



Wilkinson of Thetford del.

W^m Read Sculp. Maiden Lane, Covent Garden.

A VIEW AT THETFORD,
From the RIVER OUSE.

Published for Accum's Guide to the Thetford Spa.

GUIDE
TO THE
CHALYBEATE SPRING
OF
Thetford,

EXHIBITING

THE GENERAL AND PRIMARY EFFECTS OF THE THETFORD SPA—RULES ESSENTIAL TO BE OBSERVED WHILST TAKING A COURSE OF THE WATERS—AN ACCOUNT OF THE DISEASES IN WHICH IT WILL MOST PROBABLY BE FOUND EFFICACIOUS—CAUTIONARY HINTS AGAINST THE INDISCRIMINATE USE OF THIS WATER IN DISEASES TO WHICH IT IS INAPPLICABLE, AND TESTIMONIALS OF MEDICAL MEN, SHOWING THE CURATIVE EFFECTS OF THE SPA IN CERTAIN OBSTINATE AND LINGERING MALADIES ;

WITH

OBSERVATIONS ON BATHING,

AND A SKETCH

OF THE

History and Present State of Thetford,

By FREDRICK ACCUM,

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WITH COPPER PLATES.

London :

SOLD BY T. BOYS, 7, LUDGATE HILL ;


AT THE SPA BY THE SUPERINTENDANT ; AND BY ALL THE BOOKSELLERS AT THETFORD, BURY ST. EDMUNDS, NORWICH, AND DEREHAM.

1819.

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TO THE RIGHT WORSHIPFUL
J. B. FAUX, ESQ.
MAYOR,
AND THE INHABITANTS AT LARGE,
OF THE
City of Thetford;
AND TO THE RESIDENT PROPRIETORS
OF ITS VICINITY,
WHOSE
UNITED AND DISINTERESTED EXERTIONS IN
BRINGING THE
Mineral Spring of Thetford,
FOR ITS HEALING VIRTUES INESTIMABLE,
YET SUFFERED LONG TO REMAIN NEGLECTED AND
UNKNOWN, INTO
CELEBRITY AND USE,
AND WHOSE
CARE IN PROVIDING FOR THE
COMFORTABLE ACCOMMODATION OF THE SICK
AND INFIRM VISITORS TO THIS
Fountain of Health,
HAVE GIVEN THEM LASTING CLAIMS
TO THE
GRATITUDE OF THE PUBLIC;
THIS GUIDE
TO THE
MINERAL SPRING OF THETFORD,
IS MOST RESPECTFULLY INSCRIBED
BY
THE AUTHOR.



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PREFACE.



IT having fallen to my lot to be professionally called upon to determine by a series of analytical experiments, the general nature and chemical constitution of the Thetford Chalybeate Spa, I was led by the great importance of the results, in a medical point of view, to feel a natural anxiety that a knowledge of the spring should be as widely diffused as possible.

In furtherance of this desire, I have written the present guide, in which I have endeavoured to embrace every variety of information respecting the chemical con-

stitution of the Spa, which can be necessary for the satisfaction of the medical adviser, or for the benefit and gratification of the invalid visitor.

From the result of the chemical analysis, the medical practitioner will at once perceive that the Thetford Spa bears a strong resemblance to the Chalybeate Waters of Tunbridge. It will enable him to judge clearly and distinctly of the medicinal effects to be obtained from it; and the reader need scarcely be told, that without such an analysis, no medical practitioner would attempt, nor feel himself justified in including the use of the spring in a system of cure.

For the benefit of the visitor of the Spa, I have stated the general effects of this Spring upon different constitutions.—I have pointed

out to him the rules essential to be observed whilst taking a course of the waters, including particularly those which relate to regimen and diet—I have also specified some of the diseases in which the water may most probably be found efficacious, accompanied with cautionary hints against its indiscriminate use in ailments to which it is inapplicable.

I have added some important testimonials of medical men of eminence, showing the efficacy of the Thetford Spa in the cure of many obdurate and complicated diseases, proving the benefit that must result from its more general application in the art of healing—and I have likewise added some observations on bathing, as far as the warm or cold bath may become a co-agent to the curative powers of the Spa.

The part of the guide which relates to the ancient history and present state of Thetford, it is presumed will not be considered altogether superfluous. It may serve to inform the stranger visitor, of all that is chiefly remarkable or interesting in this "CITY OF THE EAST," and in pointing out to him not only the various remarkable objects of curiosity, but also the sources of recreation which it affords, it may enable him to fill up pleasantly and beneficially those hours which might otherwise be oppressed with an *ennui*, destructive to the great object of his visit to this fountain of health.

FREDRICK ACCUM.

*London, Compton Street, Soho,
August, 1819.*

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GUIDE
TO THE
Chalybeate Spring
OF
THETFORD.



SECTION I.

**GEOGRAPHICAL SITUATION OF
THETFORD.**

Thetford is a borough and market town, situated partly in the hundred of Shrop-ham, and county of Norfolk, and partly in the hundred of Lackford in the county of Suffolk. It is distant thirty miles S. W. from Norwich, and eighty miles N. N. E. from London.

ANCIENT HISTORY OF THETFORD.

The history of the rise and progress of cities venerable for their antiquity, or eminent for military exploits, fills the mind of men with the most pleasing reflections.— Among such, none claims our attention more than the city of Thetford.

In narrating the historical events of a place, the origin of which mocks the researches of the most inquisitive, we must naturally review in part a more extended district. It is almost impossible to distinguish the historical events which solely belong to any precise spot, from those which occurred in the vicinity. Neither the Britons, Romans, nor Danes, had established the precise boundaries that now serve as land-marks, consequently in giving a sketch of the ancient history of the town of Thetford, we must be more general than particular in language.

Thetford traces back its origin to a very remote period, but the most intelligent and erudite antiquarians differ much in their opinions respecting the precise time in which the scite of this town began to be inhabited.

“ Of all the eulogies at which I aim
Antiquity does the precedence claim,
By me with Order, and with air inspir'd,
The oldest glories, shall be first admir'd ;
THETFORD, thy age, shall introduce my rhimes,
I honour all thy joys in ancient times,
And wish thee happy, in what now appears,
The relics of above a thousand years.”

Nothing can be affirmed with certainty with regard to the derivation of this once celebrated place. According to some it was called by the Romans *Sitomagus*, which is supposed to be derived from the word *Set* or *Thet*, the name of a small river falling out of Norfolk, into the river called the *Little Ouse*, which runs through

this town, and *Magus*, which according to Pliny, signifies a city, so that it was called by the Romans, the city upon the river Set or Thet, and hence *Sitomagus*.

“ Next I congratulate thy charming scite,
Fit for accommodation and delight,
On OUSA’S Bank, conveniently placed
With all her troops, of wanton *Naiads* grac’d.”

What name Thetford had before the arrival of the Romans is unknown, nor is it very material: the best towns the Britons had before, were very obscure; and history does not furnish any particular account of them.

According to others, the name of *Sitomagus* was given to this town long before the Romans, and the appellation *Sitomagus* according to them, is supposed to be no more than the city of the *Sitones** or *Sinones*, situated upon the Ford, that is, the

* Gibson’s explanation of the names of places at the end of the Saxon Chron. p. 45.

most frequented Ford by which people used to enter into Norfolk. The arguments adduced in support of these opinions are not very conclusive, for no decisive evidence has been produced.

Sitomagus continued to be a fenced and royal city, from the unfortunate overthrow of Boadicea till the establishment of the Heptarchy, and was known to Antoninus, Ptolemy, and elder ages, by this name; when Norwich, Lynn, and Yarmouth, were yet in their infancy.

Thetford has an acknowledged claim to having been once the seat of the East-Anglian Kings.

Time which brings the mighty low,
And level lays the lofty brow;
Has seen these broken piles complete,
Big with the vanity of state.

Thetford being the metropolis of that portion of the *Heptarchy* which lay open to the north, it became subject several times to the ravages of the Danes. During

the reign of Egbert, in the year 827, the Danes becoming truly formidable, the whole county of Norfolk was more than once involved in fire and blood, and Thetford shared largely in the general calamity.

In the reign of Ethelbald 838, and Ethelbert, a new swarm of the Danish ravagers landed with thirty-three sail, but were repulsed. The ruthless barbarians continued their invasions from year to year, and fought battles, or rather skirmishes in East-Anglia.

In the reign of Ethelred 866, the Danish robbers again landed in East-Anglia, and the valour of Ethelred was insufficient to repress the Danish invasion. Ethelred attempting to rout them, received a wound in the battle of which he died, leaving his brother Alfred the inheritance of the kingdom. The Danes were by this time in possession of East-Anglia, and continued their pillages over the greatest part of his dominion; the lands being uncultivated

through fear of continual invasions, and all the churches and monasteries were burned to the ground.

Alfred had scarcely come to the throne in 872, when a new swarm of Danish pirates came over, who joined their countrymen. Alfred fell upon them with a few troops, and after many conflicts, victories, and defeats, perils and escapes, overcame them under their leader Guthrum in the year 878, or 879. He compelled the Danish chieftains to receive christian baptism, and allotted the province of East-Anglia, for their limited residence. The principal residence of the Danish leaders, was Norwich.

The restless spirit of the Danish marauders could not long brook such restraint. During the reign of Ethelred the Second, the son of Edgar and Elfrida, a weak and irresolute monarch, the old and terrible enemies, the Danes again revolted.

As they lived indiscriminately among the

English, a resolution was taken for a general massacre; and Ethelred by a policy common to weak princes, embraced the cruel resolution of putting them all to the sword. This plot was carried on with such secrecy, that it was executed in one day, and all the Danes in England were massacred without mercy. But this event so perfidious in the contriving, and so cruel in the execution, only prepared the way for greater calamities. To revenge this treacherous outrage, Swyne king of Denmark invaded England in the year 1004, with a powerful fleet, and landing on the coast of Norfolk a furious engagement ensued. The cities of Thetford and Norwich were laid in ashes. Ethelred was obliged to fly into Normandy, and Swyne was proclaimed king of England. After his death, Canute, afterwards surnamed the great, who had succeeded to the throne, finding his tenure precarious, retired to Denmark, and the people again

affixed the crown on the head of Ethelred, who dying in 1016, his son Edmund, surnamed Ironside, ascended the throne; but in the same year Canute returned with fresh levies of troops, and gave battle to Edmund.

The contest between Canute and Edmund was managed with great obstinacy and perseverance. The first battle that was fought appeared undecisive; a second followed, in which the Danes were victorious. But Edmund still having interest enough to bring a third army into the field, the Danish and English nobility equally harrassed by their internal convulsions, obliged their kings to come to a compromise, and to divide the kingdom between them by treaty. Canute in 1017 reserved to himself the northern parts of the kingdom; the southern parts were left to Edmund, but this prince being murdered about a month after the treaty by his two chamberlains, Canute was left in the peaceable possession of the whole kingdom.

After the truce which was concluded between king Edmund Ironside, and the barbarous Canute, for in no other light can the Danes at that time be considered, peace and tranquillity began speedily to be restored. Thetford like a phoenix arose from its ashes, and under the Danish succession grew so opulent and flourishing, that in the time of Edward the Confessor, there were no less than nine hundred and forty-four free burgesses inhabiting this city ; of which, except thirty-six, could put themselves under the protection of whom they pleased without the royal licence ; provided they paid all customs, *heriot*, (or a tribute given to the Lord for his better preparation towards war,) excepted.

In the time of the Conqueror, the number of burgesses was reduced to seven hundred and twenty ; and the uninhabited houses were two hundred and seventy-four. The town was governed by a consul and other inferior officers. Not being

a free burgh, it suffered greatly at times by the oppression of the officers nominated by the crown.

From numerous coins, it is evident that there was a mint at Thetford from the time of Athelstan to the reign of king John.

Here was also a Bishops See, till Herbert de Losenga removed it to Norwich, in the reign of William Rufus, where it has remained ever since.

In the year 1573, Queen Elizabeth granted a charter to the town, by which a mayor, ten aldermen, twenty common-councilmen, and a recorder, constitute the corporation. The mayor for the time being is clerk of the market, and in the year after his mayoralty officiates as coronor. The corporation had also permission to send two burgesses to parliament, "*provided they were discreet and honest men, and were elected at the expence of the borough.*" This charter was surrendered to the crown

in the thirty-fourth year of Charles II. ; and a very imperfect one obtained in its stead. But in 1692 an order was procured from the court of chancery for cancelling the surrender, and procuring a transcript of the charter granted by Elizabeth, under which the town is at present governed.

Thetford has been honoured with the presence of many of our sovereigns, particularly Henry I. and II. Several charters, granted by the former, bear date from this town. When the manor fell with the duchy of Lancaster, of which it formed a parcel, to the crown, the ancient seat of the earls Warren became the royal palace. This was rebuilt in the time of Queen Elizabeth, who occasionally resided here.

King James I. made it one of his hunting seats ; but having been disgusted with the abrupt remonstrance of a farmer in the vicinity, over whose lands the King and his retinue had been hunting, he gave the palace to Sir Philip Wodehouse ; it has been re-

built, and is now the property of a private gentleman, James Cole, Esq.; but still bears the appellation of the “King’s House.”

RUINS OF THETFORD.



THE MOUNT, OR CASTLE HILL.

The Romans, when they conquered a country or town, endeavoured to secure the acquisition, by garrisoning it with some of their legions under the command of proper officers. We find about this town several vestiges of its being once fortified; and nothing is more probable than that those places of defence were erected by the Romans.

Mr. Bloomfield supposes they had a fortress at each end of the town, which then lay altogether on the Suffolk side of the river.*

* Martin’s History of Thetford, p. 9.

At the eastern extremity of the town are some extensive remains of fortifications, consisting of a large mount, or keep, with lofty banks and deep ditches. These fortifications were probably first formed by the early kings of East-Anglia, and the keep an addition, made subsequent to the Norman conquest.

The Danish mount of partial green,
Still as each mould'ring tower decays,
Far o'er the bleak unwooded scene,
Proclaim their wond'rous length of day.

BLOOMFIELD.

East of the mount is a large area, or place of arms, three hundred feet square, evidently intended for parading the troops employed in its defence. The mount is about one hundred feet in height, and the circumference at the base, nine hundred and eighty-four; its diameter measures three hundred and thirty-eight feet at the base, and eighty-one on its summit, which is dishing, or concave, upwards of twelve feet

below its outer surface, owing, probably, to its having been once surrounded by a parapet, the top whereof may have gradually been mouldered away by the injuries of time and the weather. The slope, or ramp of this mount is extremely steep, forming an angle with the plain of the horizon, of more than forty degrees; and yet no traces remain of any path or steps for the purpose of carrying up machines, or any weighty ammunition. The chief entrance seems to have been on the north side, where, in the second or inner, rampart, a passage is so formed, that troops attempting to enter must have presented their flanks to a double line of the garrison looking down upon them.

The remaining ramparts are about twenty feet high, and the fossa from sixty to seventy feet wide: the slope or inclination of each vallum forms an angle of forty-five degrees with the plane of the horizon, and, consequently, exhibits a wide crest against the foss. This mount is shown in plate II.

The ruins of ecclesiastical and other buildings strongly remind the visitor of the ancient splendor of this place. At one period Thetford had twenty churches answerable to the same number of parishes, and eight monasteries, besides other religious and charitable foundations. But of these the names only of some remain ; and of others a few dilapidated places will serve to mark their scites.

THE NUNNERY

Was founded by Uvius, the first abbot of St. Edmond's Bury, in the reign of king Canute ; in commemoration of the number of persons who fell at Snarehill, near this town, in the sanguinary conflict between king Edmund's army and the forces under the Danish leaders Ingwar and Ubba. A few monks were placed in this monastery, which was then considered as a cell to Bury Abbey. In the year 1176, the monks being reduced to two, resigned, by the

request of the abbot of Bury, who placed in their stead a convent of nuns, who had previously resided at Linges. At the dissolution, the revenues and scite were granted to Sir Richard Fulmerston, who made this house his residence. It was afterwards let to a farmer, and some years since the greater part was taken down: a new farmhouse was built of the materials, and the conventual church converted into a temple of Ceres, commonly called a barn. Some of the walls, with buttresses, windows, a fine arch, and a cell, still remain.

THE PRIORY OR ABBEY

To where of old rich abbey's smil'd,
In all the pomp of gothic taste,
By fond tradition proudly styled
The mighty "City of the East."

BLOOMFIELD.

The priory was founded by Roger Bigod, 1104, for monks of the Cluniac order. This was a peculiarly privileged house;

for other Cluniac monasteries were subject to have their revenues seized, on a war breaking out between England and France, because being dependant on the abbey of Clugny, in Burgundy, the monks were considered in law as foreigners; but the religious persons of this monastery were naturalized in the time of King Edward the Third, and treated as other subjects of the realm. The monastery was suppressed in the year 1540, and the revenues granted to the Duke of Norfolk, and are now the property of Lord Petre. The ancient gateway, constructed with free-stone and black flint, with parts of the church, &c. still remain. This monastery had been the burial-place of the several noble families who had successively borne the title of Earls of Norfolk, and also contained numerous monuments of the Bigods, Mowbrays, and Howards. After the dissolution many of the mortuary remains were removed to Framlingham.

ST. AUSTIN'S FRIARY

Was founded by John of Gaunt, duke of Lancaster, in the reign of Richard II. in the year 1386, for mendicant friars of the Augustine order. The scite, granted to Sir Richard Fulmerston, is still called the Friar's Close.

THE MONASTRY OF ST. SEPULCHRE.

———— 'Tis dreadful,
How rev'rend is the face of this tall pile,
———— It strikes an awe
And terror to my aching sight.

CONGREVE.

This monastery was founded 1109, by William, Earl of Warren and Surrey, for canons of the Augustine order, and additionally endowed by King Henry II. The scite is still called Canons: part of the conventual church, yet standing, has long since been used as a barn. The gate of

the porter's lodge, and some other parts of the buildings still remain. Of the other four religious houses, no vestiges are now left.

SEPULCHRAL MONUMENT.

In removing the foundation of St. Augustine's Church the remains of Lady Todenham and Lady Hengrave her Daughter were discovered; they were taken up and carefully re-interred near the same spot, and a neat monument supporting an urn, with the following Inscriptions, was erected to their Memory, by George Beauchamp, Esq. of Thetford.

East End.

Here stood the Church
And Monastery of
The Friar Augustines,
Founded by
John of Gaunt,
Duke of Lancaster
A. D. 1386.

South Side.

In removing the foundation of this Church,
 A Vault was discovered,
 Containing the bodies of Dame Margery,
 Daughter of Sir Thomas Jenney, Knt.
 She was first married to John de Herling
 Lord of Herling,
 and to her second Husband
 Sir John Todenham, Knt.
 She Died A. D. 1412.

West End.

Also Dame Elizabeth,
 Daughter of
 John de Herling,
 And Wife of Sir Thomas Hengrave, Knt.
 of Hengrave, in Suffolk
 She Died A. D. 1402.

North Side.

In Veneration of this consecrated Place,
 And of those illustrious Persons,
 This Altar Tomb was erected by
 George Beauchamp, Esq.
 A. D. 1807.

SOLI DEO GLORIA.

The following is a list of the principal ancient monastic buildings, and charitable foundations of Thetford.

<i>Orders.</i>	<i>Founded.</i>	<i>Granted to.</i>
1. Cluniac Priory	cir. 1104.	Th. D. of Norfolk
2. Canons of the Holy Sepulchre	} temp. Steph. removed	R. Fulmerston, Esq.
3. Bened. Nuns from Linges		cir. 1160. }
4. College of Gild	temp. Edw. I.	} D. of Norfolk and Richard Fulmerston Esq.
5. Godshouse	temp. Edw. I.	
6. St. John's Hos.	_____	R. Fulmerston, Esq.
7. St. Mary and St. Julian's Hos.	} temp. Hen. I.	_____
8. St. Mary Magdalen Hos.		_____
9. St. Magaret's Hos.	}	_____
10. Austin Friars		temp. Ric. III.
11. Black Friars	temp. Ed. III.	_____

PRESENT STATE OF THETFORD.

DESCRIPTION OF THE TOWN.

On the approach to the town in its present state, the many awful ruins of antiquity recal to the spectators mind the once flourishing state of this "*City in the East.*" The Lesser Ouse which runs through part of Thetford, is the boundary between the two counties, as it has been as far back as the time of Alfred. That part on the south of the river belonging to Lackford hundred in Suffolk, and the other on the north side to Shropham hundred in Norfolk.

The principal streets are Bridge Street, the White Hart Street, King Street, St. Giles Street, and Guildhall Street.

In Thetford are shops which may vie with any in London. The modern buildings are elegantly constructed, and cleanliness

and comfort pervade the whole, a circumstance that has attracted the particular notice of every stranger.

The town has been much improved within these last ten years. A new bridge has been built, the principal streets paved; the navigation of the river has been attended to—and by this communication much mercantile business is transacted in the corn and coal trade. The extensive paper mill of Messrs. Munn is sufficiently known.

On the right of the market way, there is a turnpike road to Bury St. Edmund's; on the left to Lynn, by Bury St. Edmund's Way; on the right also to Norwich; on the left to Newmarket.

The healthiness of the town is evinced by the longevity of its inhabitants, numbers of whom live to between 80 and 100. Indeed Norfolk is famous for healthiness and longevity. The poor man may sometimes want victuals—but seldom wants a doctor.

The panoramic view from the mount on one side is uncommonly picturesque. The seat of G. Beauchamp, Esq. particularly attracts notice. It stands on a beautiful lawn, surrounded with lofty trees and pleasure grounds, gardens, and plantations. The eye rests also with pleasure on the elegant Mansions and charming Villas of H. Readhead, Esq. Mrs. Marsham, and T. Vipan, Esq. which are laid out with much judgment and taste. As the soil is uncommonly favourable for vegetation, every thing appears flourishing and luxuriant. When the fruit trees are in blossom, no country town can afford a richer prospect.

The king's house has been laid open to the street, and by laying out the area before the front of the edifice with a plantation of trees, and a shrubbery, enclosed with pallisades, the whole is rendered highly ornamental to the town.

The houses are well built and respect-

ably tenanted. The inhabitants are a very sociable people, and ever ready to pay attention to strangers; and on the whole there is a courteousness and ease not often to be met with in other places. The hospitable genius of Norfolk and Suffolk, sheds its benign influence on the town, and even strangers catch a portion of its spirit.

An excellent police is kept up, throughout the town the streets are kept clean, and nuisances are carefully removed.

ARMS OF THE TOWN.

The arms of Thetford are a castle tripple towered, out of each of the end towers two demi armed men issue, the one holding in his right hand a spear, the other a trumpet.

POPULATION.

The population in the return of the year 1814, was stated to be 2661 inhabitants, occupying 546 houses.

CIVIC CONSTITUTION.

The town is governed by a mayor,* ten aldermen, and twenty common-council men. The mayor is also justice of the peace in the borough, and no writ can be executed within its jurisdiction till he has indorsed it.

Thetford sends two members to parliament; the election is vested in the Corporation.

INNS.

The entertainment at the inns is good and reasonable. They furnish excellent post-chaises and civil drivers; and saddle horses may generally be hired at a reasonable price. The principal inns are the Bell, and the White Hart.

LODGINGS.

Thetford possesses some conveniences perhaps in a superior style to other places;

* The present mayor is J. B. Faux, Esq.

for invalids who visit it, and require greater retirement than usual, may be supplied with lodgings (and that on a scale agreeable to their circumstances) in private families, several of whom appropriate part of their houses for the accommodation of strangers during the summer months.

In fact lodgings are not merely reasonable, they are even cheap. Suitable accommodations for the sick are here within the reach of ordinary resources. And from this circumstance there arises no necessity for making any inconvenient sacrifices to the support of what is called style, or the extravagance of exterior show.

COACHES

Pass and repass from London and Norwich daily. A coach from London arrives three times a week at Thetford through Newmarket, and from Norwich to London every other day. The mail passes through the town daily.

WAGGONS, CARAVANS, AND CARRIERS.

For the conveyance of heavy goods, there are almost daily waggons and caravans to and from London. There are also carriers to Norwich, Bury, Lynn, Dereham, and Diss.

BANK.

There is one bank under a very respectable firm, and two agencies; one from Norwich, and the other from Bury, which afford great facilities to the visitors of Thetford.

POST OFFICE.

The London post comes in every morn- at seven o'clock, and goes out at half-past seven o'clock in the evening.

This establishment, which to visitors must always be an object of consideration, is very conveniently situated, a few hundred

yards from the walk leading to the chalybeate spring. Here visitors waiting for letters may exclaim with Cowper :

Hark ! 'tis the twanging horn, o'er yonder bridge,
He comes the herald of a noisy world,
News from all nations lumb'ring at his back,
Houses in ashes, and the fall of stocks,
Births, deaths, and marriages ; epistles wet.

AMUSEMENTS.

RIDES AND WALKS.

The surrounding country is extremely favourable for riding and walking. The soil is dry, and not so much incumbered with trees as to check the circulation of the air. The heaviest rains that fall here cannot prevent the exercises of riding or walking for any length of time after they have ceased, and for which the many agreeable rides in the vicinity of the town offer a frequent inducement.

CIRCULATING LIBRARY.

There is a small circulating library, which no doubt will be enlarged with the increase of company.

SUBSCRIPTION LIBRARY.

Here the Scholar will find books on almost every branch of human learning, with a sufficient quantity of articles for light summer reading.

FISHING.

For those who prefer fresh water fishing the Lesser Ouse presents a favourable opportunity. It abounds in eels, pike, perch, roach, dace, barbel, and sometimes salmon is caught. Permission to angle is seldom refused on proper application to the proprietors.

The Lesser Ouse, or, as in some deeds it is denominated, *Brandon* river, rises in a

swampy meadow, near the village of Lopham. It divides Suffolk from Norfolk; and taking its course westerly, by Rushford, receives a small stream from Ixworth, and is joined by the Thet, at Thetford, whence meandering through a sandy soil, it passes under Brandon bridge, and stealing along with solemn pace, through the uninteresting level of the fens, is then "*wedded*," as Drayton calls it, to the Greater Ouse, at Littleport, on the borders of Cambridgeshire.

THE THEATRE

Is rather small, but has a good company of performers during the Lent assizes, and some excellent actors have trod its narrow stage.

ASSEMBLIES

Are occasionally held, and the state of society is much more agreeable than is generally to be found in country towns.

Ceremony is wholly dispensed with, and there is no high priest to perform her rites.

AQUATIC EXCURSIONS.

Rowing and sailing, which whether regarded as a pleasure, or a healthy exercise, cannot be excelled by any in the circle of the occupations of the idle, may here be enjoyed in the full, and with facility that renders it still more inviting.—The Lesser Ouse is navigable down to Lynn Regis—and pleasure boats may be had at a reasonable price.

PROVISIONS.



THE MARKET

Is a commodious building, covered with cast iron. It has a portico and handsome pallisade in front.

As the Thetford Chalybeate Water professedly sharpens the appetite, it may be

pleasant for visitors to know that they may be abundantly supplied with provisions of all kinds on very moderate terms.

The regular market day is Saturday, when the shambles display no want of excellent viands, and the neighbouring villages bring in their supplies.

Poultry of all kinds are very plentiful, and of a superior quality. Owing to the dryness of the soil, in the sandy and loamy districts, and the range afforded by the unenclosed parts, *turkies* are numerous; and the mode of feeding gives them a delicacy of flavor, which has stamped a kind of imposing pre-eminence on every bird which bears the name of a Norfolk turkey. The consumption of these is great, both in Norfolk and the adjacent counties; and yet such is the abundance, that immense quantities are sent to the most distant parts of the kingdom. It has been computed, that more turkies are bred in Norfolk and the adjoining county of Suffolk, than in the whole kingdom beside.

Norfolk furnishes large supplies of *geese*, which are bred in the fenny parts of the county.

Of such animals as are *feræ-naturæ*, the *rabbit* claims the precedence; because it is made an object of trade to a considerable extent in Norfolk. These profitable little animals are here extremely numerous; occasioned not only by their natural fecundity, which is proverbial, but also by the congeniality of the soil with their peculiar habits. So prolific are they, that it is with difficulty, in places, they are kept from increasing to an alarming number, as anciently they did, according to Pliny, in the *Balearic Isles*. Numbers breed about Thetford, Castle Rising, Winterton, and Sherringham; but *Methwold Heath* is a celebrated place for the finest and best flavoured. This spot was noticed as a rabbit-warren so early as the reign of King Canute, A. D. 1016.

What is denominated *game* is very plentiful in Norfolk. The arable lands

affording both food and cover, and the proprietors being particularly attached to the amusements of sporting, have recourse to the strong arm of the law for its preservation.

Though woods are not abundant, yet *pheasants* are so plentiful, that they are frequently flushed in the stubble, like partridges.

FAIRS.

The fairs of Thetford are May 14, August 2, and August 17, for Sheep, and September 25. There is besides a Wool Fair, for which the day is fixed by T. W. Coke, Esq. of Holkam Hall. It is generally held in the month of July.

RELIGIOUS EDIFICES.

Of the twenty churches, three only are preserved ; St. Peter's, and St. Cuthbert's,

on the Norfolk side of the river, and St. Mary the Less on the Suffolk side.

ST. PETER'S CHURCH,

Commonly called the Black church, from its being constructed chiefly of flint, consists of a chancel, nave, two aisles, and a tower. The tower was rebuilt in 1789, when a great part of the church was also re-edified. The battlement on the south side, and the buttresses, are decorated with allusive ornaments and large letters inlaid in the flint work. It has eight bells.

ST. MARY THE LESS,

Is the only parish church now standing in the Suffolk part of the town; it is meanly built, and has a square tower with six bells. On the corner of the steeple were placed the symbols of the Evangelists in free-stone; but, being thought too heavy for the building, they were taken down.

At the east end are three lancet-shaped windows, and two rich niches. The north door has a round arch with Saxons capitals.

From the time of James I. to Charles II. it was called a chapel; but in the reigns of Henry VII. and Edward VI. a church. In the civil war it was converted into a stable, and otherwise greatly abused by the parliamentary forces. Towards its reparation some time after the duke of Norfolk gave fifty pounds.

Sir R. Fulmerston was a great benefactor to Thetford. He lies interred in this church according to his will, dated January 23, 1566, in which he ordered his body to be buried in the parish church of St. Mary in Thetford, on the north side of the chapel, without pomp or vain-glory; saving, that he would have a convenient monument of free-stone erected over him and his wife, within one year after his decease.

Upon the monument is the following inscription :

IN. MEMORIAM. RICHARDI. FULMERSTON. EQUI-
TIS. AVRATI. DOMINÆQUE. ALICIE. VXORIS.
EJVS. HEREDIS. IPSIVS. RICARDI. MARITVS.
EDWARDVS. CLERE. ARMIGER. HOC. TVMV-
LVM. EREXIT. ANNO DOM. 1567.

Under the above in larger characters :

TRANSIT SICUT FULMERSTON GLORIA
MUNDI.

At the bottom are these words, much defaced.

PROPITIOR DEUS ANIMABUS MORTUORUM.

Sir Richard Fulmerston endowed a preacher here, whose stipend is paid out of the estate ; but the nomination is in the mayor and corporation by act of parliament.

ST. CUTHBERT,

A parish church now standing. It has a square tower embattled and faced with flints, with five bells in it.

The church is tiled, and has a south porch; the aisle and chapel, now a vestry, are leaded.

There are four hexagon pillars supporting five pointed arches between the church and the south aisle.

Upon a buttress of this south aisle the following letters are still visible, **pray for**; and on the south side of the church **ora pro.**

The roof of the church is adorned in the joints of the beams with a cross fleurè, sun, moon, stars, dragons, roses, four leaves in cross, spread eagle double headed, pelican, heart pierced, monkey sitting, &c.

Over the entrance into the belfry, is the following, in rude letters—*Anno Dom.* 1618.

METHODIST CHAPELS AND OTHER MEETING HOUSES.

As a general toleration in religion prevails in this kingdom, Thetford contains

besides the Established Churches, other places of divine worship, namely : — a Quaker's Meeting-house, a Wesleyan Methodist Chapel, and an Independent Meeting-house ; the last is one of the neatest public buildings in the town.

CHARITABLE INSTITUTIONS.

Age and sickness are provided for in this town, with an attention that does honour not only to the liberality, but also to the feelings of the inhabitants.

HARBOARD'S HOSPITAL,

At the N. W. end of the town, was founded for six old men, who divide the surplus of £.30 per annum between them, after the expence of repairs is deducted.

ALMS HOUSES.

The alms-houses erected by Sir Richard Fulmerston, near St. Mary's church, are

built of black flint and free-stone. On the S. gabel ends above the dial, is the following inscription :

I (a rose) R
 V I V A T
 R E X
 1612.

On the the west side of the dial,
 1612.
 A G.

“ *God bless the founder of this work.*”
 Towards the bottom is the following inscription :

“ QUOD EGENIS
 CHRISTO FIT.
 Matt. xxv. 40.
 R. BROWNE.”

On a square stone between the two centre doors, in capitals.

FOLLOW PEACE AND HOLIN
 ESS WITH ALL MEN ; WITHOUT
 THE WHICH NO MAN SHALL
 SEE THE LORD. HEB. xii. 14.

Between the windows on small square stones, are some single letters, probably initials of poor inhabitants. The following are some of the letters.

EE. ER. WS. NG. TS.

THE BINDING CHARITY,

For apprenticing a certain number of boys and girls, inhabitants of the town, was founded by Sir J. Williamson, Knt. The Mayor, Recorder, and Coroner, are the Trustees. The number of poor children that have been bound apprentices from this charity since its establishment, amounts to upwards of 1000 Boys, and 100 Girls.

STERNE'S LEGACY.

Mr. P. Sterne of Thetford, who died November 12th, 1818, left £.1000 sterling for the benefit of the poor of Thetford, to

be placed upon government security. The trustees of this charitable donation, are the Mayor and principal Burgesses. The legacy is to be equally divided between the poor of the three parishes of the town. The first dividend of this charitable donation was made by the present mayor.

GRAMMAR SCHOOL.

In the Suffolk part of the town, near St. Mary's church, is a free grammar-school. In the year 1566, Sir Richard Fulmerston bequeathed property for the erection of this free-school, with dwelling-houses and salaries for a master and usher; and also habitations and weekly pensions for two poor men and poor women. The benevolent design of the donor, however, was not carried into effect till the time of James I., when it was enacted by authority of parliament, that there should be for ever a

free grammar school and hospital; and that the master, usher, and the four poor people, should be a body politic, under the title of “The master and fellows of the school and hospital at Thetford, founded by king James the First, according to the will of Sir Richard Fulmerston, knt.”

There are several other charities at Thetford, namely:—Smith’s charity—Sir Edward Rich’s charity—Alderman Barnham’s charity—Archbishop Parker’s Legacy, &c.

OTHER PUBLIC BUILDINGS.



GUILDHALL.

The Guildhall is a fine old building. In this hall the Lent assizes have been held ever since the first institution. Here is the following inscription:

Hic locus odit, amat, punit, conservat, honorat,
Nequitiam, pacem, crimina, jura, probos.

In the Crown court is a fine statue of the figure of justice; executed by Coade.

The Old Guildhall or Council-house, being in a dilapidated condition, Sir Joseph Williamson, secretary of state to Charles II., erected at his own expence the present *Nisi Prius* court, and grand jury chamber.

On the top of the building is the statue of justice, and below, in the front, S. a chevron between three trefoils, *Williamson*, quartering, 1. three fleurs de lis, 2. a fess cheque; and this inscription:

Antiq. Burgi de Thetford
Optim. Civ. ob perpetuam in se
Benevolentiam
Josephus Williamson
Eq. Aur.
Memori grata mente
P.

An. Christi MDCLXXX.

The windows of the chamber are adorned with the arms of the town, Williamson, and other benefactors, and Williamson's

crest, an eagle issuing from a crown, and this motto, *Sub umbra alarum tuarum*.

GAOL.

The common gaol is a plain building, well arranged for the purpose for which it is intended, and capable of holding one hundred prisoners.

SWORD AND MACE OF THE
CORPORATION.

The sword and mace which are borne before the Mayor on all public occasions, was presented to the Corporation of Thetford, by Sir J. Williamson, Knt.

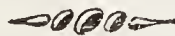
The sword is richly embossed and ornamented with the figures of Justice and Prudence—the arms of England—the arms of the town—Sir Joseph's arms, and the emblems of the three kingdoms, a Rose, Thistle, and Harp.

The mace is very large and handsome. It is made of silver strongly gilt, and ornamented nearly in the same manner as the

sword. On each side of the sword and mace is the following inscription :

In usum majoris et Burgensium
Antiqui Burgi de Thetford,
D. D.

Josephus Williamson, Eq. Aur.
Sal. Reg. M.—A. Consiliis intimis
et primarius secretarius Status. A. D. 1678.



Among the few writers and distinguished persons which Thetford can claim, as her sons may be reckoned Thomas Martin, an antiquary, and author of the *History of Thetford*.

George Burrell* has lately given a neat, concise and faithful account of the *Gifts and Legacies of Thetford*.

Thomas Paine of political notoriety, was a native of this town, and received his education in the grammar school.

* Son of Mr. G. Bird Burrell, the present celebrated Antiquary of Thetford, whose collection of rare and valuable antiquities deserve here to be named.

NOBLEMEN AND GENTLEMEN'S
SEATS WITHIN TEN MILES
ROUND THETFORD.



EUSTON HALL.

The seat of the Duke of Grafton, is a large commodious mansion, built of red bricks, surrounded by trees of uncommon growth, and the most luxuriant appearance: near it glides the river Ouse, and in front of the house is a fine canal, over which is thrown a neat and substantial wooden bridge. The scenery about this mansion combines the most delightful assemblage of rural objects, and is justly illustrated by the author of the *Farmer's Boy* :

Where noble Grafton spreads his rich domains
Round Euston's water'd vale and sloping plains,
Where woods and groves in solemn grandeur rise.

About a mile beyond Thetford is Snare Hill House, the seat of T. Redhead, Esq. Here a bloody battle was fought between King Edmund and the Danes, which several *tumuli* remain to record.—About half a mile further on is Kilverston Lodge, the seat of J. Wright, Esq. ; on the right of Larlingford Heath, near East Harling, is West Harling Hall, the seat of N. W. Ridley Colborne, Esq. M. P. for Thetford ; further on is Quiddenham Hall, one of the seats of the Earl Albemarle, remarkable for picturesque scenery and rural beauty. About three miles from Thetford is Shadwell Lodge, the seat of Sir Robert Buxton, Bart. ; surrounded with various charming pleasure grounds, an extensive piece of water, and ornamental plantations. Here is a spring affording a remarkable pure and well tasted water, apparently equal to the Malvern spa.

Other noblemen and gentlemen's seats round Thetford.

<i>Names of Seats.</i>	<i>Possessors.</i>	<i>Miles.</i>
Riddlesworth Hall .	T. Thornhill, Esq.	6
Weston Market . .	J. Thruston, Esq.	8
Coney Weston . . .	E. Bridgman, Esq.	6
Rushford Lodge . .	T. Crookenden, Esq.	3
Troston Hall . . .	Capel Lofft, Esq.	8
Livermere Hall . .	N. Lee Acton, Esq.	8
Ampton Hall . . .	Lord Calthorpe	8
Fornham Hall . . .	Duke of Norfolk	9
Hengrave Hall . . .	Sir Thomas Gage	9
Culford Hall . . .	Marquis Cornwallis	9
Elveden Hall . . .	William Newton, Esq. M. P. for Ipswich.	4
Downham Hall . . .	Earl Cadogan	4
Weeting Hall . . .	Colonel Dixon	7
Buckenham House .	Lord Petre	9
Lynford Hall . . .	Earl of Shannon	7
Tofts Hall	John Moseley, Esq.	6
Wretham Hall . . .	Wyrley Birch, Esq.	6
Hockham Hall . . .	H. S. Partridge, Esq.	8

52 NOBLEMEN AND GENTLEMEN'S SEATS.

<i>Names of Seats.</i>	<i>Possessors.</i>	<i>Miles.</i>
Merton Park . . .	Lord Walsingham	9
Tomson College . . .	Lord Coleraine	9
Hilborough Hall . . .	R. Caldwell, Esq.	10
Cressingham Hall . . .	Lord Clermont	10
Bodney Hall . . .	M. Tasburgh, Esq.	9
Didlington Hall . . .	Major Willson	10
Hockwold Hall . . .	Rev. W. Newcombe	10
Brandon Hall . . .	A. Corrie, Esq.	6
Barton Hall . . .	Sir Charles Bunbury	10
Milden Hall . . .	Sir Henry Bunbury	10
Shropham Hall . . .	Miss Hethersett	9

About fifteen miles from Thetford is Redgrave Hall, the seat of Admiral Wilson, and twelve miles distant from Thetford is the town of Bury St. Edmund's, which derives its name from St. Edmund the King, who was buried here after being murdered in a wood. It was formerly of great note for its abbey, one of the most magnificent and richest in England. Here in 1272, died King Henry III. after a reign of fifty-six years. In St. Mary's

Church, at this place, lies Mary, Queen of France, who was married to Charles Brandon Duke of Suffolk. The town is governed by an alderman and burgesses, and returns two Members to Parliament. Here is held an annual mart in October.

Newmarket race course is about two hours ride from Thetford.

Many other places might be named which may be visited for the sake of variety, but let these suffice; enough has been said to show that Thetford wants no rational attraction that can be desired by those who are happy enough not to want money. Even a winter's residence at Thetford is far from being unpleasant, because the climate is temperate, and provisions and lodgings, as already stated, are cheap and abundant, and dissipation is here unknown.

The general face of the country around Thetford, consists chiefly of corn land, almost wholly open and unenclosed, interspersed with cottages neatly built of flint

and chalk, as well as the boundary walls, which give the whole an uncommon cheerful aspect.

There is not a county in England so distinguished for the native industry of its inhabitants as Norfolk, nor is there one superior for the beauty and neatness of the farms. The Norfolk farmer exhibits, both in himself and his farms, characteristic traits of excellence : industrious, economical, yet hospitable, habitually neat in his person, and presenting in his farm every thing that can evince the most sedulous attention and comprehensive judgment with respect to agriculture.

In fact, whether we survey Norfolk with respect to its climate, its population, its trade and commerce, the character of its inhabitants, the diversified beauties of prospect, which embellish it, or especially with respect to the improved state of agriculture and rural economy, it may with propriety be denominated "the Glory of England."

SECTION II.

THE CHALYBEATE SPRING, — ITS LOCAL SITUATION AND CHEMICAL ANALYSIS.

PRELIMINARY OBSERVATIONS.

Mineral waters have long attracted the attention of mankind, by their medicinal powers. They have been resorted to in the earliest state of society, as remedies which operate powerfully on the human constitution.

These natural medicines have been considered as peculiar gifts of some favourite god or saint; and the temple or marble

reservoir surrounding the source of these consecrated fountains, has contributed to their security from accidental pollution.

The inquiry into the nature and constitution of mineral waters is certainly not one of the least important objects of chemical research. As remedies furnished by the hand of nature, they have been at all times peculiar favourites with the public, and have deserved from their real efficacy much of that esteem in which they are held by medical men. The scientific examination of this class of remedies comes particularly within the sphere of chemical research, and is admirably calculated to show the value and application of chemical philosophy, to the art of healing.

Hence a correct analysis of a new discovered mineral water has always been considered as absolutely essential, to enable the medical practitioner to form a true estimate of its powers, and the important results which have attended such inquiries

have abundantly rewarded the labours and attention bestowed on them. In a chemical point of view, the research is not less interesting, for there is no department of analytical investigation to which greater acquisitions, in point of matter of fact, have been gained, during our own time; and in proportion to this acquisition of knowledge, has the chemist been able to throw light on the real constitution of these natural medicines—a subject which has always attracted a very large share of attention both in a medical and chemical point of view, and exercised the abilities and skill of some of the most eminent men that chemistry has to boast of.

The popular reputation which the Thetford chalybeate spa has lately acquired, induced the inhabitants of Thetford and its vicinity, to seek by such an analysis as that here laid before the public, to ascertain how far that reputation was really founded on rational principles.

In the analysis which has accordingly been made, the medical practitioner will find every particular which is necessary for enabling him to form a just appreciation of the virtues of the spa. Since it was made the spring has become a subject of public resort, and its vast efficacy in removing disorders to which the human body is incident, has been sufficiently evinced by the recovery of many who have ventured on a trial of its powers.

At what period this chalybeate spa was first discovered, cannot be ascertained. In the year 1818, the reverend H. C. Manning, minister of St. Peter's Church of Thetford, published a memoir respecting the spa, from which it is evident that this spring had been known and analysed by Matthew Manning, Physician of Thetford, in the year 1746. This analysis was added as an appendix to the Doctor's treatise, written in Latin, on the application of mineral waters in the cure of chronic dis-

eases*, and is closed by a detail of some cases in which these waters were more eminently successful. Dr. Manning's analysis displays much skill and chemical knowledge; he determined the most predominant constituent parts of the water with accuracy; but the science of chemistry at the time the analysis was made, was not sufficiently advanced to enable the doctor to trace their combinations.

SITUATION OF THE SPRING.

Thou sacred nymph! whose pious care,
 Pours from thine urn, this min'ral rill,
 Whose healing draughts, like crystal fair,
 In pleasing murmurs here distill.

SHENSTONE.

The water of the chalybeate spa rises in a verdant meadow, at the east end in the Norfolk part of the town, near New

* *Aquæ minerales omnibus morbis chronicis mendendis, &c.*

Place, the elegant villa of Mrs. Marsham, and not far distant from the paper mill of Messrs. Munn.

The approach from the town to this fountain of health is very convenient. The entrance into the spring meadow, is by a road, which branches out of the town towards the corn mill, and after leading over a bridge terminates in a fine gravelled promenade, shaded by elms ; and here and there a bench is placed, as we advance, which during the morning are generally occupied in succession by invalids who wish for a temporary rest.

On the right hand of the promenade, and close to the road, glides the lesser Ouse, the beauty of which attracts the notice of every person who visits the spring. The following lines are appropriate of this river :

No torrents stem thy limpid source
No rocks impede thy dimpling course,

That sweetly warbles o'er its bed,
With white round polish'd pebbles spread ;
While lightly poised the scaly brood
In myriads cleave thy crystal flood.

SMOLLET.

The Little Ouse drives the water wheel of Messrs. Munn's paper mill, and produces, when the sluices are open, beautiful cascades, which have a very romantic effect.

On the left hand of the road, meanders the river Thet, giving impulse to the machinery of the corn mill. Nothing can be more beautiful and pleasant than the promenade between these two rivers, separated only by a verdant meadow. In a line with the eye of the spectator towards the spring, the ruins of the Nunnery are seen, and looking back the tower of St. Cuthbert's church appears in the horizon.

“ Enchanting site ! here every rural sweet,
And every natural charm delight to meet,
Here to the eye the landscape opens wide,
The dancing spirit rolls a quicker tide.

On the left hand the Castle hill towers its lofty head above the neighbouring buildings of the town—and close to the spring, as already stated, is the beautiful seat of Mrs. Marsham, sheltered and embowered by trees and shrubberies, which gives a pleasing finish to the scene.

The prospects from the summit of the Castle Hill, have a grand effect. The remains, and mouldering walls of the monastic buildings, covered with luxuriant ivy, where numerous, and some mighty dead repose under fragments of ancient architecture, and masses of ruins, compose an interesting and sublime picture, that cannot fail to afford an impressive lesson on the vanity of human labours, and the uncertainty of fame erected on such perishable foundations. The spectator might here exclaim :

The ivy now with rich luxuriance bends

Its tangled foliage through the cloister'd space,
O'er the green windows, mould'ring heights, ascends,
And fondly clasps it, with a last embrace.

KEATE'S ELEGY.

With a slight change in the point of sight, the same plot of ground might afford a painter a complete set of landscapes. From the top of the castle hill, the fountain of health, with the meandering rivers, and ruins of monastic buildings alone, are sufficient to form a picturesque landscape, and from the valley near the spring, a noble separate picture might be drawn of the mount and the surrounding seats, interspersed among plantations, together with the paper mills and other appropriate objects.

Plate II. exhibits a view near the spa, from the pencil of the Rev. Mr. Wilkinson, of Thetford. In the fore ground is seen the Lesser Ouse, and Thetford bridge, with some of the buildings of the town. In the back ground the Castle Hill, or Mount, appears, embowered in trees, and on the left hand we behold St. Peter's Church.

Nothing can be more beautiful than the rivers in the immediate vicinity of the chaly-

beate spring. The banks are picturesque, the water is as clear as rock crystal. Every part is in unison, and without the grandeur that arises from a large extent,—the scene though small, is extremely pleasing.

PHYSICAL PROPERTIES OF THE WATER.*

The water taken fresh from the basin of the spring is as transparent as rock crystal, and perfectly colourless. Its taste is distinctly chalybeate, and by no means unpleasant. It exhales, when minutely examined, an odour resembling the smell of iron when rubbed in contact with water.

The temperature of the water before it reaches the air, is invariably ten degrees below the temperature of the surrounding atmosphere. It is therefore one of those springs which lie so deep in the bowels of the earth, that it can neither be influenced

* Philosophical Magazine, 1819, No 253, p. 359.

by the scorching sun-beams in summer, nor by frost in winter.

A large quantity of air-bubbles are frequently seen to ascend from the bottom of the spring, to pass through the water without being absorbed by it, and break as soon as they reach the surface; and a thin column of steam generally hovers over the surface of the spring during the cool of the morning and evening.

The water lines the stone reservoir at the part where the air touches the water, as well as the channel through which it flows with a yellow brown precipitate.

The quantity of water afforded by the spring amounts to nineteen gallons in an hour. The specific gravity of the water is as 297 to 277.

The water taken fresh from the spring after having been exposed to the open air for a few hours becomes turbid; a few air-bubbles are disengaged; and in twenty-four hours a precipitate becomes deposited.

If a bottle be filled with water at the fountain head, and immediately well corked and sealed, the water may be kept unaltered for about two or three days, but in four or five days it becomes sensibly turbid.

EXAMINATION BY RE-AGENTS.

Experiment 1.—To a tumbler full of distilled water was added blue tincture of cabbage, to impart to it the slightest blue tint that could be distinguished when the glass was placed between a sheet of white paper and the eye.

Experiment 2.—A like quantity of tincture of blue cabbage was added to a similar quantity of water, taken fresh from the spring. On viewing both tumblers against a sheet of white paper, the water of the spring appeared distinctly red, the former blue.

Experiment 3.—When the water of the

spring had been boiled, it did not produce this reddening effect with blue tincture of litmus.

Experiment 4.—Six cubic inches of lime-water added to ten of the water of the chalybeate spring, produced a white precipitate, which disappeared by the admixture of muriatic acid.

Experiment 5.—Crystallized hydrate of barytes produced a copious precipitate both in the fresh water, and in such as had been concentrated by evaporation. The precipitate was not soluble in muriatic acid.

Experiment 6.—Oxalate of ammonia produced much cloudiness, both in the fresh and in the boiled water.

Experiment 7.—Nitrate, sulphate and acetate of silver produced in the fresh and in the boiled water much cloudiness—which did not disappear by the addition of nitric acid.

Experiment 8.—Two grains of acetate of barytes rendered eight cubic inches of the

chalybeate water turbid. The filtered fluid afforded, with acetate of silver, a copious precipitate.

Experiment 9.—Tincture of galls produced with the fresh water a purple hue. Water concentrated by boiling was not affected by this test.

EXAMINATION OF THE GASEOUS CONTENTS OF THE WATER.

Nine hundred and and twenty-four cubic inches of the chalybeate water were introduced at the fountain head into a retort connected with a mercurial pneumatic apparatus. The water was made to boil, and the gaseous products collected in the usual manner.

After the apparatus had again acquired the common temperature, barytes water indicated 48,28 cubic inches of carbonic acid gas, of which 12,7 are contained, therefore, in one gallon of the water.

The residuary gaseous fluid on being examined by the test of phosphorus, was found to be composed of 1,21 of oxygen, and 3,04 atmospheric air.

CHEMICAL ANALYSIS.

Experiment 1.—Four gallons of Thetford chalybeate water being evaporated in an earthenware vessel, placed in a baker's oven, to dryness, afforded a brown mass of a slightly saline taste.

Experiment 2.—This product was levigated and digested in alcohol filtered, and the insoluble residue put aside for further examination. The alcoholic solution mingled with a small quantity of water, became turbid by the addition of sulphate of silver; and phosphate of soda, in combination with carbonate of ammonia, produced with it much cloudiness.

Experiment 3.—The mass which had been repeatedly acted on by alcohol was boiled

first in eight parts of water, and this solution was put aside; and then in eighty times its weight of distilled water. The insoluble residue was soluble in muriatic acid.

Experiment 4.—The muriatic solution was mingled with nitric acid and evaporated to dryness, heated red hot, and again dissolved in a small portion of muriatic acid. It afforded by liquid ammonia eight grains of oxide of iron, which indicate 2,75 grains of carbonate of iron in each gallon of the water.

Experiment 5.—The alcoholic solution (experiment 2) having been suffered to stand exposed to the open air for twelve days afforded a crystalline mass. The uncrystallizable portion was mixed with sulphuric acid, and heated till the colour of litmus paper employed for covering the bason in which the process was conducted, did not suffer a change of colour. The solid residue was digested in a small quantity of water, and the insoluble part separated by the filter.

The soluble portion was decomposed by subcarbonate of potash ;—the precipitate afforded with muriatic acid thirteen grains of muriate of magnesia ; therefore 3,25 grains of this salt were contained in a gallon of the chalybeate water.

Experiment 6.—The insoluble residue of Experiment 5, after being boiled in a solution of subcarbonate of potash, became readily soluble in nitric acid. This solution was decomposed by subcarbonate of ammonia, and the product, after being mingled with muriatic acid, again evaporated to dryness, and strongly heated, gave 2,25 grains of muriate of lime to a gallon of water.

Experiment 7.—The analysis being thus far conducted, an alcoholic solution, obtained as before stated, and equal to that operated on, was evaporated to dryness—covered with sulphuric acid, and again evaporated to perfect dryness. This mass, digested in a small quantity of water, afforded

copious crystals of sulphate of magnesia. The residuary insoluble substance was soluble by boiling in water, and decomposable by nitrate of barytes,—and, lastly, a similar alcoholic solution was mixed with muriatic acid, and decomposed by subcarbonate of potash, and the product heated to redness. Thus carbonate of iron and the muriates of lime and magnesia were clearly established in the water.

Experiment 8.—The first portion of the aqueous solution obtained in process 3, after being concentrated to a bulk of five cubic inches, was not affected by muriate of platina nor oxalate of ammonia. It was diluted with alcohol, which occasioned a crystalline precipitate to fall down. The remaining fluid was evaporated and attempted to be crystallized. The salt produced being muriate of soda, was dissolved in water together with the saline mass obtained in process 5, and decomposed by nitrate of silver. The precipitate produced, taking 235 grains of

muriate of silver to be equal to 100 of muriate of soda, indicated 2.125 muriate of soda in one gallon of the water.

Experiment 9.—This fluid being completely freed from muriate of soda, and highly concentrated, was decomposed with subcarbonate of potash. It yielded a copious white precipitate which, after being thoroughly ignited, give 1.25 grains of sulphate of magnesia (taking 136.68 of magnesia to be equal to 100 of sulphate of magnesia) to be present in one gallon of the water.

Experiment 10.—The dilute fluid obtained in process 3, yielded a precipitate by oxalate of ammonia and nitrate of barytes; and being on a further examination found to contain nothing but sulphate of lime, it was therefore decomposed by barytic water; and taking 100 parts of sulphate of barytes to be produced by 71 of sulphate of lime, gave three grains of sulphate of lime to one gallon of water.

The composition of the Thetford chalybeate water is therefore as follows :

Contents in one Gallon of the Water.

Carbonate of iron	2,75 grains.
Muriate of magnesia	3,25
Muriate of lime	2,25
Sulphate of magnesia	1,25
Muriate of soda	2,125
Sulphate of lime	3
	—————
	14,625
Carbonic acid gas	12,07 cubic inches.
Oxygen gas	1,21
Atmospheric air	3,04
	—————
	16,32

After the above analysis was made public, the medical men resident at Thetford, had no hesitation in immediately recommending a practical trial of the spring in

various infirmities, to the cure of which the sanitary properties of the water appeared particularly adapted, and the result of these trials has exceeded the anticipations even of the most sanguine expectations.

In a number of diseases of the most obdurate kind, the water has speedily proved of the greatest efficacy, and cures almost incredible have been effected in several cases which had previously baffled every effort of medical skill.

The fame of the water spread with the extraordinary effects which it produced, and invalids came flocking from all quarters to participate of its healing powers.

The ground about the spring was cleared at the request of the Mayor, J. B. Faux, Esq. ; the spring was enclosed ; a stone pavement laid down round it ; and in August 1818, the spring was opened to the free and unrestrained use of the poor. When this had been effected, the Mayor at his own expence caused a gravel walk to be con-

structed, extending from the spa to the Nun's Bridge, to serve as a promenade for invalids resorting to the spa.

The fate of the spring is now settled, and if the inhabitants of Thetford continue to show the same earnestness and assiduity with which they seem at present animated, to provide further for the comfortable accommodation of the invalids and visitors who may resort to this spa, it is not without the range of probability that "*the City of the East*" may yet become as eminent for its waters, as another far famed city of England, has long been for its waters in the west.

SECTION III.

MEDICAL EXAMINATION OF THE SPRING.

REMARKS ON THE GENERAL NATURE AND MEDICINAL USE OF THE SPRING.

From a review of the chemical analysis of the Thetford Mineral Spring, we are authorised to pronounce this medicinal water, to possess various powerful effects upon the human body, and this is actually the case, as appears from the best authorities.

The Thetford chalybeate water is a powerful remedy in the curative action of many diseases. Its effect when properly administered, and aided by the judgment of an able practitioner, has combated the most obdurate and complicated maladies.

This medicinal spring is one of the strongest chalybeates we are acquainted with. It is chiefly to the strong impregnation with iron, and to the active, neutral salts, and free carbonic acid gas, contained in this mineral water, that we are to look for the explanation of the very important benefit which is derived from its application in a variety of diseases.

It is scarcely necessary to inform the reader, that of all the mineral waters, the chalybeates are by far the class most beneficial to the human constitution, and both chemical and medical practitioners agree, that the most active form in which iron can be administered successfully as a medicine, is the state in which it exists in the Thet-

ford chalybeate, namely in combination with an excess of carbonic acid gas, associated by minute portions of saline compounds.

To the free carbonic acid gas itself, a considerable and very useful influence may justly be assigned ; and the saline ingredients enable this gaseous substance probably to exert its medicinal effects more directly and actively.

The affections of the system in which the medicinal springs are employed, are those of debility ; hence the use of chalybeates in the greater part of the diseases to which mankind are subject.

Yet it may be laid down as a general maxim, “ that which is calculated to do much good, may also do much harm ;” and, therefore, judgment and care are necessary in the exhibition of the Thetford spa.

A celebrated physician has observed, that “ *when a remedy is used indiscriminately, it must of necessity very frequently be used improperly.*” This observation can in no

instance be more justly applied than in the use of the chalybeate waters.

It must not by any means be understood that the Thetford chalybeate spring of itself without regular management and suitable medical assistance, is capable of curing a vast number of diseases.

And to give the water fair play, it is necessary that the patient should strictly obey the rules prescribed to him by his medical adviser, during the whole time of using the spring.

It may be necessary to observe that there are two regular medical practitioners in high repute, resident at Thetford, who are well acquainted with the qualities and medicinal effects of the spa, and who should be consulted on the use of this powerful water, as it will either prove beneficial or detrimental, according to the rules and condition under which it is taken.

PRIMARY ACTION OF THE WATER, AND
SYMPTOMS OF ITS EFFECTS.

The effects of this natural medicine are much more striking in some habits than in others, and though it is the irritable and delicate constitution, that in general feels the effects of it most powerfully, no certain rule of expectation can be laid down previous to a trial.

The sensible effects of the Thetford water are different in different cases, and they are generally most felt on first using the spa. It not uncommonly produces a flushing of the face, a slight degree of nausea, a heaviness of the head, and a sense of fulness over the whole body. It often proves aperient, sometimes considerably so; in many cases the water produces the opposite effect on the bowels, so that some aperient medicine is necessary. When drank largely, particularly by those who are not accustomed to the water, it fre-

quently produces even pain of the head. In some it produces a degree of feverish heat. In most people it acts as a diuretic. But generally it seldom fails after it has been used for some time, to increase both the spirits and appetite.

When the constitution is very delicate, and the nervous system exquisitely irritable, surprising as it may appear to those who are unacquainted with the action of chalybeates, even small doses will sometimes produce these symptoms, especially at the beginning of the course.

These effects are mitigated or prevented by a previous attention to the stomach and bowels. When these are foul and loaded, the water usually purges pretty briskly at first, but this operation ceases, when the intestines are restored to their natural state.

If, notwithstanding this care, and the correct observance of general rules, the symptoms above mentioned continue, the

necessary inference is, that sufficient preparation has not been made.

It is also remarked, that with some persons, after using the spring copiously, many parts of the body, and especially the feet, swell considerably; this cellular effusion however, soon disappears. But upon the whole it may be said, that the first effect of this water on the bowels is uncertain; it sometimes produces on first using it a diarrhœa, but this is by no means a general consequence, for it much oftener occasions costiveness, and this may be said to be its more natural and constant action.

Besides the effects thus far detailed, which evidently demonstrate that the water possesses high stimulating powers of a peculiar kind; it has also in most habits a very considerable disposition to pass off by urine, even when taken in a moderate dose, and this generally in the greatest quantity where the water agrees best with the constitution of the patient. Now and

then it brings on a more perspirable state of body, especially where the person who uses the spring is in a situation to take much and regular exercise, and is rather of a delicate habit.

AUSPICIOUS SYMPTOMS PRODUCED BY THE WATER.

When the water is likely to prove beneficial, it excites on being first taken, a pleasing glow in the stomach, to which soon succeeds an increase of appetite and spirits, and a rapid determination to the kidneys, and these auspicious symptoms are followed by a gradual improvement in the general energy and strength, after having used the water for some weeks.

UNFAVOURABLE SYMPTOMS.

On the other hand, when the water occasions head-ache, thirst, and dryness of the tongue, when it sits heavy on the stomach

for hours, when it produces a chilliness and sickness, and does not pass off by urine or perspiration, its operation is unfavourable, and its further employment is not to be advised, without the opinion of a medical man.

**RULES TO BE OBSERVED BY INVALIDS
PREVIOUS TO COMMENCING A COURSE
OF THE WATER.**

On beginning a course of the water, it is a general practice to premise some evacuation, either a gentle emetic where the stomach is foul, or some opening medicines; and these by many have been held of consequence as very good preparatives, and to prevent that disgust for all chalybeate waters, which persons are apt to conceive when they have not at first met with the desired success.

Perhaps every person also should use the tepid bath, once or twice before they begin a course of the water—indeed in many cases this is absolutely necessary.

Having attended to these circumstances, the invalid may proceed to the spa, take a sip, and after having paid what is called his "*welcome penny*" to the dipper, and put down his name and residence in the well book as a subscriber to the spa, he may consider himself sufficiently prepared and qualified to partake of the spring.

QUANTITY OF WATER TO BE TAKEN
DAILY, AND TIME RECOMMENDED
FOR ITS FIRST DOSE.

As to the quantity of water to be drank each day, there can be no general rule given but what must be liable to innumerable exceptions, because it must be suited to every one's particular case, and probably will require to be increased and diminished according to the different stages and variations of the complaints.

It is therefore necessary, that this should be regulated by a medical man who is well

acquainted with the nature of the water and the disorder of the patient.

And I am persuaded that nobody who is acquainted with the medical practitioners of Thetford, will suspect me of adulation when I render here my humble tribute of praise to the knowledge, the skill, and above all the gratuitous assiduity in the case of the poor, with which they are distinguished in the exercise of their profession.

It is a mistaken notion and vulgar error, that patients cannot drink too much of the spring. Country people who flock to this fountain of health on all occasions, for a variety of complaints, have in general no other idea of proportioning the dose to their complaints, than that of drinking it as copiously as the stomach will bear.

I have heard men boast of the very large quantity they drink of the chalybeate water daily, and its wonderful effects in passing off by the bowels. They ignorantly imagine that all the virtues of the spring

depend upon its passing off quickly by the kidneys, and by this erroneous conduct many deprive themselves of the benefit they might otherwise receive.

The following are the directions usually given for employing this water medicinally.

The time recommended for the first dose is before breakfast, as early in the morning as the patient chooses to rise, when it is usual to take two glasses, with about half an hour spent in gentle exercise interposed between them.

Two more glasses, with the same interval, are generally taken between breakfast and dinner, and the water is seldom repeated afterwards in the course of the day.

The size of the glass varies from a quarter to half a pint, which last is reckoned a full dose.

As a general direction it may be stated, that half a pint daily, is the smallest dose, and that two pints daily, is the largest dose generally given. But circumstances

may occur when the medical practitioner will find it advisable to order a larger quantity.

The exact quantity to be taken daily, must of course be varied, according to the several circumstances of the age and constitution of the patient, and the nature of the disease, and above all, according to the action which the water is found to produce on the individual.

REGIMEN AND DIET DURING A COURSE OF THE WATER.

To furnish a plan of regimen adapted to every constitution and habit is by no means an easy task, since some variation will be always required according to the age and strength, as well as to the former habits of the patient. But in general by strictly regarding the following rules, the effects of the chalybeate spa will be greatly assisted.

It is hardly necessary to observe, that more than ordinary prudence should be pursued in the general diet, during a course of this water. The patient should always avoid heavy indigestible food, should be kept free from anxiety and care, and should make it a constant part of his daily occupation to strengthen his body by moderate and prudent exercise. The hour of dining should not be later than four or five. Indeed temperance and exercise are indispensably requisite to give the water a chance of producing beneficial effects.

Exercise should always be used between the draughts of the water ; walking is preferable to all other sorts of exercise. It wonderfully promotes the efficacy of the chalybeate water, prevents its passing off too quickly, and if a gentle perspiration, not amounting to a sweat can be promoted, it is a sure prognostic of the good effects of the water, and that flow of spirits which accompanies it will convince every patient of the truth of this observation.

I am the more particular in enforcing this rule, because those who labour under chronic complaints, are subject to lassitude, and by indulgence confirm the evil which they expect the water to remove. Patients labouring under chronic complaints are apt to retire from the spring to their rooms, and sit motionless, the moment they have taken the waters. For their own sake I hope they will act otherwise.

It is much to be wished some amusement could be pointed out, that should invite invalids to be much in motion while they are using the chalybeate spring. Dancing, in a moderate degree, is excellently calculated to answer the purpose.

The exercise by means of the new invented *Velocipede*, or *Hobby-horse*, for which the level nature of the roads in the vicinity of the spring are particularly adapted, might be used to the greatest advantage at this spa, even by the softer sex, and such exercise would be highly conducive to assist the

curative powers of the spring. By means of this salutary amusement, the muscles of the abdomen which are precisely those that require to be roused in chronic complaints, are properly called into action in an easy, and delightful manner. In recommending this kind of exercise, I cannot hope that my recommendation will give it any additional zest, but the patient may rest assured that it will greatly tend to the restoration of his health, and not a little to his immediate enjoyment. The attempt to put in practice this healthy amusement may appear laughable, even to the parties most convinced of its utility ; but would any thing imaginable appear more ridiculous than dancing, if familiarity had not taken away its power to produce laughter ?

The diet will require the strictest attention. There should be the greatest moderation in the use of the plainest food, and that of the easiest digestion. Very little

wine should be drank, and if any spirit it should be much diluted.

All fat, salted or smoked meats, rich sauces, plumb puddings, butter and high seasoning, are to be avoided. The food should be plain fresh meat, simply boiled or roasted, with only its own juice or gravy, plain light soup or broth, boiled fish, and occasionally light bread or rice pudding, and a small portion of well boiled vegetables, without butter. Large quantities of vegetables, raw, or not well boiled, never fail to produce flatulency or acidity, where the stomach is weak, and are therefore highly improper. A cup of coffee after dinner, should be preferred to tea and supper.

TIME NECESSARY FOR CONTINUING A COURSE OF THE WATER.

The same that is above said of the quantity, may also be applied to the time of continuing to drink this water, since it is

equally necessary that this should be determined in conformity to the different cases of patients, by the judgment of his medical adviser.—In some, perhaps a few weeks may be sufficient, in others months are not enough, and with others it may be necessary to attend the spa year after year to perfect a cure.

It may in general terms be observed, that a shorter period than four weeks scarcely justifies the expectation of any material advantage.

SEASON FOR DRINKING THE WATER.

The season for drinking the water, is during the whole of the summer, for all chalybeate spas are in their highest perfection from May to September, or October, and they are most serviceable in warm and dry weather ; but it must not be understood that their virtues are so absolutely confined to one season, as to be useless in all others ;

on the contrary, it is an allowed fact that in hard frost, these waters are universally stronger than at any other time, because then the carbonic acid gas is retained more forcibly, and the water consequently is rendered more active. The summer months are only selected on account of the benefits resulting from the concomitant advantages of air and exercise, which may be enjoyed more advantageously in this season.

OTHER RULES TO ENSURE THE GOOD EFFECTS OF THE WATER.

To produce the full medicinal effects, the water should unquestionably be taken at the fountain head. It is always judicious to allow it a fair trial at its natural temperature, and with its complete properties fresh from the spring.

If, however, it should sensibly disagree, as will happen more especially in those constitutions where the circulation is very

languid ; where the skin, and feet and hands, are remarkably cold ; and where a great defect of nervous energy is altogether apparent ; in such cases the water may be slightly warmed.

To females of a weak irritable stomach, the water drawn fresh from the spring is particularly apt to prove too cold for the stomach, and to occasion a nausea or sickness, which always defeats the general intention of the medicine. This inconvenience is easily prevented by warming the water very slightly. That the properties of the water are quickly impaired is obvious, by exposing it to the open air.

When the water has stood for some hours exposed to the free contact of air, the sides of the vessel become covered with minute bubbles ; it grows turbid in a few hours ; a pellicle encrusts the surface like a very thin scum, and in twenty-four hours the water has entirely lost its chalybeate properties.

This circumstance shews that all the iron is suspended by the carbonic acid which becomes disengaged; the oxid of iron precipitates to the bottom of the vessel in which the water is contained. The water is by this means entirely freed from every particle of iron.

This separation likewise occurs, if the fresh water be kept in a bottle only half full, or carelessly corked. The channels through which the water flows show this effect.

Hence the water will not keep well, nor bear transporting to any distance, without being materially altered; for the chalybeate part is soon lost by the precipitation of the iron which takes place even in the closest vessels, after a few days.

We have stated that the water should be drank early in the morning, for besides the advantages resulting from a light stomach, the early exercises prescribed by this method, tend greatly to exhilarate the spirits,

and thus to assist the curative effects of the water. But careful, and indeed necessary as this method is in most cases, it is not without its disadvantages to some people; because chalybeate waters often cause a degree of sleepiness in many persons, which cannot but be increased by early hours in those who have usually indulged a contrary habit; and this is a complaint which must be obviated as soon as can be, and strenuously resisted by any body who expects to receive benefit from the spring; however, a sparing use of the water at first, a moderate exercise and pleasant company, will soon remove this complaint.

**DISEASES IN WHICH THE WATER MAY
MOST PROBABLY BE FOUND EFFICA-
CIOUS.**

It is not my intention to enter into a history of all those formidable complaints,

which often require the utmost skill in their treatment, but I shall merely point out a few in which the water will most probably be found a remedy ; and these diseases are some of the most important and difficult of cure, of all that come under medical treatment.

The diseases to which the water may be advantageously applied, are the same as those for which the Tunbridge water is resorted to by invalids.

The Thetford chalybeate spring is not intended to promote powerfully any of the natural evacuations when received into the system ; it is of eminent service, particularly as a tonic, the immediate effects of which are to brace and increase the force of circulation,—to augment the animal heat,—to promote the various secretions, or moderate them when morbidly increased,—to quicken digestion, and to render muscular action more easy and vigorous.

This water when assisted by a few auxi-

liary remedies, may be pronounced to be of eminent service in an impaired or capricious appetite, and weakness of the assimilating organs, irregular digestion, flatulent distention of the stomach and abdomen, anxiety about the præcordia, difficult respiration from sympathy with the stomach, bilious vomiting, and spasmodic pains in any part of the alimentary canal, and in several cutaneous affections.

The use of the cold or warm bath will in many of these diseases be required to assist the efficacy of the water. The application and nature of the bath to be used must rest entirely on the opinion of the medical man.

It is therefore chiefly in chronic* dis-

* *Chronic* diseases are called those complaints which have been of long standing. The term is used in direct opposition to *acute* complaints, such as the the general kinds of fevers. The latter necessarily confines patients to the bed, or the sick chamber. They terminate quickly either by a favourable or unfavourable crisis. *Chronic complaints* on the

orders, in those that arise from slow beginnings, and are attended with great laxity and debility, but without much organic disease, and which require a gentle, gradual, and permanent stimulus, that the water will be found peculiarly useful.

In chronic complaints, muscular motion is universally oppressed, the pulse generally languid, and the strength of the constitution much below *par*. Nature in chronic diseases requires a spur, and the chalybeate water when properly administered is a powerful spur—but many unsuccessful riders are continually thrown out of the course by using it too furiously.

Persons who have injured their digestive organs, and who are suffering under the symptoms either of excess or deficiency of bile, and an irregularity in its secretion, receive remarkable benefit from a course of contrary seldom confine the patient; their cure is not only tedious and troublesome, but often fatal in the end.

this water, judiciously exhibited. Its use with the help of co-agent medicines may be continued even during a considerable degree of debility, and from the great determination to the kidneys, it may be employed with advantage to check the incipient symptoms of dropsy and general anasarca.

In almost every species of dropsy, the functions of the skin, the liver, and of the kidneys, are morbidly interrupted; and the perspiration, the biliary and urinary secretions are impaired. The pores of the skin not performing their functions, the insensible perspirable matter is not carried off, but accumulates under the skin in the cellular substance, or in some of the cavities of the body, and produces the swelling: the biliary secretions being suppressed, the circulation in the liver becomes obstructed, and congestion in that organ takes place in this disease the most formidable of all chronic maladies. The powers of the

chalybeate water, assisted by the warm bath, and a proper course of medicines, may prove highly beneficial in the first stages of the disease.

Another and more decidedly beneficial use of this chalybeate as a medicine, is in relieving those deranged functions of the stomach and bowels, and biliary organs, occasioned by the most frequent of all causes of disease, especially with men of easy circumstances; viz. a long and habitual indulgence in high food, strong drink, indolence and the luxuries of the table.

A weak stomach, however, is not the lot only of the luxurious livers, since it too often forms an addition to the miseries of the unfortunate, but never more certainly than when he seeks a respite from his miseries in the temporary exhilaration arising from the effects of spirituous liquors. — Other causes that may produce this disease are grief, anxiety, a sedentary life, and an immoderate use of tea, or other warm

liquors. But whatever may be the case, the water after the stomach and bowels have been cleansed, will with great probability prove of essential benefit to the patient, and greatly assist the cure.

In making this statement, I do not mean to assert that the mere use of the water is applicable in every case of dyspepsia, or a deranged stomach *indiscriminately*. Every body must be aware of the great difficulty of curing a disease, which is so varying in its symptoms, and especially so exposed to be affected by accidental circumstances, by having its seat in that organ (the stomach), which of all others receives the greatest variety of impressions from external causes. It is sufficient to have enlarged upon one of the various means provided by the hand of nature, which art makes use of as a powerful remedy ; and which, from its simplicity, from its gradual and powerful operation, and from the ease with which it may always be procured, deserves the highest

attention. And in a general way, it is sufficient to observe, that the Thetford water is highly serviceable in all the disorders of the stomach that appear to depend on a debility of that viscus, unconnected with organic disease.

In nervous diseases, a course of the water may in general be expected to promise advantage particularly in all those cases where there is a relaxation of the solids, and any disease connected with general debility.

In hypochondrical affections, the powers of this spring are great when the presence of hypochondriasis is marked by anxiety, general langour, perturbed dreams, a livid hue in the face, difficult breathing, pain of the back and head, giddiness, and coldness of the lower extremities; when a bilious humour and depraved secretion of the stomach impairs its tone and healthy action.

As a stimulating diluent and diuretic, in addition to its tonic influence on the

stomach, it bids fair, in conjunction with other medical treatment, to be useful in gravel, of which disease, an unhealthy condition of the digestive functions is the foundation.

In uterine debility and other diseases peculiar to the female sex, this water is eminently useful.

In chlorosis (the green sickness), even where there is a considerable degree of feverish irritation, particular benefit may be derived from the use of this spring.

The great debility attending this malady, the disposition to a cachectic state of body, and to general dropsy, strongly indicates this form of medicine, whose operation is so much calculated to restore the healthy state of all the secretions, and along with it to invigorate the whole system. It restrains that inordinate action of the vessels which depends chiefly on their want of tone. Its power will often be much assisted by the use of a warm bath, to remove that languor

of circulation and obstruction of natural evacuations, which characterise this disease, the cure of which is generally extremely obstinate, and from the age at which it always affects females, excites a good deal of anxiety, and requires the greatest attention.*

On account of the tonic, diuretic effects and properties of this water, and from its rapid determination to the kidneys, it has been employed with great advantage in diseases of the urinary organs, especially those that are attended with the formation of gravel. What action it may exercise is not yet determined; but it is certain that under the use of this medicine, and the advice of a skilful medical practitioner, the disease is often rendered much less painful.

* In a pamphlet entitled *Prognostications*, written in the reign of Richard II. the following advice is given to the ladies—that they should **go to the Chalybeate Springe, and the bathe, for beautye.**

Another disease of the biliary organs, the jaundice, which arises from a simple obstruction of the gall duct, is often removed by the use of this medicinal spring. It has likewise been found serviceable in the cure of glandular obstructions, connected with the healthy action of the stomach, particularly if assisted by the warm bath, but in the application of the bath, as a coadjutant source of relief in bilious disorders, it is right to notice, that it cannot be employed with advantage or security until some of the portentous obstructions are previously removed; therefore on its timely and judicious management, the medical practitioner only must decide. In glandular obstruction, in both young and old subjects, the assistance afforded by the warm bath leaves no doubt of its efficacy.

Those individuals who have led a sedentary and inactive life, become frequently affected with œdematous swellings in the extremities, a want of due action in the

stomach, eructations after taking food, and a generally impaired state of health: all of which may expect great benefit by a liberal use of this spring.

In the debility of the stomach, arising from a too liberal use of the bottle, a draught of this water is highly refreshing and salutary.

A judicious use of this water assisted by a few medicines relieve the distressing symptoms of heart-burn, and sickness; and if persevered in with the strictest rules of diet and regimen, will increase the appetite, render the secretions more regular, and improve the general health and spirits of the patient.

Another class of disorders for which this water often brings considerable relief, is in those cutaneous eruptions of the skin, that are attended with general irritation, which were formerly ascribed to scorbutic humours.

The difficulty of investigating the causes

of these complaints, the variety of forms they assume, and the tediousness and uncertainty of their cure, often render them sources of embarrassment to the medical practitioner, as well as of misery to the unfortunate sufferer. So various are the symptoms and modifications which unfold themselves in the eruptive diseases which attack the human race from the cradle to the grave, and so numerous are the useless remedies that have been recommended from Hippocrates down to the present day, that it would be quite superfluous to enumerate them. The varieties of cutaneous complaints, then, are the small pimply eruption so commonly met with, and called in popular language, though improperly, scorbutic; which are often produced by a sudden application of cold, either to the surface of the body or the stomach; or else belong to the habit of body and state of the skin. It is not however merely to these that the use of this spring is confined,

for it is considerably, though not equally serviceable in many of the more obstinate and painful disorders of the skin, such as the leprous eruption, and all those that are not merely local, and with which the stomach strongly sympathises.

The effects of this water in some of these cases, is much assisted by the use of the warm bath, which accordingly in this, as well as in many other cases, makes part of the plan of cure.

The warm bath will greatly assist the action of the water, in all those eruptive diseases where there appears a great deficiency of perspirability in the skin; when it cracks, and leaves deep and painful fissures, which discharge a thin serous moisture; or else where there is a constant desquamation of the skin in dry branlike scales. The warm bath during a course of the water, is then highly advantageous in relaxing the skin, and rendering it more pervious, and prepares it admirably for

receiving the stimulant application of external remedies.

As an external application in old and languid ulcers, where the texture of the diseased parts is very lax, and the discharge profuse and ill conditioned, much benefit has been derived from this chalybeate, employed both internally as a medicine, and external as a lotion applied to the sore, it has moderated the profuseness of the discharge, and corrected the foter which so peculiarly marks a carries of the bone, by promoting the granulating process, and a salutary exfoliation of the carious part ; and by a long perseverance in this course, and with the guidance of a skilful practitioner, very dangerous and obstinate cases have been entirely cured.

Another order of external diseases for which this water has been used with advantage, is that which belongs to those obstinate cases of dry desquamations, that frequently follow a sudden application of

cold in very delicate and irritable habits. Where the skin is hot and dry, it remarkably relieves the intolerable itching, and renders the surface of the body more cool, healthy, and perspirable.

Scrophula is another disorder in which many receive very important relief by the use of chalybeates of this kind. It is chiefly however in the very earlier stages, and slighter symptoms of this formidable malady only, that the good effects arising from chalybeate water, will be most conspicuous; but under its use, glandular tumours had been dispersed without suppuration, or any bad consequence.

In cases of worms, the water of Thetford has been applied with great advantage.

CAUTIONARY HINTS AGAINST THE IN-
DISCRIMINATE USE OF THE SPA, IN
DISEASES TO WHICH IT IS INAPPLI-
CABLE.

The general and indiscriminate use of chalybeate water is allowed on all hands frequently to lay the foundation of a train of maladies, if injudiciously used.

There can be no doubt that the indiscriminate and injudicious use of this medicinal water is hazardous, and might often do considerable mischief in various cases, especially in irritable inflammatory habits, where there exists a strong tendency to hectic fever; and even in the less inflammatory state of disease.

There are some constitutions which are naturally prone to an inflammatory action, but which do not shew any marks of actual disease; and these cannot bear with im-

punity the constantly increased stimulus of the medicinal spring.

Persons of a plethoric habit of body, who from some obstruction to the free circulation of blood through the abdominal viscera, have acquired a strong disposition to the Ehmorrhoidal affections, might become exposed to very serious evils, by the use of this chalybeate, and this shews the necessity of some caution and judgment in the use of it.

In general, wherever a quick pulse and dry tongue indicate a degree of fever, the diffusive stimulant properties of this powerful remedy are often improper. Hence in inflammatory complaints, attended with much heat, flushing of the face, and determination to the head, the use of the water is improper. These precautions apply to all chalybeates, but are particularly necessary in the very active form in which the Thetford water is constituted.

The employment of this water is also

improper when local congestion exists without inflammation.

Several instances might be related, showing the occasional abuse of the Thetford water, where it necessary to speak on that subject. The following fact, communicated by an eminent medical man resident at Thetford,* may serve as a warning to show the fatal consequences that may follow from an indiscriminate use of the spa, as a remedy in diseases for which it is inapplicable.

John Goulding, aged forty-five years, of a robust, and full plethoric habit, labouring under a stomachic affection, was advised by his friend to drink the Thetford spa. He went to the spring, drank from six to seven pints of the water daily, for three days, when he felt himself extremely ill, complained of a weight and fulness in his head. His countenance became florid, and the carotid and temporal arteris beat vio-

* Mr. H. W. Bailey.

lently. Immediately after relating these symptoms, he fell down senseless in a state of apoplexy. Two quarts of blood were immediately taken from the temporal artery, which saved his life.

It is by being employed injudiciously in such cases, that the chalybeate springs have often disappointed the sanguine expectations that have been held out; and that they have frequently lost much of the regard to which they are really entitled.

To children under five years of age especially, this water is not a favourable remedy. The diseases of children are for the most part of a nature to require a strict attention to the bowels; to the progress of dentition, diet, exercise, and sleep, with cold or tepid ablution, or bathing; and do not come within the useful influence of chalybeate spring.

From what has been so far stated, it must be obvious, that the diseases, to the cure of which the Thetford medicinal spring is

applicable, are as various as the nature of its foreign contents ; and from the union of several valuable qualities in this water, it may be made use of in cases of very opposite natures, without incurring the censure of employing it indiscriminately as a panacea, or universal medicine.

SECTION IV.

TESTIMONIALS OF MEDICAL MEN OF EMINENCE, SHOWING THE EFFICACY OF THE THET- FORD SPA, IN THE CURE OF MANY OBSTINATE AND LIN- GERING DISEASES.

DEAR SIR,

IN compliance with your request, I take the earliest opportunity of laying before you the observations I have been able to make upon the medicinal qualities of the Thetford Chalybeate Spring.

It has unfortunately happened that the greater number of invalids who have flocked to the town for the purpose of drinking this water, or using it as an ex-

ternal application, appear to have considered it as a *panacea*, or an infallible cure for all complaints.

It has been resorted to under all circumstances, and in all states of the constitution; so that till within a short period, I have had but few opportunities of watching the effects of the spa, or of appreciating its virtues to the extent necessary for practical purposes.

Experience however has convinced me, that under proper regulations, the Thetford Chalybeate may be unquestionably employed in various morbid conditions of the human frame, with much prospect of advantage. The number of patients who from its use in various complaints, have derived great and permanent benefit, precludes the necessity on the present occasion of my forwarding to you any statement of particular cases; I shall therefore content myself with stating, that in many, particularly in dyspeptic, nervous, and scrofulous affec-

tions ;—in cures of worms, eruptions of the skin, nervous debility, and other complaints originating in a disordered state of the digestive organs, and the alimentary canals ; a discriminating use of the Thetford Chalybeate water will generally be found to realize the best hopes of the invalid,

I am dear Sir,

Your obedient and humble servant,

HENRY BEST.

*To Mr. Accum, Compton
Street, Soho, London.*

Thetford, June 1, 1819.

DEAR SIR,

I have great pleasure in communicating to you any observations I may have been enabled to make upon the effects of the chalybeate water. The Thetford Spa is daily more and more frequented, and the water is carried away into the adjoining

counties in large quantities. The superintendant of the Spa informs me that upwards of 120 to 160 gallons have been daily fetched away since the first opening of the spring.

It would be unnecessary to speak to you on the nature of the cases in which the water has proved beneficial, they are those of general debility, in all morbid conditions of the digestive organs; in nervous and bilious diseases, the water has proved a sovereign remedy, in conjunction with the usual treatment—you will likewise notice the curative effects of the water in some internal maladies, I have therefore forwarded some cases copied from my minute book, which you will receive by post to-morrow, and they will enable you to form some kind of estimate of the medical powers of the spring,

I am yours truly sincere,

H. W. BAILEY.

*To Mr. Accum, Compton
Street, Soho, London.*

F. Willett, Esq. a gentleman residing at 81, Holborn-Bridge, London, of a plethoric habit, has been affected for many years with a cutaneous disease of the legs and arms, and frequently extending to other parts of the body, which he considered to be scurvy. During the last summer it had become very distressing, spreading over the whole surface of the skin, accompanied with violent itching and a discharge of a thin acrid lymph. For some weeks, I believe, months, he was unable to walk without the assistance of crutches, and his general health was much impaired. Under such a distressing situation and not finding speedy relief from the aid of medicine, he had recourse to *nostriums*, but the relief was only temporary. The first time I saw him was in consultation with his son Mr. Henry Willett; his sufferings then were acute, the whole surface of the skin was extremely red and shining, with an acrid and lymphid discharge, exco-

riating wherever it extended—the irritation with the heat and smarting can be much better conceived than described. He was recommended the decoction of the woods with mercurial alterative pills, and I must in justice to the merits of Mr. Henry Willett, who had previously prescribed the decoction, say, under such plan of treatment, he found more relief than he had hitherto done from any other medicine. Simple applications were made to the skin, more with a view to relieve the excessive irritation, than from any specific virtue they contained.

This mode of treatment was pursued some months, still the disease was not eradicated, the legs and arms suffered much irritation, and were much ulcerated. At this time the celebrity of the Thetford mineral spring spread through the adjoining counties, and Mr. Willett, felt desirous of trying the effects of the water upon his case. He began by drinking nearly a pint night and morning, and he frequently

washed the parts affected, with the water of the spring.

The effects produced were the following : the bowels were considerably acted upon, which previously were in a very irregular state, the appetite improved, the skin became sensible to perspiration, the secretions from the bowels were greatly increased, and his health in a short time very much improved. The application of the water to the skin entirely removed that excessive irritation, the thin acrid discharge lessened, the ulcers put on an healthy aspect, and a new skin completely formed. He has some time laid aside his crutches, and is in much better health than he has experienced for many months.

Mr. N. Mathews, a young gentleman from the neighbourhood of Ixworth, had been under the care of a skilful practitioner Mr. Green, with what he considered a derangement of the functions of the liver ; he remained in a very precarious state of health,

so that apprehensions were entertained of his being attacked with fits, or an accumulation of water in the head. From the communication I received from Mr. Green, his disease had partly yielded to small doses of mercury. When at Thetford I had frequent opportunities of visiting him, he appeared of an extremely delicate constitution, his countenance was sickly, he complained of headache, had frequent and frightful dreams, calling out and screaming violently. His appetite was much impaired, his pulse quick, the action of the bowels very irregular, his tongue foul, and numerous other symptoms, denoting a great derangement of the digestive organs. He complained much of an inability to exert himself, and great lassitude and debility.

He began by drinking a pint of our chalybeate water every morning, which at first produced nausea and sickness, but these symptoms after the bowels were cleared soon ceased. The secretions became more

healthy—the appetite increased, and in a little time his head-ache left him. He could take considerable exertion without fatigue, and his health became perfectly established in the space of two months.

A young lady, residing in Thetford, of an extremely nervous and delicate constitution, had often been under my care, with very distressing and unpleasant symptoms of general debility. She complained of being excessively fatigued even after the least exertion, frequently of syncope, lassitude, and palpitations of the heart. These symptoms more particularly occurred upon any sudden noise, or the introduction of any stranger into the room. She often felt a considerable agitation or tremblings of the whole nervous system. Her appetite was very uncertain, and she complained of a sense of faintness, or sinking about the region of the stomach—the bowels were irregular, and a great relaxation of the muscular fibres was evident. Tonic medi-

cines were had recourse to without any permanent relief. She was desirous to drink the chalybeate spring.

The effects were very striking. The water produced a strong exhilaration of her spirits, and a general increase of strength of the whole nervous and muscular system of the body. Her appetite become much improved, the palpitation of the heart ceased, the bowels became regular, and she is now enabled to take exercise without fatigue, and to attend to her domestic affairs with ease and alacrity.

Mrs. Pond, an elderly lady, residing at Shropham, a few miles from Thetford, has frequently been subject to stomachic affections, her general health was much impaired, and her habit becoming cachectic. Countenance sickly and palled—stomach highly dyspeptic—the hepatic functions going on irregularly—appetite uncertain—and breathing rendered laborious and oppressed, from distension of the stomach—

the legs swollen, and subject to a scurfy state of the skin, attended with violent itching, &c With such symptoms the effects of the Thetford spring were tried. After persevering in its use, internally, and externally to the legs, her complaints were relieved—the stomach lost that dyspeptic tendency, the breathing was rendered quite free, the secretions of the bowels were increased, the appetite improved, and her general health is nearly established. The swellings of the legs soon subsided, and the irritation was completely allayed by the external application of the water.

Mrs. Lake, for many years has been troubled with what is usually called gravel. Medicines which are administered commonly in such diseases had been tried, and whether from peculiarity of circumstances, or not experiencing much relief, they were discontinued. As soon as the mineral spring was re-opened, she gave it a fair trial. Several weeks she drank the water

every day, and certainly has found the greatest relief—the irritability of the neck of the bladder subsided, the kidneys performed their office more correctly, and the pains in the umbar region in a short time entirely wore off. She is now enabled to attend to her business, and is in better health than for many years past.

Mr. Land, a respectable farmer at Boughton, near Stoke, aged 60, of a full habit and very bilious, had been afflicted for nearly 40 years with a leprous eruption on his body, which occasioned a continual excessive itching, could get no rest at night, and the disease had completely deranged his constitution. He was extremely debilitated and the functions of the stomach and bowels completely irregular. The constant itching of the eruptive disease rendered his life truly miserable. He came to Thetford, and began drinking half a pint of the chalybeate spa, three times a day, the effects of which were extremely striking. His

bowels and stomach soon became regular, and he slept all night, which he had not done for some time, the irritation of the skin also became lessened, the scaly eruption in part has disappeared, and his general health became gradually improved. He is still drinking the spa. I forgot to mention that he washed the diseased parts of the body with the water of the spring.

Thomas Jones, aged 45, of apparently a strong constitution, complained of a weak state of the stomach—loss of appetite—squeamishness — heartburn — flatulency — frequent rising of a sharp acid liquor in the throat—a coldness of the whole surface of the body, and particularly of the lower extremities. The disease evidently arose from irregularities in the mode of living, and a liberal use of fermented liquors.— He was desirous of taking a course of the Thetford water, and to put himself under my care—took a pint and a half of the

water, daily, for three months, and is now in an excellent state of health.

John Mills, aged 60, of a stout make, formerly a coachman at Norwich, had always lived in good places, and eat and drank freely, was desirous of trying the chalybeate water, for a weak stomach and the gravel, suffered much with acid eructations, flatulency and continual head-ache, which rendered him frequently unable to work, he put himself under my care, drank one quart of water daily.—After having used the spa for three weeks his head-ache disappeared and his bowels became regular,—he now took three pints of water a day but contrary to my knowledge—in five weeks he found himself in a better state of health than he had been for many years before, and he deemed himself sufficiently, worked up, as he called it, to live comfortably.

Elizabeth Underwood, a servant maid at Attleburgh, 30 years of age, observed two years ago a small itching pimple on her

leg, which at first gave her no uneasiness, but during its increase at length produced much pain, and became a deep ulcer, discharging a thin foetid sanies. She was advised by her mistress to try the effects of the Thetford water, and called upon me for advice.—She drank the water three months, and put herself under my care. The uneasiness and pain of the sore became much diminished during the use of the water—the ulcer began to discharge a healthy looking matter, after she had used the water one month.—She washed the sore frequently every day, with folds of linen dipped in the water, and in three months the ulcer was completely healed.

Elizabeth Morris, aged 37, a servant maid at Thetford, had dropsical swellings in her legs for a considerable time, which gave her no alarm till an accumulation of water in the abdomen took place. She called upon me to ask whether she might go and drink the spa—she drank the water for upwards of

three months, and put herself under my care—the swelling of the extremities gradually began to diminish, and lastly, totally disappeared. She has had no return of the complaint.

Mrs. —, resident near Boughton, of a delicate habit, has for some years, been subject to the formation of gall stones, attended with all those distressing symptoms peculiar to a deranged state—the function of the liver and stomach—her constitution from the frequent attacks of the disease became greatly debilitated, and the stomach had become so weakened, as to be incapable of bearing any food, however simple and of easy digestion. She came to Thetford, and drank the water regularly, a pint night and morning, occasionally combining with it some mild saline aperient medicine. “I have regularly,” she writes to me, “persevered in drinking the Thetford spa some months, and obtained the greatest relief.—The violent pains and sickness of my

stomach have entirely left me—my bowels from being sometimes constipated and at other times relaxed, are now observing their regular functions, and my health and spirits are quite restored.”—I have pleasure in copying the above paragraph from her letter, because it is one among numerous other cases of a similar kind, in which I have had the opportunity of witnessing the good effects of the spa.

James Taylor, of ———, aged 50, has been affected many years with a distressing species of cutaneous disease, for which he had been under the care of several medical gentlemen, both in hospitals and private practice, without even any temporary relief. His constitution had suffered considerably, the stomach having lost its power, with considerable sinking and lowness of spirits, want of appetite and general debility; he began taking two pints of the Thetford water three times daily, but was obliged soon to desist, in consequence of

its producing a giddiness and constipation of the bowels. He consulted me on the further use of the water, and I advised him to combine with it two tea spoonfuls of Epsom salts, which entirely prevented that determination of blood to the head, and kept up a regularity in the state of the bowels. He soon lost the depression about the region of the stomach, the appetite became restored, countenance more healthy, the secretions from the kidneys increased, and a general sense of warmth felt throughout the frame. The parts affected with the disease were washed twice daily, the irritation became greatly relieved, the incrustations became detached, and new and healthy skin formed. I have seen no case in which the striking effects of the Thetford spa were more evident. He is now nearly free from the disease and seems very grateful for the relief he has obtained.

Mrs. ———, a young lady, resident at Thetford, complained of a weak state of

the stomach—frequent sickness, and want of appetite—sometimes pain in the stomach, and indisposition to motion—was averse to medicine, but inclined to drink the Thetford water—at the end of a month after having drank the water, the symptoms disappeared, and on continuing it for six weeks longer, she became perfectly healthy.

A young lady, residing at Norwich, suffered under Chlorosis, which had resisted a number of remedies prescribed by the apothecary of the family. She consulted me on the use of the Thetford spa—she drank the water for three months, and became perfectly relieved.

A. N. a weaver at Lopham, aged forty-three, apparently of a strong constitution, complained of a fluttering and extreme sinking in the inside—frequent sickness, and cold feet—he took one quart of the water daily, and occasionally one ounce of Epsom salts. He was cured by means of these remedies in six weeks,

T. ———, Esq. of Norwich, had suffered from repeated attacks of a liver complaint—his emaciation and debility were great—he began a course of the Thetford water, assisted by the requisite medicines. At the end of three months he found himself much better, and he intends to recommence a course of the water next Spring.

Miss L., aged 23, of a delicate habit and a very pale visage, was nervous, and suffered extremely from hysteric affections—had used a long list of domestic medicines, prescribed by a doctress in the family, without any benefit—this young lady was extraordinarily sensible to a change in the weather—she was affected by the slightest alteration of the atmosphere with more certainty than a barometer, in fact she was a living weather glass. Being on a visit in the neighbourhood of Ixworth, she was desirous of taking the Thetford water of which she drank a pint and a half a day, with two

glasses of asses milk. She had scarcely continued the use of the spa for five weeks when her appetite became regular and her countenance healthy. In two months the hysteric paroxysms had left her, and in three months her health was restored.

Mr. T. M. has had a sore leg for upwards of ten months, which has rendered him unable to attend to his work, which is that of a gardener,—said he was rather somewhat fond of grog, and drank it sometimes to excess, but was now determined to drink the Thetford spa water, in which he persisted for four months ; his leg is completely healed.

Miss B——, had a white scaly eruption on her legs, to remove which the sea bathing had been recommended her, which she used for several weeks. She had taken in that time quantities of purging medicine, by way of sweetening as she called it her blood, without the slightest benefit. She had been advised to use the chalybeate

water and to rub her face with it, and also occasionally to take a calomel purgative. In three weeks the eruption disappeared.

A lady residing at Norwich, of a delicate habit, has some years been suffering under some stomach affection, which has brought on a train of nervous sensations extremely distressing to herself and those around her. From the communication I received from her, I understand she had punctually observed the advice recommended by her medical advisers but without that relief she anxiously looked for. Hearing through her friends that the Thetford chalybeate spa had proved beneficial in similar cases, she requested some of the spa water might be sent for, as she was totally incapable of undertaking the journey to Thetford, and I believe, had not left her room many months. After persevering in the use of the water for some weeks, she found the greatest benefit. She felt an universal glow of heat in the stomach, and system in general, the appetite be-

came restored, and those distressing nervous sensations soon subsided, in short she is now enabled to take her rest at night of which she had been deprived, and undergoing that exertion in her domestic concerns to the no small gratification of her husband and the astonishment of her numerous friends.

Mr. T. B——, aged about forty-five years, had been long afflicted with pain in the region of the kidneys, which extended down to his thighs, his abdomen was hard swollen with a sense of weight and pressure downwards. He frequently passed gravel and small calculi, with excruciating pain. He was very much averse to medicine, he asked my opinion concerning the use of the chalybeate, which he was determined to try. After having taken three doses of Epsom salts, he drank daily three pints of the water, which strongly acted as a diuretic. I ordered him a warm bath, and after being in it for fifteen minutes he discharged a quantity of calculi, with in-

finitely less pain than on former occasions, and felt considerable relief in other respects. He persisted in the use of the spring and the warm bath, for near three months. And he is now in perfect health.

A farmer, aged thirty-nine years, had white scaly patches, which covered his body and lower extremities. The eruption was moist and itchy during the night, his hands were entirely covered with scales. He had been afflicted with this disease for five years, and had been under the care of a most eminent medical man. He had undergone a course of mercury, sarsaparilla, had used the sea bathing, from which he occasionally got relief. He was advised by a friend to try the chalybeate spring, he took a pill, which he said he was accustomed to do every night, and a dose of salts once a week. After having used the chalybeates for six weeks, his skin became softer and smooth to the touch, which encouraged him to persevere daily using

the water for three weeks longer, after six weeks he was quite well.

Miss ———, aged seventeen years, of weak and delicate habit, had a swelling in the parotid gland, which gradually increased till suppuration commenced, I was called and advised to have it opened, it being on the point of bursting. The parents requested the operation to be delayed, and to try what effect the chalybeate water might have upon the disease, a poultice of bread and milk had been applied which I ordered to be continued, I gave her a dose of calomel and rhubarb. The lady continued the use of the water for some time, and in ten days the tumour became reduced to one half the size, absorption having taken place, and in less than three weeks it totally disappeared.

SECTION V.

OBSERVATIONS ON BATHING.

Any account of the medicinal use of a mineral spring would be imperfect, without taking some notice of the employment of the bath, either generally or topically employed as a co-agent to assist the powers of the spa.

WARMBATH, ITS USE AND APPLICATION.

Exclusive of the wholesomeness of the warm bath in a variety of diseases, the luxury of its application is so great, and the tranquil state of mind and body which

follows the use of a warm bath, is so exquisitely delightful, that I think it quite impossible to recommend it too strongly, if we consider it merely as a rational and elegant luxury. It is unnecessary to remind the reader of the tendency it has to promote cleanliness. This will appear evident to those who are not in the habit of bathing, by perceiving the first time of their going into a warm bath, that a quantity of a whitish scaly matter may be observed to swim upon the surface of the water, which by remaining upon the body, would have contributed to obstruct the pores of the skin, to check perspiration, and perhaps induce various cutaneous eruptions.

The use of the warm bath twice or three times a week, has assuredly a very renovating effect upon emaciated people, and its use has no inconsiderable tendency to retard the advances of those infirmities naturally incident to old age.

“ Pleas’d, on the boiling wave, old *Æson** swims,
 And feels new vigour stretch his swelling limbs ;
 Through his thrill’d nerves forgotten ardours dart,
 And warmer eddies circle round his heart.”

DARWIN.

The propriety of employing warm or cold bathing, in co-operation with the chalybeate Spa, must be entirely relative to the individual case. Dr. Saunders observes, “ It is frequently of eminent service to employ the warm bath occasionally during the course of a chalybeate water, and the propriety of this practice, which is warmly recommended by the most eminent medical men, is amply proved by experience.”

The effects of bathing are not the same in all conditions of the system, but derive their character more from the varying cir-

* The tradition of *Æson* being restored to youth by the medicated baths of Medea, hinted at by Lord Bacon, is an allegorical representation of the effects of the warm bath, in retarding the approach of old age.

cumstances of the patient, than from any intrinsic properties they may possess, of universal activity.

The same application, which in a strong person produces increase of strength, may tend immediately to debilitate the feeble; and a remedy, which used with moderation, is a stimulant, becomes rapidly destructive to vital power, in an excessive dose.

DISEASES IN WHICH THE WARM BATH MAY PROVE BENEFICIAL.

Frequent bathing in tepid water at the temperature of ninety-five degrees at least, by drawing the circulation from the internal organs to the surface of the body, is highly conducive to the development of the corporeal organs, as well as to the preserving the skin in that state of softness and pliability, which is not only a sign of good

health, but which tends to facilitate the eruption, and diminish the danger of the various *diseases of the skin*.

The fair sex may here be informed, that the warm bath has unquestionably a tendency to preserve the lustre of the eye, and to add a healthy ruddiness to the cheek.

The tepid bath occasionally employed, perhaps, is the best cosmetic that can be used, and it has that peculiar advantage attending it, of being innocent and not leaving any deleterious effects as its consequences. It not only moistens and softens the skin, but preserves it in that state of smoothness and delicacy which gives the appearance of a good state of health.

We have stated already some of the diseases in which the application of the cold bath may prove hazardous. See also p. 157.

On the other hand, the warm bath, properly regulated, will be found a principal agent in the cure of many disorders, and in all cases where the action of the ab-

sorbents is required to be increased, in eruptions of every kind, in œdematus swellings of the limbs, in stiffness, in contractions of the joints, (whether an original disease or the consequence of others,) and in those maladies called *nervous*; in the decline of life to the last stage of existence, the warm bath may be used with advantage and safety.

It is also of use in female obstructions, chilblains, strangulated hernia, and inflammations of the stomach and bowels. It is evident that its first effects would be attended with danger, in a plethoric state of the body, or where there is much determination to the head—in such cases therefore, previous steps must be taken to remove plethora, or relieve the head.

From its power of determining to the surface of the body, it is useful where any acrimony is to be discharged, or where any unequal balance of the circulation is to be removed. In the former view it may be

employed in several affections of the skin, in the latter, in chronic catarrh and diarrhœas.

During the period of *teething* in children, the warm bath is attended with the best effects, and in a variety of diseases, when the glands of the mesentry become obstructed and thickened ; when the appetite is great and ravenous, but neither health nor strength are the result ; the more food given in this case, the worse the disease, as it oppresses without nourishing the system ; no healthy appearance can therefore take place, until the obstructions are removed.

After intense thinking, or a close attention to mental labour ; after constant action or laborious exercise of the body ; in fact, after great mental distress, the warm bath is always useful ; it recruits the faculties both of the body and mind, and increases their activity.

In very feeble persons, who are not equal

to support the expence of vital power, necessary for preserving the natural heat during winter, who are subject to cold feet, and general chilliness, the warm bath is tonic, by an artificial supply of heat.

If, however, the same person indulge too long in this luxury, he acquires a quantity of superfluous heat, which generates a necessity for increased perspiration, and thus equally calls too much on his vital powers. To such person, and in such a way, the warmth bath is debilitating.

The time for using and remaining in the warm bath must depend upon the purpose for which it is designed. From ten minutes to a quarter of an hour, is sufficient in general; but there may be cases where half an hour or an hour will be necessary.

COLD BATH.

The cold bath like the warm bath, is not not only calculated to promote cleanliness,

but the pleasure derived from it in warm weather, must have induced the use of it from the earliest periods of time. It tends to remove the impurities from the surface of the skin, induces a free perspiration, by opening the cutaneous vessels; promotes the different secretions, increases the circulation of the blood, and tends to strengthen and invigorate the whole system. Hence, to the infirm, the delicate, and even to the healthy, under certain rules and restrictions, it may prove highly conducive to the preservation of their health.

DISEASES IN WHICH THE COLD BATH
MAY PROVE BENEFICIAL.

The diseases and morbid affections for which the cold bath, under one form or another, may be supplied with advantage, are very numerous, and some of them deserve particular attention.

The general circumstances of disorder in

which the cold bath may be beneficial to assist the power of the chalybeate water, are langour, and weakness of circulation, accompanied with profuse perspiration and fatigue on very moderate exertion, tremours in the limbs, and in fact, in all those diseases usually called nervous; where the moving powers are weak, and the mind listless and indolent, but which at the same time, are unattended by any organic disease. But let it be remembered, that the use of the cold bath and the manner of applying it as a co-agent to assist the action of the chalybeate spa, must entirely be left in the hands of the medical adviser. It is far too powerful a remedy not to be able to produce much mischief when misapplied.

In chronic diseases for instance, the cold bath may prove hazardous to persons who are liable to a strong determination of blood to the head, and still more the lungs; and it is capable of producing serious consequences in weak and irritable constitutions.

It is therefore seldom admissible in those cases of disease in the stomach, with defect in the powers of assimilating food, which are brought on by high living, and constitute what may be termed the true dyspepsia. The process of digestion seems to require a pretty uniform state of animal temperature; and therefore when the stomach and digestive organs are weak, this state cannot be interrupted with impunity, whereas, in other cases of debility it is a sovereign remedy.

The propriety, therefore of bathing, and the mode of bath which may be admissible, are matters of no trifling consideration, and should never, in disease, be left to the patient's own unassisted judgment,

The usual custom, and indeed the best preparation for cold bathing, is to begin with a warm, then a tepid, and afterwards a cool bath; after this course, the bather may in general plunge with safety.

The bather should quickly plunge; this

produces a quick return of warmth, a glowing healthful appearance in the countenance, and an additional flow of spirits—when this is not produced, the cold bath should not be repeated.

When a person in the ordinary state of health is suddenly plunged into a cold bath, he first experiences a general sensation of cold, which is almost immediately succeeded by a general sensation of warmth; the latter rapidly increasing, so as to cause the surrounding water to feel of an agreeable temperature.

If the immersion has been sudden and momentary, and the body be immediately dried and covered from air, the agreeable sensation of warmth continues, the whole body feels refreshed and invigorated, and under favourable circumstances, the natural perspiration is increased.

But if the body instead of being suddenly plunged into the cold bath, is made to come in contact with the water gradually,

a contrary effect takes place. A shivering is produced, and as the person advances so as to make the water rise towards the belly and chest, a shuddering and convulsive sobbing takes place, sometimes attended with sickness and head-ache.

Therefore when after the use of the cold bath a person feels heavy, inactive, or chilly, or finds himself affected with head-ache, or tightness across the chest, it is evident it does not agree with him, or that he has continued it for too long a time.

SHOWER BATH.

The cold shower bath is less alarming to nervous patients, and less liable to produce cramps than cold immersion: it may be considered as the best and safest mode of cold bathing.

The frequency of applying the bath, must be left to the discretion of the physician, exercised upon the variety of constitutions and circumstances.

DISEASES IN WHICH THE COLD BATH IS
INAPPLICABLE.

In general plethora, or fulness of the vessels, and in inflammatory diseases of the more important viscera, the cold bath proves injurious, however high the feverish heat, which accompanies such disease, may be raised. For, by repelling the blood from the surface, the cold bath causes a greater influx of that fluid into the interior of the body, the inflamed part, already oppressed by too large a proportion of nourishment and excitement, is thereby driven into still more inordinate action, and the disease rendered more violent and dangerous.

In these cases, the cold bath, in *all* its forms, is inadmissible; and in no instance whatever should it be used, without the advice of a skilful physician.

Numbers of invalids, delicate females,

puny, rickety, and young children, are materially injured in their health by the unadvised and injudicious use of this powerful application.

In all disorders affecting the head, with pain, giddiness, sense of fulness—in all diseases of the breast, in asthma, catarrh, water on the chest, and every species of consumption—in all internal inflammations of the liver, spleen, kidneys, intestines, &c.—in gout, rheumatism, diseases of the joints, scrofula, glandular swellings—in every species of dropsy, the cold bath is injurious.

Such then are the circumstances which regulate the practice and ensure the utility of bathing.

By the perusal of these pages, the reader, while he is guarded against the ill consequences of an injudicious, unregulated, or unadvised use of a powerful remedy, may perceive grounds for hope of success, in the treatment of many obstinate and

chronic complaints, by its timely and guarded application. From the use of the Thetford Chalybeate spring, the greatest expectations may therefore be indulged; the Author has rather undervalued than overrated its utility.



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THE END.

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