misconduct. A cruel vision haunted the devoted victim every second day, leaving the interval to despondent reflections on the certainty with which the insatiable tormenter would return on the succeeding morn!!

A very different character next approached the pump, with light elastic tread, though "frisking beneath the burthen of three score"—and ten more years than that! The dapper little GENERAL had weathered the storms of 70 Winters, without other apparent damage, than an unusually small degree of the natural wear and tear of age. I saw him the same evening threading the mazes of the mystic dance, and gaily tripping on "the light fantastic toe," among nymphs and swains of one-third his age! He was evidently drinking the waters of Cheltenham, not for the cure of disease but for the sake of longevity. TIME has since put a full-stop to the waltz and quadrille—his last essay being in the "DANCE OF DEATH," at the mature age of seventy-six. It is said, (and there may be as much truth in the story as in some of our legends) that, as the hearse moved along Piccadilly, the gallant General's feet beat time, against the foot of the coffin, to the tolling of the bell in St. James's church. If so, the "ruling passion" was strong in death!

I was a little surprised at seeing a number of well-dressed, healthy, and official-looking gentlemen, crowding round No. 4 A, swilling the fluid in flowing goblets. What can this mean, I asked? "The mineral of that spring," replied my familiar, "is called IODINE, which has the property of removing old and diseased materials from the body, and depositing new and healthy ones in their stead. It is supposed, also, that it has a somewhat analogous effect on the mind, and that, like the famous *Nepenthes* and *Lotos* of antiquity, it has the power of obliterating the records of past actions and opinions from the brain, and thus freeing the memory of many illustrious personages from very troublesome reminiscences of by-gone days. You will observe, added he, that

the group before you is chiefly composed of Radicals who have become RATS—of Whigs who have become FLATS—and of Tories who have become Conservative CATS, to watch and catch both the rats and the flats.”

A nearer view of this group revealed several distinguished individuals, who had stood prominent on the stage of human life, and changed opinions and principles in their day. And why not? The whole fabric of man is perpetually changing from the cradle to the grave, and so does the mind itself.

“Manners with fortunes, tempers change with climes,
Tenets with books, and principles with TIMES.”

There is no occasion, therefore, for these magnates to drink Nepenthe, eat Lotos, or swallow iodine, as penance for changing with circumstances, or pursuing their own interests, when the wind blows fair.

A weather-beaten, veteran warrior advanced to the iodine fountain, as soon as the foregoing knot had dispersed. In the lineaments of his care-worn countenance, chagrin, disappointment, and scorn were mingled. “By one of those capricious rotations of the wheel of Fortune (said my informant), that soldier, though of comparatively *low* rank, was elevated, all at once, over the heads of illustrious generals, and even of royalty itself. The imperial sceptre that had dictated laws, dethroned princes, and erected kingdoms, from the pillars of Hercules to the rocks of Norway, bowed, reluctantly and indignantly, to his iron sway. His dominion was (though on a small scale) like the Roman Empire at one time—a kind of vast prison, girt with a chain of inaccessible precipices, against which the foaming breakers dashed in vain, and over which all ingress and egress were impossible, except by his express permission. But Destiny ever mingles the poison of care with the intoxicating draught of power, and the ‘monarch of all he surveyed,’ became haunted with real or imaginary terrors and anxieties. His daring and turbulent subjects, and especially the eagle-eyed sceptre-bearer under his command, occupied his waking thoughts and midnight dreams. ‘VOICES,’ too, came

floating on the gales from various quarters, reflecting on his conduct, and calculated to inflame the popular mind against him.

Spargere voces

In vulgum ambiguas.—

He hated the *presence*, but still more feared the *absence* of his arch-enemy—till, at length, his nerves became so morbidly sensitive, that he smelt rebellion in a band-box, and mutiny in a—LADIES' CLOTHES-BAG! The life of his subordinate was the lease of his Government. The death of that perturbed spirit released him from the weight of an odious command—but not from the shafts of unrelenting calumny!"

An aged and infirm man, with gray hairs, threadbare coat, coarse worsted stockings, and general habiliments of the humblest kind, advanced slowly to the saline chalybeate, and drank the water. He appeared like a reduced but respectable farmer, broken down by age, infirmity, and misfortunes—

" Whose cattle died, and blighted was his corn."

" That emblem of poverty realized a most princely fortune by a long life of industry and economy beneath the burning skies of India. That fortune has been doubled since his return; but his parsimony augmenting with age, debars him of many of the necessities, and all the luxuries of life. He cannot afford to pay for physic, much less the fees of physicians; and therefore he comes annually, *in forma pauperis*, to one of the Spas, where he can drink the waters *gratis*, and procure a temporary renovation of health. He is too poor to employ a clerk or accountant, and therefore his books and affairs are all in confusion. Although the thought of parting from his millions is worse than the idea of meeting death, yet a kind of instinct has prompted him to make his will—but without going to the expense of legal advice. To this will, have been added, at different times, more than twenty codicils, each entangling, mystifying, modifying, or even annulling some of its predecessors, or the body of the testament itself! The consequence will be a TWENTY YEARS' CHANCERY SUIT, and

the reduction to beggary of many families who had a right to expect his property, and for whom it was designed by the testator ! He will thus leave his millions virtually to lawyers instead of relations ! But this will not be all. The Chancery suit and the final division of his money will sow dissention, jealousy, hatred, and animosity among his descendants for generations after his body has been the prey of worms !”

I asked if this parsimony, increasing with age, and in proportion to its inutility, were not a species of insanity ? No, was the reply. It is an impulse, or kind of instinct almost universally implanted, with more or less force, in the human mind. We prize life the more as we approach its termination ; and as—

“ All men think all men mortal but themselves,”

the miser clings to his treasure with more tenacity at 75 than at 45, because he knows better the difficulty of replenishing it, if diminished—and the impossibility of re-acquiring it if lost.

“ Oh, blindness to the future wisely given !”

A fine and stately dame sailed up majestically to the iodine font. She was a “widow in weeds”—fat, fair, and forty. It is probable that she did not prize very highly the first and third qualities—especially as they do not generally improve by TIME. But as she learnt that iodine decreases the size, it is not unlikely that she expected it would lessen the apparent number of her years in the eyes of her neighbours. Let her beware how she plucks from her cheeks and bosom the plumpness and the roses of health, lest she plant in their place the pallor of the lily, and the blight of atrophy !

The handsome widow was succeeded at the font by a lady of very different aspect, being emaciated in figure—pale as alabaster in complexion—eye lack-lustrous—countenance the seat of an expression combining hopeless sorrow and suffering, with perfect resignation. A fond and afflicted mother led the invalid to the Hygeian fountain, but the experienced eye immediately perceived that the corporeal fabric was stricken through the agency of its

immaterial tenant, and that all the medicinal springs in the world would not be able to—

“ Pluck from the memory a rooted sorrow.”

It is hardly necessary to say that this was one of the ten thousand victims which modern society daily witnesses—or rather produces—where the corporeal frame is destroyed by the sorrows, disappointments, and miseries of its immortal occupant! Great wealth alone can, with any certainty, lead to matrimonial establishments; but as that can fall to the lot of comparatively few, splendid accomplishments offer the next best chance. The consequences are, that superhuman exertions are made in the acquisition of these, and bodily health is sacrificed. But the evil does not end here. The gates of preferment are so crowded by candidates, that not one in five hundred can succeed! The hosts of rejected suitors trained for spheres of life, within which they cannot now hope to enter—

pine in thought,
And, with a green and yellow melancholy,
They sit, like Patience on a monument,
Smiling at grief!

The crowd now became so pressing, that all attempts to individualize were fruitless. The rooms, the walks, the shops were filled with myriads of Whigs, Tories, Radicals, Chartists, and Socialists—Aristocrats, Democrats, Bureaucrats. The WHIGS seemed all to prefer the chalybeate or tonic waters—most of them appearing to labour under considerable debility; and some of them being actually affected with a kind of “paralysis agitans,” or skaking palsy. The Tories flocked to the cooling saline aperient springs—most of them being feverish and irritable, with flushed faces and plethoric habits, for which their physician-general had recommended depletion, especially bleeding, purging, abstinence, and an annual application of leeches, called, in political language, ASSESSORS.

There was a sprinkling of SOCIALISTS, who had air and water, in common, if they could not carry their system into the other necessities of life. The CHARTISTS, who seemed a very thirty as

well as hungry race of mortals, drank success to the five points of the Charter in five goblets of "No. Four," grinning at their wealthier neighbours, and wishing them luck of the "INCOME TAX," from which they rather prematurely calculated that they themselves were exempt.

As for the multitude—

"O'er whom her sable wing Oblivion drew,"

they have all gone to their homes—many of them have since quaffed at that stream which renders all medicinal springs unnecessary afterwards. On the hither bank of Lethe what myriads of torturing maladies and corroding cares are congregated! These pursue their victims to the very verge of the silent river—but, fortunately, they dare not, and cannot cross the stream! And what a chaos! They are commingled with crowns, sceptres, coronets, and all the emblems of wealth, power, and beauty! Neither the ills nor the pleasures of life—nor even the remembrance of them, can pass the mysterious Lethe.

DORTON CHALYBEATE,

NEAR OXFORD.

THERE are but few, either in or out of the profession, who know anything of a strong chalybeate (Dorton) situated 12 miles from Oxford, and six from Thame, which has no small local reputation in the neighbourhood for the marvellous, not to say miraculous, cures which it has effected. The water rises clear, and has a strong inky taste, and a peculiar, though not unpleasant odour. When exposed to the sun and air, a slight pellicle appears on the sides of the glass and surface of the water. Soon after this it lets fall a light brown sediment, which may be re-dissolved by the addition of a few drops of sulphuric acid. The well exhales a

rather strong sulphureous odour; but, unless the water is taken at the fount or bottled immediately, this odour is soon lost. When first poured into a glass it exhibits a momentary sparkling appearance, and when swallowed in that state produces a refreshing and exhilarating effect. When mixed with powdered galls or strong tea it becomes quite inky—or rather ink. The following are the leading contents of a pint of this Spa, as ascertained by Professor Brande.

Traces of carbonic acid

	Grains.
Sulphate of lime.. .. .	11½
Muriate of soda	1½
Sulphate of alumine	2
Sulphate of iron	10
Total	25

This Spring contains infinitely more iron than Tunbridge Wells, and one-fourth as much as the celebrated styptic water of Sandrock in the Isle of Wight. From the above analysis it is evident that people of full or plethoric habit, or with costive bowels, should be extremely cautious how they use the Dorton Chalybeate. In almost all cases, it is advisable to take the Spa diluted with an equal quantity of warm water. Mr. Knight, who has written on this Spa, informs us that, in cases of dyspepsia, attended with loss of appetite, flatulence, tremors, nocturnal watchings, low spirits, &c. a patient trial of this chalybeate has often produced permanent relief. Patients of this description should take two wine-glassfuls an hour before breakfast—and the same quantity an hour before dinner. In a few days the dose may be increased to a moderate tumbler-full. A brisk walk, immediately after taking the water, will promote its good effects. In this, as in all other complaints, the bowels should be well cleared before commencing the chalybeate, and carefully attended to during the course.

It has acquired considerable reputation in chorea—leucorrhœa—menorrhagia from debility—clorosis—and in all relaxed and cachectic states of the constitution. In these conditions, the water

is not only taken internally, but used as a tepid bath also, as an auxiliary. In scrofulous sores, and a variety of cutaneous complaints, especially psoriasis and lepra, the waters of Dorton, inwardly and outwardly, have acquired considerable fame. In herpes and tinea, the same may be said.

The Spa is delightfully situated, a mile from the romantic village of Brill.

“ A lovely village seated on a hill,
Where Nature wears a most bewitching mein,
Where beauteous scenes, enchanting prospects fill
The enraptured soul, with ecstasy supreme.”

Mr. Knight has published some remarkable cases that have been cured by the Dorton Spa. We shall only notice one. A married female was severely afflicted with lepra pervading the whole body, with the exception of the face. Dr. Ferguson, of Windsor, had tried various remedies, including arsenic, without relief. The thick scales on her legs, when cracked, discharged through the fissures considerable quantities of blood, as well as humour. The waters, both internally and externally, were employed vigorously. The desquamations daily were astonishing, the incrustations resembling pieces of leather. The baths were taken at 110° of Fahr. and kept up for half an hour, every second or third day. The skin rapidly attained its wonted appearance, and ultimate recovery took place. Mr. Knight used saline medicines in aid of the waters. I think the medical gentlemen in the neighbourhood should experiment on this powerfully tonic Spa.

SANDROCK SPRING.

[ISLE OF WIGHT.]

AFTER alluding to Dorton Spa, we may just as well, in this place, glance at its older sister-spring—SANDROCK. The romantic locality in which this powerful mineral springs to light, is scarcely equalled in England or elsewhere—being near the western extremity of UNDERCLIFF, at an elevation of more than a hundred feet above the beach, and commanding a fine view of Undercliff itself—the South coast of Southampton—and the boundless ocean. High as the spring is, it is surmounted by enormous fragments of rock still higher. There is a Royal Spa Hotel, and various other accommodations for the invalid here. Like the Dorton Chalybeate, it is too good—as it contains some forty grains of sulphate of iron in the pint!! As if this were not enough, the pint contains some thirty grains of alum—and only about twenty grains of aperient salts.

The taste is, of course, extremely styptic, and can scarcely be swallowed undiluted, without some inconvenience to the palate. Yet it has been and still is taken internally, even in its natural state, not only with impunity, but, from the evidence of Saunders, Latham, Young, Scudamore, and Lempriere, with the greatest advantage. It is hardly necessary to indicate the class of complaints to which this powerful chalybeate is applicable. The greater the debility, the greater is the chance of deriving benefit from the Sandrock Spring—and, where there is the slightest tendency towards inflammatory action, or constipation of the bowels, especially if combined with biliary obstruction or derangement, it ought to be avoided. We have no doubt that the remarkably beneficial effects of this water in cases of great weakness after long-continued malarious or intermittent fevers, as related by Dr. Lempriere, were authentic and painful records of facts.

The beautiful scenery, the pure air, and the sea-breezes of the Isle of Wight, and Undercliffe in particular, must have contributed their share to the restoration of health in those cases where the Sandrock Spring was employed.

BOURNMOUTH,

ALIAS

WILDBAD WEST, IN THE NEW FOREST.

WHEN I read a flowery description of this infant bathing-place, published in 1840, by an anonymous writer, I considered it in the light of one of those sublime effusions of George Robins, Esq. or perhaps of one of those BALNEOLOGISTS who undertake to "*write up*" a particular locality. Next year, however, Dr. Granville visited Bournemouth, and has dedicated twenty-five pages of his last volume to the praises of its salubrity, beauty, and capabilities—not merely as a Summer's watering-place, but as a Winter retreat for pulmonary invalids, "superior to either Bonchurch, St. Lawrence, or Ventnor in the Isle of Wight." I determined to examine it. This I did in the Summer of 1841, and located a part of my family there for many weeks. I therefore speak from personal observation.

Bournemouth lies in the centre of a semilunar bay, whose extreme headlands or horns are ten or twelve miles apart. These are HENGESTBURY-HEAD to the Eastward—and HANDFAST to the West. It is equi-distant (five miles) from Poole on one side and Christchurch on the other: being thirty-seven miles from Southampton. The cliffs, from one promontory to the other, are all of very moderate height, and almost entirely composed of sand or gravel. The beach, for many miles, on both sides of Bournemouth, presents beautiful sands for bathing. The valley itself, or rather

vale, is narrow but shallow, with a small stream of clear water meandering down its centre. Both sides of the valley, especially the eastern side, are planted with firs, which give the whole the appearance of a small gorge in the Black Forest, covered with pines. The hotel, the great boarding-house (Belle-Vue)—with some thirty detached villas, occupy the eastern side of the valley—and are open to the sea-breeze, while tolerably sheltered from the northern, eastern, and western winds. There are three or four private villas peeping out of the pines, especially on the western side of the vale.

Into the main valley, which is itself small, shallow, and tortuous, there are a few narrow ravines, or rather ravinets, opening laterally. These, particularly one on the western side, are localities which Dr. Granville selected for building small villas, as the *Winter residences* of pulmonary invalids. None have yet been erected in consequence of the Doctor's recommendations—and for this good reason, that the whole concern is in a state of bankruptcy. I was told that a joint-stock company was forming to take up the project, build a pier, a church—and make Bournemouth a fashionable watering-place. As a Summer's residence for bathing, I think the place has no superior, as far as fine sands and expanded ocean are concerned. But as a *Winter* residence for pulmonary invalids cannot be tested by latitude, longitude, thermometer, hygrometer, or barometer—but only by time and experience, I would recommend the new company to be cautious how they speculate on Bournemouth as a second Madeira, superior to Undercliffe, Hastings, or Torquay, lest they overshoot the mark. The water of the Bourne, which is the principal source of supply at present, certainly contains some ingredients, though they could not be detected by Dr. Aitkin and Dr. Granville, which cause them to disagree with new comers, as was proved by my own family, while residing there in the Summer of 1841.

But I am able to adduce a trait in the sanatory physiognomy of Bournemouth which, I think, will speak volumes in its favour, and redound more to its fame than all Dr. Granville's eulogies.

It is this :—that neither in Bourne, nor within five miles of it, in any direction, is there such a thing as a physician, surgeon,

apothecary—or even a chemist!! There is a church, indeed, but in all my perambulations round this place, I could not discover either grave or tombstone. It is evident that this was not the place which Shakespeare had in view, when he speaks of that BOURNE—

“From which no traveller returns.”

From the Hampshire Bourne all travellers return, dead or alive—and some of them—Dr. Granville and myself, for example—to tell the tale of what we saw there.

As a matter of course, there are no undertakers at Bournmouth. *They* know right well that *their* trade cannot flourish till the doctor has been fairly at work in the place. *If* Bournmouth, however, should one day become a substitute for Ventnor, or Nice, in the Winter season, I venture to prophesy that the smart chariot of the doctor, and the sable hearse of the undertaker, will be often seen crossing the stream of the Bourne. Till then I can recommend it as a quiet, sequestered, unexpensive, and excellent bathing-place.

BATH.

A VIEW of the locality and construction of Bath would lead one to imagine (and he would not be very far wrong) that this was a great city, hewn out of the solid rock in some gigantic quarry, where it became tanned and blackened by the hand of time and the operation of the elements. It is a magestic city, with not a little of the sombre in its physiognomy. The great majority of its streets and houses, (particularly the aristocracy of them) whether tired of the monotonous and lazy Avon, or sick of the “chicken broth,” for ever simmering and boiling over on its banks, have evidently crept up the hills on all sides, for change of air and scene, till they have now crowned or crescented every eminence, however steep, in the vicinity of the city. The old Ca-

thedral was too massive and passive to follow the stream of fashion; and keeps its sacred font for the cure of souls close to the Hygeian fountains for the cure of bodies. But several modern temples there have shewn that they are not unambitious of rising in the world, and have followed rank and wealth into very high places.

The thermal springs of this place have no need of appeal to fabulous history in behalf of antiquity. King Bladud's pigs may have been fond of wallowing in warm water, like other pigs; but the swinish multitude of Roman military (swine-general, consul, and all) had as keen a scent for hot water as any of the long-faced quadrupeds of the Celtic King.* The Romans were absolutely infected with the thermo-mania, or insatiable desire for hot bathing. Nor did this passion seem to spring from any principle of cleanliness or health; but from sheer love of enervating and corrupting luxury, as their poets acknowledged—

“ Balnea, Vina, Venus corrumpunt corpora nostra;
Sed vitam faciunt, Balnea, Vina, Venus.”

The Roman baths here were on a magnificent scale; and their remains shew that they as far exceeded, in extent of scale and elegance of proportion, the present establishments, splendid as they are, as these last outstrip the Lilliputian Baignoirs of Clifton. It is sufficient to say that ONE of them, en suite with several others, was ninety feet in length by sixty-eight in width, with dressing-rooms, smaller baths, vapour-baths, &c. and all fifteen or sixteen centuries ago! The greater part of these ruins are buried under other and more modern ruins, like the Eternal City itself. They were not exactly over the present fountains, which must have shifted their situation a little.

The waters now rise from three, or, as some affirm, two sources, not far separated, and differing so little in temperature and constituents as to sanction the belief that they all come from the same fount.

* The historians of Spas are very fond of tracing their discovery to the instincts of animals rather than to the researches of man. Thus, the pigs at Bath, the pigeons at Cheltenham, the lapwings at Harrogate, the stag at Carlsbad, &c. &c. were the first to ascertain the medicinal qualities of the respective springs.

The Kings' Bath Spring seems the origin of the other two—the Hetling, and the Cross Bath. From the first, the enormous quantity of a ton is discharged every two minutes—and that at a temperature of 116° of Fahrenheit! The Hetling or hot-bath discharges about an eighth of the above quantity, at the same degree of heat—the Cross Bath not more than a tenth, and the temperature 112° .

The Avon is seventeen feet lower than the springs, and, in the time of the Romans, the stream of hot water, in its course to the river, turned a mill to grind their corn, after it had cleansed and refreshed their bodies. From the earliest records, no change has taken place in the quantity, quality, or temperature of the Bath Waters. How long these springs were known to, or used by, the Ancient Britons, it is useless to inquire—the testimony of King Bladud's pigs, "to the contrary notwithstanding." The Roman ruins attest their splendour soon after the Christian *Æra*—and that is enough. The titles of the works which have been written on the Bath Waters, from Solinus, in the reign of Vespasian, to Dr. Granville, in the reign of Victoria, would make a long and a curious catalogue. Some of them were composed in verse—some in prose:—some, to puff off the waters—some to puff off the authors—and a few to convey accurate information to the public, and nothing but the truth. In this last, and most honorable category, I range all modern living writers on the subject—as a matter of course.

The poetical balneographer (NEEHAN) in the thirteenth century, completely anticipated Dr. Fenner of Schlangenbad, assuring us that the waters of Bath "restore youth to the aged, and peripatetic agility to the lame." Who can wonder that this ancient city should be the great resort of septuagenarians, male and female, from all parts of the kingdom!

Guidot, a celebrated writer of 1676, and the oracle of his day, found the waters to contain "freestone grit, bitumen, marle, ochre, shells, nitre, rubrica, crystal pebbles, and sulphur, without any salines." This precious compound he recommended internally and externally, for almost every ill to which flesh is heir!

The bitumen was to cure one class, nitre another—and where all failed, “sulphur came in as the universal panacea.”*

Dr. Oliver, so late as 1719, after giving us a long catalogue of the maladies which the Bath Waters will cure, concludes thus: “Upon the whole, BATH is the *asylum chronicorum morborum*, the common sanctuary for all persons who labour under any chronic distempers—where scurvies, cachexies, and all other lingering diseases may be cured, *citò, tutò, et jucunde*, by a composition which nature has contrived for the benefit of mankind.”

It is now more than twenty years since Sir Charles Scudamore and Mr. Garden analyzed the waters of Bath, and found them to contain fourteen grains of solid matters in the pint, being as follows:—

	Grains.
Muriate of lime	1—2
Muriate of magnesia	1—6
Sulphate of lime	9—5
Sulphate of soda	0—9
Silica	0—2
Oxide of iron.. .. .	0—019
Loss	0—5
Total	14—0

Carbonic acid gas a little more than a cubic inch in the pint.

Mr. Phillips gave fifteen grains to the pint, and detected three and a half grains of carbonate of soda, which differs in this respect from the analysis given above.† These waters have been compared to those of Baden-Baden; but the latter contain twenty-four grains in the pint, of which sixteen grains are muriate of soda, or common salt, none of which appears in the Bath Waters according to Scudamore and Garden—though Walcker gives two

* Spry, on the Bath Waters.

† Walcker, a German chemist, made out eighteen grains of solids in the pint—nearly two of which were muriate of soda.

grains of common salt to the pint. The other ingredients in the two waters, however, are not materially different.

All writers on these waters seem to agree on one point, however widely they differ on others—namely, that their medicinal virtues cannot be explained or accounted for by their chemical composition—a remark which applies indeed to almost every mineral water in existence. The natural springs, therefore, must contain something which chemistry has not yet detected, or some unknown quality which analysis can never unravel. We have nothing, therefore, to trust to, but the experience of their *effects* on the human frame. And even here we have great difficulty in sifting the grain from the chaff—the probable from the improbable—the truth from fallacy!

It is acknowledged by Dr. Spry, one of the most modern writers on the Bath Waters, and, in my humble opinion, the best, that, although the population of the city has been annually *increasing*, the reputation of the Waters has been *decreasing*. The learned and talented author enters into an explanation of this *falling off*, and contends that—

“We have demonstration of their good effects on a large scale in a public hospital, where the worst stages of disease are almost miraculously cured; and where the waters are suffered to perform their duties without the interference of ignorance, prejudice, or quackery.”

He thinks, and probably with some reason, that discredit has been thrown on the Bath Waters by patients being kept too long under disease before they are sent there, and by the writings and opinions of medical men at a distance, who contend that warm-bathing at home is just as good as warm-bathing at Bath. At length, when they are tired of their patients, and the latter are tired of physic, the doctor sends them to Bath, as a “*dernier resort*,” when it is too late. Another cause of the discredit is, that people come to Bath who are not proper subjects for the waters in any stage of their complaints.

“Indeed (says Dr. Baynard) when men will bathe who are of plethoric habits and sanguine constitutions, with a cargo of wine and good cheer in their bellies, without emptying, or any medical

preparation, or that overheat the blood and other fluids beyond their natural standard of calefaction, by swimming or exercising too much in them, or staying too long on the hot springs, &c. there, I say, sometimes the consequences have been ill."

But the grand cause, according to Dr. Spry, is the scepticism, "which despises every remedy of a simple nature, which requires that every cure must be wonderful—must be miraculous. Thus scepticism and credulity run hand in hand to decry a remedy which has nothing to recommend it but its simplicity."

What say our gentry and aristocracy, who run to see the miracles of Mesmerism, to this satiric lash? Another cause of the decline in reputation of the Bath Waters, is the small quantity of saline ingredients discovered in them. This prejudice, however, is in the course of being worn away by our extended knowledge of mineral waters in general, many of which produce powerful effects from apparently inadequate causes.

"The experience of ages has proved their efficacy, and we are not the less to doubt the evidence of our own senses, because we are deficient in unravelling the arcana of nature."

It is to be remembered that the Bath Waters, like almost every medicinal spa in the world, are absolutely injurious in all diseases of an *inflammatory nature*—and that they (the diseases) must become *chronic* before the Bath Waters are applicable. Even *local* subacute inflammation will not bear these kinds of remedies. It is therefore not to be wondered at that many people are sent to Bath before all inflammatory symptoms have subsided, and return disappointed from the expected remedy. Hence the necessity of the distant practitioner's careful examination of those whom he sends to a medicinal spa.

It is well known that, contrary to all other mineral waters, at home or broad, the WINTER is the season at Bath. Let us hear what a resident physician of twenty years there, says on the subject.

"Those patients who come to Bath with little or nothing the matter with them, and make the waters an excuse for a little recreation, of course will prefer the Winter season, combining the pleasures of this gay city with the ostensible plea of attending to

their health. Those, on the contrary, who come here labouring under real maladies; who wish to drink the waters regularly, and persevere in the bathing and pumping, with moderate exercise, for the recovery of such disorders as gout, paralysis, &c. to them the season is every thing; and as in the Spring and Summer months there is more settled fine weather than can possibly be expected during Winter, so I am decidedly of opinion those milder seasons are much more favourable for the recovery of all diseases connected with loss of motion in the joints."

Coinciding with Dr. Spry on this point, I must say that Bath appeared to me, as it has done to many others, a most hot and oppressive locality in the Summer and Autumn. I do not wonder therefore that it should become a favourite residence in Winter, for the rheumatic, the gouty, and the paralytic—for the painted tabbies and faded dandies—for the spinsters and tuft-hunters—for the card-players and time-killers, &c. &c. to all of whom a Bath-chair is a much less expensive vehicle than a barouche, and much more safe and easy for descending in the mornings to the pump-rooms and baths, and ascending in the evenings to the high circles of aristocracy, in the neighbourhood of the Park and Lansdown Crescent.

USE AND ABUSE; OR PROS AND CONS.

"The internal use of the Bath Waters is recommended in rheumatic, gouty, and paralytic affections, in all those disorders originating from indigestion or acidity of the stomach, biliary and glandular obstructions, hypochondriac and hysterical affections, and, in short, almost every disease accompanied by great debility, and unattended with inflammation.

"Amongst those diseases where the water is contra-indicated, may be enumerated all affections of the lungs, asthma, disorders of the chest, apoplexies, epilepsies, dropsical effusions, fevers, erysipelas, hemorrhages, maniacal cases, topical inflammations, cancers, plethoric habits, where the vessels appear distended with

blood, or indeed, any disorders having a tendency to lethargic or inflammatory symptoms."

Although the three springs here are considered to arise from the same source, yet there is some slight difference (real or supposed) in their medicinal properties:—thus the Hetling and Cross-bath are recommended at first, as more mild and less stimulant than the King's-bath or Spring at the great pump-room. But, in all cases, and contrary to the German practice abroad, and the Germanized practice at home, aperient medicine is recommended for some days before the waters are taken, and during the whole course, where the waters fail to produce an aperient effect themselves.

A small glassful at first, may be taken early in the morning; and the quantity gradually increased, as the stomach can bear it, to a couple of large glasses before breakfast, and the same quantity in the middle of the day. A few minutes rest after the water, and then gentle exercise, between each glass is proper. If the waters lie heavy on the stomach, or occasion languor, or head-ache, they must be left for a day or two, and aperient medicine substituted for them.

Contrary to the practice at the German thermal spas, the Bath Waters are to be swallowed as quickly as possible, otherwise they lose their gaseous contents, and the slight chalybeate with which they are imbued. A month or six weeks is considered a medium period for a course—to be repeated at a short interval, if necessary.

In some people the waters occasion, at first, a lethargic torpor, with slight giddiness, which is generally relieved by opening medicine.

"Great care should be taken to avoid cold, and in the pursuit of exercise, which is decidedly necessary, not to be exposed to damp, or to get wet in the feet, causing a check of perspiration; for if the patient by any imprudence gets cold, an immediate stop is put to the course of the waters."

This is another reason why the Winter is not so good a season for the *real* invalid to take the waters as the Summer or Autumn.

Bath, like Carlsbad, was formerly used only externally. Now

the waters of Carlsbad are comparatively little used as baths, but chiefly as internal remedies. It is, however, more than two hundred years since the Bath Waters began to be taken in drink; though some of the older writers, as Guidot, had some qualms and fears "lest the leap-year should have some malign influence on the drinkers of the waters." At this time they were drunk, *a la Sangrada*, not by glasses, but by quarts and even gallons. Later spa-doctors, as Lucas, and even Falconer, conceived that the moderns have erred on the opposite extreme, and do not drink enough.

They were brought into great vogue internally, by Sir A. Frayser, who attended, in 1663, Queen Catherine, consort of Charles the Second, to Bath.

BATHING.

Every one knows that, not one hundred years ago, the public baths were frequented daily by men and women indiscriminately, in full dress—the ladies with their hoops, diamonds, powdered hair, &c.—the gentlemen with shoes, buckles, silk stockings, inexpressibles, and powdered queues! The procedure was more ridiculous than indelicate, since the habiliments of both sexes almost entirely nullified the good effects of the baths. The error has now been rectified. The bath is open on alternate days to the two sexes; so that they may wade, or swim, or flounce about, *in puris naturalibus*, without scandal or indecency.

The public baths are three in number. The King's, the Queen's, and the Cross-bath.

I. The KING's is an oblong square, sixty-six feet by forty-one, environed by a stone parapet, with three recesses for the accommodation of invalids—four dressing-rooms—and four entrances. Two of these were formerly for the ladies, and two for the gentlemen. The temperature of this bath is about 116° —the spring throws up three hogsheads of water in the minute, and the depth is about four feet and a half. The water rises in the centre of

the bath from the original source, through a stone cylinder ; but, in fact, the water is seen rising in various directions round the centre source. From this cylinder, but several feet below the bottom of the bath, the water is conducted by pipes to the great pump-room. This bath, when full, contains three hundred and fourteen tons of water. In this reservoir there is a *subaqueous* douche, or pump, for directing a stream of water to any particular part of the body, while immersed in the fluid. This is called the wet-pump, or douche, in contra-distinction to that which is applied to any part of the body not immersed in the bath. It has obvious advantages in many cases over its namesake.

Although the temperature of the spring is 116° , yet, such is the extent of the reservoir, and the cooling process which is constantly going on, that, except just in the centre, the heat is little more than 98° , especially towards the circumference.

II. THE QUEEN'S BATH.

This is supplied from the same source, and is only separated from its consort by an arched way. It is a square of twenty-five feet, having two recesses, three dressing-rooms—and three entrances. It contains upwards of eighty-one tons of water. Both this and the King's Bath are daily emptied, at twelve o'clock. They require eleven hours to fill.

Adjoining the King's public bath are four excellent private baths, with dressing-room, fire, dry linen, and every necessary, nay luxury, that could possibly be desired. The depth of each bath is four feet seven inches—the length nine-feet eight inches—and the breadth, from shoulder to shoulder, six feet. Each bath contains thirteen hogsheads of water. There is a pump or douche in each bath. They can be emptied and filled in a few minutes, during the inspection of the bather. The price is extremely moderate, and the attendance excellent.

III. THE CROSS BATH.

This is a small open bath of a triangular shape, at the bottom of Bath Street. It has two recesses and a pump, with three dressing-rooms. The temperature is 94° to 96° . This is a public bath—contains 53 tons of water—but has no private baths attached. Formerly there was a cross or pillar in the centre, erected by the Earl of Melford, in the time of James the Second, as a kind of votive tablet to the beneficial effects of the bath in the case of his Queen.

DISEASES.

Gout stands at the head of those afflictions for which the Bath Waters have, in all ages, been strongly recommended. But it is not in the inflammatory or tonic state of this malady that the waters in question can be of any use, but rather detriment. It is in atonic gout—and the painful sequelæ of the disease, that Bath proves wonderfully efficacious.

“With regard to the atonic stage, the object must be to endeavour to relieve the constitution by producing a fit, for the moment that is effected, the whole host of troublesome symptoms disappear. It is in this stage, when unaccompanied by fever, that the internal use of the Bath water is of infinite service, often producing a regular attack of the gout in the extremities from its specific action on the stomach.

“Dr. Falconer, alluding to this state of gout, observes, ‘the Bath Waters are found by experience to be the best and safest medicine for this purpose yet known; their stimulus on the stomach being immediate and peculiar, restoring to it such a degree of tone as enables it to send the gout into its proper place. On this account the Bath Waters are of the greatest service in erratic gouty complaints, especially those wherein the gout attacks the noble parts, from an inertia of this organ produced by excess in drinking fermented liquors, and exceed in this respect any medicine hitherto known.’ ”

“The chronic stage of the gout is that in which the exhibition of the Bath Waters is recommended; and never should they be tried until the paroxysm, with all its inflammatory symptoms, has subsided. The great debility, with loss of appetite, and the swelling and tension of the joints, then become proper for the application of the waters; and their successful result must depend on the regularity of their use.

“It has been before remarked, that the sooner the patient has recourse to bathing after the secession of the inflammation, the more rapidly will the limbs recover; for if once the chalky concretions are allowed to be deposited, a stiffened or ankylosed joint is invariably the consequence. Bathing, every other day, with regular pumping, according to the strength of the patient, with moderate exercise, will assist in promoting absorption; and, were the use of the vapour bath better understood, I am convinced many cases would receive the greatest benefit when foiled in their expectations at the pump.”*

In the debility of the digestive organs, and of the whole constitution succeeding inflammatory attacks of gout, the internal use of the Bath Waters becomes necessary.

NODOSITY OF THE JOINTS, whether referrible to gout, rheumatism, or other cause, is an affection which appears to receive great benefit from the Bath Waters.

“In few cases are the waters more beneficial than in this malady, when early directed. The three forms of using the Bath Waters are most essentially necessary,—drinking, bathing, and pumping. The first is given with a view of strengthening the stomach and organs of digestion, which are generally very much impaired; the second, to promote a more general circulation and determination to the skin; and the third, as a local application to the tumefied joints, in bringing on an increase of action, and promoting absorption.

“Dr. Haygarth observes, that in eighteen cases which came under his care, most benefit was derived from the warm bath, and

* Spry.

a stream of warm water, with repeated applications of leeches on the diseased joints.

“In addition to the above means, the bowels must be carefully and constantly evacuated; for the same torpor exists in the liver which pervades the general system, and which in some degree may be considered the origin of the disease.”

RHEUMATISM.

He who would recommend the Bath Waters in acute rheumatism, would be a madman; and yet many practitioners to this day plunge their patients, with swelled and inflamed joints, and a pulse at 120°, into hot baths, to relieve pain—but to risk metastasis to the heart, lungs, or brain!

But in chronic rheumatism, where no heat, tenderness, or redness exists, then the Bath Waters come into excellent operation, and are of infinite service. Although chronic rheumatic pains are usually augmented by the heat of the bed, yet they are as generally relieved by the warm Bath Waters. Dr. Falconer states that, between May 1785 and November 1793, 424 cases of rheumatism were admitted into the Bath Hospital. 386 were cured or relieved—38 were not relieved.

The varieties of chronic rheumatism—lumbago, sciatica, and tic-douloureux—are treated with considerable success at Bath, by bathing, pumping, and friction.

PARALYSIS.

We have only to take a tour round the BATH HOSPITAL, where nine-tenths of the patients are paralytic—most of them paraplegiacs—to be convinced that this is a disease for which the Bath Waters are renowned *per totum orbem*, and perhaps much beyond those confines, if spirits are permitted to tell their dolorous tales in the realms *above*, or compare them with those which they suffered in the regions below. Dr. Summers, who expressly wrote on the benefit of bathing in paralytic disorders, makes the following observations.

“We have a great variety of paralytic patients, and upon exactly examining the books from the first opening the Hospital

to the present time, I find the account to be as follows : Admitted in nine years, 310. Cured and much better, 208 ; no better and dead, 99 ; remain in the house, 3. From hence it appears, that more than two-thirds were either cured or received great benefit, and that only twelve died in the space of nine years. All these patients were bathed twice a week, and many of them three times. And what is very remarkable is, that of those who were cured or discharged much better, about thirty were more than forty years old, fifteen of whom were turned of fifty, and five were sixty and upwards. Now let appearances have their force, conjecture hesitate, and reason judge. And when I add, that the generality of our patients come as incurables from other hospitals, where there are physicians of the first character, and consequently where the best means are used, how strong in favour of bathing (with such obstacles) must be the above account !”

Dr. Spry remarks on this passage thus :—

“ Looking with an impartial eye at this strong body of evidence, which could never have been brought forward in private practice, with what confidence and well-grounded hope will the paralytic patient resort to these springs for relief, if he has but the patience and perseverance to adhere to the mode of treatment chalked out for him.”

Upon enquiry at the Bath Hospital, a very intelligent house-surgeon, with whom we visited the wards, informed us, that the external use of the Bath Waters—bathing, pumping, shampooing, &c.—were almost the only modes of their administration. The baths, in cases of paraplegia, are used at a high temperature—upwards of 100° of Fahrenheit. Colica pictonum is a disease which is very frequently treated by the Bath Waters, and, it is said, with considerable success.

DYSPEPSIA.

The Bath writers are loud in the praises of these waters, taken internally in the *Proteian* malady termed INDIGESTION. The causes of this pest of civilization are nearly as numerous as its symptoms—and that is saying a great deal.

“ Sir George Gibbes bears ample testimony to the benefit dys-

peptic patients derive from both the internal and external use of the Bath Waters ; and Dr. Falconer observes, that ' every medical practitioner at this place has seen instances of people labouring under want of appetite, pain, and spasm of the stomach and bowels, together with all the other symptoms of depraved digestion, and want of power in the proper organs to perform their functions, joined to a very great degree of weakness, both of the body and of the spirits, relieved by the use of the Bath Waters. The recovery in such cases is particularly remarkable for its taking place so quickly after the commencement of the trial of the remedy. A few days will frequently work such a change in the situation of the patient as would be scarcely credible, were it of less common occurrence. The appetite is often restored altogether, the wandering spasms and pain cease, the natural rest returns, and the spirits are raised to their proper pitch. The strength likewise improves daily, and the natural secretions and regularity of the body in point of evacuations are restored.' "

Hypochondriasis — pyrosis—biliary derangements — hepatitis chronica—jaundice—uterine obstructions and debilities—chlorosis —amenorrhœa—leucorrhœa—hysteria—and even sterility itself, have found benefit from the Bath Waters, if there be any faith in the records of medicine. Various cutaneous affections are annually sent to Bath—especially the varieties of lepra and psoriasis, and the reputation of the waters in this tormenting and troublesome class of human ailments rests on ample experience.

So much for BUCKINGHAM—or at least for BATH. This Spa is to the British Isles what Teplitz is to the Germanic circles and Europe generally. They are both of them splendid WASH-TUBS, from which have been discharged, into the Elbe and the Avon, prodigious masses of human ailments !

The experience which is annually gained at the thermal springs abroad by our countrymen and women, will ultimately, we think, enable them to appreciate the virtues of the Bath Waters, and re-instate them in their pristine fame. Bath is the only water in Great Britain which can be called hot ; and as the supply is enormous, they may be made available to an extent beyond that of almost any thermal spring in Europe.

CLIFTON.

Where high on hills or airy cliffs they dwell,
Or deep in caves, whose entrance leads to —.

THIS is one of the most remarkable spots in Great Britain. Dr. Chisholm, who practised here for some years, characterises it in the following terms, which every one who has visited Clifton, will acknowledge to be just. "The whole parish of Clifton is a beautiful and romantic assemblage of woods, rocks, water, pasture, and down. It seems, indeed, singularly well adapted to the maintenance of health; the soil resting on immense beds of lime-stone rock, exposed to the southern and western and westerly winds for nearly three-fourths of the year—with an atmosphere elastic, vivifying, not humid." The sea-breezes sweep up through the Severn estuary during a great portion of the year, ventilating and purifying the numerous cliffs and crescents of this favoured locality; and being nearly surrounded by a navigable river, whose tides sometimes rise thirty feet, Clifton possesses a most efficient scavenger for clearing away all impurities which the winds and rains fail to remove. Its grey compact mountain lime-stone rock is hollowed out into caverns profound, the entrance to which is seen in the perpendicular cliff overhanging the Avon. The prevailing soil, however, in the neighbourhood, is clay, highly impregnated with iron-ore. Two different kinds of water issue from the earth here—one from the lime-stone, of a hard quality—the other springs up through sand-stone, of a much softer nature.

But airy, clean, and salubrious as are the cliffs and crescents of this great valetudinarium, the lower classes of inhabitants—many of them at least—occupy a narrow strip of ground stretching along the right bank of the river, and between two cliffs of

immense altitude, where "an impure air and accumulated filth are the necessary consequences; and where the fetid smell which assaults the stranger on entering any of the houses, sufficiently indicates their offensiveness." Such may have been the case in Chisholm's time, a quarter of a century ago; but in my numerous rambles along the banks of the Avon here, both by day and by night, I saw very few appearances of the filth and squalor, so vividly depicted by Dr. Chisholm.

The traces of the Old Roman or perhaps Danish fort on the summit of the Downs here, and close to the yawning gulph of the river, offer food for reflection, while we enjoy the balmy zephyrs wafted from the Atlantic, and carrying health on their wings. There can hardly be a more invigorating lounge than the Downs here, and when tired of our walk, we can enter a building resembling an observatory, and have a panoramic view of a most romantic country for many miles in every direction.

The gigantic suspension-bridge across the Avon, which is forming here, will prove a very interesting, though I fear a very unprofitable, feature in the scenery. It may surpass the bridge at Sunderland in dimensions, but the tolls will be light.

The so-named Hotwells, at the bottom of St. Vincent's Cliff, and close to the river, were once in great repute; but the air of the place has superseded the tepid spring. The temperature is about 74°—and the solid contents so few that they may be imbibed as pure spring water. The paucity of ingredients, however, is no proof of their inertness of operation, as I have often had occasion to remark elsewhere. Dr. Saunders had a good opinion of this spring, and recommended it as a pure, warm, and slightly acidulated fluid, useful in dyspepsia, and well calculated to allay febrile thirst. In urinary affections, also, this bland and tepid beverage may prove serviceable. Raised to a temperature of 96° I bathed in these waters, and found them very pleasant to the cutaneous nerves; and a brisk walk afterwards along the banks of the Avon, where the scenery much resembles that about Matlock, and even some parts of Saxon Switzerland, was most invigorating. The variety of residence in Clifton, from the airy hotel on the Downs to the Hot Wells at the foot of the Cliff, affords

the visitor and invalid such infinite choice, that the most fastidious may be satisfied. Clifton may vie with Torquay, Undercliff, Hastings, or any other locality in England, for salubrity as well as mildness of climate.

TUNBRIDGE WELLS.

A FEW years ago, this fashionable Spa was situated 36 miles from London. It is now less than half that distance from Modern Babylon, thanks to the united efforts of fire, water, and iron. It is only rivalled by Bath in its antiquity as a fashionable resort for the invalids or the hypochondriacs of the Metropolis. "Its varied attractions (says a writer) of picturesque and truly wild scenery—the salubrious waters which perpetually flow from its iron substrata—and the bracing and finely-scented airs which pass over its thymy commons and umbrageous woods, are so many securities to the valetudinarian and lover of Nature, that we may say of the Wells, as Shakespeare says of Cleopatra—

" Age cannot wither, nor custom steal
From her infinite variety."

It is fortunate, too, that Tunbridge Wells does not present a dense population congregated in narrow streets and lanes—nor flat and insipid rows of brick houses—but numerous and detached buildings, with gardens and lawns in front and rear, commanding beautiful and extensive views of wild or cultivated country—of furze-clad common bestrewed with broom—and of primeval rocks and forests.

It is now some 25 years since Sir Charles Scudamore gave a brief account of Tunbridge Wells and Tunbridge Waters. The physical properties of the latter are, perfect transparence—no air-bubbles—odour distinctly chalybeate, as also the taste—neither acidulous nor saline, but fresh and agreeable to the palate. The

supply is copious, and the temperature uniformly 50° . The spring was analysed by Dr. Scudamore and Mr. Children, and the following inferences were drawn.

1. The water rises from a great depth.
2. The specific gravity being little more than that of distilled water, the solid contents are very small.
3. It contains iron, combined with carbonic acid, by which it is held in solution, even at a temperature considerably higher than that of the human stomach.

In four gallons and twelve ounces (wine measure) there were found $31\frac{1}{2}$ grains of solid matters,—about 12 of which were ferruginous, and 20 saline—or $7\frac{1}{2}$ grains per gallon. The saline ingredients were found to consist of minute portions of muriate of magnesia, muriate of lime, muriate of soda, and some sulphate of lime. The twelve grains of ferruginous matters consisted of $9\frac{1}{2}$ of oxide of iron, with some trifling insoluble substances. Thus, then, a gallon of the water contains about a grain of iron—and a pint holds only an eighth part of a grain—with about a cubic inch and a half of carbonic acid, and half an inch of azote. The strength of the water varies with dry or wet seasons.

Sir Charles considers that the mildness and salubrity of the air, combined with the beautiful scenery, work no inconsiderable share in the cures performed by, or attributed to, the waters. Small, however, as is the quantity of iron in this water, it often produces sensible effects even on people in health—but still more on invalids. To people of plethoric habits, the Tunbridge waters are by no means safe potations. The iron was found to continue in perfect solution at a temperature of 140° —full 40° higher than that of the stomach. In such a state of solution, this minute portion of chalybeate very probably exerts a greater physiological action on the human frame than large doses of the insoluble carbonates which are often swallowed by patients. The saline ingredients, with the exception of the muriate of lime, are scarcely deserving of notice.

Tunbridge water, then, may be considered as a very pure chalybeate, though a rather weak one. Its medicinal agency is, no doubt, first on the stomach, radiating from thence through the

medium of the brain and the circulation, to the whole system. A single dose, say half a pint, contains about a 16th part of a grain of oxide of iron, and about one-twelfth of a grain of muriate of lime, with half a cubic inch of gaseous contents.

No person should commence a course of Tunbridge waters without taking some aperient medicine, unless the bowels are previously in a relaxed state. The first dose of the water is recommended to be taken at seven o'clock in the morning—the second at noon—and the third about three o'clock. Sir C. Scudamore prefers this plan to that which is usually pursued at other spas, and on the principle of keeping up the diffusible stimulus for a greater portion of the day than when the whole quantity is taken in the morning.

As a general statement, Sir Charles Scudamore would say, that half a pint daily is the minimum, and two pints the maximum quantity of water to be taken. The daily dose, however, should at first be small, and gradually increased according to the patient's ability to bear it.

Exercise on the common, rather than on the fashionable and sheltered parades, is recommended to all those who can take it. Tea in the morning is prohibited; but not in the evening. Bread and milk, cocoa, or chocolate, are recommended for breakfast. Dinner should not be later than four or five o'clock, with very slight refreshment in the middle of the day. The water should, if possible, be taken cold; but if it give pain in the stomach, the chill is to be taken off.

On first using the water, some inconvenience is usually felt, as flushings of the face, slight fulness about the head, drowsiness, or distention of the stomach. These effects are not of much importance, and generally disappear by attention to the bowels; but if not, the waters must be discontinued, or lessened, and aperient medicine taken. Indeed, these and all chalybeates are improper when the secretions are vitiated, or the bowels constipated. They should not be commenced, in fact, where there is furred tongue, heart-burn, nausea, fetid evacuations, turbid urine, and other symptoms of deranged condition of the digestive organs.

It is hardly necessary to state that a water of this kind is

highly improper in all plethoric constitutions—in all inflammatory affections—in all congestions about the brain, liver, spleen, or lungs—and, in all organic diseases of important organs. Hence the necessity of an examination of the patient's condition, before entering on a course of this chalybeate, from hearsay recommendation.

In simple debility of the constitution, the water bids fair to restore strength, but, alas! how often do we find these *feelings of debility* connected with, or dependent on, local diseases of an inflammatory or congestive character, where a chalybeate is injurious. The signs of its agreement with the individual are increase of appetite and spirits, followed by a gradual improvement in strength and energy. A glow of heat on taking exercise after the water is a good symptom, and so is an increased action on the kidneys. Exercise should never be neglected immediately after each dose of the waters. As all chalybeates have a tendency to constipate the bowels, an aperient, in the form of a pill over night, is far preferable to the practice of exhibiting saline aperients with the waters in the morning. A warm aloetic at bed-time, as the pil. aloes cum myrrha, is a useful medicine.

The propriety of combining the warm or cold bath with the internal use of the waters, must depend on the nature of the case, as no general rule can be laid down on this point.

The principal maladies to which these waters are applicable, according to the experience of Sir C. Scudamore and others, who have resided at the Wells, are dyspepsia depending on atony of the stomach, and accompanied by languor of body and mind—in uterine debility and irritability—in chlorosis or green sickness—in certain cutaneous complaints of the squamous kind, and connected with debility of the digestive organs—in scrofula, after sea air and sea-bathing have been tried in vain—in gravel, dependent on functional disorder of stomach, &c.

At a much later period, viz. in 1832, Dr. Yeates, a resident physician at Tunbridge Wells, furnished Mr. Britton with a professional article on the waters of this place, for his descriptive work on Tunbridge, and which deserves notice here as the testimony of an experienced and talented physician, now no more.

Dr. Yeates, remarks, that the hills encircling the dell or glen in which the waters rise, are not so high as to ensure complete protection from the North and East winds—and that a good deal of rain falls there: but, from the porous nature of the soil, the ground soon dries. The climate has been greatly ameliorated since the extension of buildings and of cultivation. It is now often frequented by invalids, even in the Winter. Dr. Yeates bears testimony to the peculiar balminess and exhilarating properties of the Tunbridge air, producing sensations which all feel, but none can describe. He is inclined to think that this effect is not entirely owing to the purity of the air—but probably, in part, to the aroma from the plants—especially the broom and heath on the extensive downs. Highly charged with iron as the whole of the ground is, it is not unlikely, Dr. Y. thinks, that the air may receive some tonic and bracing qualities from that mineral—particularly from the iridescent pellicles upon the surface of the waters.

Crowboro Common, at the Beacon, seven miles from the Wells, stands at an elevation of 800 feet above the level of the sea, and must influence the air passing from that quarter.

“The nature and medicinal qualities of its *Mineral Spring* are well calculated to aid this very salubrious property of the air, as it holds iron in solution in its purest and simplest state of combination, that of a carbonate, with very little other foreign ingredient and with a sufficient quantity of carbonic gas to render it a grateful and wholesome stimulant to the stomach. The water from this spring proves highly beneficial in all cases of simple debility, and in such debility as is complicated with sluggish movements in the glandular system, where no inflammatory action or serious obstructions exist; for, to my repeated knowledge of the fact, dangerous errors have been committed upon this point in both sexes, by taking for simple debility *that* which arise from, or is connected with, a high derangement in the functions or structure of some organ.”

The proportion of female visitors at these springs is much greater than of males—but some mischief is annually done here by confounding simple debility with diseases of the uterine sys-

tem—the *feelings* of weakness being attendant on both cases. Dr. Y. very properly observes that “there are some kinds of cough depending on tubercles in the lungs, in which the waters are positively injurious,” and he has great doubt whether the air of Tunbridge is not also inimical in such cases. Consumption, scrofula, and bronchocele are rather frequent about Tunbridge, and so is gout, even among the middling classes of society. With these exceptions, Dr. Y. does not know any place more free from “*local diseases*,” than the quarter in question. Dyspepsia, however, is more than usually prevalent in this locality, and is probably owing to the constipation occasioned by the chalybeate impregnation of all the drinking water in this district. People troubled with any fulness about the head should avoid Tunbridge or its Wells. The following extract from Dr. Yeates’ paper may be appropriately introduced here.

“Observing, then, the stimulant nature of the air and waters of Tunbridge Wells, it is no difficult matter to ascertain what persons, labouring under particular maladies, would be most benefited by a residence at this place, either permanently or for the season. All that class of diseases which has general or local debility for its basis, finds a ready relief from the salutary stimulus of this renovating air. Some species of asthma, coughs arising from a particular state of the stomach, weaknesses and irregularities in young females, sick headaches, irregular atonic gout; that degenerated state of the constitution, with a depression of spirits, produced by a sedentary life with mental exertion, so common to our city merchants, who neglect their health in a laborious search for the accumulation of wealth; and also the dyspeptic state of the literary student, panting for fame and distinction in his secluded study, will receive benefit at this place. The catalogue of ills which arise from these causes is too extensive to be specified; and it will depend upon the degree to which they have arrived, and upon their complication with constitutional ailments, whether the invalids should trust to the benefits of the air only, or joined with the tonic power of the mineral spring. It will happen, and very often too, that nothing is necessary but the advantage of the air, with suitable hours and regimen. It

is not an unfrequent occurrence, under such circumstances, that the addition of the waters will be injurious. When these waters are proper, their effects are powerfully promoted by the air. It is not always so, however, with the waters when the air is found beneficial. It is necessary to draw this distinction correctly in some cases, in order that all the benefit which this place affords may be derived from it; and this discrimination depends so much upon constitutional peculiarities, and upon the causes of the debility, that it is quite impossible to draw a rule of proceeding applicable to all cases. One instance will exemplify this. A person may arrive here with a cough, reduction of flesh, some feverish irritation, an indifferent appetite, restless nights from irritability, great variableness of mind from debility of the brain and nervous system, caused by mental exertion and agitation in the student, the senator, or the merchant, in their too ardent pursuit of worldly acquirements, or in the devotee of fashion, who comes with hectic fever from the nocturnal orgies of London. In such cases as these, and they are often met with, no man of discretion and judgment would lay it down as a rule, that, as the cause is debility, the waters are to be drank as a tonic. But how often is this the case! It is much better to trust to the renovating powers of the air, with moderate diet, exercise in the beautiful scenery of the country, and to such medicines, at times, as mildly excite the bowels; and yet, in such a case as that just described, the invalid becomes impatient to return to his pursuits of worldly acquirements or of pleasure, drinks the waters as a short road to health, and finds he is thrown to a greater distance from it by his hasty imprudence, their qualities being unfriendly to some organ in his diseased state. The same observations will equally apply to young women, who labour under similar symptoms, from twelve to eighteen or twenty years of age, but from a very different cause, though great debility is present in both instances."

Although the chalybeate waters of this place do not sparkle when drunk at the font, yet, if well corked and taken to some distance, say London, they will shew a considerable evolution of gas when poured out into a tumbler. This is owing to the low temperature (48° to 50°), at which they rise from the earth, and

which is raised considerably by their being transported, in the Summer or Autumn, to a distance.

To a stranger the first appearance of the well or spring is truly ridiculous. Who would expect a woollen-draper's shop perched over a mineral water? Yet so it is! "GRAFTON HOUSE" displays its various articles of linen and woollen drapery directly over the two basins into which the water springs. The thing was so ludicrous that I sat down on one of the steps to have a hearty laugh. But an unpleasant idea suddenly rose in my mind. Where do the drains of "Grafton House" lead to? The unfavourable idea was soon effaced by recollecting that the mineral water rises from a considerable depth—and that the shores of Grafton House can have no communication with the chalybeate. It appears that this building was originally constructed for baths—but did not succeed, probably from the very small supply of the mineral water.

BEULAH.

At the short distance of seven or eight miles from the metropolis, (rendered now still nearer by a rail-road,) lies a recent Spa, of no mean power, in a spot elevated several hundred feet above the Thames, and commanding a magnificent view of one of the most beautiful and Champagne countries in the world. The spring itself rises on a gentle acclivity open to the South-west, and embosomed in a wood of oaks, far above the fogs and smoke of the metropolis, on the spires and cupolas of which it looks down. Norwood, even in the memory of some now alive, was a dense forest of oaks, the well-known haunt of the gipsy tribes, but now agriculture and architecture have entirely changed the appearance of this romantic spot. Even since Dr. Weatherhead published a small brochure on Norwood and Beulah, in 1835, the place has wonderfully improved. The walks have been amplified

—elegant villas now crown every eminence—ornamented cottages, without number, adorn every slope—while numerous villages nestle in every dell. Churches have sprung up to prepare man for another world, and a superb cemetery stretched far and wide along the side of a hill for the abode of his lifeless clay, till the last trump shall sound.

The view from the highest ground and promenades is very extensive, embracing Croydon, Banstead-downs, Windsor-castle, and the beautiful range of the Surrey and Hampshire hills on the southern horizon. Turning to the left, the eye ranges over Addiscombe, the Addington-hills, the park and seat of the Archbishop of Canterbury, Seven Oaks, Beckenham, Shooter's Hill, &c. &c. Northward, the metropolitan spires pierce through their canopy of smoke, and we gladly extend our view to Hampstead, Highgate, and the surrounding heights. I have not seen a single spa in this or in any other country, so delightfully situated as Beulah. Most of them rise in narrow valleys or even steep defiles, with a corresponding heat and sultriness of atmosphere: whereas, Beulah is high and open, with a most delicious and exhilarating air, a boundless prospect, and charming scenery.

PHYSICAL APPEARANCES AND QUALITIES.

When the water is first drawn from the well, it is sparkling and transparent, discharging numerous bubbles of carbonic acid gas. Its taste is distinctly bitter, rather than nauseous, leaving on the palate a sensation or flavour somewhat brackish, partaking of its chief ingredient, Epsom salts. The temperature is that of the earth, or nearly so, and its specific gravity is 1011. The water was analyzed by Messrs. Brande and Hume, when the following solid contents were found.

COMPOSITION.

In one pint of the Beulah waters are—

	Grs.
Sulphate of magnesia (Epsom salts)	61 $\frac{1}{2}$
Muriate of soda	17 $\frac{1}{2}$
Muriate of magnesia	9 $\frac{1}{2}$
Carbonate of lime	7 $\frac{1}{2}$
Carbonate of soda	2
Carbonic acid gas 7 $\frac{1}{2}$ cubic inches.	—
Total	97 $\frac{1}{2}$

MEDICINAL EFFECTS.

From the above analysis, it will be seen that the mineral water of Beulah contains a larger quantity of aperient saline matters than those of either Cheltenham or Leamington. Thus, the pint of Cheltenham pure saline bears only 80 $\frac{1}{2}$ grains of solid matters, fifty of which are common salt—the others being eleven grains of sulphate of magnesia—fifteen of sulphate of soda—and four and a half of sulphate of lime. In a word, the Beulah Spa is about one-third stronger, in aperient quality, than the water of Cheltenham.

When we survey the dense mass of inhabitants on each side of the Thames, both below and above London Bridge, immersed in foul air, living on gross food, and deprived of anything like a proper proportion of exercise, out of doors, while at the same time their minds are harassed and perplexed by business, we cannot wonder that their digestive organs become disordered, their secretions depraved, their humours and blood vitiated, and that their general health falls far below par. This metropolitan health, which is little better than rural sickness, becomes particularly conspicuous in Summer, among those vast tribes included under the terms shopocracy and bureaucracy, both of which present on their countenances unerring symbols of disordered health.

Now it seems almost providential that, within 35 minutes' run by rail from London Bridge, a locality of unequalled beauty and salubrity—of air the most pure, and medicinal water the most potent—should open its healing fountains and invigorating breezes to the metropolitan invalid. It is true that the tens of thousands

in Modern Babylon, who earn their daily bread by corporeal labour, cannot avail themselves even of this source of renovation. But the numerous classes above them, employed at the counter and desk, may, at a very trifling expense, procure all the advantages which the winds and the waters of Norwood and Beulah are so well calculated to bestow, without trenching on their official hours or their domestic business. Thus the waters of the spa may be taken from six to eight o'clock in the morning—and the drinkers may be at home in town before 10 o'clock in the forenoon. In the evening, long after their offices and shops are shut, they may go out to the neighbourhood of the Hygeian fountain, and sleep in the pure air of Norwood. Even a month's course of this system of air, exercise, and medicinal water, annually, would go far to set up the sedentary classes of the metropolis for the remainder of the year.

The Waters of Beulah being mildly but efficiently aperient, as well as diuretic and alterative, are applicable to an immense catalogue of ailments, especially of those which are generated in this huge metropolis. INDIGESTION, with all his proteian forms, features, and consequences—constipation of the bowels—congestion, or even chronic inflammation of low grade in the liver and other organs of digestion—fulness or giddiness about the head, taking care that the bowels are kept open—loss of appetite—headaches—bilious derangements—hypochondriasis—the sequences of residence in tropical climates—tendency to jaundice—green sickness—irregularities in certain functions—cutaneous eruptions—scrofula, &c.

With the exception of acute inflammatory affections—disposition to hæmorrhages or piles—diarrhœa—general debility, and purely nervous complaints—and tendency to apoplexy—there are very few maladies that can be aggravated by such a spa as Beulah. Here we need have no apprehension of the BAD-STURM kindled up so often by the more potent and stimulating waters of Germany, and where auxiliary aperients are so much neglected.

MODE OF TAKING THE WATERS.

The following concise observations on this point, from the pen of my friend Dr. Weatherhead, who has written a sensible pamphlet on the Beulah Spa, will be sufficient.

“ The water is best drunk at the fountain, for it so abounds with fixed air, that by carriage the gas escapes, and its taste becomes vapid. The aperient effect is usually quickly produced, and this may be judiciously assisted by drinking freely of tea. Its operation is unattended with griping, or any of those uneasy feelings which commonly accompany the exhibition of factitious saline purgatives : neither is this followed by languor and debility ; but, on the contrary, the patient feels more alert and cheerful, with a keener relish for his meals, for, as I have already observed, it is an advantage peculiar to natural aperient springs that their use can be continued for a much longer period, without weakening the body, than that of any factitious saline purgative—a circumstance of the greatest importance in the cure of all chronic visceral diseases. While these are the general effects of the waters, patients ought, nevertheless, to be apprised, that, in certain constitutions, they sometimes induce, on first taking to their use, a sense of fulness in the head, felt chiefly across the forehead, attended with drowsiness, and occasionally vertigo. In all these instances they have been resorted to unadvisedly, and whenever these symptoms occur, they indicate the necessity of some little preparative. When this precaution is taken, these unpleasant results do not take place. The particular plan of preparation varies necessarily with the disease and its circumstances.

“ As soon as the patient has taken his first dose, he is to walk about until it is time to take the second, for exercise quickens the passage of the water from the stomach into the bowels ; and, should the ordinary dose not operate sufficiently, an alterative aperient pill, taken over-night, is almost certain to ensure its proper effect the following morning.

“ As to the season best suited to the beneficial operation of the waters, although the fine weather of the Spring, Summer,

and Autumn, is most favourable, yet they may be safely taken at any period of the year, if precautions be had to prevent the catching of cold; and, with regard to the duration of the course, this ought not to be less than a month or six weeks to obtain their full effects; but in cases of long standing, as in liver and certain obstinate cutaneous complaints, it is necessary to understand that a much longer period often is required, in order to remove the disease.

“ Among other rules requiring observance, due attention to a proper diet must not be neglected. This ought to be nutritive, and of easy digestion. The stomach ought not to be over-loaded with the quantity, and still less disordered by the quality, of the food, and all salted meats and high-seasoned dishes are carefully to be avoided, as likewise all spirituous liquors. Those who have indulged too freely in the luxuries of the table, to which indulgence indeed very many of our complaints are ascribable, and whose blood has become saturated with the impurities of an unhealthy sanguification, will especially experience the advantages of returning to a diet more natural and simple, while the waters are depurating the whole humours of the body. Numerous other instances, brought on by the nature of the particular avocations and habits of individuals, will be found not less benefited by the change, when man, straying from Nature's path, in pursuit of wealth or of pleasure, contracts diseases through the imprudent deviation. Let the truant, in all such instances, return to nature's beverage, to nature's exercise and hours of repose, to nature's medicine, which here, at a fount, like an affectionate parent, she pours out exuberant from her own bosom.”

MALVERN.

HAD Hippocrates been acquainted with Worcester and Gloucestershires, when he wrote his treatise "*De Ære, Locis, et Aquis*," he would have given MALVERN a conspicuous niche in his list. There is not a spot in England where the air is finer, the water purer, or the prospect more cheering and extensive, than at this place. The following topographical sketch, drawn by Dr. Addison, long resident there, will convey some idea of the locality:—

"The chain of elevations denominated the Malvern Hills, runs in a direction nearly North and South for a distance of almost nine miles, the northernmost extremity, which is about seven miles and a half S. W. of the city of Worcester, being highest and the boldest.

"The summits of the Malvern Hills attain to a height of between fourteen and fifteen hundred feet above the level of the sea, and rising up in several places in a pointed or conical manner, in others running along in a narrow undulating ridge, and their sides sloping down in a broken and precipitous descent, render the outline of the whole remarkably picturesque; while the deep ravines, which in numerous places intersect the masses composing the chain, present a grand and romantic appearance when they suddenly burst upon the view."

"Malvern, is, perhaps, one of the most healthy and delightful spots in the kingdom, and possesses advantages very rarely indeed to be found combined elsewhere. Nature seems to have unfolded her choicest beauties in the surrounding scenery, and to have collected here everything that can delight the eye, or engage the imagination. The air has always been justly celebrated for its great purity and invigorating quality; the healthiness of its topographical situation has been acknowledged by all who have resorted to it; whilst its salutary and wholesome water holds out a paramount inducement to those who are suffering from bodily

infirmity. It is to an examination of the latter, and to an enquiry into the manner in which it has proved serviceable in scrofulous and other diseases occurring in weak habits, that some of the following pages will be especially appropriated, particularly as it has long been resorted to not only for the cure of these, but also for the alleviation of other important disorders to which mankind are subjected.

“There are two wells here frequented by invalids, one called St. Ann’s Well, which is a little distance above the village of Great Malvern, the other, or the Holy Well, is nearly a mile and a half upon the road towards Little Malvern and Ledbury, where are a number of genteel residences and some boarding-houses for the accommodation of those, who, either for benefit or pleasure, resort to this enchanting spot.

“Both these springs are upon the eastern side of the range, and being situated some distance up the ascent of the hill, are removed from the influence of decaying vegetable or animal matters.”

It is abundantly evident that a place of this kind, combining such qualities of water and air, and presenting such facilities and even inducements for bodily exercise, must be admirably calculated to ameliorate or cure a host of maladies engendered by close and mephitic air, noxious and polluted water, sedentary avocations, and the wear and tear of mental anxiety and perturbation. It evinced no small sagacity in one of the hydropathic, or rather hydrophagic priests of Hygeia, to select Malvern for the temple, in which the miracle of the day, and the regnant mania of the moment, should be exhibited to the million, who are always under the influence of some moral epidemic.

There are worse places, after all, than this wicked world. We hear a great deal, indeed, about excruciating maladies, and even death itself. Mr. Farr exhibits his weekly and quarterly black, white, and red catalogue of deaths, marriages, and births; but the first column ought to be entirely omitted, because it is solely the fault of an individual if he labours long under a malady—or if he suffer the grim tyrant to seize him with his fangs. There is no disease, however painful or obstinate, for which there is not a

safe, speedy, and infallible cure, proclaimed in almost every street of London, or of provincial towns in these islands. But, at all events, there is always ONE REMEDY, to which the afflicted may appeal from failures in the courts below, and where relief is sure to be obtained. Nor is this a modern millennium, or felicitous discovery of our own times. It has probably existed since the days of Hippocrates, or even before his birth. Formerly, however, the infallible remedies were more divided into specifics than at present, when we find some UNIVERSAL AGENT at work in its day. Thus, the ROYAL TOUCH cured SCROFULA to the tune of 92,000 cases annually, at one time, till Oliver Cromwell, who tried his hand in this way, failed, and the royal remedy fell into disuse soon afterwards. Bishop Berkley, who denied the existence of *matter*, wrote strenuously in favour of tar water, in consumption and other diseases—a remedy that is now rarely heard of. Mrs. Stephens dissolved stone in the bladder and kidneys, by means of egg and snail-shells, till she got £8,000 from Parliament for the secret, when the remedy soon *dissolved* into air, and the calculi remained as hard as ever! Then came the metallic tractors, which had the wonderful property of attracting internal maladies to the surface of the body, and then drawing them clear out of the patient for ever. When it was found that common wooden tractors performed the same miracles on credulous patients, the charm vanished, and Perkins is only recorded in history as a quack and impostor! In our own time, MUSTARD SEED was, in its day, the panacea for every ill. Unfortunately it caused some violent explosions in the chylopoietic organs of certain people of eminence, or at least of influence, and the bubble burst.

Next came St. John Long, who, with his turpentine and sulphuric acid liniment, "*rubbed out*" the various ills which flesh is heir to. But, in the case of Miss Cashin and others, he effectually "*rubbed out*" the malady and the life together, when the remedy lost all its reputation, and its inventor now lies in Kensall Green, having fallen a victim to the disease for which his liniment was proclaimed by himself as an infallible specific.

Then Dr. Wine-merchant Morrison figured on the stage. His

gambouge, aloes, and antimony pills cured every disease—from a fever to a mosquito bite—from a cancer in the breast to a cataract in the eye—from a dropsy in the chest to a chilblain on the toe ! His promises were all believed, though many fell victims to the nostrum ; and, what is most strange of all, he believed in the efficacy of his own medicine, and died, in Paris, while swallowing a dozen of his pills.

“ BRANDY and SALT ” strutted its day on the stage of human credulity, and was not the least popular candidate for fame, had it not been, in its turn, eclipsed by a more recent, if not more potent rival. The salt was admirably calculated to create the thirst for the brandy, and Mr. Valance’s vineyards in France (for it was only the best *French brandy* that would answer the purpose) might soon have turned in the proprietor a handsome revenue, had not the brandy exploded and the salt burned blue, for want of its spiritual helpmate.

HOMŒOPATHY, or HAHNEMANISM, next made its appearance under lofty and scientific pretensions. A German physician took it into his head that the physiological EFFECTS of medicines, when exhibited to man or animals, were, in fact, diseases, which diseases superseded or suspended other diseases for which the said medicines were administered. So far there was some truth in the theory. Thus mercury, carried to salivation, will often cure or suspend the most violent pains or even swellings on the shin-bones, and so forth. On this he built his doctrine of “ *similia similibus curantur*,”—that is, that a medicine which, when given in common doses, produces a certain train of symptoms, resembling certain diseases, will, when exhibited in *infinitesimal* doses, cure such diseases. The theory, taken as a whole, is no more than “ the baseless fabric of a vision,” and its application to practice exhibits the most ludicrous species of insanity, or at least, of monomania, that ever infested the human brain. Thus, the salivation produced by calomel ought to be cured by doses (the ten-millionth part of a grain) of the same mineral, and so on !! The German fancied that belladonna would prevent or cure scarlet fever ; and that it was only necessary to throw a grain of the extract into the Thames at Richmond, and another into the New

River, at Pentonville, to secure the inhabitants of the metropolis against the dreaded scarlatina!! Another example of Homœopathy may be amusing. It is well known that the Sprudel empties its superfluous and potent waters into the little stream of the TEPLÉ, at Carlsbad—that the Teple discharges itself into the Elb, near Teplitz—and that the Elb, ultimately, flows into the German Ocean, at Hamburgh. Now the Homœopathists have proposed to employ the waters of the Elb, at the last-mentioned city, when farther diluted by spring water, as infinitely superior to the Sprudel itself, at Carlsbad, whose waters, they aver, are so powerfully allopathic, that they would poison a horse or an elephant, and that they produce ten thousand times more diseases than they cure!

The apologists for Homœopathy tell us of the dangers of the allopathic, or large dose practice, which often destroys instead of saving life—they aver, in short, that the millionth part of a grain of chamomile can never do injury, even if given in the delirium of a brain fever, or the last stage of consumption. This is true, to a certain extent. But there are errors—nay sins, of *omission*, as well as commission, in this world, and especially in the treatment of diseases. The billionth or trillionth part of a grain of aniseed, which would amuse a nervous dowager or a vapourish malade imaginaire, could not injure the most intense inflammation of brain, heart, or lungs—but such transcendental humbug would allow those precious moments to elapse, during which the malady might be arrested, and the life of the patient saved by proper means. Now, the man who sees a fellow-creature mount the parapet of Waterloo Bridge and prepare to spring into the river, without using the least effort to prevent suicide, is little less culpable than if he had pushed the wretched individual off the range-wall into the stream below. But it is doubly culpable in the physician who takes charge of his patient's health, in acute diseases, and yet lets slip the opportunity of effectually assisting the powers of Nature, in her unequal combat with overwhelming maladies. The Homœopathists, indeed, deny the inefficacy of their *infinitesimal* doses of arnica or other medicinal substances, and appeal to the testimony of their patients on this point. But what miracle or impossibility ever lacked testimonials on such occasions? Were

not the metallic tractors, though merely pieces of cold iron, amply attested by numerous and respectable individuals, as capable of extracting the most inveterate diseases? How many unquestionable proofs were adduced of the efficiency of Prince Hohenloe's prayers in the removal of maladies, and the prevention of death?

To the influence of imagination many of the effects vouched for by weak-minded patients must be ascribed. A hypochondriac, at a public institution in Middlesex, became convinced that he had a poisonous taint in his blood and bones, which nothing but a regular course of mercury carried to salivation would correct. His physician, wearied out with his entreaties, consented, and ordered him two bread pills every night, and one in the morning. In the course of ten days the patient's mouth became sore, and he was kept in a state of mercurial or bread-pill ptyalism for a month. He was then told that enough of mercury had been given—the bread-pills were discontinued—and the salivation gradually ceased! Now, if such decided physiological effects can result from imagination and bread-pills, how can we wonder at the effects of globules of aconite, when exhibited to nervous females and credulous males—especially among the aristocracy, who are ever the foremost in believing miracles, and listening to quacks. From the nature of Homœopathy, however, flagrant OMISSIONS will not be near so frequent or apparent as those of COMMISSIONS in other systems: but, already, some distinguished personages have fallen victims to Hahnemanism, and its fall is not a matter of doubt, but only of calculation as to time.

MESMERISM.

The father of Homœopathy worked by means of *matter*, however minutely that matter was divided into infinitesimal portions. But it was reserved for another German brain or genius to transcend the boundaries of the material world, and call into existence a new power, of a nature totally unknown to mankind before. This power is clearly supernatural, and seems to exceed the power of the Deity himself. Our wise, and hitherto supposed Omnipo-

tent Creator constructed various organs of the body, as the eye, the ear, &c. so beautifully adapted to their peculiar functions, as to form the themes of admiration for philosophers and divines in all ages and countries. These adaptations of means to ends were held forth as the most undeniable and convincing proofs of Almighty design—and, in fine, of the existence of an Omniscient and Omnipresent DEITY. All these proofs and illustrations are now dispersed in empty air! By a wave of his hand, the MESMERIC NECROMANCER can annihilate the function of the eye, and transfer its vision to the navel—by another motion of his hand, he renders the ear a nonentity, and places the function of audition in the elbow!! But these are trifles. By a third motion, the magician throws the subject of his experiments into a profound magnetic trance—bursts the boundaries of all the senses, as established by the Divine Architect—and causes the said subject to see, hear, feel, and understand every action, word, or even thought that may be passing in the remotest corners of the globe—in the Celestial Empire, Affghanistan, or on the summits of the Cordilleras!!

Another “PASS,” and, presto, a wretched cripple, harassed for years with ulceration of the knee-joint, and worn to a skeleton by pain and suffering, is thrown into a state of profound mesmeric sleep, by a barrister. The surgeon screws on his tourniquet—severs the flesh from the thigh-bone—saws through the dense femur—ties up the arteries—and pinches the nerves, by way of experiment—but no sensation is felt—no interruption of the balmy slumber occurs, and when brought back to this world of woe, by a counter-pass of the mesmeriser, the fortunate patient finds himself minus a member that had brought him to the brink of the grave, and that without the slightest pain or consciousness of having undergone a capital operation!! This operation, however, with a number of similar ones, such as extraction of teeth, insertion of needles, sawing away jaw-bones, &c. &c. I do not bring forward as specimens of the supernatural, well knowing that they are common deceptions that have been practised, time immemorial, by designing people; but, when the transposition of the organs of sense—the *clair-voyance*, or knowledge of events passing ten thousand miles off, &c. are brought forward and verified, or at least

testified by "credible witnesses"—peers of the realm—and various learned and honourable men—then we are forced to admit that such transactions are not merely supernatural, but that they are beyond the power, or, at all events, the will, of the ALMIGHTY, according to all human experience. They are powers or endowments which finite human beings have never before been entrusted with, and as they reverse or annul the laws of the Almighty, as established since the Creation, they (*if true*) almost drive us to the impious conclusion that they are the works of a BEING who is adverse to, and stronger than GOD! Now, taking for granted the assertions of the Mesmerists and the testimonies of their disciples—supposing it *true*, that they can transpose the senses, and so completely annihilate all consciousness that a jaw-bone may be sawed and cut away, or a limb amputated, without producing the slightest pain or sensation, what security have we for the life or limb of man, or the honour and virtue of woman?

There is yet another, and important consideration. In what light are we to regard the miracles recorded in Holy Writ, when we see them completely cast in the shade by the miracles of Mesmer? But fortunately for religion, morality, philosophy, and even decency, the whole system of animal magnetism is no more than a baseless outrageous deception—or, as Danl. O'Connell would roughly but properly designate it—"A MIGHTY BIG LIE"—a triple-headed monster, composed of credulity, imposture, and mendacity. And what shall we say to the first of these heads—CREDULITY—as represented by the public, in this *enlightened* age? What are we to think of senators, divines, barristers, and grave doctors believing in the mummeries of Mesmerism, much more firmly than in the truths of Christianity? Talk of the gullibility of the lower orders of society, when listening to the harangues of political quacks! Their credulity is not half so great as that of their superiors, when swallowing the matchless absurdities of the most unprincipled charlatans!

HYDROPATHY.

THIS system did not originate in the brain of a German philosopher, but of a German peasant. And truly, two things can hardly be more dissimilar than Homœopathy and Hydropathy. The *former* is a chip in porridge—and never does harm but by omitting to do good. The latter is a kind of Devil-angel. It kills or cures—amends or makes worse—the complaint hardly ever remaining in “*statu quo ante Aquam.*”

The principles and practice of hydropathy are by no means new; though there is little doubt that PRIESNITZ, the Silesian peasant and founder of the Modern System, is fairly entitled to the claim of originality, as far as he himself is concerned; for it is not likely that a man who knows not in which side of the body the liver is placed, should know anything of medical history. The *peculiarities*, indeed, of the Silesian's practice shew that he is original, and these peculiarities are the dangerous points in his system. Thus, the drinking of cold water for the cure of diseases is as old as the hills; but the enormous quantities which the disciples of Priesnitz often ingurgitate, have caused many deaths by dropsy and by an eruption of boils, which have worn out the wretched sufferers with all the tortures to which JOB was doomed!

The transition from a hot or vapour-bath to snow or the cold-bath, has been practised by the Russians time immemorial. They stew themselves in their vapour and then roll themselves in the snow, or plunge themselves into a river or cold-bath. But the Russians do not adopt this process for the treatment of acute or serious diseases, but as a means of fortifying their constitutions against the rigour of their climate. Now, it does not follow that that which will generally strengthen the human constitution, and preserve it from diseases, will always cure those diseases when they do actually occur. We may take a familiar example:—

Gymnastic and athletic exercises, when taken regularly, will keep off a multitude of diseases, as gout, rheumatism, indigestion, &c. But let a man have his knees and ankles swelled and inflamed by gout or rheumatism, and then let him try gymnastic or athletic exercises! And here is one of the grand mistakes which the Hydropaths make. The practice of hydropathy, with some modifications, might be very beneficially employed by people *in health*, as preventive of disease; but, as has been just exemplified, the preventive of disease will not always be the proper remedy for the cure of an actual attack.

But, independently of the inapplicability of the practice of hydropathy to a multitude of ailments, the process itself of sweating, cold plunging, and enormous ingurgitation of cold water, is very far from safe, even in health. Many have suffered, and not a few have died of dropsy, and, what is far worse, of Job's terrific malady—the eruption of carbuncular boils over the whole body! It is hardly possible to imagine a more dreadful death than that which results from this horrible and loathsome furuncular malady. To be roasted alive is an easier death, because it is soon over; but the torments of Job last for weeks and months, without a moment's mitigation, but with constantly augmenting sufferings! It is not very probable that a Silesian peasant is much wiser than the Constructor of the human fabric and of the Universe—nor even of God's own handmaid, Nature. Now this last agent or sub-agent never institutes thirst unless for the cure of some feverish or inflammatory action, or to dilute our food. Whenever the ingurgitation of liquids, whether of water or any other fluid, is indulged in beyond the quenching of natural thirst, a violence is offered to Nature, and sooner or later the offender will pay the penalty. But when the Hydropath swills ten or fifteen goblets of water—drenches the digestive organs—swells the torrent of the circulation with blood and water—and calls upon the secreting and excreting glands to work quadruple tides, he puts the constitution into some peril. For although Nature is capable of withstanding numerous shocks, and resisting multitudinous poisons that are daily administered to her, she is not omnipotent, as the bills of mortality too clearly prove. The ultra hydropaths employ

the process under discussion where there is intense acute inflammation of the most vital internal organs, as the following case from Dr. Engel, of Vienna, will shew.

“The first case related by Dr. Engel, is one of pneumonia, well marked, in a young girl who had been exposed to a current of cold air after violent exercise in the heat of the day. Dr. Weiss ordered her to be enveloped in a blanket, wet with cold water, and then other blankets over the wet one, with plenty of cold water to drink. Some amelioration of the symptoms followed; but in two hours they were again intense. Two foreign physicians accompanied Dr. E. to the bed-side of the patient, and prognosticated a fatal termination unless she were bled, and the cold water treatment declined. Dr. E., with the greatest confidence, ordered the blanket to be again wetted with cold water. This second application was followed by increase of the burning heat, and also by delirium. Notwithstanding the remonstrances of the foreigners, Dr. E. was still firm in his purpose—and ordered the wet blankets to be applied every half-hour. No change took place till after the sixth application, when the kidneys acted copiously. The seventh application was followed by diminution of the thirst and heat—the patient became more tranquil—began to perspire—and fell into a short sleep. The perspiration continued copious for twenty-two hours, and was kept up by the drinking of large quantities of cold water. The perspiration having ceased, the patient was put into a cold half-bath (slipper) where the respiration became more free. On being taken out and covered over she perspired copiously. The wet blankets were now applied only twice a day, with an occasional half-bath. On the fifth day she was well.”

It is to be remembered the above and other cases are related by a Hydropathic physician, and are to be taken, “*cum grano salis.*” Even if the accounts be true and correct, which I very much doubt, they only shew how much poor human nature will bear, when exposed to the errors and caprices of the experimental practitioner!! I have not the smallest doubt that where one case of inflammation of the lungs resisted this most pernicious mode of treatment, fifty would prove fatal. And the same may

safely be said of other acute inflammations, as of the heart, brain, stomach, bowels, liver, kidneys—or even of the limbs, in acute rheumatism and gout. The cold water system has been tried in gout time immemorial, and, about thirty years ago, the practice was revived by Dr. Kinglake in this country. After numerous failures, and not a few deaths, it has been abandoned by the profession, though it is occasionally advocated by a few individuals.

But it is in chronic diseases, that is, diseases without any evident fever or inflammation, acute or subacute, that hydropathy flourishes, and its disciples exult; and yet it is in this very class of afflictions, large and multifarious as it is, that the “water-cure,” as it is erroneously called, produces what its name expresses—the “WATER-DISEASE”—and slays its thousands—not, indeed, in an open, obvious, and sudden manner, but in a slow, insidious, and masked character, when the victim is totally unconscious of the precipice to which he is advancing, and over which he will inevitably be hurled. Those who have seen most of human maladies, are well aware that the *causes* of chronic diseases, as the very word (chronic, from *chronos*, time) imports, are slow and gradual in implanting themselves in the constitution, and, when once fixed, are equally, if not more slow in their removal. In fact, it is known to every practitioner of experience that not one chronic disease in ten can be cured at all, and that the most we can expect is a mitigation of suffering. But there are certain classes of maladies—for instance, gout, rheumatism, rheumatic gout, tic douloureux, &c., which, though thoroughly constitutional, and whose *causes* have been years accumulating, are yet of a migratory nature, suddenly shifting their seat from a vital to an unimportant organ, and, *vice versa*, from a foot or a wrist to the stomach or heart. Now, it is an undoubted fact, that when a translation or metastasis of a chronic or sub-acute affection; as of gout or rheumatism, suddenly takes place from the exterior of the body, whether spontaneously or by the force of medicine, the malady takes up its seat in some internal organ;—but as internal organs, as the heart, liver, brain, &c. are not naturally sensitive of pain, the metastasis is very often taken for a cure, and the malady preys for a long

time on a vital part, without suspicion, till it reaches a certain height, when the disease not only reveals itself, unequivocally, by pain and suffering, but is now totally beyond the power of art!! Nature will not be cozened by the ingenuity of man. For a long time she counteracts the deleterious effects of morbid causes, whether applied by ourselves, or unavoidably occurring, and guards vital organs by throwing the onus on external parts, as is familiarly exemplified in gout. But, when we thwart these salutary efforts of Dame Nature, by violently repelling the pain, inflammation, stiffness, or swelling from the hands and feet, by cold applications, heroic doses of colchicum, &c. then we lay the foundation, directly or remotely, for serious or even fatal maladies of some of the internal viscera! In this drama HYDROPATHY is now playing an important part, and we are now in almost daily habits of seeing the precious fruits of the "water-cure," in the shapes of furuncles, carbuncles, dropsy, and hypertrophy of the heart—internal abscesses, and other grave consequences. These, however, will not be heeded—at least they will not make much impression on the public, till some great personage dies suddenly under the Hydropathic process, when the bubble will burst, and the "WATER-CURE" shrink within its natural and *salutary* boundaries. I say *salutary*; because, in a large class of patients, labouring under dyspeptic, hypochondriacal, and nervous complaints, the early hours, the abstinence from wine and other stimulants, the vigorous exercises and the external and internal use of water itself, may prove more efficacious than medicine, indolence, and repletion at home. But let those who are subject to rheumatism, gout, erysipelas, tic douloureux, or any migratory disease, beware of the wet sheets, the plunge into cold water while perspiring, and the enormous ingurgitation of cold water, if they wish to avoid enlargement of the heart, chronic inflammation of the lungs, congestion of the liver, dropsy of chest, or the affliction of JOB!

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