## Bad Homburg and its resources: for the use of English visitors especially / by Dr Hoeber.

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## BAD HOMBURG

## AND ITS RESOURCES

for the use of English visitors especially

BY

## Dr HOEBER

resident physician at Homburg.

BAD HOMBURG.
PRINTED AT LOUIS SCHICK'S OFFICE.
1875.

# BAD HOMBURG

AND ITS RESOURCES

for the use of English visitors especially

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## PREFACE.

The following pages have been written for the use of English patients especially with the view of giving to them a general idea why the Homburg waters are taken as a remedy against some well known diseases

and how they should properly be taken.

The English colony here has so much increased in number during the last few years, the customs and the style of living of our English visitors differ in so many points from ours, that peculiar regard must be frequently had for the nationality of a patient with respect to the administration of the waters; so that a treatise for the use of English visitors in particular seems justified.

Although it is intended for the use of patients especially, yet I hope that even professional men will find in it some practical hints and new points of view, which have not been mentioned in the description of the

waters hitherto published.

Finally the author must claim peculiar indulgence for the style of this treatise. It is not translated from the German, but it has been written directly in English by the author who is obliged to apologize sincerely for the sins he may have committed against the laws of English grammar.

HOMBURG, April 1875.

The author.

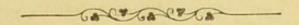
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## Contents.

	Page.
General remarks on the curative resources of Homburg which are three, the climate, the waters, the baths	1
Chapter I.	
The climate — mean temperature of the place — the constant motion and bracing quality of the air — dryness of the atmosphere, its causes — general character of the climate — class of diseases for which our climate is suitable — class of diseases for which our climate is not suitable — especially beneficial effect in tropical diseases — Homburg a sanitary station for patients going to very elevated places	2
Chapter II.	
The waters — topography of the wells — their names — classification of the waters — the mineralizing principles — the salt — the carbonic acid — the iron — physiological effects of the single components — physiological effects of	
the waters in general - therapeutic effect of the wells .	1(

Chapter III.  Homburg waters may be divided into two classes, those	Page.
in which the resolvent qualities prevail and those in which the tonic qualities prevail description of the separate wells, and indications for their use	
Chapter IV.	
General indications and counterindications for the waters — special diseases which make a course of Homburg waters unadvisable — the particular ailments in which the waters have proved useful — the author's point of view in treating of this matter — synoptical table of diseases	
Chapter V.	
Diseases of the digestive tract and their consequences.  1) Affections of the mucous membrane:	
a) of the pharynx, b) of the stomach,	
c) of the bowels. 2) Habitual constipation and congestion to the abdominal	
organs and their consequences.  3) Enlargement of the large glands	27
Chapter VI.	
General disturbances of nutrition and their consequences  1) excessive nutrition and in consequence of i corpulency, fatty degeneration, gout; 2) insufficient nutrition and in consequence of i	t
chlorosis, anemia, general debility	36
Chapter VII	
Infections of blood, tropical diseases, (malaria, live enlargement, chronic diarrhoea) and their consequences .	44
Chapter VIII.	
Directions for the use of the waters — time of the year most suitable for a course of Homburg waters — time of the day at which the waters should be taken — no general rule possible for the quantity which is required — cautions to be observed — causes why the waters sometimes have no effect — necessity for a patient to put himself under medical control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed during the control — if the use of medicines is to be allowed.	e il o o
a course of waters — how long the water should be used .	47

Page.
54
59
65



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#### CHAPTER I.

The climate — mean temperature of the place — the constant motion and bracing quality of the air — dryness of the atmosphere, its causes — general character of the climate — class of diseases for which our climate is suitable — class of diseases for which our climate is not suitable — especially beneficial effect in tropical diseases — Homburg a sanitary station for patients going to very elevated places.

-DOG-

The first question a patient intending or recommended to come here, will suggest, is certainly what kind of a place is Homburg and what is its principal difference from other spas. It is not my intention to give a general description of Homburg, its situation, its interesting points and establishments, the reader will find these in any one of the numerous guide books; my task is to point out the characteristics of the place as exactly but as briefly as possible, so that the reader may be able to judge under what condition he may expect a happy result for himself or another from a stay at our watering place.

This sketch is not however designed to make medi-

cal advice unnecessary.

These waters which form most complicated mixtures from nature's own laboratory, require just as much caution in their use, and just as much skill in their application to cases as any medicine bought at a chemists dispensary.

If we ask now what remedial agents Homburg offers to such visitors as come here to seek recovery from their ailments, we shall find that the curative means of Homburg are three:

1º its peculiar climate,

2° the waters, 3° the baths.

We begin with the climate of Homburg.

#### THE CLIMATE.

Situated on the south east declivity of the Taunus six hundred and six feet above the level of the sea it is just near enough the chain of hills to sustain the character of a mountain place, and just far enough to allow the currents of air, coming down from the Taunus to develop their full strength and to be felt in the town as a constant current of air. I consider this one of the greatest advantages of Homburg. Even during the hottest days of July, visitors will see the leaves of the trees in constant motion, the air is — so to say — remarkably bracing. Of course this condition of the atmosphere has a remarkable influence upon the mean temperature of the place.

I do not intend to tire the reader with long comparative tables of temperature, it will be sufficient to say that the average temperature of Homburg will be during the summer about 1—2 degrees R. under the mean temperature of Wiesbaden and Frankfurt.

Of course in very warm days in the middle of summer it will be sometimes quite as hot in Homburg as in any other place even in more southern climates; but even then our town has the advantage of the constant movement of the air and, a principal thing for the comfort and health of visitors is the cool nights we have as a rule. Throughout the summer there may be three or four very warm nights, but never more; generally it will get cool after 9 o'clock in the evening, so that there will be a difference of from 6 to 8 degrees between the temperature of the day and that of the night; a fact which

is of great importance for visitors, who have mostly left large towns, where the continual heat, retained by the large stone houses, prevents every body from sleeping. This happy condition of our climate depends to a certain degree doubtless on the large forests, which covering the Taunus mountains for many miles and in many parts in close proximity to the town, form not only a charming ornament of the country, but also an important health resort for our visitors. It is a well ascertained fact, that the air amidst large woods is not only several degrees cooler than in the open country, but also a great deal purer and healthier because it contains a greater amount of oxygen. This condition of the atmosphere must be of the greatest value for the class of diseases generally treated at Homburg, which mostly depend upon what was called formerly abdominal plethora and venous dyscrasia, and I have seen in fact many cases, where the constant habit of staying in the middle of our forests during the whole day, if continued for weeks, has been sufficient to remove most severe irregularities of health.

I can not too highly recommend patients not to be satisfied with daily walks in the gardens and near the wells; but to make more extended trips to the mountains. Although the air in Homburg is very good compared with the atmosphere in large towns, every one will feel the beneficial effect of the purer and fresher air in the mountains. The distance between the town and the edge of the forests is not very great; a drive of 20 minutes will bring the visitor to the "Gothische Haus", or to Dornholzhausen and from there many good roads and paths lead to every part of the mountains. Homburg

is besides a very dry place.

This dryness depends

1º on the total absence of water in the environs;

2° on the comparatively small amount of rain which falls during the year and

3° on the condition of the soil,

Homburg has no water for many miles around; the nearest rivers the Main and Rhine are too far off to have

any influence upon the moisture of the atmosphere, and the brooks which are found in the environs of the place are so small and shallow that the evaporation of water produced by them, need not be taken into consideration. From what other sources could moisture be absorbed by the atmosphere?

Although the prevalent winds during the summer at least, are South and Southwest, rain is not very frequent here and moreover it is never lasting. There will be only very few days in which visitors would not be able to take exercise in the open air for several hours. This is very much facilitated by the nature of our soil, consisting chiefly of sand. Even after a heavy rain the soil will take up the moisture so quickly that an hour later it is quite possible for ladies to take a walk in the gardens without risking their "chaussure", a fact which is of the highest importance at a watering place, where sufficient exercise is so strongly insisted upon; the streets will get dry nearly immediately after the rain.

In consequence of these peculiarities of the country the air here is very light, sometimes rather sharp and the climate may be considered as almost the opposite of a seaclimate.

If I have on one side mentioned the advantages of the climate of Homburg, I must say on the other side that it is necessary to be careful, if patients would not lose the benefit of our good air. The fact that it gets cool very soon after sunset, makes it necessary for every body who wishes to stay out in the evening, to protect himself with warm clothing. A great number of visitors are attacked every year with influenza or even acute affections of the bronchial tubes and other organs because they sit out in the garden to listen to the evening concert, in the same dress they wear during the day. I am quite sure that the greatest part of these ailments, which sometimes take away several days of the precious time of the course, might be entirely avoided if patients would adopt the habit of protecting themselves against

a sudden chill, by changing the dress in the evening, or carrying an overcoat with them.

From the same reason we can not easily allow patients to sleep with the windows open in the bedroom.

This custom very much favoured amongst English visitors, seems certainly right and beneficial in England or any place with a more equable climate, but it may become dangerous here on account of the sudden changes, and even visitors long accustomed to this manner of sleeping, would do well to open only the window in the next room, in order to avoid a direct draught.

To sum up shortly the above mentioned points we may say that Homburg has a strong mountain climate, remarkable for the low temperature of the summer and from its dry invigorating sometimes rather sharp air,

which is kept in constant movement.

Keeping this in mind we may find out the general indications and counterindications for a stay here, leaving

the special ones to a later chapter.

Homburg will not suit those patients who are affected with very tender organs of respiration, and more especially not in the earlier and later months of the year, it will not suit very irritable patients especially not very excitable ladies; except those cases where extreme nervousness is produced by obstructions in the abdominal organs.

The dryness and rarity of the air acts upon those patients not only as a tonic but really as a stimulant and in fact we find a very frequent complaint of nervous patients even of those, who on account of the water stay here and get better is that of sleeplessness.

In cases suitable for our place this disagreeable symptom will disappear in a few days, while a constant sleep-lessness in most cases will prove that the climate does

not suit the patient.

On the other hand the climate will suit very well the numerous class of patients suffering from nervous depression, and all those for whom it is of importance to accelerate the metamorphoses going on in the human body, and all those where sluggishness of the large glands of the body is the cause of morbid symptoms.

A brief glance at the diseases prevalent amongst the inhabitants here will confirm our presumption. The greatest number of patients here suffer from acute affections of the bronchial tubes and lungs.

Bronchitis and pneumonia are frequent here, while real epidemic diseases of the blood are rare. Malarious fevers never originate on the spot, but are always brought here by patients who take them elsewhere. Typhus exists in single cases only, whilst the cholera never made her appearance here.

This may be the place to mention the exceedingly beneficial effect of Homburg, on a special class of morbid symptoms, which I shall it is true be obliged to mention again in the description of the waters; I mean the most excellent results we obtain here against the consequences and remains of tropical diseases.

It is a sad but true fact that hardly any European will be able to stand the climate of the tropics for more than ten years without incurring danger to his health. It may be either that the extreme heat produces an entire relaxation of nerves and muscles and consumes the strength of a formerly athletic body, or that violent attacks of dysenteria and other diseases of the digestive tract produce an obstinate and even dangerous catarrh of the stomach and the bowels, or else the humidity of the air may hinder the action of the skin and finally cause enlargement of the liver and thus undermine the health or finally the jungle or other malarious fevers may produce an enormous enlargement of the spleen and in consequence disturb the formation and circulation of blood; in all these cases we see formerly healthy men come back after a number of years weakened in body and mind and seek recovery from their ailments in a more healthy climate.

The climate of England is in many cases not sufficient for that purpose and so we see a great number of those patients spread every year over the continent, and visiting our spas, or those of France and Switzerland.

And it is just in these cases where Homburg more perhaps than any other spa deserves the name of a health-

resort for invalids.

The dryness of our strongly ozoniferous air accelerates the changes of the body and helps greatly to remove the swelling of the glands, so frequently produced by tropical diseases; the atmosphere being able to absorb a great deal of moisture, enables the skin to act as a respiratory organ and to relieve the lungs as well as the liver; the lower temperature and the refreshing breeze of our mountains is a real tonic for the nerves, relaxed by the tropical sun, and so we see, that even in a comparatively short time these patients recover their natural complexion, that a feeling of energy is imparted to the whole frame, and that they leave the place cheerful and in a much better state of health than they have been in for years. Perhaps the reader will say that I speak too much about the climate; but I really think that up to the present time this point has not been appreciated sufficiently. In all classes the conviction has taken root that medicine or its equivalents are not the only, perhaps not even the principal remedy by which diseases are cured; more and more we begin to think, that the principal task of an intelligent physician is to put the patient under those conditions, in which nature itself is able to reestablish the normal function of disturbed organs. The climate and condition of the atmosphere is one of those agencies which daily and hourly act upon the human body, and just on that account seem well fitted if properly chosen, to alter chronic affections which have themselves been the result of an injury, acting a long time on the body:

The number of visitors to spas, and especially the daily increasing number of mere climatic establishments are sure proof, that this idea has been very well accepted by the public; and it is in fact my firm opinion that fewer failures of a course of water would be complained

of, if in all cases the necessary regard had been paid to the climate of the watering place, and not only to the chemical analyses of its waters.

Certainly Englishmen more than any other nation have well understood the advantage of change of air, but also no other nation is so inclined to exaggeration in that particular respect and to try to obtain an immediate result by abrupt changes, which nobody can undergo without damage.

I may be allowed here to mention an idea which I hope will for the future be more and more admitted by foreign physicians, the idea that hardly any place in central Germany is more fit than Homburg to be a station for those patients who are obliged to have recourse to the very elevated watering or climatic establishments in Switzerland, such as St. Moritz or Davos.

It is well known and has been repeatedly stated by English physicians, that for many debilitated patients it is almost dangerous to change from a place like for instance the isle of Wight, or the milder climates of England or France direct to a high mountainous place. Not only the difference of temperature but the different quality of air in regard to rarity and moisture have in many cases done harm to these delicate patients.

The custom of remaining for some time in the valleys of Switzerland is quite unreasonable; the temperature in these valleys is in summer just as high as any where in England and the moisture generated by numerous lakes prevents an invigorating effect of the mountain air.

For those cases, where delicate patients, suffering from weakness or torpidity of circulation or from extreme degrees of anemia are recommended to visit the iron waters of St. Moritz or other very elevated places; it is of the greatest value to stay for some time, if only for a fortnight perhaps, at a bracing place, which combining the invigorating effect of dry mountain air, with the benefit of a generally mild climate, enables the pa-

tient by and by to resist the rougher and more trying

air of high mountains.

And such a station is represented by Homburg to an eminent degree. Situated nearly in the middle of the great route from England to Switzerland it offers to visitors the great advantage of a quiet, bracing place in the immediate neighbourhood of a great railway centre. The temperature several degrees lower than at Frankfurt, the perfect dryness of its air, the large woods and remarkable mountains in its immediate environs form a transition to the higher and rougher places of Switzerland, which could hardly be surpassed.

### CHAPTER II.

The waters — topography of the wells — their names — classification of the waters — the mineralizing principles — the salt — the carbonic acid — the iron — physiological effects of the single components — physiological effects of the waters in general — therapeutic effects of the wells.

We have now to proceed to the second class of curative means, which Homburg offers to its visitors and which are generally considered as the most important

ones, I mean the mineral springs.

The springs open in a fine valley, only ten minutes walk from the centre of the town. They are five in number namely: the Elisabeth well, the principal and most frequented one; the Kaiserbrunnen, formerly the lion of the ferro-saline waters; the mild but most agreeable Ludwigsbrunnen and the two wells more especially favoured by ladies, the Luisen- and the Stahlbrunnen.

Although the taste as well as the effect of these wells are rather different, it would be wrong to consider them as entirely different waters, they all belong to the class of ferro-saline waters, but they differ in the proportion and quantities of the mineral substances they contain, so that it is possible to produce quite opposite effects by a different method of employing them.

How this apparently curious fact is to be explained we shall see directly in speaking of the physiological

effect of the waters.

In treating this matter we will therefore regard the effects of the different wells collectively, leaving the explanation of the difference between the separate wells to

a later chapter. The next question will be: what are the remedial agencies which give the water their medical efficacy.

I will try to explain this point as plainly and simply, as possible. The reader who takes an interest in the subject will find an analytical table of the separate wells, at the end of this treatise, but whilst considering the effects of the waters I will not bring forward long comparative series of numbers which no one of my reader could either keep in mind or verify; nor will I try to point out subtilties of the medical action attributed to certain principles existing in hardly perceptible quantities in the water; I shall strictly keep to facts and only expect to find such qualities in the waters, as answer to substances found in the waters in such quantities as are proved by experience to have under all circumstances a medical effect.

Now the principal components of our wells are three and they are so remarkable that we are able to recognize them by our own senses.

Approaching one of the wells we see that the spring is not quiet, but in constant motion produced by bubbles of gas constantly rising through the water, which otherwise appears perfectly clear and limpid.

In drinking it, the first impression is in all the wells, the decided taste of salt.

In two of the springs, we find besides a decidedly astringent and inky taste.

Indeed the taste alone shows us the three principal components; the gas which keeps the water in constant motion is carbonic acid in remarkable quantities, the salt taste is produced by chloride of sodium, and the inky astringent taste owes its origin to a quantity of protoxide of iron. These three substances exist in the water in such quantities as are known to have a medical effect if introduced into the body. One pound of water contains in proportion to the different wells:

from 25 - 75 grains of salt,

15 - 20 of carbon acid and

1/4 - 3/4 grains of iron.

An inspection of the analytical table shows the reader a great many other substances found in the water, such as chlorides of potassium, chlorides of calcium and of magnesium, carbonate of lime and many others.

But it seemed to me that substances of which the

analysis shows only 2 or 3 parts in tenthousand, could be of no interest to the patient, nor even to a foreign physician, who will always chose a spa for his patients ac-

cording to the general character of the springs.

I can certainly not deny that some of the substances which exist in minute quantities in our waters, might modify to some degree the medical effect of the springs and above all I agree that the chloride of calcium and the carbonate of lime might belong to that class; nevertheless the character of the Homburg waters it determined by the three above mentioned components; the carbonic acid, the salt and the iron

Theory as well as practice proves this fact and nobody indeed will deny that if a patient takes in 4 glasses of Elisabethwater about 150 gr. of salt and nearly one gr. of iron, these substances not only might but will

have a decided effect on the body.

It will therefore be our task in the next chapter to examine briefly the effect of the three above mentioned substances, to see what effect they have on healthy and morbid bodies, and when by means of theoretical construction, we have found the indications for our water, to examine finally if practice and results answer this theoretical construction.

In this explanation I will try to be always intelligible to patients, as I really think that special medical matters may be good even if they are not made unintelligible to the patient.

By far the prevalent and most important one of these 3 above mentioned substances is the salt or to call it by its chemical name the chloride of sodium.

It is a well known fact that the salt has a most important role in the economy of animal bodies, it is a constant part not only of the blood, but also of most of the tissues and animal fluids, but it is only quite lately that we know with a high degree of certainty in what manner it operates in regard to nutrition and digestion.

If we endeavour to follow the way and the changes which the salt undergoes when introduced into the body, we find first of all, that it is doubtless the substance which furnishes the material for the formation of the muriatic acid in the stomach, without which digestion would be entirely impossible; besides the surplus of salt which is not transformed into muriatic acid, acts certainly as an irritant to the mucous membrane of the stomach promoting a greater and improved secretion of gastric juice; when conveyed into the bowels it is certain that although the exosmotic effect of salt, id est the faculty of absorbing water from the body is not very high — it is sufficient to make it act in the lower part of the bowels as a regulator of diffusion between the blood and the content of the abdominal viscera.

These physiological facts alone would be sufficient to prove, what an important role the chloride of sodium has in the economy of the body, but a still higher interest is claimed by the secondary effects which appear when the salt is reabsorbed from the blood. The first organ to feel the influence of the reabsorbed salt are the kidneys. Bischoff and several others proved by most exact experiments that the salt not only increases to a remarkable extent the quantity of urine, but that the quantity of the secreted urea is increased and not merely in proportion to the larger quantity of urine; (increase of urea is not only relative but absolute).

This means that the consumption of albumi-

nates is remarkably increased; in a word, that the metamorphoses going on in the body are accelerated by the use of chloride of sodium.

In how perfect a manner salt is absorbed has been proved by Buchheim by a most interesting experiment comparing the effect of sulphate of sodium, and chloride of sodium. If the movement of the bowels is intentionally arrested for some time, we shall find that two days after a dose of sulphate of potassium a watery evacuation rich in sulphates will take place, while if chloride of sodium be given, the next morning a perfect normal evacuation free from all salt will be the result.

If we join to these facts the remark that the salt is proved to act in general as a mild stimulant not only to the mucous membrane of the entire tract of digestion and all the glands in connexion with it, but also to the nerves and organs of circulation, we have a pretty true idea of the physiological effects of salt.

Trying according to this deduction to find out the therapeutic effects of the chloride of sodium we may say, that after an increased use of salt, id est the medical administration of diluted solutions of salt, such as we may consider our wells to be, we find on the one hand that secretion is stimulated in all organs; while on the other hand, the lymphatic system betrays its increased activity by a more energetic process of absorption.

And this deduction is by no means altered by an objection frequently made not only by patients but even by some physicians; the objection namely that a substance which we use daily in our food, which forms already a part of our blood, could by no means, if used in the form of the weak solution of a mineral spring have a remarkable effect on the human body. It is true that we use daily with our food a quantity of certainly 300 grains of salt, but experience with patients, as well as direct experiment shows us that, on increasing that quantity by 100 — 200 grains (contained in 4 glasses of Elisabethwater) we find the effects just above mentioned.

Denying that would be nearly the same as if anybody, saying that one bottle of wine left his pulse and constitution quite normal, pretended that a second bottle also could by no means have a remarkable influence upon his

system.

Concerning the two other important substances in the waters, it will be hardly necessary to say anything about the iron; its value for sanguification and its effects as a somewhat astringent tonic is too well known even amongst patients, to make it necessary to point out exactly its physiological effects. It will be sufficient to say that its presence in our water is of the greatest value, because the tonic qualities of the iron will prevent a protracted use of the water having a weakening influence on the patients, which is frequently the case after a course of saline and more especially of aperient water. Some more exact notices on the effect of the iron, the reader will find in the description of the two wells principally rich in iron.

We have now to proceed to the examination of the carbonic acid which as mentioned before exists in the wells in very considerable quantities, so that one pound of

water contains about 30 grains of that gas.

For our purpose we are only interested in the effects which the carbonic acid produces if introduced into the stomach, we need not consider its influence when inhaled

or absorbed by the skin.

If very moderate quantities be taken, the first feeling will be an agreeable cooling one, and at the same time we shall feel a soothing effect as well on the blood, as on the nerves. This is the reason why the carbonic acid is so frequently used in summer in the form of effervescing beverages such as Selterswasser, Sodawater and as a medicine in the form of effervescent sedative saline draughts; but, and this is a fact frequently noticed in the use of medicines, if taken in larger quantities, the effect will be nearly an opposite one. Given in stronger doses, the gas will act as a mild but decided irritant to the mucous membrane of the stomach.

The activity of the liver will be stimulated, the secretion of the kidneys and skin increased and the movement of the bowels accelerated. At the same time lar-

ger quantities will produce a feeling of giddiness.

I know that this effect of the carbonic acid is denied by some authors, at least as far as our waters are concerned; but daily experience shows us so frequently that patients who after taking larger doses of our water had been affected by giddiness or slight headache, get relief immediately when the carbonic acid is removed from the water, that this doubt does not appear justified.

Besides physiological experience seems to reveal that effect. It is well known that very small quantities of carbonic acid if inhaled, first of all produce giddiness and headache, and it appears very probable that large quantities absorbed by the stomach will develop a very similar effect to that of the inhalation of smaller quantities.

If we now endeavour after having examined the effects of the single substances in our springs to consider the physiological effects of the waters, taken as a whole, we may say that the Homburg water taken intervally acts first of all as a mild irritant to the entire tract of digestion, to the pharynx, the stomach and the bowels, subsequently they have the same effect on the large glands, more especially on the liver and kidneys, and finally they will act in a kind of revolutionary manner upon the whole system by accelerating the changes of the body and renewing the whole system, more quickly than would have been the case otherwise.

Let us now see what experience proves in regard to the application of these waters in a normal body.

If a healthy man takes medium quantities about two to three glasses of Elisabeth which is generally considered as the representative of the Homburg waters, he will feel directly that the mucous membran of the mouth secretes a clear viscid liquid, (action on the mouth) very soon he will experience a feeling of warmth in the stomach soon followed by increased appetite and thirst (action on the stomach) after a short time one or two actions of the bowels will ensue of a green darkish colour, (action on the bowels) and at the same time large quantities of urine of a high specific gravity will be secreted, (action upon the kidneys and the system).

days, he will find that his skin gets tender and moist (action on the tissue-changes) and that the weight of his body is diminished. But this diminution of weight is not followed by any sensation of weakness or uneasiness, on the contrary the energy of the muscles increases; the complexion gets brighter, the man feels more lively, both in body and mind, (action of the tonic substances of the waters). According to these effects experienced for a number of years by individuals of every age and sex we must describe the therapeutic character of the Homburg waters as that of a resolvent tonic, which seems very apt to remove obstructions or congestions in a number of organs, without producing any weakening effect on the system.

Even from this short description of the effects of the single components and the springs as a whole, the reader will I hope agree, that nothing could be more erroneous then to consider the mineral springs of Homburg as mere laxative waters and to compare them as is frequently done with the bitterwaters. In some respects, they will not be able to afford the same services as these merely aperient waters and in others they will

do very much more.

It is true, the chloride of sodium is also an aperient, but it is not merely a laxative and in a great many cases extremely suitable for our place, a laxative effect of the water is not at all necessary, in some of them not

at all desirable.

The mere laxative waters above mentioned, whose efficacious ingredients are in most cases sulphates of potassium and sulphates of Magnesia produce in all cases a strong irritation on the intestinal tract; they act as laxative by increasing the peristaltic action of the bowels, and they make the evacuations thinner and more copious; not because they absorb water from the animal fluids,

but because in consequence of the accelerated movement of the bowels the liquids retained by these salts have no time to be absorbed (BUCHHEIM, WAGNER).

They also reduce the weight of the body making

expenditure larger then income.

It is quite different with the chlorides contained in our waters. If given in larger doses they act as an aperient, but principally by reason of their absorbing water from the liquids of the body and only partly because they act as a mild irritant to the bowels. We have seen that they are almost entirely absorbed and that they can diminish the weight of the body, because the nutritious substances introduced into the human system are more quickly consumed, but we have also seen, that if given in smaller doses they promote the assimilation of albuminates and thus help nutrition and facilitate the reception of nourishing food; in a word, the great advantage of the mineral springs, rich in chlorides and poor in sulphates is, that according to the will of the administering physician they may promote as well the regressive as the progressive metamorphoses of the body and that according to their administration and the diet observed during their use, they can increase or diminish the weight of the body. This is the reason why the Homburg waters have in many cases apparently quite contrary effects, this is the reason why we see here the one hand stout and pasty-looking men relieved from their excess of weight, leaving the place rejuvenated and with recovered elasticity, and why on the other hand, we see tender and delicate looking ladies, with a tall and thin frame returning to their home with a healthy complexion, firmer in muscles and increased in weight.

## CHAPTER III.

Homburg waters may be divided into two classes, those in which the resolvent qualities prevail and those in which the tonic qualities prevail — description of the separate wells and indications for their use.

We have just seen that the Homburg waters combine two different qualities, that they are resolvent, but at the same time tonics. If we consider the individual wells in this point of view, we shall find that in some of them, the first quality is more prevalent, while the second one gives the others their characteristic efficacy.

And so great indeed is the difference that we may distinguish two series of springs, the more resolvent ones, Elisabeth, Kaiser and Ludwigsbrunnen and the more

tonic ones, Luisen and Stahlbrunnen.

To begin with the first class, we have mentioned already that the Elisabeth well is the most frequented one and appears as the representative of the Homburg waters. It contains the greatest quantity of salt. 67 grains in one pound of water, and it is this well more especially, which we had in view when speaking of the physiological and therapeutical effects of our waters.

The Kaiserbrunnen was formerly the strongest amongst the known ferro-saline waters; it contained when first used 117 grains of salt in one pound of water, but it has changed in qualities, and contains now only about

55 grains in one pound.

We use the well now with great advantage in certain diseases; and principally were we intend to make the stools more copious, without making them more watery.

The Ludwigsbrunnen may be looked upon as a diluted Elisabeth and is seldom used alone as a medical water. It is of the greatest value in all those cases, where we intend to make a patient drink a considerable amount of water during the day, without injuring his powers of disgestion.

Hence one or two glasses of Ludwig taken in the afternoon very frequently assist the effect of the Elisabeth, which generally is taken in the morning in a most favourable manner. I must not forget to mention that the Ludwigsbrunnen often renders the greatest service to children. There are numerous cases, and they become more frequent from year to year where even children suffer from chronic affections of the stomach and principally from obstinate constipation.

The more rapid increase of large towns makes it especially difficult for children, since they are generally in attendance at schools, to lead a life according to the laws of nature and compatible with health, the more the constantly increasing demands for scientific education force children to employ the greatest part of the day in their studies, so much the more diseases arising from poverty of blood and chronic affections of the stomach, seem to increase in number. And in such cases where a strong mineral water, particularly the Elisabeth would appear too strong, the Ludwigbrunnen has been of the greatest use, as making it possible to introduce chlorides and iron into the body without injuring the child's digestion. Another reason for prefering the Ludwig in some cases is the large amount of carbonic acid it contains.

We arrive now at the second class of our wells in which the tonic qualities preponderate. The Luisenbrunnen is the youngest amongst the Homburg springs; it was bored in 1856 and taken into medical use the next year.

It may be looked upon as a very mild and easy digestible iron water.

It nearly corresponds to the Schwalbacher Weinbrunnen and has been found very useful where we want the effect of the iron to predominate over the effects of the salt.

It differs from the other waters in containing a small quantity of hydrosulphuretted gas and by the total ab-

sence of chloride of calcium.

It is perhaps on that account that it never produces headache or excitement, and that it can be taken in many cases where the stronger iron water of Schwalbach or

Pyrmont can not be tolerated.

The taste appears in the beginning not quite agreeable to patients, in consequence of the hydrosulphuretted gas, but one gets soon accustomed to this. It seems unnecessary to drink the water, as frequently done through glasstubes in order to protect the teeth.

Last but not least we have to mention the Stahlbrunnen, which according to my opinion has certainly been neglected for a long time without any particular

reason.

A glance at the analytical table shows us, that in regard to its content of salt it nearly equals the Kaiserbrunnen; while its content of iron surpasses not only the other Homburg springs but even the most celebrated chalvbeate springs of Germany. In fact the results of its administration fully answer the expectation, which one might form from its chemical properties, and I am sure the more it is tried, so much the more it will gain favour amongst patients as well as amongst physicians. It will be sufficient here to mention, that the effect of iron is experienced in its full extent in the use of this water without the disagreeable secondary effect of constipation so frequently complained of in the use of chalybeate waters; and in all cases where we require in a prevalent degree a tonic effect combined with a resolvent one, it would be very difficult to find a more suitable well.

#### CHAPTER IV.

General indications and counterindications for the waters special diseases which make a course of Homburg waters unadvisable—the particular ailments in which the waters have proved useful—the author's point of view in treating of this matter—synoptical table of diseases.

The reader who has been kind enough to follow this treatise so far, will be anxious now to receive an answer to his legitimate question: what are the diseases for which the Homburg waters can be taken with benefit and with the prospect of a successful result. will try to answer this question as straight forwardly and clearly as possible, as I really think, that in this particular point many mistakes have been committed; I shall not try to enumerate a number of single maladies, which, as frequently is done in treatises on mineral waters, might almost make the reader think that every mineral water is good for every possible disease and several more, but I shall endeavour to show the patient the great groups of diseases against which he may expect help from our waters. The question if a special ailment will be benefitted by a certain mineral water can only be answered by an experienced physician, well acquainted with the nature and the habits of his patients, and I am quite sure, that if every patient had an idea of the difficulty and the complicated considerations which cessary to discover the appropriate watering place for any particular disease, it would not happen so frequently that patients would waste time and money by choosing a spa, either by their own fancy or from the advice of friends who imagine that they have suffered from a similar complaint and have been relieved by the use

of a certain mineral water.

I shall bear in mind that the first wish of a patient is to be cured of his ailment and I hope by demonstrating as exactly as possible the indications for our waters and refusing to enumerate all doubtful cases, that I shall serve not only the interests of the visitors but also still more those of the watering place.

It is to our interest only to get here such cases as are really suitable for the place; and even a greater number of visitors if attracted here by a wrong idea of the efficacy of the Homburg waters, would in the long run only be a misfortune for the place and only serve to discredit the old fame of Homburg.

We have seen that the effect of our water first extends to the mucous membrane of the intestinal tract; indeed the greater number of patients, who come here suffer from maladies of the tract of digestion. Together with these ailments, we find affections of the large glands, di-

seases of the liver and spleen.

We have seen besides, that in consequence of their laxative effect the waters are very powerful in removing obstructions and swellings produced by disturbed circulation of blood; so they prove very useful in all cases of chronic constipation and their numerous consequences, not only in regard to the body (digestion and nutrition) but also to the mind (hypochondria).

In close affinity to these we see them useful in many diseases of the female system and their consequences, both

to body and mind.

The fact that our wells are able to modify remarkably the metamorphoses of the body as well in a regressive as in a progressive sense makes them very useful in diseases produced by general disturbances of nutrition; and so on one side in excessive nutrition (corpulency, gout) on the other side in cases of insufficient nutrition, (chlorosis anemia, general debility).

In order to enable the reader to take an easy glance at the different classes of diseases, and to perceive how one fundamental disease involves a whole series of others, I shall give on the next page a synoptical table of the diseases in which a successful result may be expected from the Homburg waters and then endeavour to consider shortly the individual diseases and the way to care them.

#### COUNTERINDICATIONS.

I do not consider it necessary to mention here fevers or a feverish state of the body and acute inflammations, as certainly hardly any one will think of sending a patient here in a feverish state, and if even such a morbid affection should take place during the stay of the patient an interruption of the course is so inevitable, that every body would adopt it even without medical advice.

We shall only consider the chronic affections which render a course of Homburg water unadvisable.

First of all we have to mention bronchial affections or even a great tendency to them, if this morbid state be not produced by obstructions in the abdominal organs as before mentioned.

Even the dry air of the place will not suit such patients and frequently this condition will be aggravated by the use of the waters.

In connexion with this ailment we often find asthmatic affections; I confess that I never have seen any benefit from our water in cases of real bronchitic asthma but frequently an injurious influence from the climate.

Diseases of the heart are no absolute counterindication; on the contrary the obstructions in different organs, which are necessarely produced by these ailments, may be sometimes relieved by a course of Homburg waters but in

all such cases they should be taken with the greatest caution and under the constant supervision of a physician and in cases of advanced cardiac disease they should be avoided altogether.

Concerning the uro-genital organs it is principally acute affection of the urethra, in the female sex excessive menstruation (except when depending on chlorosis) which form a counterindication to our waters, and finally they should be avoided in all cases of dropsy.

#### SYNOPTICAL TABLE OF DISEASES.

I. Maladies of the so called "primae viae", relieved or cured by the direct action of the waters.

#### 1° AFFECTIONS OF THE TRACT OF DIGESTION.

a. chronic catarrh of the pharynx;

b. chronic catarrh of stomach and bowels and its consequences, impaired nutrition, loss of

weight:

c. obstructions in the abdominal organs, formerly called abdominal plethora; habitual constipation and their consequences both in regard to mind and body, such as dyspepsia, hemorrhoids, liver diseases; in females fluor albus, chronic catarrh of womb, irregularities of menstruation, in regard to the mind hypochondria in males, hysteria in females.

## 2" ENLARGEMENTS OF THE LARGE GLANDS FROM MECHANICAL CAUSES.

II. Maladies relieved or cured by the indirect action of the water when absorbed.

#### 1 GENERAL DISTURBANCES OF NUTRITION, AND CONSEQUENTLY MORBID QUALITY OF 'THE BLOOD.

a. excessive nutrition and its consequences, gout, corpulency, fatty degeneration of organs;

b. insufficient nutrition and its consequences, chlorosis, hydremia, general debility.

#### 2º INFECTION OF BLOOD.

a. malaria and its consequences, enlarged spleen;

b. tropical diseases and their consequences, enlarged liver, chronic diarrhoea.

## CHAPTER V.

Diseases of the digestive tract and their consequences.

1) Affections of the mucous membrane:

a) of the pharynx, b) of the stomach,

c) of the bowels.

2) Habitual constipation and congestion of the abdominal organs and their consequences.

3) Enlargement of the large glands.

# Special diseases indicating the use of Homburg waters.

a) Chronic catarrh of the pharynx.

This very frequent and most disagreeable affection is known to be one of the most wearisome and to resist obstinately all the common methods of treatement. Produced either by direct irritation of the mucous membrane through very cold air or cold beverages, or by indirect action through abuse of alcohol or in consequence of gastric affections, it is characterised by a livid redness of the mucous membrane, by a production of large quantities of mucus; and by frequent vomiting principally in the early hours of the morning.

The internal use of Elisabeth, combined with energetic gargling of tepid Ludwigs or Elisabethwater has in many cases not only relieved patients but even effected a per-

fect and radical cure.

## b) Chronic catarrh of the stomach and the bowels.

This ailment very common amongst English patients has been treated here for a long series of years with the greatest success,

We must distinguish two forms of the disease. In the first class the catarrh is a secondary affection which accompanies as a rule many affections of the heart, of the lungs and the pleura, in fact every disease which produces an overfilling of the right cavities of the heart with blood, and consequently produces obstruction in the vessels of the liver and of the stomach. In these cases Homburg will mostly give great relief to the patient, but he would be wrong to expect a perfect restoration of health, unless the fundamental disease which produced the catarrh of the stomach could be entirely cured.

In the second class and this includes the greater number of cases, the catarrh is an idiopathic one and generally produced by difutive nutrition. If a patient eat simply too much, a case which occurs more frequently, than one should expect, or if he eat aliments not compatible with health on account of their quality, such as aliments excessively rich in fat or in sugar, or if he abuse stimulants in the form of alcoholic beverages, in all these cases a disturbance of nutrition and very frequently a chronic catarrh of the stomach will be the necessary consequence.

The symptoms are but too well known amongst a great number of our visitors.

Soon after meals the patient gets a disagreeable feeling of oppression in the stomach, which sometimes is aggravated into a real pain, he feels inflated, the want of food comes either too seldom or too often, his appetite diminuishes, he feels sick and complains of a sour or disagreeable taste in the mouth combined with a large production of saliva. The consequences of this affection of the stomach very soon appear in the form of flushing of the face, or even of headache; the patient gets nervous and suffers from drawing pains in the spine during digestion, the urine shows large deposits, and finally the complexion changes, the patient gets pale or grey looking and the weight of the body diminuishes to a remarkable degree.

If the affection extends to the bowels the patient complains of a feeling of oppression and repletion of the

abdomen, the motion of the bowels becomes irregular both in regard to the time and to the quantity of evacuations.

In most cases we find obstinate constipation, in others diarrhoea alternating with obstruction, but in all cases the consequences of these affections are fatal in regard

to nutrition of the body and to mental activity.

No other diseases are followed so frequently by mental affections as these; and the state of the mind generally known as hypochondria is one of the most trequent consequences of chronic catarrh of the bowels.

Almost the same symptoms are found in cases of real dyspepsia. In Germany many physicians are very much inclined to deny entirely the existence of genuine dys-

pepsin.

Now this seems to me to be erroneous, should we even agree, that the more exact diagnoses are made with the help of physical examination, the more the number of these cases diminuishes, still we can not deny that there exist cases of real dyspepsia, where we are not able to find any anatomical change in the state of the stomach. It seems that there exist changes merely in the quality of the secretions of the stomach without any alteration of the mucous membrane or structure of the organ.

It appears natural that in such a malady which shows nearly as many different species as patients, an enormous number of remedies should have been tried.

Thus we find dozens of spas recommended for the cure of this ailment and in fact no other ailment requires nearly so much a delicacy in decision in respect to the selection of the right spa, for the peculiar constitution of

the patient.

It is not my intention to examine in which cases Carlsbad, in which Ems or other spas would be preferable; it will be sufficient to show, that if the cases are properly chosen, we are sure to have from the application of our waters successful results in chronic catarrhs of the stomach and bowels and of dyspepsia. I shall content myself with mentioning two separate forms, in

which the effect of our wells could hardly be surpassed

or equalled by any other.

In the beginning of stomach catarrh when a disproportion between the food which a person takes, and the consumption of the components of the body first produces disturbances of digestion, a mild course of Elisabeth or Ludwig has often a surprising effect. It is easy to understand the reason. The large amount of carbonic acid in these wells assists materially the digestive powers which are only weakened but not destroyed in these cases; and the acceleration of the changes of the body, produced by our wells compensates the disproportion between income and waste; while real laxative waters or waters rich in sulphates would only be of temporary use, and if taken for a long time destroy the digestive powers, already weakened by the affection.

With the same advantage but from a quite different reason, we see patients cured here of chronic stomach catarrhs of very long standing. We have seen above that in cases of continued stomach catarrh nutrition is much impaired and that the weight of the body diminuishes.

In such cases one ought to be very cautious in using waters which act strongly on the bowels and it is frequently necessary to send such patients after a course of strong laxative waters to a chalybeate spring in order to recruit their strength, which has been remarkably lowered by the course of waters.

Now we have seen that our waters are both resolvent and tonic, and if properly administered, patients of very weak digestion and very low strength, can use the Homburg waters for more than six weeks without feeling

the slightest weakening effect.

Practice supports perfectly this theoretical reasoning; many patients who had for years used the spas of Carlsbad, Marienbad and others with very little effect have been cured here by a longer course of our waters. In such cases we administer besides the Elisabeth either the Luisen or the Stahlbrunnen, combined with properly applied baths or a modified cold water cure, and under

such treatment sanguification previously much impaired will become healthy again, and new life and new hope will reinvigorate the patient, who often came here in a very depressed state of mind.

c) Obstructions in the abdominal organs, formerly called abdominal plethora; habitual constipation and their consequences, both in regard to mind and body such as: dyspepsia, hemorrhoids, liver diseases; in females, fluor albus, chronic catarrh of womb, irregularities of menstruation; in regard to the mind, hypochondria in males; hysteria, in females.

I have thought it necessary to consider these two affections, abdominal plethora and chronic constipation as one; the relation between them being so near and the symptoms so much connected that it seems almost impossible to give a separate description of these ailments.

First of all we must bear in mind that in many cases these affections are secondary ones. Every cause which prevents the reflux of blood to the heart, as for instance diseases of the liver, of the heart and the lungs may

produce obstructions in the abdominal organs.

Indeed in so many cases we are able to find a fundamental cause for these affections, that for some time the name of abdominal plethora became much discredited. The subject which occupies us here especially are the idiopathic cases of obstructions in the abdominal organs; and amongst the numerous causes which may produce them I shall only mention two which supply us with the greatest number of patients being extremely productive in the generation of diseases in general, these are sedentary habits and luxurious living.

The reason why these customs are so injurious, is easy to be understood. Circulation in the abdominal organs is already somewhat difficult, especially in the portal system from causes which it would be too long to

enumerate here.

Too much or too rich nourishment will overcharge

the stomach and the upper part of the bowels with a great quantity of chyme which the blood is not able to

absorbe quickly enough.

At the same time the blood will get thicker and not able to pass the finest branches of the vessels with the necessary speed; the result will be a retardation of the movement of the blood, obstruction and venous

congestions in many organs.

It is easy to be understood that to a certain degree an energetic effort of the heart will be able to compensate these effects, and of course every condition which prevents that stronger action of the heart, and sedentary habits more than any thing else, is apt to aggravate such cases, and to make it impossible for nature unassisted to overcome there disturbances.

The consequences of this affection are speedy and fatal. The overloading of the stomach produces catarrh of stomach and bowels, the frustrated efforts which the heart makes to circulate the greater amount of blood produces palpitation of the heart and in severe cases, even diseases of this organ (enlargement,) the irregularity of nutrition originates a whole series of nervous disturbances, from that condition we call low spirits to high degrees of hypochondria.

Combined with all these morbid conditions and partly dependent on them, we find chronic constipation, a very common ailment which may injure in a most severe manner the health of the person affected with it.

The causes of this affection are very numerous and as the object is of a high interest particularly to visitors of this spa, I will enumerate the most common ones. These are:

- 1" improper quality of the food, indigestible food;
- ?" insufficient secretion of gastric juice (dyspepsia);

3" chronic catarrh of stomach and bowels;

- 4" insufficient secretion of bile or obstruction to the entrance of the bile into the bowels;
- 5° obstruction in consequence of diseases of liver, heart and lungs;

- 6° a paralytic condition of the bowels, produced by long illness (affection of the brain) or by abuse of strong laxative remedies;
- 7º torpidity of the bowels in consequence of muscular debility (in anemic patients or ladies who have undergone a great number of confinements) or of sedentary habits;
- 8° stricture of the bowels either internal (cicatrices) or external, (compression by tumours).

The simple enumeration of these numerous causes will convince the reader, how wrong it would be to treat each case of chronic constipation simply with laxative remedies, and how necessary it is to adapt the treatment to the peculiarity of each case, but at the same time he will agree, that the happy composition of curative means in our waters, at the same time resolvent and tonic, will in most cases promise a fortunate result.

The consequences of chronic constipation are as numerous as its causes.

Besides the symptoms already mentioned, as dyspepsia, nervousness, palpitation of the heart, it may produce constant headache, flushing of the face, shortness of breath, nay even bronchial affections by mechanical compression of the lungs; and more frequent then any thing else hemorrhoids with all their disagreable symptoms.

In female patients the consequences are still more serious. Besides the symptoms above mentioned they may acquire by these general obstructions and chronic constipation severe diseases of the sexual organs.

The fame which Homburg has obtained within a few years in the cure of female diseases is a very legitimate one, and depends chiefly on the efficacy of our waters in removing abdominal obstructions. Many cases of fluor albus and chronic metritis have been either cured here, or very much relieved, and in the last few years, I have had several remarkable results in cases of obstinate vaginism which had for years resisted the most skilful and energetic treatment. In some of these cases six weeks of Elisabeth, combined with the use of baths very rich in carbonic acid, and a simple local treatment have entirely removed this terrible ailment.

If the Homburg waters seem well adapted to remove the corporeal consequences of the ailments, we are now treating of, we perceive the same good results in the treatment of the mental consequences. It is a matter of course that nervous depressions arising from affections of the digestive organs get better with the cure of the fundamental disease; but even cases of Hypochondria have frequently been cured here, and for the same reason, severe cases of Hysteria if depending on abdominal obstructions;

9° enlargement of the glands, — principally the liver — from non infectious causes.

We may be brief on this head. The same reasons which produce stoppages in the other abdominal organs, for instance all diseases of heart and lungs and more directly sedentary habits and rich living produce very readily hyperemia and enlargement of the liver.

On account of this enlargement, the production as well as the secretion of the bile is disturbed; the liver becomes what we generally call sluggish, and this state of the organ may as we have seen produce obstinate constipation, or in more severe cases even jaundice and more serious diseases of the liver. The reader will remember from previous pages that the Homburg waters have besides their aperient qualities a direct action

upon the liver and the production of bile; indeed the simple non complicated cases of enlargement and sluggishness of the liver yield extremely quickly and perfectly to a regular course of Elisabeth or Kaiserbrunnen.

# CHAPTER VI.

General disturbances of nutrition and their consequences:

1º excessive nutrition and in consequence of it corpulency, fatty degeneration, gout.

2º insufficient nutrition and in consequence of it chlorosis, anemia, general debility.

1º Excessive nutrition and its consequences; Corpulency, gout, fatty degeneration of organs.

A morning walk near our wells during the season, will plainly show that the number of persons seeking relief from their corpulency is a pretty considerable one, and numerous photographs show the result which has been frequently attained by a course of a few weeks. The effect of the Homburg waters is a pretty sure one, should the morbid condition have arisen from luxurious manner of living or should it be only the consequence of hereditary disposition which is frequently the case. An energetic course of Elisabeth or Kaiser, combined with sufficient exercise in our strong ozoniferous air and a corresponding diet will enable the patient to lose in 6 weeks from 5 to 15 pounds in weight.

Very frequently we find in such persons of great corpulency, accumulation of fat not only under the skin but also in the internal organs of the body, more especially in the heart and liver. It is well known that

these morbid conditions are not all indifferent.

Even slight cases of fatty liver will produce swelling of that organ, sometimes to a great extent, and in consequence of it all the symptoms we have considered in the previous pages. Accumulation of fat on the heart is

still more disagreeable; in slight cases we may find palpitations of the heart and feelings of anxiety, in severe cases when the morbid condition has already produced fatty degeneration of the heart, the patient's life is in constant danger. The action of the heart becomes very weak, unable to provide the arteries sufficiently with blood, frequent attacks of asthma, or even of angina pectoris will ensue, and often apoplectic attacks caused by anemia of the brain, will put a sudden end to the life of such a patient.

There is no doubt, that if this morbid condition be recognised soon enough, a regular course of our waters, which in such cases should be repeated for several years can effect a perfect and radical absorption of the fat ac-

cumulated on the heart and liver.

We arrive now at the examination of one of the most important diseases, gout; more especially important for Englishmen as it really represents a national English disease. In no other country of the world do we find such a number of gouty persons as in England, and it appears but natural that spas renowned for the use of gout are favoured by the English especially.

It seems useless to mention the symptoms of the different forms of gout; they are but too well known, and certainly more then half of my readers will know

them by experience.

More interesting is the question as to the origin of gout and here it must be stated that a great number of patients are not responsible for this ailment. Gout is in an eminent sense a hereditary disease, and perhaps the greater number of persons affected by it, owe their sufferings to the hereditary predisposition. On the other hand, the cases where an improper style of living has produced gout directly, are numerous, and even in the cases of hereditary origin, an irregular diet generally causes this ailment to break out.

Looking to the nature of our watering place, it will generally not fall to us to cure the primary attacks of gout, our task is principally to remove the residues of gouty fits, and then either to prohibit further attacks, or if that should not be possible in cases of too long standing, to prevent at least the change of regular gout into irregular or atonic gout. And if the reader asks if this can be done here it must be stated that the curative means of Homburg are able to answer these exigencies in a most eminent manner. I have no doubt that from year to year Homburg will be more frequented by gouty patients, the more its favourable and lasting effects become known. I will try to explain briefly why our waters have and must have such a beneficial effect on gout.

Although the ultimate causes of the origin of gout are up to the present time not fully known, we know by the most valuable and exact examinations of Pr. Garron that gout is characterised by deposits of urates in different joints and other organs of the body, and the existence of uric acid in the blood of the patients and we also perceive, that the single paroxysm generally ends by the secretion of a large quantity of urine very rich in uric

acid.

The question whether this surplus of uric acid is a consequence of overformation or of retention of urea in the body is not answered with perfect certainty. Both seem to be true, at least most of the patients live in such a way that we may presume an overformation of uric acid. Gout is never found in poor people, it is in an eminent sense a fashionable disease. We see it arising principally in such persons as indulge in the pleasures of the table and are accustomed to drink the stronger wines, wines rich in alcohol. It is known that the custom of taking drinks rich in alcohol easily produces affections of the mucous membrane of the kidneys, and it seems that, if at a moment, where an unusually large amount of uric acid has been formed in the body, an accidental catarrh of the urinary organs takes place, the secretion is so impeded that a gouty paroxysm arises; it is very common at least for such a fit to occur after an excess in strong wines, which produces most easily such catarrh of the kidneys.

To sum up the above we may say: if in consequence of an abundant supply of food rich in nitrogen and the customary use of strong alcoholic drinks en one side and in consequence of not sufficient exercise and insufficient consumption of these substances on the other side, a great disproportion between income and expenditure has taken place in many cases an overproduction of uric acid will be the result. If at the same time by accidental affections of the urinary organs this surplus of uric acid be prevented from being excreted from the body in the natural ways, there will under certain conditions hitherto not yet known, gout in the body of the affected person. If we remember now that our wells accelerate the metamorphoses of the body so as to compensate to a high degree disproportions between income and waste, if further they increase diuresis and prevent therefore obstructions in the kidneys, and if we keep in mind that by the use of these waters the quantity of excreted uric acid is increased and not only in proportion to the greater quantity of urine, we can easily understand how these wells combine all qualities required to enable them to act as a powerful antagonist to the causes which produce gout.

The results which have been obtained here in incipient gout are really surprising, and several physicians are able to prove that some patients whom they have attended for years, have been entirely and radically freed

from gout.

On this occasion I would like to make a few remarks on the treatment of gout with regard to the choice of a spa. It is a custom frequently kept by English physicians as well as french or belgians, to send their patients who have recovered from gouty fits first to the thermal waters of Aachen, Wildbad or Wiesbaden and to recommend to them an aftercure in Vichy, Carlsbad or here. Now this is decidedly wrong. Most physicians here, and I am sure in other spas also, have frequently made the remark, that patients coming here from these thermal baths generally experience bad re-

sults; or that it takes them a longer time to recover. Whether it be that by the effect of the warm water and by the more copious secretion of the skin produced by these baths, the diuresis is reduced, or whether from some other cause; the fact is, that most patients, who after having overcome attacks of gout during winter or spring, come to thermal waters directly, suffer from severe attacks of gout again during their stay at these watering places, and that it takes them weeks, to come back to the same state of health, they had at their departure.

It is quite different if they take the reverse way. First the system must be freed here, or at another similar place, from the gouty tendency and only then the thermal baths will develop their full benefit in taking away the local remains of the fit and reestablishing the

mobility of the joints.

In most cases I would not allow a gouty patient, to take baths even here before he has taken the waters for a fortnight or 3 weeks; and I am sure that many patients would come home in a better state of health if this fact were better known elsewhere and principally in

England.

It is natural that those patients derive the same benefit from our waters, who are not suffering from regular attacks of gout, but more from those indistinct symptoms which are generally characterised in England by the expression that gout is in the system; such as dyspepsia, heartburn, constipation and a scanty dark urine; it must be stated however, that by far the greatest number of these cases cannot be considered as suppressed gout; but that they generally are the result of the same causes which after a longer action, produce gout; namely a wrong way of living and an abnormal nutrition of the body.

In the cure of recent gout it is principally the Elisabeth well which is used; in cases of long standing where the patients are much reduced in strength, we often apply the Luisen and Stahlbrunnen with the greatest advantage, and most physicians in Germany agree now,

that such cases are better fit for the ferro-saline waters, which at the same time have a resolvent effect and thus a direct action upon the disease than for the mere chalybeate waters.

# 2º Insufficient nutrition, chlorosis, anemia, general debility.

There is no doubt that chlorotic affections may be entirely cured here; still the cases of genuine chlorosis are and quite rightly sent by preference to the pure steel wells, such as Pyrmont or Schwalbach. It is different with a large class of cases where the anemic or hydremic quality of blood is not idiopathic, but combined with other morbid conditions which require at the same time resolvent remedies.

We have seen that most diseases of the tract of digestion finally produce an anemic state; these patients are sure to be benefitted by our waters, it is the same with those persons, in whom swelling of the mesenteric glands or severe affections of the liver and other exhausting ailments have produced an abnormal condition of the blood.

We see here every summer a great number of ladies, who without being really unwell do not feel so strong as before. The exigencies of fashion, a trying season in London, or unusual corporeal and mental efforts have pro-

duced in these patients a kind of anemia.

The muscular strength diminishes, they feel easily tired even after a short walk, they complain about pains in the back and limbs, and at the same time they generally suffer from irregularities of the alvine evacuations, frequently also from irregularities of menstruation, which appears either too seldom or too much.

These patients are sure to be cured entirely in a relatively short time if the water be administered in a proper way and with certain cautions. Unfortunately this is frequently not the case. Many of these patients

do not feel unwell enough to consult a physician, considering the constipation the principal and fundamental ailment, they begin to try by their own fancy the Elisabeth or the Kaiserbrunnen and are astonished that they become worse from day to day, in spite of the daily increased doses of water they take.

It is a remarkable fact which should be appreciated more then it has been done up to the present time, that in anemic or chlorotic patients all saline waters and even waters where the salt only is prevalent such as the Elisabeth and Kaiser, have very little or no aperient effect, on the contrary, if constipation has existed for several days before the use of the waters, it is sure to get worse. Even strong doses of bitterwater or aperient medicines have in such cases only a momentary effect and the confinement of the bowels comes back immediately the first action is over. Here the anemic quality of the blood is the reason not the consequence of the chronic constipation, and with the amelioration of the blood these waters get back their aperient effects and the constipation yields in the same proportion as the blood recovers its normal quality. These patients require first a preliminary course of Luisen or Stahlbrunnen or steel medicines, and then, when the morbid quality of the blood is compensated by the iron introduced into the body, the Elisabeth and Kaiser will develop their beneficial effect on the disturbed digestion and the strong ozoniferous air of our mountains will soon accomplish the perfect recovery. We find this form of poverty of blood not only in ladies, but also and very frequently in those gentlemen who are obliged to keep very close to trying mental work.

Tradesmen who have to manage business of large extent, lawyers who are obliged to spend the greatest part of the day in their offices, learned men who devote a part of the night to their studies, very frequently get affected by the symptoms above mentioned. To these patients a stay of 3 or 4 weeks in our charming valley

with its pure air rich in oxygen and with its beneficial wells promises a certain recovery, and will allow them, to go back to their occupations with new strength and

increased faculty of working.

I must add here a few words on an interesting point, which frequently induces patients to chose a wrong well, if they drink the waters without medical advice; I mean the alternating effect between extreme corpulency and poverty of blood. We see these two morbid conditions frequently combined and more especially in ladies.

If such a patient of a high weight of the body, with a bright complexion begins to drink the waters by her own fancy, she considers it natural that against corpulency a strong aperient water should be taken and so she begins with the Elisabeth and is amazed to find no effect and no result. Frequently it happens that extreme corpulency prevents to such an extent the action of the heart and the circulation of blood that anemia is the result. Such a patient must either begin with one of our steel wells which notwithstanding always include a resolving effect, or she must take iron with the Elisabeth and then she will soon feel the improvement.

On the other side it is well known, that ladies who have undergone small losses of blood for a longer time acquire an inclination to become stout. We find this condition not seldom in ladies suffering from fibroids and I am much inclined besides to believe that the increase of weight, we frequently find in ladies nursing their children a long time depends more on a slowly arising anemia then on the greater quantity of food which they take at

that time.

# CHAPTER VII.

3º Infections of blood, tropical diseases, (malaria, liver enlargement, chronic diarrhoea) and their consequences.

Speaking about the climate of Homburg we have already mentioned, that it represents a most powerful remedy against the consequences and remains of tropical affections; we have to examine now how far our wells can act as an adjuvant to this climatic influence.

We know by a former chapter that malaria never arises in the spot; in fact in recent cases of ague, a stay in our mountain air is quite sufficient to remove it; but in more severe cases, when malignant malaria has enlarged the spleen to a considerable degree, when in consequence of the affection of this organ so important for sanguification a morbid quality of the blood has been produced we must have recourse to our waters. A regular course of Elisabeth will soon diminish the size of the spleen, and in the thorough application of the Luisen and Stahlbrunnen we have a powerful remedy to recruit the morbid quality of the blood.

We have had sufficient opportunity last year to prove the influence of our watering place against remains of malignant malaria; many of the brave officers who had sacrified their health in the deadly climate of the Gold coast, came here to seek relief from their sufferings, and we had the pleasure to see in a few weeks the colour of health returning to their pale checks, and to see them leave our place with restored strength; as far as I remember no failure had to be complained of. More frequent perhaps and certainly just as fatal are the cases where a long residence in the tropics has produced a chronic diarrhoea which obstinately resists all treatment as long as the patient remains under the influence of an inimical climate. Nutrition suffers most severely, the patients lose their appetite, get pale and grey looking and the weight of the body diminishes in a remarkable manner.

In these cases the Elisabeth well, taken in small doses has a surprising and speedy effect. The digestive effect of the water shows itself soon by recovery of appetite, the abnormal production of the mucous membrane of the bowels diminishes from day to day, and the patient feels his former strength coming back in the same pro-

portion, as his weight increases.

Abstractedly from the severe liver diseases which arise frequently in the tropics from the same causes as chronic diarrhoea, namely from severe attacks of dysentery we find a form of enlarged liver not complicated with any real anatomical derangement of that organ. Perhaps the fact that the skin constantly covered with moisture is not able to fullfil its destination as a respiratory organ, perhaps also the relaxation of the organ in consequence of the great heat is the reason of this affection, certainly it is sufficient to put the affected person out of health.

Sluggishness of the liver with its disturbances of digestion, sometimes even jaundice is the consequence.

This affection yields quickly and surely to a course of our waters. Finally we must mention that frequently we see general disturbances of health follow a long residence in hot climates, although it is not possible to

find out a derangement of any particular organ.

The relaxing effect of a constant heat never interrupted, the necessity of avoiding brisk exercise, perhaps also the custom of fighting against the weakening effect of the climate, by strong and very exciting stimulants, produce frequently a general want of strength and of muscular energy, although the patient never has been

really ill; in ladies we observe in these cases nearly always profuse menstruation, without any affection of the abdominal organs. These cases also seem extremely

suitable for our spa.

I cannot finish this chapter without expressing the wish, that the fact, that our watering place gives relief to almost all curable consequences of tropical diseases should be more known, than it is even now. If any where help can be found it will be here where a most happy alliance of curative means gives a patient every chance of recovery. They are brought under nearly opposite climatic effects, to those in the tropics; instead of a constant heat, they find a moderate temperature with cool refreshing nights, instead of a damp misty atmosphere, they breathe a dry, vivifying constantly moved air; the soil takes up humidity very quickly and never exhales poisonous vapours prolific of diseases. The happy composition of our waters promises recovery to the morbid organs; the wells rich in salt and carbonic acid, will develop their resolvent effect on the enlarged and inactive organs, while the tonic power of the iron contained in it will restore sanguification and give back strength to the relaxed muscles, in one word, theoretic reasons as well as practice promise a sure result to those patients who in the service of their country have been obliged to run the risk of a longer residence in hot climates.

With these ailments we finish the list of diseases indicating the use of the Homburg waters; many others have from time to time been enumerated, but I wish to mention no one, where either the result is doubtful, or where other spas promise quicker or surer success.

# CHAPTER VIII.

Directions for the use of the waters — time of the year most suitable for a course of Homburg waters — time of the day at which the waters should be taken — no general rule possible for the quantity which is required — cautions to be observed — causes why the waters sometimes have no effect — necessity for a patient to put himself under medical control — if the use of medicines is to be allowed during a course of waters — how long the water should be used.

### How the waters should be properly used.

I he time at which a patient uses our wells, generally depends not only on medical advice, but frequently on conditions to which the patient is subject. Our season, the time which has been fixed by custom and practice for the use of mineral springs, extends from the beginning of May to the end of October. Still there is no necessity to keep strictly to this time; many patients for whom a course of the wells is imperatively necessary, would do well to come sooner. The weather is generally good from the middle of April, so that patients coming from northern climates can very well begin their course at that time. Patients on the contrary, who have spent the winter in Italy or still more southern climates should not come here so soon, as for a number of years, the first part of May has receded in temperature, and has been characterised by a number of wet days. From the middle of May the weather gets settled, and this early time can be highly recommended to all those who can choose their time by their own fancy. The wells are richer in water, the mild temperature allows all kind of exercise, the fresh and new green of our gardens and

forests makes the scenery still more lovely and acts most beneficially on mind and body.

There is besides the advantage that the place is not yet crowded and that lodgings can be chosen according

to the taste of the visitors.

Good weather continues with few interruptions till the middle of October; after this time the mornings are rather cool and sometimes damp; patients are obliged to take the waters later and the evening coming on so soon, forces them to go back to the shelter of the

houses; and makes the stay less agreeable.

Concerning the time of the day, it is considered as a rule, but a rule which has many exceptions that the waters should be taken in the morning fasting. There is no doubt that the waters are more quickly absorbed and more easily digested, if they are taken before breakfast and all patients with sufficient strength, who desire a stronger effect either on the bowels or the system, such as persons affected with habitual constipation or the commencement of gout will do well to take them at this time of the day (the general hours are from 6-8 or from 7-9).

But as I mentioned before, we are obliged to make many exceptions; principally with english patients and more especially with ladies. English ladies in generally are not accustomed to rise so early, and certainly they are not in the habit of leaving the house so soon. A walk before breakfast is decidedly much more trying than a walk of twice the distance in the afternoon and it is easy to be understood that a patient with not sufficient strength, who imagines that the waters should by all means be taken fasting, who after losing a part of his sleep, takes a walk of an hour or more on an empty stomach, will come home, as we frequently see, in a state of perfect exhaustion, so that he is obliged to lie down for several hours, before he is fit for any occupation. If this be continued for several days, the patient will suddenly be aware of an entire loss of strength and will be obliged to interrupt the course of water for some time. In order to avoid this disagreeable event I advise all

patients who come here with reduced muscular strength or in an anemic state, to take while dressing, half a cup

of tea or coffee with a little biscuit.

This small amount of food is without doubt digested before the patient begins to drink, it can by no means prevent the action and effect of the water, but it is quite sufficient to give a certain force of resistance to the body and prevent the feeling of perfect exhaustion. Besides I allow all those patients who drink our steelwaters, to take a real breakfast, of course a light one, at their usual time, and to drink the Stahlbrunnen several hours later, as I imagine that the advantage from the stronger action of the water if taken fasting, is by no means proportional to the risk they run by overstraining their powers already considerably diminished. Very weak patients or those who are exhausted by illness or severe losses of blood must take the water in bed, till the increase of muscular strength allows them to walk to the wells without any risk.

As a rule it will be sufficient if a patient drinks the quantity of water prescribed to him once in the morning; in deeply rooted affections however, and in those cases where we want to introduce a large quantity of water into the system, we are obliged to recommend the patient an additional course of water in the afternoon, either of the same well he takes in the morning, or of a weaker one. It is principally the Ludwigsbrunnen which is used for this purpose, and the best time will be from 4—5, consequently before dinner for those patients who dine at 5, and sufficiently long after dinner

for those who take their meal at one.

The quantity of water which a patient must drink to attain a result varies extremely from 3-30 ounces a day, according to the nature of the ailment and to the

constitution of the patient.

Generally speaking from 2-4 glasses (the glass contains 6 ounces) taken once in the morning will be the ordinary dose of the waters of a more resolvent effect, Elisabeth and Kaiserbrunnen.

The water should be sipped and gentle exercise resorted to after each glass, in order to digest the water properly. The peculiarities of the administration, division of one glass into several parts, shorter or longer walks must be prescribed by the physician according to the nature of each case, and it would be useless to enumerate the numerous variations which sometimes must be made in the manner of drinking the waters. I shall content myself with giving two warnings, the one is not to exaggerate the exercise to real fatigue while drinking; the second not to try to force a result by drinking too much. It is a fact that most patients are inclined to drink too much, because they have a wrong idea of the way the waters act. We have seen already in a former chapter that the aperient effect is not the only, not even the principal one, and that it is wrong to estimate the efficacy of the waters in proportion to their laxative effect. In the numerous cases for instance where we intend the waters to have a stimulant effect on digestion. we are obliged to give them in small doses, so that they may be entirely absorbed, and are able to act on the whole system. Larger doses would in such cases by acting too quickly on the bowels remove a part of the fixed components of the waters, and they would (so to sav) have no time to develop their beneficial effect on the system. It is different in those cases where we have to remove obstinate obstructions.

We recommend then larger doses in order to produce several liquid motions. Now it happens frequently that even 3—4 glasses have not the desired effect. It is perfectly wrong to try in such cases to force the effect by increasing the quantity of water to an unreasonable amount 6 or 8 glasses as it frequently has been tried by patients. The result is always a bad one; in a few cases an evacuation will finally take place with violent pains; but in most cases the constipation will only become more obstinate and severe inflammation of the bowels may be the result. The right way then is to

find out the reason why the waters refuse their effect, and this will nearly always be possible.

One of the principal causes is poverty of blood. We have spoken about this matter in previous pages. Another

reason is the low temperature of the air.

In cool weather the waters act a great deal more on the kidneys, and in the same proportion the effect on the bowels is diminished. It is easy to correct this fault by drinking the water warm, a measure which always should be adopted in cold weather, even in order to pre-

vent striking cold to the stomach.

Finally a constipation which has existed for several days before the beginning of the cure, will generally prevent the regular action of the waters. In such cases the cure must be begun with an aperient dose. brings us to the question if the use of medicines is to be allowed during the course of the waters. We must decidedly answer in the affirmative. All mineral waters represent very compound medicines in which the efficacious substances exist in very small quantities; and as the diseases for which they are employed are mostly of long standing it seems natural that the waters should require some time to act on the system; it appears therefore most reasonable to assist the effect of the waters by very mild aperients taken in the evening or by additional employment of the natural salt of the well; in a short time these expedients may be given up, and the waters will act alone on the body when once accustomed to regular evacuations. In some cases even it may happen that during the stay of the patient here, evacuations will never take place without the help of medicines and that nevertheless the motions become quite regular when the patient has returned home. Many letters from patients who have felt the benefit of the water only after coming home, have proved to us the possibility of such a fact, which is generally called the aftereffect of the waters.

Where the ailment is really suitable for our wells and where the drinking is done in the proper way, the

waters will nearly always agree with the patient. Increase of appetite and a feeling of comfort and health generally proves this to be the case. A symptom which sometimes frightens patients, is the feeling of more or less giddiness immediately after drinking the waters. This arises as we have seen very likely from the large amount of carbonic acid and can be avoided if the water is taken warm or well shaken before drinking. It must be stated however that this expedient should not be employed without necessity as the waters doubtless become less digestible if the gas be expelled.

On the contrary a feeling of pressure in the stomach, loss of appetite and severe headache will prove that the waters do not agree and therefore require a thorough examination of the patient by a physician well acquainted with the effect of the wells. He will either be able to remove these disagreeable symptoms by changing the method of drinking or advise the patient to discontinue the course of waters altogether.

After a certain time which varies extremely, every patient will feel a repugnance against the waters, should he even have taken them hitherto with pleasure and good results. We call this the period of saturation and advise the patient either to stop the use of the waters altogether, if a sufficient result has been obtained, or if this is not the case to interrupt the course for 5 or 6 days; after this time the waters will generally again agree quite well with the system.

It is of course impossible to give a general rule how long patients should take the waters; this depends entirely on the nature of the ailment. The greater number of patients stay here from 4-5 weeks. This time may be sufficient for slight affections of the organs of digestion, in most cases it will be too short. Certainly 4 weeks seem very little to remove chronic diseases which frequently have been as many years in their development. In deeply rooted affections it may be necessary to take the waters for 2 or 3 months, or to begin

the cure in spring, to interrupt the course in summer for a few weeks and to take it up again in autumn.

Certainly in ailments in which the whole system is affected, such as corpulency, chronic constipation or gout, the patients should by all means try to repeat the course for several years, in order to have a real and lasting effect.

Whether it may be necessary to join to the use of our wells an additional course of other mineral waters depends upon circumstances, and can only be determined according the particular case; but in all cases it seems reasonable that the patients should not immediately after having broken off the use of the water resume their former style of living, but that they should follow for some time the regimen they were subject to here.

Besides I advise them mostly to take for some days one or two glasses of plain spring water in the morning, because the sudden withdrawal of a quantity of liquid to which the body was accustomed for several weeks will in the most cases, without that caution, produce a dis-

agreeable constipation.

Finally I must mention one point, which I am afraid is but too frequently neglected. It is not sufficient that a patient consults a physician once at the beginning of the cure; in all serious or inveterate cases it seems absolutely necessary that he puts himself under a real medical control during the whole time of his course.

We have seen that the method of employing the waters varies very much; sometimes a slight change in the manner of drinking will be sufficient to remove disagreeable symptoms and to secure a good result; while patients will spend useless time and money if they try to continue in the way they have begun, or if they endeavour, what is worse to make changes according to their own fancy.

# CHAPTER IX.

Diet to be observed during the course of waters

the time at which meals should be taken,
what kind of nourishment should be taken drinks
smoking synoptical table of nourishments allowed or forbidden here.

#### Regimen to be followed during the course of waters.

It is a matter of the highest importance, we begin to speak of now; nobody indeed will deny that a course even of the most efficacious waters, may or rather will be perfectly useless, if the patient continues to live in a manner which is perfectly fitted to counteract all the sanitary effects of the wells; more especially it seems natural that in a watering place where the greater number of patients are suffering from affections of the tract of digestion, or from disturbances of nutrition, it is a "conditio sine qua non" to follow a diet compatible with the rules of health and with the character of the wells.

Of course it is perfectly impossible to give a common schema for diet which could be followed by all patients; the singularities of the regimen are prescribed by the character of the diseases and vary so much, that we may be obliged to prescribe quite the opposite diet to two different patients. We may for instance recommend to a person of great corpulency to live strictly on animal food, while we are obliged to forbid the same kind of nourishment to a gouty patient, drinking exactly the same quantity of water.

I shall therefore content myself with pointing out some general rules, which are determined either by the

character of the wells or by the customs of the country, to which the patients belong.

This seems especially necessary for English patients, whose manners of living differ in many points from ours; to my opinion it would be entirely wrong to compel an English patient to live in the same way as an Italian or an inhabitant of the south of Germany.

The principal questions a patient generally advesses to his physician are these: what shall we drink, what shall we eat, and at what time shall we eat.

To begin with the last question, we may be brief about the breakfast; generally it will be taken, when the patient has returned from the wells; but it is necessary to remark that certainly an hour should have passed away, between the last glass of water and the meal, so that the waters are entirely and thoroughly digested.

As for dinner time it seems proper that English patients who are accustomed to take their principal meal late in the day, should take dinner in the afternoon about 5 or 6, the hours which are generally kept here; lunch and supper are either reduced to a very small quantity or by the greater number of visitors given up altogether. Now this can be only allowed with many exceptions. Persons of reduced strength, or persons suffering from stomach diseases generally will do better to eat more frequently during the day, and not so much at once; especially I advise such patients to take a light supper at about 9 o'clock. The time from 6 or 7 till nine or half past 9 the next morning appears certainly too long, and I have often made the remark that sleeplessness takes its origin from that custom. A light supper or even a glass of wine with a roll or a few biscuits have frequently been sufficient to remove that disagreeable symptom.

Concerning the quantity of meals I allow English patients, quite different from German to take a full breakfast if the waters have been taken fasting; this may con-

sist of tea or better coffee, toast, eggs and lean meat; butter and all fatty aliments especially bacon and fat ham should be avoided.

I know very well that many physicians would not allow such a breakfast, nor would I do so in German or Italian patients, but experience has taught me, that English visitors who as before mentioned, generally take no supper or but very little, and who besides are accustomed to a much more copious breakfast then we are, not only support this regimen very well, but even they require it. For the same reason I allow tea during the day and in the evening. If possible it should be avoided at breakfast except by those persons, who by taking coffee or cacao get indigestion.

As for dinner it should not consist of too many dishes. I allow soup, any kind of seafish, except lobster, all joints except pork; venison and any fowls with white flesh; besides cooked fruits of every kind. Pastry, sweets and salads should be avoided except lettuce and endive.

Of vegetables all kinds of cabbages are strictly prohibited, cauliflower, young peas and beans may be taken as well as potatoes, especially when mashed.

Raw fruits should be avoided as a rule and most physicians do not allow any of them. I have always made an exception with strawberries and grapes, in fact I never saw a bad effect from the use of these fruits, and so I do not see any reason to deprive patients of this agreeable and cooling nourishment; on the contrary I often found a moderate use of grapes to be a powerful adjuvant to the waters if properly taken during the day and not too soon after the waters.

Lunch and supper should consist of aliments very easy of digestion, chicken or cold meat with dry bread

will generally be sufficient for it.

For the better information of patients I will give at the end of this treatise a synoptical table indicating the special nutriments allowed or forbidden here.

As for drinks it must be stated first of all, that our dry invigorating climate by no means requires the use of strong stimulants. All physicians here agree that patients should not be allowed to take spirits of any kind, and I confess that I have never been able to understand why in England some patients are allowed to take gin

or whisky, but by no means brandy.

As for wines, we are obliged to indulge to some degree the taste of our English visitors, who, accustomed at home to the strong and sweet southern wines, such as Sherry or Port, think all our wines sour even when they are really good. In most cases I recommend therefore a good light claret; for those who like white wines, the better wines of the upper Moselle or Ahr are advisable. A good dry Champagne may generally be recommended, but for gouty patients it is strictly prohibited.

There is generally no reason why patients should not take a glass of light well-made beer; especially the quality known by the name of Bohemian or Pilsner Bier, is easy digestible and well supported even by a stomach of weak digestion; Porter or Ale on the contrary is too

strong and does not agree with the waters.

Finally I can not avoid remarking that nearly all English visitors drink wine too quickly and that by this custom they not only lose the benefit of the beverage, but even that they produce disagreeable symptoms. Good wine should be taken in very small draughts; if a patient takes half a glass or a full one at once, reaction comes on too quickly, digestion is disturbed, and flushing of the face and a feeling of oppression is the necessary consequence.

The same disagreeable symptoms may easily arise if ice is put in drinks. There is no objection to cool the beverage by putting it into a vessel filled with ice, but icewater or wine with ice, when taken with warm meals

is nearly sure to injure the stomach.

I must not omit a question frequently asked by patients; the question if smoking interferes with the use of the waters. There is no doubt that moderate smoking is not injurious, especially as all our English visitors

are in the habit of smoking Havannacigars but on the other hand it is certain that excessive smoking may most severely disturb digestion. It seems that especially smoking strong cigars immediately after breakfast has this effect. Besides other disagreeable symptoms which may arise, I have seen several cases where such intense palpitations of the heart have been produced by abuse of tobaco that the patients finally imagined, that they suffered from a real organic disease of the heart.

# CHAPTER X.

The baths — the new Parkbad a most excellent remedial agent — the grosse Badhaus — plain mineral baths — the additional use of medical substances — motherlye — pineneedle extract — indications and counterindications for the separate classes of baths — time of the day most suitable for bathing — cautions to be observed.

#### THE BATHS.

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Till very lately, many foreign physicians used to blame, and with some reason our bathing institutions. This reproach is no longer justified, since we posess in the Park Bad an establishment which entirely answers all exigencies. This new bathing house was erected in 1871 in the immediate vicinity of the wells, the water of the Kaiser and Ludwigbrunnen is introduced into it in closed tubes, so that it passes into the bath by its own pressure and has no communication with the air. It is then heated by passing steam between the double walls of the bath which raises the water to the designed temperature.

This manner of preparing the bath is so perfect that only a very insignificant quantity of the carbonic

acid and the iron is lost.

As soon as the water gets warm it begins to effervesce, and this continues as long as the water is warm, so that the skin of the bather is covered with thousands of bubbles of carbonic acid, which produce a most agreeable sensation.

At the same time the iron walls keep up the temperature so well, that the bath loses not quite a degree of warmth in one hour. Many patients feel disappointed that the water looks darkish and not limpid; this appearance however is only a proof of its efficacy, and depends on a quantity of iron which is not entirely in solution, but partly suspended in the water. These baths are very much liked by our visitors and have prooved extremely useful in many cases.

The tonic effect is so preponderant in them, that they may be looked upon as a steel bath, very rich in carbonic acid. It seems therefore not only useless, but perfectly wrong to alter the specific character of these baths by medical addition. Without any alteration they are principally useful in all cases of poverty of blood and muscular debility, and if administered in the proper way, do by no means weaken a patient, even if they are taken pretty warm.

However they should never be taken without medical advice, because they are so exciting as to be dangerous to some patients.

All very excitable persons and all those who are subject to congestions of the head and chest, besides gouty persons do not seem to take them with advantage.

The grosse Badhaus which has existed for many years is in the immediate neighbourhood of the Kursaal, it has been renovated and ameliorated in several respects. Here as well as in some private establishments are given besides fresh waterbaths, mineralwater baths plain, mineralwater baths with medical additions, of which two principally are remarkable, namely motherlye and extract of pine.

The plain mineral baths are applied where more a resolvent then a tonic effect is intended.

The addition of motherlye increases the resolvent effect of the saline baths and has proved useful in scrophulous diseases and cases of torpidity of the tract of digestion.

The use of pine extract has been much extended in the last few years. It is prepared on the spot from pine needles, supplied by the large pine forests which cover the Taunus mountains.

The extract generally used is a composition of pine needle oil, the result of destillation and of a decoction of

the pine needles.

These baths of a strong aromatic smell, produce a most agreeable sensation on the skin and have proved extremely beneficial in all rheumatic affections and in all cases of torpidity of the skin. They render the skin soft and inclined to perspiration, and reestablish in a remarkable short time the activity of skin, so necessary for health.

Besides they have a decided tonic and soothing effect on the nerves, and many delicate patients for whom the Parkbad is too strong, use them with great success. On account of this specific action on the skin, caution is especially required after the use of the baths in order to avoid cold.

The use of baths in general is indicated in the greater number of diseases suitable for our place; especially

in affections of the tract of digestion.

They make the distribution of blood more equal by regulating the circulation and have a decided beneficial effect on digestion, so that they most powerfully assist the internal use of the waters.

Concerning the time at which the baths are generally taken, it has been the general custom to use them between 10-12 or 1, a custom which produced much inconvenience, because the baths naturally are overcrowded at that time. There is however no reason to keep

strictly to these hours.

I advise most patients to whom the Parkbad is recommended to bathe directly before or after taking the waters, consequently early in the morning, as the time which patients have to spend between the use of the waters and breakfast is quite sufficient for bathing and experience has taught us that even delicate persons bear such an early bath very well, by reason of the tonic qualities of the water.

In hot weather, patients feel it a benefit, not to be obliged to make the pretty long walk to the wells a second time, besides the advantage, that they finish their cure in the early hours of the morning and can spend the rest of the day according to their own fancy. Very delicate persons, to whom an early bath appears too trying, or who have to take the waters later, would do better to bathe in the afternoon before dinner at 4 or 5 o'clock, as it is a matter of experience that very weak or nervous patients will generally feel much better and less exhausted in the afternoon than in the morning.

For the use of the plain baths of mineral water or pineneedle extract which generally are taken at the grosse Badhaus or in private establishments situated in the town, the hour from 10-1, appears very suitable, but it must be remarked that in no cases should baths be taken sooner than two hours after breakfast. Bathing before digestion is finished, nearly always produces nausea

and has a bad effect on every body.

The peculiarities in the administration of the bath, the temperature, the duration and the quality and quantity of additions must be determined for each patient according to the nature of his ailment.

# CHAPTER XI.

Some other remedial agents which Homburg offers to its visitors — the goats whey — the gasbad — the two hydropathic establishments — Homburg not only a sanitary station but also a healthy and agreeable summer-residence.

Of other sanitary establishments at Homburg we have to mention:

1° The establishment for preparing goats whey. It is under the direction of a native Swiss and furnishes excellent whey prepared from the milk of goats kept only for this purpose. The whey is taken either pure or mixed with our waters and has proved beneficial in some affections of the stomach and bronchial tubes.

2" The Gasbad near the Kaiserbrunnen.

3" The two cold water establishments. The elder one, the Pfingstbrunnen, is situated ten minutes walk from the town on the road leading to the mountains, and is well known to visitors who come here regularly; the second one was established two years ago by Pr. Zimmermann, and is fitted out in a most perfect and suitable manner, especially with regard to douches. An orthopedic establishment under the direction of the same gentleman is connected with it, and has had remarkable success during the short time of its existence.

We have seen in the course of this treatise that Homburg offers a great many curative means to those who come here to seek relief from their ailments, but at the same time we must state that it furnishes a great many advantages to those who only look out for an agreeable and healthy summer-residence. Much stress has been always laid here upon the fact that sources of amusement and interest should be easily attainable as well for the invalid, who often comes here in low spirits, as for

healthy visitors who only seek amusement.

A walk to the highly interesting ruins of the Saalburg, an ancient Roman fortification, or a game at cricket in the large fields, especially provided for this purpose, will be a pleasant diversion for those who like brisk exercise, while to others the Kursaal, one of the largest in Europe offers all the amusements they can find at any watering place. An excellent musical band performs three concerts a day, while during the season a number of fêtes enliven the town.

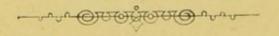
Homburg has been thoroughly well drained, during the last few years, a great deal of planting has been done at the same time and numerous roads and paths traverse in all directions the crescents and parks inviting

visitors to agreeable and healthy walks.

The public health is excellent during the summer months, and the rate of mortality is as low as 18 per thousand. The situation of the place in the middle of Germany facilitates highly a visit to our charming spa; it can be reached from any of the capitals of Europe in

twenty hours or less.

The civil authorities, into whose hands the administration of all the establishments passed two years ago, do every thing to render residence here as agreeable as possible to strangers, and so we may hope that visitors will find more and more at Homburg the advantages and conveniences which constitute a favourite watering place.



# SYNOPTICAL TABLE

of the separate wells

showing the contents in one pound — 7680 grains of water.

In 7680 grains are	Elisabeth- brunnen.	Kaiser- brunnen.	Ludwigs- brunnen.	Luisen- brunnen.	Stabl- brungen.
Chloride of sodium	75,73171	55,11959	39,31546	23,82958	45,92784
,, of potassium	2,65935	1,92998	1,80872	0,68552	1,90084
,, of lithium	0,16612	0,11589	0,07956	-	0,09216
., of ammonium	0,16811	0,11520	0,03924	0,07196	0,10060
,, of calcium	5,27900	4,20887	3,59823	-	3,82233
,, of magnesium	5,59764	3,22268	2,87462	0,064512	2,42427
Iodide of magnesium	0,00023	0,00015	0,00008	- 98	0,00007
Bromide of magnesium	0,02196	0,00184	0,00430	-	0,00400
Nitrate of potassa		-	0,02127	4 -	12001
Sulphate of lime	0,12902	0,11827	0,09585		0,02841
,, of baryta	0,00768	0,01436	A CONTRACTOR OF THE PARTY OF TH	-	0,00322
,, of strontian	0,13640		-		0,08140
,, of potassa			-	0,26910	0,01382
Bicarbonate of lime	16,71721	10,20988	8,80789	7.40451	7,98950
,, of magnesia	0,33178	0,55988		0,50602	0,71808
,, of protoxide of	0,24545	0,24822		1,46813	0,75571
iron	1,9				
Hydrate of oxide of iron	_	_	0,01544	-	- 14
in suspension					
Bicarbonate of protoxide	0,01613	0,01636	0,01306	0,01966	0,04300
of manganese					
Bicarbonate of protoxide	- 9		-	-	-
of Kobalt-Nickel					
Bicarbonate of baryta	-			0,00169	Edward St.
Phosphate of lime	0,00723	0,00422		0,00768	
Silica	0,20237		0,09492	0,15437	0,13132
Total of solid ingredients	107,41739	75,99913	57,24772	35, 6334	63,92085
Free carbonic acid	14,98053	Control of the Contro	A STATE OF THE PARTY OF THE PAR	14,53426	15,68947
Sulphuretted hydrogen	11,0000	0,00123		0,01121	0,00514
	199 30709		-	49,60881	79,61546
Total of all ingredients	122,39792	31,61144	11,0:019	10,00001	10,31010

# SYNOPTICAL TABLE OF NUTRIMENT

# 1º ALLOWED NUTRIMENTS.

#### Meats.

Beef in every form.
Veal.
Mutton.
Venison.
Fowls with white flesh.

#### Fish.

All kind of seafishes except lobster. Trout. Pike.

## Vegetables.

Carrots.
Asparagus.
Cauliflower.
Young peas and beans.
Potatoes.

## Puddings and sweets.

Rice and Sagopudding, soft eggs.

#### Fruits.

All sorts of cooked fruits.

#### Beverages.

Selterswater and Sodawater.
Coffee, tea, milk, cacao.
Light Rhinewine, good clarets.
Dry Champaign.
Good beer, especially Pilsner.

# LOWED OR FORBIDDEN HERE.

## 2º NUTRIMENTS NOT ALLOWED.

Meats.

Pork. Goose and duck. Fried liver.

Fish.

Eal. Carp. Crabs, lobster. Salmon.

## Vegetables.

Lentils and white beans.
Cabbige.
Salad, truffles and all strong spices.
Cucumber.

#### Fruits and deserts.

All fresh fruits except strawberries and gra pes. Cheese without exception.

#### Sweets.

All puddings except Rice and Sago, especially Plumpudding.

#### Beverages.

All kind of spirits.
All strong wines, Sherry, Madeire, Burgundy.
All strong beers, such as Porter, and Bavarian beer.

# Erratum.

Page 4, 13th line from above, read

"consisting chiefly of clay, well covered with sand especially on the roads and paths"

instead of "consisting chiefly of sand."