

The baths and mineral waters of Bath / by Randle Wilbraham Falconer.

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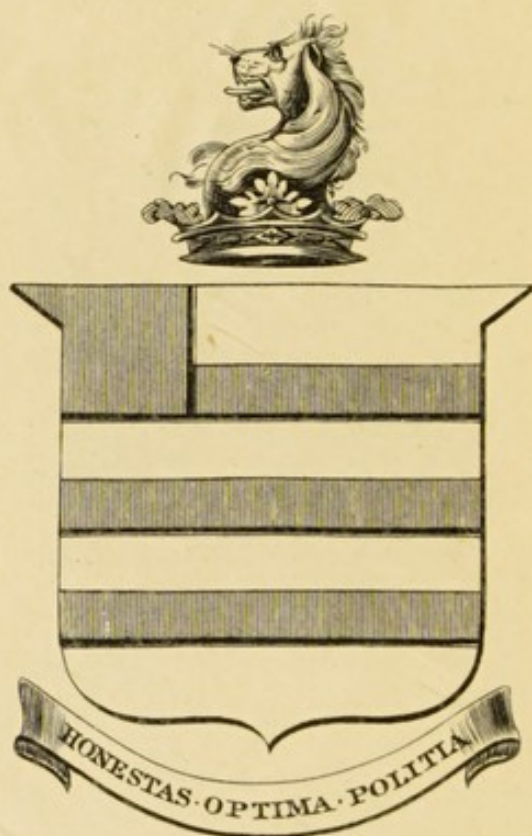
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THE BATHS
OF BATH
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THE BATHS
AND
MINERAL WATERS
OF BATH.



THE BATHS
AND
MINERAL WATERS
OF BATH.

BY
RANDLE WILBRAHAM FALCONER, M.D.,

*Physician to the Bath United, and Bath General, Hospitals,
&c., &c.*

LONDON:
SIMPKIN, MARSHALL, AND CO.
BATH: R. E. PEACH.
AND SOLD BY E. COLLINGS, C. W. OLIVER, & S. W. SIMMS.

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THE chief object of the following pages is to give an account of the extensive and admirable arrangements provided for the use of the MINERAL WATERS OF BATH. To this account have been added some statements respecting the impregnations and medicinal uses of the waters.

I beg to acknowledge the kindness of *Messrs. Manners and Gill*, Architects, in presenting me with the plans which illustrate this work; and my thanks are also due to *Mr. Thomas Hilliar*, a former talented student of the Bath School of Art, for the drawing of a portion of the ornamental work, mentioned at page 13, which decorates the Hot Bath.

R. W. F.

22, *Bennett Street, Bath;*

June, 1857.



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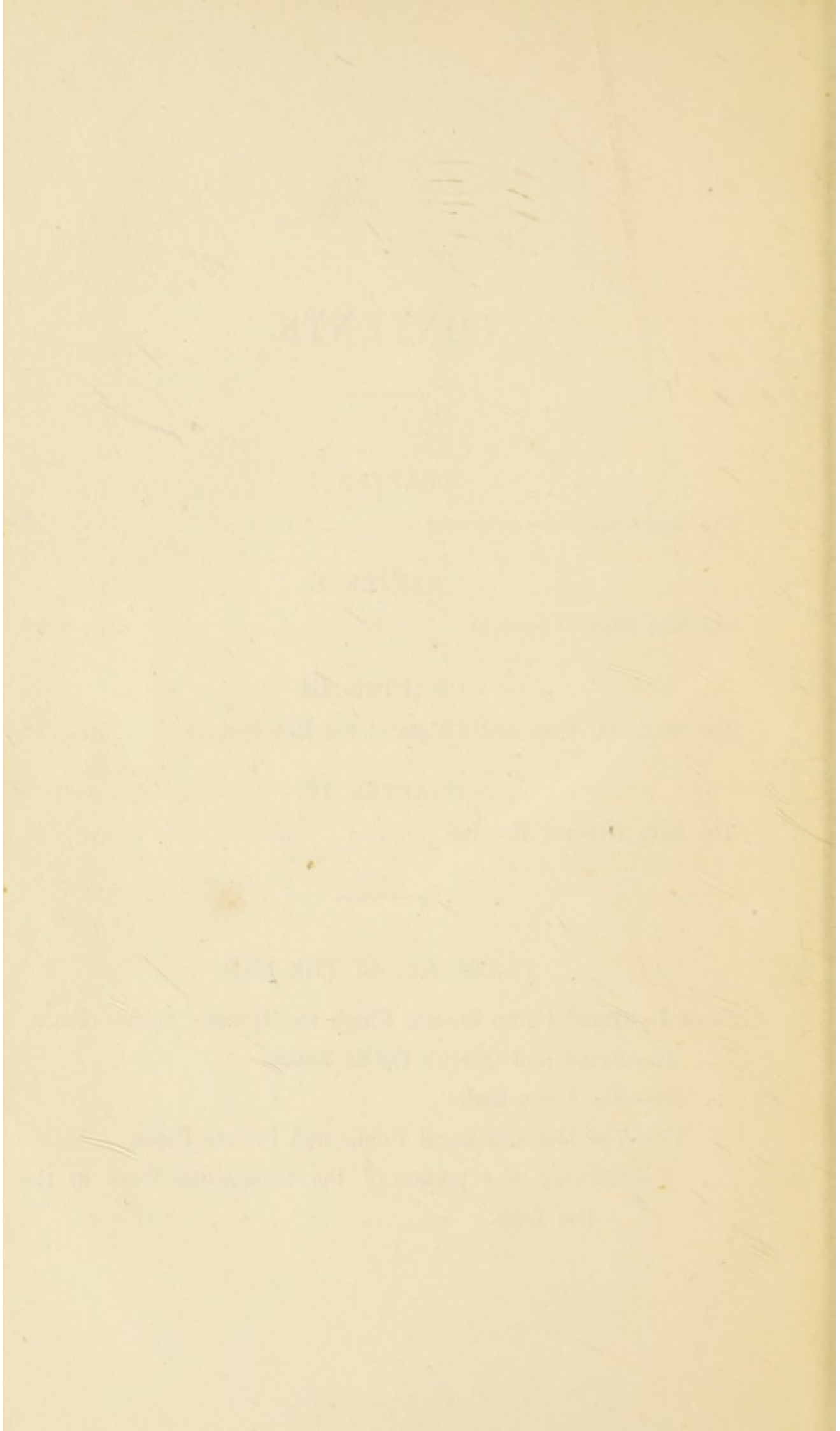
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CONTENTS.

	Page.
CHAPTER I.	
The Baths and Pump Rooms	1
CHAPTER II.	
The Hot Mineral Springs	20
CHAPTER III.	
The Medicinal Uses and Effects of the Hot Springs ...	29
CHAPTER IV.	
The Bath General Hospital	41

PLANS, &c., AT THE END.

- PLAN I.—Grand Pump Rooms, King's and Queen's Private Baths.
„ II.—King's and Queen's Public Baths.
„ III.—The Cross Bath.
„ IV.—The Hot and Royal Public and Private Baths.
„ V.—Drawing of a portion of the Ornamental Work at the
Hot Bath.



INTRODUCTION.

No statement deserving of credit has been preserved regarding the discovery of the Hot Mineral Waters of Bath. The account given by *Jones*, in his *Bathes of Bathes Ayde*, which attributes their creation to "Bladudus Magus, that wyse Magicyan;" and *Wood's* statement in his *Description of Bath*, which declares their detection to have been effected by Bladud and his swine;—are examples of those legendary histories, with which it is attempted to supply the want of authentic records. If any truth exists in such legends, it is generally extremely difficult to disentangle it from what is fictitious.

It is thought by some, whose opinions are entitled to respect, that a British settlement once occupied the site of the present town of Bath, and that through the obscurity which envelopes its history, the outlines of an extensive city are traceable, which was distinguished above all those of the West; and hence, it is inferred as probable, that its inhabitants did not neglect the mineral waters of the locality.

It is however more likely that the British occupied the elevated positions in the neighbourhood, and that the hot waters of the valley, formed a morass, the overflowings of which were poured into the river Avon.

The period at which the history of Bath and the Bath Waters, can be truly said to commence, is with the Roman occupation of the locality of the present city. The presence of the Romans is indicated by many remarkable remains of their workmanship, which have been found and preserved, and among these are the ruins of buildings of magnitude and great beauty, erected in the vicinity of the springs, portions of which contribute to form one of the richest and most interesting collections of Roman Antiquities in England.*

One of the most important discoveries of a Roman building, connected with the use of the hot waters, was the finding in 1755 of the ruins of a Bath, of considerable size, of which no traces are now to be detected, in the position at present occupied by Kingston Buildings, near the Abbey. These remains were described by Dr. Lucas, and subsequently by Dr. Sutherland† in 1763.

A description of them, which is too extended to admit of quotation, may also be found in *Collinson's History of Somersetshire*, vol. 1. p. 9, or in *Warner's History of Bath*, p. 22. Some idea of the size of the building in which the baths were contained, may be formed from the statement "that they occupied an area 240 ft. from east to west, and 120 ft. at the broadest part, from north to south, that they were highly decorated with tessellated pavements, columns, pilasters, and every ornament of classical architecture."‡ This building, it is probable, was destroyed by the Saxons, who succeeded the Romans in their occupation of Bath, and it must subsequently have escaped notice, inasmuch as at eight feet below the surface, but still considerably above the ruins, several stone coffins, containing remains of

* These remains, the property of the Corporation of Bath, are placed under the care of the members of the Bath Royal Literary and Scientific Institution.

† Attempts to revive ancient Medical Doctrines relative to Waters, &c. Lond., 1763.

‡ *Warner's New Guide through Bath*, p. 29; 1811.

persons of both sexes, and coins from the mints of several Saxon kings,* were simultaneously discovered. To this subject it will be necessary again to refer.

The names which the Saxons gave to the city founded by the Romans of *Hæt Bathan*, and *Akemancæstre*, sufficiently indicate both the nature and efficacy of the waters; and moreover what we know of their habits, tends to confirm the belief that they paid considerable attention to the employment of the mineral springs. "Osric built a monastery at Bath (A.D. 676), and visited its hot waters; and Offa, a century afterwards, made it the residence of his court for some time. Athelstan and Edgar also delighted in the use of its medicinal springs; and indeed almost all the Saxon kings honored Bath, either with their presence, or enriched it by their munificence."† A bath seems to have been provided from very ancient times for the use of royal visitors, since the name *King's Bath* occurs as early as the beginning of the thirteenth century.

John de Villula, Bishop of Bath and Wells, who died in 1122, richly endowed the church of St Peter (the Abbey) in 1106; and for the convenience of the monastery, built two new baths within its precincts, one of which, called the Abbot's Bath, he gave to the public use, and the other for the prior. *Wood* states that both were given to the public; this took place perhaps at a later period. He also erected a considerable edifice for his own residence. The baths went by the name of the Abbey Baths for some time, and were supplied with water from the spring in the King's Bath. The residence, built by John de Villula, was the Abbey House—which was demolished in 1755, and its foundations removed, during which process, the stone coffins and

* There was a mint at Bath. *Vide* "On coins issued from Somersetshire Mints," by the Rev. T. F. Dymock.—Somersetshire Arch. and Nat. Hist. Soc. Proceed. for 1849-50, p. 12.

† Warner's History of Bath, p. 316, and note.

coins were found, and also the remains of the Roman Baths before-mentioned. At this time the spring which supplied the latter baths was accidentally discovered. On the site of the Abbey House, new baths were built, which for some time were known as the Abbey, or Roman Baths; at present, as the Kingston, or Old Roman Baths, notwithstanding there is not any reason to believe that traces of the latter are to be found. Besides the making of two new baths, John de Villula is represented as having repaired the then existing baths which were tending to decay.

In 1138, Robert, Bishop of Bath and Wells, founded a hospital for Lepers, and dedicated it to St. Lazarus, attaching to it at the same time a bath called the Lepers' or Lazours' Bath; it was supplied by the spring in the Hot Bath, to which it adjoined. Johnson, in his book on the Bath Waters, published in 1634, mentions this bath, and it was still used in 1773; the period at which it was destroyed is uncertain.

The baths remained in the hands of the Priors and Monks of the Benedictine Monastery of Bath, until the dissolution of religious houses in the time of Henry VIII., and in consideration of their receiving the proceeds, which arose from the use of the baths, they were to keep them in repair, fit for the reception of Royalty. In 1235, however, it appears that they neglected their duty, receiving the profits, but leaving the baths to decay, in consequence of which, they were amerced in the sum of £13 11s., the estimated cost of the repair of the King's houses, and of the King's Bath.

Leland, not long before the dissolution, gave the following account of the Baths:—"There be 2 springes of whote water in the west south-west part of the towne, whereoff the bigger is caulled the Crosse-Bathe, bycause it hath a crosse erected in the middle of it. This bathe is much frequented of people diseased with lepre, pokkes, scabbes, and great aches, and is temperate and pleasant, having a 11 or 12 arches of stone in the sides for men to stonde under yⁿ time of reyne. Many be holp by this bathe from scabbes and aches.

"The other bathe is a 2 hunderith foote of, and is lesse in compace withyn the waulle than the other, having but 7 arches yⁿ the waulle. This is caullid the Hote-Bathe; for at cumming into it, men think that it would scald the flesch at the first, but after that the flesch y^s warmied it is more tolerable and pleasaunt.

"Both these bathes be in the midle of a lite street, and join to St. John's Hospitale; so that it may be thought that Reginald, bishop of Bathe, made this Hospitale nere these 2 commune bathes to socour poore people resorting to them.

"The Kinge's-Bathe is very faire and large, standing almost in the midle of the towne, and at the west end of the Cathedrale chirch.

"The area that this bathe is yⁿ is cumpassid with an high stone waulle.

"The brimmes of this bathe hath a litle walle cumpassing them, and in this waul be a 32 arches for men and women to stand separately in. To this bathe do Gentilmen resort.

"Ther goeth a sluise out of this bathe, and servid in tymes with water derivid out of it 2 places in Bath priorie usid for bathes, els voide, for in them be no springes.

"The colour of the water of the baynes is as it were a depe blew se water, and rikith like a sething potte continually, having sumwhat a sulphureus and sumwhat a pleasant savor.

"The water that runnith from the 2 smaul bathes goit by a dike into Avon, by west bynethe the bridge.

"The water that goith from the Kinge's Bath turnith a mylle, and after goith into Avon above Bath bridge.

"In all the three Bathes, a man may evidently see how the water burbelith up from the springes."

In 1542, Henry VIII. granted the "late monastery or priory of Bath," with all the property appertaining to it, to Humphrey Colles and his heirs: Colles disposed of it to Matthew Colthurst, whose son Edmund Colthurst gave the Abbey and a portion of the land adjoining it, to the Mayor and Citizens of Bath; while the Abbey House and

remainder of the property, he sold to Fulk Morley, in 1569, from whom it descended to the Duke of Kingston, and from him to the late and present Earl Manvers—who thus owns the Kingston or Old Roman Baths, erected on the spot once occupied by the Abbey House. The King's, Cross, and Hot Baths appear to have been conveyed with the Abbey to the Mayor and Citizens of Bath.

For a considerable period the Bath waters had enjoyed great celebrity, but it appears from the statements of Dr. William Turner, who was Dean of Wells in 1550, made in the preface to a work published in 1562, entitled “A Booke of the Natures and Properties, as well of the Bathes in England as of other Bathes in Germany and Italye,” &c.—that they were neglected, and their condition ruinous. He observes, that “there is enough money spent on cock fightings, tenes players, parkes, bankettings, pageantes, and playes, serving only for a short tyme the pleasure oft tymes, but of privat persones which have no nede of them. But I have not hearde tell that anye rich man hath spent upon these noble bathes, beyng so profitable for the hole commonwelthe of Englande, one grote these twintye years.” Dr. Turner made several suggestions for the improvement of the baths, and recommended the formation of a bath of the hot water for horses—which was done according to *Wood* about the year 1597. A large pond was made on the southern side of St. James's Church, without the city walls, near Ham Gate, to receive the waste water of the King's Bath, “and this was for sometime used as a bath for horses, and called the Horse Bath.”*

In 1572, Dr. Jones published “The Bathes of Bathes Ayde,” in which he proposed to supply the deficiencies in Dr. Turner's book.

In 1590, Queen Elizabeth granted a new charter to the city of Bath, wherein she confirms the possession of the water and baths in the following terms: “And whereas the Mayor and Citizens of the afore-said city now hold, occupy, possess and enjoy, to them and their

* Description of Bath, vol. i., p. 207.

successors, the same city, with the appurtenances, and all the waters and baths there, &c., &c. ; know ye, as of our abundant grace, certain knowledge, and mere motion, we have granted and confirmed, and by these presents, for us, our heirs, and successors, do grant and confirm to the aforesaid mayor, aldermen, and citizens, and to their successors, all and singular such and the same waters, baths, &c.” Shortly after this charter was granted, the corporation of the city rebuilt the Hot and Cross Baths, which had become decayed; and about the same time, Mr. Bellot built the bath adjoining the King’s Bath, which, in 1615, was named the Queen’s Bath, owing to Anne, the Queen of James I., making use of it. The management however of the baths seems to have been neglected by the corporation, and all sorts of irregularities were practised in them, so as to prevent their public utility. In order to correct these abuses, several persons, with whom were associated the members of the corporate body, petitioned King James I. to grant them power, to check the irregularities which took place in the baths; but the king’s death occurring soon after the presentation of the petition, nothing was done to terminate them: and in 1632, Dr. Jordan, in the second edition of his “Discourse on Naturall Bathes” &c., complains in his preface of still existing annoyances, whereby the baths “are not able to display their vertues, and doe that good for which God hath sent them to us.” In 1646, the corporation framed a code of by-laws to remove nuisances, and establish order in the city. These by-laws were confirmed in 1650, after a satisfactory trial had been made of them; “then,” says Wood, “people began to flock to Bath for recreation, as well as for the benefit of the waters.”

From about this time to the present, the history of the waters, and the beneficial effects produced by them, will best be traced in the numerous works which have been written upon them.

It was at first proposed to have concluded these introductory remarks with a complete list of the treatises upon the Bath Waters, but it was found to be so large that the intention could not be conveniently carried out.

The following catalogue may however prove interesting, and properly terminate this brief sketch of the History of the Waters.

A list of some Authors of Works on the Bath Waters from 1557 to 1857:—

From 1557 to 1607.—W. Turner, M.D.; John Jones, M.D.

From 1607 to 1657.—Tobias Venner, M.D.; E. Jorden, M.D.; T. Johnson, M.D.

From 1657 to 1707.—Thos. Guidott, M.B.; H. Chapman; R. Pugh; E. Pratt, M.D.; R. Pierce, M.D.; J. Maplet, M.D., &c., &c.

From 1707 to 1757.—J. Quinton, M.D.; W. Oliver, M.D.; G. Cheyne, M.D.; J. Wynter, M.D.; D. Kinneir, M.D.; J. Summers, M.D.; G. Randolph, M.D.; T. Smollett, M.D.; R. Charleton, M.D.; W. Baylies, M.D., &c., &c.

From 1757 to 1807.—A. Sutherland, M.D.; J. N. Stevens, M.D.; J. Ratty; C. Lucas, M.D.; William Falconer, M.D.; Sir E. Barry, M.D.; D. Lysons, M.D.; J. Elliott, M.D.; W. Corp, M.D.; A. Wilson, M.D.; Sir Geo. S. Gibbes, M.D., &c.

From 1807 to 1857.—William Falconer, M.D.; C. H. Wilkinson, M.D.; E. Barlow, M.D.; J. G. Mansford, M.R.C.S.; J. H. Spry, M.D.; A. B. Granville, M.D.; J. Tunstall, M.D.; &c.

THE BATHS, ETC.

CHAPTER I.

THE BATHS AND PUMP ROOMS.

THE Mineral Springs, Pump Rooms, and Baths of Bath, are situated in the southern part of the town, in the vicinity of the Abbey Church, not far distant from each other, and easily accessible from all parts of the city.

There are three Springs,* two Pump Rooms, and three Establishments for Public, and Private Bathing. One spring supplies the Fountain in the Grand Pump Room, the King's and Queen's Public, and Private Baths, and the large Tepid Swimming Bath. A second supplies the Cross Bath; and the

* The Springs and Bathing establishments here spoken of are the property of the Corporation of Bath. There is, however, another Spring supplying the Kingston Baths, the property of Lord Manvers, which have been recently much improved, and are under the direction of Mr. Penley.

third, the Hetling Pump Room, the Royal Private Baths, and the Hot Public Baths. In former days, the last mentioned Spring, also supplied the Leper's Bath, which was still remaining in 1773, but now no longer exists. If an additional supply of water be required at the Royal Private Baths, as is sometimes the case, it is obtained from the spring at the King's Bath.

THE GRAND PUMP ROOM.

(Plan I.)

This room, erected in 1796, under the direction of Mr. Baldwin, the City Architect, is situated in the Abbey Yard, adjoining the King's and Queen's Public and Private Baths. Its architecture is Corinthian; it is eighty-five feet in length, fifty-six feet in breadth, and thirty-four feet in height, affording ample space for promenading, to those who drink the waters. In the recess at its eastern end is a marble statue of Beau Nash, executed by Prince Hoare; the right hand of the figure rests upon a pedestal, on the face of which is delineated a plan of the Bath General or Hot Water Hospital, towards the establishment of which national charity he greatly contributed, by his exertions, in obtaining donations of money; at the western end is an orchestra for the band. There are three entrances on the northern side; opposite to the central, or principal entrance, is the Fountain, where every

requisite arrangement is made for drinking the waters. The Fountain is supplied, direct from the Spring, with a continuous stream, of mineral water, at a temperature of 114° F. This room is open on week days from 8 a.m. to 4.30 p.m., from September to March, and from 7.30 to 4.30 from March to September: on Sundays from 9 a.m. to 10 a.m., and from 1 p.m. to 3 p.m. throughout the year. During the above hours an attendant is always present to deliver the water to invalids. At the south-western end of the Pump Room a communication has recently been made with

THE KING'S AND QUEEN'S PUBLIC AND PRIVATE BATHS.

PRIVATE BATH (Plan I).

The Private Baths occupy the upper story; they were built according to the plans of Mr. Baldwin, the foundation stone having been laid May 10, 1788. The Public Baths are on the basement story. On the upper story there are four Baths, of which one is a Reclining Bath, lined with white porcelain tiles, fitted with taps, by means of which it is supplied with hot and cold mineral water; the other three are large Baths similarly lined, each of which will hold 806 gallons of water, with a depth of four feet six inches. In each there is a Douche for the local application of the water, if required, while the bather is in the bath. They are sufficiently large,

to afford space, for the free movement of the bather, and occupy, the greater portion of the Bath-rooms, which are twelve feet long, seven feet wide, and eleven feet high. Within a small semi-circular apse, is situated, the deeper portion of the Bath, with which is connected a flight of steps, forming a part of it. The hot water is thrown up from the bottom of the bath, and the cold water is turned on from a tap above the steps, and as it flows over them into the bath, mingles with the hot water. To all of the Baths convenient and comfortable dressing rooms and closets are attached, containing every requisite for the invalid. In addition to the Baths there are also two DOUCHE ROOMS for the local application of the water, or "dry pumping," so called, in contrast with the Douche used in the Bath. The water when applied by these Douches is propelled by a pressure of two pounds and a quarter on the square inch, when the valves are not weighted. When the smaller weights are used, the pressure is equal to five pounds and a half on the square inch; and when the larger weights are employed, the pressure amounts to eight pounds and three quarters on the same space. The distribution of the water may be regulated by the attachment of large, small, or perforated nozzles to the Douche pipe, so that a larger or smaller stream may be made to descend on the part to be douched, or it may be more gently applied by means of the perforated or rose nozzle. To each Douche Room a dressing room is attached.

SHOWER AND VAPOUR BATH.

(Plan I.)

There is also a Shower and a Vapour Bath in this establishment. In the former the mineral waters are used; and it is so arranged that the height from which the water descends can be regulated as occasion may require. The vapour of the latter is not derived from the mineral waters but from the water in the boiler of the steam engine, which raises the mineral water from the springs to supply the Private Baths. It forms a useful adjunct to the Mineral Baths.

There is also a closet heated with hot air, from which warm towels, flannel, and linen, are supplied to the bathers. Other arrangements may be seen by referring to the plan of the building.

The water may here be obtained at any temperature up to 115° Fahr.

From March until September these baths are open to the Public from 6 a.m. to 10 p.m.; and from September to March, from 7 a.m. to 10 p.m. On Sundays, throughout the year, from 7 a.m. to 9.30 a.m.; and from 8 p.m. to 10 p.m.

PUBLIC BATHS.

(Plan II.)

These Baths are reached by descending a spiral staircase from the vestibule of the Private Baths. The KING'S BATH,

which is open to the sky, is the larger of the two. It is somewhat more than fifty-nine feet in length, and nearly forty in breadth. When filled, it is computed to contain 51,450 gallons of water, with a depth of four feet and a half.

On the northern side of this Bath is a corridor, out of which are entrances to dressing rooms, which either communicate with the bath, or contain in them Reclining Baths. These rooms which communicate with the bath were formerly called "slips." At the eastern end of this corridor there is an inclined passage for wheel chairs, which is approached by an entrance in Abbey Place, communicating with the Abbey Yard. On the northern side of the bath there are three large Reclining Baths, and three flights of steps leading from as many dressing rooms into the water. One of these flights of steps communicates directly with the bath, while the other two lead into large recesses having partly glazed doors, which may be closed so as to convert the recesses into distinct baths, or the bather may pass through them into the open bath. Thus an opportunity is afforded to the invalid, of enjoying either a private, or an open bath, as taste may incline.

On the same side, but within the boundary of the bath, are three recesses furnished with seats for the convenience of bathers. On the eastern side, there are other recesses, within a colonnade, which admit of being partially closed in; the centre one contains a Douche. On the south side there is a stone chair and bench, the former bearing the following inscription, "Anastasia Grew Gave this 1739." Above the

stone chair is a mural tablet recording the gift of an ornamental balustrade for the bath, by Sir Francis Stonor, in 1677,* and not far distant, a figure of Bladud in a sitting posture, and below it an inscription on copper, the perusal of which will suggest some amusing speculations to the bather. Many of the brazen rings, attached to the walls of the bath, commemorate the benefits received by the donors from the use of the waters. On the western side are two flights of steps leading from dressing rooms: one near the Queen's Bath, and the other communicating with a recess within a colonnade, closed in chiefly with glass, from which, however, the bather can pass into the open bath. Near this recess is a pump attached to the wall, by means of which, mineral water for drinking, may be obtained direct from the spring.

In the centre of this bath, is a well eight feet seven inches deep; from its bottom, the hot spring supplying the bath rises through a large perforated iron plate covering the well, and through smaller openings around it, and also in other parts of the pavement, so as to preserve as much as possible, an equable temperature, throughout the whole extent of the bath. The space around the well is railed in; and here, where the water rises at times with considerable force, discharging large volumes of gases, the bath is the hottest. (Plan II.) The water is continually undergoing a change, as openings are provided, in the sides of the bath, at the water level, to convey

* The above date is on the Tablet; Guidott gives the date, 1624.

away the superfluity. The quantity of water yielded by this spring, is estimated at two hogsheads and a half a minute. Its temperature at the bottom of the well is 117° F.; within the enclosed space, 116° F.; while in different parts of the bath, it ranges from the last mentioned degree, down to 100° or 98° F., according to the distance from the exit of the spring.

At the time when Anstey wrote his "New Bath Guide" this bath was frequented by ladies dressed in the extreme of fashion, and gentlemen in powdered hair, and bag wigs, sociably enjoyed the bath together.

THE QUEEN'S BATH.

(Plan II.)

The Queen's Bath, formerly known as the New Bath, and constructed at the cost of Mr. Bellot, in 1597, received its present name upon its being used by Anne, the Queen of James I.; after which it was enlarged, and a cross erected in the middle, having on its summit a figure of the Crown of England, surmounting a globe, on which was inscribed, in letters of gold, "ANNÆ REGINÆ SACRUM." This cross appears to have been removed some time previous to 1732. It is also an open bath, and adjoins the former on its southern side, and is separated from it by a wooden partition.

It is supplied from the same spring as the King's Bath, and is somewhat more than twenty-seven feet square. When filled, it is computed to contain 18,215 gallons of water, having a depth of four feet and a half, the same as the King's Bath. On the southern side there are two dressing rooms with flights of steps from them communicating directly with the water, and adjoining one of them is a Reclining Bath. On the western side there are also two other dressing rooms communicating in a similar manner with the water. On the northern and eastern sides are arched recesses, and stone benches within them. The temperature of this bath is variable, but may be estimated at from 100° F. to 102.

The King's and Queen's Public Baths are open from March to September, from 6 a.m. to 10 p.m.; and from September to March, from 7 a.m. to 10 p.m.; and on Sundays from 7 a.m. to 9 a.m., and from 8 p.m. to 10 p.m. Each bath is open to male and female bathers on alternate days, as follows:—King's Bath—Gentlemen—Mondays, Wednesdays, and Fridays; Ladies—Tuesdays, Thursdays, and Saturdays; Queen's Bath—Gentlemen—Tuesdays, Thursdays, and Saturdays; Ladies—Mondays, Wednesdays, and Fridays.

Above and on the eastern side of the Queen's Bath is a large reservoir for cooling the hot mineral water (Plan II.), which was planned in 1829 and completed in 1833. It measures forty-five feet in length by twenty-five feet in breadth, and is four feet eight inches deep. It contains 32,000 gallons of water, which is used for regulating the tem-

perature of all the private baths. The water is cooled by means of a jet, thrown up by the steam engine, in the centre of the reservoir, which receives it as it falls.

Near this reservoir is a small building containing the engine, which draws the water direct from the spring, and propels it into the King's and Queen's Private Baths, and supplies the Douches; while, by means of a smaller engine, the water is supplied to the Fountain, in the Pump Room.

The chief entrance to the King's and Queen's Public and Private Baths faces Bath Street, at the end of which is

THE CROSS BATH.

(Plan III.)

This is a cheap public bath. It is of an irregular form : its greatest length is twenty-three feet, and greatest breadth nearly twenty-two feet, and is partly covered over. During the recent improvements this bath has been increased two feet in length, and one foot in breadth. When filled, it is estimated to contain 11,350 gallons of water, with a depth of four feet and a half. The spring supplying it rises from a depth of fourteen feet below the flooring of the bath, and yields half a hogshead of water a minute. The temperature of the water at the depth above mentioned is 104° F.; that of the bath generally, 96° or 92° F.

The present edifice was erected from plans by Mr. Baldwin, the City Architect, and within it, there was on the northern side, a small pump room, which was afterwards removed, and the space used for reclining baths, which have been recently taken away, and replaced by small private dressing rooms; and instead of two public dressing rooms originally adjoining the bath, there have been made, six private dressing rooms, and one small public dressing room.* In the centre of the Cross Bath there formerly stood an elaborate structure surmounted by a cross, from which this bath was named. This cross was erected by John Drummond, Earl of Melfort, Secretary of State to James II., in commemoration of the Queen having used this bath, with happy results, in 1688. An engraving of the cross may be seen in Guidott's work, "*De Thermis Britannicis*," p. 208, and a full account of it in Wood's "DESCRIPTION OF BATH" (1765) Vol. II., p. 259. It was removed in 1783, the action of the water having rendered its foundations insecure. Around this Bath are arranged thirteen convenient dressing, and one small common dressing room. There are closets also adjoining it. Bathers bring towels with them, or they are supplied by the attendant, on a small additional charge. It is open from March to September from 6 a.m. to 9 p.m.; and from September to March, from 7 a.m. to 4 p.m. Male bathers only are admitted.

* On the southern side of the Bath is a figure of Bladud in alto relievo.

THE HETLING PUMP ROOM.

Near to the Cross Bath is the Hetling Pump Room, a small, neat, and convenient room, where the water is supplied to invalids by means of a pump, which draws it direct from the spring which rises into a reservoir under the adjoining street. The temperature of the water as it is delivered from the pump is 114° F.

THE ROYAL PRIVATE AND HOT BATHS.

(Plan IV.)

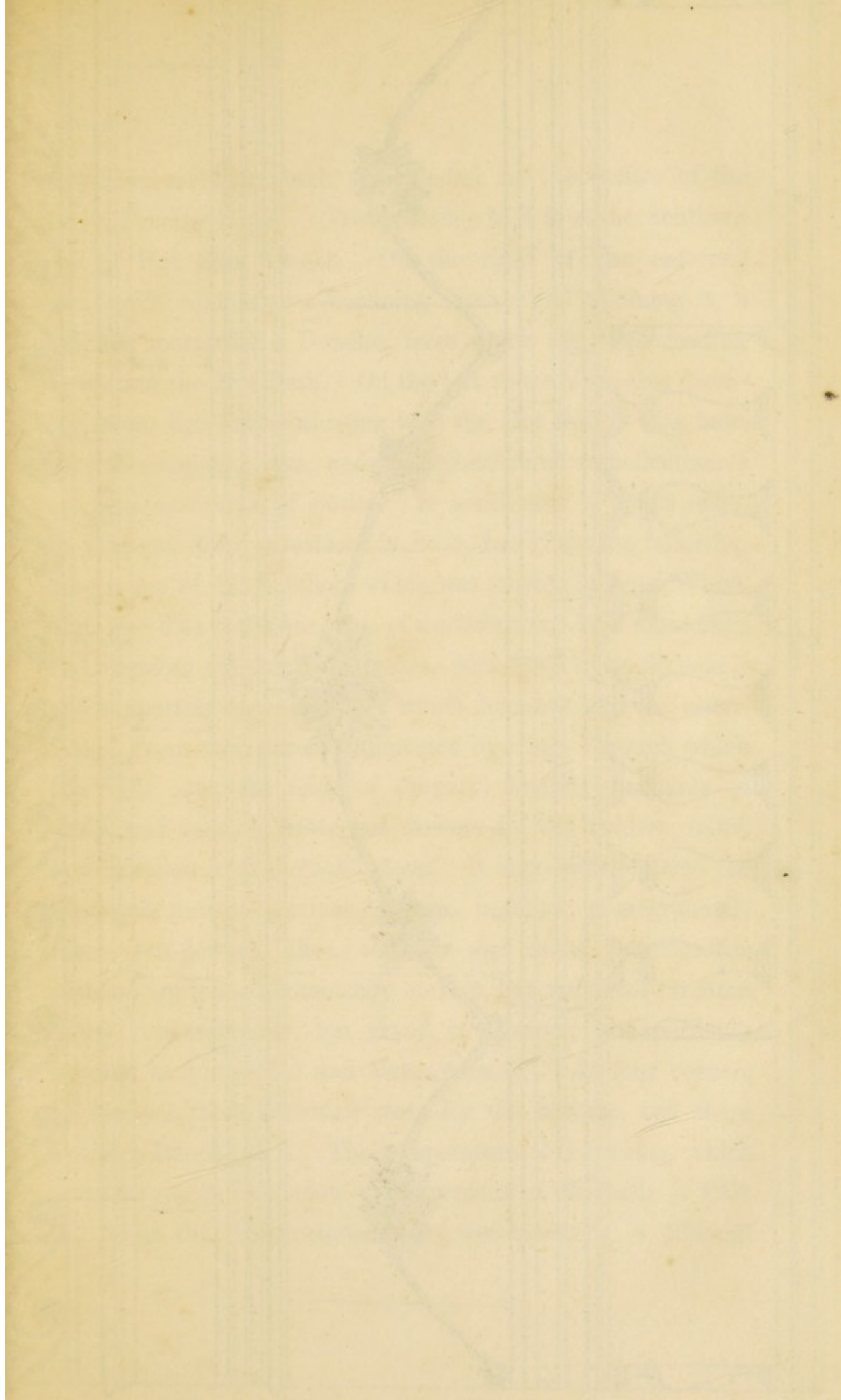
Immediately opposite to the Hetling Pump Room are the Royal Private Baths and the Hot Bath.

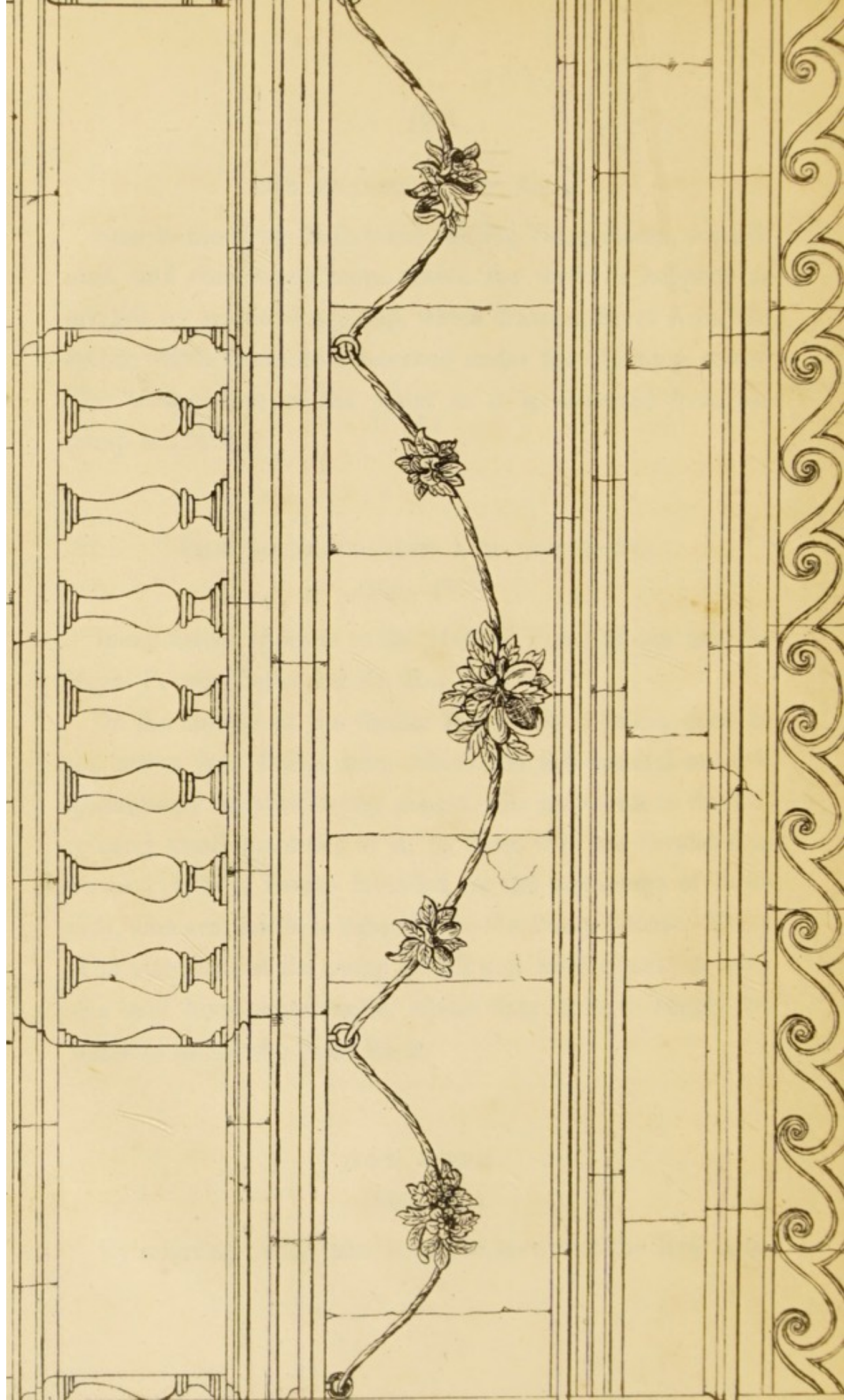
On the outside of the former and within a recess open to the street is a Pump, from which the hot mineral water is gratuitously supplied to any person, who may wish to drink it or carry small quantities of it, to those who are invalided at home. It is of course intended for the advantage of those only, who are unable to subscribe to the Pump Rooms. There is an attendant at the pump from 7 a.m. until 4 p.m., or even to a later hour occasionally, whose duty it is to supply the water to those who come for it.

HOT BATH.

(Plan IV.)

By referring to the plan, it will be seen that the Hot Bath,





which is an open bath, is situated in the centre of the Royal Private Baths. The entrance to it is at the southern end of Hot Bath Street. On the right of the entrance is a room containing a Reclining Bath; and adjoining it, a dressing room with a Douche, from which are steps leading down into the Hot Bath. On the left there is another dressing room, also communicating with the Hot Bath. This bath is of an octagonal form, and its architectural embellishments are well deserving of notice. A gentleman of great taste, C. Empson, Esq., a resident in Bath, has given the following description of this building, which was erected by John Wood, Jun. :—"The walls are grey, of uniform tint: bold mouldings and cornices support balustrades, separated by sunk panels and supporting an entablature which demands especial attention. From each corner, supported by rings, through which the folds pass, are folds of drapery, bearing pendants of sculptured foliage, fruit, and flowers in the boldest relief, and chiselled from the solid stone. It is possible to name the fruit and flowers—melons, grapes, peaches, pomegranates, roses, sun-flowers, lilies, acanthi, and other less familiar plants—not indeed botanically correct, but artistically treated—not conventionally, but grand in manner, and perfectly original in adaptation and arrangement." At four corners of the bath there are small seats for the bathers, and there is also a Douche in it. The temperature of the spring, which rises seventeen feet below the pavement of the bath, is 120° F., while the temperature of the water, varies in different

parts from 105° F. to 102° F. The spring yields one hogshead and a half of water a minute, and supplies the Royal Private Baths, as well as the Hot Bath, and also the bath in the Bath United Hospital, in its immediate vicinity. When full, this bath is computed to contain, about 9,570 gallons of water, having a depth of four feet and a half. The out-patients of the Bath United Hospital, have free access to this bath by ticket; and the same privilege is extended to invalids, who are unable to defray the expense of a bath, provided they bring with them, a written order, from the Mayor of Bath, who will grant such order, on the presentation to him, of a certificate, from a resident medical practitioner. Males are admitted on Tuesdays, Thursdays, and Saturdays, and also on Sundays; and Females on Mondays, Wednesdays, and Fridays. It is open from March to September from 6 a.m. to 9 a.m., and from September to March from 7 a.m. to 9 a.m.; on Sundays from 7 a.m. to 9.38 a.m. The out-patients of the Bath United Hospital, and those having certificates, are admitted from 9 a.m. to 12. After 12 o'Clock the bath is emptied.

THE ROYAL PRIVATE BATHS.

(Plan IV.)

The chief approach to these baths is under a semicircular covered way, from an entrance at the northern end of Hot

Bath Street, opposite to the Hetling Pump Room. There are four principal Baths.

The first, the BLADUD, or MARBLE BATH, is a small bath, more approaching to a reclining bath, lined and paved with marble, the surrounding space being laid down with encaustic tiles, and the rest of the bath room, decorated in keeping with its other arrangements. There is a dressing room adjoining it, with every requisite convenience. The door, which closes in the latter room, separates it and the bath room from the rest of the building.

The second, or ALFRED'S BATH, contains, when filled, 724 gallons of water, with a depth of four feet and a half, and has a dressing room attached to it.

Adjoining this room is another dressing room communicating with a DOUCHE ROOM, having all the necessary arrangements for the use of the Douche, the water from which is discharged by a pressure equal to six pounds on the square inch.

Beyond this is a dressing room, connected with the third, or CHAIR BATH, containing an arm chair, attached to a crane, by means of which, an helpless invalid, can be safely let down into, and raised up from, the bath. This bath, when filled, contains 702 gallons of water, with a depth of four feet and a half.

Adjoining this bath is a dressing room, having in it a SHOWER BATH, the cistern supplying which may be filled with any quantity of water, from one, to twenty-eight gallons.

This room is also connected with a small chamber, contain-

ing, the ENEMA or LAVEMENT APPARATUS. This apparatus is supplied from a cistern, at some height from the floor, which will hold fourteen gallons of water, exerting a pressure of from two pounds three quarters to three pounds on the square inch, and discharges two quarts of water a minute. The temperature of the water may be estimated at 110° F.

Adjoining the last-mentioned room, is the fourth, or EDWIN'S BATH, which, when filled, contains 716 gallons of water, and has a depth of four feet and a half. Attached to it is a dressing room.

Near this bath is a small lobby leading into a corridor, at the upper end of which is a room containing a large RECLINING BATH. This room also serves as a dressing room to an adjoining bath, which holds when filled, 600 gallons of water, with a depth of four feet and a half: next to this bath is a second of like capacity, also with a dressing room. At the opposite end of the passage is another dressing room and Bath, the latter containing when filled 698 gallons of water, and of the same depth as the two previously mentioned.

The four principal Bath-rooms are of a T shape, and measure nearly twelve feet in length; the lesser width is ten feet, and the greater width twelve feet; and are nearly twelve feet in height. They are lined with white porcelain tiles, fitted with marble, and the flat surface around the bath covered with slate. Two taps are placed above the steps into each bath, by one of which hot water is admitted, by the other cold water, the two streams mixing as they flow

down the steps into the bath. The three other Bath-rooms are smaller; the baths, however, are of the same general forms as the principal ones.

There is in this establishment also a hot closet, for the supply of warm linen and blankets for the bathers.

TEPID SWIMMING BATH.

(Plan IV.)

By turning to the right after leaving the last-mentioned bath, a passage leads to the large Tepid Swimming Bath, which was built in 1829, after a design by Mr. Decimus Burton. Its form is an oval of sixty feet, by twenty-one feet. On the eastern side of the bath are arranged eight small dressing rooms, and one large common dressing room. From each of the smaller rooms, flights of steps lead into the bath. It contains about 37,225 gallons of water, with a depth of four and a half feet. The water is supplied from the spring in the King's Bath, and from the cold water reservoir; its temperature is 88° Fahr. The bath is lighted at the side by windows, and from above, by three lantern domes. There is a separate entrance to this Bath through the Piazza in Bath Street, opposite St. Catherine's Hospital.

All of the establishments for the use of the mineral waters have recently undergone a thorough and complete repair; the Corporation of the city having expended upon them the sum of £3,000.

The dressing rooms have been greatly improved and newly furnished. They contain toilet tables, looking glasses, sofas (some of which are convertible into beds), and fire-places. They are also carpeted; and curtains are suspended within the doors, to exclude draughts from the bather while dressing; and every necessary convenience is provided for the bather. The Baths and Dressing Rooms are all lighted in the evening with gas. By means of inclined planes adapted to the entrances, invalids may, if necessary, be wheeled in their chairs into the dressing rooms, and from thence into the bath rooms: and every endeavour has been made to facilitate the employment of the waters whether as regards the arrangements which have been described, or the charges for their use.

It may be questioned whether there is any locality possessing a mineral spring which presents so many conveniences for its use as are to be found at the bathing establishments in Bath. It certainly does not appear, excepting perhaps in a few instances, that there are any private baths in England, or on the Continent, where the bather has such ample room for movement in the bath, or where so large a quantity of water is supplied to each bather.* It is well known that the private

* From a recently published pamphlet, it appears that the quantity of mineral water, supplied for medicinal purposes at Vichy, amounts to 3,174 hhds. 38 gallons in a day; while the Bath springs yield 7,200 hhds., or more than double the quantity, in the same space of time.

baths, at by far the larger number of continental spas, are not larger than ordinary sized hip baths, which do not equal in size the majority of the Reclining Baths which adjoin the King's Public Bath, or that at the Royal Private Baths.

PORTABLE BATHS.

The Bath Waters admit of being carried to any part of the town, in tubs made for the purpose; and an invalid who is unable to leave home, or is desirous of having a bath, late in the evening, may have the mineral water supplied at his residence, at a temperature only a little below 100° Fahr. It may also here be mentioned, that the Bath Waters, are bottled for transportation, to distant places, and are, after a long trial, in this form, found to be beneficial in cases where a cold mineral water is preferable to a hot one.

CHAPTER II.

THE HOT MINERAL SPRINGS.

THE three Springs which supply the Pump Rooms and Baths, are situated in the lower part of the town; and probably derive their origin, from one common source; the main stream from which, does not seem to be far distant from the several points, at which they appear above ground.

As the geological character of the locality where mineral springs are found, is a subject of interest, it may be well to give a general sketch of the disposition of the strata found in Bath, and its immediate neighbourhood. The limestone of which the town is built, is obtained from the beds of Great Oolite, quarried on Claverton and Combe Downs. Beneath this stratum is Fuller's earth, which appears on the northern side of the city, and on it the houses of Mount Beacon, and

Richmond Hill are erected. Under this is the Inferior Oolite; Lansdown Grove, Lansdown Crescent, and its two Wings, Winifred House, and Sion Place rest upon it. The declivity in front of Lansdown Crescent, is formed of Inferior Oolitic sand, upon the lower limit of which, All Saints' Chapel is built. The continuation of this declivity, on which Park Street and Cavendish Place are erected, consists of marlstone, which also forms the upper portion of the High Common, and part of Sion Hill. The remaining part of Bath, on the right side of the river Avon, is built upon Lias. The larger portion of Bathwick, the Parades, Green Park Buildings, and Norfolk Crescent, are upon Alluvial soil. In ascending the high ground upon the eastern and southern parts of the town, the Lias and Inferior Oolitic sand are crossed, until we gain the highest point when we reach the beds of great oolite on the Downs. Below the Lias are found the Upper Red Sandstones and Marls, and beneath these the Coal Measures.

It is not improbable that the hot springs find their way through fissures or dislocations in the latter, and the fact that particles of coal are found among the sand, thrown up by them, tends to give support to this impression. They have also forced their way through the Upper Red sandstones, marls, and lias.

The temperature of the water, of all the Springs, appears to have been constant, except on three occasions, which will be hereafter noticed. Compared with other Thermal Springs

frequented for medicinal purposes they rank high, as the following list will shew :—

Borcetta, 171° F.	BATH KING'S BATH, 117° F.
Wiesbaden, 158° F.	Vichy, 109° F.
Baden Baden, 153° F.	BATH CROSS BATH, 104° F.
Aix-la-Chapelle, 130° F.	Warmbrunn, 99° F.
Cauterets, 122° F.	Pfeffers, 99° F.
Töplitz, 121° F.	Wildbad, 98° F.
Gastein, 120° F.	Aigues Chaudes, 95° F.
BATH HOT BATH, 120° F.	Schlangenbad, 88° F.

The temperature of the springs has been represented as arising from the action of a volcano beneath the town ; but, on the one hand, the presence of thermal waters is by no means always connected with volcanic agency ; and on the other, the geological features of the district indicate a tranquil deposition of the materials constituting the several strata, while the separation between them is more properly due to denudation than the throes of a volcano. It is more reasonable to attribute the heat of the Bath Waters to a cause, to which both thermal Springs and Volcanoes, may be satisfactorily referred, namely, the central heat of the Earth.

The quantity of water supplied by the Springs, appears to have been unaffected, since they first became subjects of investigation, up to the present time, by any meteorological change. The constancy of their flow into the baths, has been thrice interrupted : once by the sinking of a shaft in search of

coal, in the neighbourhood of Batheaston, towards the East ; again in 1811, when an escape of water took place from the springs, rendering it necessary to “puddle” the ground through which they rise ; and more recently, in 1835, by the digging of a well 170 feet deep, at a distance, on the West, of 250 yards from the King’s and Queen’s Baths, and 200 yards from the Hot and Cross Baths. The stream of hot water, burst into, and overflowed the well, and the supply to all the baths was materially diminished, as also the temperature of the water, which may be accounted for by the water in the baths cooling more rapidly when slowly supplied to them. The stream however was restored to its natural channel, and the baths again filled, with nearly the usual quickness. On all these occasions the temperature of the water in the baths was diminished, but after a brief interval, it recovered its usual degree of heat.

In small quantities, when recently drawn from the Spring, the water is clear, colourless, and sparkling. In large quantities, it presents a pale sea-green tint. It is free from any odour, and possesses a pungent, slightly saline, and somewhat chalybeate or inky taste, and though perhaps a little distasteful at first, the invalid with whom it agrees, in a short time, comes to relish, and even desire it.

The gases evolved from the waters, are Nitrogen, Oxygen, and Carbonic acid. The result of Professor Daubeny’s investigations of the average amount of gas yielded by the King’s Bath Spring shows that 267 cubic inches were evolved in a

minute, or 222 cubic feet in twenty-four hours. The gas consisted of 97 per cent. of Nitrogen, 3 per cent. of Oxygen, and a variable quantity of Carbonic acid.

Several analyses of the Bath Waters have been made, those most deserving of attention are given in the following table. The water examined was in each instance drawn from the King's Bath Spring; the specific gravity being 1.002.

In an Imperial Gallon. 70.000 grs.	Phillips.	Seudamore.	Walcker.	Noad.	Merck and Galloway.
Carbonate of Lime - - -	7.680	5.280	10.667	.....	8.820
Carbonate of Magnesia - -	.....	.....	.....	.....	0.329
Carbonate of Oxide of Iron -	0.274	0.200	0.243	0.521	1.071
Carbonate of Soda - - -	.....	.....	.....	5.760	.....
Sulphate of Lime - - -	86.400	98.320	81.624	96.240	80.052
Sulphate of Potassa - - -	.....	.....	2.927	.....	4.641
Sulphate of Soda - - -	14.400	1.520	19.371	.....	19.229
Chloride of Sodium - - -	31.680	12.240	15.122	27.456	12.642
Chloride of Magnesium -	.....	15.360	13.339	7.142	14.581
Alumina - - - - -	.....	.....	0.150	.....	.....
Silicic acid - - - - -	1.960	1.920	3.233	3.360	2.982
	142.394	134.840	146.676	140.479	144.018
Quantity directly observed -	144.125		147.622	149.072	
Carbonic acid - - - - -	11.25 c.i.		7.60 c.i.		26.45 c.i. at 115° F.

Cuff detected Iodine in the waters; *Noad* remarks in reference to this substance, that "according to Stromeyer starch will detect free Iodine in a liquid containing $\frac{1}{450000}$ th of its weight of that principle; if therefore any Iodine does exist in the Bath Waters, it must be in a proportion, less than the above, and probably beyond the reach of chemical detection." Merck and Galloway found traces of both Iodine and Manganese.

The most abundant ingredients of the waters, taking the above analyses as a whole, are 1. Sulphate of Lime, 2. Chloride of Sodium, 3. Chloride of Magnesium, and 4. Sulphate of Soda. The proportion of Iron which has been detected is comparatively small, still its taste is quite perceptible in the water, and its effect on the system more decided than might have been at first sight anticipated. It appears somewhat remarkable that so small a proportion has been discovered, since large quantities of it, chiefly in combination with lime and some magnesia, are deposited in the channels through which the water is conveyed, and also on the pavements of the baths.

As regards the Carbonic acid found in these springs, the analysis by Merck and Galloway, gives somewhat more than three cubic inches of this gas, to each pint of water; while the earlier analysis by Phillips gives somewhat more, and that by Walcker somewhat less, than one cubic inch to the same quantity of fluid. Prof. Daubeney, found by his investigations, that the proportion of this gas was variable, amounting

at one time to four, and at another to eleven per cent. of the whole volume of gas evolved from the spring. Whether the variation occurred at definite intervals we are not informed; nor whether, as in many instances, it is attributable to the changing pressure and temperature of the atmosphere.

It is to the presence of this gas, that the sparkling appearance of the water is due, when drawn fresh from the spring. It is a powerful stimulant of the nervous system, and its effects in contributing to restore pliability to stiffened limbs, and especially when applied in a gaseous form to the surface of the body, in alleviating paralysis, is well known.

The quantity of Nitrogen contained in the Bath waters, amounting to 97 per cent. of the gaseous matter yielded by them, is deserving of notice. Dr. Lyon Playfair, writing on the gaseous contents of the Buxton Water observes that "the gases are nearly of the same composition as those of the thermal spring at Bath, and there is no reason to doubt that dissolved carbonic acid and nitrogen may exert important physiological effects." It is difficult to explain precisely the manner in which nitrogen, from such sources, produces a beneficial effect on the system; but that it holds important relations with the animal economy, is evident from the large proportion found in the blood, and in the organs of the animal system; and we know that articles of diet, must possess a due proportion of nitrogenous matter, in order that the body may be properly nourished. But while it is not easy to point out how this gas beneficially affects the system, yet if we find a

spring yielding a large proportion of nitrogen, and containing no larger amount of solid ingredients than is yielded by spring water, or ingredients, whatever may be their quantity, to which the entire good effects of the spring cannot be satisfactorily attributed, they must it would appear of necessity be partly referred to its gaseous contents. Dr. Sutro on this point observes that "if we see the use of a mineral water, causing distinct retrogression of anti-vital phenomena; if we perceive gouty concretions to proceed towards absorption; if we observe contracted limbs gradually to relax again, and to try feeble efforts of long forgotten exercise; if we find cutaneous harshness and rigidity to diminish, and to give way to a former softness; if we behold a resuscitated desire for muscular exertion and for mental work in a prostrate individual, and we know the spa, the originator of these changes to possess a great quantity of nitrogen, is it not legitimate to attribute to this gas part of the efficacy?" (*German Mineral Waters*, p. 69, 1851.)

The much frequented German spring of Wildbad having a temperature of 98° F., to which invalids resort for the cure of ailments the greater proportion of which are of the same nature as those which are cured or relieved by the Bath waters, evolves about ninety-one per cent. of Nitrogen or six per cent. less than is yielded by the latter springs. One noticeable effect of the Wildbad waters is the restoration of flexibility to limbs stiffened by Rheumatic Paralysis, and the number of such cases which have been thus relieved by the

Bath waters is very large. It is not however to the presence of one or more particular ingredients in a spring, except where they are found in large proportions, that its efficacy is to be attributed, or on which its selection as a medicinal agent will depend. It is to the union of the several substances contained in the water, the quantity of fluid with which they are combined, and still more to the testimony of credible witnesses to their effects, that we must chiefly refer for instruction and guidance.

CHAPTER III.

THE MEDICINAL USES AND EFFECTS OF THE HOT SPRINGS.

UNDER this head, it is not intended to enter into a detailed account of the medicinal employment, and effects, of the Bath waters; but merely to give such an account, as may be useful to those who are unacquainted with them.

The several points deserving of attention admit of arrangement under the following divisions :—

BATHING, DRINKING, ETC.

The temperature of the bath, under ordinary circumstances, should not exceed 95° or 97° F. A higher degree of heat ought not to be resorted to except by special direction. The proper time for remaining in the bath, should not exceed ten minutes, or a quarter of an hour, when used for the first time. Provided no discomfort is experienced, the

period may be extended to twenty minutes or half an hour. Before entering the bath room, it is advisable, that the vapour which has collected during the preparation of the bath, be allowed to escape. The bather should descend gradually, into the bath, and on leaving it be enveloped in a warm sheet, covered with a warm blanket. The sheet, aided by gentle friction, absorbs the moisture, from the body, and when this has been done, it should be allowed to slip down, and the warm blanket wrapped round the person; the bather may then return to the dressing room, and after being well rubbed with warm towels, proceed to dress. Where it is considered necessary to promote perspiration, the bather should immediately on being enveloped in the sheet and blanket, proceed to the dressing room, lie down on the bed or sofa, and being wrapped in one or two warm blankets, remain there for about a quarter of an hour, then to be rubbed, and dress. If the weather permit, it is well to walk for a short time after bathing, or else to return home in a covered vehicle.

The usual time for taking a bath is between two and five o'clock in the spring and autumn, and at an earlier hour during the winter. But it may be employed, generally at any period of the day, provided it be not soon after, or only a short time before a meal. It may be ordinarily taken three times in the week; in some cases as often as four or five times within that period.

The Douche or Lavement.—Dry pumping, as the use of a

Douche without a bath, is termed, and also the *Douche ascendante*, may be used at any period of the day, the forenoon however is the most desirable time. As regards the *Lavement*, it is well to have recourse to it before breakfast, though it may be beneficially used an hour or two after that meal. The time for which the douche of both kinds, and the lavement should be used, will depend on the circumstances of each case.

Drinking. The quantity of water to be drank during the day, should be divided into two portions, one of which should be taken before breakfast, and the other in the afternoon. The usual amount taken at one time varies from four ounces to half a pint. It may however be increased to double that quantity, if the smaller doses do not disagree, and the case requires it. If the quantity to be drank be large, the morning and afternoon portions should be divided, ten minutes or a quarter of an hour being allowed to intervene between the divided dose; which time will be usefully occupied in gentle exercise. The water should be drank leisurely, for nothing is more likely to cause discomfort, than rapidly tossing off the quantity directed to be taken. There is no objection to drinking the waters on the same day that the bath is used.

The above remarks are applicable only as general rules, and to be observed in employing the waters either for bathing or for drinking; but the particular circumstances of every individual case will decide to what extent a deviation from them is allowable.

When the waters are used as a BATH, a slight shock, accompanied with chilliness, is often experienced, on first entering the water, which soon passes away, and is succeeded by a grateful sensation of warmth. The frequency of the pulse and the temperature of the body is increased, and subsequently the amount of the urinary discharge augmented. After the use of the bath, there is a consciousness of elasticity and vigor of the frame, and the appetite is improved. The exhausting perspiration and fainting which often follow the use of warm baths of ordinary water, rarely, if ever, occur after the employment of the mineral water, neither is its use productive, under ordinary circumstances, of the copious perspiration consequent on ordinary hot baths. In cases where the limbs are stiffened, or contracted by rheumatism, the power of moving them is gradually restored, in many cases it returns with remarkable quickness, by means of bathing. The same result also takes place, though more slowly, in certain cases of palsy, in which the employment of the bath is allowable. Pain also is relieved during the use of the bath, as in Sciatica, and though it, and the stiffness of the limbs often return, at first, soon after leaving the bath, it will be observed, that the interval between employing the bath, and the recurrence of pain or stiffness, increases, until they are entirely removed. In some cases, where bathing does not disagree, and yet does not produce any very appreciable effect, at the time, it is advisable after a proper trial to cease from using the bath, for oftentimes, when relief is not obtained

during the use of the waters, it presents itself, after their employment has been discontinued.

When the use of the bath is attended with marked redness of the skin, flushing of the face, and giddiness, the temperature of the water should be lowered, and the period for using it diminished, until both are adapted to the requirements of the case; but if after taking these precautions, similar effects be still produced, it will be evident that the use of the water, in this mode, must be relinquished.

When the waters are DRANK fresh from the spring, they raise and accelerate the pulse, increase the temperature of the body, and excite the secretions; and these effects, which are generally manifested soon after drinking them, are more permanent than might at first be anticipated. They have a tendency to produce constipation when taken in small quantities: but the older writers mention their purgative effects; the dose however they administered, amounted to one, two, or three quarts daily, which produced two or three copious evacuations. The ordinary dose will sometimes cause a like result.

The effects of the waters which indicate that they will prove beneficial by drinking of them, are, a glow of warmth in the stomach, an increased appetite, an improvement of the spirits, an augmented secretion of saliva, and an excitement of the urinary discharge, the latter constituting one of the best indications of their being likely to produce a good effect; next to which may be placed the rapidity with which

they quench thirst. If however the waters produce headache, thirst, a dry tongue, a sense of weight in the stomach, diminish rather than improve the appetite, induce nausea and sickness, and fail in promoting the flow of urine, they will be of no advantage unless their tendency to cause these effects can be obviated. This may in many instances be brought about by diminishing the dose, by altering the period of the day at which they are taken, especially by relinquishing their use before breakfast. The nausea and sickness are often relieved by allowing the water to cool before it is drank, as well as by diminishing the dose. The employment of some diuretic remedy, conjointly with the water, will aid in deciding its effect so as to augment the flow of urine. But if these changes are unattended by any corresponding result, no benefit can be expected from persisting in their use.

DISEASES IN WHICH THE WATERS ARE FOUND TO BE BENEFICIAL.

Disorders of the Digestive Organs.—Among the disorders which derive benefit from the use of the Bath waters, those of the digestive organs may first be noticed. Invalids who suffer from these affections do not generally have recourse to mineral waters until their complaints have assumed a chronic form; manifested in a pale, yellow, or what is called a bilious complexion, with diminished, or an almost entire want of

appetite, foul taste in the mouth, accompanied by weight and oppression, referred to the stomach, constipation or diarrhœa, with cold hands and feet, depressed spirits, and an indisposition for occupation of any kind. In such cases the Bath waters produce very beneficial effects, and where constipation is present, the occasional use of the Lavement contributes to their realization. An eminent writer on these waters has observed, that "every medical practitioner at this place has seen instances of people labouring under want of appetite, pain and spasm of stomach and bowels, together with all the other symptoms of depraved digestion, and want of power in the proper organs to perform their functions, joined to a very great degree of weakness, both of the body and of the spirits, relieved by the use of the Bath waters. The recovery, in such cases, is particularly remarkable, for its taking place so quickly after the commencement of the trial of the remedy. A few days will frequently work such a change in the situation of the patient as would be scarcely credible, were it of less common occurrence. The appetite is often restored altogether, the wandering spasms and pain cease, the natural rest returns, and the spirits are raised to their proper pitch. The strength likewise improves daily, and the natural secretions and regularity of the body, in point of evacuations, are restored."

Interrupted Menstruation.—Among the diseases of the abdominal viscera, are certain affections of the uterine organs, namely, *Interrupted menstruation*, characterised by a cada-

verous complexion, depravation of appetite and digestion, languid circulation, swelling of the lower extremities, and languor of the powers both of mind and body. In such cases the waters have been found by experience to be a most effectual remedy. The bath is generally the best form in which to use them, while the drinking of them, and the employment of the *douche ascendante* will materially contribute to promote beneficial results. In *Painful menstruation* also, the employment of the warm bath has been repeatedly observed to produce good effects.

In *Leucorrhœa* also they are useful when employed as above. In *Sterility* when not dependant on malformation, their use was highly esteemed by many writers on the waters, even as early as the time of Guidott, and were much frequented on this account. The bath was recommended, nor was the local application of the water omitted, which appears to have been lost sight of until its recent revival, in the form of the *douche ascendante*.

In *Anæmia*, or "poverty of blood," arising from causes which induce a diminution of its colouring matter, the power of the waters in restoring it to a healthy condition, is very manifest. The effect of iron in this disease is well known; and the form in which it is found in the waters, materially assists the development of its beneficial effects.

Gout.—In this affection the waters have long been celebrated for the relief which they afford. In cases where anomalous affections of the head, stomach, and bowels, are

attributable to latent gout, the use of the warm bath will bring on "a fit of gout," by which they are generally removed. It however often happens that by the repetition of acute attacks, the disturbance of the digestive organs does not subside, but harasses the sufferer, in the intervals between the paroxysms. In alleviating and removing this condition, the waters taken internally are peculiarly beneficial. They act as a cordial without producing any heating effects; and their influence is soon shewn in an improved appetite, a more regular action of the bowels, and in the altered character of the urine. There are however circumstances which forbid the use of the waters in this disease, and render it necessary that they should never be employed for it, but with the sanction of the medical attendant.

Rheumatism.—In this disease the greatest benefit is derived from the use of the waters. In *Acute Rheumatism*, after the subsidence of feverish symptoms, the employment of the tepid bath is extremely grateful, and accelerates the cure. In *Chronic Rheumatism*, after many remedies have failed, as numerous cases admitted into the Bath Hospital prove, the waters when used internally and externally, seldom fail to give relief, and very frequently effect a perfect cure. In *Sciatica*, and other forms of *Neuralgic Rheumatism*, the waters in the form of a douche, or bath, are extremely serviceable. In *Rheumatic Gout*, where the joints of the extremities are swollen, stiff, or contracted, the use of the baths, commencing with the temperature generally used, and rapidly increased, if the

patient can bear it, soon produces relief. Drinking the waters at the same time also conduces to quicken recovery. The amount however of benefit afforded by the waters will depend on the length of the time during which the patient has suffered from the disease. In *Rheumatic Palsy* also the usefulness of the waters is well marked.

In *Lumbago*, by the use of the douche three or four times a week, commencing with the lightest pressure, and ascending to the heaviest, the sufferer will in a short time be relieved.

Palsies.—In *Palsy*, preceded by an apoplectic fit, where the brain is involved, the use of the waters cannot, on the whole, be said to promise relief. Instances however are adduced where the contrary result appears to have taken place. Certainly the use of the waters ought not to be permitted for some time after the seizure, and not even then, except after a very careful examination of the condition of the invalid. In *Palsy*, arising from *Cold*; from the introduction of mineral substances into the system, as *Lead*, *Arsenic*, *Mercury*, *Copper*, the use of the waters has been attended with the best results, and particularly in that form of *Palsy* which affects the wrists of painters, gilders, and compositors, known as “dropped hands.”

In *Ischias*, or *Hip disease*, the waters have afforded great benefit, but it is only at its early stage, that advantage can be looked for from their employment. In *Chorea*, or *St. Vitus' Dance*, bathing and pumping down the whole back, several times in the week, is productive of good results.

In cases of *Syphilitic Rheumatism*, and *Cutaneous Eruptions*, attributable to the same origin, and especially if the patient has been previously placed under the influence of mercury, the use of the waters, both by drinking, and bathing in them, is followed with beneficial effects.

Lepra, *Eczema*, *Psoriasis*, and other cutaneous diseases, are effectually relieved, and in very many instances cured by bathing. It is generally desirable in such cases to commence with a tepid bath, and gradually increase the temperature.

In *Weakness of the Limbs*, arising from injury; in the stiffness following the fixed position in which it is necessary to preserve fractured limbs; and in sprains; the employment of the waters, in the form of a douche, is efficacious in restoring pliability to the limb, and removing pain.

During convalescence from protracted sickness, the Bath waters may be classed among the most desirable and grateful tonics which can be taken; and formerly it was almost an invariable custom for convalescents to take a short course of the waters, which habit seems of late to have been relinquished without reason.

The above-mentioned diseases may be regarded as among the principal in which relief or cure may be expected from the use of the Bath waters. It would not have been difficult to increase their number, but as the object was simply to indicate some of the chief affections in which the waters are beneficial, and not to state all of them or treat fully of the

medicinal effects of the remedy, a longer list or more copious account of them was not considered desirable.

THE SEASON OF THE YEAR FOR USING THE BATH WATERS.

The best seasons of the year for the use of the waters are Spring and Autumn. The months of April, May, and June, in the former period, and the close of August, and all September, and October, in the latter, are the best months to resort to their employment. It is not to be understood that the waters cannot be used in winter, but the inclemency of that season often interrupts their being regularly employed, delays the development of their curative effects, and precludes exercise in the open air which assists their action, and is used with so much advantage during the time they are employed. Reason and long experience have justified the propriety of the preference given to those portions of the year which have been mentioned for using the mineral waters.

CHAPTER IV.

THE BATH GENERAL OR HOT MINERAL WATER HOSPITAL.

IN any work treating of the Baths and of the Bath Waters, it would be an omission not to notice the Bath General Hospital.

This Institution was established for the relief of poor persons from any part of Great Britain and Ireland afflicted with complaints for which the Bath waters are a remedy. It was founded in 1738, and during a period of more than a century has been the means of affording a great amount of relief to the sick and helpless. Mr. Ralph Allen, of Prior Park, delivered free of cost, from his quarries on Combe Down, all the stone required for its erection, besides contributing a handsome sum yearly, to the funds of the charity. Mr. Wood, the architect, gave all the several draughts, plans, and other papers relating to the Hospital, together with his care, labor, and other expenses for surveying and directing the building, as a free gift and benefaction; and this generous action was further enhanced by the addition of a considerable donation of money. Mr. Richard Nash, better known as "Beau Nash," was

unwearied in his exertions to collect subscriptions and donations, and succeeded in a few years in obtaining more than £2,000 for the charity.

The number of persons received within its walls, since it was first opened for the reception of patients in 1742 to the present time amounts to 38,094, of which 11,193, have been sent forth quite cured, and 18,771 much relieved. It is a NATIONAL CHARITY, and one of its peculiar features is that no interest is required to gain admittance to its advantages—no recommendation of Subscribers, Governor, or any other person. All that is required is, that the person who desires admittance be in such a condition of life, that the expences attendant upon a residence in Bath would be more than could be afforded; and that the waters are applicable to the patient's case. The Hospital provides accommodation for 134 patients—86 males and 48 females. They are gratuitously supplied with advice, and attendance, food, washing, medicines, and the assistance of nurses. In consequence of the increasing number of applicants, arising from the extension of Railways and other causes, there is a want of adequate accommodation, and the Governors have decided on enlarging the present building and making such other alterations as may be deemed requisite to meet the demands for admission to its benefits. For effecting these objects it is necessary to have recourse to the public for assistance; and as a national, not a local, charity, it has just claims upon public support. It is the only institution of its kind in the kingdom,

and by its means the use of the waters is gratuitously offered to the afflicted poor of every parish, and is supported by voluntary subscriptions and donations.*

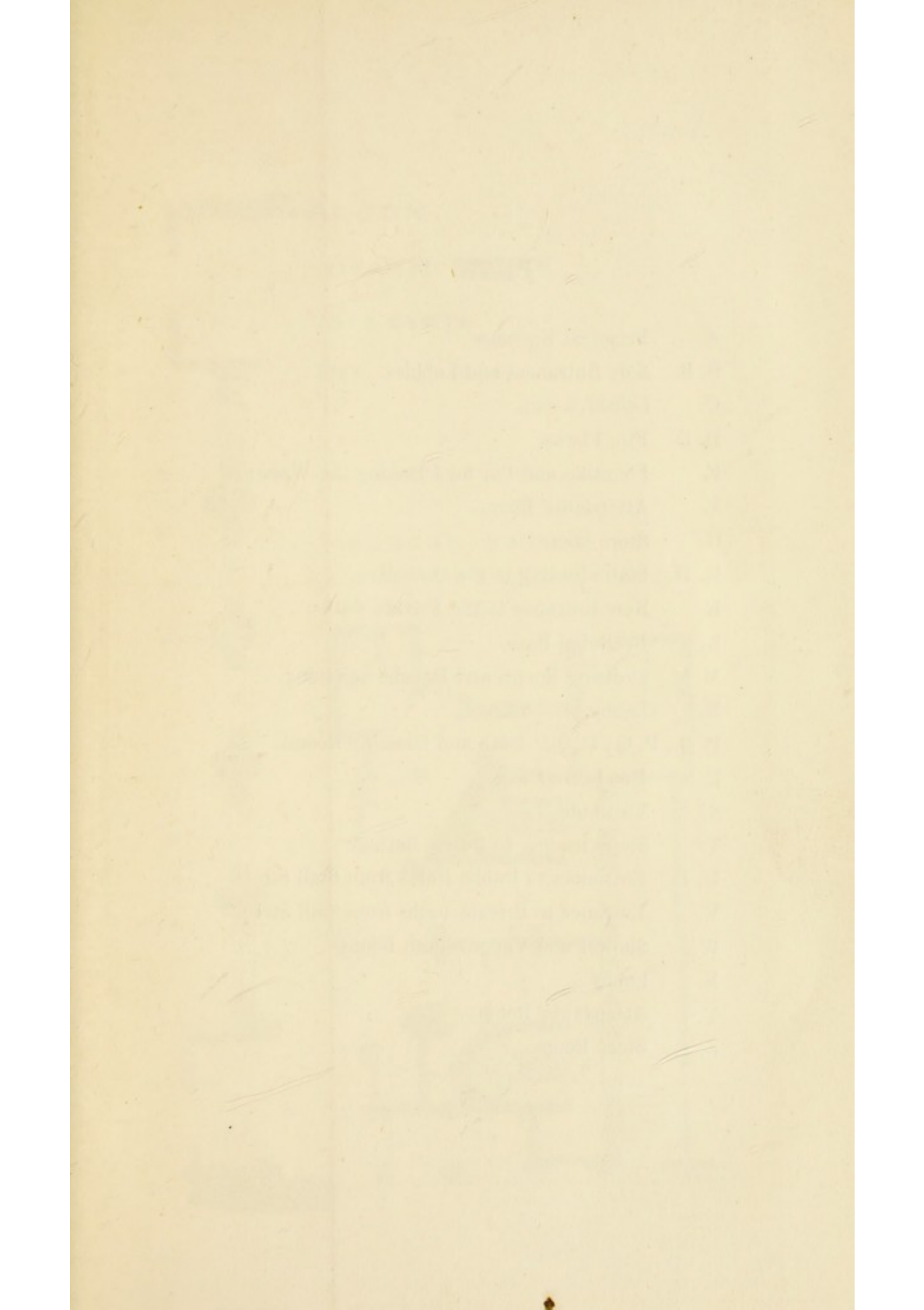
The following is a tabular statement of patients discharged from May 1, 1856, to May 1, 1857 :—

	Cured.	Relieved.	Incurable or no better.	Improper.	Irregular.	Dead.	Total.
Rheumatism	99	151	2	30	9	1	292
Leprosy and other Skin diseases .	40	26	1	„	2	„	69
Paralysis	2	23	2	23	2	„	52
Contraction and Rigidity of Parts	4	20	2	10	2	„	38
Sciatica and Lumbago	7	13	„	2	„	„	22
Palsy from Lead	4	11	„	„	„	„	15
Visceral obstructions	4	4	3	„	„	„	11
Chorea	4	„	„	„	„	„	4
Lameness and Weakness of the Limbs }	1	2	„	1	„	„	4
	165	250	10	66	15	1	507

* Donations to the Ordinary, or the Building Fund, may be paid to the Registrar at the Hospital, Mr. Starr.

Preparing for Publication.

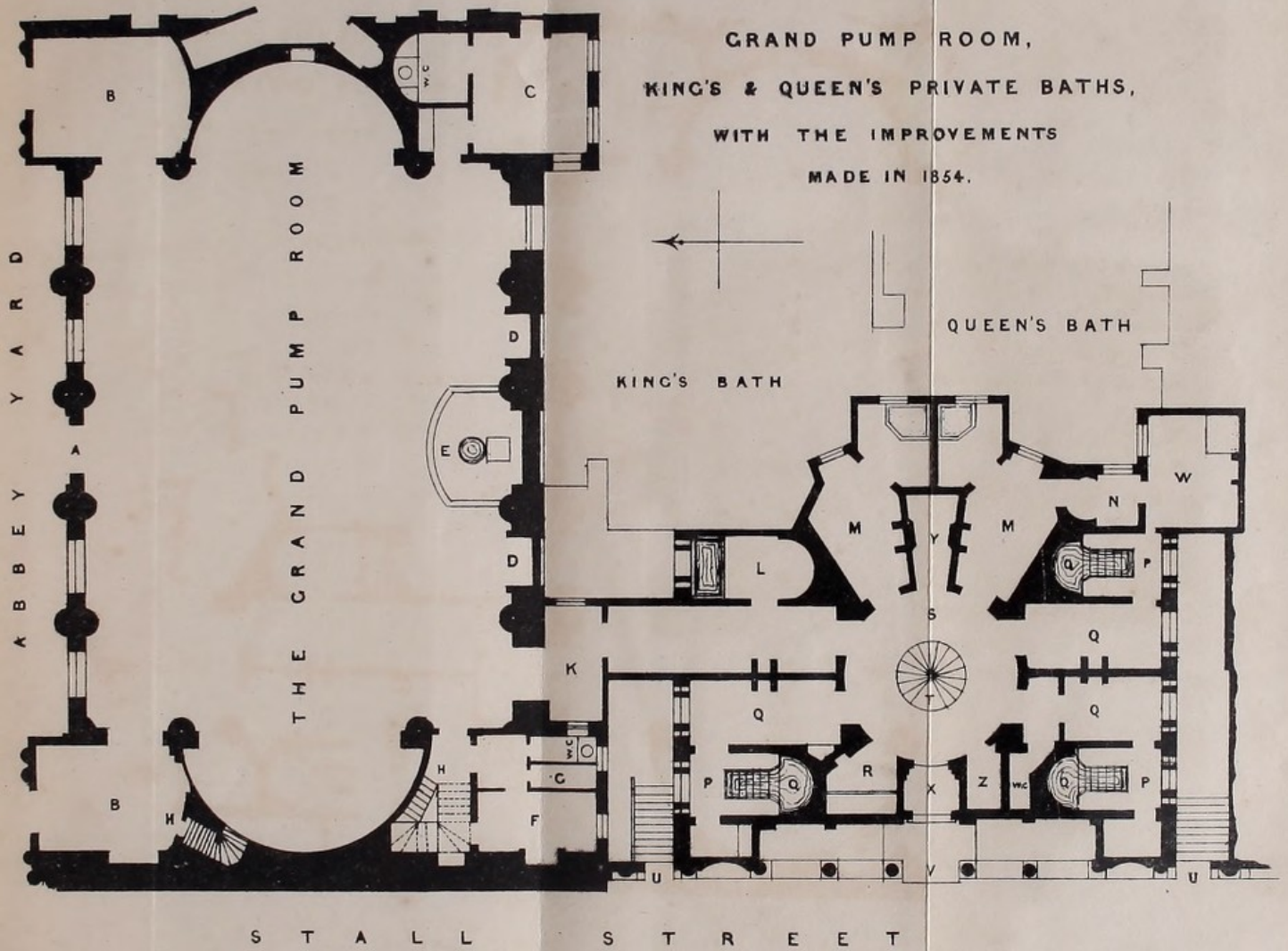
THE HOT SPRINGS OF BATH, and their
MEDICINAL USES. By R. W. FALCONER, M.D.,
Physn. to the Bath United, and Bath General, Hospitals,
&c., &c.

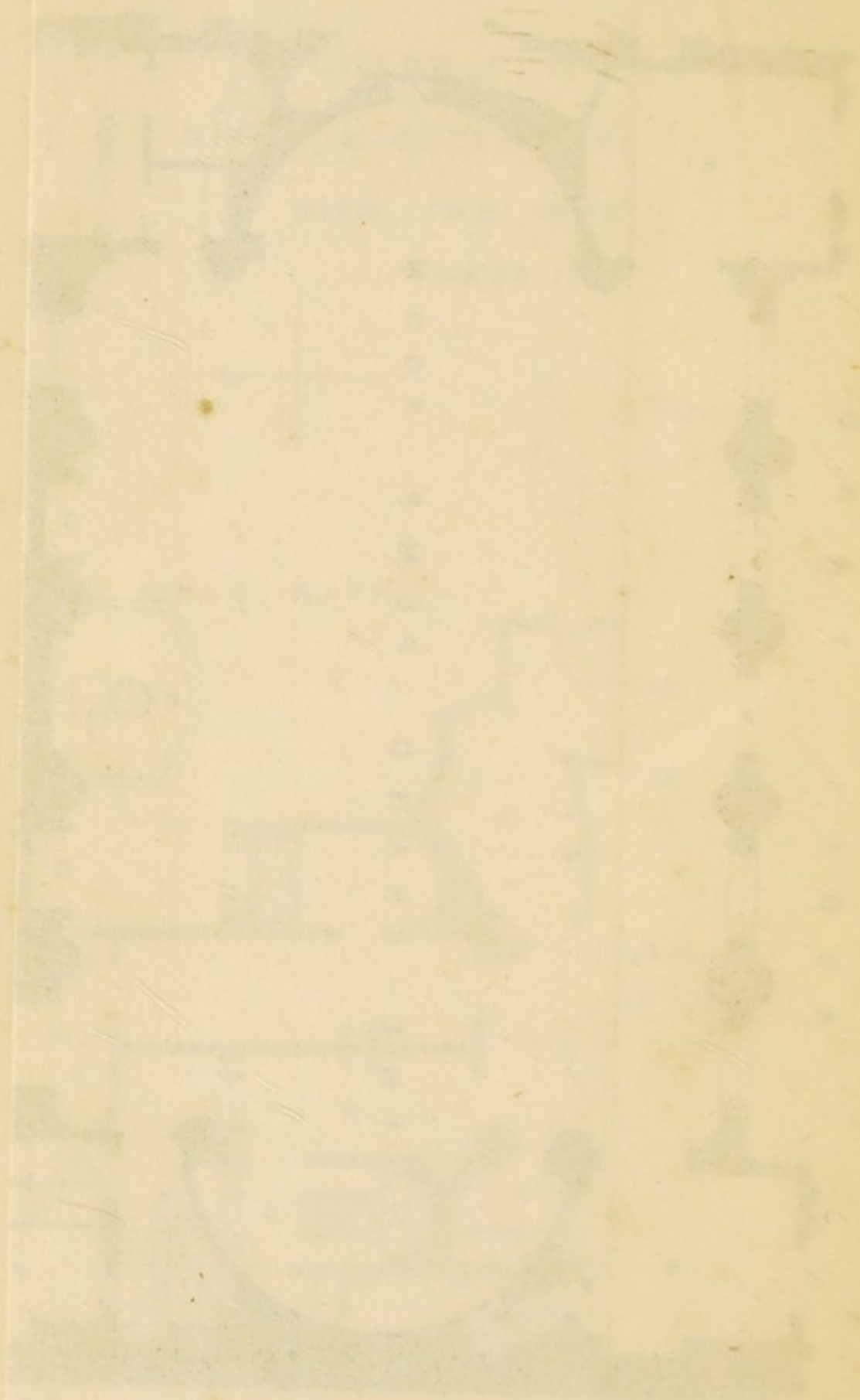


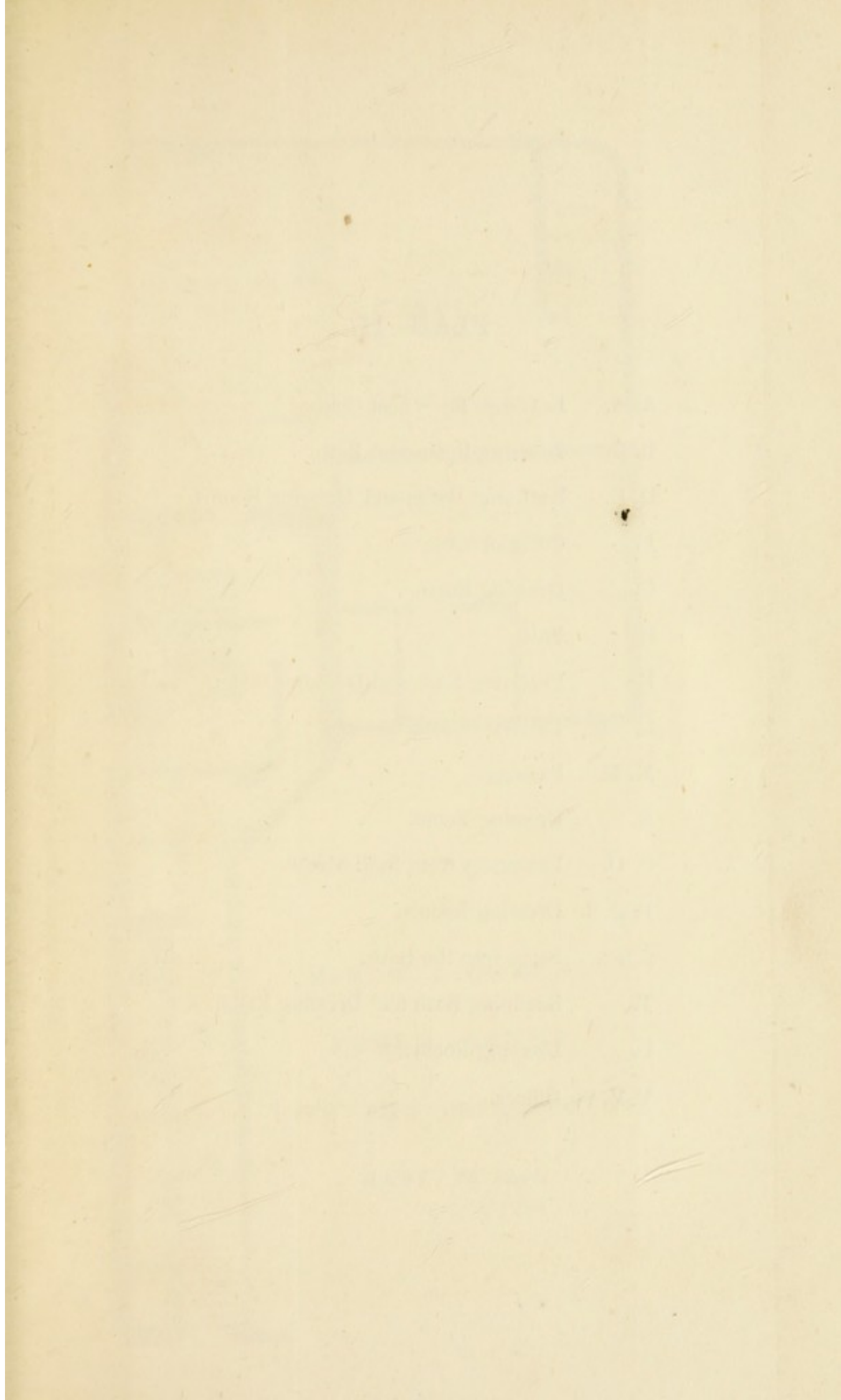
PLAN I.

- A. Principal Entrance.
- B. B. Side Entrances and Lobbies.
- C. Ladies' Room.
- D. D. Fire Places.
- E. Fountain and Bar for Drinking the Waters.
- F. Attendants' Room.
- G. Store Room.
- H. H. Stairs leading to the Orchestra.
- K. New Entrance to the Private Baths.
- L. Reclining Bath.
- M. M. Dressing Rooms and Douche adjoining.
- N. Lobby.
- P. Q., P. Q., P. Q., Bath and Dressing Rooms.
- R. Hot Linen Closet.
- S. Vestibule.
- T. Stairs leading to Public Baths.
- U. U. Entrances to Public Baths from Stall Street.
- V. Entrance to Private Baths from Stall Street.
- W. Shower and Vapour Bath Room.
- X. Lobby.
- Y. Attendants' Room.
- Z. Store Room.

Plan I.



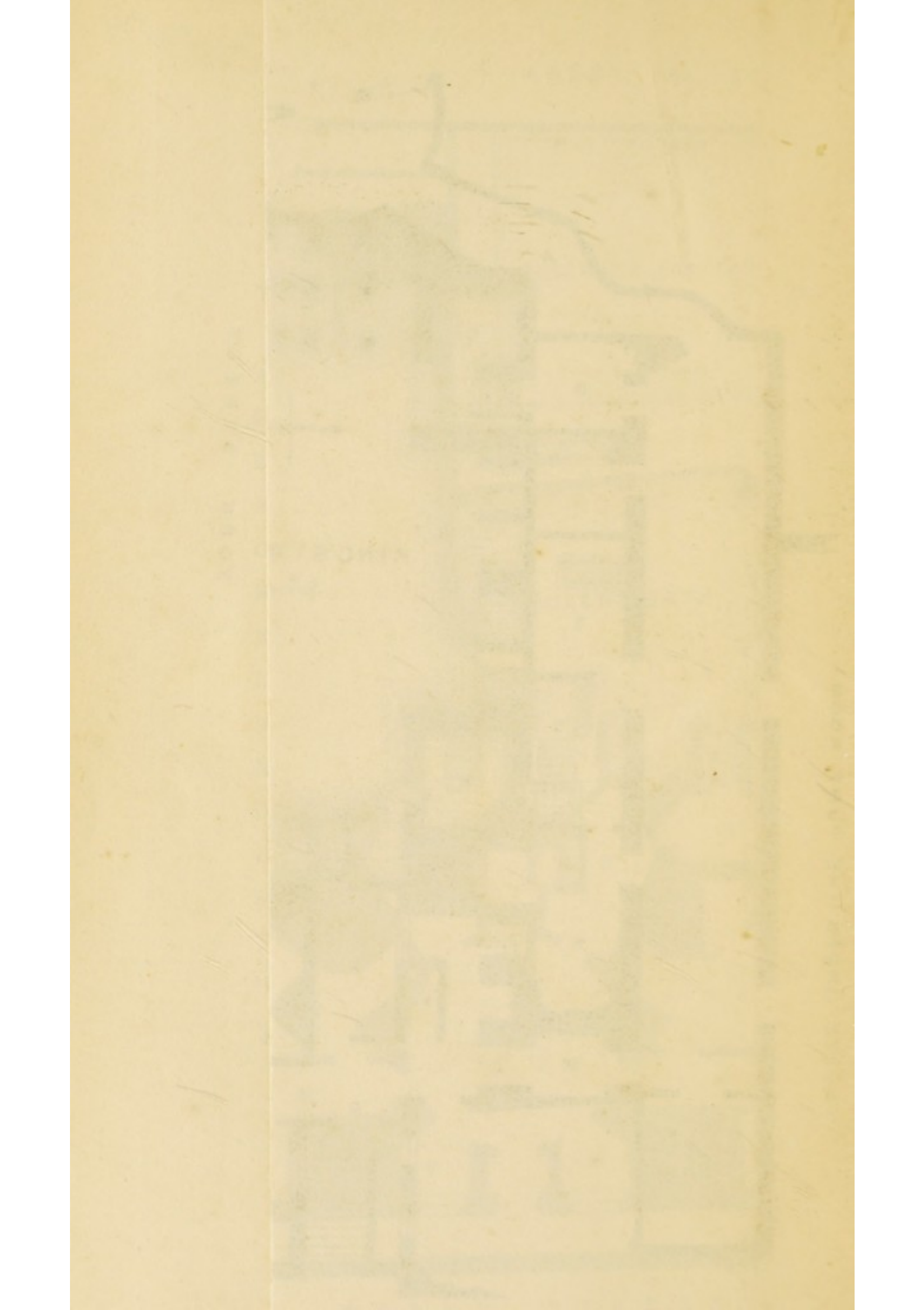




PLAN II.

- A. A. Entrance for Wheel Chairs.
- B. C. Dressing Room and Bath.
- D. E. Reclining Baths and Dressing Rooms.
- F. Corridor.
- G. Dressing Room.
- H. Bath.
- K. Reclining Bath and Dressing Room.
- L. Cellar.
- M. M. Passage.
- N. Dressing Room.
- O. O. Entrances from Stall Street.
- P. Q. R. Dressing Rooms.
- S. S. S. Steps into the Bath.
- T. Reclining Bath and Dressing Room.
- U. Dressing Room.
- V. V. V. Offices.

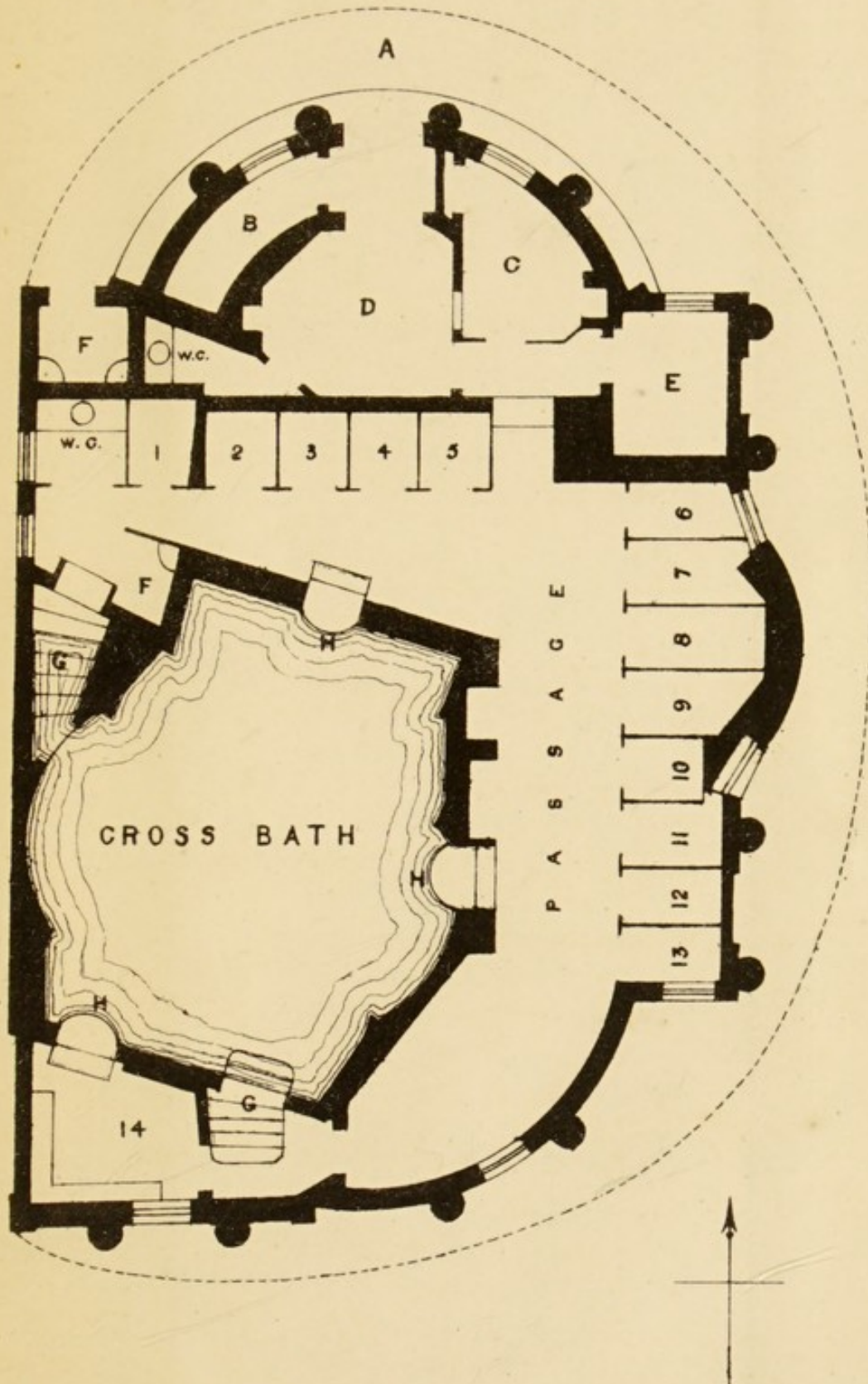
KING'S & QUEEN'S
PUBLIC BATHS,
WITH THE IMPROVEMENTS
MADE IN 1854.



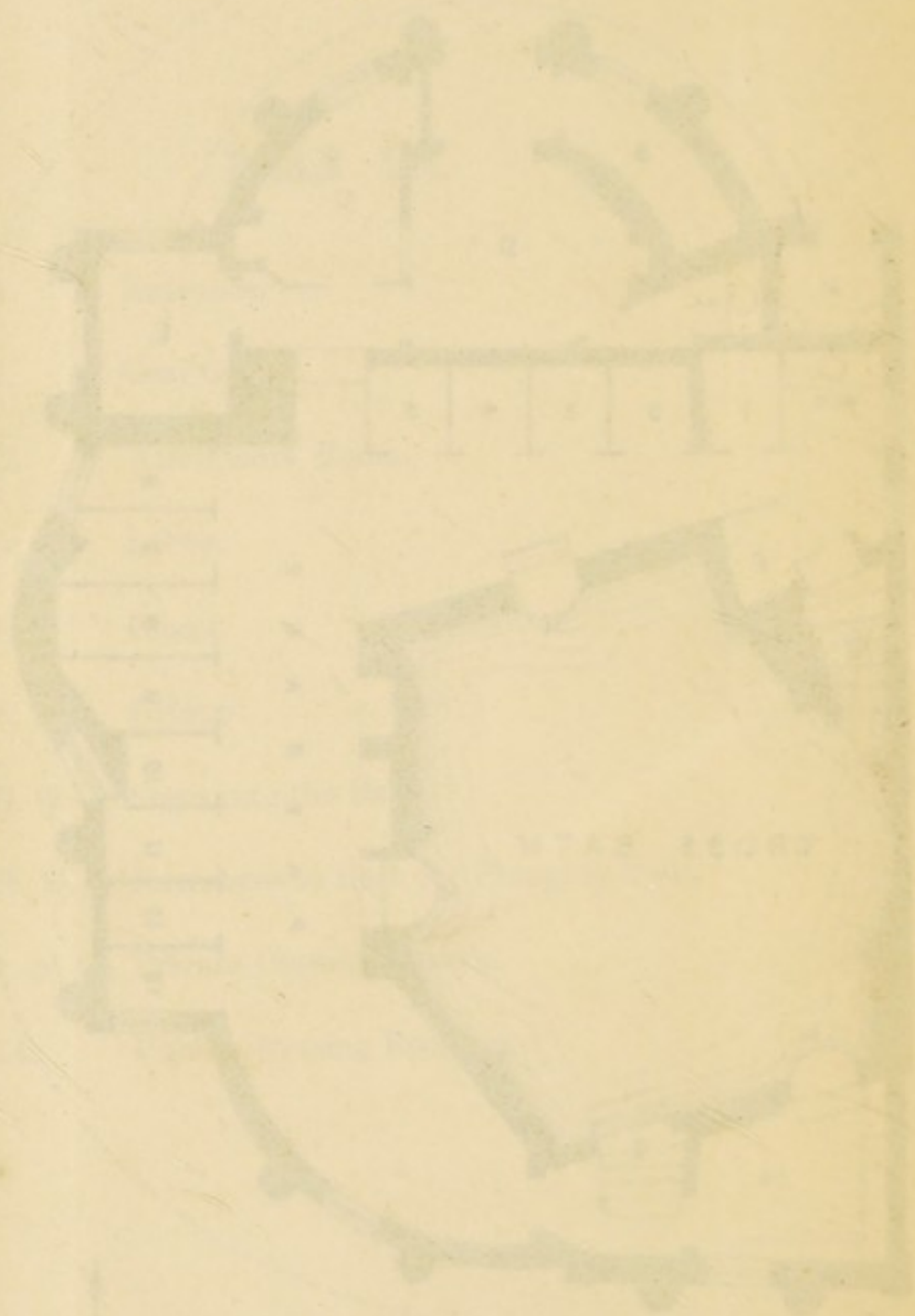
PLAN III.

- A. Entrance.
- B. Coal Cellar.
- C. Attendants' Room.
- D. Lobby.
- E. Closet.
- F. F. Urinals.
- G. G. Steps into the Bath.
- H. H. Entrances to Bath for Plunging from.
- 1. to 13. Private Dressing Rooms.
- 14. Public Dressing Room.

THE CROSS BATH.



THE CROSS BATH



THE CROSS BATH

1867

Received of Mr. J. H. Brown

the sum of

Five Dollars

for

rent

of

the

premises

at

the

rate

of

one

dollar

per

month

for

the

term

of

one

year

from

the

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day

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1867

to

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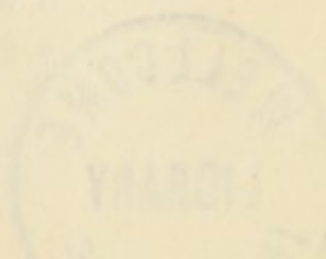
month

of

the

year

1868



PLAN IV.

- A. Entrance to Royal Private Baths.
- B. Lobby.
- C. Covered Entrance.
- D. Vestibule.
- E. Corridor.
- F. Yard.
- G. Lobby.
- H. Entrance to Hot Bath.
- K. Lobby.
- L. Open area.
- M. Passage to Swimming Bath.
- N. Corridor.
- O. Lobby.
- P. Entrance from Bath Street to Swimming Bath.
- Q. Coal Cellar.
- R. Engine Room.
- S. Laundry.
- T. Hot Closet.
- U. Yard.
- V. Attendants' Room.
- W. Pump.
- X. Shower Bath.

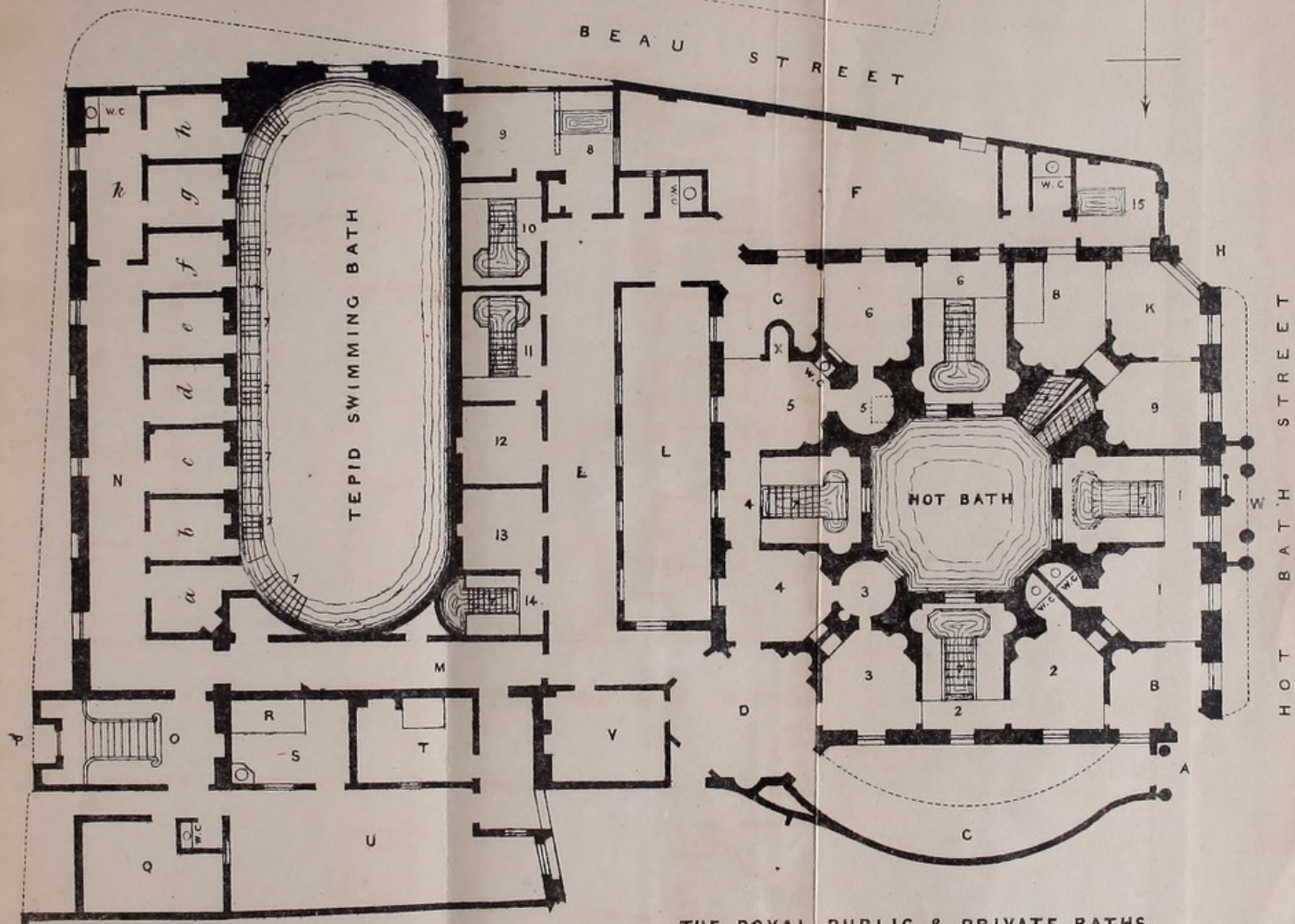
- 1. 1. Bladud's Bath and Dressing Room.
- 2. 2. Alfred's Bath and ditto.
- 3. 3. Dressing and Douche Room.
- 4. 4. Dressing Room and Chair Bath.
- 5. 5. Ditto, and Lavement Room.
- 6. 6. Edwin's Bath and Dressing Room.
- 7. 7. 7. Steps into the Baths.
- 8. Reclining Bath.
- 9. Dressing Room.
- 10. Bath.
- 11. 12. Bath and Dressing Room.
- 13. 14. Ditto Ditto
- 15. Reclining Bath.
- a. to f. Private Dressing Rooms.
- g. h. k. Public ditto.



UNITED HOSPITAL

Plan IV.

BEAU STREET



THE ROYAL PUBLIC & PRIVATE BATHS.

