Handbook to the health resorts of Switzerland : containing full information for the physician, the healthseeker and the traveller as to all the baths, climatic stations, springs and watering places of Switzerland / by H. Loetscher.

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HANDBOOK

TO THE

Health Resorts

of

Switzerland.

BY

T. LOETSCHER, M. D.

CONTAINING FULL INFORMATION
FOR THE PHYSICIAN, THE HEALTHSEEKER AND THE TRAVELLER
AS TO ALL THE BATHS,
CLIMATIC STATIONS, SPRINGS AND WATERING PLACES
OF SWITZERLAND,
WITH AN ACCURATE MAP
SHOWING THE LOCATION AND MODE OF ACCESS
TO THE SAID RESORTS
ALSO 120 VIEWS, PANORAMAS AND SPECIAL MAPS OF SWITZERLAND.

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HANDBOOK

TO THE

HEALTH RESORTS

OF

SWITZERLAND

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CONTAINING FULL INFORMATION

FOR THE

PHYSICIAN, THE HEALTHSEEKER AND THE TRAVELLER

AS TO ALL THE BATHS,

CLIMATIC STATIONS, SPRINGS AND WATERING PLACES

OF SWITZERLAND

BY

H. LOETSCHER, M. D.

WITH AN ACCURATE MAP SHOWING THE LOCATION AND MODE OF ACCESS TO THE SAID RESORTS, ALSO 125 VIEWS, PANORAMAS AND SPECIAL MAPS OF SWITZERLAND

FOURTH EDITION

ZURICH

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1890

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Artisticale Establishment

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PREFACE.

A few weeks after the publication in German of "The Health Resorts of Switzerland" a second edition appeared, which was a striking proof that this Guide for invalids and health-seekers supplied a recognised want. In response, therefore, to a very general request for an English version, a translation has been prepared of the third, enlarged, and revised edition, which will be published simultaneously with the original.

This "Guide to the Health Resorts of Switzerland" gives a concise, descriptive and popularly scientific synopsis of all the spas and health and summer resorts of Switzerland, special attention being given to climatic and hygienic conditions, dietetic and medicinal methods of treatment, on the principle that only by combining these several factors with the therapeutic action of the mineral springs can the hoped for cure be attained. To enable the physician, and especially the unprofessional reader, to ascertain at a glance the natural characteristics and medicinal value of the numerous health-resorts, and to facilitate a suitable choice for each particular case, the health stations are all printed categorically in the Introduction, together with the diseases for which they are adapted. The hygienic and dietetic recommendations may also prove acceptable to many an invalid, and if conscientiously observed will contribute essentially to the success of the treatment.

EGLISAU, 1887.

Dr **H. LOETSCHER.**

INTRODUCTION.

I.

The Climate of Switzerland.

Switzerland lies on the central parallel between the Equator and the North Pole, is 140 miles broad, and has a superficies of 41,390 sq. km. Situated between the isothermal lines 11 and 130° C., the average temperature is 2° C. in winter, and 20° C. in summer, with a margin for fluctuations of 18° C. in the extreme months of the year.

Switzerland comprises the magnificent mountain ranges of the Central or Swiss Alps which run in a line from west to east, stretch northward between the 46° and 47° degrees of latitude, and in their central portion at the St. Gotthard cross the 46½° degree of latitude; also the opposite low lying range of the Jura which, deviating from the great Alpine chain running from west to east, stretches straight up north east to a latitude of 46—48° degrees; and lastly that extensive middle territory or high plateau between the Alps and the Jura which, extending from the Lake of Geneva to Lake Constance, lies at an average height of 450 metres above the sea level, is very fertile, well watered, and adorned with numerous lakes.

As regards climate the Swiss Alps form the southern boundary of that climatic zone of Central Europe which is characterised by the transition from the marine climate of the coasts of Western Europe to the inland climate of Eastern Europe or Russia. The Alpine valleys, those for example of Canton Ticino, which are open to the south, form climatic oases, and owing to their position—sheltered from the wind and exposed to the south—have quite a Mediterranean character such as generally only prevails some degrees further south. A journey over the Simplon, the Gotthard, the Splügen, the Bernina, or the Stilfserjoch effects in a very short time the marvellous change from the Central European to the Mediterranean zone with its sub-tropical character.

The Swiss Alps are therefore a region of the most striking contrasts, and yet of the most harmonious beauty. Every variety of scenery which our part of the earth can show is presented in this small space. The mountains rise in all their grandeur whether fanned by the dry, balmy breezes

of the sunny south or blown upon by the cold raw winds of the bleak north. All the varied geographical configurations of the Continent of Europe are united in this small area; every kind of climate belonging to this highly favoured quarter of the globe is found in Switzerland in the closest contiguity, and lends to this wonderful country an interest scarcely equalled by any other region so restricted in extent. This diversity of configuration and of climate is most strikingly evidenced by the flora. The profusion of species and the wonderful way in which the flora zones overlap are unique and unrivalled, and make the vegetation of Switzerland beyond question one of the most interesting and remarkable of the whole European Continent.

Besides geographical situation the local accumulation and distribution of heat play an important part in the climate of Switzerland. This depends on the vertical elevation and varied configuration of the country, and is also much influenced by the length and breadth of these elevations, their position, and their angle of incidence towards the sun, wind, and rain; for with the increasing elevation of the ground above the sea level the air strata, which more or less absorb the rays of heat, become more rarefied and their capacity for absorption is reduced, that is to say, the intensity of the sun's heat increases with the altitude. Air saturated with aqueous vapour absorbs the sun's rays much more powerfully than does dry air, and as the moisture diminishes with the height faster than the barometer sinks, so the intensity of the heat increases more quickly than would be reckoned for from the decrease in the pressure of the air. With the altitude radiation increases in the same ratio as the humidity of the atmosphere decreases. In Central Europe, as a rule, the temperature shows a fall of 0,58° C. for every 100 metres of height, with possible local variations of 0,45° to 0,8°; the decrease is least in winter, greatest in summer. On the south side of the Swiss Alps the fall is, according to Hirsch, 0,69°, on the north side only 0,55° C. The variously tempered wet and dry winds have, of course, an important effect on the intensity of the sun's heat on the mountain sides; their effect is on the whole to warm the southern and cool the northern slopes.

The great intensity of the sun's heat on clear days is a notable peculiarity of the mountain climate, and produces a relatively high degree of warmth on the soil; that is to say, the ground becomes very hot in the day-time while the warm currents continue, the process being reversed during the night. This explains the very interesting fact that on clear, still nights the valleys are colder than the slopes and peaks of the surrounding mountains up to a height of at least 50 metres (important for vegetation), while the ground as it rises radiates more heat, and the variously tempered

currents are disposed according to their specific weight, the coldest at the bottom, as long as the stillness of the air permits of this stratification. The practical sense of the people long ago turned this circumstance to account, and many of the farms and villages are built on the slopes, and thus enjoy the advantage not only of less moisture, but of a warmer temperature during the night. The average winter minimum in the valleys is lower than on the neighbouring heights from which the cold air blows freely down; it is lowest in those valleys where an undisturbed accumulation of cold air is produced by radiation, owing to their being shut in from the strong, warm winds from the west.

For example, Bevers in the high valley of the Upper Engadine has a mean temperature in January of —10,4° C., at an elevation above the sea of 1715 M.; ascending the Julier Pass (2244 M.) one finds a mean in January of 8,8° C., and at the Rigi Kulm (1784 M., and therefore almost at the same height as Bevers) only 5,1° C. The respective mean winter minima of the above named places show similar conditions: Bevers, 26,9°; Julier, 23,9°; Rigi Kulm, 18,9° C.; Grächen (1632 M.) in Upper Wallis, situated on a declivity, shows 4,4° C. in the middle of January; Davos (1650 M.), as high as Grächen but quite in a valley, shows —7,3° C.; the mean winter minima for both are —17,3° and —24,7° C. respectively.

In winter during clear, calm weather, when the barometer is at its highest, cold currents of air sweep gradually over the whole area of the Alps Their direction and force are determined by the inequalities of the ground, and like streams of water their tendency is to unite together in gorges and valleys and to converge towards the main valleys through which they flow like rivers along their beds. As the air blows down from these slopes it is constantly replaced by currents from greater altitudes which are warmer than the cold air below and increase in heat as they descend. Sometimes in mid-winter it is wonderfully warm on the heights for a considerable period, while severe frosts prevail in the valleys which, with the low-lying parts, are often enveloped in clouds of fog hundreds of metres thick. On the slopes and peaks, on the contrary, the air is very dry. This phenomenon is most observed during the season of the longest nights, especially therefore in November, December, and the first half of January. "Whoever", says Kerner, "has tarried in the late autumn, that calm, bright season, at some of the farms on the steep mountain slopes, at a time when in the valleys the ground is hard with frost, the leafless branches of the trees are covered with rime, and vegetation is completely dead, while on the heights above the air is mild and summer-like, the green grass plots are decked with autumn flowers, and the sheep are grazing on the pastures, will

readily understand why the earliest settlers built their farms on those hills which were known to enjoy a mild, genial climate in late autumn and winter."

The fluctuations of warmth during the year decrease as a rule with the altitude above the sea level; there are more variations of temperature in the lower than in the higher mountain districts, these latter having rather the character of a coast climate, which is distinguished from an inland or continental climate by a more equable temperature. As a proof of this the following examples will serve; the mean yearly variations are:

Théodule Pass	3339	Metres above the sea	14,4° C.
St. Bernard	2480	" " " "	15,2° "
Rigi Kulm	1780	" " " "	15,6° "
Grächen	1620	" " " "	17,1° "
Coire	603	" " " "	20,4° "
Zürich	480	" " " "	20,8° "
Sils and Bevers	1762	" " " "	21,7° "

But in the decrease of fluctuations with altitude the topographical element must be taken into account. It is important to ascertain whether a place is in a valley or on a mountain slope, as will be seen by a glance at the comparisons given above of the mean variations of temperature on the Rigi Kulm, at Sils, Bevers, Coire and Zürich: for Sils and Bevers show a variation 6° greater than the Rigi Kulm situated equally high, and somewhat above that of Coire and Zürich which are 1200 metres lower. The climate of the valleys, especially of the high valleys, shows greater extremes than that of the slopes, owing to the increased radiation and intensity of the sun's heat in the more rarefied atmosphere in which there is less humidity. Therefore a mountainous region exhibits great varieties of temperature, according as the place is in a valley, or on a slope, or a hill-top, on a northern or a southern slope, and according as it faces east or west.

Next to the elevation of the ground above the sea level the winds are the most important factor in the climate; for "winds not only make the weather, but are themselves the weather". As Switzerland is in the northern hemisphere, the two trade winds, the north polar wind and the equatorial current, are the prevailing forces. The north polar or north-east wind is, in winter, like an inland current, cold, dry and strong, whence it has received the name of the "Bise", while, in summer, it makes the temperature warmer. On the other hand the equatorial, or south-west wind, with its oceanic character, is, in winter, light, warm and moist, and in summer rather cooler than the north wind. Therefore, the slopes inclining south-west or north-west are, generally, the rainy side of a district, where the oceanic moisture gathers in the form of rain, hail and snow. While these slopes enjoy a

warm, balmy, one might almost say southern climate, the slopes inclining northwards are comparatively cold and bleak.

The lower strata of these two ruling currents are modified and carried in various directions by partial, local influences, and often impinge against the mountain sides; whence they partake more of the character of local winds which are frequently caused by excessive heating of the earth's surface and of the atmosphere. The most regular and best known local winds are produced, as has been noted, by the intense heat of the ground or of the strata of air directly in contact with the sun's rays. There may be sometimes observed during the day an ascending current of air, more or less charged with vapour, and often bringing an increase of cloud which towards night gathers into a local storm. This ascending current is called the valley or day-wind. After being cooled in the higher mountain regions, the heavier air, towards night, rolls down the slopes into the valley, where its presence is made known by a lowering of the clouds and a clearly perceptible breeze, called the mountain or night-wind. The regularity and strength of this wind is dependent on the configuration of the ground and the calefactory conditions. Fournet, the most learned investigator of these local Alpine winds, says: "These currents are strongest in, though not peculiar to, valleys; for they pass all over the slopes, and the wind in the valley is only the result of the ascending day and descending night-currents. The transition from the descending to the ascending current is swifter in short, narrow, gorge-like valleys, and slower in wide basins where the ascending day-wind is generally in full motion about 10 a. m., and the descending night-wind is felt regularly towards 9 p. m. The configuration of the upper part of the valleys, together with the hour and season, exercise a great influence on these winds; sometimes they blow more strongly by day than at night, and sometimes by night than by day. The winter with its snow-falls more often induces the night-wind, and the summer, as a rule, the day-wind".

Frequently, the night-wind only is observed, because, owing to its lower temperature, it is more felt than the day-wind, and is, in many cases, too, stronger than the latter. This is especially so where narrow, gorge-like, and therefore cool valleys open out towards wider, warmer valleys or lowlands. These day and night-winds, for which the natives have usually some name, are very similar to the regularly alternating inland and coast-winds in riparian districts and on the shores of the numerous Swiss lakes. To this category belong also the currents which periodically play about the mouth of certain valleys, blowing in during the day, and passing out at night.

These ascending and descending winds are of eminent importance to the whole metereology of the Alps, especially

affecting the daily gathering of moisture and cloud and rainfall. On the mountains they frequently cause rain in the afternoon, and in summer bring afternoon storms when the general appearance of the weather gives no indication of anything of the sort, and the surrounding lowlands are rejoicing in brilliant sunshine. These storms are confined to the mountains, disperse towards evening, and are followed by clear nights, so that in the early morning the view from the peaks is very clear.

Switzerland suffers in all the four season from atmospheric discharges in the form of rain or snow, in larger or smaller quantities, according to the climatic conditions; while in the south, chiefly about the Mediterranean Sea, the equatorial current, carrying the oceanic vapour northwards, makes it quite summerlike on the heights, and as long as the current does not descend, no rain falls. This long, dry period gives the climate of the Mediterranean coast a decided stamp, some resemblance to which is found in southern Switzerland, especially in the Rhone Valley. While, for example, Basle has, in the three summer months, on an average, 41 days on which rain falls, Geneva has altogether only 30, and Nice only 9,6.

Still the rainfall in Switzerland varies greatly, according to the inclination and direction of the mountains, and is not the same in the valleys as on the heights. The Alps consist of several parallel chains intersected by long valleys, and it is instructive to learn that these valleys have comparatively little rain owing to the influence of the parallel chains whose outer sides attract most of the moisture. Benteli, on the north side of the Bernese Alps, has 150 Cm. of rainfall and snow, and on the south side in the Rhone Valley (a long valley) there are only 60—90 Cm., while further away, on the south side of the Pennine Alps, in Piedmont, the rainfall is very considerable, in Pallanza, for example, 236 Cm.

As a rule, the amount of rainfall among the mountains increases with the altitude, but only up to a certain height (about 2000 metres), after which it decreases. This depends on the amount of humidity in the air, which, on the higher parts, is least in winter and greatest in spring and summer, and the reverse in the lowlands. There is a corresponding difference with regard to cloudiness, on the mountains and in the valleys: the winter is the clearest season, the spring and summer are the cloudiest on the mountains, the conditions being opposite in the valleys. Rapid changes and great extremes — complete saturation of the air with aqueous vapour and clouds scudding along the ground alternating not infrequently with extreme dryness — are the characteristics of the humid atmosphere on the higher mountains. These swiftly changing conditions of relative humidity in mountainous regions are attributable to the excessive evaporation arising from the greater lightness of the air, which latter

determines the amount of evaporation in a high mountain climate.

The Föhn is a so-called "endemic" wind, it is peculiar to the Alps, and has a very modifying effect on the climate of Cis-Alpine Switzerland; it is a warm, dry current, often sweeping down like a hurricane from the mountain ridges into the valleys on the North Alpine slopes; it comes from the south-east or south, rarely from the south-west, and penetrates into the very south of Germany. The Föhn is unknown in Ticino on the south side of the Alps; in its place there blows at times a North Alpine wind which, like a "North-Föhn" comes down to the Leventina from St.Gothard.

The northern valleys of the Central Alps which stretch towards the north-west, or from south to north, are most exposed to the Föhn; in the valleys which run from east to west, e. g., Upper Wallis, the valley of the Aar between Brienz and Thun, it is seldom if ever experienced. The region most subject to the Föhn is that lying between Geneva and Salzburg; it blows with greatest violence in the valley of the Ill in the Voralberg, in the Rhine valley as far as Lake Constance, in the valley of the Linth up to Zürich, in the Reuss valley, in the Aa at Engelberg up to Muri in Canton Aargau, and in the valley of the Lower Rhone up to the Lake of Geneva. The force of the Föhn is greatest in the upper parts of the valleys, and diminishes as the mountain chains recede; in the greater portion of the Swiss Plateau, in the Jura and beyond the northern boundary of Switzerland, its presence is only perceptible in a slightly higher temperature and the absence of moisture in the air.

Tschudi, in his classic work "Thierleben der Alpenwelt" ("Animal life in the Alpine world"), gives a very vivid description of the appearance of the Föhn: "On the southern horizon a slight film of cloud rises and settles on the mountain top; the sun sinks pale and lustreless in the crimson sky. The clouds are still aglow with the most brilliant purple. The night is sultry and dry, with occasional whiffs of chilly air; there is a dark red ring around the moon. The air is so wonderfully clear and luminous that the mountains seem brought nearer; the back-ground is of a bluish-red. In the distance is heard the rustling of the trees on the heights; the mountain torrents roar through the stillness as if their streams were swelling; the unrest which reigns above seems approaching the valley. With mighty gusts, which in winter when it has traversed vast snow fields are raw and cold, the Föhn announces its advent: an intense stillness succeeds. Then the Föhn bursts in with all its fury, and often for two or three days blows like a hurricane. The destruction caused is tremendous; trees are blown down, rocks dislodged, sylvan streams choked up, houses and stables

unroofed — the whole country devastated. In those parts of the valley which are closest to the southern sides of the mountain the force of the Föhn is generally fiercest."

The Föhn was formerly thought to be a hot south wind coming over from the burning sands of Sahara. From the telegraphic weather reports on which the weather charts of Europe are founded it has now been discovered how it is that the wind sometimes sweeps stormily down from the Alpine ridges into the valleys, as it sinks grows rapidly warm and produces the Föhn. The reason for this is to be found in the approaching fall of the Atlantic barometer, or the advance of storms towards Western Europe. When there is a fall of the barometer west or north-west of the Alps, on the line between the Bay of Biscay and Ireland, a south-east or south wind blows over the lower Alpine regions to where the pressure of the atmosphere is least; the air from the Alpine valleys is sucked up from the lowlands and gravitates to the same spot. As the walls of the Alps obstruct the direct passage of the air from the south it is compelled to find an outlet over the tops of the mountains, and thus the Föhn is caused.

There are, on an average, 30 to 40 Föhn days in the year: this wind is most rare and least violent in summer (5 days), somewhat more frequent in winter (9,1 days), in autumn 9,6 days, and is worst in spring (17,3 days). The average duration of the Föhn is two and a half days. It makes the air quite summer-like in mid-winter, with a relative humidity that is exceptionally low (about 50 to 60 %). For example, on Jan. 1, 1877, at Altstätten in the Rhine valley, the deviation of the temperature at mid-day from the mean was + 17,1° C, and this was the same also at Altdorf in the Reuss Valley. Places where the Föhn blows frequently and with great force have a comparatively mild autumn and winter. The extremes of temperature are not so great, the difference between the summer and winter mean is diminished, the severity of the winter, especially in high mountain regions, is tempered, the approach of spring is hastened, the advance of autumn retarded, and, above all, the normal temperature of the year is made more equable. Evaporation is enormously accelerated, clouds are quickly and completely dispersed, the atmosphere is continually renewed, and the heat grows more intense, so that the Föhn would be most ruinous to vegetation in the districts it frequents were it not almost immediately followed by a copious rainfall which restores to the soil the moisture abstracted from it.

In popular parlance the Föhn is rightly termed the "Schnee-fresser" (snow eater); it is greeted with joy as the long looked-for herald of spring; for "der liebi Gott und die guldi Sunn vermögid nüd, wenn der Föhn nüd chunt" (the

dear God and His golden sun can do nothing if the Föhn did not come). In fact it melts enormous masses of snow in a very short time, and does as much in 24 hours as the sun in 14 days. In a single spring night the Föhn will change the entire face of the landscape; the thick mantle of snow which in the evening covered hill and dale being in the morning rent in all directions.

The unusual warmth, the dryness, and the great evaporating power of the air while the Föhn is blowing have a marked physiological effect on men and animals. At the approach of the Föhn bees, wasps, hornets, stinging flies, and other winged insects become exceedingly restless and venomous, their sting being very painful and dangerous both to man and beast. Fish spring more frequently to the surface of the water, and birds which are, as a rule, very sensitive to changes in the atmosphere, either grow silent, or utter low troubled cries, dip themselves much in the water, rumple their feathers, and hide in holes and corners. The human frame also, especially in states of disease, is visibly affected in a greater or less degree. Persons who suffer from nervous irritability are often conscious of the approach of the Föhn long before it comes, by a peculiar sense of weariness and a leaden weight in the limbs, often a sudden unaccountable pressure on the chest, and more or less mental depression. While the Föhn lasts the circulation is accelerated, the heart is more active, and the pulse stronger; occasionally there is dull head-ache and bleeding from the nose, followed by congestion of the brain. The appetite diminishes, sleep is uneasy and much disturbed by troubled dreams. The skin and the mucous membrane of nose and mouth, even the hair, become uncomfortably dry, and a general feeling of drowsiness and disinclination to bodily and mental exertion takes possession of the most robust.

Jolly's atmospheric researches have established some interesting facts with regard to the influence on the direction of the wind of the amount of oxygen in the air. He has discovered that when uninterrupted the Polar Current shows a higher, and the Equatorial Current a lower percentage of oxygen. The largest proportion present is with a continuous north-west wind, the smallest with the Föhn; the percentage in these extreme cases is 20,965 per cent., and 20,447 %, with a variation of nearly 0,5%. It is not indeed probable that this difference in the percentage of oxygen is the sole cause of the physiological disturbances experienced by men and animals; the sudden accession of dry heat and the powerful evaporation induced by the Föhn would seem to be the most important agents. Until now, unfortunately, the effects of the Föhn on healthy and weakly organisms have been little, if at all, investigated, or taken into account in connection with the therapeutics of climate, although they are of great

importance in considering the special properties of a health resort.

The numerous lakes, large and small, and the luxuriant and extensive woods exercise a beneficial influence, not to be under-rated, on the local climate of whole zones and of particular districts of Switzerland. The lakes have, like the ocean, only on a small scale, a very softening influence on the surrounding shores, for the radiation from the surface of these sheets of water is less fierce than that from the earth, which is also greatly tempered by the constant evaporation from the lakes. These vapours not only pour out upon the shores the warmth they have absorbed, but protect them from rapid and excessive cooling. These influences are most exercised by those lakes which are sheltered from the north-east wind by rocky walls warmed by the mid-day sun; there is a fine circle of such lakes from Geneva to the Upper Rhine Valley and the south of the Alps (Ticino). The climate of the lakes both at the northern and southern base of the Alps is characterised by a very mild winter, while their lowest temperatures are considerably above those of places at an equal elevation on the northern Plateau.

The woods exercise a modifying influence on the climate in a much greater and more marked degree than do the lakes. They preserve the soil from excessive heat, and also from very rapid cooling, and prevent those sudden leaps and bounds in the temperature which are so trying to the system and dangerous to health. The more complete this equalising influence the better the climate.

On an average the mean yearly temperature of a wooded district is somewhat lower than that of one without trees, about 0,8° C. The difference between the air in the woods and in the open is, of course, greatest in summer and least in winter. There is an analagous relation observable between day and night, the air in the woods being cooler during the day than in the fields, and conversely warmer at night. Owing to this difference of temperture between the woods and fields an equable current of air is created: in the day time the cooler, moister air of the woods courses over the ground upwards, while, on the other hand, a light breeze from the open fields passes to the woods, playing about the tops of the trees where the air is warmer than at their base, and, sinking down through the pines and leafy trees, gradually settles down on the soil of the woods, and replaces the currents which have floated out to the fields. At night the conditions are reversed: the cold air from without penetrates the woods, and the warm air rising above the trees blows across the country. Through this circulatory motion the sharp contrasts which would be created by the great radiation during the night from the open country are avoided. During the night there is no great cooling of the

air near the woods. It is easy to see from the foregoing how deleterious would be the effect on the climate—not to speak of other evil results—of destroying large woods; for in the warm months, especially, there would be those excessive differences in temperature between day and night that are experienced in the desert of Sahara.

The climate of a country, as has been shown above, is determined both by the temperature and the humidity of the air. A moist atmosphere obviates extreme heat and cold—a fact which we noted when speaking of the lake climate. Aqueous vapour has the property of very largely absorbing the rays of heat, while perfectly dry air allows the sun to penetrate with almost all its power to the surface of the earth. Aqueous vapour, on the other hand, acts as a covering during the night and protects the ground from excessive radiation and cooling. The woods are the chief cause of moisture; the air of the woods, and especially of dense woods, is more humid than the air of the open country. This is particularly the case where the trees are young, for the numerous apertures in old timber allow the wind to enter. The greatest difference is observable after heavy rain, when for a long time the air among the young trees remains saturated, or very nearly so, a circumstance which as regards hygiene is worthy of all attention. A large extent of young woodland makes the climate milder and softer. Especially is this noticeable in the hot summer months and in high mountain places. The woods conduce much more in summer than in spring, autumn and winter to a precipitation of moisture, and keep the country well-watered. Besides, the air in the woods has this great advantage, it is free from the noxious gases, fumes and smells which arise in towns from impurities of the soil or the presence of manufactories; neither is it polluted by the smoke and soot issuing from thousands of chimneys in busy places; lastly, it is free from the dust of the streets which so often annoys the dwellers in towns and injuriusly affects their health.

Closely, and perhaps causatively, connected with the humidity of the air is that change in the oxygen of the atmosphere known as ozone-making, a process important alike in the economy of nature and of the human frame. Moist air in the mass is richer in ozone than dry air, and the ozone increases with the humidity. It has been observed that rapid evaporation of water and strong winds generate a great deal of ozone, which is undoubtedly present in largest quantities in rainy, stormy weather. There is least during the prevalence of mist, cloud, frost, or thick yellow fog, wherefore foggy weather is, as a rule, to be regarded as unhealthy. But in addition to moisture and high winds there is another source of ozone in the aroma which, under the influence of the sun's rays, is exhaled by such trees and plants as the

turpentine, juniper, thyme, and certain flowers, the narcissus, hyacinth, reseda, &c. The neighbourhood of large woods, the shores of lakes, and lofty mountain regions are the situations where most ozone is found.

Ozone is a great oxydiser and a strong disinfectant, but in the atmosphere of cities is present in very small quantities, if at all, being arrested in its formation, withdrawn from the air, and absorbed in the dirt and refuse, sewers, manufactories, and the exhalations from human beings. Woods are important in the formation of ozone because they largely increase the humidity of the air. The most recent experiments and clinical observations show that ozone has an unmistakeable influence on the human frame, both for good and for evil. Professor Binz, of Bonn, states that ozonised air produces sleep, while Dr. Eyselein, of Blankenburg, from accurate observations among about 2000 persons during 22 months, declares that it exercises an important beneficial influence on chronic nervous patients, that the most favourable and strengthening effects have been recorded with an average degree of ozone in the air of not more than 10 in 14 in Lender's Scale of Colours, and that disturbances of the nervous system occurred in a greater or less degree according to the measure of ozone in the air. A high degree of ozone only acts favourably on persons whose weakness is purely physical, on those convalescent from severe illnesses, and on nervous patients whose bodily system has run down. This explains the rapid cures which are as often effected by wood and mountain air as by sea-air.

All these facts show the immense importance of woods and luxuriant vegetation to the climate of a town, a district, or a country. Switzerland, unfortunately, as compared with neighbouring states, is not well wooded, and this is to be attributed to the reckless cutting down of the forests in the first half of the century. At present only 15,4 % of the whole area, or, including the sterile parts, 22,4 % are wooded, while in Austria there is 30 %, in South Germany 25,33 %, and even in sparsely-wooded France 16 %. The best wooded part of Switzerland is the Jura where 30,2 % of the area is covered with magnificent forests, next come the Ob- and Nidwalden, the Lower Simmenthal, the Emmenthal, the Lower Grisons, Rhine Valley, and the Mesolcina. Canton Uri is the most sparsely wooded of all, having only 6 % in the whole area; a portion of Central Grisons, Avers, and some other high valleys in the neighbourhood show a similar scarcity. Especially thin are the woods of the Upper Engadine, Ticino, and Upper Wallis, which is largely owing to the prevalence of the larch—a tree that most needs sun and air. But a good deal has been done during the last 20 years to supply this lack by planting saplings.

II.

Switzerland as the Sanatorium of the World.

The climate of Switzerland, as has been shown in the preceding brief investigation, is so diversified, and well-adapted for curative purposes, that within a short period this little mountain land has become the favourite resort of invalids. Switzerland is, also, rich in mineral springs of all kinds—many of them long celebrated for their valuable properties—the proper use of which, combined with the air at the numerous climatic stations, is a very effectual means of relieving suffering.

The famous Swiss doctor and naturalist, Albrecht von Haller, has very aptly and beautifully described the various climatic zones of his native land in the following words: "Every part of Europe, from the extremities of Lapland and Spitzbergen down to Spain, has its counterpart in Switzerland". We may, for the purpose in hand, divide Switzerland into three parts, namely: the lowlands and the hill region from 200 to 700 metres above the sea, which stretches north of the Alps as far as the Rhine, attaining a considerable breadth, and in the south forms a narrow passage into the plains of the Po; secondly, the Lower Alpine region from 700—1300 metres, and thirdly, the Alpine region from 1300 to 2500 metres above the sea. Each of these zones has its own climatic characteristics determined not only by the height above the sea, but also by the direction of the valleys, the position and inclination of the mountains, and the consequent meteorological conditions.

The first zone comprises Central Switzerland, the so-called Plateau, including Cantons Thurgau, Schaffhausen, the northern part of Cantons Zürich and Lucerne, the lowlands and highlands of Cantons Berne, Freiburg, Waadt and Geneva, the plain of the Upper Rhone Valley and the deep valleys of Ticino. It is distinguished, particularly at the base of the Alps, north and south, by a complete chain of lovely lakes which, sheltered as they are from the north, exercise a very modifying influence on the climate of the surrounding country, giving it an almost southern stamp. There are in that region not only a great number of medicinal springs—for instance, the long celebrated hot springs of Ragatz-Pfäfers, Schinznach, Baden, and the brine springs of Schweizerhalle and Rheinfelden—but also a goodly number of famous climatic stations and grape cures, such as Montreux on the Lake of Geneva, Thun, Interlachen and Bönigen on the Lakes of Thun and Brienz, Vitznau and Gersau on the Lake of Lucerne, Locarno on Lake Maggiore and Lugano on Lake Lugano.

The Lower Alpine region is, on the whole, somewhat colder: there is less atmospheric pressure, and the contrasts

between the temperature of day and night are sharper; on the other hand it is richly wooded and the atmosphere is humid, so that it forms an easy transition from the climate of the plains to that of the Alps or high mountains. In this zone also there are a great many valuable medicinal springs and numerous health establishments and summer resorts. Among these are Tarasp-Schuls in the Lower Engadine, the health resorts of Seewis, Serneus and Klosters in the Prättigau, Heiden, Gonten and Weissbad in Appenzell, Vorauen in the Klœn Valley, Felsenegg in Zug, Axenstein and Seelisberg on the Lake of Lucerne, Faulenseebad on the Lake of Thun, Giessbach on the Lake of Brienz, Les Avants and Château d'Oex on the Lake of Geneva, and several important health resorts among the Jura, such as Weissenstein and Frohburg.

The Alpine, or high mountain region, which is of great extent, lies between the Lower Alpine country, with its beautiful meadow-land, fir and leafy trees, and the snow region. It includes nearly all the chief openings and passes among the mountains of the great Alpine range, also many celebrated heights in the north which have become the favourite ascents of travellers from all parts, such as the Rigi, Pilatus and Niesen. The mountains of the chain westward of the Gotthard—the central point of the range—are distinguished from those of the eastern by rising sheer up from the ground, by towering peaks and deeply cleft valleys; in the Grisons, on the other hand, we find a general rising of the ground and less steep mountains, with high valleys; the climate is warmer and milder than in other Alpine valleys and vegetation and agriculture are carried to a much greater height. Throughout the Alps the winters are, on an average, long, and the summers very short, with frequent hard frosts. The highest part of the Alpine region is scarcely three months quite free from snow, and even during that brief term there are often rapid descents of melting snow; but in the lower portion of this zone there are districts towards the south which have, at least, four months of summer, and in the Grisons there are some quite mild valleys in which the summer lasts five months. Although throughout the Alpine region changes of temperature are extraordinarily rapid, in summer the days are not infrequently very hot and the nights frosty; thus in winter the daily oscillations of the thermometer are strikingly less than in the hill region. The humidity of the air is slight, but in consequence of the diminished atmospheric pressure, the intensity of the sun's rays and the force of the wind, evaporation is very active, as is seen daily in the rapid drying of meat and hay, the disappearance of fungus and moss from the rocks and the absence of decomposition.

In the Alpine region are the most famous climatic sta-

tions, and many equally celebrated medicinal springs; as, for example, Davos and St. Moritz in the Grisons, Andermatt near the Gotthard, the establishments on the Rigi, the gypsum springs of Leuk, the iron springs of Morgins, and the sulphur springs of Schwefelberg.

The physiological effects of these climatic zones on the human frame in states of disease have been little if, at all, investigated. As far as present experience goes, we can only say, speaking generally, that the lowland and hill climate, especially in the lake zone, has a mild, equable, soothing influence; the Alpine climate is more changeable, stimulating and exciting, and is suited for invalids in summer, the former in autumn and winter. At Davos, however, for twenty years past, a winter course of treatment has been practised with successful results (regular statistics are wanting), and quite recently similar sanatoriums for consumptive patients have been established at St. Moritz Kulm and Maloja in the Upper Engadine, at Andermatt in the Urseren Valley, and at St. Beatenberg on the Lake of Thun. The Lower Alpine climate is, in many cases, well adapted as a transition between the lowlands and the high mountains, and *vice versâ*.

The stimulating effect of a mountain climate is seen in the increased activity of the various organs of the body, and especially of the functions of the skin. The lightness of the air and the intensity of the sun's rays send the blood coursing through the veins, which greatly promotes the healthy action of the skin, hardening and strengthening its nerves. Rapid perspiration is also induced by the dry, rarefied air and the very hot sun. During the first few days at a mountain resort the activity of the heart seems somewhat lessened, but in reality the strength of its muscles is being increased.

The pure mountain air, free from all organic and inorganic impurities, and in the truest sense of the word antiseptic, acts most directly and beneficially on the respiratory organs, the blood, and the tissues. The inhaling of cold, dry air subtracts warmth and moisture from the body, and has, therefore, a drying, cooling influence on the delicate ramifications of the trachea and the small air vessels of the lungs which are surrounded by yet tinier blood vessels; and owing to the diminished pressure of the atmosphere the blood flows more freely to the lungs, which contributes to their nourishment—all which circumstances arrest the progress of disease. Owing to the heightened activity of all the organs of the body the appetite is improved, digestion quickened, bloodmaking increased, nervous and muscular energy are stimulated, and the general condition is made perceptibly better. But the mountain air is a rigorous remedy, only to be applied where there is a good deal of resisting and reactionary power in the constitution, and is there-

fore only adapted for specific states of disease. The mountain climate is especially indicated in:

1. Tendency to consumption and the first stages of the disease. When the process of the disease has already led to serious disturbances and disintegration in the cells of the lungs and the bacillus of the tubercle has deposited its germinating matter, the mountain climate can only defer the inevitable end.

2. Chronic inflammation of the lungs, known under the names of catarrh of the apices, bronchial catarrh, partial, inflammatory consolidation, &c.

3. Chronic catarrh of the stomach and round ulcer of the stomach, but only where the diet is specially arranged for individual cases.

4. Disturbances of the nervous system, neurasthenia following on mental strain, emotional excitement, and recoveries from severe illnesses.

5. General constitutional weakness, scrofula, spinal disease, chlorosis, poverty of blood.

6. Convalescence after severe, and especially after infectious illnesses, such as typhus, diphtheria, scarlet fever, hooping-cough, measles, &c.

The mountain climate, especially in the highest parts, is, on the other hand, not indicated in:

1. Complaints of the heart: fatty heart, enlargement of the heart, weakness of the valves.

2. Vascular affections, fatty degeneration, aneurism.

3. Asthma, following emphysema.

4. Laryngeal and intestinal tuberculosis.

5. Disposition to acute rheumatism of the joints, inflammation of the tonsils (angina), of the throat and larynx. For all these latter complaints the climatic places of the lowlands and the hill region are best suited. The number of climatic health resorts where the milk, whey, and grape cure are also practised, is over 400.

The high climatic stations specially indicated in phthisis, and frequented both in summer and winter are: Andermatt, Arosa, Davos, Maloja, St. Beatenberg, St. Moritz, Sils-Maria, Wiesen, Zug; Weissenburg in the Lower Alpine region is only a summer place.

The following places are indicated in the various other complaints noted above: the health establishments on the Rigi, the Maderaner Valley, the *Kurhaus* at Frutt, the Schimberger Spa, Niesen, Axalp, the Grimsel Hospice, Mürren, Morgins, Leukerbad, Zermatt, the Rieder Alp, the Eggischhorn, Brigels, Disentis, Sedrun, Chiamutt, Splügen, San Bernardino, Parpan, Bergün, Zernetz, Samaden, Pontresina, Celerina, Campfer, Silvaplana, Bormio, Hotel Piora, Monte Generoso.

The climatic stations of the Lower Alpine region are so numerous that to name them all would be wearisome;

the reader is referred to the table of altitudes II p. (X), which contains most of the air cures and summer resorts.

Especially to be mentioned among the climatic health resorts of the lowland and hill country, particularly in the Lake and Föhn zone at the north base of the Alps and about the lakes of Ticino are: Locarno, Lugano, Mendrisio, Soragno, Stabio, Montreux, Glion, Chexbres, Bex, Thun, Bönigen, Interlachen, Brienz, Heustrich, Giessbach, Hertenstein, Weggis, Vitznau, Gersau, Axenfels, Morschach, Stachelberg, &c.

Switzerland is uncommonly rich in mineral springs. These may be divided into three groups: those in the south-west, north-west, and south-east; in the north-east and centre there are none at all. The first and second groups consist chiefly of lime and gypsum springs; the south-western group covers the northern and southern slopes of the Bernese Alps, the boundary between the Rhone and the Aare, while the north-western group starts from the northern end of the Jura. The springs of the south-eastern group are mostly acidulous, and are chiefly found among the mountains of the Grisons. An extract from a return of the Federal Statistical Department for the year 1870 gives the following numerical proportions:

1. Muriate Springs, Chloride of Sodium Springs .	10
2. Saline Springs	6
3. Soda Springs	20
4. Acidulous Springs	34
5. Lime or Earthy Springs	60
6. Iron Springs	121
7. Sulphur Springs	170
8. Iodine, Bromine, and Springs containing arsenic reckoned among the others	10
9. Hot Natural Springs	3
10. Bituminous Springs	5
11. Springs impregnated with Gas	6
12. Springs whose properties are not definitely stated	175

There are in Switzerland a large number of well-managed hydropathic establishments and private houses for special cases.

Some of the mineral and medicinal springs are only used for bathing, others for both bathing and drinking. They may be classified as follows, according to their physiological effects and the complaints in which they are indicated:

I. Hot Natural Springs.

The natural springs contain only a minimum of fixed solids, and differ but little chemically from ordinary spring and river water. Their main property is their natural equable warmth which is therapeutically applied in certain forms of disease. There are, in Switzerland, only three of these warm wells: Ragaz-Pfäfers, Baden and Leuk; the two latter,

despite the presence of a good deal of sulphate of lime, are to be reckoned as belonging to the natural springs, and are distinguished from the first named by a much higher temperature (8—10° C).

The hot natural springs are indicated in:

1. Most nervous diseases, over excitement of the nerves, hysteria, hypochondria, paralysis of the brain and spinal cord following the inflammatory stage, spinal irritation, emaciation, paralysis of the capillary circulation, neuralgia, and especially in lumbago and cardialgia.
2. In cases of very slow convalescence and weakness.
3. Gout, chronic rheumatism of the joints and muscles.
4. Effluxions, when they are not of a rheumatic or gouty character.
5. Chronic catarrh of the mucous membrane.
6. Skin diseases.
7. Syphilis.

II. Alkaline or Soda Springs.

These mineral waters which have been popular as a drinking cure for centuries principally contain carbonate of soda and free carbonic acid, then chloride of sodium, Glauber salt, Epsom salt, and oxide of iron. The soda and chloride of sodium waters and the soda and Glauber salt waters are distinguished from each other by their percentage respectively of chloride of sodium and Glauber salt. The Alkaline springs of Switzerland are naturally cold, and in certain complaints are artificially warmed for drinking.

According to Liebig's theory, carbonate of soda is the carrier of carbonic acid through the blood to the lungs; it alkalises the blood, releases the albumen and fibrine, and promotes the destructive processes of the change of tissues, neutralises an excessive secretion of acidity in the stomach, and has a diuretic effect as it hastens the discharge of effete matter.

The strong soda waters are used for gout and calculous deposits in the bladder; the weak soda waters, especially those containing chloride of sodium, for:

1. Increased "venosity" with scanty evacuation of carbonic acid from the blood.
2. Chronic catarrh of the mucous of the respiratory and digestive organs and of the bladder.
3. Obstruction of the liver, catarrh of the biliary duct, (icterus catarrhalis), gall stones.
4. Diabetes, for which the foreign springs of Carlsbad and Vichy have a special celebrity.

There are in Switzerland only two springs of simple soda water — the so-called alkaline acidulous springs — those of Fideris and Passugg.

There are no soda and chloride of sodium or muriate

and carbonate of soda waters which, besides bicarbonate of soda and carbonic acid, contain great quantities of chloride of sodium, but little or no sulphate of soda. But in the Tarasp springs there is excellent soda and Glauber salt water; very similar to this, but a good deal weaker, is the mineral water of Eglisau, in which the chloride of sodium strongly predominates over the Glauber salt.

Glauber and Epsom salts promote the excretion of the mucous of the stomach and intestines and a gradual absorption of fat (reduction of corpulence) without causing any nutritive disturbances. The alkaline saline springs are therefore indicated in:

1. Obesity.
2. Diabetes.
3. Hyperæmia of the liver, plethora abdominalis, gallstones, icterus catarrhalis.
4. Piles, hypochondria.

Simple and muriate and carbonate of soda waters are generally indicated in:

5. Gout, calculous deposits in the bladder, catarrh of the bladder.
6. Chronic catarrh of the stomach and intestines.
7. Chronic ulceration of the stomach.
8. Scrofulous glandular exudations.

III. Chloride of Sodium Waters.

The percentage of chloride of sodium and carbonic acid in these waters and their temperature are their most important qualities. Most of the springs also contain more or less ferrous carbonate with a slight mixture of iodine and bromide.

Used as a medicine chloride of sodium promotes the functional activity of the stomach and intestines, increases secretion and cellular formation, stimulates the absorbing power of the vascular system and the destructive and productive processes in the tissues. Chloride of sodium, therefore, not only repairs, but conserves and builds up, and this is the chief distinction between it and carbonate of soda and Glauber salt. Chloride of sodium in the blood chiefly contributes to the production of free muriatic acid in the juices of the stomach, and consequently helps the digestion of food. The drinking of chloride of sodium water has the effect of subtracting the albumen and starch from the food in the stomach, of conveying well-prepared nutriment to the intestines, and of supplying the blood with the necessary amount of chloride of sodium for absorption, secretion, and tissue-making.

The use of the brine bath stimulates and nourishes the skin, increases the appetite, the change of tissues, and the weight. The weakest brine baths ought to contain 2—3 %

of brine, with at least 25 % of salt; those of middle strength, 4—6 %; the strongest, 7—10 %. The latter often produce a biting sensation on the skin. The very small quantity of iodine and bromine present seems to have no perceptible influence in the bathing-cure. Brine baths are indicated in:—

1. Sensitiveness of the skin (susceptibility to changes of temperature and readiness to perspire) and chronic eruptions without irritation.

2. Chronic rheumatism of the muscles and joints.

3. Gout, and especially gouty exudations.

4. Neurosis, especially when accompanied by irritability and weakness.

5. Scrofula, with glandular exudations.

6. Effluxions that are not scrofulous, inflammation of the joints, periostitis, caries, necrosis.

7. Anaemia.

The brine drinking cure is indicated in:—

1. Chronic catarrh of the stomach.

2. Plethora abdominalis, especially when accompanied by the fatty type of hæmorrhoids.

3. Intermittent swelling of the spleen.

4. Chronic bronchial catarrh.

5. Gout in those forms where there is only moderate acceleration of tissue change, and at the same time a conservation of nutrition.

6. Diseases of the bones, caries, necrosis, spinal disease.

7. Scrofula, with a great deal of glandular exudation; in severe dyspepsia, catarrh of the stomach and intestines only the weaker chloride of sodium waters are permissible, and frequently only soda and Glauber salt.

8. Effluxions and exudations of the pleura and the peritoneum; chronic congestion of the uterus.

Among the chloride of sodium waters of Switzerland the slightly mineral cold spring of Wildegg is most frequently used as a drinking-cure, especially for scrofulous children, but owing to the large quantity of gypsum which it contains it is somewhat difficult of digestion. These brine waters are diluted with water and impregnated with carbonic acid for drinking. Warm chloride of sodium springs, largely charged with carbonic acid, are not found in Switzerland. The following enjoy a good repute as bathing cures:—Bex, (15,6 % salt), Saxon-les-Bains, Liestal, Schweizerhalle (23,9 %), Mumpf, Laufenburg, Rheinfelden (31,9 %).

IV. Epsom Salt Waters.

The magnesia salt waters contain large proportions of Epsom salt and Glauber salt, and more or less chloride of sodium and chloride of magnesium. As they usually contain little or no free carbonic acid, and consequently have a very disagreable taste, they are frequently impregnated with gas

or acids, and the carbonic acid serves as a help and corrective to stimulate the otherwise over-burdened stomach. The exciting action of Epsom salt on the mucous of the stomach and intestines is about one and a half times as powerful as that of Glauber salt. The latter induces a watery secretion of this mucous which may develop into violent diarrhœa with slimy evacuations and discharge of white mucous.

A prolonged use of Glauber and Epsom salts generally induces dyspepsia and catarrh of the intestinal canal, and reduces the system. Epsom salt water is therefore not suitable for a course of treatment, only as an occasional purgative.

Magnesia salt water is used for stoppage of the bowels, obstruction of the portal vein, with functional disturbances of the liver, congestion of the brain and lungs, especially when following affections of the heart which have not been compensated.

There is in Switzerland only one Epsom salt spring, that of Birmensdorf, and one Glauber salt spring, that of Mülligen, both of which have been changed from gypsum wells by a process of lixiviation.

V. Sulphur Springs.

Besides the free sulphuretted hydrogen in these springs, special stress is laid on the amount which they contain of liver of sulphur, which appears as sulphide of soda, calcium sulphide, and sulphide of magnesium. The large quantity of gypsum in the water makes it difficult of digestion, and there is not any carbonic acid worth considering. In some of the springs there is a fair amount of chloride of sodium. A large number of the sulphur springs are hot, and are mainly used for bathing.

For internal use the amount of sulphurous alkali and sulphate of salt is the chief consideration, but for bathing the amount of sulphur and the warmth. The theory of the drinking cure is that the sulphurous alkalies decompose in the stomach and intestines and generate free sulphur which, absorbed into the blood of the portal vein, destroys the red corpuscules as they are about to re-form. The drinking treatment also causes slight constipation, hunger, and enlargement of the liver.

Sulphur waters are indicated in:—

1. Gout, rheumatism and exudations.
2. Phthisis and bronchial catarrh, complicated by enlargement of the liver and hæmorrhoids.
3. Paralysis and Neurosis.
4. Chronic metallic poisoning.
5. Scrofula with affections of the joints and bones.
6. Chronic skin diseases.

There are in Switzerland a large number of cold sulphur springs: - Alvaneu, Büren, Clavadel, Flühli, Garniswyl, Gur-

nigel, Heustrich, Kemmeribodenbad, L'Alliaz, Le Prese, Leuk, Lostorf, Rietbad, Savognin, Schwarzseebad, Schwefelbergbad, Spinabad, Stachelberg, Stabio, Yverdon. There are only a few hot sulphur springs: Baden, in Aargau, Schinznach, Lavey, and Bormio in Veltlin.

VI. Iron Springs.

Iron or steel water is characterised by ferrous bi-carbonate in very weak solution, which in the stomach is converted into lactic acid, in part, perhaps, into ferrous chloride, and in the intestinal canal is chemically combined with the proteids and passes into the blood. These mineral waters also contain a fair amount of free carbonic acid which stimulates the functions of the stomach and intestines; also in smaller quantities bi-carbonate alkalies and earths, chloride of sodium, and sulphide of soda (Glauber salt); these, however, have only a subordinate therapeutic effect, or actually weaken digestion, as is specially the case with calcium sulphide (gypsum).

The effect of iron on the blood is well-known; in the composition of the colouring matter of the blood (hæmatites) a certain amount of iron is indispensable. A diminution of blood causes also a diminution in the relative quantity of the hæmatites — the chief carriers to the blood of oxygen — which must be replaced by the addition of iron, if tissue-making is not to be impaired.

The effect of steel baths is not dependent on the amount of iron — no iron being absorbed by the outer-skin — but on the amount of carbonic acid and the warmth introduced by hot steam — two factors which induce a potent excitation of the skin, especially of its sensitive nerves, and consequently promote the making of tissue. The warm steel baths have, therefore, rather the character of hot natural springs, and are particularly indicated in the numerous varieties of nervous complaints.

The effect of drinking the steel waters is materially increased by the pure, stimulating mountain air, a suitable dietary — combined frequently with the milk cure — and regular out-door exercise. Drinking the waters is especially indicated in:

1. The development of chlorosis.
2. Acute anæmia brought about by sudden or violent bleeding and suppuration, or by copious exudations quickly arising, particularly in pneumonia and pleurisy, more especially in pneumonia in children.
3. Weakness of the stomach and intestinal canal which often accompanies chlorosis and anæmia.
4. Chlorotic and anæmic neurosis.
5. Diseases of the sexual organs in women.

Among the vast number of iron springs the following

may be mentioned: Bergün, Blumenstein, Castiel, Enggistein, Fideris, Flühen, Gonten, Gutenburgbad, Heinrichsbad, Jakobsbad, Kyburg, Längeneybad, Lenk, Moosbad, Morgins, Ottenleuebad, Passugg, Peiden, Rigi-Scheideck, Rothbad, Rothenbrunnen, Rovio, St. Antönien, St. Bernardino, St. Moritz, Savognin, Schwendi-Kaltbad, Schwendlenbad, Seewen, Tarasp, Tennigerbad, Valserbad, Waldstadt, Wildeneybad &c.

VII. Earthy or Lime Mineral Waters.

These waters contain, in the first place, sulphuric acid and bi-carbonate of lime, then sulphuric acid and carbonate of magnesia and sulphide alkalies, small quantities of oxide of iron and some free carbonic acid.

The effect of drinking these waters has, as yet, been very insufficiently investigated, and their old reputation as a cure for spinal complaint, softening of the bones and scrofula, rested on purely theoretical deductions, and was not confirmed by regular clinical observation. Only as a means of removing acidity in, among other cases, the early dyspeptic stages of spinal disease, are the salts of these mineral waters of any importance, although they are difficult of absorption by the mucous of the stomach and intestines. In catarrh of the bladder and gravel the beneficial operation of these waters is perceptible in increased secretion and greater clearness of the urine. It is more difficult to understand what their curative effect is on tubercular consumption (compare Weissenburg), the benefit seeming to result rather from the high sheltered situation and favourable climate of the place. The influence on bronchial catarrh is more apparent, as the waters dissolve the carbonic acid compounds and promote secretions of the mucous of the respiratory organs. The more gypsum such mineral water contains, the more indigestible and difficult of absorption is it.

For bathing these wells are of little value, as only their warmth, the carbonic acid and the large amount of gypsum which they contain have any exciting effect on the skin. The early fame of the springs of Leuk seems to have been founded on these properties.

The use of the chalky mineral waters for drinking and bathing is indicated in:

1. Chronic cutaneous eruptions.
2. Gout and rheumatism.
3. The first stages of bronchial catarrh and tubercular consumption.
4. Catarrh of the bladder and formation of uric acid.
5. Catarrh of the stomach with excessive acidity, if the carbonates of alkali predominate.

Among the earthy mineral springs are the following: Andeer-Pignieu, Attisholz, Aeusseres Gyrenbad, Dettligerbad, Ettingen, Faulenseebad, Laurenzenbad, Leuk, Lüterswyl, Mönch-

altorf, Oberwyl, Ruch-Eptingen, Rütihubelbad, Schnittweyerbad, Silvaplana, Sissacher-Alpbad, Weissbad, Weissenburg, Wengibad, Worben.

VIII. Cold Water-Cure Establishments.

Cold water is used as a means of cure both internally and externally. As a drinking cure its influence is purely dietetic; in feverish disorders it cools the blood and quenches the thirst; in habitual constipation, especially if taken fasting, it stimulates the peristaltic action of the intestines; in slight cases of catarrh of the stomach, taken in small quantities, it acts as a sedative and allays vomiting; it quickens the secretion of bile; and with a generous meat diet and bodily repose it promotes tissue change and has a lixiviating effect on the system.

The external application of cold water — hydrotherapy proper — takes the form of rubbing, dabbing, packs, baths, douches, &c. Its action is threefold: cooling the blood; stimulating the peripheral nervous system and consequently increasing the activity of the vital functions; and affecting the pressure and circulation of the blood. In the latter respect the effect of the water is apparent in relieving the blood vessels of the internal organs, and its hardening effect is seen in the increased toughness of the skin and power of resisting changes of temperature when the blood is richer and more abundant. The main effect of the cold water cure is to quicken the circulation, promote blood-forming and nutrition, and stimulate tissue change. The main condition for the cold water-cure is that the system should be able, without detriment, to stand a great withdrawal of heat, and that the necessary reaction should follow; that is to say *a certain degree of soundness in the vital functions is indispensable*. It is, therefore, not adapted for an advanced stage of organic weakness of the heart, vascular diseases, emphysema of the lungs, bronchial congestion, serious changes in the tissues of the spleen and liver, for example, cirrhonosos; advanced chronic catarrh of the bronchial organs and the larynx, renal degeneration, diabetes, cancer; advanced stages of anæmia and exhaustion; great failure of the central nervous system.

The cold-water cure is on the other hand indicated in:—

1. Feverish illnesses.
2. Chronic metallic poisoning.
3. Delicacy of the skin (great susceptibility to changes of temperature, readiness to perspire, excessive sensibility).
4. Hypochondria and hysteria.
5. Neurasthenia, in consequence of mental over-strain, and depression of spirits.
6. Chronic eruptions.
7. Syphilis.

8. Habitual Constipation.

9. Chronic catarrh of the stomach with anæmia — an appropriate dietary being followed.

The cold-water-cure establishments of Switzerland are: Aigle-les-Bains, Albisbrunn, Bex, Brestenberg, Buchenthal, Champel sur Arve, Chanélaz, Giessbach, Henniez, Mammern, Schönbrunn, Schöneck, and Schwarzseebad.

IX. Terrainkuren (Soil Cures).

The medical treatment of obesity and circulatory disturbances has greatly gained in scientific status since the founding of Oertel's dietetic and mechanical system, which forms quite an epoch in medical science. Oertel not only insists on a strict dietary — a scientifically correct proportion between the albuminous substances, carbo-hydrates, and fats being absolutely necessary to a rational treatment of these diseases — but requires, in certain cases, a reduction in the quantity of fluid imbibed, to prevent the heart and vascular system from being over-loaded, besides ordering systematic gymnastics, the object being gradually to remove the circulatory disturbances and restore strength.

It could be wished that these physiological rules on the new principles of dietetics were followed not only in places where the "Terrain" (soil)-cure, but also where the drinking-cure, is practised. For the mischievous custom which until recently prevailed of taking so many regulation glasses daily was often most prejudicial to the patient who, ignorant of the true state of his case, simply drank as much as he could in order to get his money's worth. But to carry out a rational system of treatment the quantity of mineral water taken should be made dependent not only on the condition of the stomach and intestinal canal, and on the nature and stage of the complaint, but also on the state of the circulation and the capability of passing in a normal manner the fluid absorbed.

The following places for the "Terrain" (soil) cure have within a short time been established in Switzerland:—Baden, Coire, Gersau, Giessbach, Langenbruck, Tarasp, Vitznau.

X. Grape Cures.

By the grape-cure the stomach is freed from the salts which are formed by organic and inorganic acids mixed with alkalies, earths and iron, containing a good deal of sugar. The immediate effect of the grape juice is an increase of secretion by the salivary glands and excitement of the gustatory nerves, a pleasant cooling, quenching of thirst, stimulation of the appetite, and an increase of intestinal secretions, and consequently of evacuations. If taken in great quantities, especially on an empty stomach, the grapes have a powerful effect on the intestines; intestinal secretion is more copious,

and dyspepsia and intestinal catarrh would probably in that case follow the grape treatment. It will also promote tissue-making, and the organism will be lixiviated according to the degree of the power of assimilation. The grape treatment is recommended for:

1. Obesity and abdominal distention, also after heart and lung affections.

2. Bronchial catarrh and tubercular consumption, where these are eminently antiphlogistic.

3. Simple catarrh of the bladder.

The places in Switzerland for the grape treatment are:— Bex, Chillon, Clarens, Glion, Lugano, Montreux, Sierre, Sion, Vernex, Vevey, Veytaux, Villeneuve.

III.

Hints and Advice as to Hygiene and Diet.

For favourable results from the treatment at the various spas and health-resorts the patient must thank neither the climate, nor the specific qualities of the mineral spring, nor the pure air, nor the ancient "Brunnengeist" (Water-God) alone: every "thorough cure" depends on following certain rules of hygiene and diet which gradually restore the diseased organism to its normal state. The age and constitution of the patient, the form and origin of the complaint, the stage of the disease, the accompanying complications, outward circumstances, and pecuniary means, certainly play an important part in the choice of a locality, but the chief thing is to get from a physician with scientific ideas as to hygiene a careful opinion as to the value of a place as a health-resort. Those establishments, therefore, show the best results which are under strict medical supervision, and where the most modern hygienic principles are followed. The greatest mistake, and one which is made daily by chronic invalids, is that they only begin a systematic course of treatment when the disease has advanced to such a stage that the patient's life is either seriously threatened or there is no hope of recovery. Persons afflicted with an unmistakeable hereditary tendency to certain diseases should be guarded, from their cradle, by the most careful bringing up, and by following the most rational mode of life possible. By timely observation and active vigilance many a young, blossoming life might have been saved from decay, and many a deadly disease nipped in the bud. How often is heard the cry, "too late", and how often is the innocent health resort made answerable for the culpable neglect of the individual. It is wonderful to see how patients with death written in their faces will, like a drowning man catching at a straw, cling to the illusory hope of recovery at some renowned health resort, and undertake the most arduous journeys. Many a one has died

in the railway carriage or almost immediately on arriving at his destination, in an hotel, far away from home. But it is unpardonable folly or mistaken kindness when a family physician backs up such patients in their delusions and plans, in order to gratify a dying wish. These who are standing on the brink of the grave, for whom there is no possibility of improvement, or of delaying the unavoidable end, are best among their friends at home where they can meet death with much more peace and comfort than far-away, alone, in the bedroom of a foreign hotel.

The second mistake, not infrequently made in these times by persons striving after money and position, is the curtailment of the period of treatment. The patient comes with the resolute intention of making a thoroughly satisfactory cure in three or four weeks, and the physician has to do the best he can to accomplish a task almost impossible in so short a time. This shows a complete misconception of all the laws of physiology, and nothing but evil consequences can follow when the patient, only half cured, returns to his occupations and falls back into his old ways. All the rules of living which have been practised during this short time, and which should have served as lasting guides for the future, are quickly cast to the winds, and the patient hastens to his grave.

A third imagines that the world will stand still if, while he is at the health establishment, he is not daily endeavouring to turn the wheels by means of hosts of telegrams and business letters. It requires the plainest and most decisive speaking to make such an one understand that mental repose is of the first necessity for a nervous, overstrained organism, weakened by long illness. The patient should, therefore, so arrange his affairs before starting as to be able to depart with the firm resolve, *procul negotiis*, to devote the possibly scanty, and therefore so much the more precious, time of his sojourn at the health resort exclusively to the care of his health, keeping this object continually before him.

Other patients go entirely on their own responsibility to some "spa" without consulting a doctor beforehand. They heroically plunge into the bath two or three times daily, stay in as long as possible, drink copiously of the waters, eat heartily at table d'hôte, force themselves in between times to take fatiguing walks, in a word, try to accomplish the "cure" at express pace. A well-known and highly esteemed physician has characterised such proceedings in the following somewhat strong terms: "Whoever wishes to make a study of human stupidity will find the widest field for his researches and the most excellent examples in health resorts." For those reckless experiments with mineral waters and different air are a dangerous game, which not only causes considerable injury to the patient and increases his malady,

but also brings the health resort into disrepute. Others again roam impatiently from one place to another, trying first this and then that, moving on somewhere else if a favourable result does not show itself in a few days. They grope aimlessly about without guidance, instead of trusting to a rational, systematic method of treatment which alone can lead to real, lasting results. Not only is it important to make a right choice of place, but also that the patient should yield himself up with complete confidence to, and follow with steady perseverance, the guidance of a physician, and not allow himself to be drawn aside by listening to the advice of other patients, bathing attendants or nurses.

The journey to the "spa" involves all sorts of risks which are multiplied by its distance and difficulty of access. The mode of travelling must be adapted to the condition of the patient. Under all circumstances forced journeys and exhausting stages are to be avoided. Very careful regard must be paid to the diet while travelling, for the ordinary table d'hôte or *cuisine* of a restaurant might materially injure a patient coming straight from a house where he had been living by rule. It would certainly be unpardonable recklessness which could suffer acute catarrh of the stomach or intestines to arise while travelling, or any aggravation of the malady for which the journey was undertaken. To avoid all such mischances it is best to go to well-known hotels and to have meals *à la carte*, giving directions as to special requirements.

Unfortunately, in most of the health resorts even, the diet still leaves much to be desired, although the opinion seems to gain ground in the medical profession that recovery is more likely to follow on a proper system of dieting with good German cookery than with the best French. There is a whole list of chronic complaints which depend for their amelioration and cure on a well-ordered diet, above all, diseases of the digestive organs, of the blood and tissues, such as poverty of blood, scrofula, spinal complaint, gout, saccharine diabetes, obesity, &c. The study and knowledge of cookery should therefore play a chief part in the investigations of medical men, and no physician should think it below his dignity, or deem that it would endanger his scientific reputation, to become acquainted with the right preparation of food on chemical and physiological principles, and to have the diet unter his strict personal control. The principal point in dieting is, and always must be, that the doctor should not limit his dietetic directions to vague generalities, such as merely forbidding "acids" and "fats", but that he should write down the daily diet as if it were a prescription, according to the particular form and stage of the disease, the nationality, age, sex, habits, &c., of the patient, having regard not only to the quality but also to the quantity of

food to be taken. For the simple reason that the same things will not suit all patients, dietetic cookery books and other popular guides with detailed dietaries are of very doubtful value, as they leave the condition of the complaint, which may vary from hour to hour, and also the selection of dishes, to the unprofessional judgment. As a matter of course the same *ménu* or table d'hote will not be appropriate for all the patients in the hotel, and it should not be left to them to choose from the too abundant and elaborate meals the articles recommended in such very general terms by the physician. Such a *régime* is the less allowable, as a right choice depends not only on the food itself, but also on its proper preparation. Without putting in question the good intentions of patients the danger of old habits and strong likings asserting themselves is not to be underrated, and, *nolens volens*, lapses occur, which have a disturbing influence on the regular course of treatment. For severe cases, especially in diseases of the digestive organs and tissues, a special *cuisine* is to be advised and a separate invalids' table under the systematic supervision of the doctor.

Detailed tables of dietary are not set out here, as this should be the special province of the doctor in charge. Also the amount and quality of alcohol, and the times at which it is to be taken should be arranged according to individual conditions. In general, invalids' diet should be as simple as possible, nourishing and plainly prepared; all garnishes, seasonings, spices, and piquant, highly flavoured sauces ("die culinarischen Mädchen für Alles") are to be avoided, even when the digestive organs are not absolutely affected, in order to avoid possible catarrh of the stomach and intestines. The actual quantity of food taken, and the number of meals, as well as their hours, must be arranged according to the general condition of the patient's nutritive organs and digestive powers.

Bodily exercises and gymnastics for the muscles, heart and breathing organs play an important part in the treatment of chronic diseases; they were quite recently brought into use by Professor Oertel. These gymnastics are not, however, to be modelled on a uniform pattern any more than is the diet, but the exercise of any particular set of muscles must be carefully regulated by the doctor according to individual conditions, and his directions conscientiously followed. Running, riding, climbing mountains, rowing, skating, sledging, &c., are all exercises which may benefit the patient if there is no strain. By a carefully studied use of these athletics a defective circulation will be regulated, the pump of life—that is the heart—and the muscles of the respiratory organs will be strengthened, the changes of tissue and the ejection through the lungs, veins and skin of useless and therefore injurious matter will be accelerated, the nutritive organs

improved, and the whole body restored to its normal condition.

During the two last decades the air treatment has come more and more to the front in therapy, especially for lung complaints, and has had ascribed to it specific and too far-reaching effects. The enjoyment of a fresh, pure, so-called antiseptic air, free from all organic aud inorganic particles, especially from infectious germs, is undoubtedly an excellent means of cure, but it requires as careful regulation and regard to special conditions as the diet for a sick stomach, if, like all other mis-applied means, it is not to do more harm than good. The danger of a climatic station consists not in the fact that an abundance – a superabundance indeed – of air is inhaled, but exclusively in the particular properties of the local climate, such as warmth and cold, humidity and other atmospheric conditions. The direct influence of the sun's rays, the so-called insolation, is also to be taken into account, the enormous chemical strength of which has more influence on the organism than is generally supposed. There is an essential difference between the rarefied, dry mountain air and the sea air, which being denser, damper, and more absorbent of light and heat, has a less direct and powerful influence on the human frame.

How thoughtlessly does a consumptive patient, for example, building extravagant hopes of recovery on a change of climate, give himself up to the unrestrained enjoyment of the open air – which at first may bring about an unpleasant reaction – instead of, at once, under medical direction, gradually accustoming himself to breathing the air and making the length of his stay out of doors dependent on the experienced judgment of a local physician accurately acquainted with the peculiarities of the climate. A consumptive patient who has, perhaps, been confined to the house for months and obliged to keep his bed or at least his room, is, of course, much more sensitive to changes of temperature than one who has been able to remain a good deal out in the air. The proper inhalation and exhalation of the air, even, should be learned by the patient who must get into the way of drawing deep breaths with the mouth closed.

As consumption, according to the newest ideas, is undoubtedly an infectious disease, an uninterrupted air treatment for such patients is an absolute necessity, and this is best attained by an outdoor life. In advanced stages of the disease the decay process in the lungs plays an important part, and from this arise hectic fever and frequent feverish relapses. A continual ventilation of the lungs with antiseptic air is quite necessary in order to arrest or check this injurious work. Our climate is not adapted for a lengthened stay in the open air, least of all the high mountain climate with its cold nights. It is therefore of the greatest necessity that

the interior of the hotel, and especially the sleeping apartments, should be thoroughly ventilated. The bedrooms ought to have the sun on them for several hours; the temperature should never be above 17° C., the heating and ventilating apparatus being if possible combined. Various other arrangements are also needful for carrying out a permanent air cure, such as open, airy, glass-covered halls, pavilions that can be open or closed, with comfortable seats, covered verandahs, screens, balconies or terraces, &c., in order that the patient may spend the whole day in the air.

The tuberculous bacilli find their entrance into the system chiefly by inhalation; the expectoration of consumptive patients being scattered in the air, for those who have a tendency to consumption or are already smitten, all public places, such as streets, churches, restaurants, theatres, waiting rooms and railway carriages are hot-beds of infection, if the most scupulous cleanliness and perfect ventilation are not observed. There is much to be said, therefore, for the invention of Dr. Dettweiler who has devised a portable apparatus which, being filled with a disinfecting fluid, receives and renders innocuous the expectorations of pulmonary patients.

We close with a few words on the care of the skin and on clothing, matters doubly important to invalids. Baths, dry and wet rubbings, douches, river and lake baths, are only to be used by special medical advice and under regular supervision. Not one of the least essentials in the care of the skin and the regulation of the heat of the body, is clothing. Those who suffer from poverty of blood are always more sensitive to influences of temperature than full-blooded persons, and as most chronic diseases lead gradually to poverty of blood, as for example, stomach and lung complaints, persons so affected are most subject to chills. Moderately warm clothing is, therefore, absolutely necessary, in summer and winter, for such patients, who should not dress according to the month or the fashion, but according to the state of the thermometer. For staying out in the open air, especially if sitting down, after taking baths, and for long excursions, patients should always be provided with wraps.

The length of treatment must be regulated by the nature of the case, and must certainly be prolonged until there is visible improvement and the patient can be left without auxiety to his own devices. During the treatment the patient must get into regular habits of life and adopt these as guides in the future. If this reformed hygienic and dietetic treatment has proved successful, he is quite qualified to decide for himself as to its continuance and as to his future life, and will be able to guard himself from the thousand injurious influences that are always threatening him.

Table of altitudes according to climatical regions.

I. The low-land and hilly region

from 200 to 700 m. above the sea-level.

	M.		M.		M.
Locarno	210	Stansstad	437	Sierre	541
Basle	248	Lake of Lucerne	437	Oberwyl	542
Rheinfelden	270	Yverdon	437	Wylerbad	545
Schweizerhall	272	Sisikon	438	Thalgutbad	553
Lugano	275	Telisplatte	438	Merishausen	558
Mumpf	284	Worben	438	Eichbühl (Thun)	560
Muttenz	295	Biel	440	Lake of Thun	560
Lauffenburg	296	Bürglen (Uri)	440	Bocken	563
Liestal	330	Hertenstein	440	Thun	565
Eglisau	337	Vitznau	440	Bönigen	566
Schinznachbad	343	Weggis	440	Brienz, lake of	566
Frenkendorf	346	Winterthur	443	Kerns	569
Ettingen	354	Gersau	443	Thierachern	569
Mendrisio	355	Petersinsel	444	Interlaken	571
Clarens	375	Wildegg	446	Ruch-Eptingen	571
Geneva	375	Altdorf	447	Berne	573
Geneva, lake of	375	Mollis	448	Chexbres	580
Montreux	375	Orbe	450	Lugeten (Pfäffikon)	588
Territet	375	Glarus	454	Coire	590
Soragno	380	Gottlieben (Meggen)	455	Waid	590
Flühen	381	Kobelwies	456	Meltingen	595
Baden	383	Chanélaz (a. Colombier)	460	Meiringen	599
Bubendorf	385	Seewen	461	Dettligenbad	600
Aarau	388	Muri	462	Garniswyl	600
Stabio	389	Murten	464	Brienz	604
Schaffhausen	397	Montelier	465	Iseltwald	604
Arbon	398	Altstätten (St. Gallen)	470	Rothenbrunnen	620
Lake of Constance	398	Sarnen	476	Innertkirchen	626
Horn	398	Brestenberg	478	Wimmis	634
Romanshorn	398	Saxon les Bains	478	Albisbrunn	635
Rorschach	398	Büren	480	Freiburg	640
Mammern	407	Tigelberg	480	Heustrich	640
Zurich	409	Sissacher-Alpbad	481	Lüterswyl	640
Zurich, lake of	409	Schauenburgbad	486	Ebnat	642
Nuolen	411	Langenthal	488	Russwyl	653
Schmerikon	412	Knutwylerbad	490	Axenfels	654
Ermatingen	417	Rovio	497	Blumenstein	655
Immensee	417	Johannisburg	500	Morschach	657
Pfäffikon (Lake of Zurich)	417	Lostorf	500	Giessbach	660
Zug, lake of	417	Goldenberg	503	Stachelberg	664
Zug	422	Sachseln	505	Rosengarten (Lichtsq)	666
Kreuzlingen	423	Buchenthal	510	Schiers	668
Weesen	425	Nidelbad	512	Fridau	670
Wallenstadt	427	Wengibad	512	Langnau	672
Champel sur Arve	428	Mariastein	514	Walzenhausen	673
Soleure	429	Schwyz	514	Rotzberg (Pension)	675
Niederurnen	430	Wolfsberg	516	St. Gallen	676
Bienenberg	431	Laurenzbad	518	Schnittweyerbad	676
Lavey	433	Beauséjour (Zurich)	520	Obstalden	683
Bignasco	434	Ragaz	521	Spiez	683
Bex	435	Sion	521	Feusisberg	684
Beckenried	437	Forster	530	Brigue	684
Brunnen	437	Karolinenburg	530	Pfäffers	685
Hergiswyl	437	Buchegg	538	Glion	687—724
Lucerne	437	Kyburg (Solothurn)	538	Schönbrunn	689
Neuchâtel	437	Bains d'Aigle	540	Passugg	700

II. The fore-alpine or mountainous region

from 700 to 1300 m. above the sea-level.

	M.		M.		M.
Enggistein	701	Ballaigues	858	Champéry	1049
Farnbühi	704	Aeschi	859	Guttannen	1049
Schöneck	705	Uetliberg	860	Viesch	1054
Faido	712	Wäggithal	864	Fideris-Bad	1056
Wolfhalden	712	Jakobsbad	869	Grindelwald	1057
Zuz	715	Bürgenstock	870	Schwarzseebad	1065
Langenbruck	717	Bunderbach	878	Richisau	1070
Gyrenbad, äusseres	720	Weissenburg	878	Vicosoprano	1087
Ramsach	720	Gonten	884	Soglio	1088
Entlebuch	722	Colombettes	886	Wildhaus	1104
Gimel	730	Flühli	893	Lenk	1105
Rütihubelbad	736	Magglingen	900	St. Croix	1108
Hütten	740	Fideris-Village	902	Göschenen	1109
Thusis	746	Trogen	905	Bachtel	1119
Axenstein	750	Seewis	910	Plans des Frenières	1120
Sonnenberg (b. Luzern)	750	Unterwasser (Toggenb.)	915	Le Sepey	1129
Vallorbe	768	Sonderbad	920	Flims	1102—1130
Heinrichsbad	776	Felsenegg	927	Grion	1130
Appenzell	781	Schönfels	927	Vers l'Eglise	1132
Gyrenbad, inneres	781	Gais	934	Abendberg	1139
Herrgottswald	792	Rossinière	950	Gottschalken-Kulm	1140
Montbovon	795	Kilchzimmer	952	Chaumont	1145
Lauterbrunnen	797	Rehetobel	955	St. Beatenberg	1148
Faulenseebad	800	Rothbachbad (Gais)	956	Dissentis	1150
Seelisberg	801	Le Prese	962	Gurnigel	1153
Klönthal, lake of	801	Vögelinsegg	962	Morcles	1165
Heiden	806	Alveneu	965	Niederrickenbach	1167
Sigriswyl	806	Schwellbrunn	972	Plan des Iles	1168
Hôtel Tödi	816	Kämmerlibodenbad	975	L'Etivaz	1178
Promontogno	819	Andeer	979	Valzeina	1200
Weissbad	820	Les Avants	979	Gadmen	1202
Küblis	822	Zweisimmen	980	Hôtel Monte Generoso	1209
Schlegwegbad	822	Serneus	985	Schuls	1210
Waldstadt	823	Château d'Oex	990	Churwalden	1212
Zugerberg	824	Rougemont	993	Klosters	1212
Peiden	825	Weisstannen	997	Chesières	1220
Frutigen	828	La Brevine	1000	Vissoye	1220
Klönthal	828	Le Pont	1009	Schweiningen	1237
Vorauen	828	Menzberg	1010	Valserbad	1252
Gruyères	830	Engelberg	1019	Leysin	1264
Teufen	836	Unterschächen	1020	Tenigerbad	1273
Schüpfheim	840	Laax (bei Flims)	1023	Villars	1275
Schwarzenberg	841	Saanen	1023	Vulpera	1275
Längeneybad	844	Rothbad	1035	Wengen	1275
Frohburg	845	Bains d'Alliaz	1040	Weissenstein	1284
Sonnenberg (b. Seelisb.)	845	Eigenthal	1040	Stoos (Schwyz)	1290
Rietbad	854	Le Brassus	1042	Rigi-Klösterli	1300
Rosenhügel (Urnäsch)	856	St. Cergues	1046		

III. The alpine region

from 1300 to 2500 m. above the sea-level.

Brigels	1302	Gimmelwald	1382	Morgins	1411
Ober-Gestelen	1339	Fusio	1386	Leukerbad	1415
Rosenlaui	1340	Bergün	1389	St. Antönien	1420
La Comballaz	1364	Sewefelberg	1394	Tête de Rang	1423
Langwies (Schanfigg)	1377	Sedrun	1398	Schimberg	1425
Evolène	1378	Madesimo	1400	Ottenleuebad	1431
Münster	1380	Tarasp	1407	Lavin	1439

	M.		M.		M.
Rigi-First	1440	Wengern Hôtel des Alpes	1611	Maloja	1817
Rigi-Kaltbad	1441	Zermatt	1620	Glacier de Giétro	1824
Andermatt	1444	San Bernardino	1626	Campfer	1829
Schwendi-Kaltbad	1444	Chiamutt	1640	Piora (Tessin)	1839
Urserenthal	1444	Rigi-Scheidegg	1648	Engstlenalp	1840
Randa	1445	Guarda	1650	St Moritz-Dorf	1856
Wiesen (Graubd.)	1454	Mürren	1650	Klimsenhorn	1869
Maderanervalley	1460	Fettan	1657	Grimselhospiz	1877
Mühlen	1461	Misox	1668	Wengernalp	1882
Spinabad	1476	Gingins	1678	Arosa	1892
Hospenthal	1484	Samaden	1723	Chalets d'Arolla	1900
Zernez	1497	Celerina	1754	Clavadel	1938
Ried (Lötschthal)	1500	Hôtel zum Rhonegletscher	1733	Riedernalp	1947
Parpan	1505	Fee	1757	Bellalp	2052
Realp	1542	Partnun	1788	Gotthard	2094
Sinestra Val	1550	Sulzfluh	1788	Pilatus Hôtel Bellevue	2111
Davos-Platz	1556	St.Moritz-Bad	1789	Schynige Platte	2118
Davos-Dörfli	1557	Sils-Baselgia	1797	Männlichen Hôtel	2210
Davos, lake of	1561	Rigi-Kulm	1800	Riffelalp (Zermatt)	2230
Saas (Valais)	1562	Pontresina	1803	Niesen-Hôtel	2366
Rigi-Staffel	1594	Sils-Maria	1811	Eggischhorn	2487
Chasseral	1609	Silvaplana	1816	Faulhorn	2683

Table of altitudes according to territorial districts.

I. Central-Switzerland.

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Albisbrunn	635	6	Küssnacht	437	24
Alpnach	446	36	Lowerz, lake of	450	2
Altdorf	447	29	Lucerne	437	38
Arth	417	8	Maderaner-Valley	1460	29
Andermatt	1444	30	Menzberg	1010	49
Axenfels	654	10	Morschach	657	10
Axenstein	750	11	Niederrickenbach	1197	34
Beckenried	437	24	Pilatus Hôtel Bellevue	2111	—
Brunnen	437	10	Realp	1542	32
Bürgenstock	870	32	Rigi-First	1446	18
Eigenthal	1040	46	Rigi-Kaltbad	1441	18
Engelberg	1019	34	Rigi-Klösterli	1300	22
Entlebuch	722	48	Rigi-Kulm	1800	21
Farnbühl	704	48	Rigi-Scheidegg	1648	19
Felsenegg	927	4	Rigi-Staffel	1594	21
Flüelen	443	29	Rotzberg	675	37
Flühli (im Entlebuch)	893	49	Ruswyl	653	48
Furka	2436	32	Sachseln	505	37
Frutt im Melchthal	1894	37	Sarnen	476	37
Gersau	443	14	Schimberg	1425	48
Göschenen	1109	29	Schönbrunn	698	5
Gotthard	2094	30	Schöneck	705	24
Gottlieben	455	24	Schönfels	927	4
Gottschalken-Kulm	1140	8	Schüpfheim	840	48
Gütsch at Lucerne	550	46	Schwarzenberg	841	48
Herrgottswald	792	46	Schwendi-Kaltbad	1444	37
Hertenstein	440	18	Schwyz	514	10
Hospenthal	1484	31	Seelisberg	801	25
Hôtel z. Rhonegletscher	1733	31	Seewen	461	8
Immensee	417	24	Sisikon	438	29
Knutwyl	490	46	Sonnenberg (n. Lucerne)	750	24
Sonnenberg (Seelisberg)	845	24	Lake of Lucerne	437	1
Stans	458	32	Vitznau	440	15
Stansstad	437	32	Weggis	440	15
Stoos (Schwyz)	1290	10	Wylerbad	515	37

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Tellsplatte	438	28
Unterschächen	1020	29
Urserenthal	1444	30
Zug	422	3
Zugerberg	824	4
Zug, lake of	417	3

II. Bernese Oberland and Emmenthal.

Abendberg	1139	66
Aeschi	859	56
Axalp	1524	86
Beatenberg	1148	64
Berne	573	54
Blauer See	900	69
Blumenstein	655	69
Bonderbach	878	69
Bönigen	566	86
Brienz	604	86
Brienz, lake of	566	50
Bühlbad	1186	69
Enggistein	701	101
Engstlenalp	1840	89
Faulenseebad	800	66
Faulhorn	2683	59
Frutigen	828	69
Gadmen	1202	89
Giessbach	660	86
Gimmelwald	1382	98
Grimselhospiz	1877	89
Grindelwald	1057	90
Gurnigel	1153	60
Guttannen	1049	89
Heustrich	640	67
Im Hof	642	89
Innertkirchen	626	89
Interlaken	571	76
Iseltwald	604	86
Kämmeribodenbad	975	102
Längeneybad	844	62
Langnau	672	101
Lauterbrunnen	797	90
Lenk	1105	74
Meyringen	599	89
Mühlenen	690	69
Mürren	1650	96
Niesen, Hôtel	2366	69
Ottenleuebad	1431	64
Rosenlauibad	1340	90
Rothbad	1035	69
Rütihubelbad	736	101
Saanen	1023	76
Schlegwegbad	822	102
Schnittweyerbad	676	59
Schwefelbergbad	1394	62
Schwendlenbad	836	101
Sigriswyl	806	64
Spiez	683	66
Thierachern	569	59
Thun	565	57
Thun, lake of	560	63
Weissenburg	878	70
Wengen	1275	90
Wengernalp	1882	90
Wimmis	634	67
Zäziwyl	680	101
Zimmerwald	858	98
Zweisimmen	980	73

III. Jura with the lakes of Neuchâtel, Murten and Biel.

Ballaigues	858	108
Bienne	440	109
Bienne, lake of	434	104
Bonn (Schwefelbad)	512	108
Buchegg	538	110
Büren	480	109
Chanélaz	460	106
Chaumont	1145	105
Dettligenbad	600	109
Freiburg	640	108
Garniswyl	600	108
Gutenburgbad	513	111
Häbernbad	564	111
Kyburg	538	110
La Brévine	1000	106
Langenthal	488	111
Le Brassus	1042	108
Le Pont	1009	248
Lüterswyl	640	110
Magglingen	900	110
Murten	464	109
Murten, lake of	435	104
Neuchâtel	437	105
Neuchâtel, lake of	435	104
Oberwyl	542	109
Olten	393	162
Orbe	450	105
Petersinsel	444	110
St. Croix	1108	106
Schwarzseebad	1065	108
Soleure	429	110
Tête de Rang	1423	105
Vallorbe	768	108
Weissenstein	1284	111
Worben	438	109
Yverdon (les Bains)	437	106

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Aigle les Bains	540	134
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Brigue	684	156
Chalets d'Arolla	1900	146
Champel sur Arve	428	117
Champéry	1049	142
Chateau d'Oex	990	135
Chesières	1220	135
Bellalp	2052	158
Begnins	537	117
Bex	435	137
Morgins	1411	142
Münster	1380	160
Obergesteln	1339	160
Plan des Iles	1168	136
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Riedernalp	1947	158

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Clarens	375	129
Croisettes	805	118
Eggischhorn (Hotel Jungfrau)	2193	158
Evolène	1378	146
Frénières	868	139
Geneva	375	116
Geneva, lake of	375	112
Gimel	730	118
Glacier de Giétroz (Hôtel)	1824	144
Glion 687—	724	133
Grion	1130	139
La Comballaz	1364	175
Lausanne	515	118
Lavey	433	140
Les Avants	979	122
Les Plans de Frénières	1120	139
Le Sepey	1129	135
Leysin	1264	135
Leukerbad	1415	146
Lourtier	1054	144
Martigny	475	142
Merjelensee	2350	160
Montreux	375	123
Riffelalp (Hôtel)	2230	156
Riffelhaus (Hôtel)	2500	156
Rossinière	950	136
Rougemont	993	136
Saanen	1023	136
Saas-Grund	1562	156
Salvan	925	142
St. Cergues	1046	117
St. Georges	935	118
St. Luc	1675	146
St. Maurice	409	142
St. Nicolaus	1164	154
Saxon les bains	478	144
Sierre	541	146
Sion	521	144
Ulrichen	1340	160
Vers l'Eglise	1132	136
Vevey	380	120
Veytaux	442	123
Viesch	1054	158
Villars	1275	135
Visp	637	152
Vissoye	1220	146
Zermatt	1620	154

V. Lower Valley of the Rhine (Basle, Argovie).

Aarau	388	176
Baden	383	180
Barmel	485	176
Basle	248	166
Bienenberg	431	165
Brestenberg	478	177
Bubendorf	385	165
Burg	530	158
Eglisau	337	175
Ettingen	354	168
Flühen	381	168
Frenkendorf	346	165
Fridau	670	163
Frohburg	845	163
Horben Schloss	816	177
Kilchzimmer	952	164
Langenbruck	717	164
Laufenburg	296	174
Laurenzenbad	518	176
Liestal	330	165
Lostorf	500	163
Mariastein	514	168
Meltingen	595	168
Mumpf	284	174
Muri	462	176
Muttenz	295	166
Ramsach	720	165
Rheinfelden	270	169
Ruch-Eptingen	571	164
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Schinznachbad	343	178
Schweizerhall	272	168
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VI. The lake of Zurich and its environs.

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Forster (Zürichberg)	530	193
Gyrenbad, äusseres	720	196
Gyrenbad, inneres	781	196
Johannisburg (b. Lachen)	500	195
Karolinenburg (Zürichb.)	530	193
Mönchaltorf	454	196
Nidelbad	512	194
Nuolen	411	195
Schmerikon	412	195
Uetliberg	860	192
Wäggithal	864	195
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VII. The lake of Constance and its environs.

Altstätten	470	210
Appenzell	781	212
Arbon	398	205
Ermattingen	417	204
Freudenberg	885	218
Gais	934	210
Gonten	884	213
Heiden	806	206
Heinrichsbad	776	215
Lake of Constance	398	198
Buchenthal	510	221
Ebnat	642	222
St. Gallen	676	216
Schaffhausen	397	199
Schwellbrunn	972	215
Schwendi	866	213
Sonderbad	920	216
Speicher	937	218

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Horn	398	205	Stoos (Appenzell)	951	211
Jakobsbad	869	214	Teufen	836	216
Kappel	634	222	Tigelberg (Pension)	480	209
Kobelwies	456	210	Trogen	905	218
Kreuzlingen	423	205	Wald (St. Gallen)	590	218
Mammern	407	202	Unterwasser (Toggenburg)	915	223
Merishausen	558	202	Urnäsch	856	215
Rehetobel	955	218	Vögelinsegg	962	218
Rietbad	854	222	Waldstadt	823	215
Romanshorn	398	205	Walzenhausen	673	209
Rorschach	398	206	Weissbad	820	212
Rosengarten (Lichtensteig)	666	222	Wildhaus	1104	223
Rosenhügel (Urnäsch)	856	215	Wolfhalden	712	209
Rothbachbad	956	211	Wolfsberg	516	204

VIII. Grisons and Glaris.

Alvaneuer Bad	965	248	Pfäffers	685	231
Andeer	979	240	Pontresina	1803	274
Arosa	1892	245	Promontogno	819	288
Bergün	1389	250	Ragaz-Pfäffers	521	231
Brigels	1302	239	Richisau	1070	292
Campfer	1829	284	Rothenbrunnen	620	240
Celerina	1724	276	Samaden	1723	274
Chiamutt	1640	240	San Bernardino	1626	241
Coire	590	237	St. Antönien	1420	259
Churwalden	1212	245	St. Moritz-Dorf	1856	276
Clavadel	1938	251	St. Moritz-Bad	1789	276
Davos-Dörfli	1557	251	St. Moritz, lake of	1767	227
Davos-Platz	1556	251	Schiers	668	251
Davos, lake of	1561	251	Schmerikon	412	195
Disentis	1150	239	Schuls	1210	270
Fettan	1657	272	Schweiningen	1237	250
Fideris-Bad	1056	259	Sedrun	1398	239
Fideris-village	902	259	Seewis	910	261
Flims	1102	237	Serneus	985	259
Glarus	454	292	Sils-Baselgia	1796	—
Guarda	1650	272	Sils-Maria	1811	286
Hôtel Tödi	816	294	Silvaplana	1816	286
Ilanz	718	238	Sinestra Val	1550	271
Klönthal (Vorauen)	828	292	Spinabad	1476	251
Klönthal, lake of	804	292	Stachelberg	664	292
Klosters	1212	258	Tarasp	1407	262
Küblis	822	259	Tennigerbad	1273	239
Laax (n. Flims)	1023	238	Thusis	746	240
Langwies (Schanfigg)	1377	245	Valserbad z. St. Peter	1252	240
Lavin	1439	272	Val Sinestra	1550	—
Le Presse	962	288	Valzeina	1200	262
Maloja	1817	286	Vulpera	1275	270
Mollis	448	292	Waldhaus-Flims	1130	237
Mühlen	1461	250	Wallenstadt	427	290
Niederurnen	430	292	Weesen	425	290
Obstalden	683	290	Weisstannen	997	290
Parpan	1505	247	Wiesen	1454	250
Partnun	1788	259	Zernez	1454	272
Passugg	700	242	Zuz	715	272
Peiden	825	238			

IX. Tessin.

Faido	712	296	Lugano	271	299
Gotthard	2094	295	Mendrisio	355	302
Hôtel Monte Generoso	1209	302	Piora	1839	296
Lago maggiore	197	295	Rovio	497	302
Locarno	210	298	Soragno	380	302
Lugano, lake of	275	295	Stabio	389	302

1. The Health Resorts of Central Switzerland.

This group, which as regards climate and natural productions, is one of the most interesting sections of the Lake and Föhn Zone on the north side of the Alps, forms a lovely picture full of varied scenes with a remarkable number of lakes both large and small. The most diversified in character of these charming lakes is the Lake of the Four Cantons, which is surrounded by the finest scenery, and is also, historically, the most noteworthy. It consists properly of six different lakes, the four northern ones at the west base of the world-renowned Rigi forming a cross, the so-called "Kreuztrichter." The Lake of Lucerne is 437 meters above the sea; its greatest length, from Altorf to Lucerne, is 37,2 kilometers, or about ten hours by road; the breadth, on the other hand, never attains three miles, and the whole surface of the lake is only 113 square kilometers or 1 3/4 square miles; the depth is very variable: in the lake of Uri it is 264 meters. Its dark blue waters

formed the bond of union which united the four original cantons, Uri, Schwyz, Unterwalden and Lucerne into the kingdom of ancient Switzerland.

The **Lake of Zug** forms the second largest water basin in this section. It lies 417 meters above the sea, and is only separated from the Lake of Küssnacht, the most northern arm of Lake Lucerne, by a strip of land 1 1/2 kilometers broad, between Küssnacht and Immensee. It is 14 kilometers long, 4 1/2 broad, and has an area of 38 1/2 kilometers; the greatest depth is about 400 kilometers. It is famed far and wide for the abundance of its fish, especially for the so called "Zugerröthli" (red trout).

Eastward from the Lake of Zug, beyond the Zugerberg and the Rossberg, lies the little idyllic *Aegerisee*, belonging to Canton Zug, 727 m. above the sea, and 300 m. higher than the lakes in this circle. Southward from the Lake of Zug, on the Gotthard road, towards Brunnen, lies the not less picturesquely situated *Lake of Lowerz*, 450 m. above the sea, in Canton Schwyz.

The mountains tower up precipitously, rent by deep ravines and forming here and there abyss-like valleys; this peculiar mountain formation, combined with the numerous, indented, generally oblong water basins, give the climate of Central Switzerland a somewhat Mediterranean character. It has a milder, less variable climate than that of other riparian districts of equal elevation, as for example abuot the lakes of Thun and Brienz. The vegetation is consequently much more luxuriant and richer in form and colour than in other Alpine valleys at the same height. The soft, green, woody belt along the lower part of the shores vividly recalls the south Alpine lakes of Ticino and upper Italy. The fine groves of eating chestnut and kindred trees, which extend from Lucerne and Zug as far as Bürglen in Canton Uri, and the numerous, thoroughly Mediterranean fauna, produce the enchanting effects of Italian scenery. The rocky mountain sides, towering one above the other, which protect the shores from the raw, cold, north and east winds, as well as from the Föhn which, especially in the spring, is apt to sweep through the valleys with great violence, enhance de magnificence of this marvellous scene. The profuse deposits, the constant evaporation from wide expanses of water branching out in various directions, increase the moisture in the air, and the warmth so absorbed is equally diffused over the surrounding districts, day and night. It naturally follows that the climate of the different health resorts in this group varies considerably, according to their elevation above the sea, their aspect, their distance from the shore, and the proximity and extent of the woods in the district.

As a rule this so-called Insubrian climate implies good health-conditions, and, comparing the mortality of this region with that of Switzerland generally, the results are very favourable. Serious epidemics seldom occur, and consumption, which causes on an average 25 % of all the deaths, shows here a percentage of only 5—6. The mortality depends mostly on the degrees of change in the temperature; it is, therefore, highest in the second half o

the winter and the beginning of spring, and lowest from May to September. Moreover, the mean daily variations of temperature are only 2,6—6° C. Nine years of observations give the average temperature of the months and the moisture of the air as follows:

Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Temperature:											
—3,8	—0,7	—0,1	5,8	10,7	12,6	15,2	13,2	11,8	5,6	0,4	—2,9
Degree of Moisture:											
82,0	77,0	80,0	70,0	71,0	75,0	75,0	86,0	79,0	80,0	82,0	80,0

The humidity of the air is therefore least in early and mid summer and greatest in the late summer, autumn and winter. The duration of the moist warmth in summer is determined by the prevailing Equatorial current, that is, by the south and west wind; this has an important influence on statistics of sickness and mortality, the smallest number of deaths occurring between May and September.

We take as a starting point in Central Switzerland.

Hotel Löwen on the Lake of Zug.

Zug on Lake Zug. 422 m. above the sea, a health-resort.

Route: By rail from Zürich to Zug 1¼ hours, from Lucerne to Zug ¾ hour, from Brunnen by the Gotthard line to Arth ½ hour, from Arth by steamboat to Zug ¾ hour, or from Arth by the Gotthard line to Zug ½ hour.

The town of Zug numbers about 5,500 inhabitants. The opening of the Gotthard Tunnel placed il directly on the great highway which unites the South with the North. It has in every respect a very favourable and exceptionally healthy situation, lying upon the slope of the richly wooded Zugerberg which inclines towards the North-east and is covered with fresh, green meadows and fruitful orchards. There are numerous noteworthy objects of interest, such as the Mediaeval watch towers, the six Catholic churches and nine chapels — some of them very interesting from an architectural point of view — the old Council House, with a precious collection dating from historic and pre-historic times, some ancient mansions, the new Cantonal hospital, the great school house with its natural history collections, the new Government buildings, etc. These,

coupled with the splendid scenery of the lake and the magnificent glacier world, entice the visitor to remain.

The climate is comparatively warm, yet the thermometer never rises in summer above 26° C. and never falls, even during spells of rain, below 12° C. But the temperature changes greatly according to the direction of the wind and the atmospheric discharges from the neighbouring mountains.

Zug is best fitted as a spring residence for elderly, weakly people and such as are obliged to stay in the valleys and avoid mountain climbing, also for convalescents and those who are taking the cure whose bodily and muscular powers require gradual preparation for higher altitudes. For catarrhic inflammatory states of the breathing organs and for rheumatic affections this place is not suited.

Hotel Löwen, situated close to the lake, very near the steamboat pier, built in modern style, (Proprietor *Alb. Utinger*) has large comfortable sitting rooms, elegant coffee and good billiard room, pretty sunny bedrooms with a splendid view of the lake and mountain ranges. In the hotel are bath rooms with arrangements for douches; there is telephonic communication with Pension Schönfels. The house is lighted throughout with electric light. Pension terms most moderate.

Hotel Hirschen; Hotel Bellevue further off; *Hotel de la Gare;* **Zuger Kirschwasser** (first class), see advertisement at the end of the book; all very good.

A quarter of an hour's climb southwards from Zug on the gently rising road to the Zugerberg is **Pension Guggithal.**

Health establishments: Schönfels and Felsenegg,

927 m. above the sea, milk and whey cure.

Route: from Zug twice a day direct service of omnibuses runs from the railway station and Hotel Bellevue, Hotel Löwen and Hirschen to Schönfels and Felsenegg. Time 1½ hours.

Both the fine health establishments stand in an open, splendid situation on the high plateau on the western declivity of the Zugerberg, pretty close together, surrounded by very extensive park-like grounds, picturesque pine and leafy groves, intersected by numerous dry footpaths, and here and there delightful nooks and seats commanding magnificent views of the mountains. From the Hochwacht scarcely a quarter of an hour's distance up the mountain panorama is very impressive.

The climate of this high plateau is like that of the lower Alpine region, and has a particulary lubricating influence on all the functions of the body, especially on the respiratory organs and muscles. It increases the appetite, facilitates digestion, favours sleep, in a word strengthens and nourishes the body without exercising any perceptible irritation on the nervous system. The average temperature is 3,7° C. lower than on Lake Zug; in summer it seldom rises above 25° C. or falls below 10° C., and the daily variations are about 5,8° C. The locality of the two health establishments is most affected by the south west wind, as the heights that rise eastward and northward and the extensive pine woods near keep off the east and north wind almost entirely. Fogs only appear after sudden changes of temperature and severe cold.

The not very stimulating, but strengthening, life-giving climate in specially suited for:

1. patients needing rest and invigoration, who in consequence of mental over-strain and business worry suffer from nervousness and sleeplessness.

2. Those who are recovering from severe, exhausting illnesses, especially infectious diseases such as typhus, intermittent fever, scarlet fever, measles, diphtheria, etc.

3. Those suffering from anaemia, chlorosis and nervous dyspepsia.

Kurhaus Schönfels, 75 rooms. Pension, 5 to 9 frs. Health Establishment and Pension **Felsenegg.** 73 rooms. Pension 5 to 8 frs.

There is one physician for both establishments, Dr. Nauer. Fresh cow's and goat's Milk twice a day; whey; strawberries; excellent drinking water.

Excursions: — To the Hochwacht and Signal (991 m. above the sea), 1/4 hour north east of the Hotel Schönfels, with a magnificent panoramic view over the Alps from Säntis in Appenzell to the giants of the Bernese Oberland. Deep down lies the melancholy Lake of Aegery, three miles long; 20 minutes to the right of the Hochwacht is the Hüngerstock (1044 m.), a wooded hill with beautiful walks, but a somewhat limited view. The Horbachgütsch (936 m.), 1/2 hour from the Kurhaus, gives a charming view over the Enger-Oberwald districts, the Lake of Lowerz, and the majestic Rigi; at our feet running along the shores of the Lake of Zug is the Gotthard railway.

Schönbrunn

Hydropathic establishment, 698 m. above the Lake of Zug. The establishment is open from the middle of May till the middle of October.

Route: — From Zug a post omnibus goes twice a day to Edlibach, 1 1/2 hours ,drive. Schönbrunn is only 1/2 hour's drive from Edlibach. There is also postal communication between Edlibach-Horgen and Wädensweil to the Lake of Zug. Visitors are met at the railway station at Zug by carriages from the hotel if notice is given beforehand.

The handsome Kurhaus, with dependances, and fitted up in the style of the best hydropathic establishments, stands on a terrace on one of the many slopes of the Menzingerberg, on a small plateau of the Lorzethal, which is enclosed on three sides. It has the sun all day. Surrounding the house are pretty, shady pleasure grounds with ornamental walks, and on the slope is a small beech-wood. There is a varied prospect of meadowland and woody ravines, open mountain plateaus, and hill spurs giving splendid views .From the chapel on an elevation close by is a view over the charming scenery of the Lake of Zug, into the Cantons of Aar and Zürich, over the Rossberg, the mountains of Uri, the Rigi, Pilatus, and the distant Jura.

The *mountain valley of Schönbrunn* is watered by a rapid mountain torrent the Lorze, by which the meteorological deposits are quickly carried away, and from whose depths fresh currents of air ascend. As the valley is open only on its west side Schönbrunn is completely protected from the raw north-east wind, especially by the projecting shoulders of the Menzingen and Gubel mountains, 900 m. high. The air is free from dust, pure, light, brisk, and invigorating. There are few fogs. Endemics and epidemics are unknown at Schönbrunn and its environs; and there is hardly any illness among the inhabitants, especially in summer.

The climate is healthy and not severe. The mean temperature for the years 1882—1884, from meteorological observations taken between June 1 and October 15, is about 14,12° C., and does not exceed 23° C., on the other hand, it may fall in October to 5° C.,

the diurnal variations of temperature are 4,1—6,2° C., the mean moisture of the atmosphere is 70,6 %; on fine days it is about 58, on dull days, 47, on rainy days 30.

The spring of Schönbrunn is its chief attraction, and its most important means of cure. There is scarcely to be found in all Switzerland a water more suitable as a cure and more digestible. Human skill has omitted nothing that would render useful the mineral springs so richly provided by nature. The numerous hydrotherapeutic arrangements allow of the application of water in all possible forms and at any temperature desired. All the bathing operations are carried out by experienced attendants, according to the directions and under the superintendance of the resident physician. Electricity, massage and gymnastics have also their appropriate application. The mountain air is a powerful aid, an advantage which very few water-cure establishments have in common with Schönbrunn.

The establishment is conducted on the latest scientific principles of hydrotherapy by its proprietor, *Dr. Hegglin*, sanitary councillor.

Schönbrunn is recommended for the following complaints:

1. Nervous affections resulting from mental strain, neuralgia, lumbago, cardialgia, hysteria, hypochondria, melancholy.
2. Stomach and bowel complaints, spleen, liver complaint, hæmorrhoids.
3. Bad circulation (congestion of the brain, and irregular menstruation.
4. Constitutional maladies, anaemia, chronic joint and muscular rheumatism, obesity, gout, syphilis.

The food is simple, nourishing and well prepared. Pension, (3 meals, lights and service inclusive) 6 fr. Servants, 4 fr a day. Bed-room 1½—4 fr. Sitting room, 5—10. Ordinary water cure and medical treatment 1 fr. per day. First consultation with the resident physician 10 frs.

Excursions: From the chapel, 5 minutes walk up is a fine view over Cantons Zug, Aargau, Zürich, and the beautiful Lake of Zug; and on the south over the chain of the Alps from east to west. From the Josephs-Gütsch, ¾ hour from the Kurhaus is a much more extensive view that over the Hochgebirg. In ¼ hour we come to the ruined castle of Wiedenburg in the Lorzenwald: in ½ hour to the Lindenberg and Menzingen, the Gubel with an old castle chapel and a nunnery; Allenwinden (a Deschwanden chapel); and in ¾ of an hour to the volcanic grotto at the Baar.

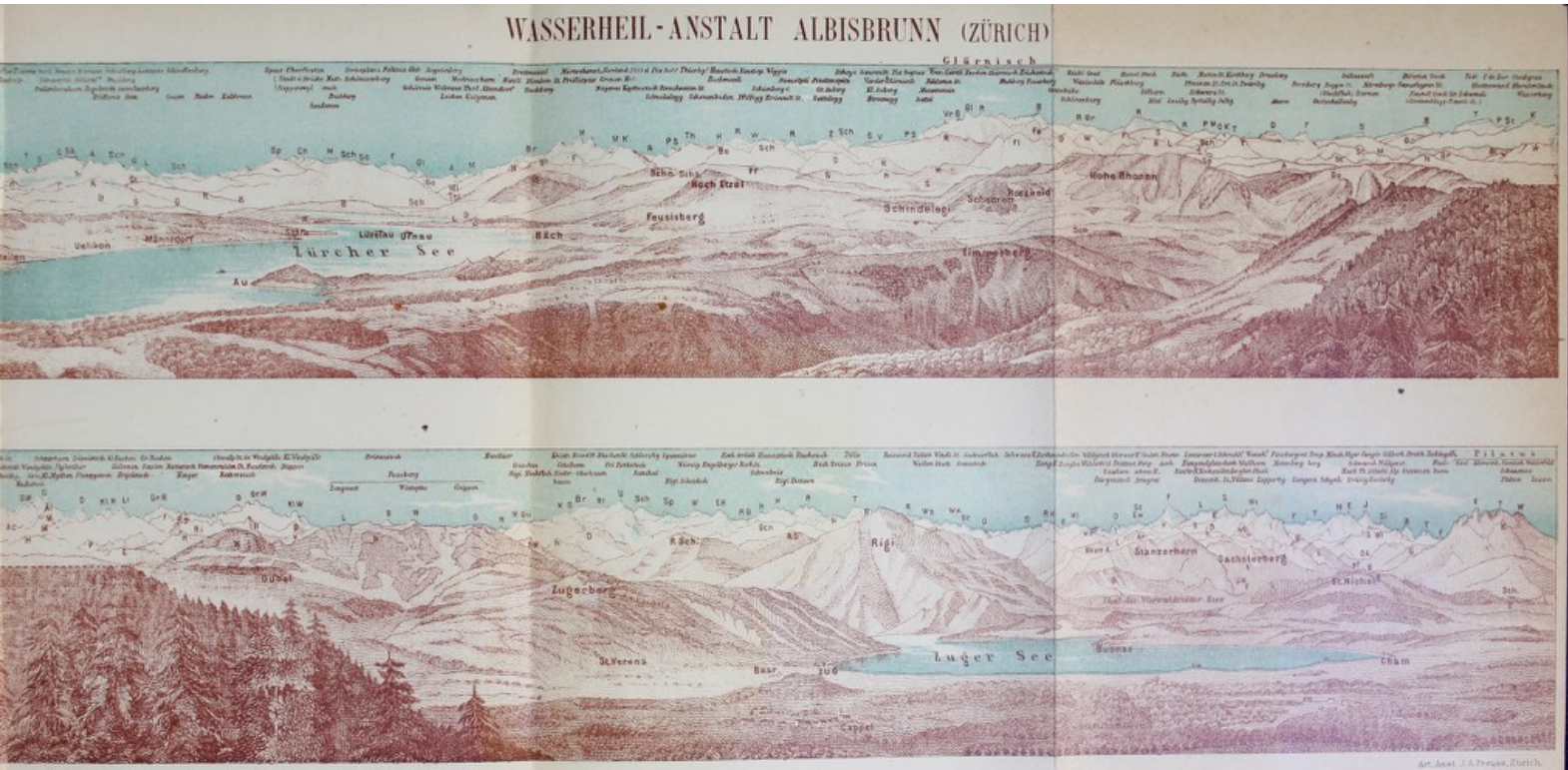
Albisbrunn

Hydrophathic establishment, 645 m. above the sea. Open all the year round. Winter retreat for those needing rest.

Route: Diligence communication three times a day between Hausen (½ k. from Albisbrunn) and Mettmenstetten (station on the Zürich-Zug-Gotthardline). From Zürich or Wädensweil direct by carriage in 2 hours, and from Zug in 1½ hours.

The Kurhaus stands on a high open plateau, looking from north west to south-east, distant only 200 m. from the south-west declivity of the wooded chain of the Albis. Soft meadows, gently rising hills, woods, a very absorbent soil, spacious pleasure grounds, laid out like a large English garden, and fine roads in all directions, characterise the surroundings. The air is free from dust, pure, fresh, and full of ozone. Many years of Meteorological observation give evidence of a splendid climate, free from sudden changes of temperature. The wind is only felt from the west-south-west, and sometimes the Föhn is slightly perceptible. In the winter of 1885—6

WASSERHEIL-ANSTALT ALBISBRUNN (ZÜRICH)



ALPEN-ANSICHT VON DER ALBIS- ODER SCHNABEL-HOCHWACHT

Art. Inst. J. J. Prenss, Zürich.

nly three times did the wind rise to a gale. There is complete xemption from storms coming from the north and orth-east over the Lake of Zürich, from which Albis is only eparated by the wooded range of the Albis. The climate is in eneral mild yet invigorating, but never too strong even or the most delicate constitutions. To the purity of the air the dis- rict around Hausen owes its almost complete immunity from hthisis, although a large proportion of the population is engaged silk-weaving, both at home and in manufactories. As a matter f fact there are several kinds of disease the existence of which not even known.

The hygienic conditions of the establishment and its surroun- dings are all that could be desired. The water pipes are of the best, the upply is excellent, and there are w. c. s. throughout the house. The water nine springs, large and small, conveyed from the top of the Albis be two rge conduits, with a natural pressure of 130 m., supply the establishment ith an abundance of the purest drinking water at a constant temperature 10° C. Former analyses showed a very small proportion of lime, and some ee carbonic acid, but not other fixed solids. In nearly all hydropathic courses treatment the water is more or less freely drunk. The baths and douches ere arranged four years ago conformably to the most modern requirements, nd there is an abundant supply of the necessary apparatus. In special cases lectricity, in the form of inductive and galvanic currents and electric aths, massage and gymnastics (massage localised gymnastics in the form chamber athletics and gentle exercises) are applied. All hydropathic cura- ve methods are as a rule carried out on the Viennese method (Winternitz).

The water-cure is successfully applied as follous:

1. As a tone-giving, strengthening, bracing treat- ent, especially in cases of anaemia, chlorosis, general weakness, onstitutional ailments, overwork, local exhaustion, weakness or aralysis, (Weakness of the generative organs, spermatorrhœa, im- otence, amenorrhœa etc.); extreme sensitiveness of the skin nclination to cold, chronic catarrh, threatened phthisis);

2. As a quieting, pain alleviating sedative; in ocal and general nervous irritations: neuralgia, neuras- enia, neurosis; palpitations, asthma, Basedow's disease, sleepless- ess, hypochondria, hysteria; incipient brain and spinal ord disease, ataxia, myelitis, sclerosis, consumption, semi-para- ssis etc.;

3. As a means of dispersing, composing and relax- ng in the following cases: scrofula, syphilis, gout, rheum, alaria; exudations from serous membranes, remains of pleurisy, eritonitis, perimetritis; hyperæmia, stoppages, congestion of e liver, affections of the biliary ducts, spleen, uterus and ovary: omach and bowel complaints, habitual costiveness.

Kurhaus *(Proprietor and physican Dr. E. Paravicini).* It is three stories gh. There is a covered Kurhalle, protected on three sides. The main ilding and dependances include altogether 120 rooms. There is a spa- ous dining hall, ladies' drawing room, a billiard and smoking room, a co- red bowling alley. Telegraph bureau in the house.

Pension, 5 fr. (little children who take meals separately with their urses 3—4 fr.); bedroom from 1½—4 fr.; double-bedded room 4—8 fr.; ser- ants (everything included) 5 fr.; service ½ fr.; simple water cure processes oultices, bathings, sitz-baths, cold douches) ½ fr.; more elaborate ditto 1 fr.; veating process 1½—2 fr. The phyisician's fee is 10 fr. for the first visit.

There are excellent opportunities for numerous easy walks and delightful **excursions.** On the Albis-road a little distance from the village of Hausen, is the battle field of Kappel where, in 1531, the Reformer, Zwingli, died for his faith. The finest starting point is, unquestionably, the Albis-Hochwacht which commands a magnificent mountain panorama.

Unter Aegeri, *sanatorium for scrofulous and rickefty children.*

Hotel Hohe Rhone Gottschalken-Kulm *(Staub and Frick)*, 1140 m. above the sea, an *air cure.* The newly built, massive Kurhaus commands a magnificent view of the Glarus, Bündner and Tyrolese Alps. Extensive fir woods in the neighbourhood.

Arth situated high up, at the south end of the Lake of Zug, steamboat pier and chief station of the **Arth-Rigi-Railway** (see advertisement in the appendix). It is a regular valley line as far as Ober-Arth, and from there to the Rigi Kulm a cogged wheel railway. It passes through a lovely valley over the bridge of the Aarbach, through the tunnel of the Mühle, and over the desolate scene where the frightful avalanche fell from Goldau (Sept 2. 1806). After passing the viaduct a glorious view gradually unfolds over the Lake of Lucerne, with the isle of Schwanau in the fore-ground, the Rigi-Kulm, Rossberg, Mythen and the eastern Alps. From the station of Kräbel the railway system becomes more complicated and the line goes over narrow, rocky terraces and steep precipices, until it reaches the highest point 1800 m. above the sea whence there is a fine view.

Seewen

Mineral bath with earthy ferruginous springs, 461 m. above the sea, in the neighbourhood of the Lake of Lowerz. Season from May 15 to September 30.

Seewen with its medicinal springs lies at the eastern base of the Rigi at the outfall of the Lake of Lowerz. The romantic beauty of the surrounding country, together with the encircling lofty mountain peaks, the extremely moist, warm climate and the absence of cold north winds which are shut off by the two imposing heights of "Hackens", make Seewen one of the most desirable and frequented health resorts. In the immediate neighbourhood of the Kurhaus are large gardens and an open piece of meadow land with fine old walnut trees which form many beautiful shady nooks; a neighbouring fir wood has been converted into a charming park.

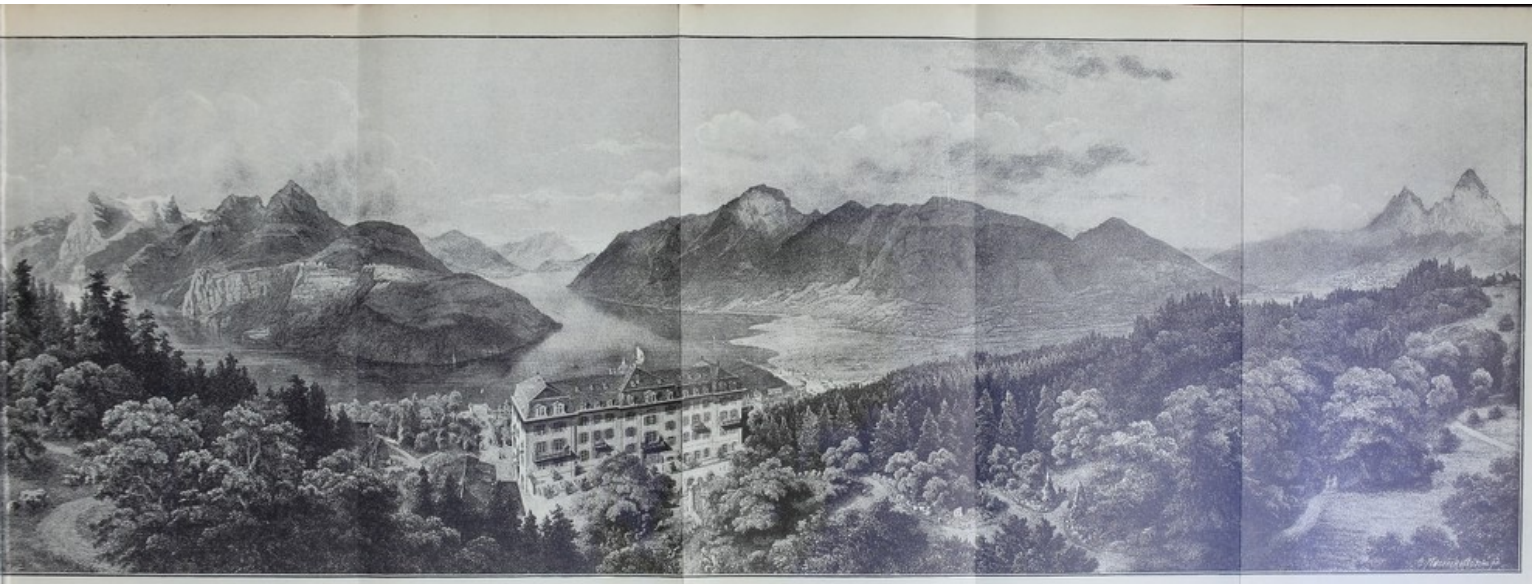
Hotel and Pension Rössli *(Beeler)* 5 minutes distant from the Gotthard Railway Station Schwyz-Seewen. There are 55 rooms with about 90 beds, a spacious dining hall and conversation room, 14 bath rooms with 40 bathing tubs and appliances for douching. There is a small bathing establishment on the lake. Pension 5½–7½ fr.; mineral baths 60 cents to 1 fr.; cow's and goat's Milk.

Advice as to the drinking and bathing cure: it is adapted for;

1. Chlorosis, poverty of blood, sterility, whites, amenorrhœa and other women's diseases.
2. Generl weakness and exhaustion after severe illnesses, nervous affections, migraine, hysteria, nervousness.
3. Chronic stomach complaints, hæmorrhage, rheumatism.

Physician: *Dr. Schönbächler* of Schwyz; other doctors can be had if desired.

In the environs are numerous **pleasant walks,** short and long; romantic rambles along the Lake of Lowerz to the Ziegel, a private wood on a high plateau of rock, where at a height of scarcely 100 m. above the Lake the Alpine rose blooms; the near and easely climbed heights of the Urnerberg with a beautiful view over the plains of Schwyz. Excursions on foot or by rail to Brunnen, Steinen, Arth-Goldau, Rigi, Mythen, etc.



Panorama Axenstein, Vierwaldstättersee - Lake of Lucerne.

Artist. Anst. J. A. Pupp in Zürich.

Schwyz

514 m. above the sea, health resort, a quarter of an hour from the Gotthard Railway Station of Schwyz-Seewen, 1¼ hr. by rail from Lucerne, 2½ hrs. from Zurich; from Lucerne by steamboat to Brunnen and thence by stage coach. The capital, Schwyz, is an agreable country residence, especially in early summer, being protected by its situation from cold north winds, and forms a pleasant introduction to higher climatic stations. — *Hotel Rössli* (Weber) very well conducted.

Rickenbach, ½ hr. eastward from Schwyz at the foot of the great Mythen which can be ascended from here in 3 hrs. by a good path; it has a very sheltered, mild situation with a fine view of the lakes of Lucerne and Lowerz as well as of the surrounding mountains.

Brunnen on Lake Lucerne, 437 m. above the sea, health resort. *Hotel Waldstätterhof* (Fassbind); *Adler.*

Route: Brunnen has a steamboat pier and railway station. From Lucerne by steamer in 1¾ hrs.; from Flüelen in 1½ hrs.; from Lucerne by rail in 1¼—1¾ hrs.; from Zürich in 2—2¼ hrs.

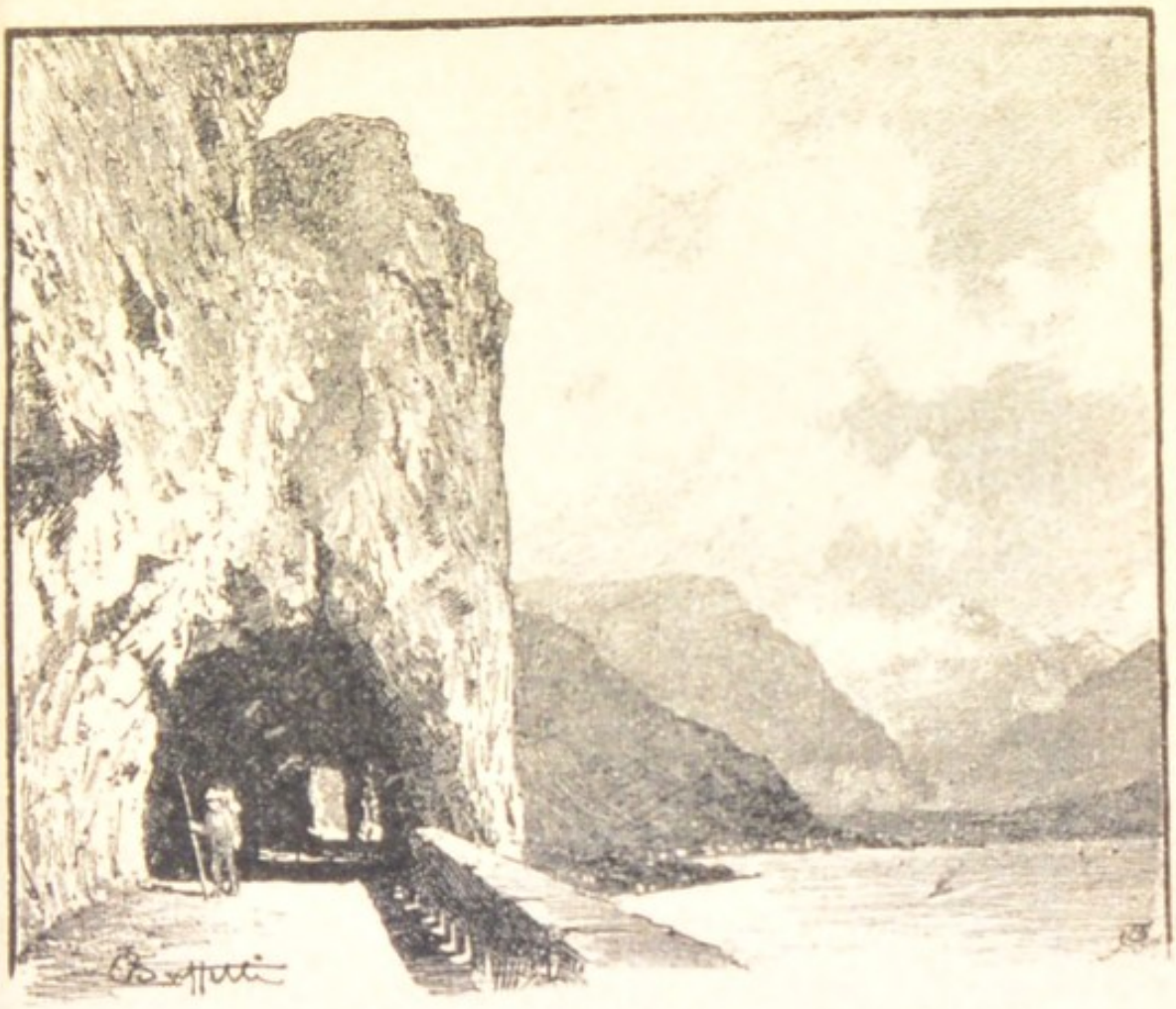
Brunnen is a place richly endowed by nature, for not only has it on all sides a marvellous and picturesque prospect, but it is also known as an excellent centre from which the most deligtful excursions can be made over mountain and valley, by land and water. The air is very mild: it is a regular lake climate, but invigorating and refreshing, and is particularly adapted for the weaker and more sensitive class of convalescents.

Excursions: in 4 minutes to the Gütsch, at the back of the village and commanding a fine view over both arms of the Lake and the neighbouring woods with their beautiful walks. Excursions on foot, by rail or boat, to Schwyz, Seewen, Axenstein, Rütli, Treib, Seelisberg; into the Muotathal to the Kurhaus Stoos, to the Frohnalp, the Great Mythen, Rigi, etc.

Morschach. 657 m. above the sea, health resort, lies on the high road leading from Brunnen to Axenstein; the new high road over Schönbach unites it with Schwyz. Its very romantic, sheltered situation, at the base of the Frohnalp, makes it a pleasant retreat for tourists and pleasure seekers; it is resorted to late in the season by invalids. — *Hotel Frohnalp; Pension Degenbalm.*

Hotel and Pension Stoos *(Carl Müller)*, 1290 m. above the sea, health resort; it stands on a terraced slope of the Stoosberg with a fine ontlook on to the richly wooded meadow land of Schwyz as well as on to the Glarus and Bernese Alps. It can be reached in 2¼ hrs. from Morschach by a good road, and there is also a footpath leading from the Muotathal up to the Hotel. The Kurhaus is in one of the most sheltered spots with a park like wood close at hand. The pure, stimulating Alpine air has a strengthening effect on constitutions weakened by severe illnesses and on affections of the nerves, on the digestion, respiration, and changes of tissue, and facilitates recovery from stomach and lung complaints (phthisis in the first-stages).

Hotel and Pension Axenfels 654 m above the sea, an air cure, lies in a lovely, sheltered corner at the edge of the plateau of the Wasifluh, 217 m. straight up above the Lake of Uri, surrounded by charming English gardens with fountains and pavilions. The temperature is mild and equable. In the Hotel are excellent baths and arrangements for douching. Milk and whey cure. Physician: *Dr. Schelbert.*



Axenstrasse.

Axenstein is 750 m. above the sea, a climatic cure. Season from the middle of May to the end of September.

Route: A regular omnibus correspondence with the steamers and railway station at Brunnen (40 minutes to Axenstein).

The Kurhaus stands, like Axenfels, at the edge of the plateau of the Wasifluh which projects, terrace-shaped, into the green Lake of Uri: there is a magnificent view of the majestic banks of Lake Lucerne, while opposite are the historic and classic Rütli, Seelisberg, and the imposing chain of the Uri-Rothstock; on the west, the many peaked Pilatus with the broad Mittelsee; on the north, the lofty peaks of the Mythen with the rich meadows of the valley of Schwyz. Charming and beautiful is all the scenery about this spot of which Queen Victoria said: "Axenstein is the loveliest place I saw in my Swiss tour." The crowning point of its beauty is the immense and beautifully situated forest and park extending for about 300 acres, a happy, artistic combination of pine and foliage; pitch trees, beeches, maples, and ash trees mingle their varied hues with that of the green meadows and pasture land, producing a most picturesque and fascinating effect. Along the paths, which extend for two German (six English) miles the traveller, seeking mental refreshment and quiet enjoyment of nature, meets, at every turn,

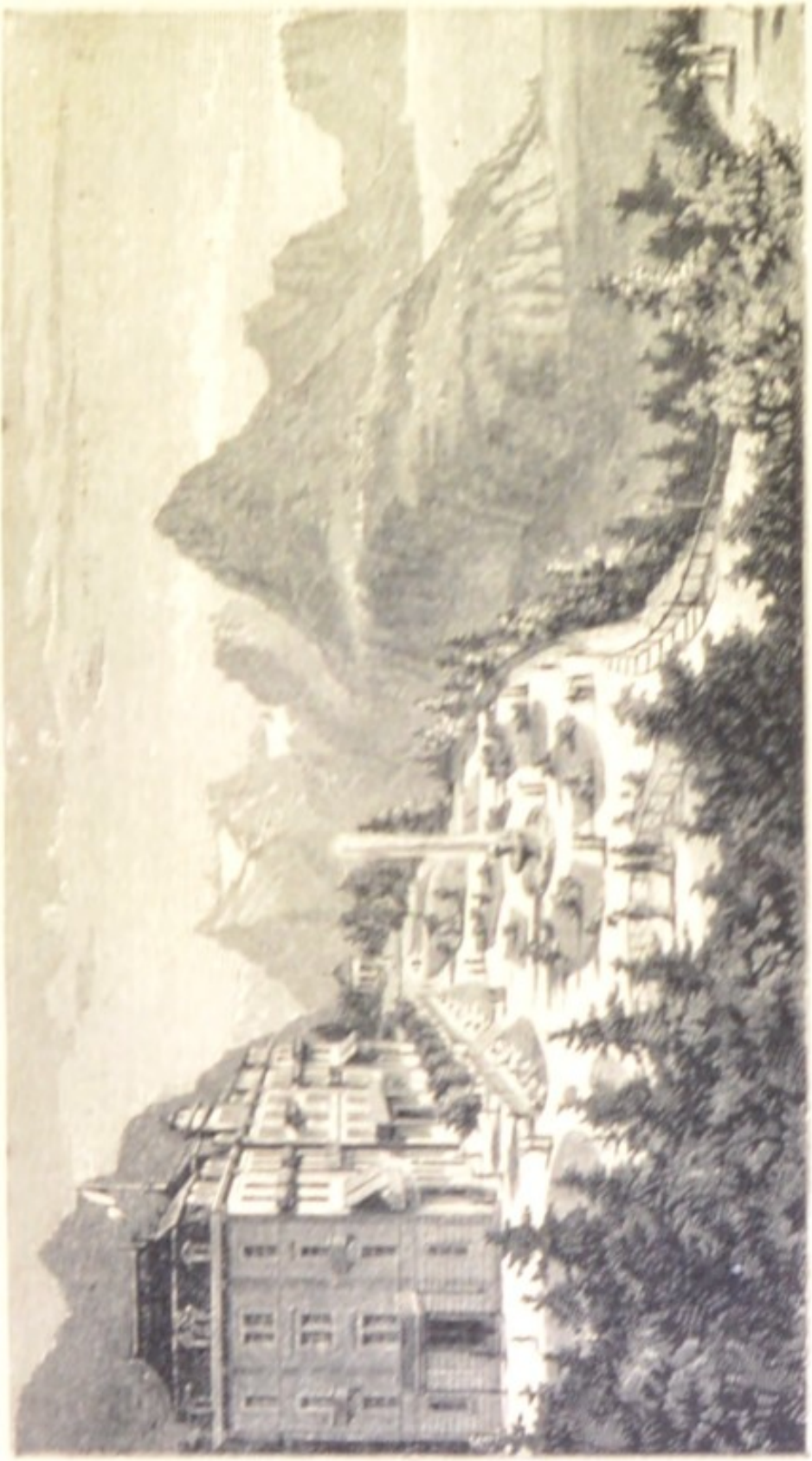
enchanting scenes, long vistas, charming chalets, verandahs, pavilions, etc. A round walk leads him successively to the amphitheatre-like Town Hall, play ground, and Schwyzerbödeli to the Gletscherfeld, the Margarita Grove and Druid Grove, etc., with interesting geological formations and specimens.

The climate of Axenstein is the same as that of the Lower Alpine regions and the Föhn Zone, and is subject to the modifying influences of the waters of Lake Lucerne which lies mirrored at its feet. The mean temperature in summer is 22° C., the highest 35° C., and although on an average it is only 1° C. lower than that of the Valley of Brunnen, yet it rarely falls below 15 to 12° C., as frequently happens in the latter place, and is therefore less exposed to violent daily fluctuations and is more equable. To the effects of a mild and pure but bracing air, of a regular exchange of currents ascending from the sea and descending from the mountains — the different disposition of the soil causing a lasting insolation — and a constantly renewed atmosphere, is added the health-giving influence of the princely Waldpark with its aromatic richly ozoned air. The currents of air descending from the Gotthard through the Reuss Valley are only partially checked at Axenberg and Frohnalpstock, and are wafted across these terraces with diminished force, contributing materially to the freshening of the atmosphere. Excellent drinking water flowing freshly and abundantly from several springs in the Frohnalp, delicious and nourishing milk from well-fed cows and goats, baths and douches of the newest-construction, an excellent cuisine, etc., complete the hygienic advantages of this first class climatic station.

Axenstein is especially adapted for

1. The numerous cases in which the nervous system has been weakened by violent emotions, mental overwork, etc.; also conditions of nervous depression, such as hypochondria, melancholy, hysteria.
2. Delicate, but not too susceptible invalids recovering from severe illnesses.
3. Poverty of blood and chlorosis.
4. Dyspepsia resulting from weakness of the digestive organs and neurosis of the mucous membrane of the stomach.

The **Grand Hotel Axenstein** *(A. Eberle & Sons)* is a massive, stone-built handsome, palatial building, four storeys high, commanding splendid views of the country for miles round and of the entire lake. It contains two large dining rooms, a large restaurant, ladies, drawing-room, conversation and reading room, music and ball room, private salons, 150 large and lofty rooms with 26 balconies, a spacious terrace with a balustrade in front of the house, on the north side a large verandah; communicating with the first floor on the south are two wooden villas, built in the most tasteful Bernese style, in which are a large conversation and billiard room, a fine terrace, cheerful, quiet rooms with verandahs and balconies, baths, stall, etc. There is convenient accommodation for 300 guests at a time. Gas laid on throughout the establishment. Beautiful pleasure grounds with a fountain in front; the extensive and shady Waldpark adjoins on the east. Several recreation grounds, gymnastic apparatus, covered German skittle ground. Telegraph and post office in the house. Elegant carriages. Once a week the Kur Orchestra plays. Pension (3 meals) 7 fr.; children under five, 5 fr.; servants 5 fr.; rooms 2 to 12 fr.; salon 15 to 25 fr.; service 3 fr. a week; lights 3 fr. Up to July 1, and



Hotel and Pension Axenstein

Road to the Axenstein.

after September 1, rooms at a reduced rate. Catholic, Protestant and English services. — Physician *Dr. Schönbächler.*

Walks in the splendid wood and park of Axenstein; **excursions** to Brunnen, Schwyz, the Lake of Lowerz, Tell's Chapel, Treib, Seelisberg, Beckenried, Gersau, Vitznau, Rigi, Frohnalp, Mythen.

Gersau

Climatic cure on the Lake of Lucerne, 443 m. above the sea.

Route: From Brunnen a high road to Gersau (1 hr.). From Vitznau a new road along the Lake. From Lucerne, steamer in 1¼ to 2 hrs.; from Vitznau in ½ hr.; from Beckenried and Treib (Seelisberg) in ¼ hr.; from Brunnen 20 minutes. Tellsplatt ¾ hr.; from Fluelen 50 minutes.

The village of Gersau for nearly 400 years formed an independent, free state, the smallest indeed in the world until in 1798 Napoleon I incorporated it with Canton Schwyz. Its situation between lofty, precipitous mountains is very pretty and picturesque. It lies on a delta, thickly studded with fruit and chestnut trees, deposited in pre-historic times by two wild Alpine streams, the Röhrlis and Riesebach, in this little bay of the Lake of Lucerne. To the right of this bay tower the majestic heights of the Hochfluh (1693 m.), at the left the Vitznauerstock (1448 m.), and between the two there stretches somewhat steeply upwards a narrow hill on which cluster meadows, woods and ravines, and on the summit of which (1648 m.) the Kurhaus Rigi-Scheideck stands imposingly.

The scenery and vegetation afford the most distinctive type of the so-called Insubrian lake region to be met with on Lake Lucerne; the air is very mild here and the soil unusually rich. On account of the great similarity of the climate to that of Italy, the southern fruits thrive and ripen to perfection; for example, figs, chestnut trees, which bear very fine fruit; almond, bay, and mulberry trees remain out of doors all the winter without protection. The place is abundantly supplied with fresh drinking water from the pure springs of the Ramsiberg. The health returns of the settled population show a satisfactory mortality of 17,4 ‰; the comparatively high death rate from consumption arises through including the fluctuating population and the factory hands who migrate thither.

As Gersau is quite shut off from the raw north-east, north, and north-west winds by a crescent shaped chain of lofty mountains running from the south-east to the west-north-west, from 1300 to 1700 m. high, while on the west rise the Bürgenstock and Pilatus and on the south the Buochserhorn and the Niederbauen, a calm rests on this romantic, peaceful spot, such as is found nowhere else on the Lake. The rays of the mid-day sun falling on the steep, exposed cliffs, the softening influence of the surface of the lake, the Föhn sweeping down from the Gotthard, quickly melting the snow in spring on the surrounding mountains and bearing away the clouds in its course, induce a strong insolation.

Gersau has all the advantages of a climatic station for diseases of the respiratory organs, especially for weak, susceptible persons for whom a gradual change of tissues with a careful regard to the amount of exudation from the skin and lungs is needed, together with a slightly stimulating influence on the nerves of the mucous membrane. According to *Dr. Fassbinds*, who has had many years' experience, Gersau is particularly adapted to check:

1. Dry bronchial catarrh, catarrh of the apices of the lungs when there is not much fever.

2. The effects of severe inflammation of the lungs, diseases of the cartilage of the skin, chronic pneumorica, pleuritic exudations and effusions.

3. The effects of measles, diptheria, scarlet fever.

4. Disturbances of the digestive organs following on general weakness and catarrh.

5. Constitutional maladies, scrofula, anæmia in young persons, especially when there is a tendency to phthisis.

It is not suited for: Phthisis accompanied with fever in advanced stages.

Physician: *Dr. Freuler.*

Hotel and Pension Müller (open all the year round) one of the pleasantest and best pensions in Switzerland. It stands close to the shore, facing south with a splendid view of the lake and mountains. The hotel contains 90 comfortable rooms, an elegant dining-room, breakfast-room, ladies' drawing-room, music, reading, coffee and billiard rooms; w. c.'s. Inhalation rooms, electricity. There is a floating bath with a circular douche. Pension 7—10 frs. The whole house can be heated for winter patients. Milk and whey cure. There is a broad terrace.

Other Hotels: *Gersauer Hof, Hirsch, Sonne.*

Pleasant walks along the Riesebach to the Rothefluh; to the Röhrlisbach-Schlucht waterfall (¾ hr.); to the Kindlimordkapelle (¾ hr.); and to the Park Schönbühl belonging to the Hotel Müller (10 minutes). A very good bridle-path to the Rigi-Scheidegg By carriage or steamer to Brunnen, Treib, Tellsplatt, Vitznau (by the Rigi railway as far as Kulm), Weggis, Lucerne, etc.

Vitznau.

Climatic health-resort on the Lake of Lucerne, 440 m. above the sea.

Route: — Steamboat from Lucerne in ¾ hour; from Flüelen in 1 hr. ¾; from Beckenried in ½ hr., from Gersau in 50 minutes; from Treib (Seelisberg) in 1 hr. From Gersau to Vitznau there is a fine new road along the Lake. From Vitznau by cable railway to the stations on the Rigi.

Vitznau lies at the foot of the Vitznauerstock and the Rothenwand. Its climate greatly resembles that of Gersau, and in Spring and Autumn it is resorted to for the same kind of complaints. The Rigi railway has quite made the place famous (see advertisement of **Rigi railway** in the appendix).

Hotels: — *Hotel Rigi-Bahn* (Kohler-Fluck) near the station and the steamboat pier, an elegantly appointed hotel; café restaurant, with long covered terrace close to the lake. — *Pension Pfyffer.*

Physician: *Dr Rappaz.*

Hotel and Pension Lützelau.

Climatic health-resort situated about half way between Vitznau and Weggis, on a beautiful inlet, amid meadows dotted with numerous walnut trees and surrounded by the jagged rocks which for two and a half centuries protected the former "Bad" from the debris falling from the Rigi. Owing to its sheltered position the climate is very mild, and is especially suited to delicate consumptive invalids. **Kurhaus** *(Dolder).*

Weggis.

Climatic health resort on the Lake of Lucerne, 440 m. above the sea.

Route: — Steamboat from Lucerne ½ hr.; from Flüelen 2 hrs.; from Brunnen 1½ hrs.

The village of Weggis, belonging to the Canton of Lucerne, is beautifully situated on the banks of the Lake, at the southern base of the Rigi. It is remarkable for the luxuriance of its vegetation, and especially for those kinds of trees which grow only on the south side of the Alps. The noble and vigorous chestnut transplanted hither from Mediterrannean regions is most flourishing, and long ago won for the place the name of the „Nice of the Lake of Lucerne." At the back of the village are the bold terraced heights of the south-western side of the Rigi; at the east the red, rocky Riesenkanzel rises sheer above Vitznau; in the distance are the Mythen, the Scheerhorn, and the mountains of Uri; on the south the gloomy precipitous Bürgenstock; on the west, towering up behind the Buochser and Stanzerhorn, is craggy Pilatus, which in the glow of the evening and morning sunlight casts a fascinating spell over this garden of Eden.

The climate is very mild, Weggis being completely protected from the cold north wind by the Rigi, and like Vitznau and Gersau enjoying all the advantages of the south side of the lake. Grapes, almonds and figs ripen, as well as chestnuts which are sent to market. The health of the resident population is, according to Dr. Gehrig, excellent; during 20 years' practice only one case of phthisis came under his notice, and in 60 years there were only 20 cases of chronic illness. Acute rheumatism, pulmonary affections and pleurisy are the complaints most commonly occuring.

The mean temperature in Spring, according to observations extending over fuor years, is 10,92° C.; in Summer 19,41° C. in Autumn 10,51° C., and in Winter 2,01° C. Owing to the abundance of wood there are numbers of deligthful and easy *walks*, shady, cool, and free from dust, such as to Tanzenberg-Hertenstein; along the beautiful road to Vitznau, to Gersau; the bridle-path to Kaltbad; the road to Küssnacht, etc.

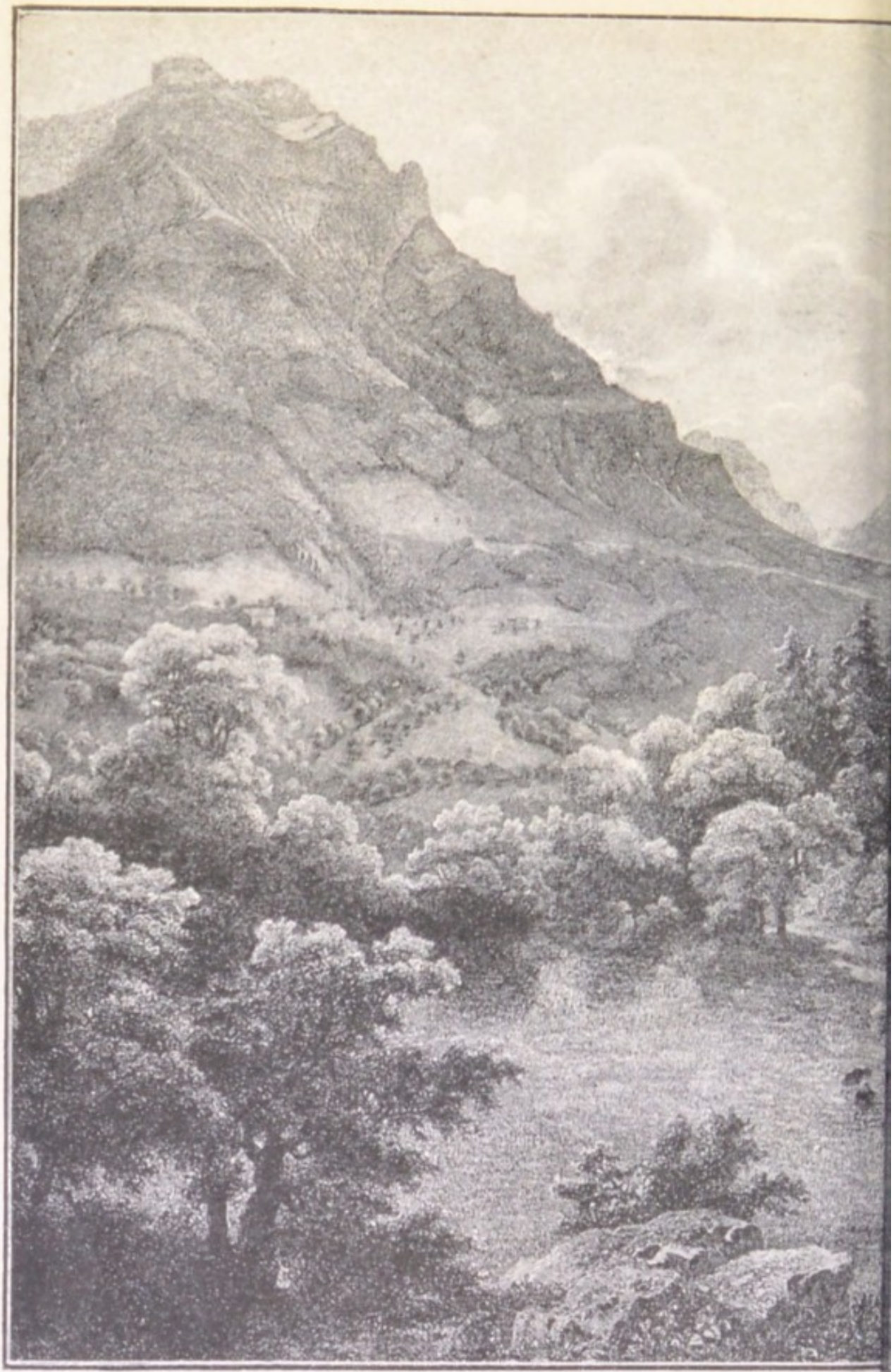
The air of Weggis is particularly suited for patients who require strengthening and a gentle and gradual preparation for more elevated health resorts, who are suffering from nervous irritation of the mucous membrane of the respiratory organs, and who are seeking to soothe and invigorate their irritated nerves.

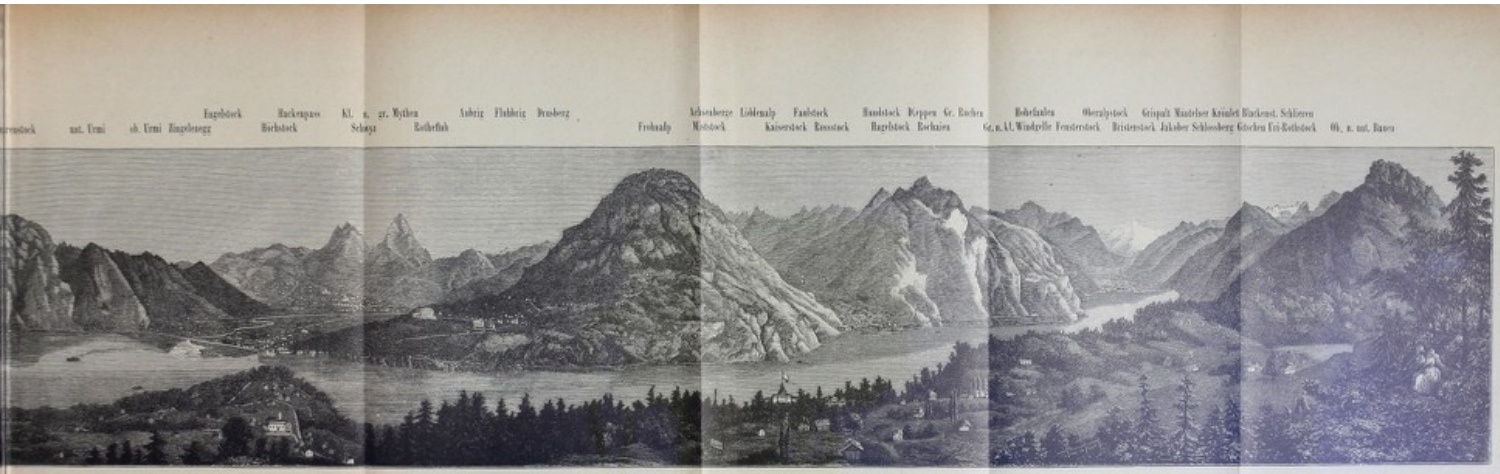
On the other hand Weggis is not suited for inflammatory affections of the respiratory organs, particularly not for the second stage of phthisis and rheumatism.

Physicians: *Dr. Gehrig*, *Dr. Schobinger*, and *Dr. Rappaz* at Vitznau.

Hotel and Pension Bellevue *(Weinmann)*, a new elegant building in the Swiss style, with a dependance, in a quiet, healthy situation close to the lake, and surrounded by a large park and pleasure grounds with numerous shady nooks. The hotel contains 50 rooms, a large dining-room, a restaurant, reading-room and a large covered verandah. Bathing in the lake. Fresh, cow's and goat's milk; whey.

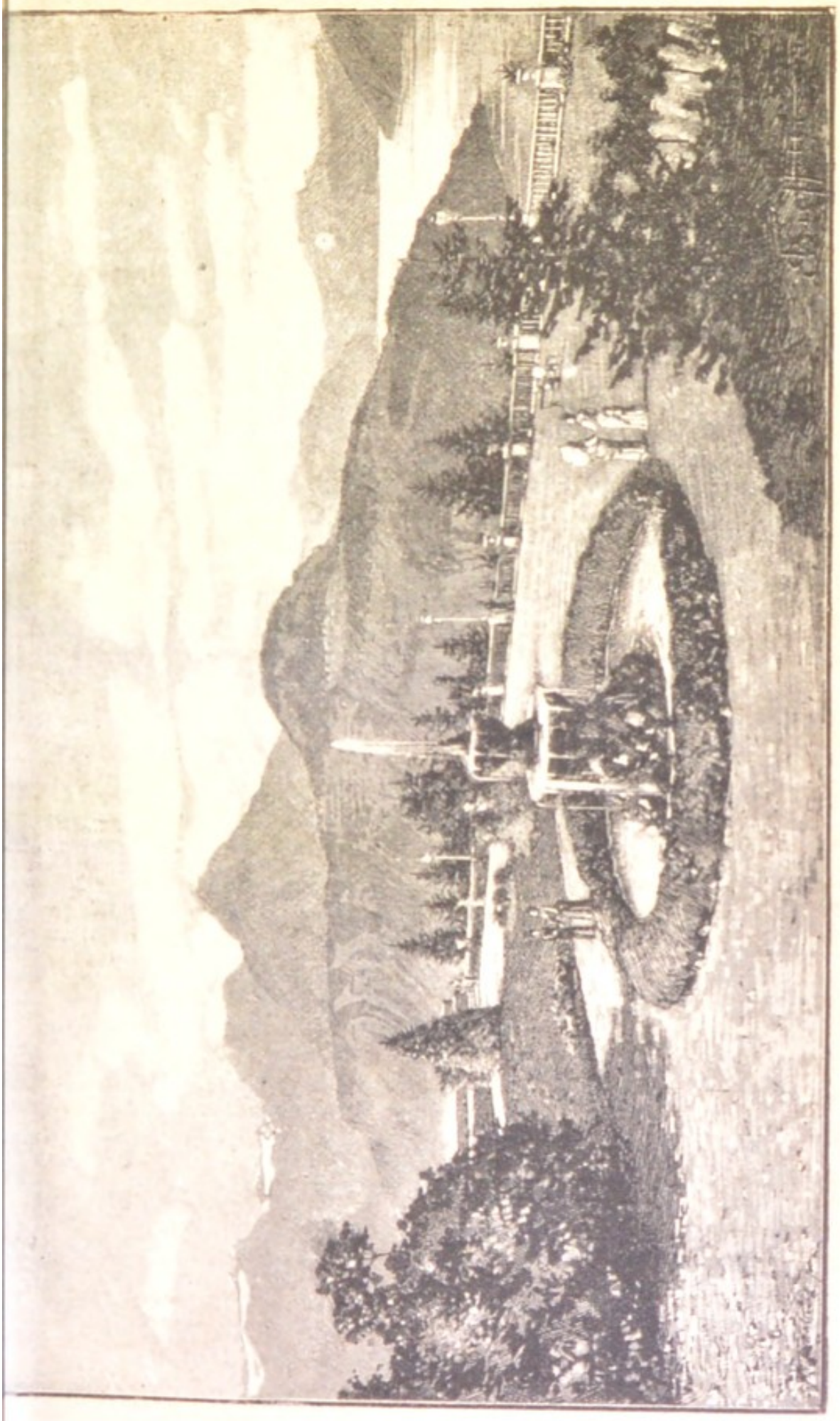
Other Hotels: — *Hotel du Lac; Pension Dr. Gehrig; Villa Köhler.*





Panorama Seelisberg, Vierwaldstättersee – Lake of Lucerne.

Artist. Anst. J. A. Pecoz in Zürich.



View from the Axenstein.

Hertenstein.

On the lake of Lucerne, only 35 minutes west of Weggis, with which it is connected by a pretty footpath along the banks of the lake, is one of the pleasantest and most beautiful summer resorts on this shore. It is the first pier touched at by the steamboat on the beautiful journey from Lucerne to Fluelen, and is situated on the fertile, well-wooded tongue of land which projects sharply westward and divides the Kussnacht arm of the lake from what is called the "Kreuztrichter" (the cross formed by the lake).

From the steamer the astonished tourist beholds a princely palace in the new Gothic style, rearing its majestic front around the little bay. It is the Schloss Hertenstein, and took its name from the nobles of Hertenstein who were once Vogts of Weggis.

The climate of Hertenstein is similar to that of Weggis, with the exception that from its protuberant position it is much exposed to westerly winds; the effect of these is, however, so modified by a large and splendid park that those who are not particularly delicate and susceptible will find Hertenstein a good place to recruit at.

Hotel and Pension Schloss Hertenstein *(Frey)*, close to the lake, is five storeys' high, has verandahs, balconies, a seven-storied tower, 40 comfortable rooms, a large dining hall, reading and recreation rooms, ladies' drawing-room, etc., there are baths and douches and a bathing establishment on the lake; shady chestnut groves, and four rowing boats. Good carriages for hire and for meeting visitors coming by steamer to Weggis. Belonging to the hotel and fine minutes' walk from it is the pretty Pension Hertenstein. Eastward, at the rear, is a Châlet. — Communication and steamboat service four times daily with Weggis.

Physician: *Dr. Rappaz.*

Rigi-Kaltbad, 1441 m. above the sea, air health resort. Season from the beginning of June till the middle of September.

Route: — From Vitznau by the Rigi railway in 25 minutes; from Weggis by bridle path in 2½ hours.

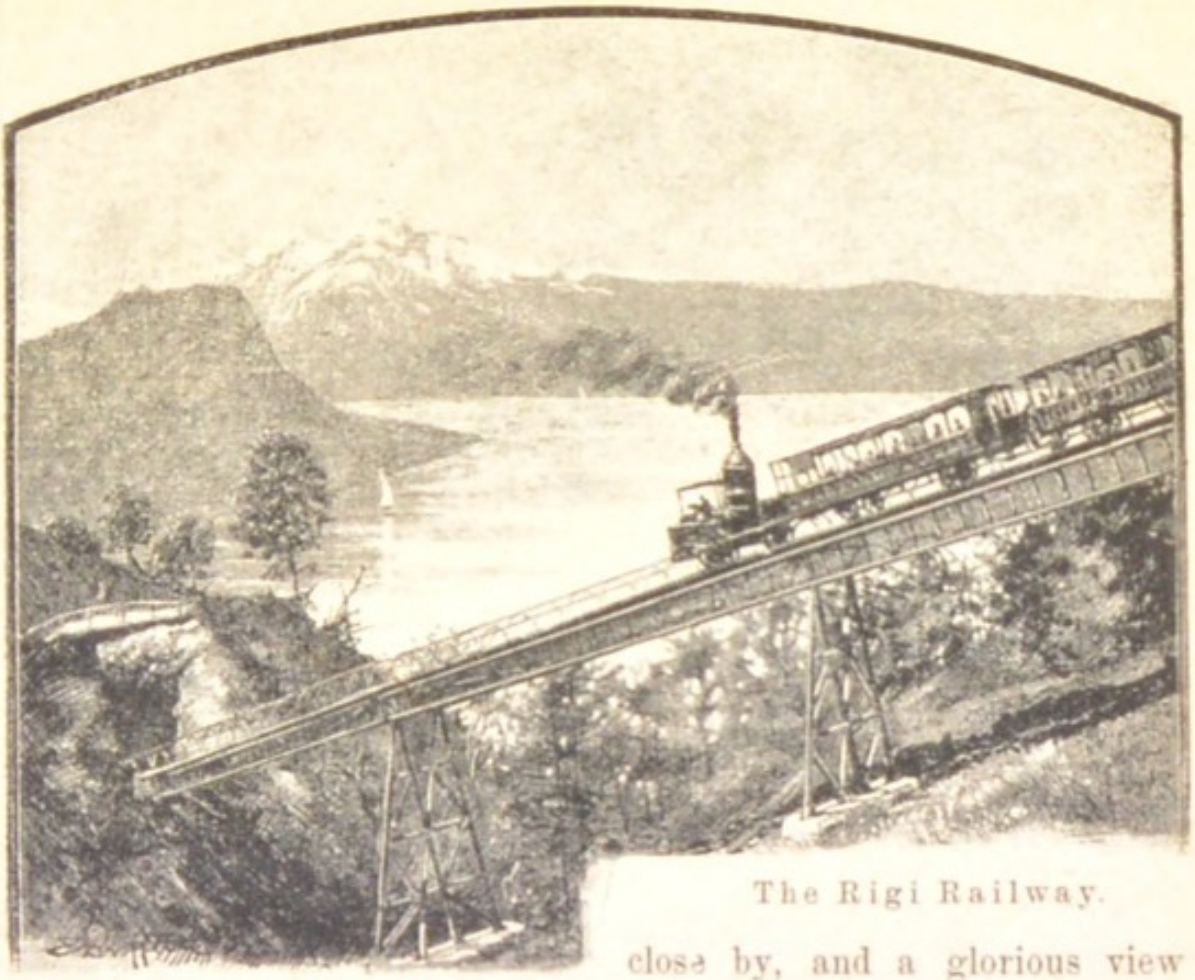
The Kurhaus is completely protected from the north, north east, and easterly winds by projecting mountain ridges, and is only fully exposed to the south and south-east, that is, to the mild winds. Towards the west is a large and picturesque fir wood, with beautiful walks and quiet retreats. Rigi-Kaltbad is noted among lofty health-stations for the tone-giving, stimulating quality of its air, and is particularly suited for those suffering from affections of the nervous system and catarrhal conditions of the respiratory organs, and for convalescents after severe illness.

Easy **walks** in ten minutes, along an almost level path, to the Känzeli, one of the favourite points on the Rigi with a splendid view over the whole country to the north east; in ½ hour to the Rothstock with an equally fine view; somewhat longer excursions to Rigi-Staffel, Klösterli, Rigi-Kulm, and in two hours to Rigi-Scheidegg.

Rigi-First, 1441 m. above the sea, air health resort.

Route: Rigi First is a railway station on the Vitznau-Rigi railway.

This favourite sanatorium of the fashionable world lies on the ridge leading from Kaltbad to the Schilt, on the southern declivity of the Rothstock, and is protected from the north and north west winds by the Kulm, Staffel and Rothstock. There is a fine wood



The Rigi Railway.

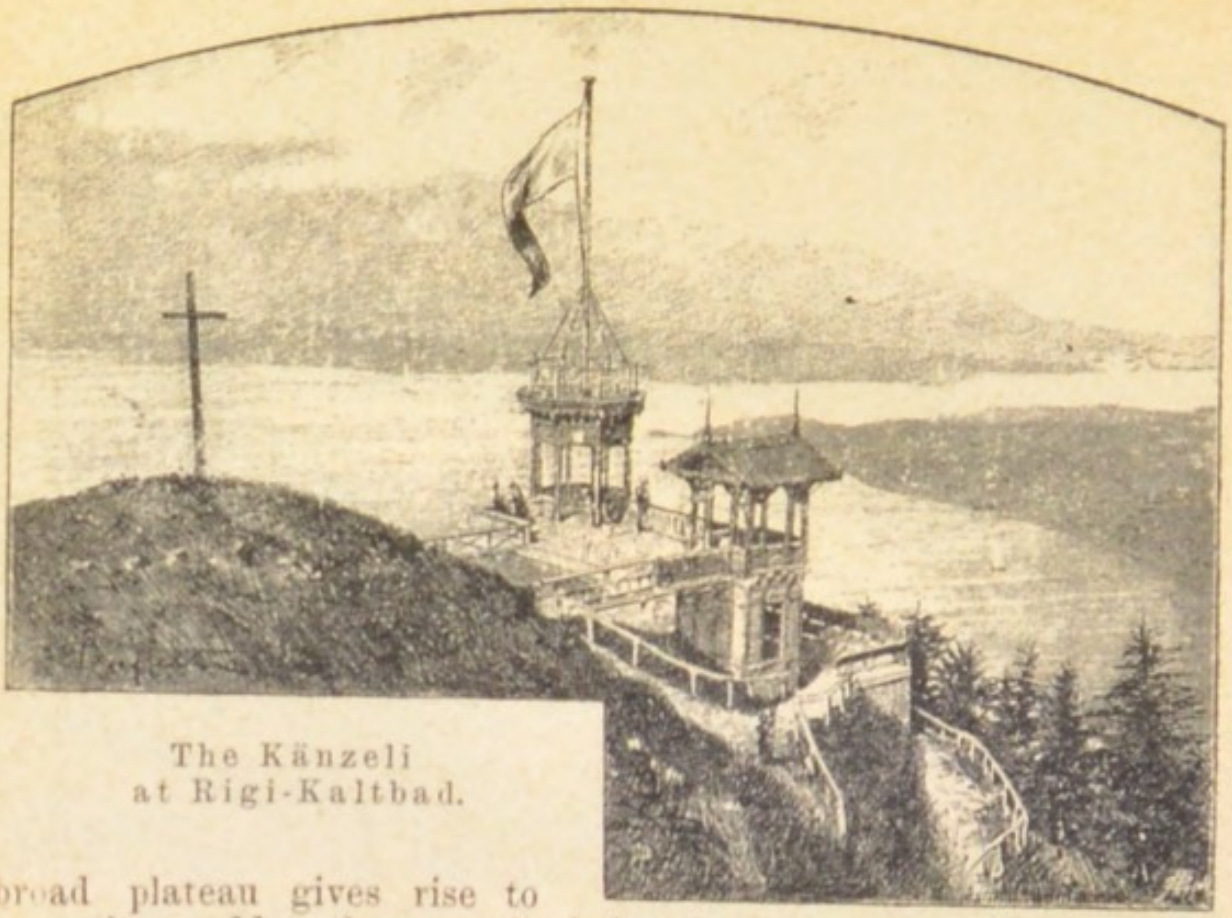
close by, and a glorious view over the Lake of Lucerne and the whole mountain range from the Scheerhörner to the Bernese Alps. Medically, the conditions are the same as at Rigi-Kaltbad.

Rigi-Scheidegg.

1648 m. above the level of the sea, 1188 above the surface of the lake, 48 m. above the last station of the Rigi-Scheidegg railway.

Route: From Vitznau by railway in 1½ hours; from Arth in 1¾ hours. From Gersau by bridle path in three hours to the Kurhaus.

This is one of the most elevated of the Swiss sanatoriums: it is in the Alpine zone, directly above the forest line, up to which extend the newly made plantations of over 2700 species of forest trees, stone pines, larches, pines, maples, etc. The extensive health establishment stands on a plateau over a kilometre in length, with a magnificent view over the south, south-east, and east. Observations made during three years give the following degrees of temperature: in June, mean 9,0° C. minimum — 0,7° C., maximum 16,7° C.; in July, mean 11,5° C., minimum 2,1° C., maximum 19,7° C.; in August, mean 10,2° C., minimum — 0,8° C., maximum 21,3° C.; in September, mean 10,8° C., minimum 3,0° C., maximum 15,0° C. The mean amount of cloud is 34—62, and the autumn days are remarkably clear and incomparably beautiful at a time when the world below is enveloped in fog. As long as there is snow lying on the mountains the weather is less settled, continuous fine weather beginning generally after the melting of the snows. This open situation on a



The Känzeli
at Rigi-Kaltbad.

broad plateau gives rise to somewhat sudden changes of wind and temperature which must be provided against by warm clothing.

The air is rather strong and exciting, suited, therefore, to constitutions needing a strong stimulous to stir up the heart and muscles, to promote change of tissues, and assist digestion and blood-making. It is also especially recommended for weakness and susceptibility of the nerves, failing digestive power, and poverty of blood.

It is not suited for diseases of the heart and vascular system, emphysema, inflammatory affections of the respiratory organs, and rheumatism of the joints.

Hotel and Pension Rigi-Scheidegg *(Dr. Stierlin-Hauser)* was begun in 1840, and consists of an extensive pile of buildings, comprising five houses connected by a gallery, namely, the main residence, the old house, the pump room, chapel, and farm. The whole includes 200 comfortable rooms with 300 beds — the largest and best being in the new building; spacious dining and conversation rooms, ladies' drawing-room, assembly room, reading room with home and foreign newspapers and a library of German, French, and English literature; several elegant private salons, billiard and smoking rooms, postal and telegraph bureau, repository, etc., in the house, besides a well supplied dispensary. Several verandahs and spacious balconies with an entrance to every room. Outside the dining-room is a verandah, protected from the wind by thick glass sides. The long pump-room can be heated, and is shut in by folding doors. In the offices are eight bath-rooms with zinc tubs and arrangements for douching. Steam pipes throughout; about 100 rooms heated; steam laundry; gas manufactured on the premises. German (noiseless) bowling-green; gymnastic apparatus. Frequent concerts during the season; dances. — The soil below the foundations is perfectly drained, and so is the surrounding meadow-land. The sewage is carried off by a conduit to the north side of the mountain, or is disposed of by buckets (the tunnage system).

The Kurhaus has at its disposal two excellent springs of drinking water, and an earthy ferruginous spring, which, according to *Dr. Stierlin*, contains the following in 10000 : 0,050 carbonate protonide of

manganese; 0,140 ferrous carbonate; 2,553 carbonate of lime; 0,087 carbonate of magnesia; 0,060 silicic acid; 0,173 crenic acid with some soda, traces of lithia and phosphoric acid, 2,330 carbonic acid, of which 0,123 parts are in a free state. Specific weight 1,0005; temperature in the height of summer 7° C.; in winter 4° C. The spring can supply 60 to 80 baths daily. To make it more palatable the iron water is ingeniously impregnated with carbonic acid which makes it a favourite table water. It is exported. Cow's and goat's milk — the animals being milked in the pump-room in the presence of the visitors — is also used as a cure. Fresh whey can be delivered daily from the dairy. Table d'hote menu to suit every digestion according to the orders of the house doctor. Pension with room (without wine and lights) for a stay of at least four days, 7—12 frs. (3 meals); servants 5 frs. without wine; with wine 6 frs. Before July 1, and after September 1, a lower tariff. Baths: cold bath and cold douche 1 fr. each; warm bath and warm douche 1½ fr.; ferruginous mineral bath 1½—2 fr. Milk or Scheidegg iron water,

Rigi-Scheidegg Hotel and Pension.

20 cts. per glass For passing travellers, breakfast, fr. 1 25; dinner 4 fr.; supper 2½ fr.; service 75 cts.; lights 50 cts.; room from 2 frs.

Physician, *Dr. Rappaz* of Vitznau.

Walks and Excursions: — Burggeist (20 minutes); Götterliboden (20 minutes); Dossen (40 minutes); Schild; First; Klösterli; Staffel; Kulm; Kaltbad; etc.

Rigi-Staffel, 1594 m. above the sea, a milk and whey cure. It is especially adapted for those suffering from exhaustion — bodily or mental — but who have sufficient rallying power to be stimulated and strengthened by the keen high wind.

Rigi-Kulm, 1800 m. above the sea, belongs like the Staffel to the *Bros. Schreiber*. It is the highest point of the world-renowned "Queen of the mountains" and is more resorted to by tourists than invalids, as it is so much exposed to the winds. The temperature is changeable, there is generally a good breeze blowing, and the air is dry and acts as a strong tonic, but is exceedingly

searching. Even the vigorous will do well to provide themselves with good warm clothing. The panorama seen from this proud height, with its three encircling lakes, is unsurpassed in all Switzerland for richness of colouring, beauty, and magnificence. The beneficial influence on the mind which such scenery exercises is not to be over-rated, and for many a wearied brain this place will be found the very best medicine.

Rigi-Klösterli, air health resort, 1300 m. above the sea.

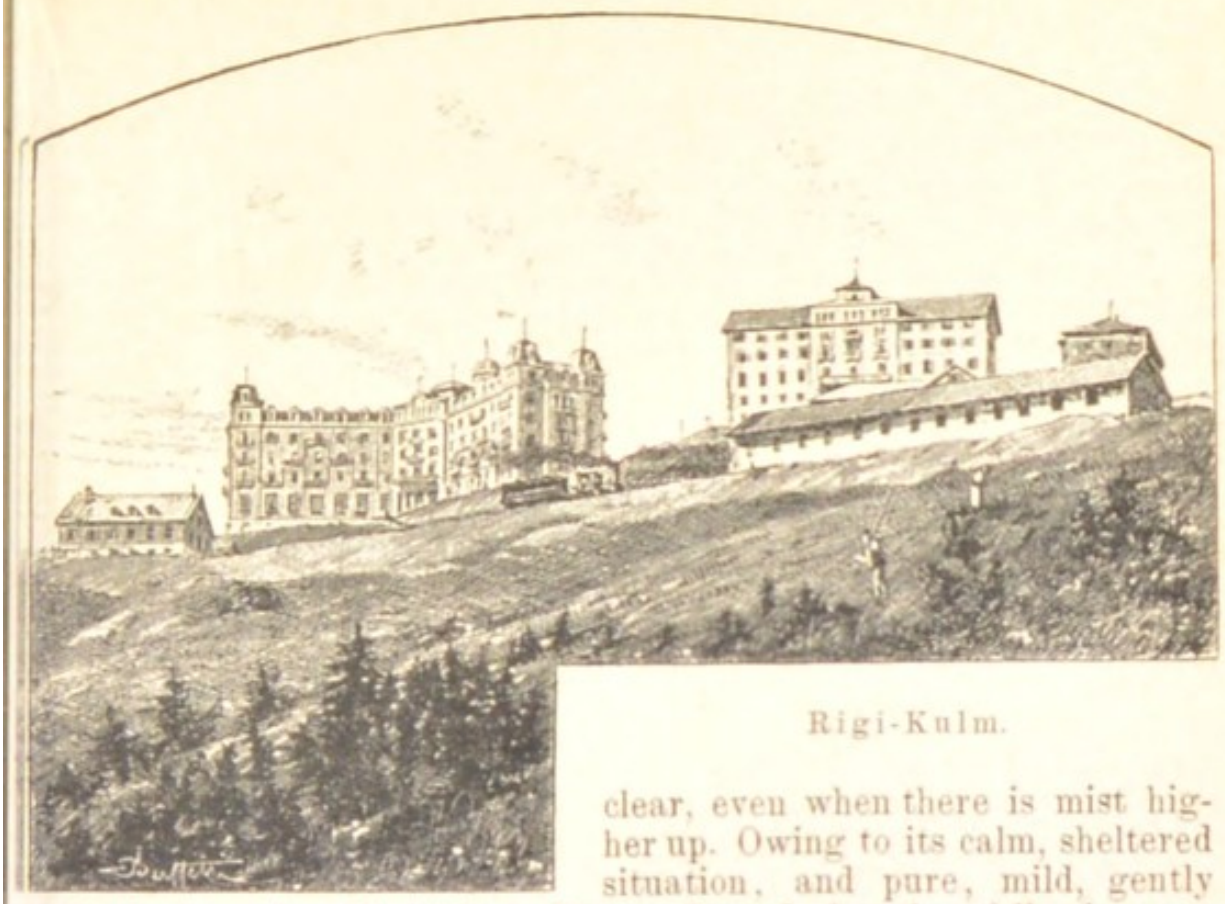
Route: Rigi-Klösterli is a station on the Arth-Rigi line. It can also be reached by rail from Vitznau by way of Rigi-Kulm.

Rigi-Klösterli lies in a lovely sheltered hollow among the mountains, amid meadows and fir-woods. It is watered by the Aabach on its way to the Lake of Zug. The soil is Rigi-gompholite through which water percolates very quickly. In the aromatic fir woods are innumerable walks, easy or arduous, so that Rigi-Klösterli might also be called a terrain health resort.

As long ago as the time of the Reformation larned men from Zürich visited the Rigi, and particularly this spot. In 1689 the mountain herdsmen built a little chapel with a hut for two Capuchins who came from the monastery at Arth every Sunday and Feast-day to perform mass. On July 11, 1700, Nuncius Piazza dedicated the chapel to the honour of "Maria zum Schnee," and from that time the shrine became the resort of numerous pilgrims. But it was not only from pious motives, but for the sake of the beautiful scenery that many travellers resorted thither. The prince of German poets, Goethe, was at "Ochsen," Rigi-Klösterli, from July 17—19, 1775; he came by way of Einsiedeln, the Schwyzer Hacken, Schwyz, and the Lake of Lowerz, from Zürich where he had been with Lavater. When the famous Zürich professor, Meister Leonhard, went to Klösterli in the summer of 1781 he found three inns, although a regular Kurhaus was not opened till 1795. In September of the same year the Danish poetess, Frederica Brun, stayed here nine days with her children, "and recorded her pleasant visit in a poem called the Rigi Mountain," and also in her "Diary." Staffel and Rigi-Kulm hotels were built successively by their proprietors. An extract from the Helvetian Almanach for 1807 shows what celebrity Rigi-Klösterli had obtained as a health-resort as early as the beginning of this century: "The Alpine air of this sweet solitude, with its freshness and purity is one of the most effectual remedies for weak nerves; and nowhere in Switzerland is so much home comfort to be found as at the hotels on the Rigi, where all the requisites for a lengthened stay are provided."

Of all the health resorts on the Rigi-Klösterli has the mildest air, being shut in by the mountains, and only having a small opening towards the east where the Arth-Rigi railway penetrates the hollow. No regular meteorological observations have yet been made, but many years of experience show that the summer temperature is fairly equable. After rain, or a storm, the temperature falls rapidly, but soon rises again. At Klösterli it is generally

Rigi Klösterli



Rigi-Kulm.

clear, even when there is mist higher up. Owing to its calm, sheltered situation, and pure, mild, gently stimulating air, Rigi-Klösterli is adapted for the following: — susceptible and weakly convalescents, those suffering from nervous weakness who need gradual strengthening and building up; for poverty of blood and chlorosis, inactivity and weakness of the digestive organs, dyspepsia, and lung disease with loss of rallying power; also for organic weakness of the heart and vascular system with serious accompanying complications; tendency to apoplexy and catarrhal rheumatic affections.

Hotel and Pension zum Schwert (Proprietor *Zeno Schreiber*), a four storeyed house, recently much enlarged, with well-arranged guest chambers and good beds; a large dining hall; excellent cuisine and wine, fresh, pure, spring water. Milk and whey cure. Baths, Pension, with room, 5—6½ frs. Reduced prices during May, June and September. Post and telegraph.

Hotel zur Sonne *(Schindler)*, with Dependance Krone, is a large five storeyed building with 100 fine guest chambers (170 beds) with ladies' drawing-room, and balconies; good restaurant. Covered gallery looking on to the Hochgebirge. Arrangements in the house for brine, steel, and pine baths. Milk and whey cure. Private farm. Gas.

The celebrated gymnastic games of the Rigi cowherds take place during the summer. Rigi-Klösterli is the starting point for the most beautiful excursions on the Rigi, both on foot and by the Arth-Rigi railway (very cheap fares). Trains up to the Rigi Kulm to see the sunrise and trains down after sunset. Pension, with room, 5—6 fr.

Physician, *Dr. Kamer* of Arth.

Walks and **Excursions:** — Numberless footpaths winding among the woods which extend about three miles, with shady and romantic seats on rocks and hillocks and beside waterfalls. By the Arth-Rigi railway to Kaltbad, Staffel, Kulm, Scheidegg, etc.

Seeburg, a summer resort on the right bank of the Lake of Lucerne, a mile and a half above Lucerne, lying in a small bay, consists of three hotels and pensions, surrounded

by a large garden reaching down to the lake with an extensive park at the back. Warm and cold baths. Bathing in the lake. Good boating.

Sonnenberg, close to Lucerne, 750 m. above the sea, a health resort for the air. Family boarding house.

Route: From Lucerne by rail to Kriens in 5 minutes, and from there in 25 minutes along a good road to Sonnenberg.

Sonnenberg is noted for its imposing panoramic view over the Lake of Lucerne and the mountain range from Tödi to Pilatus. The climate resembles that of the lower Alpine regions; the west wind predominates, but its effects are greatly modified by extensive woods and the heights of the Langfohrenkreuz. Milk and whey cure.

Gottlieben in Meggen. Pension on the Lake of Küssnacht, 45 m. above the surface of the water. A pleasant summer resort.

Route: — From Lucerne by steamer in ½ hour, or by a good road in 1 hour and ¼.

Gottlieben lies on the north west bank of the lake, close to the shore, on a pleasant declivity of the Meggerbergrücken, which slopes gently south-eastwards, in the midst of a magnificent park of forest and fruit trees. It rejoices in a very mild climate. There are excellent arrangements for bathing in the lake. Milk cure.

This place is recommended for weakly children, for persons suffering from poverty of blood, or needing invigoration, and for delicate convalescents.

Küssnacht, lying at the north-west corner of the lake called after its name, at the northern base of the Rigi, is a steamboat station on the Lake of Lucerne, and only 20 minutes distant from the Gotthard railway station at Immensee. Milk and whey. A good centre for tourists. *Hotel du Lac.*

Beckenried, 437 m. above the sea, a health-resort on the Lake of Lucerne. *Hotel Nidwalder Hof; Sonne; Mond.*

Route: — From Stans by diligence in 1 hour; by steamer from Lucerne in 1 hour; from Flüelen in 1 hour ¼.

The advantageous position of Beckenried, amid luxuriant meadows, fruit and walnut trees, renders it during the season one of the most frequented of places. The temperature is fairly equable, as Beckenried is for the most part protected from every wind but the east. Bathing in the lake; warm baths. Milk cure.

This place is recommended in cases of great weakness, or poverty of blood; for convalescents, and as a transition station in cases of incipient phthisis.

Schöneck, 760 m. above the sea, and 323 above the Lake of Lucerne, is a hydropathic establishment for the employment of the pneumatic apparatus, of electricity and medical gymnastics.

Route: — From Beckenried by carriage in ¾ hour along a good road.

The Kurhaus Schöneck lies directly above the lake on a broad mountain terrace with a dry chalky soil; it commands a full view of the Rigi on the opposite shore, of the Mythen on the east,

of Pilatus und Burgenstock on the west, and of Niederbauen on the south.

The climate is identical with that of the lower Alpine districts with the additional advantages of that of the lake zone. The air is therefore very mild, though never, even in the height of summer, excessively hot (mean summer heat 21—23° C.) because the currents of air which continually pass to and fro between the surface of the lake and the terrace equalise the temperature. The vegetation corresponds with that of Gersau and Weggis. Schöneck is indeed exposed to westerly winds, but it is protected by the Rigi and the Hochfluh from the north and east, and by the wood and park from strong breezes generally.

According to Dr. Kreis, this establishment has "the best all round medical arrangements for chronic cases." The hydropathic apparatus is on the newest hydrotherapeutic principles, and is notable for its great variety of modes of application. For pneumatic treatment there are two apparatuses: the so-called "Glocke," an iron receptacle for the use of atmospheric air in a dense condition, and Geigel's, for inhalation of dense air, and exhalation in rarefied air.

Schöneck is recommended for general weakness, poverty of blood, chronic diseases of the nervous system (mental affections excepted); diseases of the respiratory organs (catarrh, emphysema, asthma), of the digestive organs, and constitutional diseases.

Physician: *Dr. Wunderlich.*

Walks and Excursions: — In the immediate neighbourhood are the well laid-out public gardens and the aromatic woods (on the eastern side ¾ hour westward) in which are numerous smooth and easily ascending footpaths; in 10 minutes to Emmaten, a picturesque village at the foot of the Niederbauen, through the Kohlthal to Tschäderbach and the Riseetenfall; behind the splendid waterfall of Blätterbach, and in ¾ hour into the romantic Schlucht with footpaths among the rocks.

Seelisberg, 801 m. above the sea, a climatic health resort on the Lake of Lucerne. Season, middle of May till end of September.

Route: — By steamer from Lucerne in 1½ hours to the pier at Treib, whence there is a good road to Seelisberg, or from Beckenried by way of Schöneck (see above); by steamer from Fluelen in 50 minutes; from Brunnen in 5 minutes; from Gersau ¼ hour; from Vitznau 1 hour, and from Weggis in 1¼ hours and Beckenried in ½ hour. The steamer also stops at Rütli, whence there is a charming walk up to Seelisberg.

High up on the Grütli, which rises precipitously from the picturesque Lake of Uri, lies the village of Seelisberg with its little white-washed church visible from afar, and the shepherd's huts dotting the steep, craggy slopes and mountain sides. At the quiet little place of pilgrimage, Maria Sonnenberg, there has been established for the last 40 years a much frequented and delightful Kurhaus. An extensive pile of buildings, with an imposing array of windows in front and a flag flying from the lofty dome, rises from the dark wooded background. This palatial edifice, with its commanding views of the surrounding country, is the Kurhaus Sonnenberg, 845 m. above the sea.

Its favourable situation presupposes a perfect climate; for the Kurhaus lies on the western declivity of the deep valley which encloses the Lake of Uri, and consequently receives the first rays of the morning sun much earlier than Axenstrasse on the opposite shore, while early in the afternoon cooling shadows arise, and there is always a gentle breeze from the lake. Directly adjoining the house is a beautiful wood with charming walks and magnificent old trees, under whose fragrant, leafy canopy numerous seats have been placed. The establishment is protected on two sides — the north and south — by the thick foliage of the monarchs of the Schwendi and Kirchwalden; on the west it is sheltered by the precipice of Sonnenberg towering to a height of 150 m., yet richly wooded. Sonnenberg is thus exposed only towards the east, and even that side is protected from the east wind by the colossal pyramid of the Frohnalpstock opposite. The temperature, therefore, in spring and autumn is milder here than anywhere on the Lake of the Four Cantons, while even in the height of summer the solar rays are so much tempered by the surrounding meadows and woodland that the heat is never oppressive. The ordinary summer heat is 21—25 C., and only as an exception rises to 30 C. The daily variations of temperature are unusually slight. The relative humidity of the air is considerable, and owing to the propinquity of the lake and the wood remains pretty constant. Fogs are rare.

Truttmann's Meteorological Observations, 1871:

Month, Place		Temperature					Relative Humidity				Cloud	Atmospheric Deposits
		7 o'clock	1 o'clock	9 o'clock	Minim.	Maxim.	7 o'clock	1 o'clock	9 o'clock	Minim.		
April	Seelisberg	6,6	10,14	7,16	0,3	18,4	81,7	71,2	82,2	40	7,4	110,4
	Gersau	8,28	13,00	9,47	1,5	16,8	—	—	—	—	6,6	138,6
May	Seelisberg	10,07	14,27	10,26	4,1	22,2	—	—	—	—	4,1	—
	Gersau	11,71	16,58	13,52	5,6	22,8	—	—	—	—	3,1	—
June	Seelisberg	10,64	13,82	10,62	3,2	24,0	—	—	—	—	7,0	233,9
	Gersau	12,59	16,21	14,01	7,0	27,4	—	—	—	—	5,3	206,9
July	Seelisberg	16,84	19,92	16,93	9,1	29,2	—	—	—	—	4,8	118,8
	Gersau	18,05	21,27	19,19	12,7	27,0	—	—	—	—	3,6	—

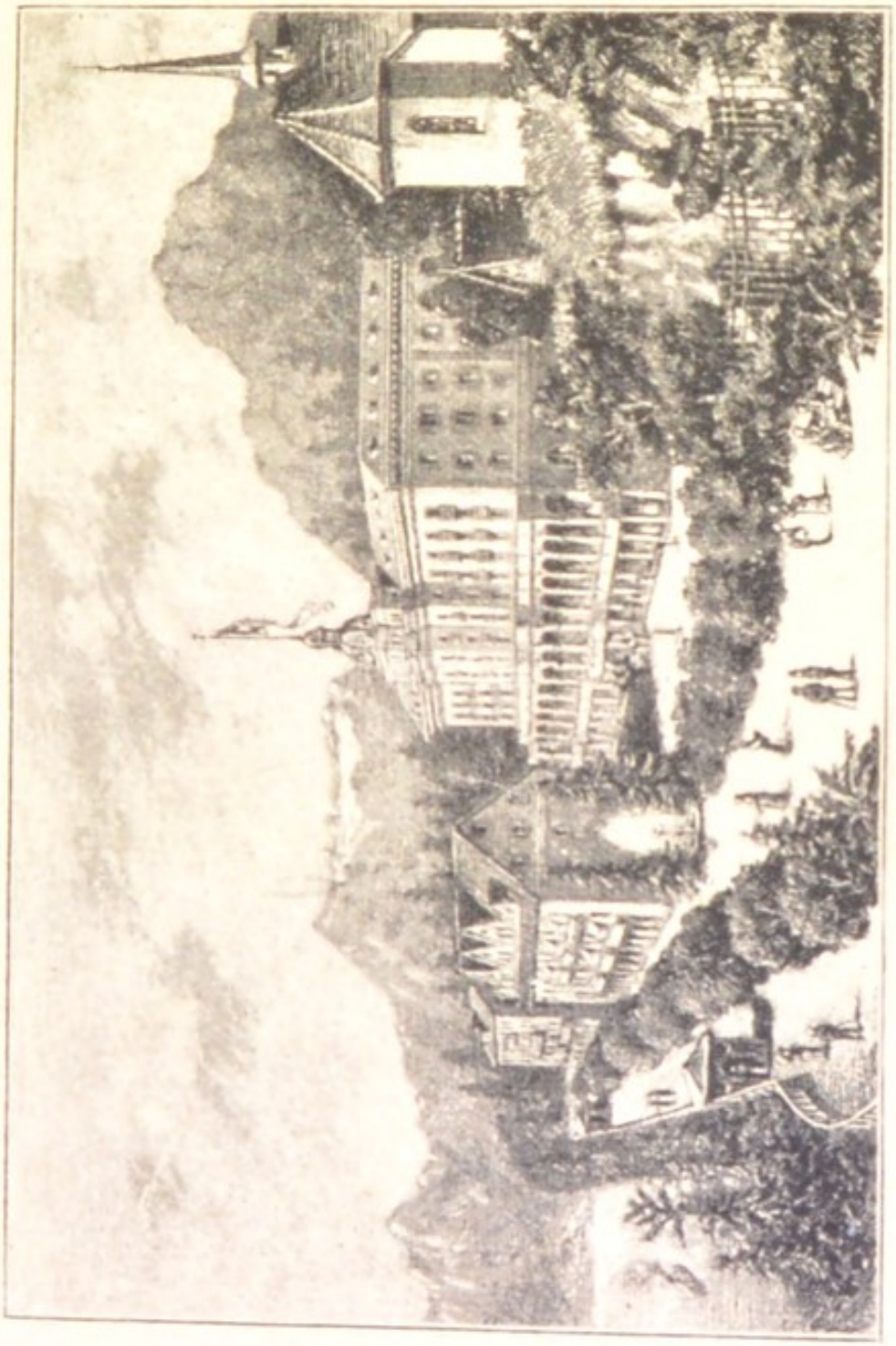
The climate of Seelisberg is therefore, though bracing uncommonly mild; it is Lower Alpine in character, and is particularly adapted to relieve irritation of the respiratory organs, or to ward off any predisposition thereto.

Seelisberg is to be recommended in cases of poverty of blood, dycrasia, weakness after loss of blood, suppuration, severe illnesses, excessive mental strain, convalescence from inflammatory affections of the respiratory organs, chronic stomachic and intestinal catarrh, dyspepsia, diseases of women, nervous affections.

For the following Seelisberg is not recommended: acute tubercular disease with great irritation of the vascular and nervous

system, later stages of consumption, organic heart disease and vascular disorders.

Seelisberg is well adapted as a treatment to follow a course of baths or waters, the balmy, light mountain air preparing the patient for a return to normal conditions. It is especially suited



Kurhaus Hotel and Pension Sonnenberg at Seelisberg.

as a summer station for persons with chest complaints who pass the winter in high altitudes, such as Davos or Andermatt, in the South of France, or on the Riviera. During spring and autumn, however, Gersau, Vitznau, Weggis, Montreux, form good intermediate places.

The Kurhaus Hotel and Pension Sonnenberg (Proprietor *M. Truttmann*) is a fine pile, consisting of three houses built during the last thirty years by M. Truttmann at a large outlay; the palatial block in the rear, built in 1874—5 is constructed to meet in every respect the increased requirements of the present day. It is five storeys high, 52 m. long by 22 m. high, and the front windows, overlooking the lake, 26 in number, all have balconies, the dome 40 m. high, commands a magnificent prospect. On the ground floor, a restaurant with a bowling alley, billiard-room, dancing, music and conversation room, the two Hotel bureaux, and the post and telegraph office; on the first floor the airy, cool and elegant dining-room, 7 m. high, to seat 500, with breakfast-room and ladies' salon adjoining. On the floors above, including the top, are in all 100 bed-rooms and salons. Along the entire frontage of the dining hall and adjoining rooms is a cast iron colonnade, the arches of which form a balcony for the first floor rooms. The establishment is lighted throughout with gas manufactured on the premises.

Facing the buildings in the fore ground, close to the precipice of the Grütli, with a full view of the Lake and the mountains, is a terrace 200 m. long, constructed on a solid wall of masonry. and laid out as a garden with pavilions, the lofty branches of the plane trees forming a cool, shady canopy — this is the favourite resort of visitors. Excellent spring water at a temperature of 9° C. flows in a conduit from Seelisberger Kulm. Cold and warm tub baths; various kinds of *douches*, *massage*, *electricity*, a *pneumatic apparatus* (Geigel's) are in use. Lake baths in "Seeli"; mineral water, cow's and goat's milk.

Pension (3 meals) 6 fr.; separate meals, 9 fr.; in a private room, 12 fr.; bedrooms in the main building, from 2 fr. upwards; in the first and third dependance, from 1½ fr.; in the second dependance, from 2 fr. upwards; salon, from 6 fr.; service 50 cts. a day; candles, 50 cts. each; Kur tax 2 fr. 50 per week. Before July 1. and after September 1., a reduction in prices. Catholic, Protestant and English church services.

Physician *Dr. Köllner.*

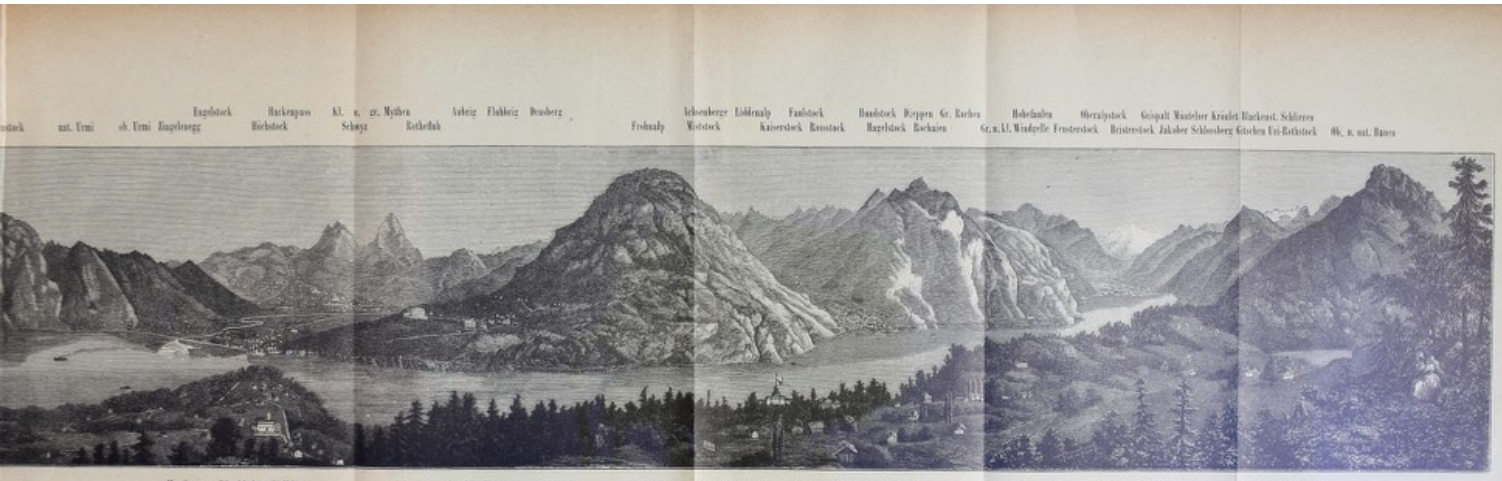
Walks and excursions. — In ¼ hr. through the beautiful cherry woods to the village of Seelisberg; in the opposite direction a high road-much used by pedestrians — to the deep-green Alpine Lake, the so-called "Seeli", with lake bathing arrangements; to the picturesquely situated village of Emmeten and the hydropathic establishment Schöneck. Almost level footways to the Dachsenlocher, with very beautiful view of the Löwenberg, to the Grashalde above the Schwendifluh and the Teufelmünsters with views of the little castle of Beroldingen. In 25 min. to the Egg and the lower Kränzli and the Ur or Oberwald. Up the mountain by a rather steeper path to the little village of Bauen on the shores of Lake Uri, as well as to the light green Lake of Rütli, the cradle of Swiss freedom, where on a December night in 1307, a little band of ardent patriots from the three Forest Cantons, by an oath of federation laid the foundation of the „Bund". By boat from there one easily reaches the rock rising 90 m. sheer above the lake — the Mythenstein — on which in 1859, on the 100th. anniversary of Schiller's birth, the following inscription was put up by the Ur-Schweizers in letters of gold: „To the Bard of Tell: the Ancient Cantons". From here one can easily cross over by boat to Tell's Chapel — the spot which Tell has made for ever memorable by the leap which saved his life. The interior of the Chapel has quite recently been decorated with historical frescoes by the celebrated painter, Stückelberg of Basle. Further excursions to Axenstrasse, Sisikon, Flüelen, Treib, Gersau, Beckenried, Vitznau, Weggis, Lucerne etc.

Tellsplatte lies at the foot of the Axenberg, through which, about 80 m. perpendicularly above the Lake of Uri, runs the Axen tunnel, the great highway for military and commercial purposes. Tellsplatte is a delightful summer resort with a charming climate and romantic scenery. Cow's and goat's milk. Lake baths. *Hotel Tellsplatte.*

Weggis Dossen

Pilatus Bürgenstock u. Nase Vitznauerstock Hohenfluh od.

Gersau Kindlimordkpl. Langmatt



Panorama Seelisberg, Vierwaldstättersee – Lake of Lucerne.

Artist. Anst. J. A. Pfenni in Zürich.

Sisikon, a little village on the eastern bank of the Lake of Uri at the entrance to the Riemenstaldthal, a pleasant summer resort; it has a very mild climate, and walnut and chestnut trees flourish luxuriantly. — Pension.

Flüelen, at the south end of the Lake of Uri, 438 m. above the sea. has a steamboat pier and a railway station on the Gotthard line. It is a centre for tourists, but not a stopping place for purposes of health, as the climate is very changeable, and is exposed, especially in spring and autumn, to the injurious blasts of the Föhn.

Hotels: *Weisses Kreuz, Wilhelm Tell, Adler.*

Altorf, 447 m. above the sea, the chief town of Canton Uri, lies 3 km. south of Flüelen, Gotthard railway station. It is often resorted to for health purposes, especially in late spring and early autumn on account of its warm climate.

Hotels: *Hotel and Pension Goldener Schlüssel, Hotel Schwarzer Löwe.*

Moosbach, with a ferruginous sodium spring, lies a little off the high road between Altorf and Flüelen. The mineral spring is used internally for digestive and haemorrhoidal disorders and scrofula: externally for rheumatism and skin diseases. — *Kur Establishment* (Blum).

Unterschächen, lies in the Schächen valley which branches off eastward from Altorf, from which place it is distant about 3 hrs. The picturesque beauty of the neighbourhood, sheltered as it is from the keen north wind, and the clear, pure, Alpine air, make the place an agreeable summer resort. Milk and whey cure.

Hotel and Pension Klausen (Vonderach).

Attinghausen, a lovely village on the left bank of the Reuss, at the eastern foot of the Kulm, is frequently made the starting point over the Surenen-Pass into the Engelberg Valley.

Maderanerthal, is a wild, romantic mountain valley, debouching at the Gotthard railway station Amsteg, and extending 4 hours' (12 miles) eastward. The *Hotel Alpenclub*, magnificently located, is an agreeable health resort and a charming stopping-place for tourists (ascent of the Clariden, Tödi and the Pass to Glarus), and in summer is greatly frequented.

Göschenen, 1109 m. above the sea, is the highest station on the Gotthard railway, this side of that wonderful piece of engineering, the Gotthard Tunnel, forming the junction with the ancient classic Gotthard road and that modern triumph of mechanical skill, the railway. A fine view over the mighty Rienthalstock (2980 m. above the sea). A cheerful place, much to be recommended as a health resort for those in search of fresh, pure air. It is a centre for splendid walks and excursions, for example, to the Göschenen-Thal, Dälbitschöge (2889 m.) and Meiglenstock (8422), Bründlistaffel, Göschenen-Alp, Damafirn, the Kehlen and Winterberg glaciers, Lochberg, Plattenstock, Winterstock, the Horn glacier, the Galenstock, Schierberg. Excursions of 7 hours. (Guide 8 fr.) Excursions to the Teufelsbrück and to Andermatt (see below).

Hotels at Göschenen:

Hotel Göschenen *(Buck-Reben)* the first, on an eminence, close to the railway station, with dependance and garden. Pension from 5 to 6 frs. inclusive; the mid-day table d'hote 3 frs.; also a table d'hote in the evening. Good cooking and wines. Baths in the house. Carriages to be had at the hotel. Omnibus to the station.

Hotel and Pension zum Weissen Rössli *(Reglin)* 3 minutes from the station, a beautifully situated house of long repute, with a garden and fine view of the Damafirn and the wildly romantic Göschenen-Thal. Milk and whey cure. Table d'hôte in the middle of the day and in the evening. Omnibus to the station.

Guides and saddle horses, as well as carriages, at both hotels at moderate charges

From Göschenen the Gotthard road winds through the narrow gorge of Schöllenen, with its bare, precipitous walls of rock, and zig-zags upwards over the Teufelsbrücke to the roaring water-fall of the Reuss, past the Urner-Loch and into the richly-meadowed table-land of the Valley of Urseren, 1440—1600 m. above the sea.

Andermatt, 1444 m. above the sea, climatic summer and winter health resort.

Route: — From the Gotthard-line railway station, Göschenen, by diligence, or by the Hotel omnibus previously ordered, in 3/4 of an hour to Andermatt.

Andermatt or Urseren (Orsera), with 730 inhabitants, is the chief place and the largest and best-built village of the high level valley, which is 16 Km. long and 1½—3 Km. broad, stretches from north-east to south east at the foot of the St. Annaberg, and is shut in by mountains rising 1200—1500 m. above its surface, and which bar the entrance of cold, raw, stormy winds. The Reuss, a river abounding in trout, which takes its rise in the Lake of Lucendro, near the Hospice, 2083 m. above the sea, meanders through the whole length of the Valley, its channel being swelled at Hospenthal by the Realper Reuss, and at Andermatt by the Gurschenbach. In the Valley the meadows are of a fresh, spring-like green which shades into yellow in the higher mountain districts. In sunny spots here and there are to be seen rye, barley, and potato fields, but only at intervals; fruit trees do not thrive. In the whole of the Osera (Urseren) Valley there is not a trace of marshy ground to be seen. The scanty woods, which only partially cover the south side of the mountain-ridge, consist of pine trees and mountain alders. Up to the end of the last century the whole district was thickly wooded; but the devastating passage of the French, Austrian, and Russian troops in the Napoleonic wars destroyed the forests, and thus conduced to the descent of the blasting avalanche: Under the auspices, however of the "Bund" this is, by the new scientific system of forestry, gradually being remedied.

The *Orsera Valley* has long been a favourite and frequented whey-cure and summer resort for tourists, on account of its pure, delicious mountain air always free from dust and smoke, and so refreshing and invigorating, the equability of the temperature and absence of excessive heat. The climate much resembles that of Davos, though it has its own distinctive characteristics. As a rule

in the winter there is more sunshine at Andermatt than at Davosplatz, and the changes of temperature are fewer. In the sun the thermometer ranges in winter from 20—23° C., while the temperature in the shade remains below zero for the most part. The coldest month on an average is January, when the mean daily temperature is as follows: 7 a. m. — 7,8° C.; 1 p. m. — 3,6° C.; 8 p. m. — 6,6° C. The average deduced from observations made during these three periods of the day, shows a steady temperature from April to October, in March and November it rises at mid-day above zero; in December, January and February it is always below zero.

The number of *snowy days* at Andermatt and Davos from October to March is 52; at Andermatt the snow lies unmelted from the middle of October till the end of April, and, as a rule, disappears suddenly. Of cloudy and dull days Davos has 47, Andermatt 67. In the winter there are a few more misty days at Andermatt than at Davos; these, however, generally occur during summer, in August. Between October and March the number of clear, bright days is about the same at both places. The winter, therefore, is much more favourable for climatic cures than the summer, and Andermatt has in consequence become a much sought after winter residence, and has this great advantage over other places that it can be comfortably reached by the Gotthard railway, even by invalids who are exceedingly weak.

Andermatt is recommended in cases of constitutional tendency to phthisis, catarrhal affections of the bronchial tubes, acute catarrh, tendency to pleuritic affections, remains of chronic pneumonic complaints and recovery from severe illness.

Kurhaus Bellevue *(Christen Kesselbach)* in an open situation, and arranged for purposes of health. There are fourteen windows in the front, and 100 rooms and salons (altogether 150 beds). Heating. Dining-room for 200; conversation, reading, and billiard rooms. Gas. Fifteen of the rooms have pleasant balconies, and there is a glass-roofed gallery 50 m long. Warm baths and douches. Milk, whey. Pension: 7—10 frs. Fishing in the Oberalp Lake.

Physician, *Dr. Neukomm*

Other Hotels: — *St. Gotthard, Oberalp, Drei Könige (Three Kings) and Post; Hotel and Boarding-house Nager, Hotel Krone.*

Walks and Excursions: — In five minutes to the Mariahilfkapelle, south eastward from Andermatt, straight above the Hotel St. Gotthard, with a wide view over the whole valley; in ¼ hour to St. Annawald; in 20 minutes to Gändli, in an easterly direction, by a broad, ascending, zig-zag road; in ¼ hour from the old village churchyard to the Devil's Bridge through the Urnerloch — a tunnel cut in 1707. Prior to that time there was a hanging chain bridge, the Stäubende Brücke, which led the traveller around the Teufelstein, amid a constant shower of spray from the Reuss. The Devil's Bridge is amid some of the grandest rock scenery in Switzerland. The Reuss falls in a picturesque cascade into an abyss 30 m. below. In 1½ hours to Gurschen, with a view of the Gurschen and St. Anna glaciers; in 1½ hours to the Gütsch, whence there is a view over the Urner and Reuss valleys, the Dama and Steinen glaciers. By a picturesque road to Hospenthal, Realp, to the Furka, the Rhone glacier, and the Gotthard Hospice.

Hospenthal, 1484 m. above the sea, ½ hr. from Andermatt, at the foot of the St. Gotthard, close to the Winterhorn, lies 40 m. higher than Andermatt and is capitally adapted for an air cure. — Hospenthal is most picturesquely situated on the

Furka and Gotthard road at the confluence of two branches of the Reuss. Close above is a young and luxuriant larch wood. The view from there of the neighbouring crags with the old ruin known as the Lombards Tower is well worth seeing. There are delightful excursions to the Gotthard Hospice and the Lake of Lucendro (2 hr.) to Realp (1 hr.) to the Furka and the Rhone Glacier (4—5 hrs.) to the Devil's Bridge (3/4 hr.) to Göschenen (the Gotthard railway Station) (1 1/2 hrs.) and to the Oberalpsee abounding in trout (2 1/2 hrs.) in which the proprietor of the Hotel Meyerhof has the sole right of fishing.

Hotel and Pension Meyerhof *(Kaspar Meyer and Sons)* a newly-restored, first class hotel, in an open, sunny situation with a large glass verandah. Pension 7—10 frs. per day. Excellent rout. Cold, warm, and douche baths. Postal and telegraphic communication with the house. Hotel omnibus meets every train at Göschenen

Realp, 1542 m. above the sea, lies in a narrow cleft at the foot of the Furka Pass. The diligence road winds tortuously from here towards the Furka in a westerly direction. Only a few vegetables flourish and no trees. — *Hotel et Pension des Alpes.*

Furka, 2430 m. above the sea. On the top of the Pass stands the excellent *Hotel Furka.* from which there is a glorious view over the Bernese and Rhaetian Alps, while in the foreground below lies the magnificent 3 miles long

Rhone Glacier *(Hotel Gletsch)* one of the most wonderful parti-coloured glaciers of the Alps. There is no other place in Switzerland where one can so easily get a view of the marvellous glacier forms which can be seen from a carriage or from the Hotel.

Returning to the Lake of Lucerne one arrives at Canton Unterwalden, touching first at

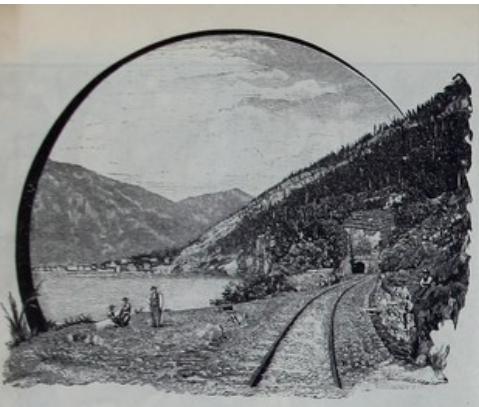
Stansstad, 437 m. above the sea, steamboat station on the Lake of Lucerne where the Bürgen and Lopperberg reach down to the borders of the Lake of Alpnacht. It is a pretty, pleasant place for visitors and is besides the entrance to the two chief valleys of Unterwalden; it has a mild climate.

Hotel and Pension Freienhof: Hotel and Pension Winkelried.

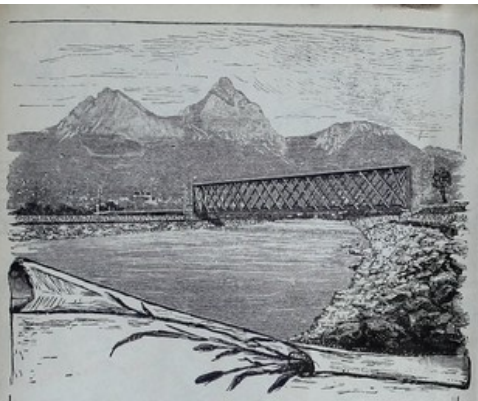
From Stansstad a good road leads through shady beech woods to

Bürgenstock, 870 m. above the sea, a health-resort. It juts out into the lake between Pilatus and the Rigi, peninsula shaped, forming an isthmus with the Vitznauernase. The lofty plateau, abundantly supplied with aromatic pines and green beeches, on which the elegant *Kurhaus* stands, rejoices in a very mild climate to which the fine fruit and walnut trees and noble chestnut woods bear the most striking testimony. The mean summer temperature is about 22° C., and is subject to but slight variations. This health resort is specially suitable for sensitive, weakly constitutions which need quiet, restful surroundings.

Stans, 458 m. above the sea, an air cure, is the chief town of Niederwalden, and lies at the north base of the Stanserhorn. On account of its mild climate, its many rural beauties, and



Station und Umgebung von Brunnen.

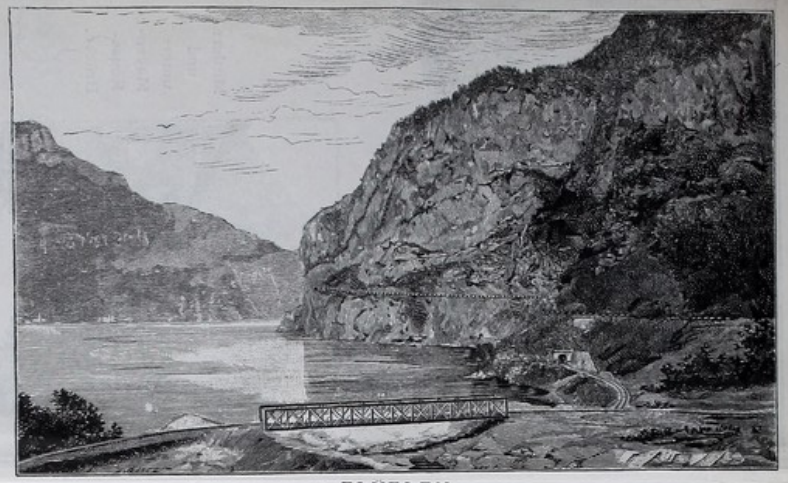


Die Muotta-Brücke.

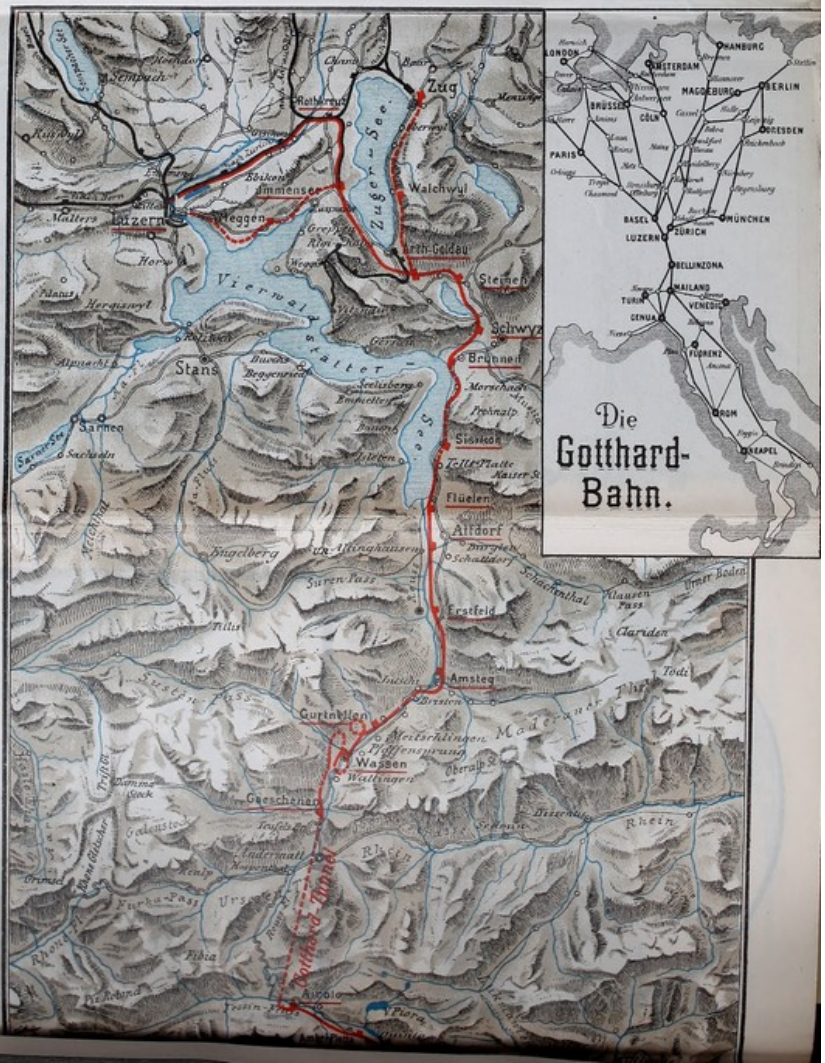
Inschi-Reuss-Brücke.

Bahngebiet bei Wassen.

Mittlere und untere Mayen-Reuss-Brücke.

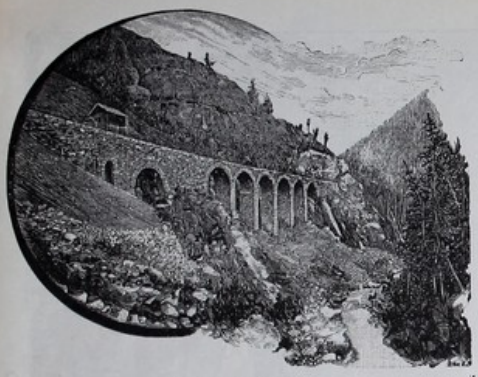


FLÜELEN


Die
Gotthard-
Bahn.
Zug
Zuger See
Walchwyl
Luzern
Meggen
Stansstad
Stansstaderhorn
Vierwaldstätter See
Stans
Sarnen
Sarnersee
Stanserhorn
Stansstad
Stetten
Schwyz
Brunnen
Sisikon
Flüelen
Altdorf
Tellsplatte
Bauen
Isleten
Seelisberg
Rütli
Bürgenstock
Pilatus
Rigi
Erstfeld
Amsteg
Gurtnellen
Wassen
Göschenen
Andermatt
Gotthard-Tunnel
Airolo
Rhein
Reuss
Ursern-Thal
Furka-Pass
Susten-Pass
Surenen-Pass
Klausen-Pass
Schächenthal
Unter Bodenalp
Glarus
Linth-Canal
Zürich
Basel
Luzern
Bellinzona
Mailand
Turin
Venedig
Genua
Florenz
Rom
Neapel
Paris
Brüssel
Köln
Amsterdam
London
Hamburg
Magdeburg
Berlin
Dresden
München

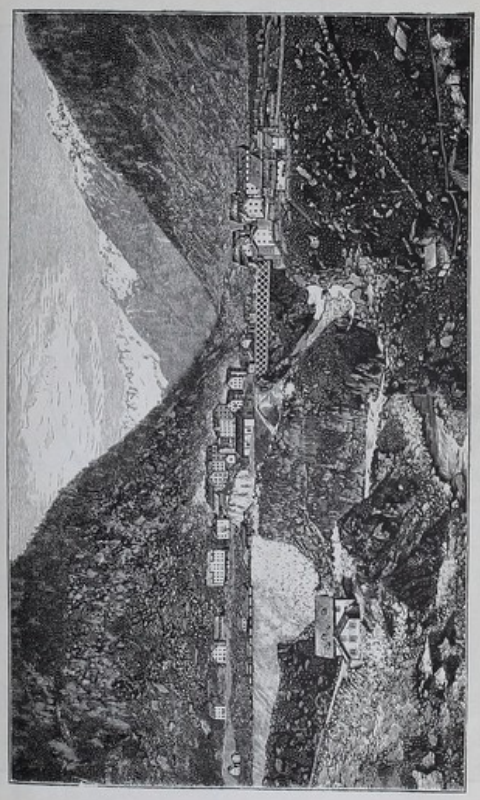
Lith. Bürgy & Schaufelberger. Zürich.

LUGANO

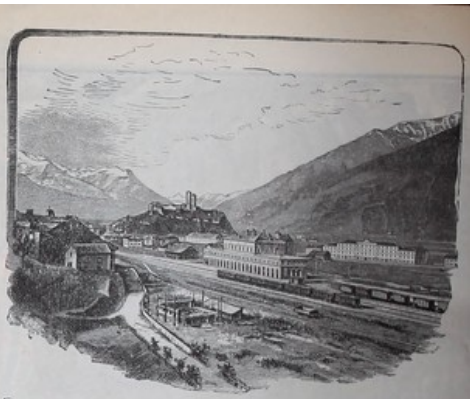


Saeken-Viaduct

Rohrbach-
Brücke.

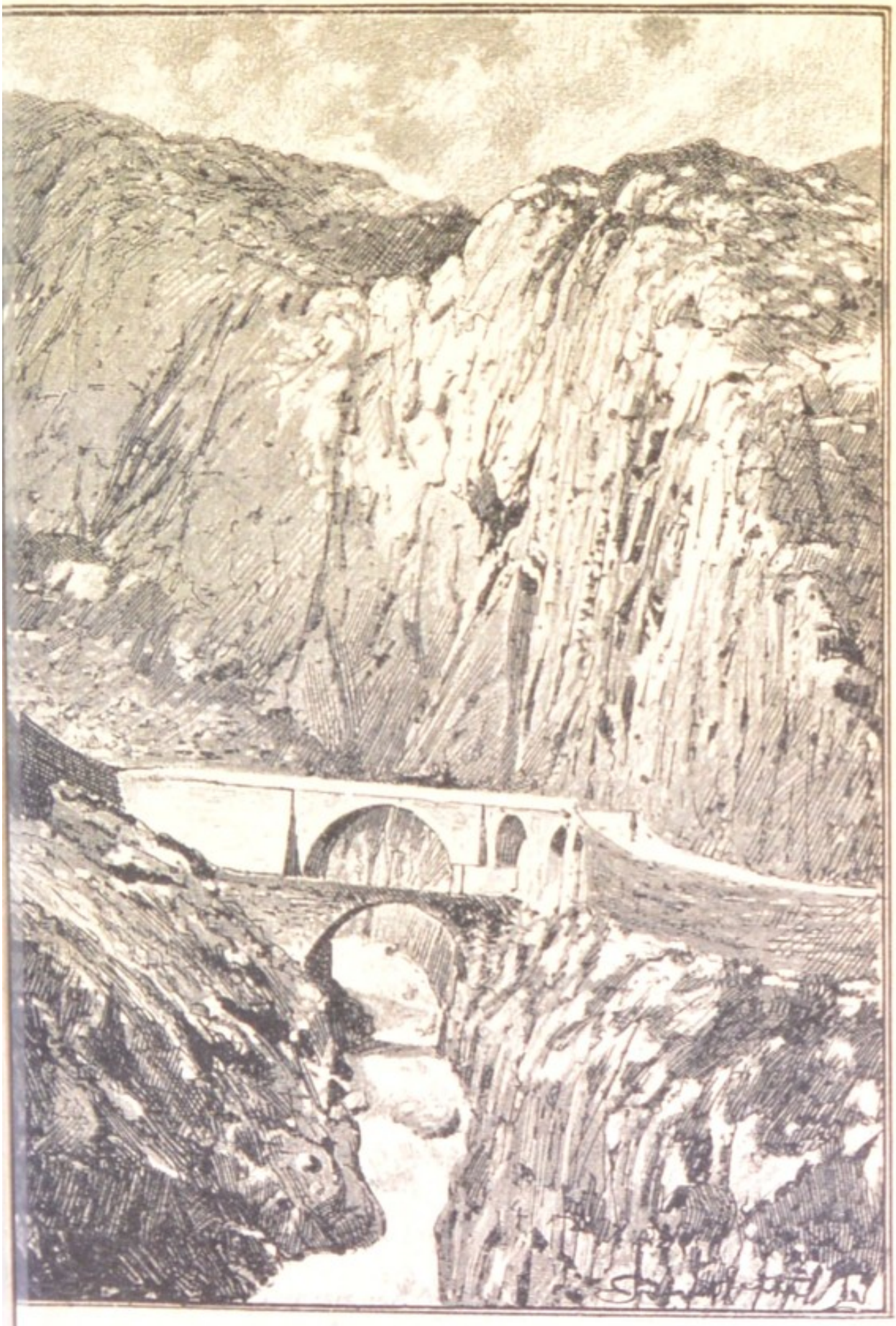


Göschenen



Bellinzona.

Ranzo.



The Devils Bridge.

exceptionally luxuriant vegetation, Stans is not only a delightful, but a much frequented resort for tourists.

Hotels: *Hotel and Pension Engel, Hotel Krone.*

Niederrickenbach, 1167 m. above the sea, climatic health resort, lies at the southern slope of the Buochserhorn, completely protected from cutting winds and fully exposed to the rays of the mid-day sun. In the immediate neighbourhood of the ancient pilgrim shrine shady clusters of maple trees and pine woods offer a grateful freshness. Persons suffering from exhaustion, mental strain, or who have been weakened by severe illnesses will find this a delightful resting place.

The *Kurhaus* (J. Jenner) is very well spoken of.

Engelberg,

1019 m. above the sea, climatic health resort.

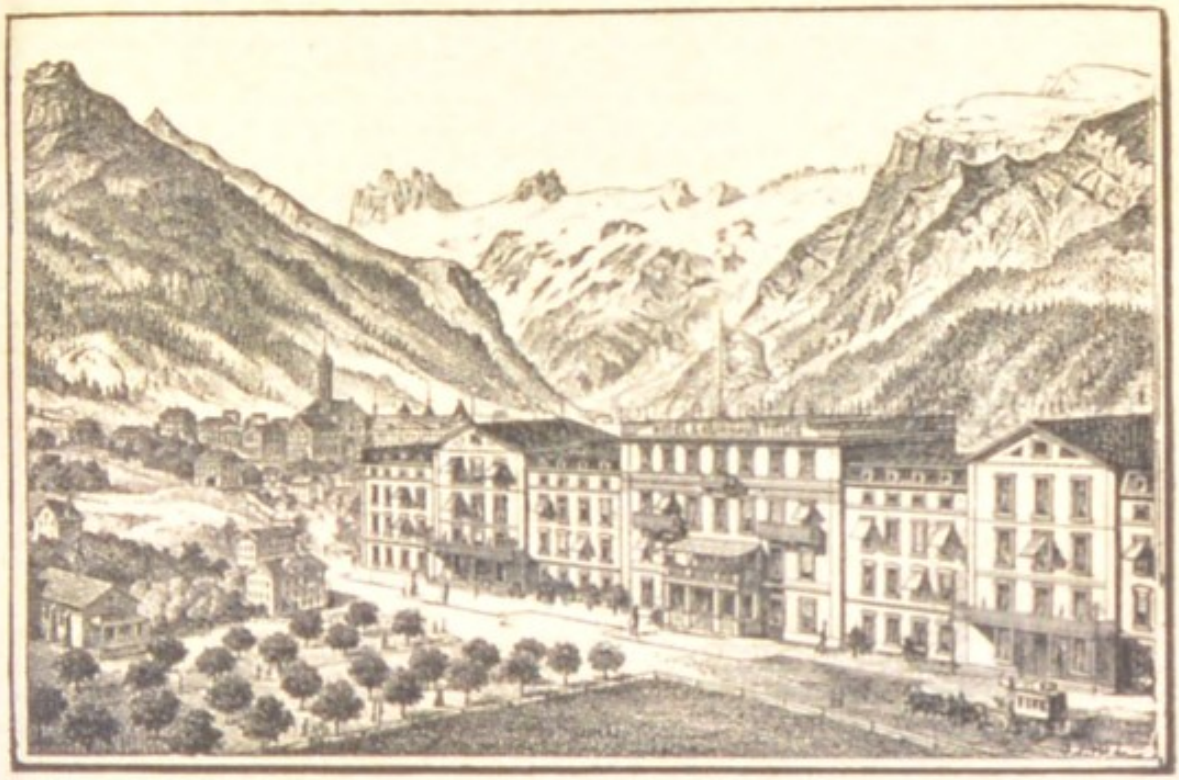
Route: From Lucerne by steamboat to Stansstad, 1 hr., thence by diligence or hired carriage to Engelberg, 3 hrs. From Lucerne by carriage along the beautiful road running by the Lake over Hergiswyl to the foot of Pilatus and the so-called Achereggbrücke to Stansstad. From the Bernese Oberland over the Brünig road to Sarnen and thence by diligence to Alpnach and by steamer to Stansstad. Mountain Passes: from Meyringen over the Joch; from Attinghausen over the Surenen.

The valley of Engelberg is in the form of an ellipse, the large axes stretching 6 miles from east to west, while the greatest breadth of the valley is scarcely a mile and a half. From the middle of the valley neither its western nor its eastern outlet is visible; the latter leads over the Surenen Pass to Uri. The valley is enclosed by mountains, 2400 to 3300 m. high, whose base is in the forest. Clear streams meander through this verdant valley; in the fore-ground a number of peaceful looking cottages cluster around St. Jacob's Chapel; in the centre is the handsome monastery around which lies the village itself. King among the mountains encircling the valley stands the Titlis, whose bold, rocky cone rears its smoothly rounded summit far away into the snow region; after freshly fallen rain the glaciers stand out in their brilliant blue green colouring, revealing their deep fissures and crevasses.

The lofty mountains shelter the valley from stiff breezes, especially from the strong north wind. The prevailing winds are south-west and south-east. The air is pure, and the heat, during the summer months from May till September, much modified by the clouds which spring up at mid-day. These are produced by the cooling of the currents of warm air arising from the moisture-laden soil. The mean temperature in May is 10,6° C.; in June 12,9; in July 15,5; in August 13,5; in September 12,0° C.

During the nine years (1874—1882) there were on an average 5,8 days of rain in May; 7,3 in June; 6,8 in July; 7,7 in August, and 4,2 in September. On rainy days, especially in autumn, there is often a peculiar mist effect; dense clouds from the west suddenly roll through the valley and rapidly sweep up the mountain sides. The Engelbergers call this phenomenon the Thalvogt. Although

Engelberg belongs to the Lower Alpine region, its moist, somewhat warm air, partakes rather of the character of the Higher region, and has a stimulating, strengthening influence. Professor von Dusch says, speaking generally of Engelberg: „Not only may persons who are convalescent or weak from past illnesses find health and strength there, but those suffering from chest affections may derive considerable benefit, and even make a permanent recovery under certain circumstances. But only those should go who are suffering from chronic catarrh of the breathing organs, or chronic inflammation of the lungs, the course of which is very slow, free from fever, or for the time being stationary, in a word those who need building up and more thorough change of tissue." For consumptive patients who have spent the winter in a warmer climate, a summer sojourn at Engelberg is very beneficial. Engelberg is not recommended for heart and vascular affections, for emphysema and joint rheumatism.



Kurhaus Hotel Titlis at Engelberg.

Kurhaus Hotel and Pension Titlis *(Cattani)* provides all the comforts of a first class hotel. It contains a lofty, elegant and airy dining room for 250 persons, roomy reading, billiard and sitting rooms, 125 bedrooms with 200 beds, besides 10 private salons. From the terrace is a glorious view of the steep mountain sides of the valley. The extensive pleasure grounds with a lake and gondolas, and the covered promenade afford admirable opportunity for strengthening exercise in the fresh air. At the end promenade is a bathing establishment with bath rooms and arrangements for douching. Fresh cow's milk morning and evening. Excellent drinking water. Belonging to the Hotel is the „Schweizerhaus" a dépendance, with 35 beds. Pension (3 meals) with room 7½—12 fr.; salon 5—12. There are private houses near with about 80 beds for visitors. The Kurhaus Titlis is lighted throughout with electric light.

Kurhaus Hotel and Pension Sonnenberg (Proprietor *Henry Hug*) a large, admirably conducted establishment replete with every comfort. It is a triple detached building, and from its sheltered situation is adapted for a sojourn in spring and late autumn. The main building, 4 storeys high, with 14 windows overlooking the valley, is connected with the 3 storeyed Dependance by a fine gallery leading from the second storey. The view from the windows in the south front and the side, over the surrounding Alps, is exquisite. The Hotel contains about 90 comfortable rooms with 9 balconies, reading and conversation room, smoking and billiard room, besides the large dining hall and restaurant. The Dépendance, joined to the Hotel by a corridor, contains 80 elegant apartments with numerous large and small balconies; its main front faces due south; the windows have sun blinds. On the slope toward the valley is a chalet with 4 bedrooms, 3 bath rooms, with douche apparatus, a large douche and a vapour bath, 2 very pleasant verandahs, gardens with trees and fountains; above and below the Hotel is a shady park and wood. Excellent spring water, water laid on, w. c'. s. Private carriages and saddle horses. Evangelical services in German every Sunday in the Hotel. Milk is supplied at the pavilion, where the cows are milked every day morning and evening. Pension, with room, 7½—12 frs. from May till July 10.; in September 7—9 frs. Doctor in the house.

The Kurhaus Sonnenberg is to be in connexion with the old renowned and brilliantly situated **Hotel and Pension Suisse** at Nice.

Hotel and Pension Engel *(Cattani)* is near the monastery and the church with a fine view over the Titlis glacier, the Grassen, the Hahnen, Laubersgrat etc. The pretty garden, with its summer-houses, enables visitors to spend the whole day in the open air. The hotel contains a spacious dining-room, two conversation-rooms with pianos, a reading-room; 50 rooms with 70 beds: a bathing house, with six tubs and douches. W. C's s. Gas. In addition to the hotel accommodation there are about 80 beds at Dr. Cattani's and at four private houses. Pension (3 meals) with room 6 to 8 frs.

Other Hotels at Engelberg: *Kurhaus and Pension Müller, Hotel and Pension des Alpes, Hotel and Pension Engelberg.*

Physicians: *Drs. Cattani* and *Schneer*

Walks and **Excursions:** — An easy path along the valley to the St. Jacob's or St. Anna's chapels; through the Horbisthal to the so-called „End of the World"; in rather less than an hour to the beautiful waterfall, the Tätschbach, and along the Aar, back through the shady Eienwalder (this path has quite recently been made passable); in ¾ to the Grünerwald, where there is a rustic restaurant; in ¾ hour to the Gerschni Alp; in ¾ hour to Arnstobel; in ¾ hour to Berglí; in 1 hour to Schwendlialp; in 1 hour to the high valley of Schwand; in 1½ hours to the Alp Herrenrüti; in 1½ hours to Alp Obhag; in 2 hours to Arnialp; in 1½ hours to 2 hours to Tiebsee or Trübseealp; in 3 hours to Fürenalp, with a glorious view of the Weissstock the Schlossberg, and the Spannörter, or Titlis; in 3½ hours to the Stierenbach water-fall; in 4 hours to Wallegg; in 3 hours by the Joch Pass to Engstlenalp and Engstlensee; in 5 hours to the high Surenen Pass; in 5 hours to Widderfeld which is one of the most remarkable spots in the neighbourhood of Engelberg; in 6 hours to the Rothstock; and in 7 hours to the Titlis.

Alpnach lies at the southern end of the lake of the same name, not far from the steam-boat station, Alpnachstad, on the post road to Sarnen and the Lake of Sarnen. Inns: *Hotels Schlüssel, Sonne.* — From Alpnachstad a good bridle-path leads in 4½ hours to the top of

Pilatus, whose highest point (Esel) is 2123 m. above the sea. This majestic mountain, with its bold peaks and deep gorges, has become one of the most popular haunts of the modern tourist, and the magnificent panorama it commands is in many respects superior to that of other celebrated Swiss mountains. On its airy heights two fine hotels have already been built; one on the Kli-

Kurhaus, Hotel and Pension Sonnenberg at Engelberg

menshorn (1821 m. above the sea); the other at the foot of the "Esel", the Bellevue (2111 m. above the sea). The strong mountain air which generally blows with violence and the absence of shelter therefrom render these heights unsuitable as an air-cure, but as tourist-resorts they are becoming more and more popular, especially since they have been connected by a cog railway with the Alpnach Lake.

Rotzberg. 675 m. above the sea, picturesquely situated on the south-eastern bank, of the Alpnach Lake, abounds with beech-woods. The view to the east, south, and west over the surrounding mountains and the lake sparkling at their feet is lovely. Both the hotels, *Pension Rotzberg* (628 m. above the sea) and *Pension Burg Rotzberg*, have consequently long been favourite summer resorts.

Sarnen, an air cure, 476 m. above the sea, near the north end of the Lake of Sarnen, is almost a town; it is the chief place in Obwalden; it rejoices in a very mild and pleasant climate, thanks to the vicinity of the lake, the beautiful and extensive woods, and the protecting heights on either side. *Hotel: Obwaldnerhof.* On the Landenberg, scarcely three minutes from the village, is the *Pension Landenberg*, a very well-appointed, pleasant summer-resort for convalescents and others seeking health. Excellent spring water; good milk.

Wylerbad, 545 m. above the sea, on the Schwendiberg, above the lake, ½ hour south-west from Sarnen, has an earthy sulphur spring, which is specially used as a remedy for rheumatism and skin diseases. A country boarding house.

Sachseln, 505 m. above the sea, immediately opposite Wylerbad, on the south-eastern bank of the lake of Sarnen, at the mouth of the two Melchthäler, with the well-conducted *Hotel zum Kreuz*. Lake Baths. ¾ hour above Sachseln is the *Inn Flüeli*.

Kurhaus Frutt, 1894 m. above the sea, lies midway between the Melchthal and the Engstlenalp, in the centre of a lofty plateau, about 8 miles long, brilliant with Alpine flora, and surrounded by the magnificent mountain and glacier world. It is adapted, owing to its pure Alpine air and quiet, pleasant, mountain life, for cases of convalescence, poverty of blood, nervous weakness and exhaustion consequent upon mental strain.

Schwendi - Kaltbad, 1444 m. above the sea, with an earthy ferruginous spring, 3½ hours from Sarnen, on the Schwendiberg, at the eastern base of the Schlierengrat which stretches southwards from Pilatus. The Kurhaus stands on an isolated green, raised table-land, surrounded by thick pine and fir woods. Owing to the place being exposed to the north-east, the temperature is keen, and is characterised by frequent variations and many changes of wind and weather. The spring, together with the milk cure, is most used as a remedy for poverty of blood, and externally, for rheumatic affections.

Lucerne,

437—590 m. above the sea, *a family health-resort* on the Lake of the Four Cantons.

Route: By rail from Basle in 3½ hrs.; from Zurich in 2 hrs.; from Berne in 3½ hrs. By diligence or carriage from Interlaken through Brienz and over the Brünig Pass to Alpnach, and thence by steamer or by carriage to Lucerne. By steamboat from Fluelen, Brunnen, Küssnacht to Lucerne. (See the publication *"Conducteur suisse".)*

The **town of Lucerne** with about 18,000 inhabitants, situated at the outfall of the Reuss from the Lake, is separated by that river into two unequal parts, on the left bank the small town, on the right the large town; these are connected by four bridges, two old, covered, wooden structures, with oil paintings between the beams of the Gables, for foot passengers only ("Spreuer" and "Kapell"), and two modern, flying bridges of stone and iron ("Reuss" and "Quai"). No other town in Switzerland produces such a charming impression as does Lucerne when approached from the Lake after passing the small spurs of the Meggenhorn or Tribschen. On the right rise the hills, range above range, the foreground dotted with many charming villas; on the left tower up the fantastically shaped, savagely rent, rocky sides and peaks of Pilatus, while between spreading out in a gentle curve along the shores of the Lake, lies the pleasant little city with its picturesque mural crowns (Musegg) calling to mind the fierce conflicts of olden times. While from the lake the town presents the appearance of a vast and imposing city with its magnificent quay and palatial hotels, in the interior of the town there is little to be admired in the narrow streets with their middle-age architecture. A great accession of light and air has been obtained by the removal of five ancient fortified gates; various sanitary improvements have also lately been made; the shallow parts of the shore have been filled up and raised considerably above the surface of the lake, making a splendid embankment with the fine quay of the Schweizerhof, and the spacious platz of the landing stage and railway station on the opposite bank. The new water supply, with excellent drinking water from the valley, is carried by conduits through the town and is used for cleansing purposes as well as for irrigating and beautifying the public squares and gardens.

The climate is generally mild and pleasant, seldom severe and not subject to sudden changes. The barometer stands usually at about 724 m., the mean temperature for the year being 9,5° C. There is a moderate degree of humidity in the air, and the denunciation of Lucerne as a "rainy hole" ("Regenloch") emanated doubtless from malice and envy. According to *Dr. C. Segesser*, observations during nineteen years give in May 14,5 days without, 16,5 with rain; snow, 1 day; 4,5 days with storms; 20,5 nights without, 10,45 with rain; June shows 12,2 days without, 17,98 days with rain and storms 3,7 days; July 14 days without, 17 days with rain and storms 5,3; August 16 days without, 15 with rain and storms 4,5; September 17,5 days without, 12,5 with rain and storms

Lucerne.

1,4. With April 15th begins the meterological spring, and with the 15th May the summer temperature; with the 20th September, which is for the most part the finest month in the year, the summer ends. As the "Föhn" greatly influences the climate of Lucerne the transition from winter to spring and summer is somewhat rapid, a peculiarity which this town shares with other climatic places in the lake zone. The other winds which prevail in the neighbourhood of the lake, corresponding with the course of the Reuss valley, are the south-west and south-east, also in a much less degree the west, north-west and north-east. The number of calm days was pretty large, being in May 1881 to the end of September 328, while in Zurich the numbers were 264, and in Lugano 409. The mean temperature, according to observations taken during seven years, is as follows:

1876—1882 Months	Temperature of the air						Cloudiness	Amount of rainfall	Numb. of Days	
	7 o'clock	1 o'clock	9 o'clock	Average	Minim.	Maxim.			Clear	Overcast
April	6,24	11,21	7,63	7,20	-0,6	17,6	6,0	125,9	4,4	14,6
May	9,85	14,48	10,52	11,22	3,6	22,7	6,6	122,4	4,6	13,6
June	14,77	19,44	14,87	15,30	8,0	26,5	6,0	200,4	3,4	12,5
July	16,34	20,99	16,61	17,52	11,1	27,6	5,7	168,4	7,3	11,1
August	15,88	20,62	16,45	17,25	10,8	26,6	5,8	176,4	5,3	10,3
September	11,50	16,26	12,42	13,11	5,8	23,0	6,6	146,3	2,7	12,3
October	6,96	11,09	7,90	8,41	0,14	18,5	7,7	117,7	3,4	16,0

The health of the town is good, the average mortality being 25 °/₀₀. About 35 °/₀ of deaths occur from complaints of the respiratory organs: catarrhal affections of the nose, ears, larynx, and windpipe are rather more frequent among the settled population; for asthmatic and consumptive persons the houses on the surrounding heights are better adapted than the hotels close to the lake. Lucerne is well suited for an autumn climatic station, and is good for incipient affections of the respiratory organs, especially for catarrh of the apices of the lungs, for those suffering from relapses, weakness, poverty of blood and dyspepsia.

Besides its favourable situation for short or long walks over hill and valley and for boating, Lucerne possesses a very good lake *bathing establishment* above the Hotel National, with large swimming baths and private bathrooms, as well as a *river bathing place* on the Reuss. These baths and walks etc., combined with exercises for the lungs and muscles exert a very invigorating influence on the muscular and nervous system, on the heart's action, the circulation of the blood and the change of tissue.

The social requirements of tourists and patients are also well provided for, while the town and its surrounding besides exercising a calm, harmonising influence on the spirits, offer to the overwrought brain an abundance of agrelable diversion both for eye and ear in the quiet enjoyment of nature's works. We may mention one of the best conceived modern pieces of monumental sculpture — the *"Dying Lion" of Thorwaldsen* hewn out of a perpen-

The Lion of Lucerne.

dicular wall of rock at the base of the Wesemlihöhe, with a lovely pool and fountain in front, a strikingly beautiful sculpture which twice a week is lighted with Bengal lights. There is also close by the celebrated **Gletschergarten,** which is open every day from morning to evening. In all parts of the world we find historical memorials erected and overthrown by the hand of man; but they are all more or less alike. They are rarely more than 500 or at the utmost 1000 or 2000 years old. But here close to the Lion Monument, which is only just half a century old, is a monument the age of which is not to be reckoned by 1,000, 2,000 or 6,000 years, but by cycles of ages, and which contains within itself a record of untold marvels.

It is a stupendous monument, the first stones of wich were laid when the great Reuss Glacier, forced down from the St. Gotthard, covered all this region: such is the small *Gletschergarten of Lucerne.* It consists of a portion of the molass ridge which runs north west from the city, and which in 1872, was cleared of the mould, boulders and débris which covered it, so that the vault shaped molass sandstone is plainly visible. In this sandstone, as if carved by the hands of man, as deep down as 93 feet are perfect basins and funnels, at the bottom of which are a number of gigantic balls of stone, some of them weighing as much as a hundred hundred-weight.

To the imaginative onlooker the whole will appear like a giant's kitchen or a Titanic flour mill. These would be the stone pots and mortars, the mill stones with which the primeval Titans ground and pounded their corn, when they were disturbed and fled to the mountains, leaving their rough implements in the valley.

But the giants were ice and water, and the gigantic pots and basins which the geologist calls whirlpool holes are the traces they have left, and which date from the distant glacial age. A glacier has been at work here.

Between the holes are clear traces of the glacier: streaks running north westward, ridges and forks, such as moving glaciers would impress upon their rocky beds.

But whence come the gigantic holes? At the present time they might be formed by the swift and strong action of flowing water causing stones to revolve rapidly on a rocky bed, as in the channel of a deep stream, or at the foot of a water fall. But the enormous Lucerne holes were not so formed, for there is here neither rocky wall nor water fall. Here it was the glacier in the deep fissure of which the melting snow or ice mingled with the moraine boulders brought down from the Alps, and these boulders rolling and grinding — through the movements of the glacier — upon the soft surface of the molass stone scooped out the holes and huge cauldrons. The more violently the boulders break through the ice channels and the stronger the action of the water upon them, the fiercer is the grinding of the glacier mill and the deeper are the hollows scooped out.

The **Diorama of Meyer** leads us in fancy on to the Rigi and Pilatus and produces a most charming illusion. *A splendid panorama of Rigi-Kulm and Pilatus.* — The Rigi railway bridge which the trains freely cross. — *A panorama of the Gornergrat* (Zermatt): the glacier and chain of the Monte Rosa, Matterhorn, etc.

The distinguishing characteristic of these large and artistically finished pictures is that they do not in the least look like pictures, but like nature itself; the splendid effects even of sunrise and sunset are so vividly represented that the spectator feels transported to those commanding summits.

It is the best of compensations for the tourist who encounters bad weather. Before ascending the Rigi and Pilatus it gives one the best general idea of what is to be seen and is a most pleasant reminiscence afterwards. One can see with the naked eye, but an opera glass is recommended. A large *relief of the Rigi* can be seen.

Not less interesting and amusing is *Stauffer's Museum* of stuffed Alpine animals. There are besides the interesting *town-hall, government buildings,* and *arsenal,* with their precious collections; the *cathedral* with its renowned organ which charms the ear with a thousand imitations of men's and angels' voices, the good vocal and instrumental concerts, the performances of the Kur orchestra given every evening on the quay of the Schweizerhof often at the same time as rowing matches and nautical sports. The provision made for visitors meets all the requirements of modern times, and the many fine hotels enjoy therefore the best reputation.

The Glacier Garden (Gletschergarten) at Lucerne.

The Hotels Schweizerhof and Luzernerhof at Lucerne

The **Schweizerhof** *(Bros. Hauser)* a model hotel on an immense scale, most luxuriously arranged, in a beautiful situation on the quay with a fine view of the lake and mountains.

The big main building which has lately been enlarged is flanked by two dépendances with which it is united by covered, warm galleries. The establishment contains 250 beautiful rooms, some furnished with the utmost luxury, with over 400 beds, 16 private salons with balconies. In the centre of the building is the dining-hall, 10 m. high, drawing-room adjoining opening on to the garden and affording accommodation for 400 people. The beautiful grounds are kept cool by fountains, and adorned with tropical plants. Towards the quay are the reading-room with a large library and plenty of home and foreign newspapers, the billiard and smoking room, and at the side the restaurant. A beautiful shady garden is on the east side of the dining-hall. All the guest chambers and corridors are heated by calorifères on chilly days. *Cold and warm baths* throughout. Hydrants, extincteurs, etc., in case of fire, are ready to hand in perfect order. — *(Lift.)*

Along the entire front of the main building runs a verandah, with a glass roof, supported by slender pilasters and adorned with hanging plants, divided in the middle by a lofty columned portico from the main entrance. Under this shelter visitors can enjoy the open air and the beautiful view even in bad weather. On the side the verandah leads into the garden. On the quay in front of the establishment and at the very edge of the lake is a shady promenade which in summer is the rendez-vous, the Corso, of visitors. The capital orchestra belonging to the establishment plays from the middle of October twice daily in the garden or on the verandah. — Pension with room 10 to 12 fr.

As a continuation of the magnificent line of frontage, belonging to the Schweizerhof and under the same excellent management there stand on its eastern side the

Luzernerhof, with 125 extremely comfortable, airy, lofty bedrooms, 4 private salons, and 13 balconies, with the same extensive view eastward over the lake and the circle of the Alps. The hotel contains an elegant dining-hall, restaurant and breakfast-room, water (warm and cold) laid on on every floor, English w. c. s.; extincteurs; a passenger *lift* (on the American system). Season from the middle of May till the end of October. Pension with room, 9—12 fr. The long corridors and entrées keep the house very cool in summer and its quietness makes it suitable for a prolonged sojourn.

Between the Hotel Luzernerhof and the Hotel National, on the Quai National is **Messrs. Leuthold & Schuchmann's** well known shop with its large stock of **beautiful Alpine stone jewellery** and other Swiss manufactures. There is also a good selection of brooches, fans, and *articles de luxe,* and assortment of Viennese leather goods. — **Branch house at Interlaken.**

Hotel National *(Proprietor Segesser, Pfyffer & Co.)*, a palatial building, in the so-called Louvre style, with luxurious appointments, splendidly situated at the edge of the lake. It contains 240 comfortable bedrooms, 20 private salons, a billiard room with **genre** paintings by Reinhard, a reading room with library and foreign newspapers, two restaurants, a magnificent dining room with the famous ceiling painted by Bargaghi, a very lofty, cool vestibule where in summer concerts are given three times a week. Passenger *lift* on Bell's system, English w. c. s., water laid on from the town and a private supply also. Bath rooms. Pension from 5 fr.; room from 2½ fr. The upper is the new portion of the hotel and is very comfortably furnished. *Bathing establishment* on the lake.

Englischer Hof (Proprietor *Steffen*) a first class hotel south west of the *Schweizerhof quay* towards the quay bridge, magnificently situated with splendid views over the lake and the chain of the Alps. The house contains 50 lofty bedrooms, 3 private salons, reading-room, ladies' drawing room, smoking room, 3 large balconies, water laid on on every floor, w. c. s. — Pension with room 8—12 fr. Cuisine and attendance excellent.

Hotel du Rigi *(Widow Regli)* on what is called the *Schwanenplatz,* by the quay, with a splendid view of the lake and mountains, especially towards the east, near the railway station and the steamboat pier. The hotel is five storeys high, with handsome balconies, 60 nice rooms (85 beds) drawing room,

reading and smoking rooms. — Pension with room 6—9 fr. In April, May, June and after September 15 a reduced tariff.

Hotel Schwanen *(Häfeli)* on the *Schwanenplatz*, a handsome five storeyed building, with lofty rooms in the upper storey, one of the oldest hotels, bearing a first class reputation, contains 103 rooms, several private salons; baths with douches. No pension tariff. Room 3—5 fr.

Hotel St. Gotthard *(Döpfner)* the other side of the quay bridge, close to the station, a four storeyed building, in an open situation, in modern style with numerous balconies, having a view over the lake and mountains, towards the east; it has 188 pleasant bedrooms (150 beds) an elegant and much frequented restaurant, a salle-à-manger and ladies' drawing-room. Pension with room 7—9 fr. From the middle of July till the middle of September no pension tariff. Room from 2½—3 fr. Service 75 cts. Lights 50 cts. Dinner with wine 3½ fr.

The **Kursaal** in the Haldenstrasse, near the Hotel National, serves as a casino. It has concert, ball, conversation, and reading rooms, a restaurant and a theatre standing in a garden. Concerts several times a day, admission to which is 2 fr. a day, or 10 fr. a week.

Hotel Englischer Hof at Lucerne.

Hotel de l'Europe *(Bucher & Durrer)* a comfortably furnished, handsome house in the best position on the lake, with large terraces, numerous balconies, 2 large dining rooms, reading, billiard and ladies' drawing rooms, 150 cheerful airy bedrooms. Water laid on on every landing. W. C's. 2 bathrooms. — Pension with room 7—13 fr.

Other hotels: *Beaurivage, du Lac, des Balances, Engel* Inns in the town: *Rössli, Wilder Mann, Mohr, Goldener Adler, Post, Krone, Kreuz.*

Pensions: *Faller, Gsegnet Matt, Ticoli, Belvedere, Neues Schweizerhaus, Anglaise, Altes Schweizerhaus, Felsberg, Kost-Höfliger, Kaufmann, Stocker, Suter, Wallis, Schloss Stutz.*

Café Restaurant Stadthof (propr. *Gottfr. Kopp*), **American Bar,** large first class establishment. Rallying point of tourists. Renowned cuisine the best in Lucerne. Old wines home-brewed and export beer, a large garden with veranda. Orchestra; and concert singing every evening.

Physicians: *Dr. Brunner*, specialist for pulmonary affections, *Dr. Bühler, Dr. Näf, Dr. Nager, Dr. Ott*, eye and ear doctor, *Dr. Steiger, Dr. Stocker* etc.

Walks and **Excursions:** The splendid promenades under the chestnut grove on the *Schweizerhof quay* with a grand view over the lake and the

circle of the Alps. Tastefully carved in stone on the parapet is a semi-circular panoramic indicator which points out the principal surroundings. In a westerly direction, beyond the Basle Gate, in 15 to 20 min. by cable train to the Gütsch (see below) and Gibraltar: to the south through a beautiful linden grove on foot in 20 min. or by train in 5 to Kriens and Sonnenberg (see below); on the north in a quarter of an hour from the quay to the Allenwinden, especially to the Drei Linden above the Capuchin monastery of Wesemli, with a capital view of the neighbourhood of Lucerne and the distant Alpine range; on the east by the Meggenstrasse to Seeburg (1/2 hr. up) and to the Meggenhöhe (3/4 hr.); by the Museggander wall with its watch tower to the Homberg. Other excursions by steamer, railway and carriage to the Herrgottswald, Eigenthal, Pilatus, Bürgenstock, Rigi, etc.

The **Gütsch,** the foremost promontory of the projecting cliffs on the left bank, towards Sonnenberg, is covered with a splendid pine wood traversed by numerous footpaths. It holds a commanding position above the city and the Reuss valley, of which latter it has a fine bird's eye view and affords a wonderful panorama of the lake and its surrounding mountains. **As a climatic resort** for actual invalids it is **not adapted,** being too much exposed to cold winds from all quarters, especially from the north and east, but it is becoming more and more a favourite place for foreign tourists, and from its splendid situation is adapted for a prolonged family residence. Although the Gütsch is only 550 m. above the sea and 113 above the Lake of the Four Cantons, and can be easily reached in 15—20 min. from the foot of the hill, *a cable railway* has just been laid from the bottom in order to facilitate its access to visitors. The journey only takes 3 min. On the eastern and northern slopes of the Gütsch stand some pretty villas which, in summer, are let to families by the room or by the whole house. In a fine situation on the Gütsch, visible far and wide, stands the Restaurant and the **Hotel and Pension Gütsch.**

Knutwyl, 490 m. above the sea, with a ferruginous earthy spring. — Season from the beginning of June till the end of September.

Route: From Sursee on the Lucerne-Basle line, in 1 1/4 hrs. by a good high road Knutwyl lies at the eastern base of the Rotherberg, close to a large thick wood, is surrounded by green fields and a well-kept park.

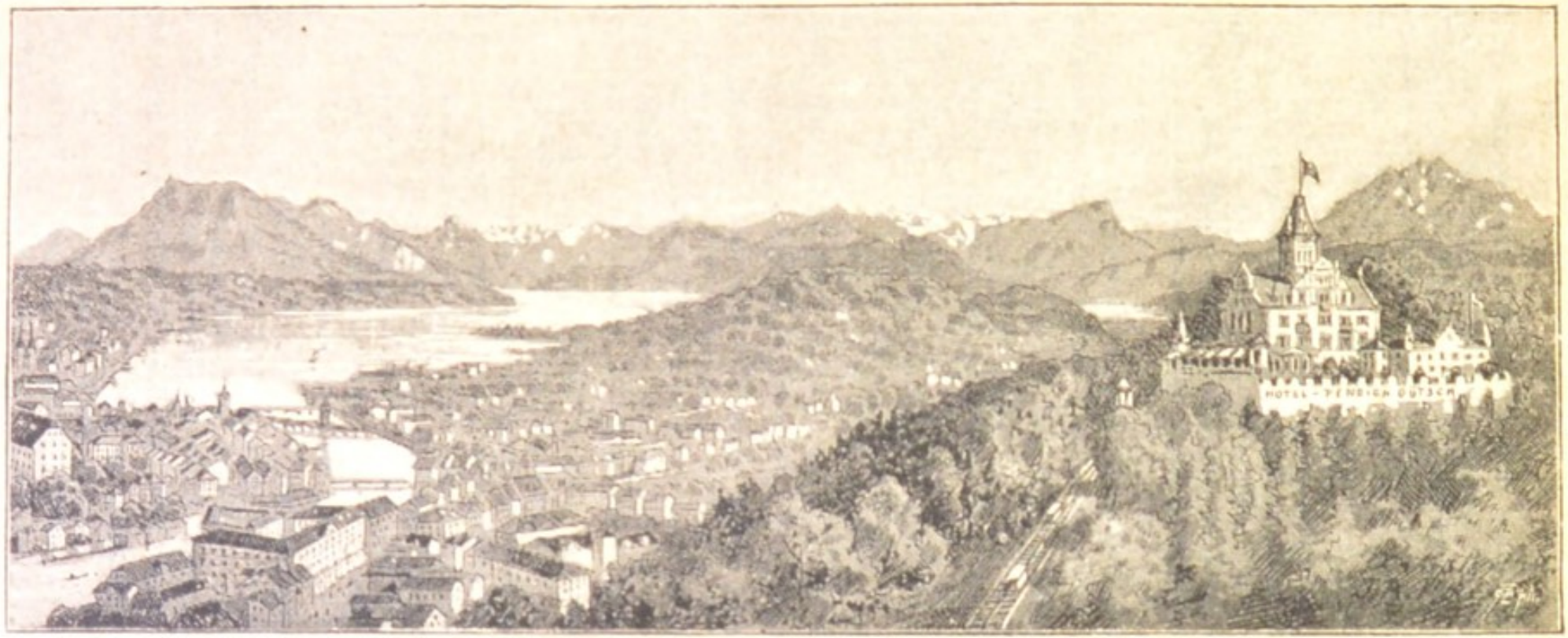
The mineral water is used for drinking and bathing as a remedy for poverty of blood when connected with gastric complaints, weakness, and disturbance of the nervous system (hysteria hypochondria), and has a special reputation for the various diseases of the female sexual organs.

Physician: *Dr. Troller.*

Herrgottswald, 792 m. above the sea, a health resort on the north eastern slope of Pilatus, 2 hrs. from Lucerne. Although open to the north it is protected by the neighbouring forest from the cold winds. Baths, Milk and whey cure. It is adapted as a summer resort for those seeking health, and for convalescents. Postal communication with Schwarzenberg and Malters. Telephonic communication with the „*Wilder Mann*" at Lucerne.

From Herrgottswald a footpath leads through the wood to the road to **Eigenthal,** (1 hr.) an air cure, 1040 m. above the

Rigi Lucerne Cable Railway on the Gütsch Pilatus



Panorama of the Lake of Lucerne.

sea, sheltered from cold winds by a high wooded hill. The summer is mild and the autumn generally very fine and free from fog. Milk cure. Excellent water. Eigenthal is adapted for weakly persons, convalescents, those suffering from poverty of blood and scrofula, and needing rest after mental strain and overwork. — *Kurhaus* (Burri).

Schwarzenberg, climatic health resort, 841 m. above the sea, by rail to Malters, and from there by the diligence in 1 hr., has a tolerably sheltered situation on the north-west slope of Pilatus, and is specially recommended for complaints of the respiratory organs, weakness, of the nervous system and poverty of blood.

Physician: *Dr. Schnyder* of Malters.

Hotels: *Kurhaus zum WeissenKreuz, Kurhaus Matt, Pension Fuchs.*

Farnbühl, Bad and climatic cure, 704 m. above the sea, at Entlebuch, has a ferruginous soda spring, is reached by rail as far as Malters, and thence in an hour by the Kurhaus omnibus. The Kurhaus stands in the midst of lovely meadows and beech woods, and although open to the north suffers little from cold winds. As the air is something of a tonic and stimulant Farnbühl is suitable for general weakness, nervous complaints, poverty of blood, bodily and mental exhaustion from over-work.

Physician: *Dr. Schnyder* of Malters.

Ruswyl, 653 m. above the sea, has a ferruginous earthy spring. By rail from Lucerne to Wolhausen, and from there by diligence in an hour to Ruswyl. The mineral bath is mostly used by residents in the vicinity as a cure for skin diseases, nervous weakness, and internally for digestive disturbances. *Kurhaus.*

Entlebuch, 722 m. above the sea, a climatic health sesort, on the Lucerne-Berne railway, is charmingly situated on the green slope of a moraine on the right bank of the Klein-Emme (the Little Emme). This lovely village rejoices in a mild climate, pure air, good drinking water and excellent milk. It is suited as a cure for weakness and poverty of bload, and as a residence for persons needing rest and refreshment, and for convalescents. A smaller private establishment (Pension belonging to the Kur physician, *Dr. Käch*) for gastric affections.

Schimbergbad, 1425 m. above the sea, climatic health resort with an alkaline sulphur spring and an iron spring. The Kurhaus of this much frequented popular spa, under the able management of *Dr. Schiffmann*, was unfortunately burnt down in the spring of 1885, but is to be rebuilt by a joint stock company.

Schüpfheim, is the chief market of the valley of Entlebuch, a station on the Berne Lucerne line, with a tall handsome church and Capuchin monastery. It has an earthy ferruginous spring which at the Kurhaus zum Bad is used for bathing and as a drinking cure. Cow's milk, goat's milk, whey.

Heilig Kreuz, 1140 m. above the sea, a much frequented place of pilgrimage, has a summer Pension *(Renggli)* in a lofty and beautiful situation, with an extensive panoramic view over mountain and valley. Cow's and goat's milk, whey.

Flühli *in Entlebuch,*

climatic health resort with sulphur springs, 893 m. above the sea, 1½ hr. south of Schüpfheim, lies in a basin shut in on all sides by mountain chains and protected from sharp winds. Bracing mountain air, pleasant walks, a fine wood near. Neighbouring heights commanding extensive views are the Brienzer Rothhorn, 2351 m., Feuerstein, 2042 m., Schratten, 2076 m., Schaffmatt, 1800 m.; a rich Alpine flora. In the neighbourhood are two sulphur spring which, according to the analysis of *Dr. Stierlin-Hauser*, contains, per litre, 0,810—0,812 grammes of fixed solids, consisting of sulphate of lime, carbonate of lime, carbonate of magnesia, chloride of sodium, silica, oxide of iron, oxide of manganese. The greater part of the sulphur is present as sulphuretted hydrogen, and a smaller proportion as calcium sulphide, the total amount being 0,0706 gr. The total amount of carbonic acid present amounts to 0,406 gr. per litre, of which about 80 cm^3. is in the free state.

The climate is very mild. The mean daily temperature in May is 11,2° C.; in June, 16,6°; in July, 19,0°; in August, 17,2°; in September, 13,25° C. Even in winter there are many bright warm days, so that Flühli is admirably adapted for a climatic health resort.

It is recommended for the following: weakness during convalescence, chlorosis and poverty of blood, incipient phthisis without fever, chronic catarrh of the respiratory and digestive organs, renal and bladder complaints, nervous affections (hysteria, melancholy).

Kurhaus zur Kreuzbuch *(Leo Enzmann).*

Physician: *Dr. Rob. Enzmann* of Schüpfheim.

Menzberg, health resort, 1,010 m. above the sea, 2 hrs. by diligence from Wohlhausen Station during July and August; other times by carriage. The east side of the Napf with its splendid views is a quiet country spot, with mild, but stimulating and strengthening Alpine air. Cow's and goat's milk; whey; baths.

It is recommended for: convalescent cases, chlorosis, poverty of blood, nervous complaints, weakness of the digestive powers. Physician, Dr. Riedweg, proprietor of the Kurhaus.

Bad Luthern, 1½ hr. west of Menzberg, at the Northern foot of the Napf, with a ferruginous mineral spring, consists of a country inn and a little bathing house.

2. The Health Resorts of the Bernese Oberland the Emmenthal and the Mittelland.

Berne, next to the Grisons, the largest Canton of Switzerland, with a superficial area of 6,889 square kilometres, and nearly a million of inhabitants, runs from south-east to north-west and divides like a broad girdle Western Switzerland from Central and Eastern Switzerland. On the south east it is bounded by Canton Wallis and the Bernese Alps over against Piedmont, on the north west by the chain of the Jura running parallel with the Bernese Alps towards France. In consequence of this vast extent of territory Canton Berne comprises within its boundaries almost all the climatic varieties of Switzerland: in the gigantic piles of granite, gneiss, and crystalline schist of the massive Finsteraarhorn with its northern spurs of chalk and molass, the climate of high altitudes; in the valley of the Upper Aar at the foot of the Lower Alps, the lake zone climate (Bernese Oberland); northwards the molass level land (Mittelland and Emmenthal), the plateau climate; the mountain wall of the Jura with its distinguishing climatic conditions forms the north-west boundary.

The Lakes of Thun and Brienz form the middle division of the so-called lake zone, which extends from the Lake of Geneva to the Lake of Wallenstadt. The Lake of Thun, 560 m. above the sea, which has a superficies of 48 square kilometres, is 15 km. long, its greatest breadth being 3,4 km., and its greatest depth 216 m.; it is a lovely sheet of water with picturesque suroundings. From the south-east to the north-west its western stores are encircled by the foremost chains of the Obergurnigel, Seelibuhl, Ganterisch, Langenegg-Grat, Stockhorn, Nieschleten, the mighty Niesen, Morgenberghorn, Rothenegg, the Leissigen and Dä:ligen-Grat, the majestic snow and ice crowned giants, the Doldenhorn, Blümlisalp, Jungfrau, Mönch, Eiger, Schreckhorn and Wetterhorn; on the eastern shore by the steeps of tho Beatenberg, Rothhorn and Blume. Both banks and the surrounding romantic slopes are dotted with handsome residences, villas, villages, gardens and parks. Five steamers compete with each other in traversing the lake in $1^1/_4$ hr. The prevailing winds are from the north-west and west, and as they blow over the lake with a pretty equable pressure, violent storms are rare.

The Lake of Brienz, a real Alpine lake, is 6 m. higher; it lies north east to south west and thus forms almost a right angle with the Lake of Thun. Its southern shore is bounded by the range of the Laucherhorn and Fuggehorn, by the Brienzerberg in the foreground of the Tschingel and Axalphorn, the Wildgerst, Schwarzhorn and Faulhorn; on its northern shore the almost perpendicular

The Brünig Road.

heights of the Horetegg across the Brienzergrat to the Brienzer Rothorn, descend steeply to the lake like a gigantic espalier stretching southwards. The Lake of Brienz is 9 (English) miles long, $2^1/_4$ wide and 600 metres deep; it is well stocked with good fish. The banks are completely sheltered from the cold north and north-east wind, and enjoy, therefore, a very mild climate.

However, the climate of this lake zone does not quite correspond with the Insubrian character of Lake Lucerne, because the near-lying range of the Finsteraarhorn, covered with eternal ice and snow (its highest point being 4,275 m. above the sea) does not allow a sufficiently wide opening for the Föhn and the south wind to be carried with full force over the northern Alpine valleys; on the other side the Jura chain does not attain a sufficient elevation to completely exclude the north west wind. In this zone the temperature in January sinks below zero, and the mean temperature for the year does not reach to 9° C., much less 10° C., as for instance at Gersau and Montreux. But if we compare this zone with the neighbouring plateau, we are at once aware of the modifying influence of the expanse of water and of the reflection of the sun's rays striking fiercely on the hills which rise sheer up from the lake. The maxima readings in winter are more than 4° C. higher than on the plateau; on the shores spring begins the earlier and the warm weather lasts longer into autumn, and in July the temperature rises considerably, although the summer is never very hot owing to the propinquity of the lake and the beautiful woods. Whilst in the neighbourhood of Berne the vine is not cultivated, on the sunny slopes of Thun there are pretty extensive if not very profitable vinoyards. The chestnut, even, does well, and between Thun and Brienz the bay tree thrives luxuriantly; indeed trees belonging to the southern Zone are not infrequently found in the gardens and pleasure grounds. This warmer Zone extends from Thun into the Kanderthal and Simmenthal, especially into the rocky clefts of Wimmis and Boltigen under the protection of the lofty mountain sides.

„The scenery of the lake Zone of the Bernese Oberland far surpasses any in the vicinity, thanks to its glorious mountains — unique in Europe — whose summits bathed in the pure aether of the loftiest altitudes, and whose majestic forms make a foreground of the richest verdure. The incomperable beauty of dazzling glaciers flowing in the loveliest lines inanimate nature ever devised; the background of eternal snow, suffused with the shimmer of the southern air, form, as it were, the leading characteristics of this domain." In this fertile region the dark branches of the walnut overshadow most of the other trees, and lend a sombre colouring to the landscape.

Abutting on this high mountain and lake zone are the hills and valleys of the undulating molass plateau, the soil of which consists alternately of marl, red sandstone and pudding-stone, all belonging to the marine tertiary period. The climate of this plateau is moderate; it may be divided into two zones: the humid zone

Berne

Temperature Table

	Average yearly temp.	Minim.	Maxim.	Jan.	Feb.	Mar h	April	May
Interlaken .	8,7	—11,4	29,4	—1,8	1,5	3,2	9,7	14,6
Brienz . . .	8,8	—	—	—0,4	2,3	3,4	9,5	14,7
Berne . . .	8,13	—15,6	30,7	—2,3	1,3	2,4	9,0	13,7
Affoltern b. Berne .	7,32	—15,5	27,5	—2,5	0,8	1,3	8,0	12,6

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Interlaken .	16,4	18,9	16,5	15,0	8,3	2,8	—0,0
Brienz . .	15,7	18,1	16,4	14,7	8,2	3,3	—0,1
Berne . .	15,6	18,5	16,3	14,3	7,5	2,1	—1,1
Affoltern b. Berne	12,2	17,1	15,1	13,6	6,9	1,6	—1,1

Average Cloudiness.

	Jan.	Feb.	Mrch.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Thun	—	—	—	—	—	6,0	5,5	5,8	6,3	—	—	—
Beatenberg	4,8	6,2	5,9	5,1	5,8	5,2	4,9	4,8	4,8	5,2	6,4	6,1
Affoltern	6,6	6,2	6,7	5,5	5,4	5,6	4,8	5,1	4,3	6,0	7,4	6,8

in the neighbourhood of the mountains, with a mean yearly temperature below 8° C., and the dry, lower zone with a mean annual temperature above 8° C. The rainfall of the Lower Alpine zone never sinks below 100 cm., whilst that of the northern sinks below 85 cm. As regards insolation the conditions on this plateau are generally speaking favourable, although the Aar is much charged with vapour. (Compare table above). The north-west edge of the plateau, with the Jura depression and the great Jura valley, registers a higher temperature, rising even to 9° C. and over; this district is, therefore, to be considered as a distinct climatic zone.

The vegetation on the molass plateau consists chiefly of pasture land, woodland, and orchards, for the overflowing of the streams which rush down from the Lower Alps produce abundant irrigation, and all the clefts and sides of the hills are covered with a carpet of luxuriant green: this is the country of the famous Emmenthal cheese produce. The central starting point in this district for tourists and invalids is

The City of Berne,

573 m. above the sea, with 47, 800 inhabitants, the capital of the Canton of the same name, and the chief city of the Swiss Confederation. It stands proudly on a small molass plateau, washed on the south-east and north by the Aar, which has here hollowed out a deep bed for itself, and over which quite lately a large bridge has been constructed. The heart of the city is characterised by an ancient and original style of architecture which, combined with the imposing modern buildings, the Federal Palace, the Museum, Hospital, the „Kirchenfeldbrücke", the fine hotels and the magnificent panorama of the Bernese Alps, make a striking impression

The Clock Taver at Berne.

on strangers. But the city is not adapted in any sense for a health resort, and its situation is far too exposed for persons suffering from respiratory affections; yet it is not a place subject to violent and continuous cold winds, and with the exception of the different forms of chest and lung affections it is suitable for various complaints. For example, it is a refreshing summer and autumn resort for persons suffering from anæmia and weakness of the nerves. It is especially to be recommended as a transitional station when passing to and from the plains to the mountains. Those who seek refreshment in walking exercise will enjoy the magnificent avenues of trees, unique perhaps of their kind, which stretch for from 1½ to 3 miles from the east to the west end of the town. Besides the charming environs, so little visited by strangers, but which offer such a number of delightful excursions, Berne has the advantage of an excellent government and of being a university city. Besides the many sanitary arrangements there are at Arzihle and at Lorraine great swimming baths, some of them warmed and supplied with douches. At Arzihle and at Oldenburg there are river baths with closed and open bath-rooms, and Turkish baths in the Bangenstrasse. There is an excellent milk cure, close to the town, the cows being medically certified.

Route: By rail from Lucerne-Langnau in 3½ hrs., from Olten in 2 hrs., from Thun in 1 hr., from Lausanne in 3 hrs., from Biel in 1 hr. Good restaurant at the Railway Station. Excellent kitchen and cellar.

Hotels: **Hotel Bernerhof** *(J. Kraft)* near the Federal Palace, with a beautiful view over the charming district washed by the Aar, and over the Bernese Alps, with a fine terrace near the "Schanzen-promenade", a small raised plateau with shady walks and seats in pleasant park-like grounds, grottos and little lakes with swans, fountains, etc. The Bernerhof is a large palatial building, the back looking on to the "Bundesgasse", only 5 minutes distant from the station, with luxurious appointments, 120 rooms and salons, very quiet and specially suited for a lengthened stay. Open all the year round. Close to the hotel a cable railway leads to the bathing establishments and to some delightful walks.

Hotel Bellevue *(Osswald)* in an equally beautiful and very sheltered situation, scarcely 5 min. from the station and picture gallery and Kirchenfeldbrücke, built by an English company. A large first-class house of old-established fame, with a beautiful shady garden and a splendid view over the Alps, the glaciers and the Aar. Just renovated. Moderate pension prices all the year round. Frequented by the best English families and tourists. Much recommended.

Hotel Falken *(U. Blau)* in the town, well managed.

Sommergarten, frequent concerts at the Casino.

Walks and excursions: The grand sight of Berne is the magnificent view of the Alps and the snow-capped heights of the Bernese Oberland visible in clear weather from every point. The following round is to be recommended: the Münster Terrace; Münster Square; Münz Terrace; Casino Terrace; Federal Council Hall; Grosse Schanze; Café in der Enge, and back across the railway bridge to the Botanic Gardens, and the Schänzli, the finest point of all for a view. In 1½ hrs. passing Wabern (½ hr.) to the summit of the Garten (861 m.) with a very extensive view; in 2½ hrs. to Zimmerwald; in 3½ hrs. to Bütschelenk (1058 m.) whence there is an extended view.

Aeschi, on the lake of Thun, 859 m. above the sea, a health resort, lies on the green mountain slopes which separate the Lake of Thun from the Great Niesen; it has, therefore, a fine open

Hotel Bernerhof and Federal Palace at Berne

view over the whole of the lake as well as over the Lake of Brienz, the Aarethal, Kanderthal, and the Hochgebirge. The air is on the whole rather stimulating and quickens the various functions of the body, such as the appetite, digestion, action of the heart and lungs, change of tissue; it has a tone-giving influence on mind and body and is adapted as a remedy for poverty of blood, chlorosis, and the headache and sleeplessness which result therefrom; to convalescence from exhausting, feverish illness and mild cases of mental depression. — Not adapted on the contrary for plethora.

Route: Aeschi can be reached in 10 min. through the wood from Faulenseebad. From Spiez a carriage road leads to Aeschi in 1½ hr. and a footpath in 1 hr.

Hotel and Pension Blümlisalp. *(Horlacher-Luginbühl)* with dépendance.

Thun

665 m. above the sea, at the outlet of the Aar, from the Lake of Thun, air cure. River baths in the Aar.

Route: From Berne by rail in 2 hrs., over the Furka, Grimsel and Brünig Passes by carriage, diligence, steamer, and the Bödeli road.

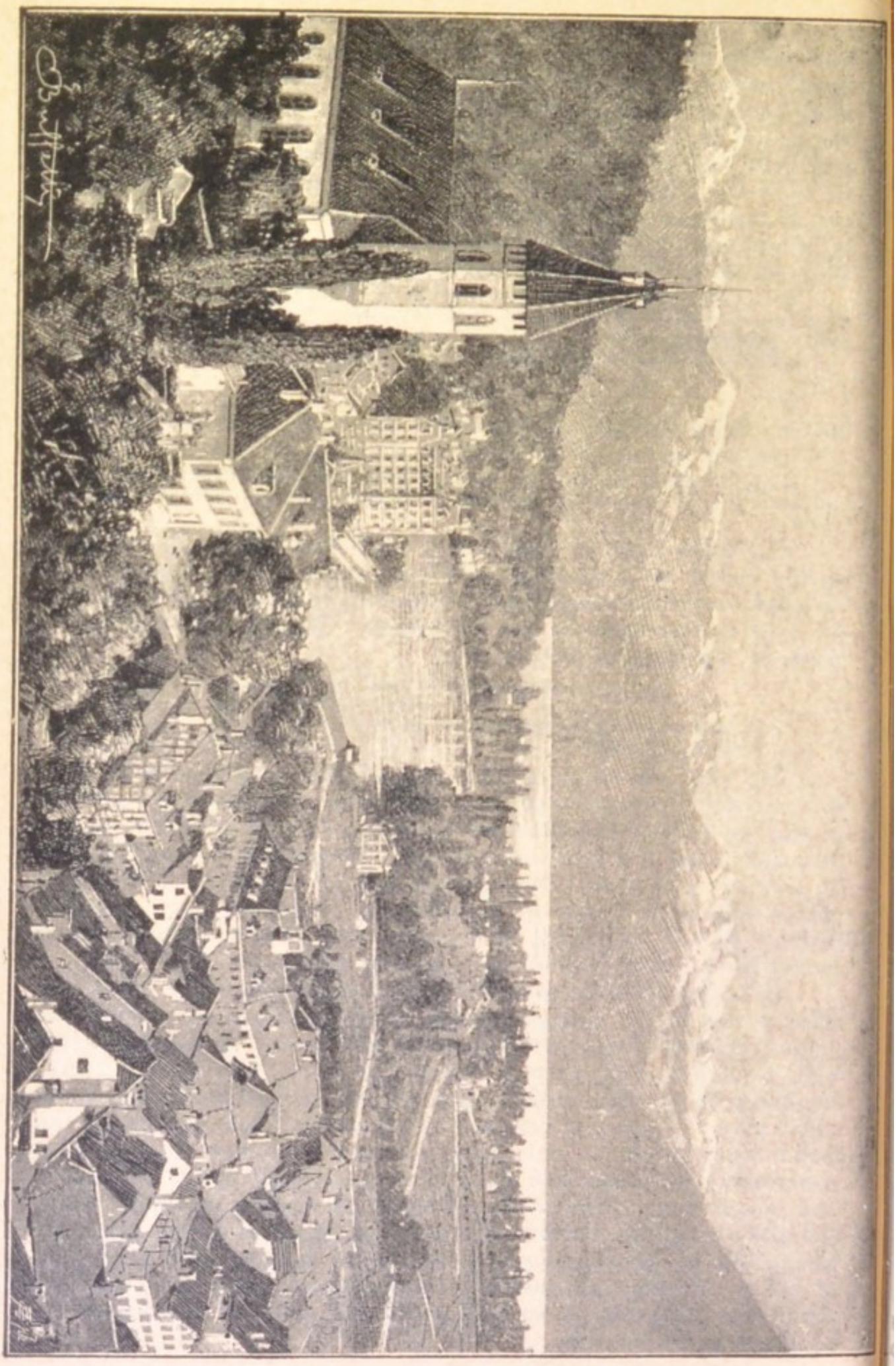
The little town of Thun, with 5000 inhabitants, is sheltered on the north by a wooded mountain range, 400 m. high, and is enclosed on the south-west and north-east by lofty heights, so that the lake is only open to the north-west. This sheltered situation gives it its climatic character.

Average temperature for the last 5 years:

	June	July	Aug.	Sept.
Average monthly temperature:	16,08	19,07	18,14	14,4° C.
Average humidity of the air:	65,50	66,17	66,70	65,00

The mild yet strengthening air is much sought after by nervous, excitable persons on account of its tone-giving, sedative quality. In the environs of the little town are many beautiful walks on the hills and along the banks of the lake. Exceptionally fine excursions by carriage and boat. During the last 10 years the town spent half a million of francs in obtaining a supply of pure drinking water. River bathing in the Aar and bathing establishment in the town. Baths and douches in the hotels.

Thun has hitherto been the resort of invalids from Berne and other towns in the Canton as well as of numerous foreigners who repair thither when convalescent after severe illnesses. Patients with chronic inflammation of the respiratory organs, especially those with chronic, dry catarrh and asthma, have found relief here. Many families who have among them invalids of the latter class settle in the neighbourhood. Thun is now making every effort to be reckoned among the "terrain" health place, and boasts some hotels arranged after the method of *Oertel*, which are situated at the bottom of the valley close on to the mountain range, all the wooded slopes of which are covered with a network of paths. At the projected "Terrain Kuren", patients, especially those with disturbances of the circulation will find every care. — Season May to October.



Hotels of the first class: **Grand Hotel Thunerhof** *(Ch. Stachle)*, **Hotel Bellevue** *(U. Blau)*, *Pension Baumgarten* (Beilick-Stalder); all three are excellently managed and splendidly situated. Also *Pension Iten*. Second class: *Hotel Freienhof*; **Weisses Kreuz** (see advt. at the appendix of the book); *Falken*; *Krone*.

Physicians: *Dr. Kauffmann, Koller, Pfander, Rau, Ries.*

Walks and excursions: — Thun possesses a great many shady promenades. To the Rotunda on the Jakobshübeli (728 m.) with a full view over the lake, the Alps, Thun and the valley of the Aar; 5 minutes higher to the Pavillon Bellevue: along the road on the right bank of the lake, across the Bächimatt to Chartreuse (20 min.); 10 min. further to Bächihölzli over the Hündbach, and by a well laid path through the picturesque Kohlerenschlucht to the Grüseberger Wald, along the Goldswyler-road. Other excursions to Thierachern (1 hr.), Bad Blumenstein or Fallbach (2 hrs.) Gurnigel (4½ hrs.); Niesen (2366 m.) (5 hrs.) where the view is equal to that from the Rigi.

Schnittweyerbad, 676 m. above the sea, *air cure* with a mineral spring, and a dry soil, is situated between two molass hills, in a verdant little valley open to the south-east and enclosed on 3 sides by fir woods. It is 20 minutes distant from Steffisburg and ¾ hr. from Thun. The air is mild, yet refreshing and strengthening. The mineral spring contains sulphate of magnesia and carbonate of lime, also chloride of sodium, sulphate of soda, potash and ferrous carbonate. It is recommended in cases of poverty of blood, chlorosis, chronic bronchitis and infiltration of the lungs, pleuritic exudations and effusions, rheumatism, nervousness, convalescence and general weakness.

Physician: *Dr. Lanz* of Steffisburg.

North-west of Thun, above the railway station of Kiesen, is the Kurhaus and Pension **Falkenfluh,** 1050 m. above the sea, a summer resort. Milk treatment.

Westward from Thun a pretty road leads to **Thierachern,** standing on a green slope 569 m. above the sea, with a magnificent view of the Lake of Thun and the Bernese Alps. Hotel z. Löwen.

Bad Blumenstein, 655 m. above the sea, with a mineral spring. Season, middle of May to the end of September.

Route: By diligence in a westerly direction from Thun in 1½ hrs.

The Kurhaus is in a high valley amid green meadows, the slopes of the well-wooded Stockhorn range forming the southern background. Close to the village of Blumenstein, at the foot of the hills, and almost buried in the underwood is the picturesque fall of the Fallbach, 20 m. high. The air is mild, but refreshing; after a storm there is often a chilly breeze. The spring consists chiefly of carbonate of lime; in smaller quantities carbonate of magnesia, ferrous carbonate, sulphate of lime, magnesia, potash, soda, chloride of sodium, silica and phosphate of magnesia; it is generally used for bathing in chronic muscular and joint rheumatism, weakness of the muscles and nerves, menstrual irregularities, chronic affections of the uterus, digestive derangements, poverty of blood, chlorosis. — Physician: *Dr. Vögeli.*

Gurnigel,

1155 m. above the sea, an air cure, with a cold spring impregnated with lime and sulphur.

Gurnigelbad is one of the oldest and largest health establishments in Switzerland. It is situated on a projecting terrace, on the northern declivity of the Gurnigelberg (one of the Stockhorn range). The establishment, which since 1863 has been the property of Councillor *J. Hauser*, has been rapidly extended under his excellent management, and now contains 375 rooms with over 500 beds.

The main building 150 m. long, and 3 storeys high, consists of several blocks, connected by corridors, has a splendid view over the high table land to the north and over the Jura. It contains in all 196 large, comfortable bed rooms, and 15 balconies; on the ground floor 30 bath rooms, the doctor's apartments, the hotel bureau, café, billiard room, conversation and music room. The dépendance with the douche rooms, kitchen and dining rooms, is on the south side, separated by a large court from the main building, and joined to the west wing by a glass gallery (Wandelbahn) The new dining rooms are very choice and tasteful, well ventilated, and lighted with electricity: they can accommodate 700 persons.

Other buildings affording accommodation are the old and new dépendances, the *Châlet, Waldhaus, Kegelhaus* and *Kirchenchâlet*.

The *old dépendance*, chiefly patronised by large families has 20 rooms. The Châlet has a parlour and 45 rooms. The new *dépendance* connected with the Châlet by a bridge from the first storey, comprises the washing and pressing rooms, the drying ground, and 13 rooms on the first storey. The *Waldhaus*, standing in the wood, has underground the water wheel and machinery for the electric light, on the first and second floors 22 nice rooms.

The *Kirchenchâlet*, built in the most tasteful style of the Bernese Oberland architecture, standing in the midst of a young fir wood, has underground, the Roman Catholic Chapel, on the ground floor the Reformed Church, and on the first floor apartments for families with a good salon, 5 bedrooms and 2 dressing-rooms.

The *Kegelhaus* is on the ground floor with a German bowling ground, shooting stand, play-ground; on the first floor are 16 rooms to let.

Two boilers heat the baths, passages and some of the rooms. The dining rooms and terraces are lighted by electricity, the passages and sitting rooms by gas.

There is also a pump room *(Trinkhalle)*, 50 m. long, covered on 3 sides and protected from draughts; on the south side of the main building is a gallery, 120 m. long, covered with glass, heated by steam, used as a promenade, where in rainy weather a good band plays afternoon and evening. On the north side of the main building is a *terrace* 200 m. long, the *boulevard* of Gurnigel, where in good weather concerts are given in the music pavilion. From the *Bellevue*, to which a carriage road has been made, and from the heights of Gurnigel is a magnificent panorama of the Stockhorn range in the immediate fore-ground, Thun, the Bernese Alps, and on the east Pilatus and Titlis.

A great and enviable advantage of Gurnigel is its wooded park. These beautiful fir woods, carefully preserved, intersected in all directions by well kept footpaths and seats, extend for 3 miles.

Good roads connect Gurnigel with Berne, Thun and Freiburg. The route most frequented is that from Berne via Wabern, Toffen, and Riggisberg through the valley of Seftig. — From June 15. to September 15. a diligence runs twice daily to the chief posting station in Berne and back, in 3—4½ hrs. It starts in the morning at 7, in the afternoon at 2. 30. Fare 7 fr. 15 Cts. and 8 fr. 60 Cts.

Pension tariff: First price, (3 meals) till July 1. 6 fr.; from July 1. to 15. 7 fr.; from July 15. to August 31. 8 fr.; September, 6 fr. Second price 4½ fr.; children 3½ and 4½ fr.; servants 5 fr. Room, per bed 1½—4 fr. (in July and August ordering beforehand is necessary). Baths: the Stock or Schwarz spring, with towels 1¼ fr.; vapour bath 2 fr.; cold or warm douche 1 fr. Private carriages, saddle horses, sedans.

There is a special invalids table at restaurant prices, which is particularly recommended to those with stomachic derargements and in cases where a strict dietary is promotive of, if not necessary to, the success of the treatment.

Climate: The prevailing quarters of the wind are the east and west. The houses, however, are sheltered by the woods which come close up on the east and west. The meteorological averages observed in 10 successive years are given by *Dr. Verdat* as follows: Barometer 660,8 mm. Hygrometer 81,9. Cloudiness 5,0.

Temperature:

Month	Average	Maxim.	Minim.	Daily Variations
June 10—30	13,18	23,0	4,9	7,28
July	15,42	27,5	8 0	7,46
August	15,25	26,5	7,0	7,21
September 1—20	14,11	21,0	5,0	6,90

Weather:

Month	Fine	Changeable	Rain	Storms	Ozone
June 10—30	6	7	7	0,5	7,6
July	18	9	4	4	7,4
August	16	10	5	6,5	7,3
September 1—20	13	4	3	2	7,1

The table above shows that the climate is almost pure Alpine, and that the changes of temperature are uniform, not abrupt. The large amount of ozone is easily explained by the extensive fir woods. The air is stimulating and invigorating.

Mineral Springs. The 2 sulphur springs are conveyed to the pump room in hermetically sealed conduits. There is an iron spring, just worked, a little distance off. The Stock spring and the Schwarz spring have, according to Fellenberg, the following chemical constituents.

	Stock spring.	Schwarz spring.
Temperature according to Celsius	7	8,5
Specific gravity	1,00182	1,0092
Pressure of the air	0,658 Mm.	0,654 Mm.
Containing 1000 gramm:		
Sulphuretted hydrogen	8,77 Cc.	39,39 Cc.
Nitrogen	18,743 „	24,074 „
Free carbonic acid	185,311 „	401,136 „
Sulphate of lime	1,5833 Gr.	1,3039 Gr.
Sulphate of strontia	0,0073 „	0,0138 „
Carbonate of lime	0,1668 „	0,1903 „
Carbonate of magnesia	0,0111 „	0,1007 „
Ferrous carbonate	0,0018 „	0,0037 „
Phosphate of lime	0,0029 „	0,0031 „
Silica	0,0127 „	0,0094 „
Lithium	— „	0,0018 „
Sulphate of magnesia	0,1033 „	0,0550 „
Sulphate of soda	0,0322 „	0,0512 „
Sulphate of potash	0,0090 „	0,0846 „
Chloride of sodium	0,0041 „	0,0053 „
Hyposulphite of calcium	0,0045 „	0,0084 „
Sulphide of calcium	— „	0,0045 „
Sulphide of magnesium	— „	0,0012 „
	1,9390 Gr.	1,8469 Gr.

These analyses show that both springs belong to the alkaline, cold sulphur class, and the Schwarz spring is certainly one of the strongest in Switzerland. They contain also a large quantity of carbonic acid which accounts for their digestibility. The sulphur, as well

as the iron springs are used not only for drinking but for baths, douches, etc. First rate whey and milk. Pine baths.

Dr. Lutz, in 1883, noted the Gurnigel springs as laxative, promoting excretion, and strengthening. *Dr. Verdat*, a spa doctor of several years' standing, distinguishes between the effects of the 2 springs. In his experience the Stock spring is of the solvent class of waters, promotive of secretions, while the Schwarz spring acts more on the circulatory and nervous systems; he describes their main effects as sedative and strengthening. They, are, therefore, successfully applied in the following classes of disease:

1. Chronic catarrh of all the mucous membranes.
2. Affections of the digestive organs: dyspepsia, distension of the stomach, constipation, diarrhœa, intestinal worms, hæmorrhoids, enlargement of the liver.
3. Affections of the abdomen: plethora abdominalis, congestion of the uterus, etc.
4. Nervous complaints: neurosis, neuralgia, special migraine, cardialgia, dysmenorrhæa.
5. Skin diseases: tendency to erysipelas, boils, nettle rash, varicose veins and eczema.
6. Affections of the blood and of the organs of nutrition: malaria, alcoholism, anæmia, chlorosis, obesity, gout (certain forms) tendency to scrofula.

It is not recommended for: fever, heart disease, full bloodedness, pregnancy, tuberculosis, cancer.

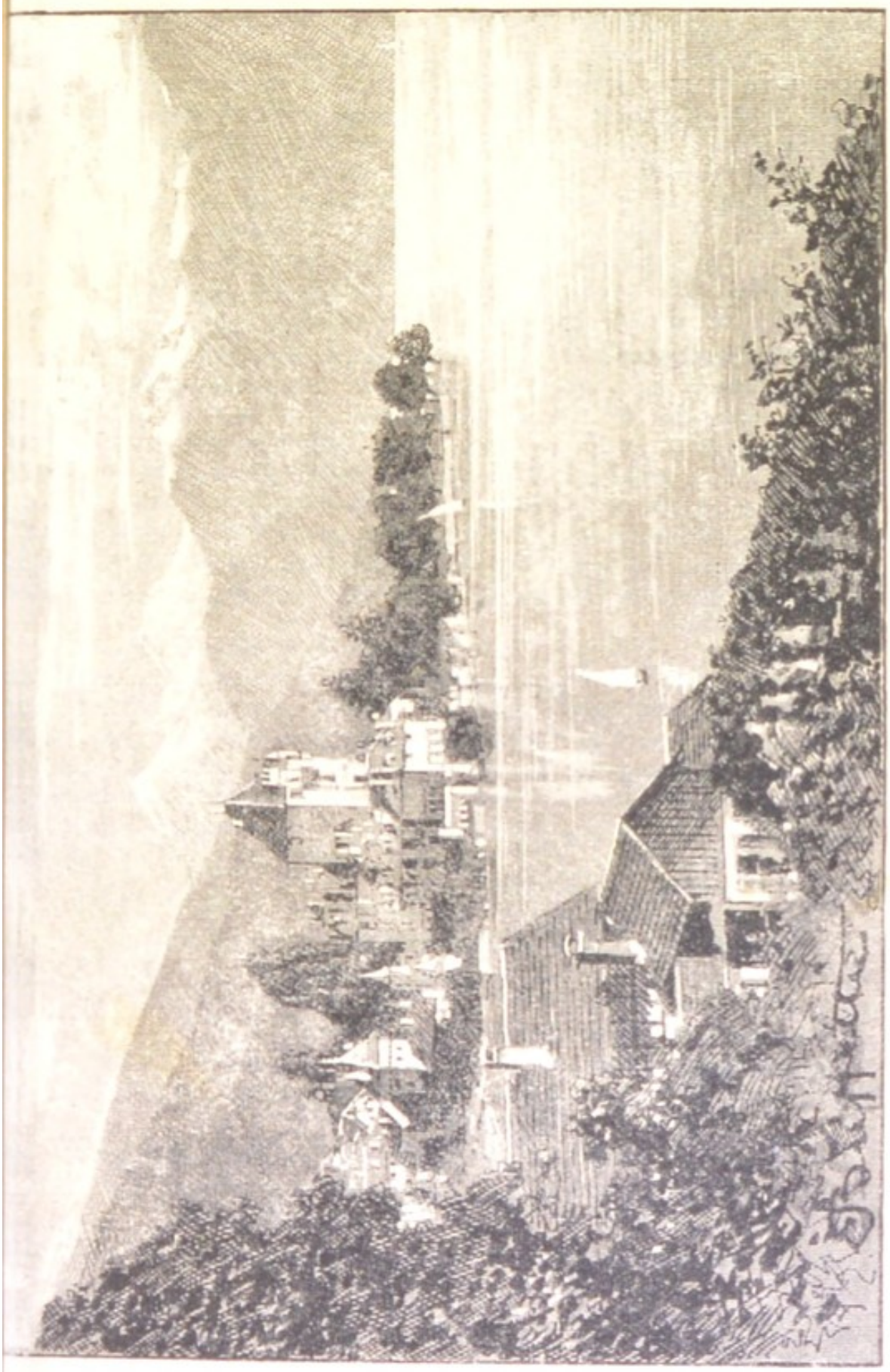
Walks: A 3 miles' walk through the splendid wooded park with its abundance of seats and picturesque nooks (see above). In 1/2 hr. to the pavilion (1320 m.), with a fine view. In 3/4 hr. through the wood to Seftigschwand, with a splendid Alpine panorama, especially at sunset (Niesen, Thun, Lake of Thun, Spiez, Schreckhorn, Finsteraarhorn, Eiger, Mönch, Jungfrau, Breithorn); to the Bellevue above Seftigschwand, a new high road, where there is a large hall open to the south with a tower for obtaining a view, a restaurant; on fine afternoons concerts are given by the Kurkapelle. One hour to the Ober-Gurnigel (1544 m.), with an equally fine panorama.

Längeneybad, 844 m. above the sea, with a ferruginous spring, picturesquely situated, 3 miles north of Gurnigel, to which a newly made way leads through the shady wood in the deep gorge of the Seeligraben. 10,000 gr. of mineral water contain 2,3304 of fixed solids, principally, carbonate of lime, also carbonate of magnesia, silica, oxide of iron, phosphate of lime, chloride of sodium, crenate of lime and magnesia, soda, traces of copper. — Rustic bath house.

Schwefelbergbad, 1394 m. above the sea, with cold sulphur springs impregnated with lime. Season from the beginning of June to the end of September. — *Kurhaus* (F. Zbinden).

The Bad is in the valley of the Sense, at the northern base of the Bürglen (2167 m.) and Ochsen (2190 m.) opposite the Schüpfenfluh (1723 m.) and the Seelibühl (1752 m.). From Gurnigelbad to Nünengrat 2 1/2 hrs. by bridle path; from Berne by diligence in 3 hours to Schwarzenburg; from there by the hotel carriage and Ryffenmatt (1 hr.) and thence by bridle path over the Seufterhöhe to Schwefelberg (2 1/2 hrs.

On account of its facing north the air of Schwefelbergbad is rather keen, and warm clothing is therefore indispensable. The temperature rises in summer to 18—20° C., seldom higher, and is never under 10° C. The mornings and evenings are cool; the



The Castle of Oberhofen on the lake of Thun.

changes are rapid and there is always a good wind blowing; it has therefore the advantages of Alpine places, is very stimulating, tone giving, and increases the appetite.

Sulphate of lime predominates in the mineral spring, then bicarbonate of lime and magnesia, protoxide of iron, sulphate of soda and chloride of sodium. It acts powerfully on the intestinal secretions, increases the activity of the liver, kidneys and skin, and has a soothing influence on the circulatory organs and the nervous system. Its principal uses, taken internally, are in catarrh of the larynx, bronchial organs, stomach and intestines; nervous indigestion, obstruction of the liver, hæmorrhoids, varicose veins, catarrh of the uterus. Physician: *Dr. Fueter* (at Berne in the winter).

Ottenleuebad, 1431 m. above the sea, a spring containing iron. It lies north west of Schwefelbergbad at the southern declivity of the Pfeifenberges (1657 m.). The route is the same as to Schwefelbergbad. As a rule the climate is raw and changeable, although it is well protected from the cold north winds. The spring is recommended as a remedy for poverty of blood and chlorosis, provided the patients are not extremely weak, for recruiting those suffering from over work and a sedentary habit of life, and occasionally for consumptive persons. *Kurhaus* (Rolli).

From Berne by rail in 2 hrs. to Thun, thence by steamer to

Oberhofen, steamboat station on the Lake of Thun, a pretty village with an old castle which has been renovated with much taste. As the place is completely sheltered from the cold north winds by lofty mountains forming a back-ground, and lies open to the south, the air is very mild and especially suited as a summer and winter resort for consumptive patients. There are several good boarding houses with fine views over the glaciers of the Blümlisalp and the Doldenhorn.

Pension Zimmermann, Pension Oberhofen, Pension Moy, Gasthof Bären.

Gunten, steamboat station on the north-east bank of the Lake of Thun, 1½ hrs. above Thun. Summer resort. Lake baths.

Pensions Schönberg, du Lac, Gunten z. Hirschen.

Sigriswyl, 806 m. above the sea an air cure, ¾ hr. above Gunten, with a good high road up to the Rebberg. Milk treatment. Fine views. *Hotel Bären.*

Merligen, south-east of Sigriswyl, on the lake, whence a steep, but tolerably good bridle path leads up through the beechwood to the village of St. Beatenberg. *Gasthof Löwen.*

St. Beatenberg, 1148 m. above the sea, a high, climatic health resort for summer and winter.

Route: From Interlaken by diligence (from June 1 to Sept. 30 private open coupé) in 3 hrs. to Beatenberg. Private carriages from Interlaken. Footpath from Merligen.

The Beatenberg rises above Merligen on the east; on the north its rugged sides incline precipitously towards the Justisthal;

on the east it stretches out in a long ridge to the Habkernthal; on the south the summits of the mountain tower up on the other side; the Niederhorn (1965 m.) with the Burgfeldstand rises opposite the lake. The village straggles for 3 miles along an almost level road on the richly wooded southern slope of the mountain with a magnificent, open view of the deep blue waters of the Lake of Thun lying below, of the Bödeli and the stupendous circle of the glacier-crowned summits of the Wetterhorn and Schreckhorn on the east, to the crest of the Wildhorn on the west, truly "a softy promenade" such as is rarely met with.

The air is very mild and gently invigorating owing to the very slight changes of temperature and relative humidity. While at the other elevated stations the Föhn, which on the Beatenberg is hardly felt at all, melts the mass of winter snow, on this mountain there is none to melt, as on account of its delicious, sunny situation it has long laid aside a wintry garb. The air is heavy with the aromatic scent of the woods, and on account of its even temperature and constant degree of humidity, it has like, southern places, a gently stimulating effect on all the functions of the body. The barometer shows an average of 663,57 m.; the mean yearly temperature is 6,43 ° C.; while at Davos (1556 m.) it is 2,6; at Andermatt (1444 m.) 2,9; at Engelberg (1019 m.). 5,6; at Interlaken 8,8. at Montreux 10,5, at Lugano 11,9 ° C. Beatenberg belongs to the few health resorts of Switzerland which, through out all the four seasons, are, in relation to their geographical position, too warm, while under normal conditions they would, at least in spring, be too cold. The mortality in Beatenberg is very low, 16,5 ‰ of the settled population; consumption is very rare.

St. Beatenberg is recommended for the following complaints:

1. Chronic catarrh of the air passages and bronchial mucous membrane.

2. For preventive treatment in cases of inherited tendency to phthisis, for the strengthening of the constitution and increase of the resisting power, for exercises for the heart and lungs (very suitable in winter).

3. Apex pulmonise with incipient consolidation.

4. First stage of phthisis after subsidence of feverish reaction (autumn and winter treatment).

5. Affections of the larynx, remnants of pleurisy and pneumonia.

6. Asthma following emphysema or chronic bronchitis in certain cases.

7. Nervous complaints, over excitement, requiring tone giving air.

The **Kurhaus**, a model hotel, built and furnished according to the latest scientific and hygienic principles by *Dr. Hans Fröhlich* in 1875, was enlarged and improved by its present proprietor, *Dr. Alb. Müller*.

Pension Beatrice (Proprietor, chief *Ranger Risold*) (formerly Pension Pfarrhaus) at present let to the family of the late much loved Pastor Krähen-

bühl, is an elegant, well appointed house. — Physician: *Dr. A. Müller*, who resides in the Kurhaus.

Walks and excursions. — To the Hohe Promenade, a walk of ¾ hr. between the Hotel des Alpes and the Kurhaus, with a good view. Beautiful woods near with well laid paths. Most accessible from the Hotel des Alpes and the Kurhaus are: the Alm (½ hr.) a charming meadow; the Ammishöhe (½ hr.) with a beautiful view of Interlaken; the Känzeli (½ hr.); the Waldrand (1½ hr.) with a view over the west half of the Lake of Thun and the Sonnen valley; the Beatushöhle, a steep climb of 1½ hr., where in spring there is a charming water fall; the Niederhorn (2½ hr.), the top of the Beatenberg (1965 m.) with a magnificent panoramic view, and the Burgfeld with an equally good view; the Gemmenalphorn (2067 m.) with an extensive panorama (4 hrs.); the Schafloch (4 hrs.) a cave with a subterranean glacier.

Abendberg, 1139 m. above the sea, opposite the Beatenberg, at the junction of the Aar with the Lake of Thun, 2 hrs. from Interlaken, an air and whey cure. *Hotel Bellevue.* Splendid mountain panorama.

Därligen, steamboat pier and railway station, on the shore. *Pension Schürz.* Cow's and goat's milk. Lake baths.

Faulenseebad, 800 m. above the sea, with an earthy ferruginous spring. Its elevated position, 150 m. above the Lake of Thun, sheltered on the south and south-west by the Seeholzwald and the mountain range on which lies Aeschi, has on the whole, a refreshing, invigorating climate; in the afternoon there is generally a light breeze, but it seldom becomes stiff. The medicinal spring contains a preponderance of sulphate of lime, also bicarbonate of magnesia, lime, protoxide of iron, chloride of calcium, sulphate of soda, potash, alumina, silica, traces of manganese, strontia, lithia. Temperature 11° C. The Bad is supplied with the newest douching apparatus. The medicinal treatment is completed by electricity and massage; table d'hôte as a rule; strict diet exceptional.

It is recommended for: Chronic pectoral catarrh with or without expectoration; chronic catarrh of the larynx; pulmonary disease in its first stages; poverty of blood and chlorosis, especially the acute forms; joint rheumatism; gouty and urinary deposits; diseases of the urinary passages, for which rest and change are required. It is not recommended for: inflammation of the windpipe with copious, running expectoration.

Physician: *Dr. J. Lussy* of Montreux.

Spiez, steamboat station on the left bank with romantic, picturesque surroundings.

Hotel Spiezerhof. Summer resort. Warm and cold baths, douches, lake baths; milk and whey treatment.

Hotel and Pension Schönegg. 630 m. above the sea, an air cure, close to Spiez, on the lake, in a delightful position sheltered from the north and north-east wind. The air is very mild, and the changes of temperature are very slight, so that apricots, mulberries, figs and chestnuts ripen here to perfection. Warm baths, lake baths, milk treatment. Hydrotherapeutic appliances, inhalation, and the Waldenburg apparatus for throat and chest diseases, electro-therapy. Schönegg is recommended to those whose health needs recruiting, to convalescents; for catarrh of the larynx and chest, neuralgia, rheumatic affections, and for strengthening weakly children. — Physician: *Dr. E. Mützenberger.*

Wimmis, 634 m. above the sea, a pleasant village in the Niedersimmenthal, at the foot of the bowl-shaped Bergfluh; the air is mild and refreshing, and it is a pleasant summer residence. *Hotel and Pension Löwen,* well and prettily situated. By carriage from Spiez in 1½ hrs.

Heustrich, 640 above the sea, with a cold, alkaline saline sulphur spring. Season from the beginning of June to 15. September.

Route: From Berne by rail to Scherzligen (1 hr.), thence by steamer to Spiez (1¼ hrs) From Spiez by diligence to Heustrich (½ hr.). From Thun railway station by the Heustrich omnibus (1½ hrs.), from Interlaken by carriage in 2 hrs.

The *Heustrichbad* is at the north east base of the Niesen (2366 m.), on the left bank of the foaming river Kander, a trifle removed from the trodden route which leads to the Gemmi Pass viâ Fruttigen and Kandersteg. On the north-east the valley is bounded by the woody, luxuriant green heights of Aeschi, on the south-east rises the snowy, glacier crowned Blümlisalp. The Bad itself is surrounded by meadows, beech and fir woods. Close to the front of the establishment is a shady, hilly wood, with sheltered seats looking north west.

As regards climate Heustrich belongs to the Sub-Alpine health resorts, and it has this great advantage that it is sheltered from the wind, and the air is charged uniformly with a considerable amount of moisture. These characteristics, which Heustrich has in common with Weissenburg, render it specially beneficial to patients suffering from chronic catarrh, who indeed form the majority at this establishment. The atmosphere is pure, clear, and well ventilated, as the north east and south west winds blow through the narrow valley. It is not, however, to be denied that Heustrich is sometimes subject to sudden changes of temperature, so that visitors must be provided with warm clothes, especially in the late summer, the end of August and September. At this time of year with the approach of rainy weather, the barometer falls very considerably.

The water is generally drunk cold, from the spring, the dose per day varying from 200—1000 gr. There are model arrangements for inhalation which have been used, for a number

Year and Month	Temperature						Relative humidity			
	7 o'clock	1 o'clock	9 o'clock		Minim.	Maxim.	7 o'clock	1 o'clock	9 o'clock	
1881 June	13,5	18,7	14,2	15,0	7,0	24,8	84,2	66,8	83,3	78,1
July	16,1	23,2	17,5	18,4	11,0	29,0	78,9	57,5	78,0	71,8
August	13,8	19,8	15,0	15,8	8,8	27,0	83,3	65,8	81,2	76,8
September	9,0	14,2	10,0	10,0	4,0	19,0	87,7	75,3	87,9	83,6
1882 June	11,6	15,6	11,8	12,5	5,2	23,6	82,0	70,7	84,1	78,9
July	13,6	18,0	18,8	14,6	9,2	24,6	84,6	74,2	87,6	82,1
August	11,9	18,1	12,2	14,1	8,4	25,0	89,1	79,8	86,6	82,2
September	11,6	15,5	11,8	12,7	2,0	31,2	90,5	78,5	92,1	87,0

The analysis of the mineral spring gave in 1000 parts:

Bi-carbonate of sode	6,710
„ „ lime	0,125
„ „ magnesia	0,076
Traces of bicarbonate of ferrous oxide	
Bi-carbonate of lithia	0,039
Sulphate of potash	0,064
„ „ soda	2,005
Chloride of sodium	0,093
Sulphide of sodium	0,339
Alumina and phosphate of lime	0,020
Silica	0,090
Sulphuretted hydrogen gas	110,9 Ccm.
Nitrogen	314,5
Temperature	5,8° C.
Specific Gravity	1,000671.

of years, especially for affections of the neck. The water is also much used for injections, nasal douches, vaginal injections, as well as for baths. There are also excellent douche arrangements, and a trained staff who, under the doctor's orders, carry out other hydro-therapeutic processes, and also massage.

The hotel is a first class one, with table d'hôte, at which a cure regime is provided.

Especially worthy of mention is the pneumatic bell filled with a compressed, rarefied air which has been in use at Heustrich since 1880. For exercising the lungs there is a pneumatic apparatus, after Schnitzler.

The spring is recommended for: Chronic catarrh of the upper breathing passages (dry coryza, catarrh of the throat, hoarseness, etc.), chronic catarrh of the bronchial mucous membrane with complications (emphysema, asthma, etc.) incipient consumption; chronic catarrh of the stomach and intestines; catarrhal affections of the urinary and sexual organs, poverty of blood, chlorosis, scrofula, chronic rheumatism of the joints, tendency to complaints which arise from chills.

It is not suitable for: Failing action of the heart, advanced stages of phthisis, feverish affections, inclination to congestion of the brain with vascular degeneration.

The **cure establishment** *(Hans Hofstetter)* consists of a large 3 storeyed building and 4 dépendances, with accommodation for 220 visitors. It contains a large, elegant dining hall and one smaller one, a conversation and dancing salon, billiard and smoking room, a reading room with home and foreign newspapers, a library, numerous balconies, a large covered gallery for a promenade adjoining a salon for the drinking treatment; 5 min. from the house is a pretty, tastefully arranged "Ruh-Salon", where those undergoing the milk treatment resort at milking time. Most of the rooms and salons have heating apparatuses; water is laid on at every floor and there are English w.c's. Postal communication twice daily. A permanent band, whose performances are excellent. The life is quiet, pleasant, and adapted for invalids.

Pension tariff: I class, 6 fr.; room 2—10 fr. II class, 3 fr. 50; children under 10 1/3—1/2 less. Baths: plain 60 cts.; with Heustrich water 1 1/2 fr.; vapour bath 2 1/2 fr.; douches 1/2—1 fr.; pneumatic bell 2 1/2 fr.; inhalation 3/4—1 fr.; pulverisation 1 fr.; nasal douche 1/2 fr. Band daily 1/2 fr. — Physician: *Dr. Neukomm.*

Walks and excursions: To the environs and the pavilion gardens (see above); 40 paces above the establishment a beautiful view of the Blümlisalp. Beautiful walks in this direction with numerous seats. In 10 min. to Emdthal, ½ hr. to Aeschi (see above), ¾ hr. to Faulenseebad; 1¼ hr. to Spiez; in 4 hrs. along an easy bridle path through a beech and fir wood to the shepherds' huts of Schlechtenwaldegg to the Niesen (see above).

Niesen, 2,366 m. above the sea, air, milk and whey cure, 4 hrs. up from Heustrich by a new, easy, bridle path, through beech and fir woods and past herdsmen's cottages. The *Hotel and Kurhaus Niesen* commands one of the grandest mountain panoramas in the Oberland. The mountain air is very strong and stimulating, and there are abrupt changes of temperature and violent gales.

Mühlenen, 20 min. south of Heustrich, on the Frutigen road, 690 m. above the sea, a charming old spa, with a spring containing iron and sulphur, used for rheumatism and cutaneous eruptions. *Hotel and Pension Niesen.*

Frutigen, 828 m. above the sea, a large, substantially built village, the chief place in the valley, with a ferruginous sulphur spring. *Hotel-Pension Bellevue; Gasthof zu Adler.*

Bad Rinderwald, 878 m. above the sea, 2 hrs. from Frutigen, on the south eastern declivity of the Niesen, with a cold, gypsiferous, sulphur spring.

Bonderbach, 878 m. above the sea, on the Kandersteg road, ¾ hr. from Frutigen, a summer resort. *Hotel-Pension Altels.*

The **"Blue Lake"** in the Kander valley, 900 m. above the sea; air cure. This little Alpine lake lies ½ hr. from Bonderbach, and 1½ from Heustrich on the Kander road which leads over the Gemmi to Wallis; it is visited and admired by thousands, yearly, on account of its beauty and strangeness.

The air, Alpine as it is, is very mild, neither raw nor cold even in bad weather.

It is recommended for: Chronic inflammatory affections of the respiratory organs; weakness consequent upon severe illnesses, disturbances of the organs of nutrition, and nervous affections resulting from mental over work. Physicians: *Dr. Schärer* of Frutigen and *Dr. Luginbühl* of Mühlenen.

Bühlbad, 1186 m. above the sea, at the foot of the Gemmi, ¾ hr. north from Kandersteg, close to the diligence road, with a ferruginous, earthy, mineral spring, used externally for rheumatism and eruptions, and internally for chlorosis and poverty of blood. There is a country inn where, on Sundays, there is frequently dancing.

Rothbad, 1035 m. above the sea, situated on the north western slope of the lower range of the Bernese Alps, at the base of the Triesthorn, in the Diemtigthal, which traverses the lower Simmenthal at its south-western extremity. The chief constituents of its mineral spring are iron and carbonate of lime: it is used for the drinking treatment, combined with goat's milk and whey, and also for bathing, for poverty of blood, chlorosis, general weakness and indigestion.

Weissenburg,

878 m. above the sea, a climatic health resort, with an alkaline earth spring rich in gypsum. Season May 15 to September 30.

Route: From Berne by rail to Thun, thence by diligence in 3 hrs. to the village of Weissenburg, thence by the hotel omnibus along a good road to the Bad (½ hr.). From Interlaken by rail and steamer to Spiez; thence by diligence to Weissenburg (3½ hrs.) From Saanen by diligence through Zweisimmen to Weissenburg (4 hrs.).

The *Weissenburg Bad* lies in a gorge on the north west side of the lower Simmenthal which runs from west to east at the southern base of the Schwiedenegggrat, a western spur of the Stockhorn range, which is a light gray chalk formation much streaked with gypsum and marl. In front of the two foremost spurs of the Schwiedenegggrat, which have been rent off by the cleaving action of the wildly romantic ravine of the Bünschi, stand, right and left, the two hamlets of Oberweissenburg and Bunschen, in the midst of flowery meadows and shady orchards. In the bowl shaped mountain hollow between the first and second spur, on the east side of the ravine, stands the *new Kurhaus Weissenburg*, on a broad terrace resting against the southern base of the craggy Flühberg. About 8 minutes further up the mountain in a narrow gorge full of leaping cascades, stands the *old Bad*, bounded on the east by the Flühberg, on the west by the Brunnenfluh, while in the background towards the north rises the lofty chalky cliff of the Schwiedenegggrat, 2010 m. high. Both the new Bad in the foreground and the old Bad in the background are embosomed in beautiful pine woods, in which numerous picturesque walks with shady resting places have been made. These promenades being partly level and partly sloping are excellently adapted to patients for methodical exercise and thorough ventilation of the lungs.

Historical. The first authentic mention of the warm mineral spring of Weissenburg dates from the beginning of the 16th century: in the archives of the city of Berne "die gnädigen Herrn" in July 1602 commanded the pastor of Därstetten to look well after the works at the "warm spring" for diverting the cold spring from the foot of the rock where the hot spring comes out. In March 1603 Hans Spiri obtained leave "to erect bath rooms on the ground by the new warm spring", and "to demand from every person who bathes once a day 2 kreuzer, and from those who bathe night and morning 1 batz". The spring was not only used for the bathing, but also for the drinking treatment.

In June 1604 an order was given that the spring should be enclosed and conducted underground to a larger, safer place. This was done and in such a thorough manner that the well is still in excellent preservation. The keystone of the arch of the well bears the date 1604.

90 years later (1694) we find the spring in possession of *Dr Ritter*, physician in ordinary to the city of Berne, who wrote the first description of the spa of Weissenburg. From this, as well as from the account appearing in 1725 from the pen of *Dr. Christen*, physician in ordinary to the city, it is clearly shown that the spring was of great service, especially for that coughing, shortness of breath, and asthma which arise from the lungs being choked by thick phlegm. *Dr. Ritter* was the founder of the *old Bad*.

The first chemical analyses were made in 1788 by the chemist, *Morrel* of Berne; they showed that the spring contained a considerable mixture of gypsum.

The Baths of Weissenburg (Ct. Berne).

In 1823 there appeared in the Zürich Neujahrsblatt zum schwarzen Garten an account by *Dr. Benoit*, in which it is particularly set forth that Weissenburg had long since won such a reputation for the treatment of chronic catarrh and especially consumption, that whoever visited the Bad was put down as consumptive, and a great number of such patients were gathered there, without any classification, awaiting relief and recovery.

In 1824 Professor *Brunner* of Berne published a very exact analysis of the water.

The mineral spring, which is 1/4 hr. above the old Bad, rises from a deep fissure in the rock on the left bank of the Bunschibach. According to *Dr. Stierlin's* analysis it contains the following fixed solids per 10,000 parts.

Sulphate of lime	9,5263
„ „ magnesia	2,9354
„ „ strontia	0,0208
„ „ soda	0,2991
„ „ potash	0,2192
Phosphate of lime	0,0041
Carbonate of magnesia	0,3083
„ „ lime	0,3927
„ „ ferrous oxide	0,0045
„ „ oxide of manganese	0,0017
Chloride of sodium	0,0507
„ „ lithia	0,0262
Jodide of lithia	0,0001
Nitrate of magnesia	0,0603
Silica	0,0316
Organic substances	0,0396
Fixed solids	13,9206
Free carbonic acid	15,9 Ccm.
Traces of caesium and rubidium	
Temperature of the Spring	26° C
Mean specific gravity	1,00143

On the whole the climate resembles that of a very mild mountain region. August is one of the warmest months, September, one of the clearest and most equable. The mean temperature in June is 13,50° C., in July 13,36° C., in August 14,65° C. and in September 13,17° C. The maximum reaches 26° C., the minimum (in June and September) 6,7° C. June has on an average 12 fine clear days, July 18, August 14, September 19; the others are dull or damp. There is a tolerably high percentage of moisture in the air: in June on an average 90,1; in July 88,7; in September 90,5. The lower Bad is quite sheltered from the north wind and exposed only to the full blast from the south; the older higher Bad, however, which lies further back, is almost completely protected from all winds. The air of Weissenburg is, therefore, very pure, light, anti-septic, moderately warm, and very moist, equable and, as a rule, still. There is a constant interchange of currents between the valley and the heights, so that this mountain basin may be considered as a splendid natural inhalatorium which one would have to travel far and wide to find equalled.

Weissenburg is recommended for:

1. Chronic catarrhal inflammation of the pharynx, larynx, air passages and bronchial organs, for the successful treatement of which Weissenburg has long been known.

2. Chronic inflammatory processes in the lungs which delay recovery from croupous pneumonia, catarrh of the apices, bronchial and bronchial-pneumonic affections which often lay the foundation of consumption.

3. Consumption, especially in cases where fresh inflammation has set in around old seats of disease.

4. The remnants of pleuritic exudations which do not require any chirurgical operation.

5. As a prophylactic cure for weakly persons with an inherited tendency and inclination to phthisis.

The new **Kurhaus** is a handsome, horse-shoe-shaped 4 storeyed building, consisting of the long house, the west wing, the new building, the dépendance and the bath-house. It has 3 dining rooms opening out of one another. The 2 new dining rooms are lofty and, when the partition is open, spacious enough to seat 250. In the summer special pains are taken to ensure abundant ventilation and coolness. There are also heating appliances.

The large pump room *(Trinkhalle)*, underneath the small dining room and one of the new ones, has been converted into a splendid salon-like assembly room. The space below the other new dining-room towards the courtyard, is enclosed with glass and serves as a promenade. The hot spring flows from a handsomely built well. Provision has also been made for the heating of the large pump-room. Over the new dining-halls is a suite of new handsome, sunny, and very comfortably furnished rooms, in direct communication with the third storey of the main building. From the back of the latter a path leads straight to the "Bergli" and "Tannenhalde." In several of the rooms there are Dutch tiled stoves, which are lighted directly chilly, damp weather sets in. All the w. c's. are thoroughly flushed by the full force of the mountain stream. Each floor has a high pressure water supply. The diet is suitably varied, abundant, and palatable. Neither the Mast-kur (fattening-cure) nor a large use of alcohol forms part of the Weissenburg treatment. New milk is served in the pump-room at 4 p. m. Smoking is only permitted out of doors. There is a band twice a week. The library is well provided with daily and illustrated papers and a good selection of books. There are recreation grounds, games, a shooting stand and chamber guns. Strict order is maintained in the house, and everything noisy or exciting is avoided. Telegraph and post-office, dispensary, sedan chairs, etc., on the premises. — Pension (3 meals) in the Kurhaus 8 fr. Room with one bed, 2½–5 fr.; with two beds 5–10 fr.

A good foot-path leads in eight minutes by an easy but very romantic ascent through the narrow sylvan gorge high over the left bank of the Bunschibach to the

Alte Bad, which forms an open quadrangle on the right bank of the stream. The two-storeyed building at the back is the oldest; the middle section, which is in connection, stands cross-wise in the narrow gorge and has the pump-room below. The triangular, modern three-storeyed building stands on a terraced slope, and has a large conversation and dining hall below and very comfortable rooms above. The "Alte Bad", which is particularly adapted for middle-class requirements, contains altogether over 90 rooms with 110 beds. During the winter of 1887 the Alte Bad will be entirely rebuilt with considerable enlargements and improvements. — Pension, with room, best rooms 7 fr., second 5 fr.

Physician: Professor *Dr. Huguenin.*

Walks and **Excursions:** For the immediate surroundings see above. Easy walks to the Tannenwald; to the Bunschibach Falls and the Bergli. In ½ hr. to Oberweissenburg, and to Weissenburg, with its castle ruins full of historical interest; also to Bunschenoberwyl and Därstetten. By carriage to Wimmis, Heustrich, Spiez, etc. (See above).

Zweisimmen, 980 m. above the sea, in the Upper Simmenthal, at the western base of the Röthihorn and Spielgarten, a fa-

vourite and pleasant summer resort, 2¼ hours from Weissenburg by diligence.

Hotel-Pension Couronne. Hotel Simmenthal.

Lenk, 1105 m. above the sea, a climatic health resort, with two cold sulphur springs and an iron spring. Season, June 10 till September 20.

Route: — From Berne by rail as far as Thun, thence by diligence in seven hours to Lenk. From Interlaken by rail and steamer to Spiez, and from thence by diligence to Lenk, by the route as above. From Wallis, by way of Conthey and over the Rawil Pass.

The spa is situated in the wide flat valley of the Lenk (clay soil) on a small spur of the western range of mountains, and is encircled by richly-green and well-wooded hills and glorious glaciers. The climate for so high an altitude is very mild, the place being completely sheltered from the cold north and north-east winds. The air is not only disproportionately mild, but very still and comparatively moist.

Of the two springs the Balm-spring is the most valuable, and diffuses a strong odour of sulphur, of which it contains a larger quantity than any spring in Europe. The Hohliebespring contains fewer fixed solids and sulphuretted hydrogen gas (Balm-spring 44,5 Ccm. per litre, Hohliebe spring 4 Ccm.) The iron spring chiefly contains sulphate of lime (18,489) and bi-carbonate of ferrous oxide (0,10) in 10 litres.

The chemical analysis of the two sulphur springs, according to *Fellenberg*, *Schwarzenbach*, and *Müller*, is as follows:

In 10,000 parts:	Hohliebe spring.	Balm spring.
Chloride of sodium	0,0567	0,0528
Sulphate of soda	0,0395	0,4072
„ „ potash	0,0223	0,0640
„ „ magnesia	1,8937	0,0290
„ „ strontia	0,0330	0,0957
„ „ lime	6 7144	16,7920
Carbonate of magnesia	—	0,2104
„ „ lime	3,3468	2,7618
Ferric oxide	—	0,1057
Phosphate of lime	0,0403	0,0399
Silica	0,1099	0,1506
	13,2526	22,7091

The springs are used for drinking and bathing, the Balm-spring especially for inhalation in the following affections:

1. Chronic catarrh of the respiratory organs, nose, throat, larynx, trachea, bronchial organs; remains of consolidation in the lung cells, consumption.
2. Chronic catarrh of the digestive organs and urinary passages.
3. Rheumatism of the muscles and joints.
4. Skin diseases, eczema, (furunculosis). It is not recommended, taken internally, for acute and feverish conditions, for tendency to plethora, for organic weakness of the heart and dropsy.

Physician: Professor *Dr. Jonquière* of Berne, a specialist for affections of the larynx, nose, ears and chest.

Promenade, the Höheweg at Interlaken.

Walks and Excursions: — Easy walks in the surrounding park, where there is a good supply of seats. In 20 minutes to the Seeflnhhöhe and the lovely Pöschenriedthal. In ½ hr. to Guttenbrunnen. In 1 hour to the Sonnen Waterfall at Oberried. In 1¼ hrs. to the Iffigen Fall. In 2 hrs. to the Liebenbrunnen at the foot of the Wildstrubel and Räzliglacier. In 2 hours to the Fernelthal. In two hours to the finely situated Mülkerblatt. In 4½ hours along a romantic bridle-path over the Trüttlisberg to Lauenen.

Saanen, 1023 m. above the sea, 2½ hours by the diligence road from Zweisimmen. A pleasant summer resort on the Pfeifenegg which is close by. *Pension Oesch.*

Interlaken,

571 m. above the sea, a climatic health-resort and centre for tourists.

Route: — From Berne by rail and steamer (3 hours); from Lucerne by steamer to Alpnach, by rail over the Brünig to Brienz, back by steamer to Bönigen, and by rail to Interlaken. From Zürich by the Gotthard railway to Göschenen, from there by diligence, via Andermatt and the Furka Pass, to Gletsch on the Lower Rhine glacier, thence by a bridle-path over the Grimsel to the upper Hasli Valley, Meyringen and Brienz.

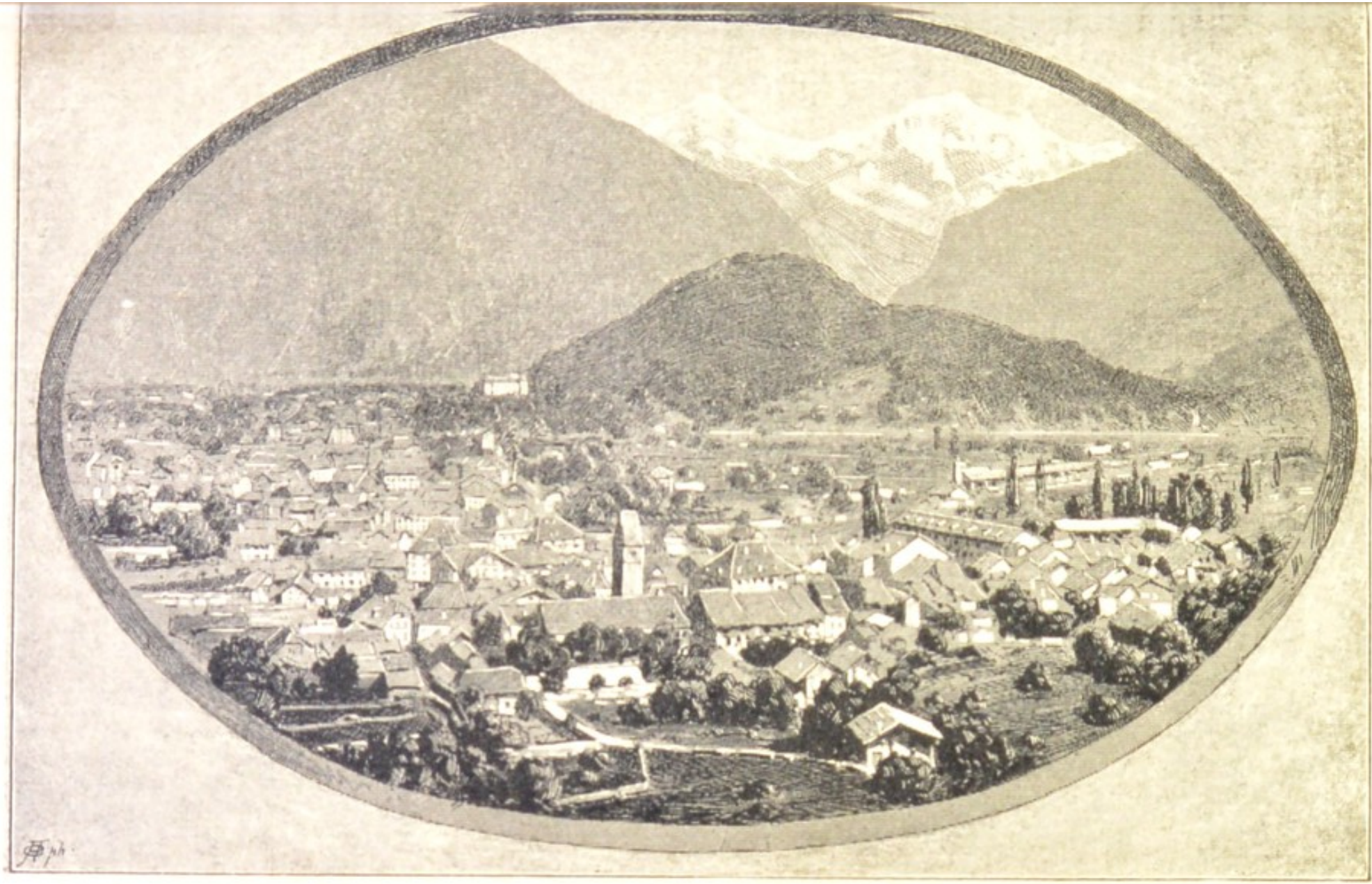
Interlaken stands on the north-western edge of the lovely little lowland of the Bödeli, between the two romantic lakes of Thun and Brienz. The tract of land is an alluvial, gravelly deposit, borne down by the wild torrent of the Lütschine as it rushed from the Jungfrau glaciers. Now it is covered with a soft green sward, splendid fruit and forest trees, and is irrigated by the blue waters of the Aar. Owing to its highly favoured situation at the foot of the High Alps, the "vestibule", as it were, "to the mountains of the Bernese Oberland," Interlaken has become one of the principal rendez-vous for tourists from all parts of the world, and is visited annually by over 100,000 persons.

The chief beauty of Interlaken is its Corso, the world-famed "Höheweg", a promenade a mile long between a shady avenue of old walnut trees of gigantic growth. It is close to the foot of the craggy pyramid of the Harder, and affords an incomparably beautiful view of the shining, gracious, and majestic Jungfrau which fills all the back-ground.

The climate of Interlaken is very mild and salubrious.

The valley of the Bödeli, which runs from east to west, is bounded on the north, and protected from the raw, cold north and north-east wind, by the lofty range of the Brienzer Grat, the Hohgant group, and the Ralligstöcke, which throw out their western spurs (Harder, St. Beatenberg) as far as the right bank of the Lake of Thun, towards which they slope abruptly. To the right rises the Abendberg, with its two thickly-wooded spurs — the two Rugen — stretching peninsular-wise into the broad plain of the Bödeli.

Interlaken thus lies, as it were, in a deep mountain basin, whose centre and precipitous sides, exposed constantly to the full force of the sun's rays, impart, by means of reflection during the day and radiation by night, an equable warmth to the atmosphere. Observations have shown that in fine weather in summer the tem-



Interlaken, view of the Heimwehfluh

perature never sinks at night below a degree corresponding to that of the day, and the night air is quite Italian in its warmth and balminess. Nor is this little Paradise wanting in salubrity, for the valley being open on two sides the south and west winds have free play. The prevailing south winds, and especially the Föhn in spring, only reach the plain of Interlaken after they have been cooled and charged with vapour by passing over the Lake of Brienz. Hence the humid warmth of the atmosphere.

On the one hand, therefore, the mean temperature for the year is higher than that of Thun, and considerably above that of Berne, or, as the popular saying goes, it is one coat warmer than at Thun, and two coats warmer than at Berne. On the other hand, the temperature, even in the height of summer, is more moderate than that of the high table lands of Switzerland, as not only do the two lakes exercise a cooling and refreshing influence on the surrounding district, but in the morning and evening breezes spring up as in the deep valleys of the Central Alps. After sun-down the keen air from the glaciers sweeps into the valley, while the warm air rises, and in the morning the direction of the currents is reversed.

The mean temperature at Interlachen, for the year, is 8,79 ° C.; the average minimum — 11,4 °; maximum 29,4 °; average relative humidity in June 63,27 %; in July 63,91; in August 66,29; in September 66,95.

J. Schaffer's Meteorogical Observations from 1876—1881:

Month	Mean Temperature						Amount of Rainfall
	7 o'clock	1 o'clock	9 o'clock	Reduced Mean	Minim.	Maxim.	
June	14,22	19,68	14,96	16,28	8,9	25,9	279,1
July	16,02	21,29	17,00	17,60	11,3	27,6	224,4
August	15,64	20,89	16,82	17,38	10,5	26,5	238,2
September . . .	11,16	16,20	12,46	12,99	5,2	21,9	191,2

As the soil consists of loose rubble the moisture percolates quickly, and the roads, even in rainy weather, are comparatively dry; in the summer in the proximity of the hotels the dust has to be laid several times a day with hydrants. The vegetation on the alluvial soil of the valley resembles that of the Insubrian lake and "Föhn" zones on the north side of the Alps; it is remarkable for the number of walnuts. Chestnut trees also flourish well, standing in a fine grove along the road, and bay trees, myrtles and pomegranates bloom out of doors.

The health of the resident population is on the whole good, and epidemic diseases are never malignant. The most frequent complaints are catarrh and acute inflammation of the upper air tubes and lungs; there are seldom cases of acute rheumatism and very rarely of consumption.

The region around Interlaken is famed of old for its great salubrity. Theodorich, the founder of the House of Strättlingen, received in the 9th. cen-

tury, from the Duke of Burgundy, among other rewards for military service "the pretty piece of land called Niederburgund (Lower Burgundy) and the Wendelsee (Lacus Vandalicus, now the Lake of Thun), with much surrounding land, also the district round the pretty end of Strättlingen, where the air is as good as one could find far and wide". But not until the 19. century was this a summer cure. In spite of the recommendations of one *Clarke* (1819) patients proper formed but a minority among the families who came hither from abroad, especially from England, to pass the summer, and much to their detriment were obliged to conform in diet and mode of life to the habits of the hosts of other visitors, so that, as *Strasser* says, it was a wonder that patients did not vacate the p ace altogether. But as from time to time remarkable cases of recovery and improvement in health, through sojourn in Interlaken, began to be made known, it never lost its reputation as a health resort. In particular those suffering from chest complaints improved so rapidly, that when they made their next visit in the following year they could boast, if not of complete recovery, yet of noticeable improvement.

Interlaken is adapted medically as a sedative air cure for incipient chest complaints, and as a transition

Grand Hotel Victoria on the Höheweg at Interlaken.

station to higher altitudes for severe lung affections, as well as for convalescents from sharp illnesses and for nervous affections.

The numerous hotels, each in its fine grounds, built in all styles, some palatial and some daintily pretty, stand in a row, side by side, and are furnished with every imaginable comfort. Every attention is paid to guests, and all modern requirements are supplied.

Grand Hotel Victoria. *(Ed. Ruchti)* a spacious, imposing building, in the very centre of Interlaken, with a full view of the Jungfrau, has 5 storeys, the main front looking south, and 3 projecting blocks with flat roofs and galleries commanding good views; there are upwards of 300 elegantly furnished rooms and 20 private sitting rooms with balconies; altogether 400 beds; a large, handsomely decorated dining room for 300 persons; a ladies' salon, reading and billiard rooms, restaurant, passenger lift. Warm and cold baths. Water carried up to every floor. W. C.'s. Music every day during table d'hôte. Very tastefully laid out grounds. Pension prices if a lengthened stay is made. Pension with room from 8 fr. Breakfast 1 fr. 50; dinner 5 fr. Electric light in the hall and garden. The establishment being one of the finest and best conducted is one of the most popular hotels in Switzerland. Next to it on the eastern side is the Grand Hotel Métropole.

Grand Hotel Métropole (Manager, *Boyeldieu*) formerly well known as the Hotel Ritschard, a castellated, elegant building in elaborate style, with numerous balconies, terraces, and verandahs, besides a charming well-kept shady garden, and a verandah adorned with frescoes, where some of the guests breakfast, and which is also used as a promenade. At the back of the garden is an older 5 storeyed building in the most elegant Bernese Chalet style, with 11 windows facing south. It is connected with the imposing new house, at right angles to the high road by a 6 storeyed, octagonal, tower-shaped building with a splendid view from 8 windows, the lower part forming a pillared vestibule, made use of by the guests as a rendez-vous for conversation; there is, too, a good reading table. On the ground floor, running along the gardens is the large, cool dining room below the new building with accommodation for 250 persons; on the other side are the reading, conversation and billiard rooms; 248 comfortable bed rooms; cold and warm water carried up to every floor; heating throughout on the Caloriféres system.

Opposite the Hôtel Métropole, on the Höheweg, the brilliant looking windows of Messrs. **B. Leuthold & Schuchmann's** hop attract universal attention. This well known firm has an immense selection of splendid **Alpine Jewellery** and other **Swiss articles,** also bronzes, fans, **articles de luxe** of all kinds, Viennese leather goods, photographs and pictures, etc. Branch house at Lucerne on the Quai National.

Grand Hotel Métropole at Interlaken.

Hotel and **Pension Jungfrau** *(Seiler-Sterchi)* one of the oldest established and the best known houses at Interlachen, is a magnificent 5 storeyed building, with several balconies (to all the rooms of the main front) and a tower at the side. The main building contains 120 elegant, lofty and large rooms, and private salons, as high even as the third floor; a large dining hall, restaurants, a spacious conversation and reading room, a smoking room; warm baths in the house; water laid on, English closets; a large verandah runs along the south façade on the ground floor; in front of the house is a pretty shady garden beyond which are extensive recreation grounds. In the 2 dépendances are 20 rooms suitable for large families. This well managed hotel stands in the centre of the "Höheweg" (the principal street) and like the rest has a full view of the Jungfrau. Pension with room 8 fr.

Rugen-Hotel Jungfraublick *(Oesch-Müller)* is one of the most noble establishments at Interlachen. It is a lofty castellated building, finely situated on a spur of the richly wooded Rugenhügel, and commands a surpassingly beautiful view over the Bernese Alps and the Lakes of Brienz and Thun sparkling at their feet: in the background is the Rugen pine plantation with its charming coups d'œil (see below). The principal building contains 80 elegant guest chambers and 10 private salons with balconies; a large dining room and restaurant, conversation and reading room, ladies' drawing room, billiard room; baths, a water supply and English w. c'. s. on every floor; drainage. In the dépendance are 15 bedrooms and the salon. The situation of the establishment as regards sanitation is excellent. There is a dairy

attached. The hotel omnibus goes to the railway station, the kur garden and the church. Pension with room, from the middle of July to the middle of September 12—15 fr.; before and after 8—10 fr.

Hotel and Pension Interlaken *(Moser)* is the oldest establishment in the place, fitted with all modern appointments, situated opposite the English and Catholic churches, and containing 47 pretty bedrooms, a dining hall, conversation room and restaurant, a covered verandah with a view over the Lake of Brienz; a broad terrace stocked with flowers runs round the first storey; water laid on, w. c'. s.; a large garden with a cool play-ground shaded by gigantic old walnut trees. A dépendance is attached with 27 bedrooms, breakfast room, balcony; behind the dépendance a chalet with 6 rooms, suitable for a family. Substantial comfort and capital management. Pension with room 7 fr.

On the whole visitors are well cared for in all the hotels and pensions of Interlachen, and will find the charges proportionate to their varied requirements.

The Rugenhotel Jungfraublick at Interlaken.

Among the other hotels situated on the "Höheweg" some of them large and all very good are to be mentioned: *Hotel Schweizerhof; Hotel Belvedere; Hotel des Alpes; Hotel Beau Rivage; Dr. Volz's Pension* behind the Hotel Victoria; *Pension Horn* behind the Hotel Jungfrau; further along, towards the Little Rugen: *Hotel National* (Wyder); *Deutscher Hof; Pension Reber; Pension Ober; Villa Bischofsberger; Pension Mattenhof.* Near the post office the well known *Hotel Oberländerhof* with a popular café and billiard room; opposite is the *Hotel de la Croix blanche; Hotel du Cheval blanc;* farther on *Hotel Eig r; Hotel Adler* close to the Hotel Métropole; near the railway station: *Hotel de la Gare; Pension Krebs;* at Untersee, *Hotel Bellevue, du Pont, Unterseen; Hotel and Pension Beausite* (Ruchti) and *Pension Eiger* (Mss. Ruchti) comfortable private apartments in the "Schloss".

Alpenkräuter-Magenbitter *(Alpine herbs stomach bitters)* prepared by **August F. Dennler** are an excellent health preservative for travellers. See advt. at the end of the book.

Near the cure garden on the "Höheweg" is the elegant establishment, the *Bavarian Brewery;* capital beer from the cask; good restaurant, billiard room, ladies' salon; garden with grotto, summerhouses, fountains, lakes.

In the lovely grounds of the **kur garden,** is a fountain 180 feet high, and hidden among the trees stands the Kursaal, built in the Châlet style of the Oberland architecture, with galleries and reading rooms. The members of the kur band which plays 3 times daily, always make use of their holi-

Interlaken and view of the lake of Thun

days to join the excellent royal orchestra under the first rate lead of Director Schleidt of Interlaken. Whey, etc, is provided in the **Kursaal.** Good restaurant. General rendez-vous for visitors.

Interlaken is noted for its inexhaustible variety of walks, as well as for the more distant excursions among the valleys and to famous points of view. The woody park of the Rugen is a labyrinth of carefully kept paths among pines and larches. On a spur of the richly wooded hills the **Rugen-Hotel-Jungfraublick** stands in simple, unpretentious dignity; its bright frontage shines out against the deep dark foliage of the Rugenpark over the whole Bödeli. Near enough to Interlaken to enjoy all the advantages of this tourist centre, it is sufficiently distant to be quite removed from the stir and bustle of incessant arrivals and departures, and to afford all the calm of undisturbed solitude.

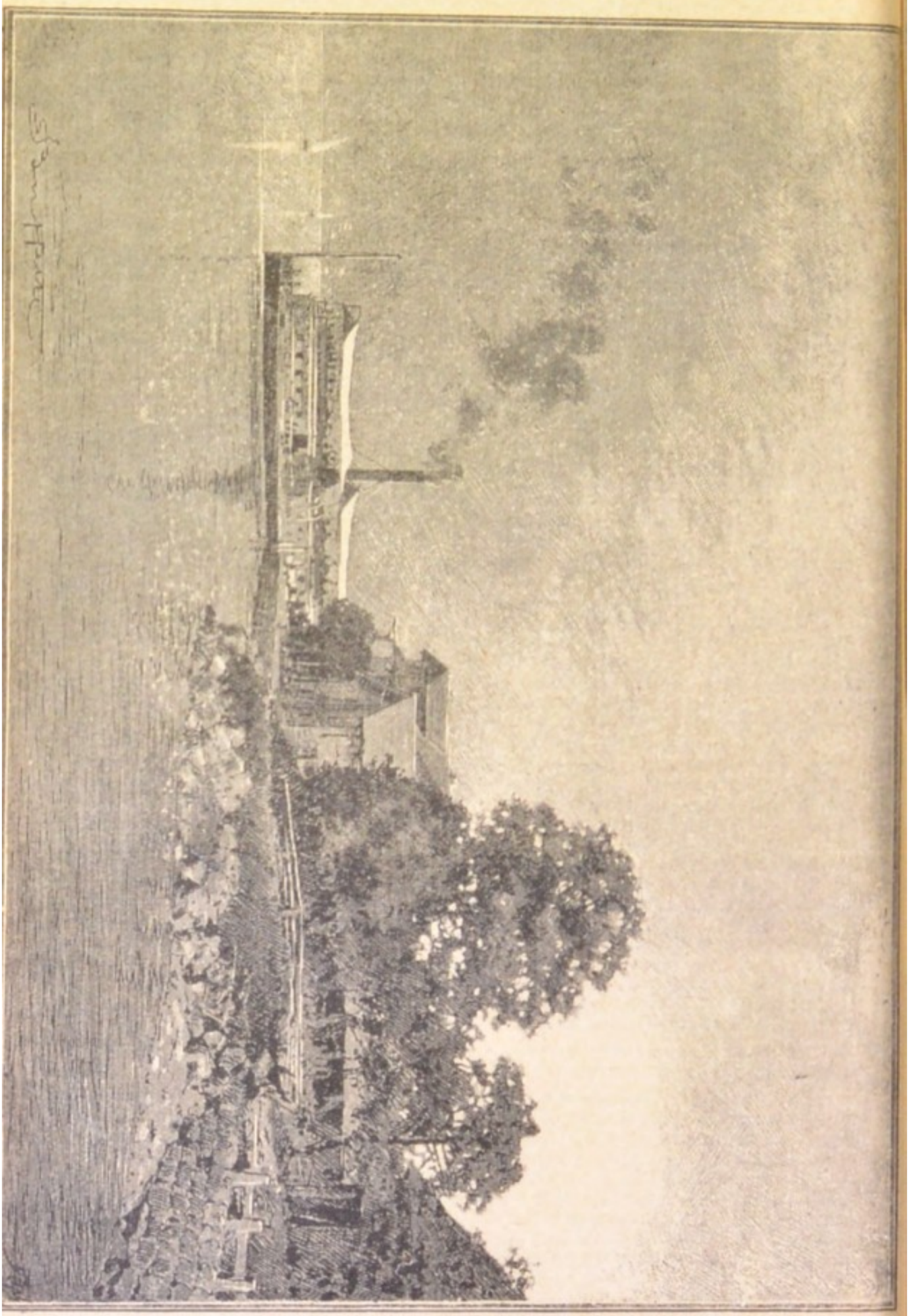
An enthusiastic admirer of Interlaken writes: "Retiring to rest with the last echoes of the Interlaken kur band in one's ears, one awakens to listen to the concert of the feathered songsters of the glorious Rugen-Park. With these sweet sounds there is wafted also from the wood the perfume of the freshly awakened flora, and through the open windows the eye rests in every direction on the most glorious prospects"

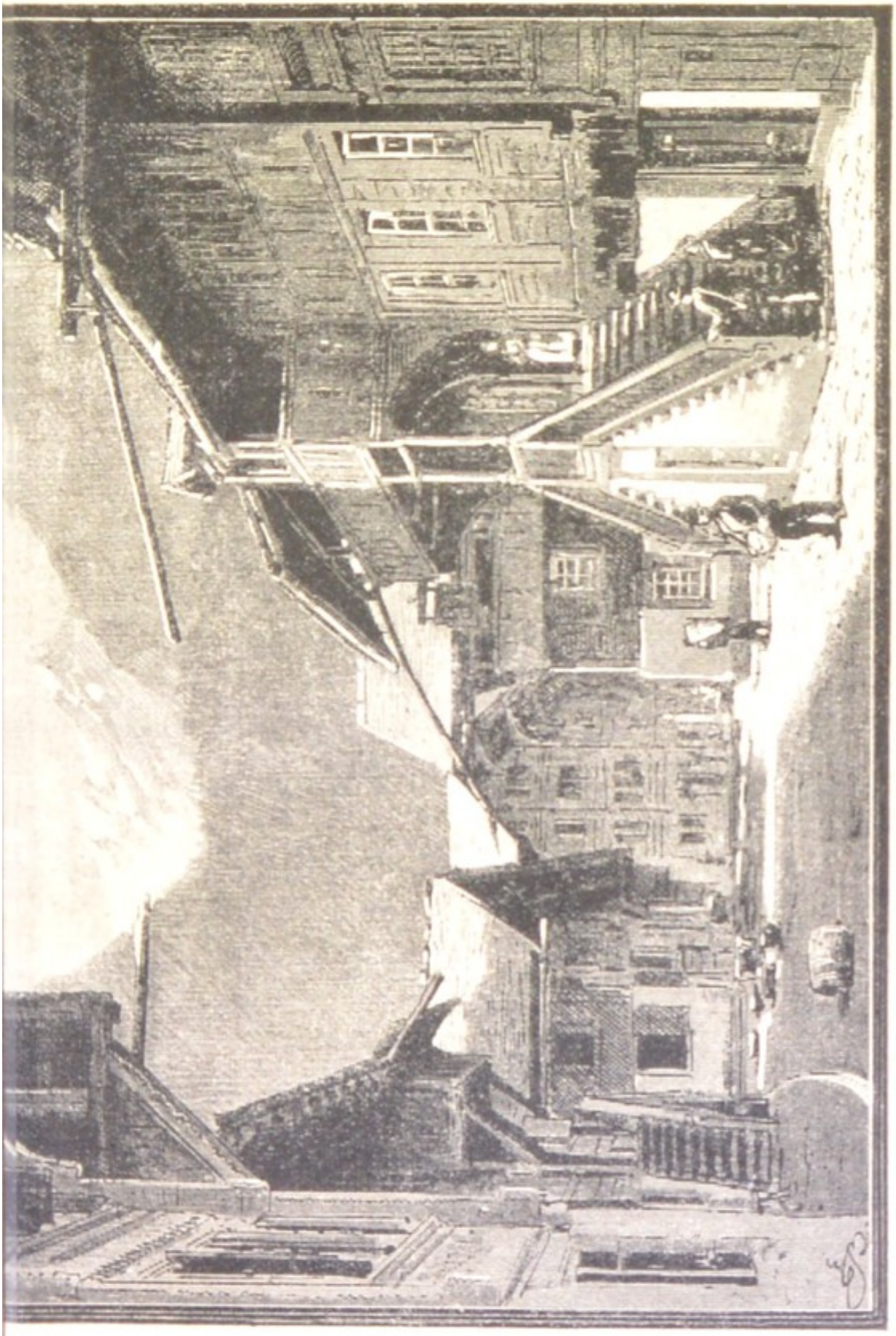
"To the south over the blue film of the Lütschinen, Lauterbrunnen and Grindelwald valleys is enthroned the famous triple constellation of the Bernese Alps: the Eiger, Mönch and Jungfrau, the Silberhorn standing by like a shield bearer in full armour with a glittering helmet. To the east from the curved shores of the Lake of Brienz rise the Schynige Platte, the Limelihorn, Faulhorn, Wildgerste; opposite is the Brienzer Grat with the Augstmatthorn and the Brienzer Rothorn, while at the foot of this mountain ridge lie the houses of the pretty village of Brienz, and the massive sides of the imposing Giessbach Hotel glisten in the distance. On the north there is a bird's eye view of the Bödeli lying at our feet, the projecting cliffs of the lowering Harder, and the pleasant sunny slopes of St Beatenberg. On the west the glittering waters of the Lake of Thun spread out wider and wider, its shores dotted with villages and castles. The view opens out — on one side the little town of Thun, with its lofty Acropolis, greeting us, on the other only the low wall of the French Jura alluring us to the far beyond. The neighbouring summit of this range has significantly been called the Heimwehfluh (Home-sickness mountain), a name which any lover of his country who has looked upon this scene for the last time will appreciate."

The ruined castles of Golzwyl and Unspunnen, the romantic Ringgenberg, the picturesque lake-side places, Bönigen and Iseltwald, are within half an hour's reach. Interlaken also forms the centre of a somewhat wider circle, including the sunny health resort of St. Beatenberg, the lofty terraced Mürren, with its crowds of tourists, the rocky valley of Lauterbrunnen with the Fall of the Staubbach, the magnificent pass of the Wengern Alp, the glaciers of Grindelwald, lying in a mountain basin, the commanding summits of the Faulhorn and the Scheinige Platte, the village of Meyringen with the Reichenbach- and Handeck-Falls, the manufacturing town of Brienz with its wood carving, and the sevenfold Giessbach-Fall. Ascending the nearest height the whole of this glorious region is seen to be encircled by the giants of the Alps, from the silver shining Jungfrau, over the Mönch and Eiger to the snowy Finsteraarhorn, the gloomy Schreckhorn and the towering Wetterhorn, all standing in a ring, armed as if to guard and shelter the Bernese Oberland, pleasant Interlaken and its neighbours.

Physicians: *Drs. Delachaux, Schärer, Strasser, Volz and Dr. Zürcher* who is at Nice in the winter.

Walks and Excursions. — The general rendez-vous of visitors is the Höheweg, a double line of fine walnut trees running from the village of Aarmühle to the Aar bridge. On the south side is the beautiful Schloss-promenade and the ancient cloister in the midst of fine walnut trees. In ¾ hour to the Little Rugen (739 m) up which there is a broad gently rising path with plenty of seats, and leading through a glorious wood of pines, firs, larches, etc., with glimpses alternately between and above the trees of the Bödeli, the Lakes of Thun and Brienz; to the pump-room (restaurant) a beautiful point of view for the Jungfrau, Mönch and Lauterbrunnen valley. To the castle ruin of Unspunnen (¾ hr.) either between the Matten and Wilders roads, or through the romantic Wagnerenschlucht, easily reached in ¾ hr.; to the Heimwehfluh, to which a little path at the entrance of





Old road in Meyringen.

the Wagnerenschlucht leads — a charming place for a view and where there is a restaurant. In 3/4 hr. to the ruined castle of Weissenau on an island in the Aare, close to where the river falls into the Lake of Thun. In 1/2 hr. to the Hochbühl (685 m.) on the right bank of the Aare, above the new Aare bridge, through the wood to the pavilion where there is a beautiful view. In 1/2 hr. to the Thurmberg von Goldswyl passing Felsenegg, along the new road to Brienz — a beautiful panoramic view. In 1 hr. to Ringgenberg; in 1 1/2 hrs. to the Schadburg along a rocky spur of the Harder.

Bönigen, 566 m. above the sea, an air cure on the Lake of Brienz, steamboat pier and railway station, has the same mild climate as Interlaken; it is notable for its rustic quiet and the many opportunities it affords for beautiful excursions along the left shore and about the lake.

Hotels: *Hotel and Pension Bellerive; Hotel-Pension Bönigen; Chalet du Lac.*

Iseltwald, a little village 1 1/4 hrs. above Bönigen, lies on the left bank of a charming little peninsular. Steamboat pier. Summer resort. *Pension Seebucht.*

Hotel-Pension Giessbach,

660 m. above the sea. Hydropathic and air cure establishment. Proprietors *Bros. Hauser.*

Route: Steamer from Bönigen, Iseltwald and Brienz to the steamboat pier Giessbach, thence by wire-cable railway in 6 min. to the Hotel Giessbach; from Iseltwald it is a shady walk up of an hour.

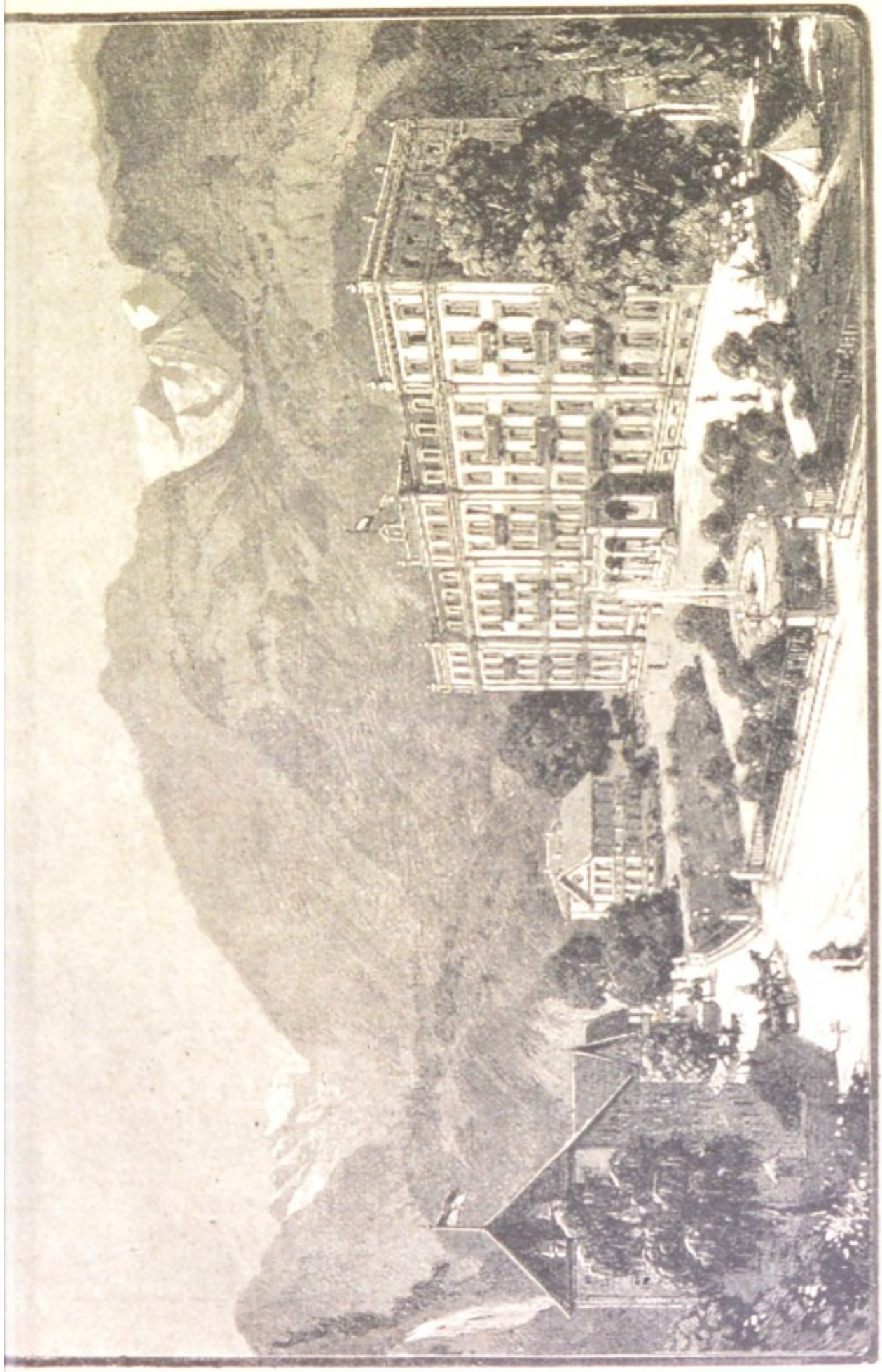
The Giessbach Hotel took its name from the famous waterfall, and has developed with remarkable rapidity. If the absolute altitude of Giessbach is not very great, a concurrence of other favourable circumstances gives it the character of a high mountain station. The rushing mighty Fall and the Lake of Brienz at its feet give sufficient humidity to the air to preserve its freshness, even in the height of summer. Bracing breezes from the Hury mountains blow across the pine woods amid which the Hotel stands. Giessbach is so completely isolated that there is no contamination from villages, streets or factories; while the thorough protection from gales and the purifying influence on the air of the surrounding mountains induce equable, constant and perfect conditions of the atmosphere.

Pension tariff in the Kurhaus: Room on the 1, 2 and 3 storey with a view, 10 fr., 9 fr. 50, 9 fr.; without view 7 fr. 50; children 2—7 fr. (boarding and service included). Scarcely 5 min. walk above the Kurhaus stands the Boarding House Beau-Site, an hotel of the 2. class, belonging to the same proprietors. — Nightly illumination of the Giessbach Falls.

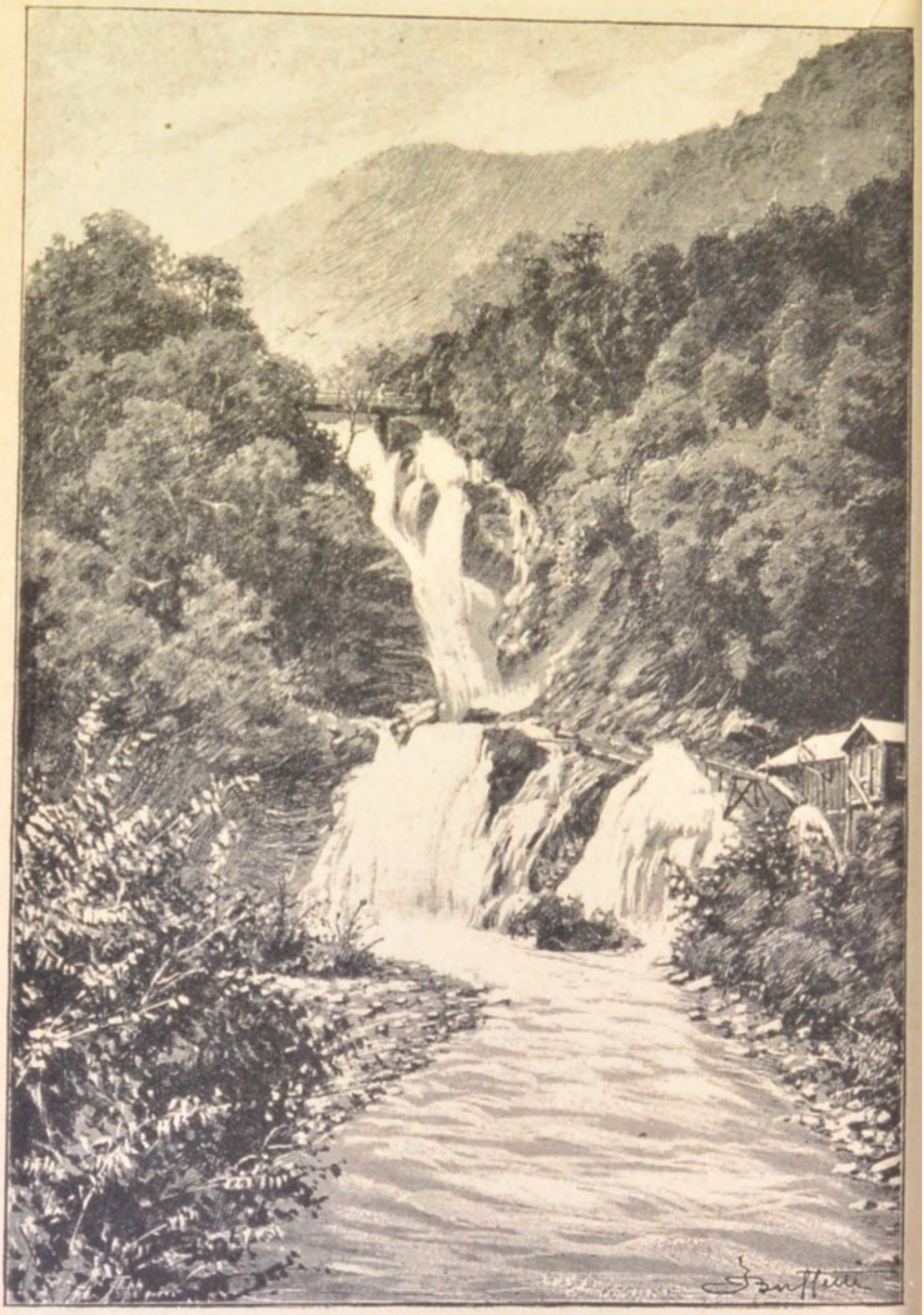
Höhenkurhaus Axalp, 1524 m. above the sea; season from June 10. to September 30.; 2 1/2 hrs. above Giessbach, up a good bridle path through beech and fir woods, situated on a magnificent green plateau on the northern slope of the Faulhorn range. Its favourable situation is specially adapted for those seeking to recruit their health, convalescents, sufferers from poverty of blood, chlorosis and consumption. Physician, *Dr. Körber* of Brienz.

Brienz, 604 m. above the sea, air and whey cure.

Route: From Lucerne and other places on the lake of the 4 Cantons by steamer to Alpnach and by railway over the Brünig. From Meyringen by rail in 1/2 hr.; from Interlaken by rail and steamer in 1 3/4 hrs.



Meyringen.



The Reichenbachfalls (Bern. Oberland).

This pleasant village lies on the Lake of Brienz, on the north-east bank, close to the water, with picturesque surroundings. The air is very mild, as the steep Brienzer Grat forms a complete shelter from cold north and north-east winds and reflects the sun's rays. The surface of the lake affords the necessary moisture and purification of the air, which is apparent in the luxuriant vegetation, reminding one of southern surroundings.

Average monthly temperature

Jan.	Febr.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—0,44	2,33	3,44	9,53	14,17	15,71	18,15	16,41	14,77	8,24	3,61	0,2

In addition to the benefit derived from the air there is the milk treatment, and there are lake baths used medicinally. Brienz is suited to convalescents, all sorts of weakly persons and those requiring increased change of tissues; also for muscular and joint rheumatism, scrofula, poverty of blood.

Hotels: *Bär, Weisses Kreuz.* Physician: *Dr. Körber.*

Meyringen, 599 m. above the sea, an air cure. Can be reached in 6 hrs. from Berne by rail, steamer and diligence; from Lucerne by steamer and diligence over the Brünig Pass in 7 hrs. The modern Bernese village lies at the entrance of the picturesque valley of Hasli, which extends from north-west to south-east towards the Grimsel and the Furka Passes. It shares the climatic conditions of Brienz and is a favourite tourist centre for the neighbouring Passes. Meyringen is recommended as a good place to recruit for those suffering from bodily and mental strain. Milk treatment. Baths at the moderate temperature of 21° C. in the *Hotel Reichenbach.* Hotels: *Wilder Mann; Reichenbach; Bär; Krone.*

Im-Hof, 642 m. above the sea, air cure 1¼ hrs. above Meyringen, with the *Hotel Alpenhof*, a favourite air Kurhaus, and Innertkirchen with the good *Hotel Imhof*. The narrow Gadmen valley branching off to the east, leads over the Susten Pass to Wasen in Canton Uri. At the little village of Gadmen, 1202 m. above the sea, 3 hrs. from Innertkirchen, the *Gasthof z. Bär* affords good accommodation to summer tourists and visitors.

Guttannen, 1049 m. above the sea, in the valley of Guttannen (a continuation of the Hasli valley) is the highest winter dwelling in Ober-Hasli (Upper Hasli). *Gasthof z. Bär.* From thence to the

Grimsel Hospice, 1877 m. above the sea, an air cure with a very stimulating, tone-giving climate, yet tolerably sheltered from sharp winds. A much frequented tourist station.

Engstlenalp, 1840 m. above the sea, an air cure (in postal communication with Meyringen) is quite a typical Alpine spot, with its flowery meadows, sturdy firs and larches, mountain cascades, excellent spring water and delicious milk. Near the Kurhaus is a beautiful lake with plenty of trout, and bathing in the height of summer. The climate is comparatively mild, as the place is protected from the cold north winds. Engstlenalp is a very favourite summer resort for those seeking change of air.

Excursions to the Loch (1½ hrs.) to the Trübseealp, Stäubi Falls and Engelberg (4 hrs.) to the Kurhaus Frutt (3½ hrs.) and into the Melchthal to Geissberg (2 hrs.) with a splendid view of the Titlis.

Rosenlauibad, 1340 m. above the sea, reached in 2½ hrs. from Meyringen by a good bridle path, is sheltered on the south and north by high mountains. From the windows of the Kurhaus there is a direct view on to the glacier.

Grindelwald,

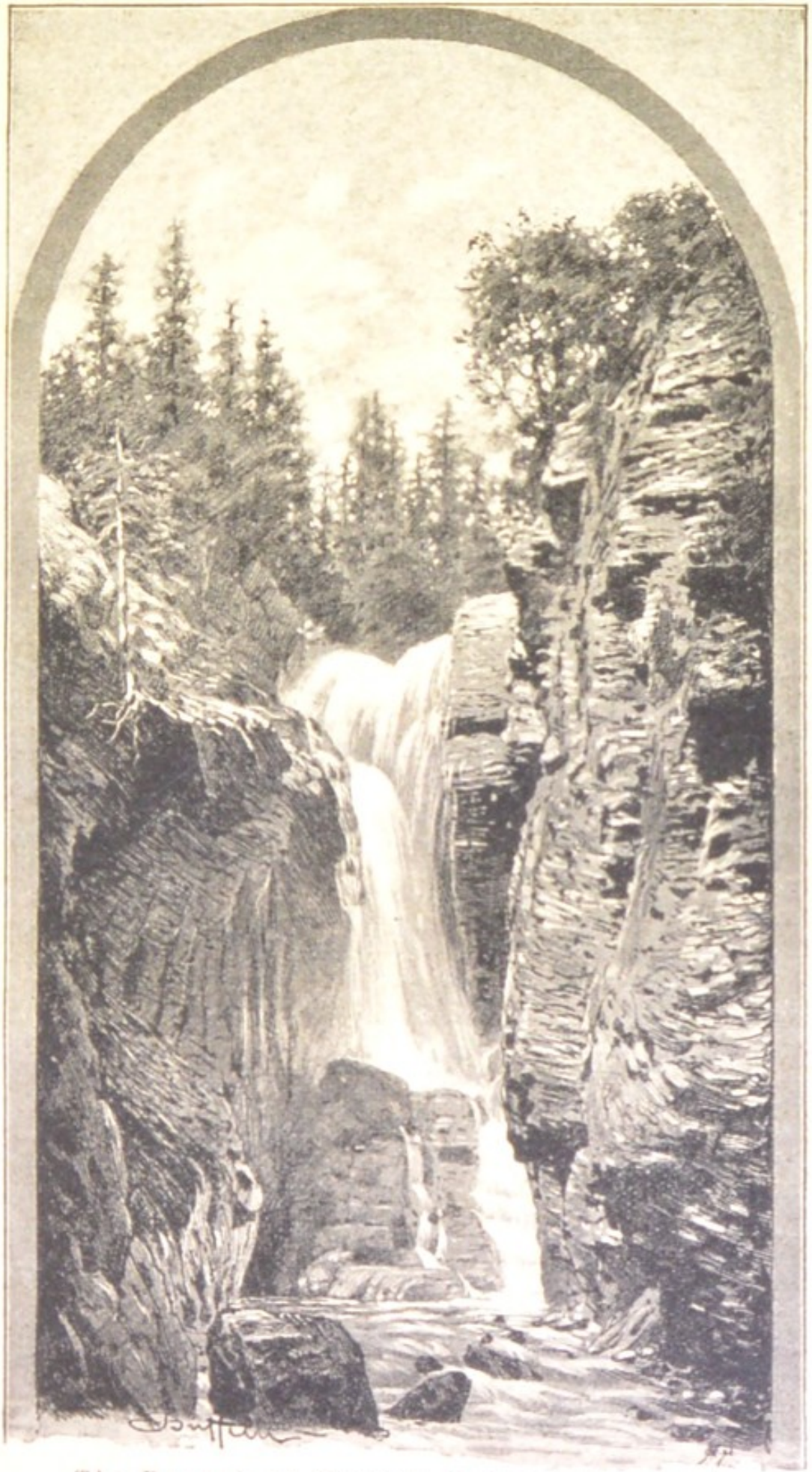
1057 m. above the sea, a climatic health-resort.

Route: In 3 hours by diligence from Interlaken, passing Zweisimmen; in 7 hours from Lauterbrunnen over the Wengern Alp (a bridle path) and in 7 hours from Meyringen by way of Rosenlaui and the Great Scheidegg.

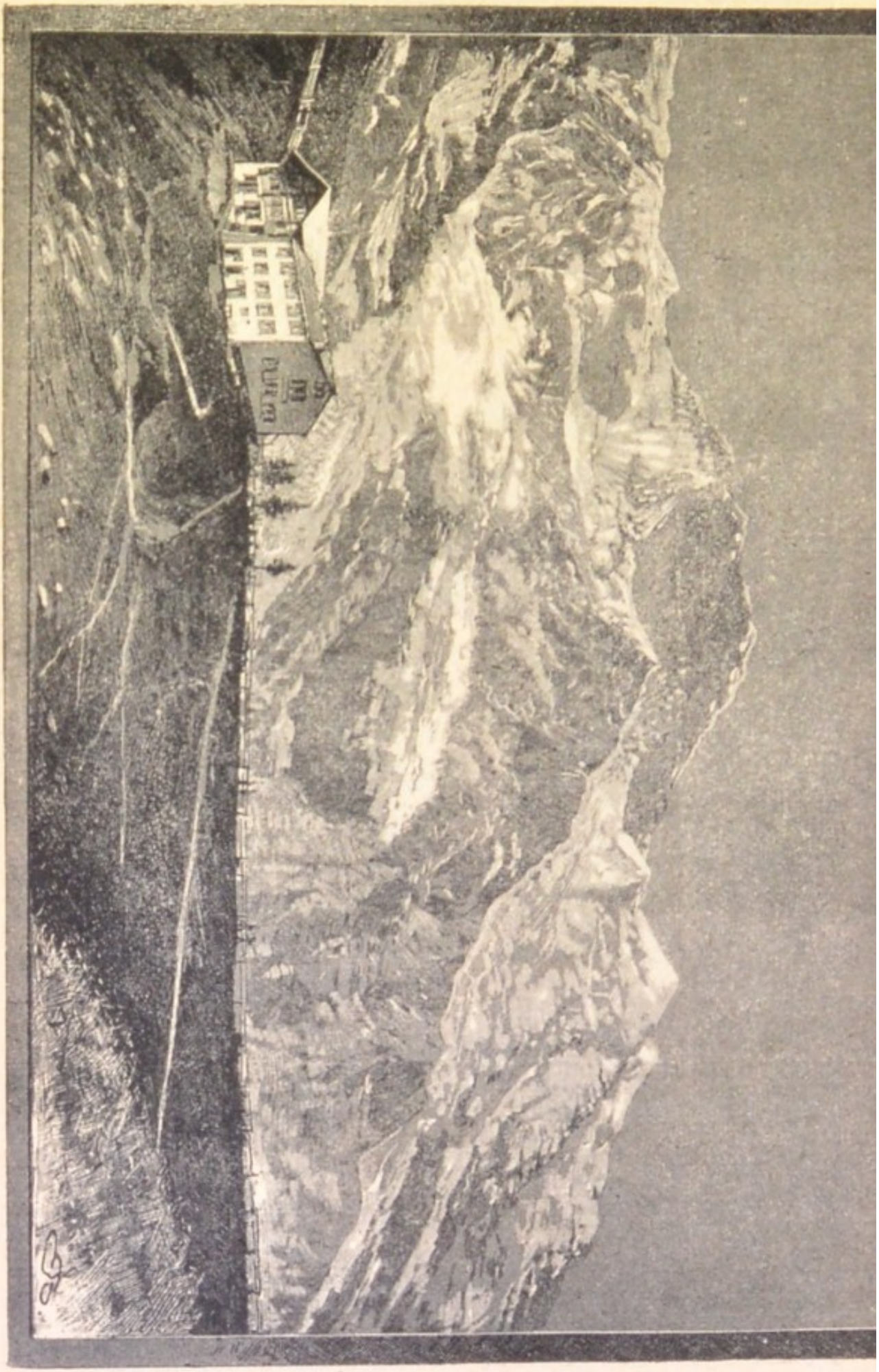
The high valley of Grindelwald, 18 miles long, encircled by majestic mountains, between which it forms, as it were, a trough, is distinguished from all the other valleys of the Bernese Oberland by its position from east to west instead of from north to south. The breadth of the valley is only a mile and a half. The high mountains which bound it on the south are very steep, and in some places precipitous, and two great cloven glaciers, whose frozen streams sweep down to the green, flowery meadows of the lower slopes, feed with their sparkling waters the Schwarze Lütschine. On the west rises the gloomy Eiger with its glittering glacier-mantle; on the north the rent and weather-beaten crags of the Faulhorn enclose the valley. East and west rise the two passes of the Great and Little Scheidegg.

Despite the loftiness of the situation and the nearness of the glaciers, the climate is very temperate, and vegetation very luxuriant; the fields yield abundant crops of corn, grass, wheat, barley, flax, turnips and carrots. Apples, pears and nuts only grow in very sheltered places; the cherry, on the other hand, grows quite in the open, and bears a small but luscious fruit, much used for Kirschwasser.

The valley of Grindelwald is protected from cold north winds by the Faulhorn, and the bleak east wind rarely finds its way across the Scheidegg. The Föhn, on the other hand, has free access on all sides, and sweeps down with desolating force, now coming from the south over the tops of the Vieschergrat, now from the south-west over the Wengern Alp. In one way, however, the Föhn is very serviceable: it causes the snows to disappear most rapidly; a coating a meter thick often melting in a single night. The temperature in winter is mild and equable, with calms; in summer it is liable to great variations, and the glacial winds induce a rapid fall of the barometer at sun-down. No very exact meteorological statistics have as yet been prepared; from the little data there is it appears that the mean daily temperature is about 9° C.; the maximum 28° C.; the minimum 11,4°. Owing to the inclination of the valley southwards, the influence of the sun's rays, the insolation, is intense, especially in autumn and winter, when fogs are rare and the sky is nearly always clear.

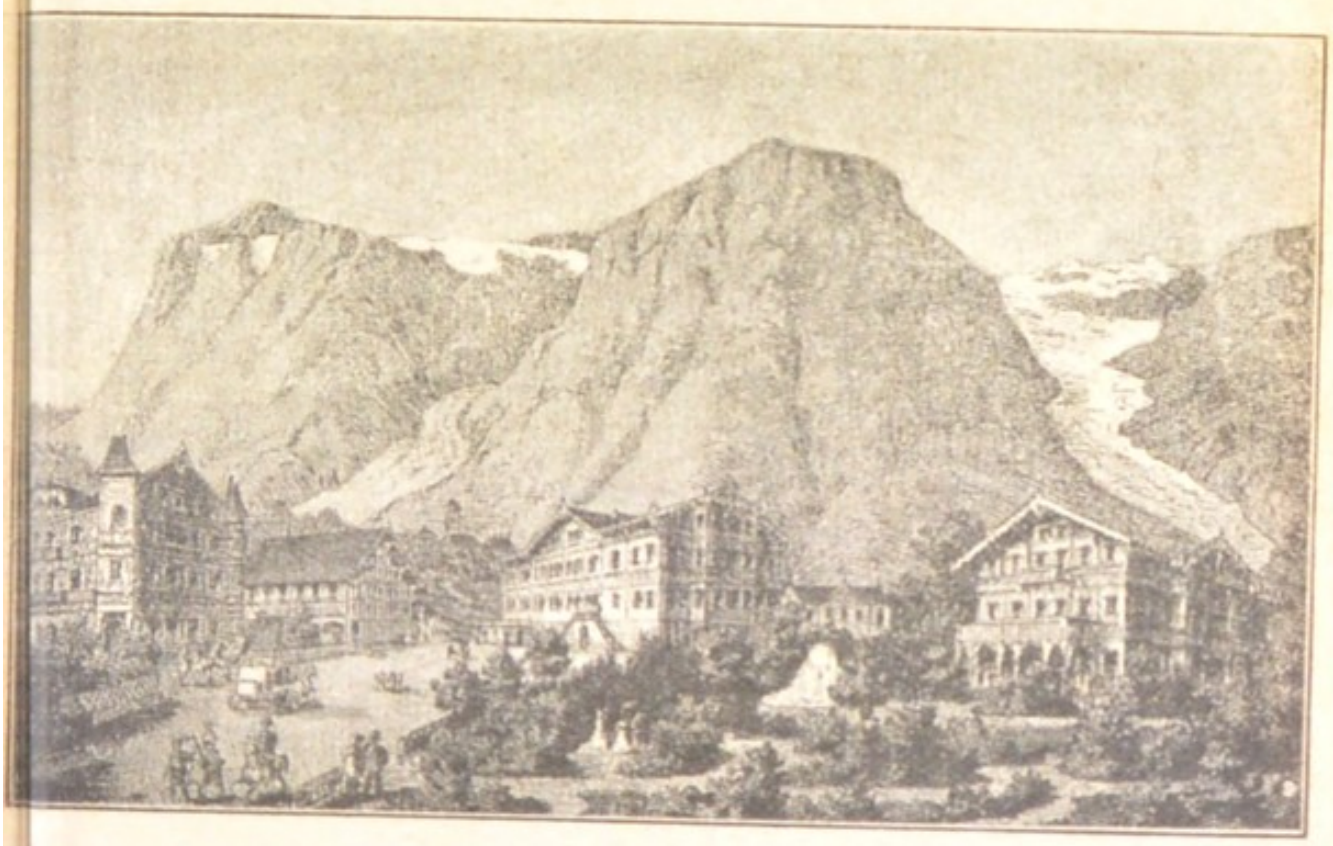


The Rosenlaui Waterfall (Bern. Oberland).



The Jungfrau, view of the little Scheidegg.

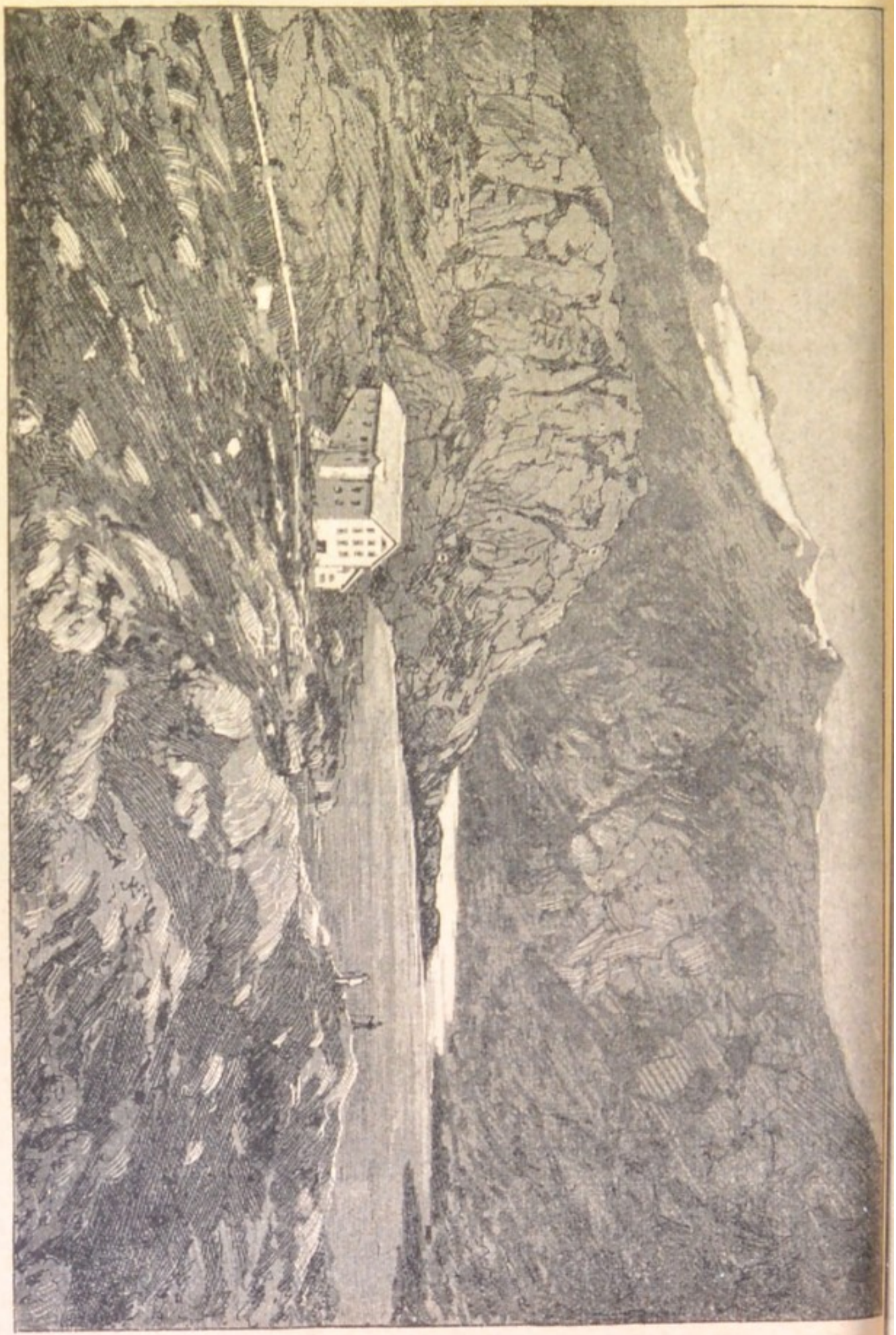
According to Professor *Lebert*, Grindelwald is suited for the following complaints: chronic catarrh of the respiratory mucous membrane, especially where the constitution is scrofulous, and there is a large secretion of mucous without enlargement of the bronchial organs, or emphysema; where there is a disposition to catarrh of the mucous membrane, a tendency to consumption, or in the first stages of that complaint; chronic pleurisy, when the fever is intermittent and the effluxion diminishing; also for poverty of blood; nervous affections accompanied by debility, and during convalescence.



Hotel zum Schwarzen Adler at Grindelwald.

Grindelwald is not recommended for rheumatism; advanced stages of phthisis, with cellular formation and diarrhœa, nor where there is a tendency to apoplexy.

Hotel and Pension zum Schwarzen Adler *(Stähli-Forrer)*, 105 m. above the sea, consists of four houses with in all 134 comfortable lofty rooms. In the Adler hotel (45 rooms in the main building) there are 4 private salons, a large handsome dining-room, with an orchestra; in the Pension Gräfihaus, 25 rooms; a new and well-warmed conversation room; two private salons; a newly built covered gallery (Wandelbahn) in the Swiss style unites the Gräfihaus with the hotel; in the Pension Schlössli, elegantly built in the Swiss style, with two corner towers, there are 32 bed-rooms and 4 salons; in the Oberhaus there are 12 rooms and a restaurant with billiards (beer). In all four houses there are balconies commanding splendid views of glaciers and mountains. There are also bathing arrangements; 6 bath rooms with 4 baths, w. c.'s. Milk cows. Arrangements for a winter cure are under the intelligent and careful supervision of the proprietor. Pension: May and June, 7—12 fr., July and August 9—14; September 8 frs., according to



The Grimsel Hospice.

The Source of the Lütschine near Grindelwald.

the character of the room. Hotel tariff: — breakfast complet 1½ fr.; dejeuner à la fourchette 3 fr., diner 4 fr. There are 20 good saddle and carriage horses at the disposal of visitors. On the south side of the hotel is a shady garden — one of the largest in the Bernese Oberland — with seats and two large tennis and croquet lawns.

The other hotels and pensions are only arranged for the warm season. *Pension Schönegg: Hotel and Pension du Grand Eiger; Hotel de l'Ours; Hotel and Pension du Glacier; Hotel Pension Burgener.* — Physician: *Dr. Tobler.*

From Grindelwald a good bridle path leads over the **Little Scheidegg** to the *Hotel-Pension des Alpes* at **Alpigeln,** 1611 m above the sea, an air and whey Kurhaus. From there in 1 hour and ¼ to the *Hotel-Pension Bellevue,* a tourist-station 2069 m. above the sea. Thence a bridle path over the Wengern Alp, and an easy ascent of two hours to the *Hotel-Pension Männlichen* (2210 m.), a little summer resort. The *Hotel Jungfrau* on the **Wengern Alp** is a tourist-station 1882 m. above the sea. The path leads along the valley to Wengern, on the western declivity of the Tschuggen and Männlichen. The little village affords a pleasant summer retreat. Milk and whey cure. Baths.

Hotels: *Pension Wengern; Hotel and Pension Mittaghorn.*

From Lauterbrunnen (**Hotels:** *Hotel Steinbock; Hotel Staubbach*) a good bridle path leads through Bergwaldung to Bergdorf.

Mürren,

1650 m. above the sea, a favourite resort for change of air in summer, consists of some 30 or 40 brown wooden houses. It commands a splendid amphitheatre-like view over the snow-clad Jungfrau and Silberhorn towering majestically over the glacier-crowned heights on either side. On the right is the Gletscherhorn, the Mittagshorn, the Breithorn, the Tschingelgrat, and the Gspaltenhorn; on the left the Mönch, Eiger, Wengernalp, Wellhorn and Männlichen — a scene of indescribable beauty, almost beyond the power of the greatest painter to depict. Owing to its position Mürren is sheltered from north-westerly and northerly winds, and only the clefts of the Lauterbrunnen Valley are open to the north wind. The freshness and purity of this delicious and highly ozonised air, and its greater lightness as compared with that in the valley, together with the loveliness and grandeur of the whole scene, have the immediate effect of raising the spirits, increasing the activity of mind and body, invigorating the nervous and mentally over-wrought, promoting change of tissue, improving the appetite, and inducing quiet and refreshing sleep. The good spring water and nourishing milk are other contributory elements. Consumptive patients breathe more freely and take deeper inspirations, the lungs are thoroughly ventilated by the plenteous draughts of perfectly pure air which are inhaled, and incipient disease is checked or destroyed. Mürren has consequently long been one of the most popular and beneficial of summer health resorts.

Favourite excursions to the Schilthorn (2971 m.) famous for the view from the summit which is easily reached in 4 hours on horseback; the splendid Fall of the Schmadribach which can also be reached in 4 hours without any difficulty.

Grand Hotel des Alpes *(W. Gurtner Kernen)* open from May 1 till October 30, is a large, handsome, new building, commandingly situated on a fine terrace, with a splendid outlook. It is three storeys high and contains 136 bedrooms with 160 beds; 24 balconies and verandahs. There are arrangements for warming. Fine dining and conversation rooms, reading and music

The Grindelwald Valley.

Grand Hôtel des Alpes at Mürren.

salon, billiard and smoking-room. The house has its own water supply; baths and douches. *Electric light* throughout. Pleasure grounds adjoining, in which are fountains; games, croquet, lawn tennis, etc.; while there are walks in the woods. There is a dépendance. Telegraphic and telephonic communication with *Hotel Steinbock* at Lauterbrunnen. Pension with room, from July 10 till Sept. 10, 9—14 fr., before and after, 8—12 fr. Breakfast, 1 fr. 50; lunch or supper, 2 fr. 50. Rooms from 2. 50 to 5 fr. Pension for servants 6 fr.

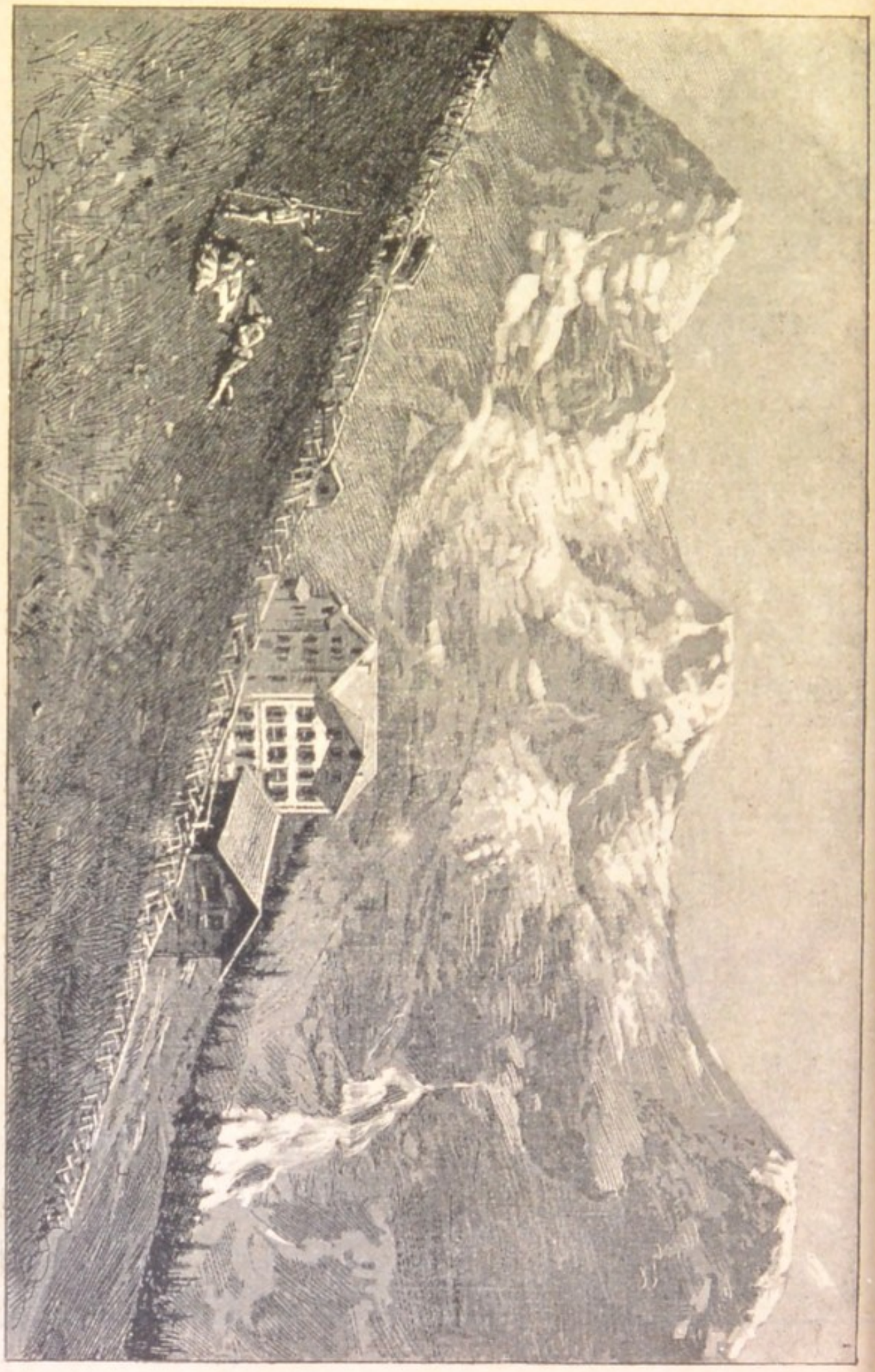
Cow's and goat's milk; whey. An English church. The Times daily: The Illustrated London News and a large number of Continental journals every week. A post twice in the 24 hours. The hotel accommodates, on an average, 150 visitors at a time during the summer (mostly English).

Gimmelwald, a mile and a half south of Mürren, a pleasant summer resort. *Hotel-Pension Schildhorn.*

Abendberg, 1139 m. above the sea, six miles south-west from Interlaken, resorted to for the sake of the air. *Hotel Bellevue.* Milk and whey cure. Baths and douches. Splendid views over the valley and the Bernese Alps.

Zimmerwald, 850 m. above the sea, also frequented for the air, 1¾ hours south of Berne by diligence, passing Wabern and Kehrsatz. The *Kurhaus Pension Beau Sejour* stands on the high plateau of Langenberg, in the midst of meadows, orchards and fir woods. The climate is comparatively mild, but very stimulating, and

The Staubbach in the Valley of Lauterbrunnen.



The Wengernalp.

is adapted for convalescents who are not very weak, for cases of chronic lung disease, where there is not much irritation of the mucous membrance, and for weakly, scrofulous, and ricketty children. (Cow's and goat's milk; whey. Baths and douches; brine baths.

Bad Enggistein, 701 m. above the sea, with an earthy ferruginous spring, ½ hour by diligence from Worb station on the Berne-Langnau-Lucerne line. The chief constituents of the mineral spring are carbonate of lime, magnesia, and ferrous oxide. It is used as a remedy for digestive disorders, poverty of blood, urinary diseases and diseases of the uterus, also for chronic rheumatism of the joints and muscles. Baths with modern douche appliances. Milk cure. Physician: *Dr. Scheurer*, of Worb.

Rütihubelbad, 736 m. above the sea, with an earthy mineral spring, only ten minutes from Enggis ein, was even in the last century a well-known and favourite spa. The mineral spring, like that of Enggistein, chiefly contains carbonic acid, magnesia, and ferrous oxide. It is used medicinally for chlorosis, poverty of blood, dyspepsia, weakness of the stomach and intestines, chronic rheumatism of the muscles and joints, scrofula, and nervous affections. The place is sheltered on the north and open on the south, and the Kurhaus is in a dry and sunshiny situation. Drinking and bathing cure. Cow's, goat's milk, and whey. Physician, *Dr. Leuenberger.*

Schwendlenbad, 836 m. above the sea, with an earthy ferruginous spring, and an acidulous spring. The acidulous spring is only used as a drinking cure for chronic stomachic and intestinal catarrh, liver complaint, costiveness, chronic catarrh of the respiratory and urinary organs. The ferruginous spring is used as a bath for weakness and disorders of the female sexual organs.

Physician: *Dr. Surbeck.*

Zäziwyl, 680 m. above the sea, with an earthy ferruginous spring, is a station on the Berne-Langnau line. The chief constituents of the spring are carbonate of magnesia and ferrous oxide. It is generally used as a remedy for rheumatism and skin diseases. Physician: *Dr. Surbeck.*

Wildeneybad, with an earthy ferruginous spring, 1½ hr. south-east of Zäziwyl. The spring contains carbonate of magnesia, lime and ferrous oxide. It is used as a remedy for rheumatism and skin diseases.

Ronachbad, ½ hour from Signau station (Berne Langnau line) with an iron spring for bathing.

Langnau, 672 m. above the sea, the chief place in the Emmenthal, on the Berne-Lucerne line, the market for the cheese manufactory and centre of the linen industry. It has recently become an air cure.

Kemmeribodenbad, 975 m. above the sea, with a sulphur spring, can be reached by diligence from Wiggen railway station (Berne Lucerne line) via Marbach and Schangnau. It lies on the left bank of the Emme, at the nothern base of the Hohgant, Brienzergrat, and Scheibengütsch. It has a large and a small mineral spring. The first is ferruginous; the second contains sulphuretted hydrogen gas, sulphate of soda, and carbonate of soda. Both are used for drinking and bathing.

Bolligenbad, 1 hour north of Berne, with a magnesia and iron spring.

Kapellenbad, 2½ hours north of the pleasant little town of Burgdorf, with an iron and lime spring.

Schlegweybad, 822 m. above the sea, with an earthy saline ferrous spring. Season, June 1 till September 15. The Bad is situated in a sheltered hollow of the Kurzenberg, on the Thun-Heimenschwand-Signau high road. The spring chiefly contains carbonate of lime, magnesia, ferrous oxide, carbonate of soda, potash chloride of sodium, and some free carbonic acid. It is used for drinking and bathing, as a cure for poverty of blood, chlorosis, general debility, neurotic affections, rheumatism, catarrh of the respiratory and digestive organs, and women's diseases, together with the milk cure.

Physician: *Dr. Lanz*, of Münsingen.

Well- and Wetterhorn.

3. The Jura Region and the Lakes of Neuchatel, Morat and Bienne.

The mighty Jura with is gloomy mountain ranges stretching in parallel lines from south-west to north-east rises on the east from the Molass plateau in a compact precipitous cliff, whilst towards the north east it descends by a gentle slope into undulating highlands. As the surface of the Jura is pure chalk, which is hard, weather resisting and neither absorbent of nor pervious to water, the atmospheric discharges descend unimpeded to the valley and leave very little trace on the higher mountain regions. The dusky pine forests with their sombre, northern aspect, slope down from the heights; at their lower extremity numberless streams spring from cracks and clefts in the chalk, and leap down to the valley. In the southern plain of the Jura these streams spread out into marshes; in the centre they shape themselves into the three great lakes — Neuchatel, Morat and Bienne, which on the north stretch out into vast bogs. Thus, between the eastern lines of the Jura and the western plateau, there is formed a deep valley with a local lake climate somewhat resembling that of the Insubrian lake zone at the northern base of the Alps. The district takes, therefore, an independent position among the climatic regions of Switzerland.

The surface of these lakes — 434—435 m. above the sea — is from 100—150 m. lower than that of the eastern plateau which gradually slopes upwards to the Alps — a circumstance which has a modifying effect on the temperature of these riparian districts. The climate of this sub-Jura zone is therefore, considerably milder than that of the plateau, because in addition to the lower altitude, a long range of lofty mountains running south-east shelters the valley like a wall from the bleak north-west winds. With the exception of January, the monthly temperatures in the Jura valley are higher than on the plateau, the minima readings are considerably lower while the maxima, owing to the strong reflection of the sun from the chalk are very high. The following table illustrates the degrees of temperature on the Jura depression and on the plateau.

Table of Temperatures.

	metres	Yearly Mean.	Maxim.	Minim.	Jan.	Febr.	March	April
Neuchatel	437	9,34	32,3	—12,2	—0,9	2,0	3,4	9,9
Dizy	588	8,75	—	—	—0,9	1,7	2,9	9,4
Solothurn	429	8,74	30,1	—13,7	—1,7	1,4	3,2	9,3
Berne	573	8,13	30,7	—15,6	—2,3	1,3	2,4	9,0

	May	June	July	August	Sept.	Oct.	Nov.	Decemb.
Neuchatel	14,6	17,0	19,7	17,7	15,7	8,7	3,4	0,3
Dizy	13,9	16,2	18,9	16,7	15,2	8,1	2,8	—0,1
Solothurn	14,2	16,4	18,9	17,0	14,5	8,2	3,3	—0,03
Berne	13,7	15,6	18,5	16,3	14,3	7,5	2,1	—1,1

Owing to these favourable conditions the eastern declivity of the Jura forms an almost unbroken series of terraced vineyard from Orbe to the Lake of Bienne. The chestnut even appears by fits and starts along these mountain sides from Geneva in the Rhone valley to Neuveville and St. Peter's Island, and with it are the snowball leaved maple, the fluffy oak and especially the box which flourishes in great profusion, indeed determines the local colouring of the landscape. This evergreen shrub, one of the principal flora of the Mediterranean zone, covers to the height of a metre the steep, ragged, weather worn chalk cliffs with a dark green mantle that is conspicuous from afar, and when in bloom diffuses a sweet and powerful perfume.

Neuchatel, the capital of the Canton of the same name, 437 m. above the sea, with about 16,600 inhabitants, is situated on two hills on the north-west bank of the Lake of Neuchatel, under the shadow of the ancient castle, the former residence of the Prussian Governors. Owing to its beautiful position and cultured, genial society, the city is much frequented by foreign tourists. There are beautiful walks in the neighbourhood through extensive grounds to the crag, Le Crêt, l'Ermitage, Tête Plumée, and to the erratic block at Pierre-à-Bot.

Although the health of the city is excellent and the temperature generally very mild, the place is too much exposed to the north-east and south-west winds to be suited for a climatic-cure.

Route: From Berne by rail via Bienne (2¼ hours); from Lausanne by Renens and Cossonay-Penthalaz to Yverdon and Grandson (2½ hours); from Pontarlier (1¾ hours); from Solothurn by Bienne (2 hours).

Hotels: *Hotel Bellevue; Du Lac; Du Faucon; Du Commerce; Du Soleil; Du Raisin.*

Hotel and Pension Chaumont, 1145 m. above the sea, 1½ hours by carriage from Neuchatel station, via Weinberg and Waldungen. Chaumont commands a magnificent view over the Alps, from Säntis on the east to the Dent du Midi and Mont Blanc on the west. The air is very brisk and stimulating; the mean annual temperature is 5,5° C.; the mean minimum 15,9°; the maximum 26,2° C; the amount of cloud is considerable, and the relative humidity somewhat higher than at Neuchatel. Chaumont is, therefore, only adapted for patients who have a good deal of resisting power and little tendency to reaction; especially for those whose nerves are unstrung, for those seeking to recruit, and for dyspeptics who suffer from mental depression. Baths. Milk and whey. **Hotel du Chateau,** 5 minutes higher up and smaller, but similar in other respects.

Physician: *Dr. de Montmollin.*

Tête de Rang, 1423 m. above the sea, a hill parallel to Chaumont, on the north west of Neuchatel. It is tunnelled by the Neuchatel-La Chaux-de-Fonds line, and is most accessible from the station of Hauts Geneveys. The little mountain hotel on the hill commands a splendid view, and the air is strong.

Chanélaz. Hydropathic establishement, 460 m. above the sea, a spa to the south-west of Neuchatel, between the Colombier and Boudry stations, is sheltered from the north and west winds; it is surrounded by beautiful grounds, and there is a wood near.

La Brévine, 1000 m. above the sea, with a ferruginous mineral spring, at the western boundary of Neuchatel, three hours north from Locle. The spring is especially used for chlorosis and poverty of blood.

Yverdon, 437 m. above the sea, with an alkaline sulphur spring, on the banks of the Orbe, near its outlet into the Lake of Neuchatel, is in the centre of a valley running parallel with the Jura chain and the Jorat, from north-east to south west.

Route: — By rail from Lausanne 1½ hours; from Neuchatel 1¼ hours; from Berne, by Freiburg-Payerne ¾ hour.

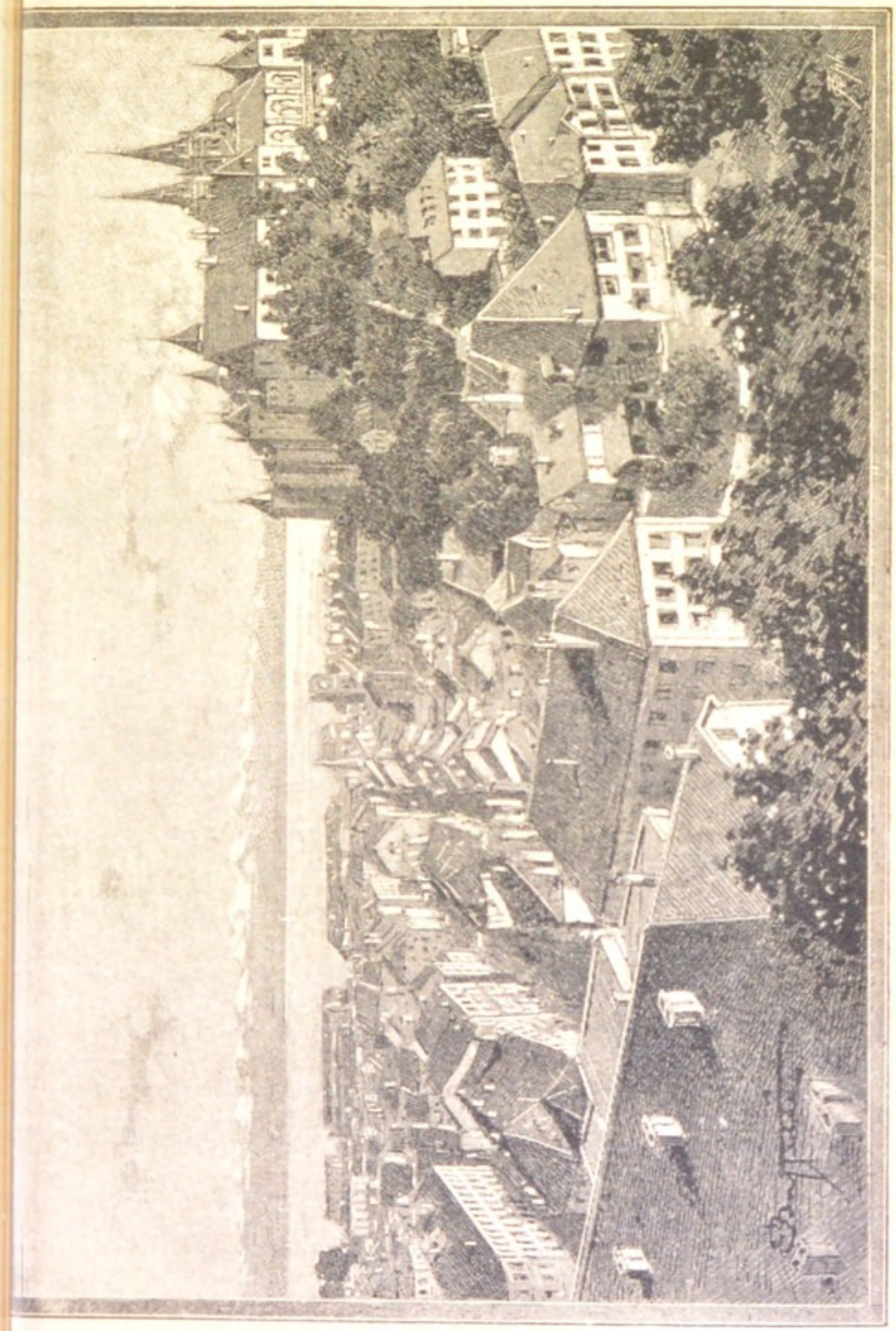
Yverdon *(Hotel de Londres; Croix Fédéral; Hotel du Port)* is a pretty little town of about 600 inhabitants, remarkable both from an historical and a literary point of view. It is in the north portion of Canton Waadt. The air is mild, which is in part owing to the nearness of the lake. As the valley is open to the south and north, it is refreshed by the wind from both these quarters. The situation is very healthy, although towards the south and west there is a long stretch of marshy country. Owing, however, to the depth of the Lake of Neuchatel, and an elaborate system of drainage, ague has, for a century past, entirely disappeared.

The Baths of Yverdon (G. Emery, Proprietor), 440 m. above the sea, lie at the base of the Jorat on the road to Lausanne, 10 minutes from the town along a shady avenue. The spring is used for drinking and bathing in the following complaints: rheumatism, diseases of the bones and joints, lumbago, nervousness, skin diseases, scrofula, chronic catarrh of the mucous membrane of the nose, throat, lungs and bladder. Hydrotherapy in its most modern applications, douches, massage (masseurs and masseuses from Aix-les-Bains), pulverisation and inhalation are also used. A new mode of inhalation has latterly been introduced, in which the compressed air for breathing is first passed through mineral water, from which it absorbs sulphuretted hydrogen, carbonic acid, and nitrogen. By this means there is not only a mechanical influence exercised on the lungs, but free mineral gases are brought to work on the mucous membrane of the respiratory organs. Electrotherapy.

Physician: *Dr. Mermod.*

Walks and Excursions: — Several beautiful walks to the Baths and around the town. In ½ hour to Monte Hélas, whence there is a splendid view over the chain of the Jura and the Alps of Switzerland and Savoy. To Estavayer and the castle of Chilnaux, noted for its architecture. To St. Croix, famous for its manufacture of pure-toned musical boxes: to the summit of the Chasseron (1611 m.) where the view is beautiful and extensive; other picturesque points of view are the Aiguilles de Beaulmes (1563 m.) and Mont Suchet (1596 m.), 3½ hours to 4 hours up.

St. Croix, 1108 m. above the sea, in the depths of the Jura, at the southern base of the Chasseron, 3 hours by diligence from Yverdon, has a warm climate, although the north-east wind predominates. It is known as a strengthening, stimulating summer resort for lymphatic temperaments, and for sufferers from poverty of blood. — *Hotel d'Espagne; de France; de Jura.*



Neuchâtel.

South-west from Yverdon, situated on a rock, washed on three sides, is the romantic little town of **Orbe** *(Eau de France; Deux Poissons; Maison de Ville)*, 450 m. above the sea. Although open to the north-east wind, the grape-cure is carried on, and there is bathing in the river.

On the west, on the Swiss boundary of the Valley of La Joux is the summer resort, **Ballaigues**, 858 m. above the sea, with the *Pension de la Sapinière*. A little south-west of that is **Valorbe**, much frequented in summer by watch-makers; at the north-east end of the Lake of La Joux is the picturesque little village of **Le Pont**, 1009 m. above the sea, much recommended as a mountain residence by Lombard; likewise **Le Brassus**, 1042 m., at the north-west end of the lake.

Freiburg *(Fribourg)*, 640 m. above the sea, capital of Canton Freiburg with about 11,800 inhabitants. The appearance of the town is mediaeval and romantic, the upper portion resting on a rock washed on three sides by the Sarine, and enclosed on the fourth by strong walls and battlemented towers. The chief objects of interest are the magnificent suspension bridge, 246 m. long and 51 high, across the Sarine; and the Grand-Fey viaduct; 333,84 m. long and 76 m. above the river.

Hotels: *Grand Hotel de Fribourg et Zähringen; Grand Hotel National; Hotel du Faucon.*

Schwarzseebad, 1065 m. above the sea, a health resort, with a sulphur spring containing gypsum. Season, June 1 till September 15.

Route: — From Freiburg by carriage via Plaffeyen, and along the river Sense to the Schwarzsee (4 hours); from the Bulle railway station by diligence to Crésus, and thence by a foot-path via Cerniat and Val Sainte (1024 m) to Chésalette (1420 m.), over the Falbach to Schwarzsee-Bad.

The "Bad" *(Kurhaus* Mdlle. Winkler) stands on the west bank of the lake, at the foot of the Kaiseregg, amid charming surroundings, and near to a pine wood traversed by numerous walks. The summer temperature is pretty even and seldom undergoes great changes, the place being sheltered from the north wind by a mountain-range running from east to west.

The mineral spring, according to Professor Schwarzenbach's analysis, contains a preponderance of fixed solids as follows: sulphate of lime and magnesia, bicarbonate of lime, soda, magnesia, chloride of sodium, silica, traces of strontia, nitrate of lime; free sulphuretted hydrogen. Temperature 11,25° C. Another spring close by contains: carbonate of lime, magnesia, iron, sulphate of lime, silica, chloride of sodium.

The springs are used both for drinking and bathing as a remedy for rheumatic affections, catarrhal conditions of the bronchial and digestive organs, skin diseases, neurosis, scrofula, general weakness.

Garniswyl, 600 m. above the sea, north of Freiburg (¼ hr. from the Railway station Guin) with an earthy sulphur spring which can only be used for bathing. *(Bathing establishment)* Physician: *D. Delley.*

Schwefelbad Bonn *(Hugg)* on the right bank of the Saane, connected with Freibourg by a good road, 512 m. above the sea, is distinguished by a mild climate and picturesque scenery. The Bad is specially applied in rheumatism, skin and nerve complaints. Physician *Dr. Delley* of Garniswyl.

Murten, 464 m. above the sea, an ancient little town on the south bank of the lake of Morat. As this lake has a very slight fall, the water keeps, in summer, at the very pleasant constant temperature of 28—30° C., especially good for bathers, patients whose nervous system needs repose without relaxing and unstringing, also for nervous sleeplessness, hypochondria, hysteria, tendency to rheumatism, and in constitutional maladies. A large lake *bathing establishment* has been built in a delightful situation 10 minutes from Morat and at Montellier.

Hotels: *Kreuz; Krone; Schiff; Löwe; Adler; Pension Kaner,* and several private houses.

Henniez-les-Bains, 485 m. above the sea, with an alkaline spring, a hydropathic establishment. It is a station on the Broyethal line, and is situated in pleasant hill country, amid beautiful woods. Complete apparatus for hydrotherapy and treatment by electricity. — Proprietor and Physician: *Dr. Borel.*

Dettligenbad, 600 m. above the sea, with an earthy mineral spring; can be reached from Aarberg railway station by diligence in an hour; route from Berne also. It is in a very sunny spot, sheltered from cold east winds. The spring contains of fixed solids: carbonate of magnesia, lime, iron, alumina, chloride of magnesium, nitrate of magnesia, sulphate of lime. *Dr. Gohl* recommends it to be taken internally as an anti-acid, increasing the activity of the intestines, and promoting appetite in diseases of the stomach and intestines; externally for skin and limb affections.

Bad Worben, 438 m. above the sea, with an earthy ferruginous spring, on the Berne-Lyss-Solothurn Line, 1 hr. west from Busswyl Station. The spring contains the following fixed solids: carbonate of lime, iron, sulphate of lime, chloride of sodium, chloride of calcium, silica; some free carbonic acid. Temperature 18,12° C. It is used less for drinking than for bathing in cases of rheumatism, catarrh of the bladder, chlorosis and poverty of blood, dyspepsia, scrofula. — *Hotel des Bains.*

Bad Büren with a gypsum sulphur spring, close to the railway station of Büren on the Lyss-Solothurn Line; the spring is used in cases of skin disease, scrofula and catarrh of the mucous membranes. *Hotel and Bad Büren: Krone.*

Bad Oberwyl with an earthy ferruginous spring, 2 km. south-east of Büren, is chiefly used for bathing, but is also taken internally for dyspepsia, scrofula and rheumatism.

Bienne at the foot of the Jura, 10 min. north-east of Lake Bienne, a pleasant little town with, about 15,500 inhabitants, is in railway communication with Berne, Soleure, Neuchatel and Basle. It is surrounded by fruitful meadows, vineyards and orchards, and enjoys a very mild lake climate, the chestnut thriving despite the strong blasts of the north-east and south-west wind. Owing to this latter circumstance Bienne is not exactly a health resort.

Hotels: *Bielerhof; Schweizerhof; Croix Blanche; Krone.*

Kurhaus Magglingen, 900 m. above the sea, a climatic summer health resort, 1½ hrs. by carriage from Bienne railway station. There is a cable railway from Bienne to Magglingen.

The *Kurhaus* stands on a broad terrace on the southern declivity of the foremost chain of the Jura, surrounded by splendid firs, beeches, maples, oaks and ashes, amid which there are long walks, with dry paths and good seats. The climate, though belonging to that of the Upper Alpine regions, is very mild, not exposed to cold winds or subject to sudden changes of temperature. Maggligen is recommended for susceptible convalescents still needing care, for delicate women and children suffering from poverty of blood, for incipient disease of the breathing organs when there is little resisting power, and for nervous affections resulting from general weakness and proverty of blood. Warm and cold baths. Milk and whey cure. Physicians: *Dr. Gsell-Fels; Dr. Böhler* and *Dr. Moll* of Bienne.

Excursions: On horseback or on foot to the Studmatten (1000 m.) three miles further to the Chasseral and Spietzberg with their picturesque views; to Pierre, Pertnis, Reuchenette, Ferg, to the waterfall and ruins of Twannberg; to Bienne with its interesting museum; to St. Peter's Island, Nidau, and the romantic ruins of the Seusberg.

St. Peter's Island, in the Lake of Bienne, which has won world wide celebrity through being the residence of Rousseau in 1765, is reached by boat from the railway station of Twann in half an hour. It has a good Kurhaus. Milk, whey, and grape cure. Lake baths.

Lüterswyl, 640 m. above the sea, with an earthy ferruginous spring. — *Kurhaus Zimmermann.*

Route: From Büren station (Berne-Lyss-Soleure Line) by carriage in an hour; direct postal communication with Soleure.

The spa lies on a pleasant slope of the valley and has a mild climate owing to the abundance of fir and forest trees. The woods are traversed by numerous paths. The spring contains besides carbonate of ferrous oxide, magnesia, manganese, sulphuric acid and phosphoric acid. It is principally resorted to by the natives from the neighbouring places of Cantons Soleure, Berne and Aargau for rheumatism of the muscles and joints, poverty of blood and scrofula. Physician: *Dr. Wyss* of Hessigkofen.

Buchegg, *Kurhaus* (Luder) 538 m. above the sea, a summer resort in a beautiful, but exposed situation. Milk and whey cure.

Bad Kyburg, *(Dubler)*. at the foot of the Buchegg, with a spring containing carbonate of iron, used especially for poverty of blood, chlorosis and hysteria.

Physician: *Dr. Rüdi* of Bätterkinden.

Bad Ammannsegg *(Huber)* on the eastern slope of the Buchegg, with a weak iron spring; is much visited by the inhabitants of Soleure.

Soleure, capital of the Canton of the same name, with about 7000 inhabitants, is the oldest Roman town this side of the Alps next to Trèves. It has the St. Ursus Münster built in irregular style, and the arsenal containing a large collection of arms from the Swiss wars. Other objects of interest are the Clock Tower, the Franciscan church, the Hotel de Ville in Renaissance style, etc. Soleure is a good centre for excursions to the Jura.

Hotels: *Krone* (Huber-Müller) a nice house with good cuisine; *La Tour Rouge,* also good: *Hirsch.*

Route: By rail from Basle via Olten, in 2¼ hrs.; from Zürich, in 2½ hrs.; from Berne via Burgdorf in 1½ hrs.

Bad Attisholz, with a ferruginous mineral spring. 1 hr. east of Soleure in the midst of the charming wood of Attisholz in romantic scenery. The spring contains carbonate of magnesia, lime, sulphate of salt, chlorine compounds and traces of sulphuretted hydrogen gas; temperature 15,5° C. It is used in bathing for rheumatism, nervous debility and hysteria. Pleasant summer resort. Physician: *Dr. Bott* of Soleure.

Weissenstein, 1284 m. above the sea, air and whey cure. Season from the beginning of June to the end of October.

Route: From Basle by the Jura railway to Moutier (1½ hr.) thence by carriage in 4 hrs. to Weissenstein; from Soleure it is a drive of 2½ hrs.

The *Kurhaus* stands on the slope of the lowest range of the Jura, called here "Weissenstein", which rises north-west of the pleasant capital with an uninterrupted view over the Alps from Säntis to Mont Blanc, and the lovely undulated country at the base of the mountains with its many lakes, rivers, towns and villages.

The climate on this exposed height is not very sharp, although there are frequent changes of wind and temperature, and the evenings, especially, are generally cool; there is nearly always a breeze, as Weissenstein is open on all sides, particularly on the east and west, and the violence of the wind is only broken by the summits of the Röthe and Hasenmatt. Clouds frequently hang about the mountain and for hours and days deprive the visitor of the sight of the sky and warm sunlight. As the climate is very stimulating and tone-giving, Weissenstein is especially suited for those invalids who have been enfeebled by long illnesses or great mental or bodily strain, and who possess sufficient power of resistance for the air to exercise on them strong reactionary influence; it is adapted to sufferers from poverty of blood, for building up the tissues, for long continued asthenic catarrh of the lungs, for nervous and mental diseases. On the other hand Weissenstein is not good for organic heart disease, emphysema, great sensitiveness to changes of temperature (rheumatism, catarrh of the throat and larynx, neuralgia in the face) with tendency to congestion and apoplexy. Physicians: *Drs. Kottmann August, Kottmann Carl, Ackermann, Frei, Bott, Mehlem, Müller, Reinert, Reinhardt, Schilt, and Schubiger* of Soleure.

Walks and Excursions: — To the neighbouring Känzli, Dilitsch, Kopf to the Risimatt and the Scheiterwald; in ½ hr. to the Hinterer Weissenstein; in ¾ hr. to the Röthe with a splendid panorama from the Rigi to the Vovians; in ¾ hr. to the Grossdilitsch and the Nidleloch-Höhle; in 1½ hrs. to the Hasenmatt (1442 m.) the highest point in Canton Soleure, with a splendid panoramic view.

Langenthal, a market town and station on the Berne-Burgdorf-Olten Line. It has two iron springs, only used for bathing. Hotels: *Löwe; Kreuz; Bär.*

Gutenburgbad (Hotel *Widow König*) 513 m. above the sea, with a ferruginous saline earthy spring; it is ½ hr. south of Langenthal on the road to Madiswyl and Huttwyl. The Bad lies not far from the right bank of Langeten in a very pleasant, open, fruitful district, with a healthy, equable climate. The spring takes its rise above the Kurhaus, on the south western declivity of the Schlosshügel, from which there is a beautiful view of the Jura region of the Oberaargau. It contains carbonate of ferrous oxide, lime, magnesia, chloride of calcium and sulphate of lime and is principally used in bathing for rheumatism, exudations from the skin, and internally for chronic catarrh and chlorosis. Physician: *Dr. Burkhalter* of Langenthal.

Häbernbad, 564 m. above the sea, ½ hr. from the village of Rohrbach, with a ferruginous earthy spring, used both as a drinking and bathing cure for rheumatism, poverty of blood, weakness and paralysis.

Huttwyl *(Bär; Stadthaus)* large market town at the entrance to the valley of Langeten, 2½ hours from Langenthal and Willisau; about 100 paces west lies **Schultheissenbad.**

The spring contains carbonate of ferrous oxide, lime, magnesia, potash, chloride of calcium, silica and some free carbonic acid; it is used for chronic catarrh of the digestive organs and bladder, rheumatism, spinal complaint and scrofula and chronic exudations from the skin.

4. Health Resorts on the Lake of Geneva and its neighbourhood and in the Upper Rhone Valley.

The ravines of the lofty Jura from Fort de l'Ecluse to Châtelard separate the French Savoy or Middle Rhone Valley from the Upper or Swiss portion of the Valley. In the course of ages the Rhone has pierced the southern spur of the Jura which here rises to a height of 600 m. above the river, and has made a way to the Mediterranean basin. At an elevation of 375 m. above the sea level the noble Leman spreads out its broad waters, and a few miles higher up is another ravine, that of St. Maurice, 426 m. above the sea. It is on a grander scale than that of the Jura, and forms in fact the entrance to the Wallis Valley, 150 km. long, the source of the Rhone, and the longest and geographically the most interesting of Alpine valleys.

The Lake of Geneva, 39 square km. larger than that of Constance, is crescent-shaped with the concave side to the south. Its length is 90 km., its greatest breadth 15 km., its depth from 690 in the Rhone delta to 334 m. at Ouchy, and its total superficies is 578 square km. The natural features of the two banks of the lake — the Waadt side and the Chablais side in Savoy — present the most striking contrasts. On the Waadt shore the Swiss Plateau descends in gentle slopes; only towards the east, in the direction of the Lower Alps, do the banks show any inclination to rise. Nowhere do the forests approach the shore, and a belt of cultivated land stretches without interruption from Geneva to Arvel. Vineyards and gardens, with hundreds of thriving villages and little towns, form one of the prettiest and most animated of landscape pictures.

The Savoy shore is totally different It is formed by an enormous moraine, descending steeply from the Wallis Alps. Immediately behind this rises the equally precipitous chalk range; and sombre forests cover all the mountains. The chestnut and the "allinges" both thrive attaining to a height of 900 m. above the sea, though they grow more luxuriantly at the foot of the mountains. Rich green meadows, beech and pine trees are found higher still, as far up even as the beautiful pastures in the hollows between the peaks.

The smooth, flat shore of Waadt faces directly south-east and south, and is like a gigantic espalier spreading out towards the sun. The precipitous Savoy shore looking northward, with its deep ravines and ridges, is quite in the shade. "To this position with the propinquity of the great watershed of the Alps, Savoy owes its wealth of dark woodland which we see from the Swiss

shore, as we inhale the gentle perfume of the trees and admire the wonderful violet of the distant horizon. On this shore mosses and ferns cover all the walls, while the fig and still more the vigorous growth of the laurel testify to the mildness of the climate of Lake Leman."

We pass from the lake basin to the interior of Wallis through the lovely plain of Montreux as far as the cleft of St. Maurice where we find deep green meadows, shaded by groves of chestnut and hill sides covered with vines which at Yvorne and Ollon bear very rich grapes, though on the alluvium of the delta there is a good deal of marsh. From the cleft of the Pont du Sex to the turning point of the Rhone — the Folaterres near Martigny — the narrow connecting gorge runs for a length of 15 km. The mountains, which are here very steep and rugged and on the western side often perpendicular, stand so close together that their great boulders and avvalanches roll into the Rhone, the latter with its large gravel bed leaving little room for the road and railway.

Suddenly the Rhone Valley takes an opposite direction, changing its course from north-west south-east, where it was exposed to the west wind, to north-east south-west, and by a single step we pass into a bright open country with southern colouring and broad horizons melting in the distance, which the naturalist *Alphonse Rion* of Wallis, thus aptly characterises:

"Wallis is a long deep furrow cut through the highest part of the Alps, and stretching 150 km. from the Furka to Lake Leman. Surrounded by two mountain ranges which are covered by the loftiest summits in Europe, cut off from Switzerland by a mountain chain whose centre crest rises to a height of over 3000 m, separated from Savoy and Piedmont by peaks which rise 200 m. higher than those at the north, the whole of this great valley has only one natural outlet: the narrow gorge which yawns between the Dent de Morcles and the Dent du Midi, and above which these two portals, as it were, of the Upper Rhone Valley tower to a height of 2660 m. Placed in the centre of Europe, but shut in by these mighty walls, Wallis can only be compared to an island with steep and inaccessible shores standing in the midst of the civilised world". The Bernese Alps close in on the north like a curtain, on the south a succession of mountain spurs conceal the great Pennine range, whose dazzling ice-capped tops are only visible through occasional apertures. From the level of the valley, which the Rhodan has for centuries been filling with its boulders, a series of picturesque emi-nences rise like islands, each crowned with church, watch-tower, or old-world village: Saillon, Valere, Tourbillon, Sierre.

Albrecht von Haller not inappropriately called this region, on account of the southern character of its vegetation, the Swiss Spain. The wild vine trails along the ground; its roots watered by thousands of streams from the glaciers of the Bernese Alps. Almost buried among the sand of the valley Indian corn springs up, with thick, long ears, as fine as could be found in Ticino; on the dwarfed elms and oaks along the road chirp the lively crickets:

hosts of brilliant butterflies flutter in mazy numbers among the flowers, and snakes and bluish-green lizards sun themselves lazily on the hot stones.

Comparing Wallis with the neighbouring Bernese Oberland, it would be hardly possible to find anywhere a greater contrast of climate within an equally small area. Ascending from the verdant Kanderthal, embowered amid forest and fir trees, with its cool humid, Alpine air, to the top of the Daube or Gemmi Pass, where the view suddenly opens out over the Pennine Alps and the deep Valley of Wallis, quite a new scene presents itself: another sky, other tints, a beautiful southern landscape of the most characteristic type, with the clear atmosphere of the South, a strangely dry air, and insufferable heat, on account of the reflection from the precipitous walls of rock.

The climate of the Rhone Valley exhibits numerous local differences, varying with the natural formation of the ground, the increasing height above the sea level, the changing direction and breadth of the valley, the inclination of the moutain slopes, the distribution of water, and the atmospheric discharges. On the whole, the climate of the Leman basin and its surroundings is very different to that of the comparatively dry and narrow Valley of Wallis, enclosed as it is between two lofty mountain ranges.

The temperature of the east and west shores of Lake Leman opposite the Rhone Valley is subject to considerable depression, owing to the absence of mountain walls reflecting the sun's heat, and the presence of a wide expanse of water, the influence of which is increased by the north wind blowing over the lower range of the Jorat. The immense mass of water in the Lake of Geneva produces a more "oceanic climate", that is to say, a modification of the isotherm; while on the one hand, the water being very slow in warming exercises a cooling influence on the surrounding shores, and absorbs a good portion of the warmth of the air by constant evaporation; so on the other hand its gradual cooling prevents sudden, sharp cold in winter. The moist atmosphere of the lake, which is felt for quite 100 metres up its sloping shores, forms a sharply defined zone, affording the most favourable conditions for evergreen trees, especially the coniferæ of the South. When frost prevails over all the terrace-shaped district of Waadt this narrow belt along the lake is quite exempt.

The gardens of Lausanne and Vevey contain a number of Cis-Alpine plants which can only be cultivated on the lake, while in Geneva there are cedars of a size, freshness and beauty surpassing all others on the Continent. From the lake to a height of 600 m. above Geneva, up to Arvel, and further, stretches the great vine country of Waadt extending for 5,650 hectares; the grapes are chiefly white, and very luscious, with rather thick skins, but of a mild pleasant taste. Nowhere else in Switzerland is the cultivation of the vine so essentially the one occupation of the people, and at the great winter fetes the old Bacchanalian customs are still kept up by the natives of Waadt.

The atmospheric discharges are much greater in the eastern part of the lake territory than in the western, and the valley of Wallis. While, for example, Montreux in the middle of the year

Mean Temperatures.

	Year	Minim.	Maxim.	Spring	Summer	Autumn	Winter
Geneva	9,7	—11,9	33,3	9,5	18,0	9,8	1,3
Morges	9,8	—10,3	29,3	9,7	17,9	9,8	1,6
Lausanne	9,0	—	—	8,0	17,1	9,0	0,2
Montreux	10,6	—11,4	28,6	10,4	18,8	10,9	2,6
Bex	9,8	—14,2	34,6	10,3	17,9	10,0	1,1

shows 128 cm., Lausanne bas only 102, Morges 103, Geneva 78, Sion 75 cm. The whole lake district is, with the exception of the small "Spalier" zone from Montreux to Bex, exposed to the cold north and west winds, which occasion considerable changes of temperature and make the climate unsuitable for an air cure; while in the "Spalier" and lower Alpine zones on the northernmost banks of the lake are numbers of renowned health resorts.

The valley of Wallis shows the climatic conditions of a mountainous district 500 m. above the sea, yet its mean temperature is considerably higher than that of other equally elevated Alpine valleys at the southern base of the Alps, which will be seen at a glance by a comparison of the climate of Sion with that of Schwyz.

Table of Temperatures.

	Height	Yearly Average	Minim.	Maxim.	Spring	Summer	Autumn	Winter
Sion	536 m.	10,6	—10,2	32,1	11,2	19,3	10,5	1,2
Schwyz	547 m.	8,6	—12,2	28,3	8,6	16,7	8,8	0,2

Average Monthly Temperatures.

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.
Sion	—0,8	3,2	5,3	11,7	16,5	18,4	20,9	18,7	17,0	10,3	4,3	1,2
Schwyz	—1,1	2,0	2,9	9,1	13,8	15,5	18,2	16,3	14,9	8,3	3,2	—0,1

Wallis has also a milder winter than prevails north of the Alps, and a more rapid accession of warmth in spring and summer. Comparing Wallis with the Transalpine, Insubrian lake region, with Ticino, it shows a uniformly lower temperature, owing partly to its being situated 300 m. higher and partly also to the circumstance that it is hemmed in between two of the greatest glacier ranges. Since, too, the valleys of Ticino are exposed to currents from the south, mountain places even 700 m. above the sea are as warm as Sion, milder even during the winter. But respecting humidity, Wallis differs essentially from Ticino as the atmospheric discharges in the latter place are much more abundant than in the former. While, for example, at Lugano there is an average rainfall during the year of 157 Cm., at Bellinzona of 180 Cm., in the Sub-alpine district of Oberwallis it only amounts to 94 Cm. and in Unterwallis (Martigny) only to 61—75 Cm. In the Insubrian region there is an extraordinary abundance of water, in Wallis, a remarkable dryness. In the clearness of its sky Wallis surpasses the Insubrian zone; at Martigny, for example, there are in the year 145 clear days and 69 cloudy days, but at Lugano there are 139 clear and 75 cloudy days, showing the heat to be of longer continuance in Wallis.

On the whole, the health of the district around the Lake of Geneva is good. Here, as indeed all over Switzerland, acute and chronic inflammation of the lungs, together with rheumatism of the joints and its effects, are the chief maladies. Scrofula and consumption are comparatively common; ague, on the other hand, is seldom heard of in Geneva and Waadt; typhus frequently occurs in the towns and larger villages, especially in the interior of the country.

Owing to geographical conditions and climate, the health statistics of the Valley of Wallis show some special peculiarities. Cretinism is common, and marsh fever, owing to the over-flowing of the Rhone, is of frequent occurrence. Typhus and consumption stand pretty high among the statistics of disease.

Geneva,

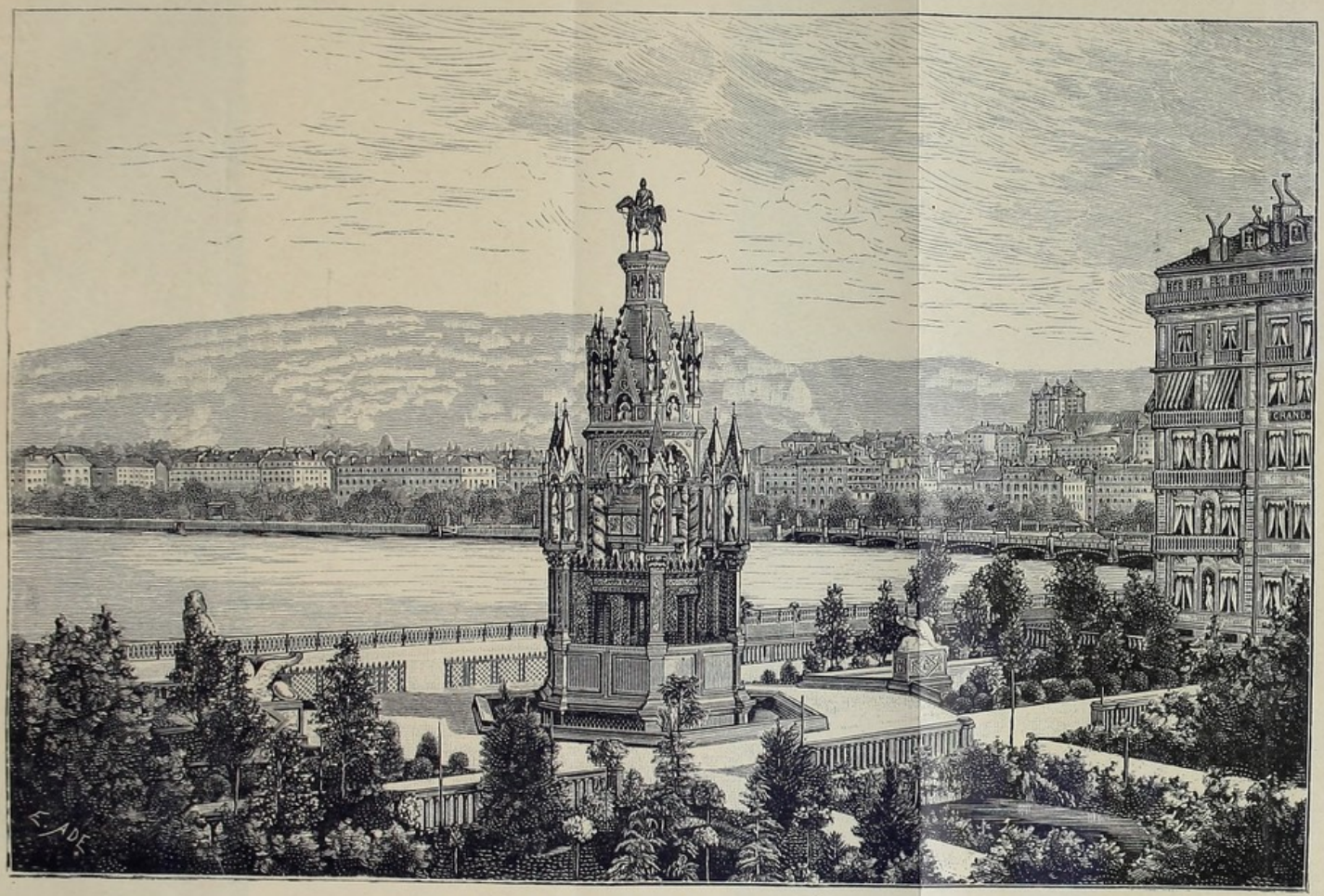
375 m. above the sea, the capital of the Canton of the same name (next to Zug the smallest in Switzerland), with 52,000 inhabitants, has all the appearance of a large city, and has therefore gained the epithet of "Little Paris". From the magnificence of its situation, Geneva has become one of the chief centres for tourists, the rendezvous for the most diverse nationalities, the number of foreigners reaching sometimes from 12—20,000. The Rhone flows round the little Quartier de l'Ile, and divides Geneva in two, the older and larger portion on the left bank is the original city, and the main point of interest; on the left bank lies the more modern Quartier St. Gervais with its handsome new streets and buildings. Six bridges unite the two parts of the city. The most beautiful is the truly classical Pont du Mont-Blanc which forms direct communication between the Rue de Mont-Blanc leading from the railway station and the Jardin Anglais. This, in summer, forms the Corso for visitors.

From the Quai du Mont-Blanc up the lake a magnificent view is obtained of the entire Mont-Blanc range, and in the clear evening light the peaks are seen from here to stand out better than at Chamounix. The city contains so many natural and architectural beauties, such a number of scientific institutes and collections, such fine industrial establishments, and affords so many social pleasures, that the visitor finds constant interest and amusement.

Although the geographical position of Geneva induces a mild temperature, it is not adapted as a climate cure owing to its exposure on all sides to the cold north-east winds, and to the absence of the favourable influence of valleys, for there are no cliffs, in the neighbourhood to warm the air by radiation. The basin is filled with a body of water which certainly modifies the cold in winter, but decidedly diminishes the warmth in summer. The average annual temperature of Geneva is 9,7° C., the mean amount of cloud is 6,0, the rainfall 68 cm.

Hotels: *Grand Hotel National,* a handsome structure in a quiet, retired park, with special arrangements in regard to health; cold water, whey, milk and grape cure; *Hotel Beau Rivage,* excellent and magnificently situated; *Hotel de la Paix; Hotel des Bergues; Métropole; Ecu de Genève; Couronne,* all first class hotels. — Hotels of the second class: *d'Angleterre; Richemont; de Russie; du Lac; Academie; de la Poste; de Genève; Schweizerhof; de Paris; Beau Séjour; des Quatres Saison; du Boulevard; de la Gare.*

Walks and Excursions: — Beautiful walks on the right bank of the lake, passing Petit and Grand Saconnex to the mountain ridge with views of the lake and from Mont Blanc in front to Versoix at the back. Train or steamer nearly every two hours back to Lucerne. On the left bank of the lake, passing the Jardin du Lac, along the quay, under the splendid grove of plane trees, up the lake as far as Vesenay (1 hr.) and back through Cologny or Chongny; a fine view of Mont Blanc both ways. In 1½ hrs. north west to the castle of Fernex, on the other side of the French frontier, built by Voltaire in 1759. (Beautiful view from the terrace of the castle garden). To Carouge (road for horses) and the Bois de la Bâtie at the confluence of the Rhone and Arve (½ hr.); along the Rhone to the new Arve bridge, and through the wood to the restaurant with beautiful views of the city and environs. To the Petit and Grand Salève, chalk hills, from which there is a fine view, 1½ hr. south-east of Ge-



The Braunswik Monument at Geneva.

The Lobby (Foyer du Théâtre) at Geneva.

eva, in Savoy. To the mountain ridge of Les Voirons (1456 m.), in a orth-easterly direction, with a fine view from the Dent d'Ochelis of the nountains, lake of Annecy and the whole Mont Blanc range.

Champel sur Arve, 428 m. above the sea, a hydropathic establishment 15 min. south of Geneva, at the foot of the hill of the same ame, around which flows the Arve. The appointments of the establishment re of the newest and best, and there is a hydrotherapeutic and gymnastic pparatus, also a swimming bath. This place is specially adapted for the reatment of rheumatic and nervous affections, poverty of blood, chlorosis, eakness of the sexual organs and menstrual irregularities, catarrh of the terus, stomach, and intestines, and for convalescents from serious illnesses. — Superintending physician: *Dr. Glatz.*

Coppet, on the Geneva-Lausanne line; here stands the castle which once belonged to the famous French minister, Necker, where is daughter, Mme. de Staël, founded a "home for genius". The lace has a splendid situation on the lake, but owing to its exposure o the north wind is not adapted for a climatic station. The view ver the lake is superb.

Hotels: *Croix-Blanche; Pension du Lac.*

Nyon, is the largest town between Geneva and Lausanne and as 3500 inhabitants. There are beautiful views from the shady erraces und pretty walks. The climate is mild, but the place is oo much exposed to the cold winds to be an air cure. There is n establishment for those suffering from nervous and mental affecions.

Hotels: *Hotel and Pension de l'Ange; du Soleil; Hotel and Pension Beau ivage.*

Begnins, 537 m. above the sea, lies three miles east of the land railway station, on a gentle slope, amid vineyards and meaows with a splendid view over the lake and the Alps. A pleasant ummer resort.

Pension Weingart; Pension Piquet.

In a south westerly direction from the above, just three miles land from the lake, lie the village and castle of **Gingins.** Beauful pleasure grounds. A fir wood near. Summer resort. — *Pension ontais.*

St. Cergues, 1046 m. above the sea, an air cure. Season May 15. o Oct. 15.

Route: From Nyon in 2½ hrs. by diligence which runs twice a day.

The place is in rather an open situation, on the eastern slope f the Dole (1678 m.) exposed to the north west winds, the force f the north wind being broken by the surrounding heights. Inumerable walks among the shady fir woods. The air is pure, omewhat bracing and stimulating, but subject to changes. The limate, therefore, is adapted for delicate convalescents, for ne very weak or for patients suffering from nervous omplaints, but is not recommended for phthisis, asthma, and hronic catarrh of the lungs. Excellent milk cure.

Hotels: *Pension Capt and Weissenfluh; Hotel and Pension étrangers; Hotel de la Poste.*

Physician: *Dr. Mestral* of Begnins.

Aubonne-Allamann, are 3/4 hr. apart, but belong together; the latter looks towards the lake and is commanded by the Castle of *Menthon;* it has a railway station. Aubonne is not suitable as an air cure, as it has a raw climate. But

Gimel, 1 1/2 hr. north west from Aubonne, 730 m. above the sea, is a pleasant, health-giving summer resort.

Hotels: *Hotel de l'Union; Pension Dufaure.*

St. Georges, 1 1/4 hr. west of Gimel, 935 m. above the sea, is in a tolerably sheltered situation with forest and fir trees in the neighbourhood. It is a strength-giving summer resort. Milk cure. Daily diligence communication with Allaman station and Aubonne.

Morges, a little town of 4000 inhabitants, has a fine view of Mont Blanc. The climate is comparatively mild, and the temperature as a rule — July and August excepted — is higher than that of Geneva (see table p. 115); in winter the minimum is that of Sion, in summer the maximum that of Montreux. Yet Morges is not adapted for a climatic station, being too much exposed to the "Bise" and consequently to considerable changes of temperature.

Hotels: *du Port; Mont Blanc; des Alpes.*

Ouchy, the beautifully situated harbour of Lausanne, (1/2 hr. from the city); in summer it is excessively sultry and in winter is subject to the raw north winds which sweep across from the Jorat. Fine promenades. Lake baths.

Hotels: *Hotel Beau Rivage,* a fine, first class hotel, excellently conducted; *Hotel d'Angleterre.*

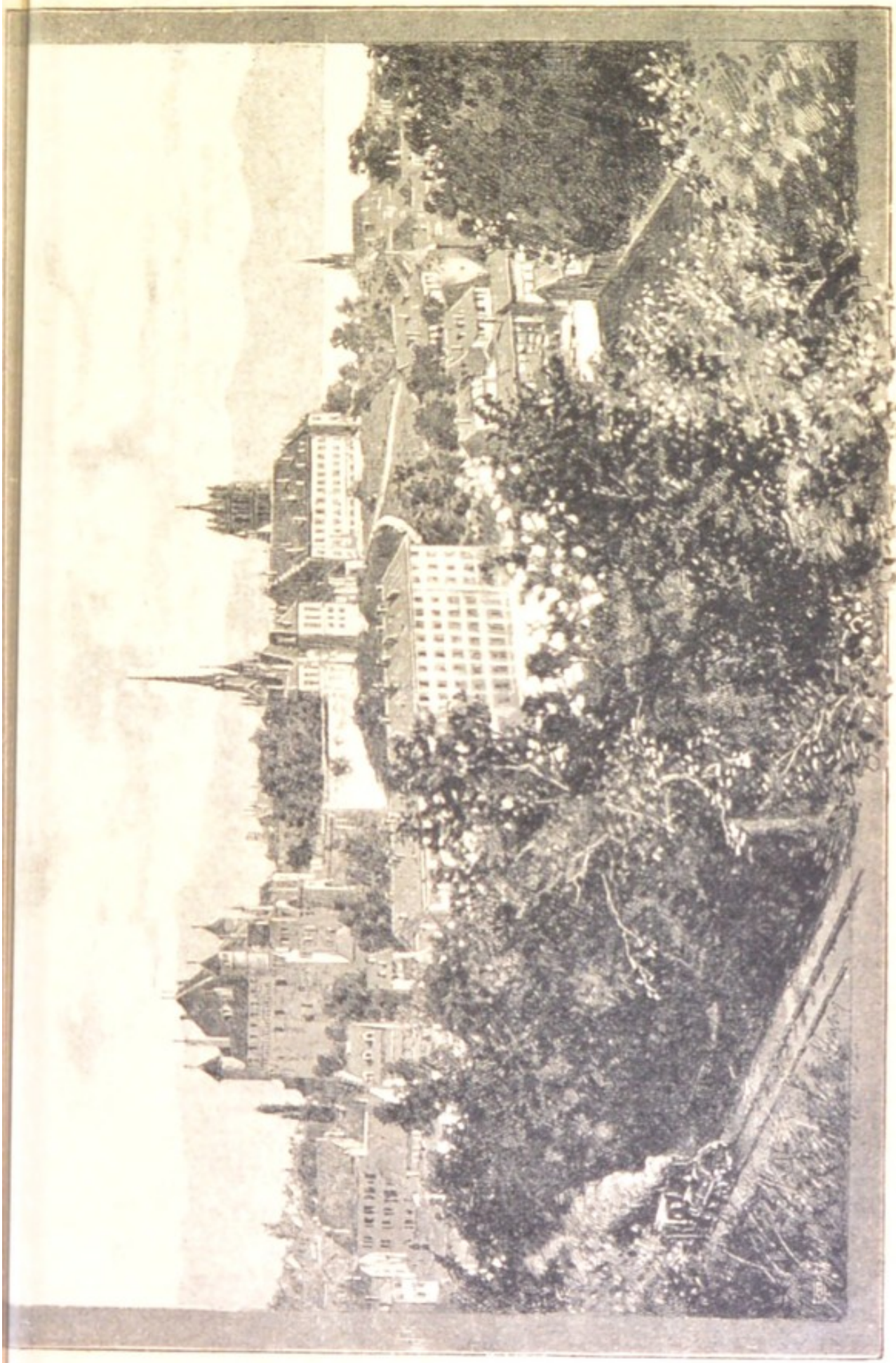
Lausanne, capital of Canton Waadt. 515 m. above the sea, with 32,000 inhabitants, ten min. up the hill from the railway station, with which it is connected by a pneumatic railway. In spring and winter especially the temperature is a good deal lower than at Morges, and there is no shelter from the north east and south west winds. In spite of its lofty, romantic situation Lausanne is, therefore, not adapted for an air cure, but is a delightful place tourists, affording numerous excursions.

Hotels: *Hotel Gibbon,* an excellently managed, first class house; *Hotels du Faucon; Bellevue; du Grand Pont; du Nord; Belvédère.*

The walks around Lausanne, through beautiful groves and shady woods are very numerous. From the Terrasse de la Cathedrale is a pretty view of the town, the lake, and the Alps of Savoy; from the tower of the cathedral (493 m. high) the view is still more extensive. Fine views also, from the lofty Castle, formerly the Bishop's Palace, now the Cantonal Council chamber. To the mountain ridge of Montbenon, west of the town, with beautiful walks, and a lovely view of the lake; in 1/2 hour above the town to the Signal, a celebrated point of view.

Croisettes, 1 1/4 hours north of Lausanne, 805 m. above the sea, in a very sheltered situation on the southern slope of the Jorat, has fine woods and beautiful views, and is much resorted to by families from Lausanne for change of air.

Chexbres, 580 m. above the sea, lies on the south side of a hill, which slopes down to the Lac de Bret, and is covered with



Lausanne.

orchards, woods, and pretty houses. It is sheltered from the north wind by the Monts de Puidoux which rise in the back-ground. The view from the Signal is one of the finest on the shores of Lake Leman. Chexbres is considered a very quiet and pleasant resort for change of air.

Hotels: *Hotels and Pension du Signal; Hotel and Pension Saubagaut.*

Vevey, 380 m. above the sea, a grape cure, lies in an amphitheatre of hills and mountains on the Lake of Geneva, facing south. The town has 8000 inhabitants, and is surrounded with charming villas and beautiful walks.

Vuillemin calls the place Dutch in its cleanliness, French in its gaiety and love of pleasure, and Swiss, or one might say German, in its sentiment. On the lake banks in the evening numbers of workmen of the Fatherland may be heard singing in spontaneous but melodious chorus songs of freedom and hope.

The winter is not cold, for the mean temperature never sinks below 0,3° C.; nor is the summer excessively hot, as the thermometer rarely rises above 30° C.

The mean temperature in January is 0,32, in February 1,72 in March 4,8, in April 7,22, in May 9,79, in June 14,02, in July 14,94, in August 14,96, in September 12,35, in October 9,49, in November 4,06, in December 0,81; the yearly average 7,81, clear days 91,1, rainy days 60, snowy days 7. Yet Vevey is not well-protected from the north-winds, and the "Bise", though not blowing with the same intensity as in the western parts of the Canton and at Geneva, is very often felt; it induces changes of temperature which are not experienced at Montreux. Vevey has, however, the great advantage of very little fog and few rainy days.

The air of Vevey is not so much adapted for consumptive patients as for those who are convalescent, for general debility, over-fatigue, affections of the nerves, in the autumn, especially; for slight digestive disturbances, for tendency to catarrh of the lungs, and for simple cases of women's diseases. The milk cure and the lake baths are used in summer, and in autumn the grape cure is pursued.

Physicians: *Drs. Barinaud, Cuenod, Guisan, Martin, De Montet, Muret, Perrier, Mond, Rossier, Turin.*

Clubs — into which strangers can be introduced — *Du Leman* and *Du Marché.*

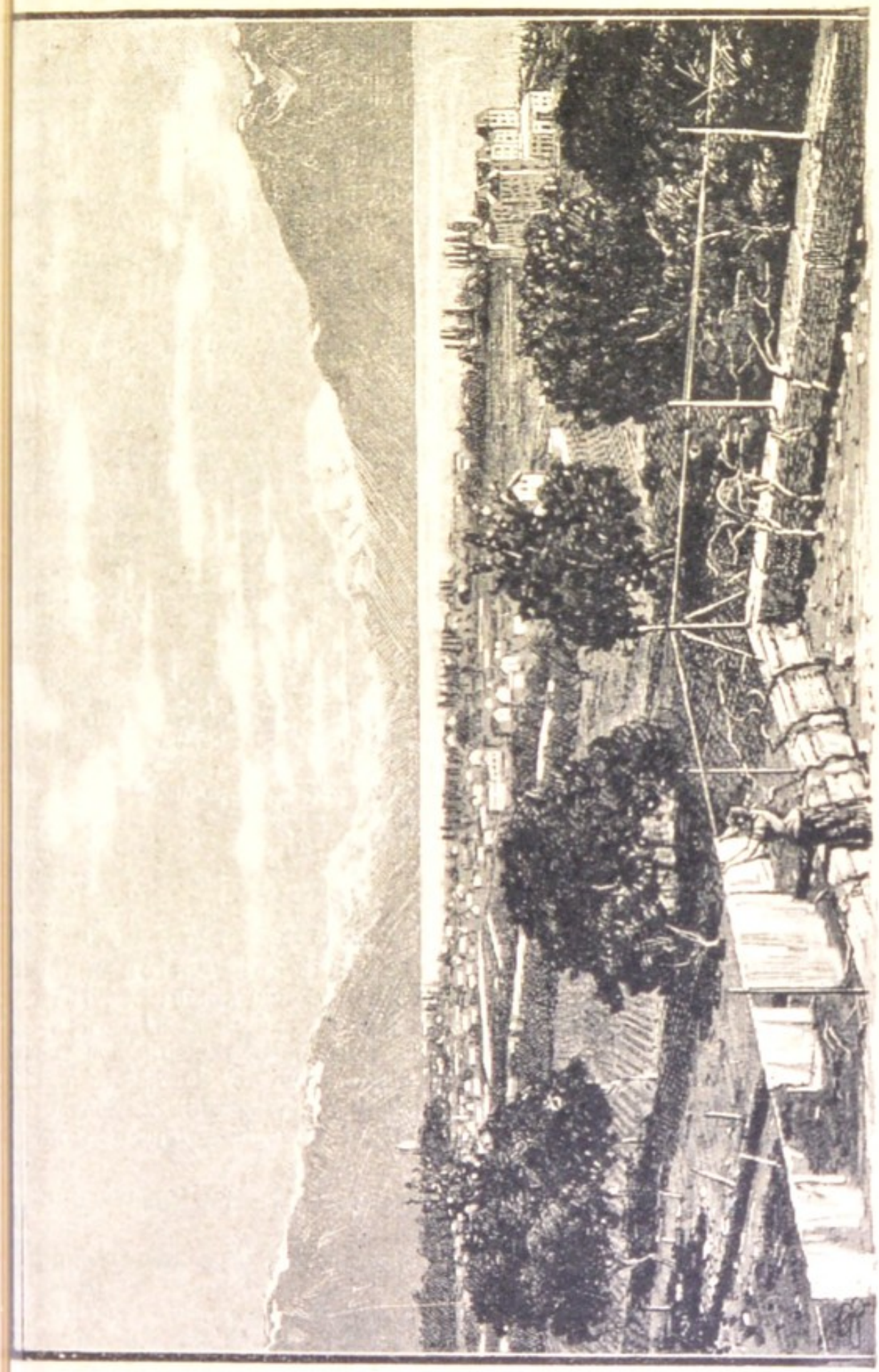
Benda's Library is well stocked.

Grand Hotel de Vevey *(Eug. Michel,* acting manager) is a splendid building, and one of the finest establishments of the kind in Switzerland.

Hotel and Pension d'Angleterre *Kaehlin-Archinard),* a pretty house on the lake, 5 minutes from the railway station, in a charming and somewhat elevated situation, with 65 comfortable bed-rooms, lofty, airy dining and conversation rooms, ladies' salon, smoking-room, w. c'. s., spring water from Les Avants; a large shady garden on the south, numerous large and small balconies. A full view of the Lake and mountains from the landing stage of the steamers. (Vevey la Tour). Very good cooking. Milk and grape cure. Pension 5—7½ fr.

Hotel Monnet; Grand Hotel du Lac; Pension Moser, at Cheminin; these three splendid establishments are provided with every comfort. *Hotel du Léman; Pension du Château; Pension du Panorama* (both elegant); *Pension Wolf* (for ladies); *Hotel du Pont; Hotel des Trois Rois; Hotel de la Croix Blanche; Pensions Maillard, Comte, Printanière* and *Beguin,* at St. Leger.

Walks and Excursions: Beyond the town to St. Martin's Church, standing on a hill, amid vineyards, and surrounded by groves of old lindens and chestnuts; a splendid view from the Terrace (la Terrasse du Panorama) on which there is a stone indicateur des Montagnes. In ¾ hour north-east



Vevey.

from the town to the Castle of Hauteville, with a fine park and a beautiful view from the terrace; 3/4 hour higher up, through groves of walnut trees and pretty villages, to the venerable Castle of Blonay; 1 hour further, north-west, to Les Pleiades (1368 m.), from the summit of which there is a magnificent view. Beautiful walks through vineyards and gardens to Montreux and Chillon; by boat to Clarens; through a chestnut grove by the side of the lake to Rousseau's "Bosquet de Julie". (Les Crêtes.)

Beautiful and well-kept promenades around Vevey.

La Tour de Peilz, railway and boat station, is a charming spot. Pensions: *Des Alpes, au Rivage, Riante-Site, Mon Désir.*

St. Légier, 1 hour north-east from Vevey, with beautiful country seats and extensive vineyards in the vicinity. Milk, whey and grape cure. *Pension Béguin.*

Bains de l'Alliaz, 1040 m. above the sea, with a gypsum sulphur spring.

Route: From Vevey, by carriage, along a good road in 2 1/2 hours; by a footpath from Les Avants in 1 1/2 hours.

The Bad lies at the end of a pretty village, enclosed by the heights of the Naye, Jaman, Folly, Cubby, and Pleiades. It is watered through its entire length by the Baye de Clarens. The air is pure and free from dust, and the temperature is pretty equable, as the place is sheltered from the north and north-east winds by the mountain chain which extends from the Dent de Jaman to the Moléson. The mean summer temperature is 21,2° C., and rarely sinks below 15° C.

Lombard says of the climate of Alliaz: "The temperature in the evening is very mild, and invalids can remain longer out of doors than in most high altitudes. Green swards and fir trees abound, and the climate is adapted for delicate persons who need a tonic, but cannot stand a cold and variable temperature."

The mineral spring contains the following fixed solids in 10,000 parts.

Sulphate of lime	15,834	Chloride of sodium	0,033
„ „ strontia	0,118	Silica	0,223
Carbonate of lime	2,136	Lithium salts	Spuren
„ „ Magnesia	0,259	Fixed solids	21,002
Ferric oxide and phosph. of lime	0,036	Free carbonic acid	145,68 Ccm.
Sulphate of magnesia	1,996	Sulphuretted hydrogen	6,39 „
„ „ soda	0,133	Temper. of the springs	8°C.

The mineral spring is used for chronic congestion of the abdominal organs, especially of the liver and womb; chronic catarrh of the stomach and bladder, and chronic cutaneous erruptions. Owing to the loftiness of the situation the place is less adapted for chronic rheumatism of the joints and muscles. The water is used for drinking and bathing. Season, from the middle of May till the middle of October. — Doctors from Montreux.

Les Avants, 979 m. above the sea, a summer and winter climatic station; milk and whey cure.

Route: From Vernex and Montreux, by carriage along a beautiful road in 2 1/2 hours.

This health resort stands on an isolated plateau of the Dent de Jaman, in the highest part of the valley of the Baye de Montreux. It is open on the south, and on the north is sheltered from

cold winds by lofty hills, and a large pine-wood, sloping steeply down. The air is pure and free from dust; the heat is modified in summer by the woods and the lake, and in winter the sun is very powerful, and the sky almost free from cloud. Invalids may thus often sit out of doors at mid-day without danger. Great and sudden changes of temperature are, however, of not infrequent occurrence, and prove very trying to consumptive patients. *Dr. Miniat* recommends Les Avants for phthisis with torpid character, catarrh of the apices of the lungs; obstinate bronchitis with scanty expectoration, the remains of pleurrisy and pneumonia, nervous asthma, anæmia and chlorosis, scrofula, imperfect development of the thorax. — Physician: *Dr. Miniat.*

Montreux.

and the surrounding villages, 375—475 m. above the sea, is a climatic health resort; it has a spring, autumn and winter season. Milk and grape cure.

Route: From Basle, by the Jura railway, via Neuchatel-Lausanne, or Olten Berne-Lausanne; from Zürich via Olten, Berne-Lausanne; from Geneva, by rail in 3 hours, and steamer in 4¼ hours to the Vernex-Montreux station: from Brieg (Simplon and Furka road) in 4½ hours by rail to Vernex-Montreux; from Lausanne by rail in 1 hour; by steamer in 1¼ hours to Vernex-Montreux.

In the amphitheatre-shaped bay facing south-west, south, and south-east, and lying on the north-east of the Lake of Geneva, are comprised, under the collective name of Montreux, a large number of villas, hotels, pensions, large and small villages, with a population of about 9,000. The mountain mass in the background, the final member of the much truncated range of the Finsteraarhorn, forms, with the rugged Rochers de Naye (2044 m.), the barren pyramid of the Dent de Jaman (1879 m.), and the bare crag of the Verraux (1935 m.), a natural barrier against the icy blasts of the Bise and of the north wind. The projecting spur of the Glion and the peninsular-like delta of the Chaudronbach divide the bay into a north-west and south-east portion. From the lofty mountain range in the rear spring three torrents of considerable size; one of which falls into the western extremity of the bay at Clarens; the second at Montreux, and the third at the eastern end, at Veytaux.

These streams divide Montreux in a line from west to east, and into the three Communes of Chatelard, Des Plances, and De Veytaux; to the first Commune belong, among others, the villages of Brent, Baugy, Tavel, Clarens, Charnex, Vernex, Sâles, and the mountain village of Les Avants; to Les Plances belong Bonport Territet, Collonges, and the mountain village of Glion; and to the eastern Commune of Veytaux belong the hamlets of Chillon and Grandchamp. Sâles and Les Plances, although belonging to two different parishes, together form Montreux proper. They are separated by the Chaudronbach, but united into a whole *(Kirch-Montreux)* by a beautiful iron bridge, "Le Pont de Montreux".

Topographically, the shores of the bay are divisble into three zones, one above another. The first and most beautiful, the lowest line, as it were, of this magnificent amphitheatre, only a few meters above the surface of the

water, stretches along the lake for six miles, from Au Basset to beyond Chillon. It forms that unrivalled procession of handsome buildings — palatial and luxurious villas and hotels — which deck the shore like a string of pearls. To this zone belong Clarens, Unter-Vernex, Bonport, Territet, and the lower portion of Veytaux and Chillon. The average height of the second zone is about 100 m. above the sea level; its villages, surrounded by vine-clad hills and green meadows, have but little intercourse with the outside world. The inhabitants are solely occupied with the culture of the vine. Thereunto belong the fertile vine-dressing village of Veytaux, the humble-looking Collonges, and Kirch-Montreux, the chief place in this group, and formerly the capital of the whole bay. The other vintage villages on this slope, more or less cut off from foreign intercourse, are: Pallens, Pertix, Vernex-dessus, Charnex, etc. The third zone quite belongs to the Lower Alpine region, lying 1,0 0 m. above the sea, and only consists of the villages of Glion and Les Avants.

The level road running along the shore for quite three miles, between villas, pensions, and palatial hotels, forms the Corso of the district, of which the centre is Vernex. The two ends of the bay are united by a tramway; and to make communication easier and more frequent, an electric railway will shortly be substituted for the tramway, on Edison's system, between Montreux and Vevey. It is also in contemplation to substitute the electric light for gas. On the bay there are more than three steamboat and four railway stations, five postal and telegraph offices, and there is a telephone at Vernex. There are eight churches, and several newly built village schools, boarding-schools, a preparatory and a high school minister to the mental and moral requirements of the young.

At the present time Montreux possesses 53 small and large establishments, with about 3,000 beds, for the accommodation of travellers. All, without exception, are in open, sunny situations, comfortably arranged for winter residence, and are surrounded by gardens which afford shade in summer. The living is good at all these establishments, and in some it is excellent, while the charges are very moderate (5—10 fr.). For families who require a whole house to themselves there are plenty of furnished villas of all sizes.

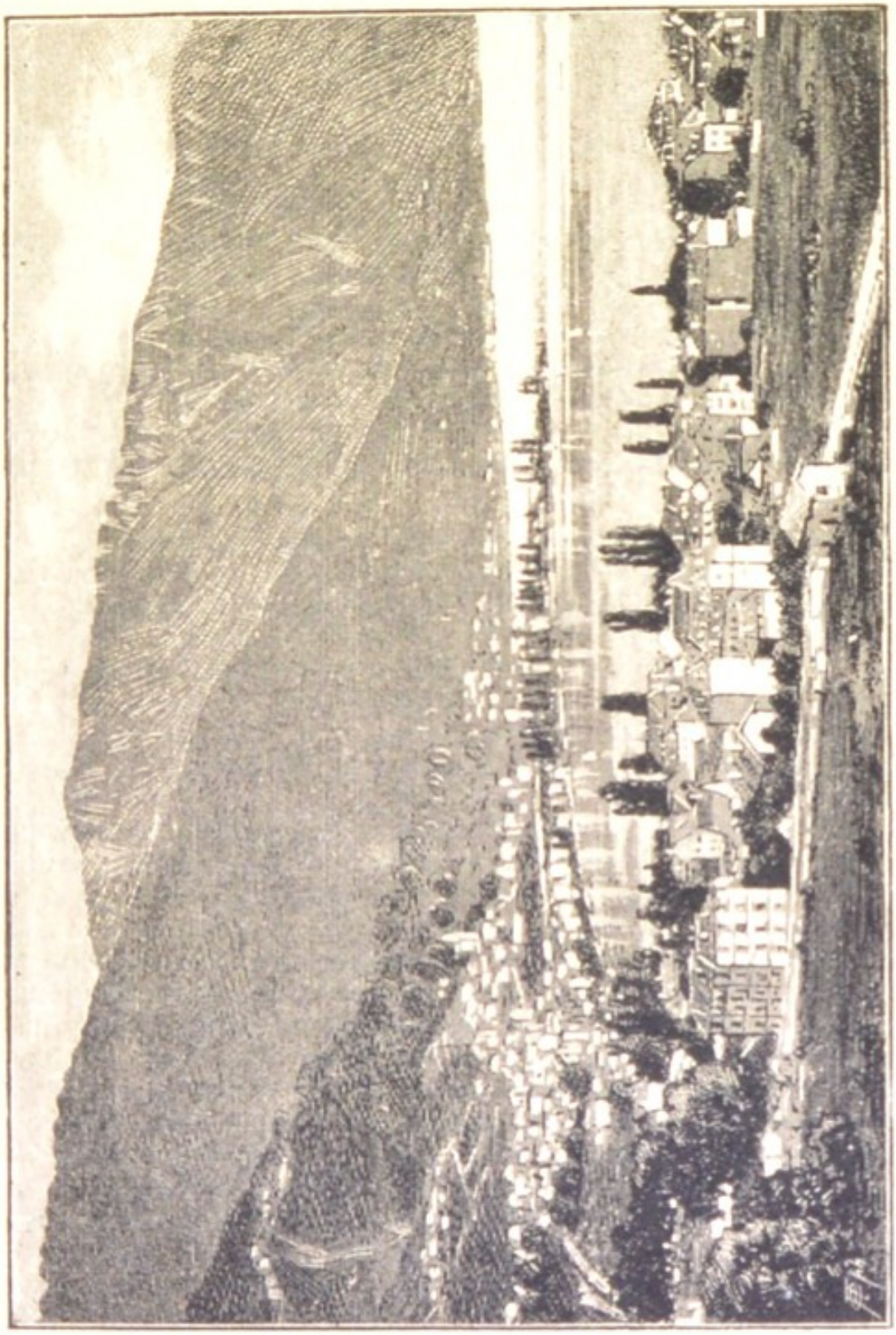
Ample provision is made for social and intellectual enjoyment. There is the **Kurhaus**, at Bonport, on the lake, built in 1880 in Moorish style, with a handsome glass pavilion; the entrance fee to which is very small. **It affords excellent opportunity for intelligent intercourse, and for amusements of all kinds, such as concerts, dramatic performances, dances and games. There is also a well-supplied reading-room.**

There are about the bay a great many well laid-out promenades, with good views; but few of them, unfortunately, are, however, sufficiently shady for very hot weather. An expedition into the woods can only be accomplished in summer with great toil. It is taken either from Kirchmontreux, which is close to the entrance of the wildly picturesque gorge of Schaudron; or from Glion or Les Avants, in the immediate vicinity of which places are dense forests.

The good, level road and the footway along the lake are followed by preference. But this, in spite of frequent watering, is not always free from dust owing to the great traffic. By evaporation the air becomes impregnated with the dust, so that a perfectly pure, antiseptic atmosphere is not to be dreamed of. The sunlight, again, can hardly penetrate between the numerous buildings on either side.

Every effort has been made to supply Montreux with all the necessary requirements of a health-resort. For the last eighteen years all the villages have been furnished with an abundant water supply from Les Avants, and with excellent drinking water at a constant temperature of 7,5° C. Good arrangements for drainage and sewage, together with a strict supervision of the food-supply, contribute to the healthiness of the place. Epidemics seldom arise, and when they do, take a favourable course; diphtheria is quite unknown. The mortality during the last two years was about 22 ‰ of the resident population, although a good many persons, comparatively, fall victims to indulgence in alcohol.

All the larger hotels have bathing arrangements, both for those in health and for invalids, and there is besides a bathing establishment at Vernex, with hydrotherapeutic apparatus (lake baths, warm



Clarens-Vernex-Montreux.

baths, Turkish baths, douches, Massage, etc.). But more requires to be done as regards the public baths in the lake, for the single, boarded structure under the railway-bridge at Territet is by no means sufficient. In the secondary schools, as well as in the various private establishments, gymnastics are taught.

The medicinal advantages of Montreux are essentially enhanced by a small alkaline spring which has long been successfully used by the inhabitants for various complaints. The analysis of its properties made by the chemist, Schmidt, of Vernex, in 1880, gave the following to every 10,000 parts:

Sulphate of Lime	0,4318	Ferrous Oxide	0,0120
Bicarbonate of Lime	4,4291	Alumina	0,0340
„ „ Magnesia	0,7260	Silica	0,1105
„ „ Potash	0,2209	Oxide of manganese	Traces of
„ „ Soda	0,4346		
Phosphate of Lime	0,0201	Fixed Solids	6,6658
Chloride of Sodium	0,2468	Free Carbonic Acid	0,56 Ccm.

The spring is therefore similar in its composition and effects to those of Eviana and Vichy, with the exception that it has no free carbonic acid. To increase the strength of the water it is bottled and impregnated with carbonic acid through a syphon. By this means it is converted not only into a pleasant and refreshing tablewater, but can be used medicinally, especially for affections of the urinary passages, chronic catarrh of the stomach, and gall stones. In 1885 about 100,000 bottles were exported.

Climate: — Montreux belongs to the Insubrian lake-zone of the northern base of the Alps, and from years of official meteorological observation it appears that during the winter months the climate is as favourable as in Cis-Alpine Switzerland. The chief factors contributing to the mildness of the climate are: shelter from cold currents of air, free access for the sunshine, intense insolation, a porous chalk soil with quick radiation of heat, and the modifying influence of the lake.

The north, and north-east winds which prevail on the west-side of the Lake of Geneva lose more and more of their original force as they approach the Bay of Montreux, and fall to a feeble, scarcely perceptible breeze, which in some places subsides into a complete calm. The places on the bay are more or less protected from cold winds, according to their proximity to the hills at the back. On the other hand the north-west wind, which is not very cold and damp, and the warm, moist west and south-west winds — the rain-bringing winds — which do not blow for long together, but are felt most in spring and summer, have free access to the bay. The "Föhn", which generally blows in winter and spring, rarely appears here, is of short duration, and has very little force. After warm, sunny days there is regularly observed, at sundown, a local wind which is caused by the cool mountain air descending to the warm regions below. According to *Dufour's* observations, out of 1000 days one-fourth would be perfectly calm at Geneva, one-third at Morges, and four-fifths in the Bay of Montreux.

According to *Mr. Steiger*, the shortest solar day at the time of the winter solstice lasts, on an average, 5½ hours at Montreux; 6 hours at Clarens which catches the first rays of the morning

sun, and only 5 hours at Veytaux and Chillon which lie eastward. The sun sets at almost the same time — a few minutes after 3 p. m. — at all the villages on the bay, while in summer Veytaux and Chillon enjoy more evening sunshine than Clarens. "The eastern half of the bay is more sheltered, and therefore more free from wind, but it has less sunshine; in the north-west portion the converse is the case."

The effect of the sheet of water is to equalise the temperature, warming in winter, and in summer cooling even the lowest stratum of the atmosphere. Twenty-five years of official and private meteorological observation give the mean annual temperature of Montreux as 10,5° C.; for the three winter months. 2,4° C., which brings Montreux nearest to Lugano (2,9° C.); Arco (3,7°) and Venice (3,9° C.).

Mean temperatures for the Years 1864—1872 (according to Gsell-Fels):

Place	Height in m.	Jan.	Feb.	March	April	May	June	July
Vernex-Montreux .	835	0,82	3,87	5,04	10,62	15,54	17,83	19,97
Lugano	275	0,97	4,21	6,74	12,55	16,53	19,48	22,42
Bex	432	0,44	3,27	4,64	10,64	15,10	16,85	19,48
Gersau	460	0,64	3,36	4,42	10,37	15,28	17,09	19,49

Place	Aug.	Sept.	Oct.	Nov.	Dec.	Yearly average	Minimum	Maximum
Vernex-Montreux .	18,27	16,37	10,47	5,11	2,54	10,54	— 8,7	29,7
Lugano	20,49	18,08	11,46	6,57	3,53	11,92	— 7,0	33,1
Bex	17,31	15,66	9,43	4,16	0,73	9,74	—13,5	33,2
Gersau	17'56	16,07	10,01	4,73	1,84	10,07	—	—

The mid-day temperature, which is most important to consumptive invalids as determining their length of stay out of doors, is at Montreux at 1 p. m. as follows: Nov. 8,6° C.; December 5,3° C.; January 4,3° C.; February 6,7° C.; March 7,5° C. In the evening, but especially in the early morning, the thermometer sinks as low as 6° C., but very rarely as low as 10° C. Night frosts are frequent in March and April and are often very injurious to vegetation. As a rule there are some snow falls every winter, but they are always of short duration. The variations of temperature in winter, within 24 hrs. with an unclouded sky, amount, to 12—5° C., but the changes during the day rarely exceed 5° C. Similar oscillations prevail in summer, and the climate of Montreux thus has the characteristics of a coast place or an island.

With regard to the humidity of the atmosphere, Montreux belongs to the moderately moist zone, having a mean of 79,5. The average amount of atmospheric discharge is 1278 mm. (at Lugano 1535, at Bex 893, at Geneva 780); the average number of rainy days is 70; from the middle of September

to the end of April 39; the number of days with snow-fall is 14½. Thick fogs are of very rare occurrence in the upper portion of the Lake of Geneva; what are most seen are filmy mists, especially in December and January. Storms, often accompanied with hail, are pretty frequent in summer. The density of the air is in winter, on an average, 729 mm., and is subject to but slight variations.

Meteorolgical Table of Averages from 15 Years' observations.

Montreux	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May
Mean daily temperature . .	10,47	5,11	2,54	0,82	3,84	5,12	10,65	15,01
Temperature at 1 p. m. . .	14,05	9,13	5,22	4,81	6,78	8,25	15,60	18,80
Mean daily fluctuation . . .	5,58	3,79	5,91	4 78	5,30	5,44	7,00	6,29
Mean relative humidity . . .	81,58	81,0	82,9	81,8	78,9	78,8	73,5	72,4
Number of rainy days . . .	3	5	4	3	3	7	7	5
Number of days on which one can go out	31	30	25	26	24	24	27	29

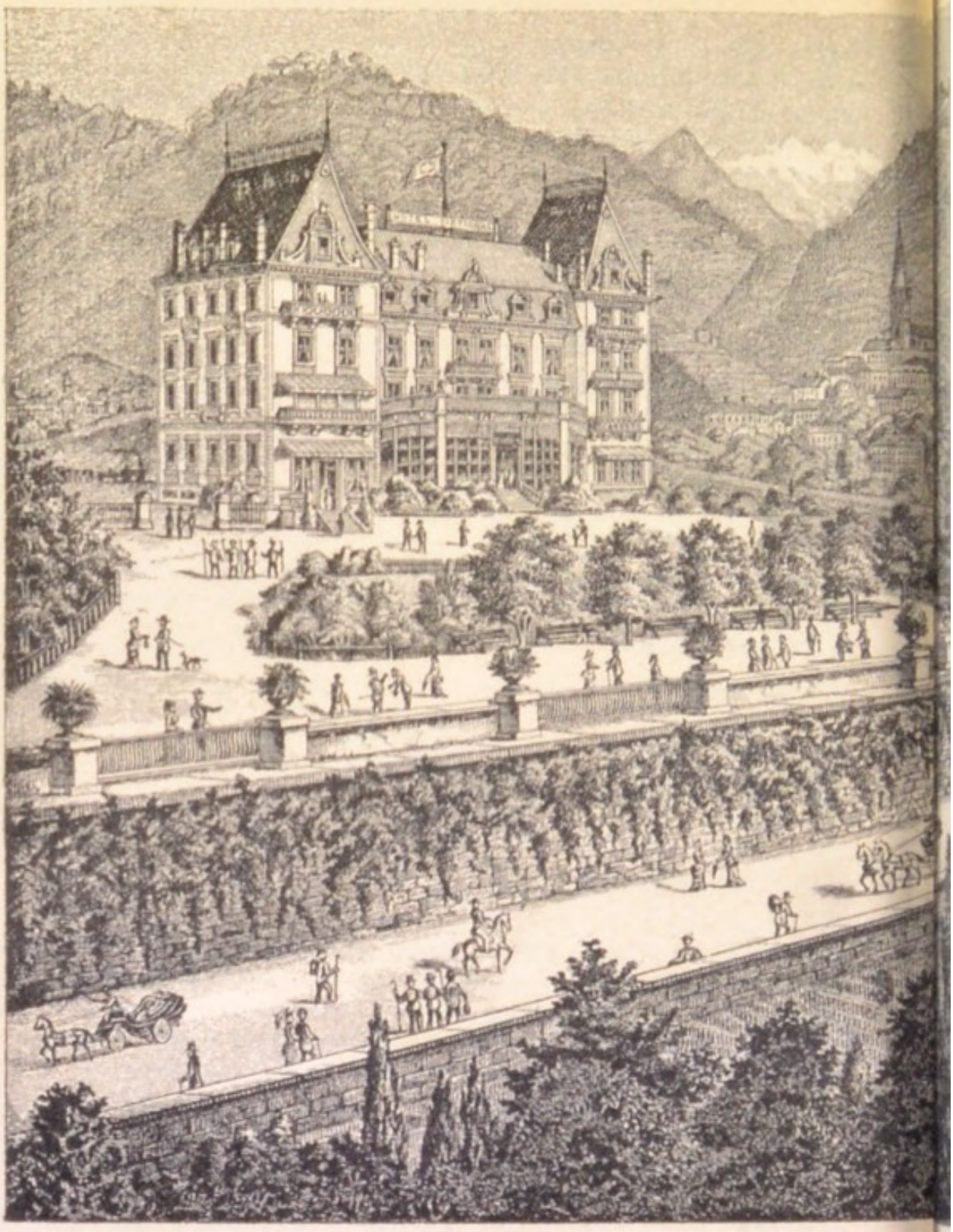
Table of Temperatures from observations taken during nine years by Dr. Carrard.

Month	7 a. m.	1 p. m.	9 p. m.	Month	7 a. m.	1 p. m.	9 p. m.
January . . .	0,1	4,3	1,1	July	17,7	23,6	18,9
February . . .	1,7	6,7	3,4	August	15,8	21,6	17,0
March	2,8	7,5	4,3	September . .	13,5	20,0	15,1
April	7,8	14,2	10,2	October . . .	8,3	13,8	9,6
May	13,6	19,0	14,6	November . .	3,7	8,6	5,0
June	16,0	21,6	17,0	December . . .	1,3	5,3	2,2
				Mean Temperature	8,5	13,8	9,9

The *fall of the year* is the height of the season at Montreux, the months of September, October, November, when the last of the tourists, the first of the winter visitors, and patients for the grape cure, all meet. The total number of visitors in this season is often 3000, but towards the end of October the numbers fall off, as Montreux is used by many as a place of passage on their way south or to the health resorts of high altitude.

The *winter season* lasts from the end of November to April, and there are, on an average, 12—1500 winter guests. December and January are quite wintry months, but on clear, calm days it is so warm at noon that invalids can sit an hour or more out of doors without risk.

The **most frequented season next to the autumn** is the **spring which begins** at the end of February and beginning of March when, under the shelter of the mountains and the quickening influence of the sun, Montreux unfolds its spring beauty. This paradise then becomes a place of refuge from the Mistral for winter guests from the Riviera, and for visitors from the high health resorts where the Föhn is sweeping away the snow.



Hotel National

treux Cable Railway Territet-Glion Castle of Chillon Dents du Midi

Hotel Beau-Rivage

Artist. Establishment: J. A. Preuss in Zürich.

Panorama Montreux, Lake of Geneva,

with the Hotels NATIONAL and BEAU-RIVAGE.

The *summer season* is a "dead season", not so much on account of the great heat as from the want of shady places and walks. But in the highest zone, on the heights of Glion and Les Avants, there are numbers of invalids and health seekers. Montreux is, therefore, at this season a much frequented tourist-centre.

It is recommended for: chronic catarrh of the breathing organs, especially dry catarrh of the bronchial organs accompanied with spasmodic asthma; acute bronchitis; chronic pleurisy after re-absorption of the exudations, chronic rheum.; catarrh of the throat and larynx, also when combined with disease of the lungs; tendency to phthisis, catarrh of the apices; emphysema in old, delicate people; scrofula, nervous complaints, women's diseases, weakness, mental strain, and for convalescents.

It is not so well suited for delicate, susceptible, very weakly persons, for advanced stages of consumption with hectic fever; for obstinate diarrhœa with consumption, or for advanced phthisis of the larynx, as the winter temperature is, on an average, lower in Montreux than in the health resorts of the Riviera.

The **grape cure** at Montreux lasts from the middle of September till the end of November. This cure is specially adapted for those suffering from chronic gastro-hepatic affections, catarrh of the intestines and haemorrhoids. For certain forms of consumption (bronchial pneumonia), judiciously applied, it is very serviceable.

Hotels, Pensions and Villas:

At **Clarens** in the western Quartier au Basset, the Clos du Lac, with an establishment for English boarders. Below the historically famous castle *des Crêtes*, the Square *Dubochet*, with 22 Villas, let at yearly rentals from 6000—8000 fr. each

Hotel and Pension Ketterer, on a hill, hidden among walnut and chestnut trees, splendidly situated in shady, park-like grounds. Has an excellent reputation. Warm baths.

On the lake *Dr. Lardy's Villa* and *Sanatorium* for convalescents and invalids.

Hotel and Pension Beau-Site, in a splendid and sheltered position, with large garden and glass verandah. Baths, vapour baths, douches.

Hotel and Pension des Crêtes, opposite the Clarens railway station, much visited by Germans. Good cuisine.

Hotel and Pension Châtelard, south of the railway station, in a beautiful, sunny situation, with a glass piazza looking south. Bath room.

Pension Verte-Rive, one of the oldest pensions, in a splendid situation above the road along the shore. Much frequented by Germans.

Pension Moser, in full view of the lake (most of the visitors are Germans).

Hotel and Pension Roth, at the steamboat bridge, in a splendid situation with a large garden. Very popular among Germans.

Pension Germann, built in the Oberland style, with a large garden.

Hotel Roy, a palatial building, in a beautiful and sheltered spot, with shady gardens and a terrace overlooking the lake. Baths. Cabins for lake bathing. Telephonic communication with doctors and chemists.

Pension Clarentzia, with a pretty garden. Simple but good. Most of the guests are Germans.

At **Vernex:**

Hotel and Pension du Cygne (Emery) one of the oldest establishments, in a splendid position on the lake. The hotel is five storeys high, with seven windows looking on to the lake; balconies in the centre and sides. A dépendance 3 storeys high is attached. There are altogether 80 comfortable bedrooms, 10 private salons and 5 reception rooms. Garden, shady terraces and verandahs.

Hotel and Pension Beau-Séjour au Lac, in a fine and very sheltered situation, with a dépendance. A shady garden with walks, a pavilion on the lake. The cuisine has the best reputation. Much frequented by Germans. Next to it is the excellent *bathing establishment, Monod-Giradet*, with a hydrotherapeutic apparatus.

Pension Beau-Lieu, on the lake, with a garden.

Pension Bon-Accueil, with a garden. Cheap.

Hotel and Pension Monney, a fine building on the lake, with numerous large and small balconies. Beautiful shady garden. *Cercle de Vernex* in the house. Gondolas and carriages.

Hotel and Pension Lorius, beautifully situated, with a large garden-Terrace with trees Close by is *Dr. Carrard's* house.

Pension Pilvet, a simple, homely building, with a verandah.

Villa Richelieu, handsomely and luxuriously appointed within. Fine balconies, a terrace looking south and a verandah to the east. It has several times been the residence of princely families.

Hotel and Pension Suisse with a shady terrace and splendid view.

Pension Bellevue and *Villa Bello*, with a lovely shady garden and pavilion.

Hotel de la Poste, a modest inn, suitable for others than invalids.

At **Montreux:**

Hotel de la Gare, an inn for commercial travellers.

Pension Ramseyer, quiet but well managed.

Above the railway station at Vernex is the **pump room** of the mineral spring, in Swiss Châlet style, with beautiful wood carving: near by is a large terrace planted with trees.

Hotel Victoria, a small, elegant establishment, with a capital pension.

Pension Visinand à Sales, a Bernese house, with a beautiful view and a terraced garden.

Hotel du Pont, an inn for travellers.

Pension Vautier, in a central and very sheltered situation, with balconies and a handsome verandah and a garden looking south. An excellently managed establishment much patronised by Germans.

Hotel de l'Union, a favourite house for commercial travellers.

Hotel and Pension Bel-Air, with garden, terrace, and balconies. Baths and douches.

Pension Biensis, near the church, with a terrace.

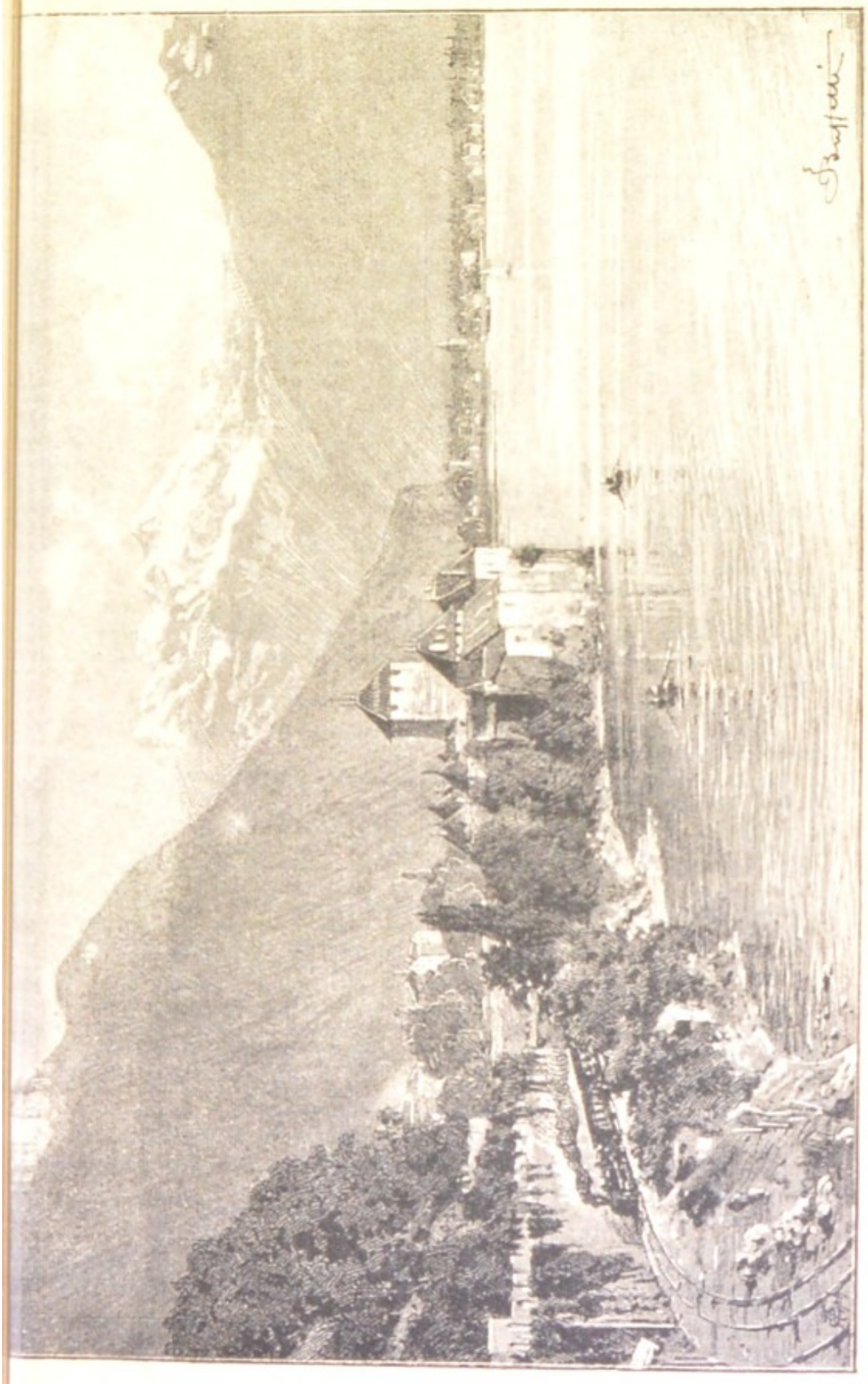
Pension Moser, near the church. From this and the last-named establishment there is a splendid view over the lake and mountains.

Pension Depallens, with a terrace and charming view.

Hotel-Café-Restaurant Tonhalle, a café visited especially by Germans, with a concert room, billards, and newspapers.

In the Quartier **Bon-Port**, on the lake, are;

Hotel National *(Faucherre-Vautier)*, first class boarding house, a favourite resort for the best families. It is a palatial building, with excellent appointments, splendidly placed, at a slight elevation, on the left side of the road along the lake, in an open but not very exposed situation. The 5 storeyed centre building has on each storey 5 windows facing the lake with large verandahs and balconies; the enormous 4 storeyed side-wings have each 2 windows facing the lake and 5 windows at the side with numerous balconies and verandahs. The whole establishment contains 60 rooms, comfor-



Castle of Chillon on the lake of Geneva.

tably furnished apartments (70 beds) together with private suites for families if desired; large cheerful salons, conversation, music, and reading rooms, ladies' drawing rooms with smoking and billiard rooms, a library, all the principal newspapers and various amusements. Warm baths in the house. From the pleasant terrace planted with trees and joined to the house by a glass pavilion is a splendid view of the lake and mountains. Telephone and telegraph offices. Pension with room, according to the storey and situation, 6—10 fr. Children 4—6 fr.; servants 5 fr.; service ½ fr. per day. Breakfast at any hour desired in the morning; dejeuner à la fourchette at 2. 30; dinner (table d'hôte, at 6. Lowered prices in the height of summer and in winter. Grape and whey cure. Hotel omnibus runs regularly to the railway station and steamer.

Hotel Beau Rivage *(Spikner)* a boarding house and first class hotel, likewise most beautifully situated on the lake, below the parish church, the first hotel built in this quarter, of old and good reputation; it is the nucleus, as it were, of the flourishing hotel business in Montreux. The hotel consists of 3 well appointed buildings, with 4 and 5 storeys, 70 elegant, luxuriously furnished rooms (70 beds) and 8 balconies with fine views of the lake. Private apartments for families if desired. Fine spacious dining room, conversation and music rooms, ladies' drawing room, smoking and billiard room, reading room and library with German, French and English papers. Verandahs on the south front facing the lake, 2 very pretty gardens affording ample shade, close to the lake, with terraces. Warm baths in the house; lake baths with no extra charge; carriages and gondolas. Amusements of every kind. Hotel omnibus runs regularly to Montreux-Vernex station and steam boat landing. The hotel is much frequented by and is a great favourite with aristocratic English families. Telephone and telegraph office at the Bureau. Pension with room 6—10 fr. For the upper floors much cheaper prices. Servants' board 5 fr. Grape and whey cure.

Pension Bon Port (Dr. Lussy) in the most sheltered corner of Montreux close to the lake; sanatorium for convalescents and invalids. The proprietor acts also as directing physician. Good garden; warm and cold baths in the house.

Pension à l'Abri. Young Ladies' Establishment.

Hotel and Pension Breuer, with 3 dépendances; garden down to the lake; winter garden; hydraulic lift.

At **Territet,** which is a landing place for steamers and a station for the *cable railway Territet-Glion:*

Hotel des Alpes (Chessex) one of the finest hotels in a very sheltered situation on the lake. The main building is 5 storeyed, with 14 windows facing the lake. On the west side is a 3 storeyed building adjoining, on the east a 4 storeyed building with 5 windows facing the lake, and at a little distance 3 chalets, Villa Rose Mont, Villa Chessex, Villa Clos Bénit. These 5 buildings contain together 130 bedrooms and 20 private salons with several balconies. On the ground floor a verandah covered with glass and warmed, billiard, smoking and reading rooms, ball and assembly room; on the first floor a luxurious dining room with Corinthian columns, seating 250 persons and a conversation room. On the corridor a stalactite spring; an asphalted terrace, large well-stocked garden and pleasure grounds; pavilion, etc. Electric light; concerts; gondolas and carriages; stores and drugs; postal and telegraph office; lake bathing establishment; warm baths on every floor and in the dépendance. Table d'hote at 2. 30 and 6. Pension with room 7—10 fr. Above Territet is the Pension Montfleuri.

Hotel du Lac, a small pension with garden down to the lake.

Hotel and Pension d'Angleterre, a pretty building a little above the lake in Renaissance style, with shady, terraced gardens.

Pension Monnoud, with a pretty garden and fine view.

At **Veytaux:**

Hotel and Pension Masson, up in the village, in a very sheltered spot. Good dépendance with balconies in villa style. Verandahs and gardens with fine trees.

Pension Ruchti; Villa Rosa, school for Young Ladies. — *Pensionnat Arthur,* school for boys.

Hotel Bonivard, 30 min. above the lake, in a very sheltered spot with a fine view. Large verandah and garden.

Hotel and Pension Chillon, 1 min. west of the Castle of Chillon, that old, gloomy building nearly surrounded by water, with its still gloomier history. In front of the hotel facing the lake is a long raised terrace with a fine view over the south-west. Pretty, pleasant garden.

Going towards **Villeneuve** are:

Hotel Byron, a showy building surrounded by a terrace on which is a fountain. It is in a quiet sheltered spot, in the midst of a large shady park. Grape cure. Milk cure. Open all the year round.

At **Chernex** ½ hr. above Vernex:

Pension Dufour, 580 m. above the sea, with splendid, pure, mountain air.

At **Brent** 1½ hr. north west of Chernex:

Pension du Scex-que-Pliaux, on a vine hill, sheltered from the north wind.

At **Chailly**, above Clarens:

Pension Mury, with pretty shady grounds, and on the south a small wood. Very quiet.

Close by is *Pension Coleine* in a fine situation.

Physicians at Clarens: *Drs. Masson, Miniat, Lardy;* at Montreux-Vernex: *Drs. Carrard* (father and son), *Bertholet, Chatelanat, Monnier, Lussy, Reichenbach.*

Chemists: at Montreux, *Rapin;* at Vernex, *Schmidt;* at Clarens, *Bührer*. **Dentists:** at Vernex, *Martinez;* at Ronvenaz, *Guder.*

In the parterre of the *Hotel Monney* at Vernex is the excellent bookseller's, *Schlesinger* (formerly Benda) which has a reading room; library well supplied with English, French, and German books, and an assortment also of Italian and Russian literature. Ready information given to visitors.

At Clarens: Bookseller *C. Meyer*, also a well supplied shop. The *shops* and bazaars are well-stocked. 6 banks and *exchange bureaux.*

The walks along the bay have lately been vastly improved and provided with numerous comfortable seats by the "Société d'intereset Publique". The favourite one will be the road which runs for 3 miles along the lake (see above). Branching off from this is quite a net work of smaller roads and paths, some of them running parallel, others up the valley, and traversing villages, vineyards, meadows and woods. Most to be recommended are the roads from Clarens to Chailly, Brent, Chernex, Sonzier, and over the Pont de Pierre to Glion; also the road from Unter-Vernex or the churchyard of Territet to Kirchmontreux and Glion; along the road from the Place du College to Belmont; from the churchjard of Clarens to the village, and the footpath from Kirchmontreux to the Gorge of Chaudron with its three waterfalls. More distant excursions to the Rocher de Naye (2,044 m.), and by way of Les Avants or Glion and Mont du Can in 5—6 hours. In 4½ hours to the top of the Dent de Jaman (1879 m.) also via Les Avants or Glion. The ascent of the Cap de Moine (1936 m.) is difficult and scarcely to be accomplished in a day. In two hours to Mont Cubli, with a pretty pavilion and splendid view (the ruins of the Burgundian hunting tower.)

Glion, 687—724 m. above the sea, milk and grape cure. Season March 1 till November 1.

Route: — From the steamboat and railway station of Territet, by cable railway in 6 minutes, or by the beautiful road from the railway station of Vernex in ¾ hour.

Glion stands on a mountain spur, which forms a terrace of Mont Can; it is a hamlet of some twenty poor houses nestling against the mountain side. From its Rigi-like terrace (Rigi-Vaudois) is a magnificent view surpassing in extent all others on the bay. Glion is much frequented by Germans and English as a mountain

resort in spring, summer and autumn, on account of its lofty, beautiful and sheltered situation. Being completely exempted from cold, raw north and east winds it enjoys a comparatively mild winter, and is adapted as a winter cure for sufferers from chest complaints, because of its light, dry, and pure air, and equable temperature. In the height of summer Glion is a most popular resort for visitors from Montreux.

Hotel and Pension Victoria, *(Mss. Müller)* of Interlaken) a new four-storeyed building with seven windows facing the lake, and three windows at the side. Fine views over the Lake of Geneva and the mountains. In the main building are two reading-rooms, billiard and smoking-room, a large dining-hall, large balcony, two verandahs and fifty pretty apartments (80 beds); bath-room with douches. "In front of the grand façade, which faces the upper-end of the lake and the Dent du Midi, a grove of plane trees runs along the entire line of frontage, and one steps straight out of the billiard-room into it. Oleanders and pomegranates blossom luxuriantly against the walls of the house. A second alley of planes, still thicker and longer, with a good open prospect, like that from the Rigi-terrace, stretches above the pleasure-grounds." Pension, according to the floor, 7—10 frs. One of the most frequented houses in the neighbourhood.

Other Hotels: *Hotel and Pension Righi Vaudois, Hotel du Midi, De Glion, Pension Bellevue.*

Villeneuve, an ancient little town at the eastern end of the Lake of Geneva, with 1800 inhabitants, and interesting both historically and pre-historically. In the middle Ages it was the chief commercial centre between Italy, England and France. Owing to its low-lying situation, the works carried out in the bed of the Rhone, and the lowering of the lake, malarial fever at times occurs. Near the little town, in an open situation, and visible from afar, stands the *Hotel Byron.* (Su p. 133).

Aigle, 420 m. above the sea, a grape cure. Aigle lies at the entrance of the valley of Ormont, and is a railway station on the Lausanne-St. Maurice line. The place is an old Roman station, and the buildings are of black marble. Yvorne is near, with its famous vineyards. On account of the excellence of its grapes, Aigle is much frequented as a grape cure in autumn.

Hotels: *Hotel and Pension Beausite; Victoria; Monséjour; Du Nord; Du Midi.*

Aigle les Bains, 540 m. above the sea, a hydrotherapentic establishment. Season, April 15 till October 31.

The large Kurhaus is 120 m. above the railway station, it stands in a fine park, with numerous walks. Large fir and beech woods in the neighbourhood.

The climate is mild, although the air is always agitated by the wind in the valley. The mineral spring, excellently adapted for hydrotherapeutic processes, contains, according to Professor *Bischoff's* analysis, a preponderance of carbonate and sulphate of lime, carbonate of magnesia, bicarbonate of soda and potash, chloride of sodium, silica, and a little free carbonic acid. It is taken internally for catarrh of the stomach and affections of the bladder and liver. Electricity, in the form of electric baths and massage, is turned to account as a secon-

dary remedy, in nervous complaints; mother-water, brought from Bex, is used for scrofula, spinal complaints, rheumatism, and women's diseases. — Physician: *Dr. Mehlem.*

Walks and Excursions: Beautiful walks in the large park, where are seats, waterfalls, a Trocadero, and Belvedere. East of the town are those charming points for a view, the Clavellaire, Signal, and Plantour (1/2 hour) To Yvorne in 1/2 hour; La Tour de St. Triphon, 3/4 hour; Salins, 3/4 hour; Chalet de Panex, 1 hour; to the Waterfall of Pissevache and the Gorges du Trient in Canton Wallis.

Chesières, 1220 m. above the sea, resorted to for the air. Season, June 1 till September 30.

It lies south-east of Aigle, whence during the summer a diligence plies daily in 3 1/2 hours. Situated at the south-eastern base of the Plan Saya and Les Ecovets, the place is somewhat exposed to the east-winds. The mountain air is stimulating, strengthening, and tone-giving, and is adapted for those who are not very susceptible and have some power of resistance. The magnificent views, and the numerous shady walks in flowery meadows and through fine woods, render Chesnières a favourite summer resort. — *Hotel et Pension du Chamossaire.*

Villars, 1275 m. above the sea, an air, milk and whey cure. Season, June 1 till September 30.

Villars lies about a mile to the east of Chesnières; it is quite protected from the cold northerly and easterly winds, and only exposed to the south-west. It is well adapted for delicate, susceptible constitutions. — Physician: *Dr Chat-lenaut.*

Hotel and Pension du Grand Muveran; Pension Bellevue; Du Chalet de Villars.

Le Sepey, 1129 m., above the sea, an air cure, in the Lower Ormont Valley, can be reached by diligence from Aigle in 2 1/4 hours. Its position — completely sheltered from the north wind, and exposed only to the east —, together with its vegetation and natural beauties, have made the place a favourite summer resort, especially for those of rather delicate constitution.

Hotel and Pension du Cerf; Des Alpes; Pension du Mont d'or.

Leysin, 1264 m. above the sea, an air cure, on a high plateau, at the junction of the Ormont and Rhone Valleys, can be reached by a good carriage road in 1 1/2 hours in a south-westerly direction from Sepey. Its rather severe and stimulating climate is adapted, according to *Dr. Bezencenet.* especially for children with scrofula, rickets or stet or spinal disease.

La Comballaz, 1364 m. above the sea, a summer resort, situated at the eastern foot of a hill, on the post road running northwards from Sepey to Chateau d'Oex. Below the Kurhaus is a weak sulphur spring. The air is very exciting and stimulating, and is best adapted for convalescents, who have a good deal of resisting power, and for lymphatic, scrofulous children. *Hotel et Pension de la Couronne.*

Chateau d'Oex, 990 m. above the sea, is an air cure Season May 1 till October 15.

Route: By diligence from Aigle station in 6½ hours; from Bulle station in 4 hours; from Saanen in 1¼ hours.

This beautiful Alpine village lies in a broad, pleasant valley among high mountains.

The climate is slightly irritating, as after mid-day the heat is intense, while morning and evening local currents cause a considerable fall in the temperature. The place is, therefore, more adapted during convalescence after severe illness where there is not excessive delicacy, for chlorosis, poverty of blood, hypochondria, and hysteria, than for irritation of the respiratory mucous membrane. Physicians: *Drs Favrod-Coune* and *C ne.*

Hotel and Pension Berthod; Hotel z. Bären; De Ville; Pension Villa d'Oex; De la Cheneau; Du Midi; Bricod; Rosat; Morier-Rosat; Martin; Aeschbacher; Mottier; Chalet Zulauf.

Rossinières, 950 m. above the sea, an air cure. ¾ hour west of Chateau d'Oex, is picturesquely situated on a pleasant slope of the Mont du Cray, high above the right bank of the Saane. The climate is similar to that of Chateau d'Oex. As regards loftiness of situation and scenery, both places are not inaptly described by *Meyer-Ahrens* as the Appenzell of Waadt.

Hotel and Pension du Grand Chalet; Pension Dubuis.

Rougemont, 993 m. above the sea, an air cure 1½ hours east of Chateau d'Oex, on the road to Saanen, at the southern base of the Rodomont, is more adapted, according to *Dr. Bezencenet*, for consumptive patients than are the two last named places. All three are very popular, and much frequented in summer. — *Pens. Collier.*

Saanen, 1023 m. above the sea, an air cure; it is well known for its cheese, and is a pleasant summer resort. Sitten is reached by a 12 hours journey south over the Sanetsch-Pass.

Vers l'Eglise, 1132 m. above the sea, an air cure, is reached in 2½ hours from *Le Sépey*, by a beautiful mountain road, winding along the right bank of the Grand Eau. It lies on the opposite bank in a sheltered, secluded nook. The climate is mild.

Hotels: *Pension des Hirondelles; Hotel and Pension Monséjour; Bär; Pension Bustet.*

Plan des Iles, 1168 m. above the sea, lies in a broad mountain hollow, covered with pasture land and dotted with houses. The valley is enclosed crescent-wise on the south by the ice-crowned chain of the Diablerets and Oldenhorn. *Lombard* says of the climate: — "The ne..rness of the glaciers and the high altitude of this little valley render the air bracing. The heat is often very great in the middle of the day but the evenings are fresh. There are numerous paths through the neighbouring woods, and one has not always to mount or to descend in order to explore. Ormonddessus is especially recommended to those needing a tonic and who can bear an exciting air. Delicate invalids are often obliged to leave, in consequence of sleeplessness and palpitations."

Hotel des Diablerets; Hotel and Pension Chamoix; Pension du Moulin; Pension Ansermet.

Excursions: Westward, in 1½ hours to the ruins of Aigremont; to the Plateau of Voettes and Les Mosses (1439 m.); north-eastward, in 1½ hrs. to Chalets d'Isenaux, at the foot of the Palette, and to the Lakes of Rettau and Arnon. In 3 hours by the Croix d'Arpilles to Favennax and Gryon. In 3 hours over the Col du Pillon to Châtelet and the Saanen Valley; in 3 hours over the Forclas to the Lake of Bretaye.

Bex.

435—465 m. above the sea, a brine bad, cold water, air and grape cure. Season, April 1 till October 30.

Route: Bex is a station on the Simplon railway: 3½ hours from Brigue; 1 hour from Montreux, 2 hours from Lausanne, and 5 hours from Geneva.

Bex is surrounded by picturesque and imposing peaks, and lies at the north-west base of the Dent de Morcles, in that broadening out of the Rhone Valley, which, beginning at the Gorge of St. Maurice with a breadth of 4 km., gradually widens as it approaches the Lake of Geneva. The beautiful old village of Bex has about 3000 inhabitants; it is watered by the Avençon, which descends in a cascade from the Paneyrossa glacier and generates refreshing currents which in the height of summer cool the heated air. The steep hill of Le Montex on the north protects the village from cold, bleak winds, and clusters of fine chestnut trees grow on the slope which gently inclines towards the south. From this fertile plain rises the picturesque and thickly-wooded hill — the Chêtre — on which are the ruins of the ancient fortress of Druins, behind which are luxuriant groves of chestnut. The soil of the valley consists partly of a moraine deposit, partly of gypsum, and is very porous.

The mean temperature of the air at Bex as compared with Montreux is as follows:

	Bex.	Montreux.	Difference.
Annual Mean	9,8° C.	10,7° C.	0,9° C.
January	0,2	1,4	1,2
February	3,4	3,9	0,5
March	4,4	4,9	0,5
April	10,7	10,7	0,0
May	15,4	15,7	0,3
June	17,5	17,9	0,4
July	19,4	20,1	0,7
August	17,2	18,3	1,1
September	15,5	16,4	0,9
October	9,6	10,6	1,0
November	4,4	5,6	1,2
December	1,1	2,9	1,8

There is a wide difference at Bex between the mean minima and maxima temperatures, and the daily variations are considerably greater than at Montreux. The average rainfall during the year is 893 mm., with 108 wet days, while at Montreux it is 128 mm. with 136 rainy days. The mean relative humidity is 79 % at Bex and 77 % at Montreux. Bex is quite protected from the north wind. The north-east wind, popularly called the "Joran" or the "Bis Noir", is rarely felt. The south and south-west winds, however, blow frequently. The Föhn is present with great force in spring and autumn; in the spring it causes the snow to melt rapidly on the mountains and pushes on vegetation with wonderful quickness; in autumn it ripens the grapes and chestnuts. Fog is rare. We

have, therefore, at Bex and its environs a very mild, and not at all damp climate, which makes it in spring and autumn a very good intermediate place for consumptive invalids before proceeding to the high Alpine stations.

There are medicinal springs at Bex, one a tolerably strong chloride of sodium spring, and two sulphur springs; the chemical analysis of the first according to Professor *Pyrame* Morin of Geneva gives the following result:

In 1000 gr. of mother-water there are:

Chloride of magnesia	142,80
„ „ calcium	40,39
„ „ potassium	38,62
„ „ sodium	33,92
Bromide of magnesium	0,65
Iodide of magnesia	0,08
Sulphate of soda	35,49
Silica	0,15
Alumina	0,39
Total:	292,49

According to Prof. Bischoff of Lausanne, there are in 1000 gr. of brine:

Chloride of sodium	156,668
„ „ potassium	2,654
„ „ magnesium	1,077
Sulphate of lime	6,759
„ „ strontia	0,019
„ „ magnesia	1,018
Carbonate of magnesia	0,505
Silica	0,616
Phosphate of iron and alum	0,039
Chloride of lithia	0,012
Jodide and bromide of magnesium	0,014
Ammonia and organic substances	1,475
Total:	170,256

The mother-water is not only used for bathing but diluted with water and carbonic acid for drinking also.

The sulphur spring, according to Prof. *Bischoff* of Lausanne the following fixed solids in 1000 gr.:

Chloride of sodium	2,334
„ „ calcium	0,038
Sulphate of lime	0,153
„ „ strontia	0,014
Carbonate of lime	0,026
„ „ magnesia	0,183
Calcium sulphide	0,047
Hyposulphite of calcium	0,014
Organic substances	0,150
Lithia, phosphoric acids silica	0,036

Free sulphuretted hydrogen gas with 0° and 760 mm. air pressure 14,5 cm^3.

The water for the establishment comes partly from the glacier stream of Avençon which has a temperature of from 9 to 10° C., and partly from a pure spring flowing from the Plan de Frenières, the temperature of which is 7,50° C.

It is indicated in: 1 Lymphatic diseases, and scrofulous affections of the mucous membrane and joints.

2. Chronic rheumatism of the muscles and joints.

3. Uterine and peri-uterine diseases of an inflammatory character, especially when they have become chronic, accompanied by old effluxions.

4. Poverty of blood, chlorosis and general weakness; albuminurie; nervousness.

5. Convalescence after chronic pleurisy and asthma.

6. Tendency to phthisis with inherited disposition, and in the first stages as a transition place especially in spring and autumn.

Grand Hotel et Bains des Salines *(Kussler,* Manager) a model joint stock establishment. It stands on a terrace of natural formation in the midst of a noble park about 60 m. above and 1/4 hour distant from the village. The main building, 4 storeys high, is in what is called the Swiss style with numerous balconies; a large 3 storeyed wing adjoins; there are thus 13 windows looking west, and 15 south. On the ground floor are 4 salons, a dining room and verandah, a billiard room in the wing, and a long glass enclosed corridor. The centre and wing contain 100 comfortable bed rooms most of them with stoves, and in the 4 storeyed châlet there are 70 rooms at from 4—8 fr., according to position. Pension (3 meals) 6 fr.; with room 7—12 fr. Children under 10, 4 fr.; servants, 4 fr. The hotel is open from March 1 to Nov. 1 Post, telegraph and telephone offices in the house. Music six times a week. Omnibus, carriages, horses.

The bath house, which is connected with the wing by a covered corridor, contains on the first floor 22 bath rooms, all heated and an inhalation room. On the ground floor are the apparatus for hydrotherapy and the sulphur baths; douches with massage performed by experienced attendants; special douches; electro-therapy. Prices for the baths: salt bath 1 1/2 fr.; sulphur bath 1 1/2 fr.; mother-water 15 cts. a litre; douches 1 fr., with massage 2 1/2 fr.; swimming baths 1 fr.; ordinary baths 1 fr.

Physician: *Dr. Exchaquet.*

Other hotels: *Grand Hotel des Bains,* an exquisite first class Hotel; *Hotel de l'Union; Hotel and Pension Crochet.*

Walks and Excursions: Many shady and pretty walks among the picturesque hills around. In 1/4 hr. to Bornnit with a splendid mountain panorama; in 1/2 hr. along the Avençon to the Pont de Massonger; in 3/4 hr. to the Tour des Duins, a hill 18 m. above the Rhone, crowned with a beautiful chestnut grove; in 1/2 hr. to Bévieux, the seat of the Salines administration, whence a shady path leads in 3/4 hr. along the river bank to Fortana Sola and along the Gryon road to Chêne. In a southerly direction in 3/4 hr. over the Pré-he-noz to the Boët, with a splendid view of the Dent du Midi, St. Maurice and the surrounding mountains; in 3/4 hr. to the Montet with a signal and the ruins of an old tower, and giving a charming view of the valley and the Lake of Geneva. In 3/4 hr. westward passing Bévieux to the Blocs Erratiques, Pierra Bessay and the Bloc Monstre on which is engraved the name of the geologist Charpentier.

Gryon, a summer resort 1130 m. above the sea, is a fine large village on the southern slope of Les Dareys (1243 m.) and is completely protected from the north wind. The air is fresh, pure, and particularly dry, the temperature agreeable and comparatively mild, very refreshing and strengthening. Gryon is 3hrs by diligence from Bex station.

Hotels: *Pension Saussaz; Pension Aulet; Hotel and Pension Morel.*

Frenières, 868 m. above the sea, a summer resort, is a little village on both sides of the southern stream of the Avençon, opposite Gryon at the north western base of the Dent Rouge (2310 m.). This favourite Alpine resort is 1 1/2 hrs. by diligence from Bex. — *Pension Giraud.*

Les plans de Frenières, 1120 m. above the sea, a summer sojourn about 1 hr. above the little village of Frenierè, on the right bank of the above mentioned stream. It is quite surrounded by steep and wooded heights. The climate is rather

keener than that of Frenières, and therefore more stimulating and strengthening.

Hotels: *Pension Bernard; Merletaz.* On the left bank *Châlet Bergeron.*

Lavay, 433 m. above the sea, a sulphurous chloride of sodium spring. Season, May 15 to Sept. 30.

This spa lies on the right bank of the Rhone, between the river and the western foot of the Dent de Morcles, ½ hr. from the railway station of St. Maurice. The scenery here affords the most striking contrasts; on the one side the gentle, fertile plain with green meadows, orchards, and chestnut groves, on the other side, steep mountains piercing the clouds. The climate may by described as moist, warm and healthy. The air is kept pure by the north and south winds constantly blowing through the valley. As the reflection from the lofty cliffs often renders the atmosphere very sultry in summer, the late spring and early autumn are the pleasantest seasons.

The chemical analysis of the spring gave, according to Baup, the following to every 1000 gr.:

Chloride of potassium	0,0034
„ „ sodium	0,3633
„ „ lithia	0,0056
„ „ calcium	0,0015
„ „ magnesium	0,0045
Sulphate of soda	0,7033
„ „ magnesia	0,0068
„ „ lime	0,0907
„ „ strontia	0,0023
Carbonate of lime	0,0730
„ „ magnesia	0,0018
Silica	0,0566
Fixed solids	1,3128
Sulphuretted hydrogen gas	3,51 cm³.
Carbonic acid	4,34 „
Nitrogen	27,80 „

Specific gravity 1,00114. Temperature of the spring 45° C., of the baths 36,3° C.

The thermal water is used for drinking and bathing, either pure or mixed with mother-water from Bex. The bathing apparatus is very good, and there are all the newest appliances for pulverisation, inhalation, hydrotherapy and massage. Grape cure.

It is indicated in: c I Chronic rheumatism of the muscles and joints.

2. Skin diseases, especially for pustulous cutaneous eruptions.

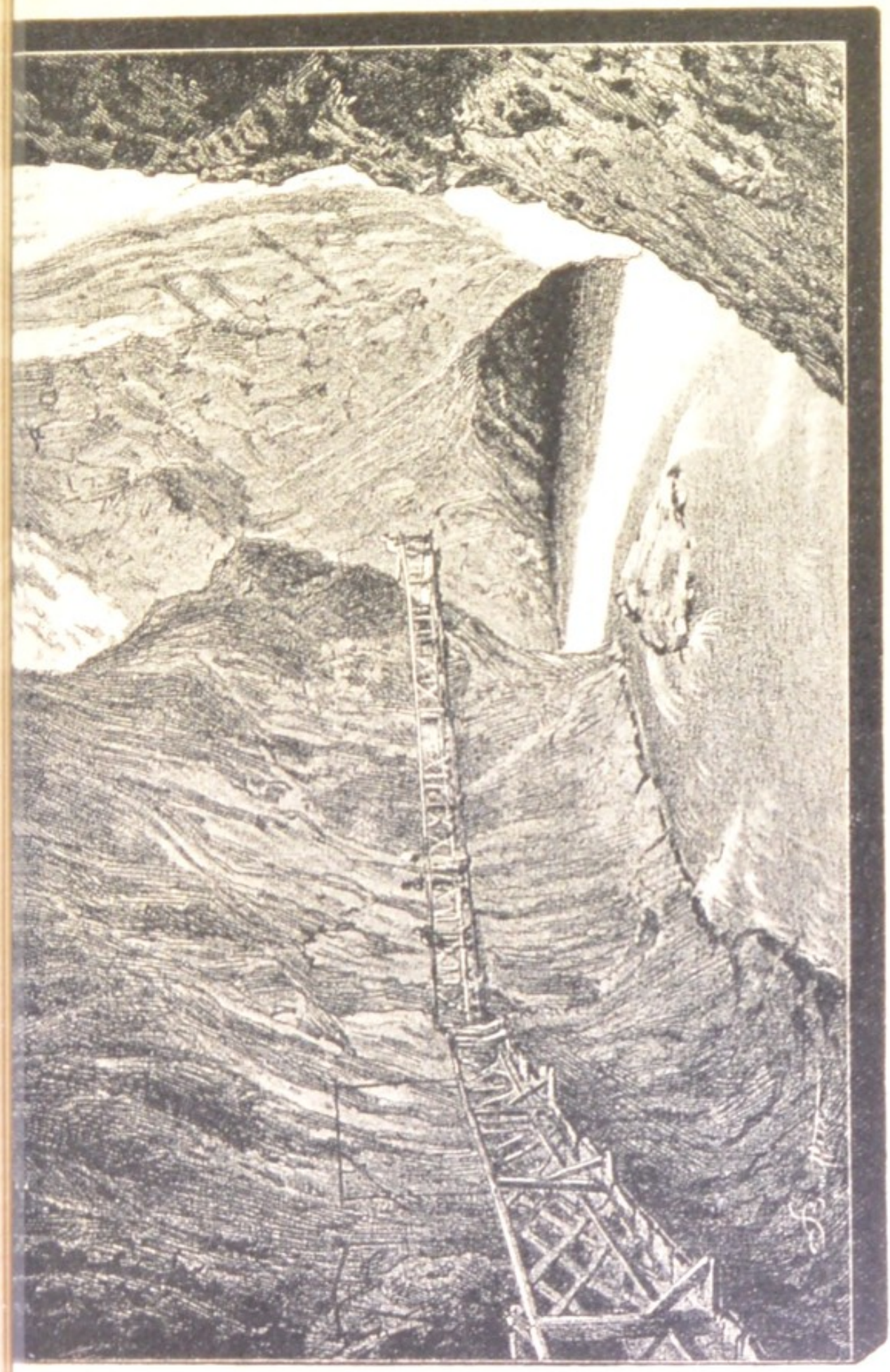
3. Scrofulous affections (lymphatic glands, joint and bone diseases).

4. Weakness of the digestive organs.

5. Catarrhal affections of the urinary and sexual organs.

Physician: *Dr. Suchard.*

Walks and Excursions: In 10 min. to the waterfall of Eslex; in 25 min. to the very picturesque Eslex; 25 min. west over the new bridge to St. Maurice; along the left bank of the Rhone to the woods of Bois Noir;



The Trient Cavity (Gorges des Trients) in the Rhone Valley.

to Verossaz; along the very romantic Val d'Illiez; in 2½ hrs. to Morcles (1161 m.); in 2 hrs. to the *Hotel and Pension Perrochon* on the Dailly heights, with a fine wood near. By carriage to Bex, Aigle, Monthey, St. Triphon, Cascade de Pissevache, Gorges du Trient. Vernayax, with a wooden gallery, like that at the gorge of Pfäffers, along the rock and across the rushing Trient.

Morgins, 1411 m. above the sea, air cure, with an iron spring impregnated with gypsum. Season from June 1st to the end of September.

The Bad lies in a beautiful little side valley of the Val d'Illiez, branching off from the Morgin Pass to the Val d'Abondance. It is reached in summer by the diligence from Bex via Monthey in 4 hrs. The valley is open from west to east, but is protected by the surrounding mountains from the north and west winds. There are splendid fir woods in the vicinity of the Bad. The climate is comparatively mild, and the variations of temperature are inconsiderable. The chief constituents of the mineral spring are sulphate of lime, carbonate of magnesia, carbonate of ferrous oxide, sulphate of Magnesia, chloride of sodium. It is used for drinking and bathing to cure poverty of blood, chlorosis, and nervous affections where there is not excessive weakness. The waters, the baths and the pure mountain air are very good for scrofulous children, and where there is a tendency to phthisis. *Cure establishment, Grand Hotel.* Physician: *Dr. Ecoeur.*

Champéry, 1049 m. above the sea, an air cure in the Val d'Illiez, 3 hrs by diligence from Monthey (a railway station). The climate is Alpine and tone-giving, but very mild.

Hotels: *Hotel de la Dent du Midi; de la Croix Fédérale.*

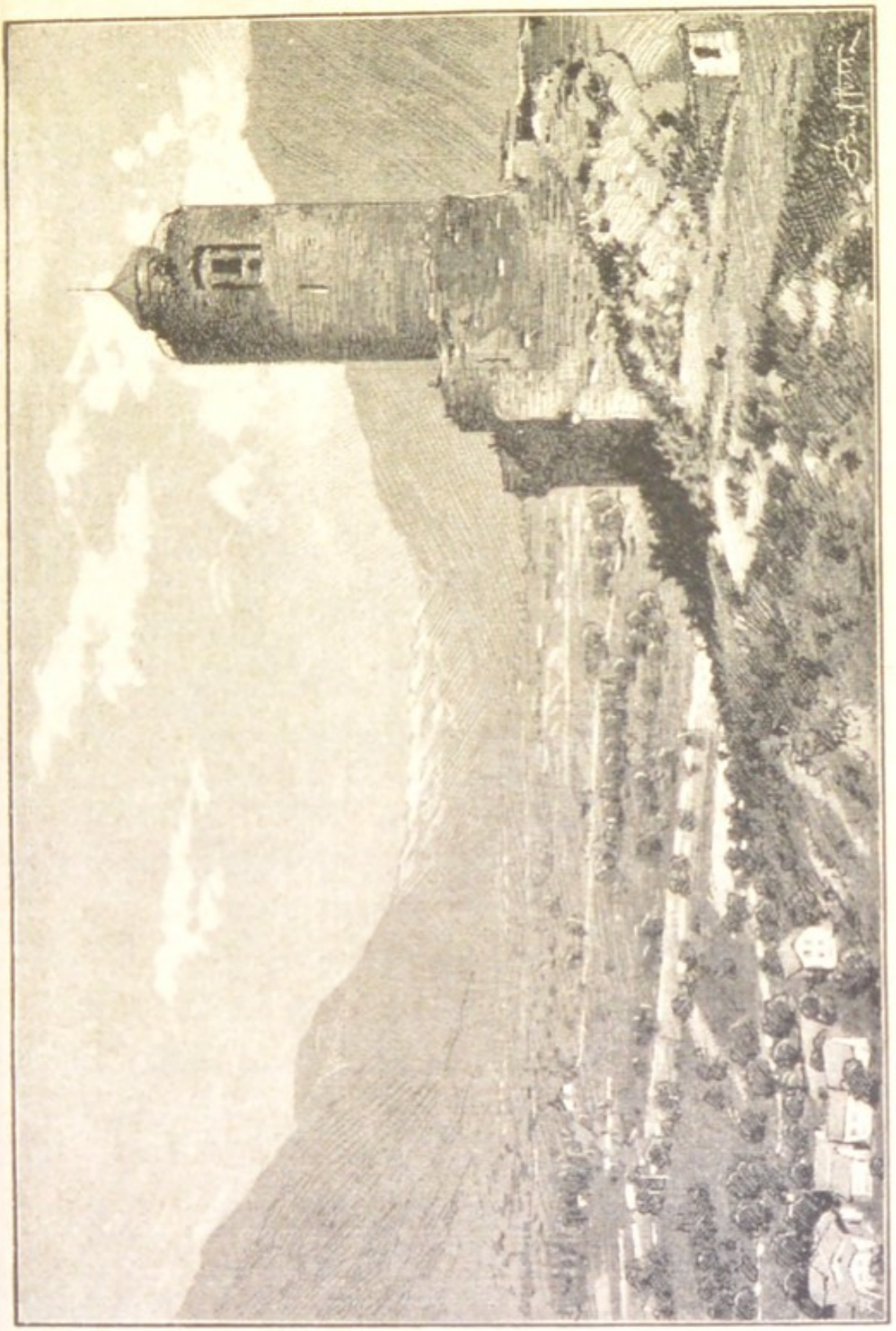
St. Maurice, 409 m. above the sea, an old Roman town with about 1700 inhabitants. It lies at the point where the Rhone is so hemmed in by the Dent de Morcles on the right, and the Dent du Midi on the left that the furious stream can hardly cut its way through. The road — to make which the rock was blasted — leads over a bridge whose slender arch has a span of 2275 m. It is a very romantic spot for tourists.

Hotels: *Hotel-Pension Grisogno; Hotel des Alpes; de la Dent du Midi; Ecu du Valais.* — A capital restaurant at the station.

Salvan, 925 m. above the sea, a summer stopping place, reached in an hour by a fairly good road from the station of Vernayaz. A charming, romantically situated little mountain village.

Hotels: *Hotel and Pension Gorges du Trièges; de Salvan; del'Union.*

From St. Maurice and Vernayaz the rail runs on to **Martigny,** 475 m. above the sea, with 4500 inhabitants. The old Roman Octodurum, now Martigny, was the winter quarter of the twelfth Roman legion, until the sixth century an episcopal see, and is now the starting point, going from the Lake of Geneva, for Oberwallis, Chamounix, and the *Great St. Bernard.* There is still standing the tower of the Bishop's castle "la Bastia", perched on a lofty, rocky eminence from which there is a fine view



Martigny Castle in the Rhone Valley.

of the valley. There are excellent vine yards in the neighbourhood of Martigny. Near the little town there is, according to Scheuchzer, a sulphur spring, but it is not used. The climate of Martigny is not adapted for invalids, but the place is a very popular centre for tourists.

Hotels: *Hotel Clerc,* a well managed and favourite hotel, with comfortable apartments and excellent attendance. *Hotel Mont-Blanc,* also good.

From Martigny in a southerly direction by *Sembrancher* in the *Val de Bagne* to the picturesquely situated

Chable (5 hrs.) and from here along a narrow road in 1½ hr. to **Lourtier** (1054 m.) whence there is a bridle path above the Dranse to the lonely bridge of Mauvoisin (1700 m.), and in tortuous windings to the **Hotel du Glacier de Giétroz** (1824 m.), an air cure in the midst of magnificent mountains and glaciers.

From Martigny the railroad continues 13 min. further to **Saxon les Bains,** 478 m. above the sea, with an iodide and bromide spring. Season May 1 to the end of October.

The village of Saxon, with 1600 inhabitants, lies on a plateau on the left bank of the Rhone, surrounded by magnificent mountain scenery. But the Rhone territory proper is liable to inundation, is rather swampy, and in summer is infested with gnats, and visited by sporadic ague. The climate in the height of summer is very hot and dry, and the westerly wind which constantly blows up the valley (from 10 a. m. till 5 p. m.) is more disagreable than refreshing.

The hygienic spring rises about 80 m. from the Kurhaus *(Grand Hotel des Bains),* the former gambling Casino, at the end of the garden. The water, the temperature of which is 25° C., is clear as crystal, odourless, and has no marked taste. The result of the chemical analysis made at various times gives the interesting, but not yet thoroughly explained, phenomenon of an intermittent iodine reaction: the iodine seems sometimes to disappear entirely, and then return suddenly in a large quantity. Besides iodine and bromine, together with calcium, potassium, and magnesium, the chief constituents of the spring are: bi-carbonate of lime and sulphate of magnesia, then bi-carbonate of magnesia, sulphate of soda, sulphate of lime, chloride of sodium, ferrous oxide, nitrate of potash, silica, and alumina. The iodine varies, according to different analyses, from 0,2257 to 0, 00005 gr. per 1000 gr. The volume of water in the spring is also very variable — from 120 to 470 l. per minute.

The spring is used for drinking and bathing in the following complaints:

1. Scrofulous affections (glands and joints).
2. Constitutional syphilis.
3. Chronic swellings, goitre, tumours.
4. Rhachitis, rheumatism.
5. Catarrh of the bladder and diseases of the uterus.
6. Chronic skin diseases.

Grape cure after the end of August. — Physician: *Dr. Reichenbach.* Hotels in the village: *Hotel Vaney; Hotel Pierre à voir; Hotel Suisse.*

Sion, or Sitten. 521 m. above the sea, a grape cure. Season begins in September.

Sion, the chief town of Canton Wallis, with 5,000 inhabitants, is one of the most picturesque places in Switzerland. From Valeria and Tourbillon, the two ancient castles of the episcopal city, enthroned on precipitous crags, there is a glorious view over the Rhone valley and the mountains. The climate is not adapted for an air cure. The average temperature for the year is 10,61° C., the mean minimum 10,2, maximum 32,1. The extremes of temperature are therefore great. The summer, owing to the strong insolation, is very hot and dry; the spring and winter show great daily variations of temperature, while, on the other hand, the early autumn (middle of September till the middle of October) is generally mild and equable. Owing to the excessive heat, the well-to-do citizens of Sitten spend the summer in their country houses on the hills around. It is well also for patients to pass the months of July, August and September at the more elevated pensions and chalets. — *Hotel de la Poste; Du Midi.*

Valley of Chamounix and the Mont Blanc.

Evolène, 1378 m. above the sea, a summer resort. The mountain village of Evolène, with 1000 inhabitants is in the Val d'Hérens, a place abounding in natural beauties, 5¾ hours from Sitten by post road. The wildly romantic scenery, with the magnificent glacier-covered Dent Blanche (4364 m.) at the southern end of the valley, make Evolène a favourite resort for summer tourists, although the air is somewhat biting. Bubbling up from a gigantic rock close to the village is a spring of excellent water, containing a little iron, which serves as a pleasant supplement to the air cure. — *Hotel de la Dent Blanche.*

The **Chalets d' Arolla,** 1900 m. above the sea, 3½ hours higher up in the Val de l'Arolla which branches off to the south-west. Very comfortable new hotel and dépendance. A good summer place.

Sierre (Siders), 541 m. above the sea, a grape cure, has the finest situation in the Rhone Valley; it is distant 2 km. from the right bank of the river, in the midst of picturesque heights of all elevations which form a guard on the east and west against violent winds and severe changes of temperature. The climate is very mild, and fogs are unknown, but the excessive insolation and the small quantity of rain induce, as at Sion, great dryness and heat. Sierre is especially adapted as an autumn place for the grape cure, and as a climatic station for convalescents and persons with chronic catarrh of the larynx and bronchial organs.

Hotels: *Hotel and Pension Baur; Bellevue; De la Poste.* Physicians: *Dr. de Courten, Dr. de Sepibus.*

On the left bank of the Rhone, going southward from Sierre is the wildly romantic *Val d'Anniviers*, stretching upwards towards mighty glaciers; a journey of four hours leads to **Vissoge,** the chief town, 1220 m. above the sea, a favourite and sheltered summer resort. *Hotel and Pension d'Anniviers.*

St. Luc, 1675 m. above the sea, an hour higher up, also a pleasant summer resort. *Hotel and Pension Bella Tola.*

Leukerbad,

1415 m. above the sea, with an arsenic and ferruginous gypsum thermal spring. Season from the end of May till the end of September.

Route: A post omnibus plies, between June 10 and the middle of September, from Loèche-la-Souste (Susten) railway station through Leuk to Loèche les Bains (Leukerbad) in four hours; from Geneva, by rail, in 6½ hours via Lausanne, St. Maurice, Sion to Leuk-Susten. From Andermatt in about 18 hours over the Furka road to Brieg railway station; thence in 1 hour to Leuk-Susten station. From Arona on Lake Maggiore over the Simplon in 25 hours to Brieg. From the Lake of Thun, via Kandersteg, Eggenschwand *(Hotel Gemmi)* and Schwarrenbach, over the Gemmi-Pass *(Hotel Wildstrubel)* down the rugged but perfectly safe zig-zag path to Leukerbad.

The little *village of Leukerbad* (Loèche-les-Bains) with 700 inhabitants (German speaking) lies in the marvellous and picturesque Alpine Valley of *Dala*, at the southern base of the Gemmi. The valley is about 12 miles long, and only about a mile or a mile and a half in breadth, open to the south, surrounded on the north-west and east partly by gigantic and for the most part perpendicular mountain sides covered with everlasting snow, and partly by low, pleasant hills, on whose spurs flourish aromatic pines and forest trees. The tumbling, foaming glacier stream, the Dala, rushes into

The Eismeer near Chamounix.

the Rhone Valley through the gorge of the Dala, and flows through the valley. The village is on the left bank, and the baths and church are on the right. In the tiny area of this narrow valley, which though hemmed in by huge rocks, is green and beautiful, there rise from unsounded depths more than 20 warm medicinal springs which in the course of the last two centuries have become of world-wide fame. All of them have the same chemical constituents, and yield in 24 hours about 6,000,000 liters of mineral water.

The most prolific is the *St Lawrence spring*, which in the village square becomes quite a little brook, and yields two million liters of water in 24 hours. Its temperature is 51,25° C. It is used for drinking and the water is also carried by pipes to the baths. About 15 paces northward from this rises a much smaller spring, the "Goldbrünneli", which is only used for the Lawrence bad. Five minutes above the village, above the *Hotel des Alpes*, is the *Flussbad spring* with a temperature of 39,50° C. On the east close by, at a little elevation, three other springs emerge in a meadow, forming the so-called *Armenbad-spring*. On the way to the Dala waterfall one comes in 15 minutes to the Heilbad spring, with a temperature of 48,74° C. It is conveyed only to the Alpenbad. There are besides numbers of smaller springs which, chemically, differ only in temperature.

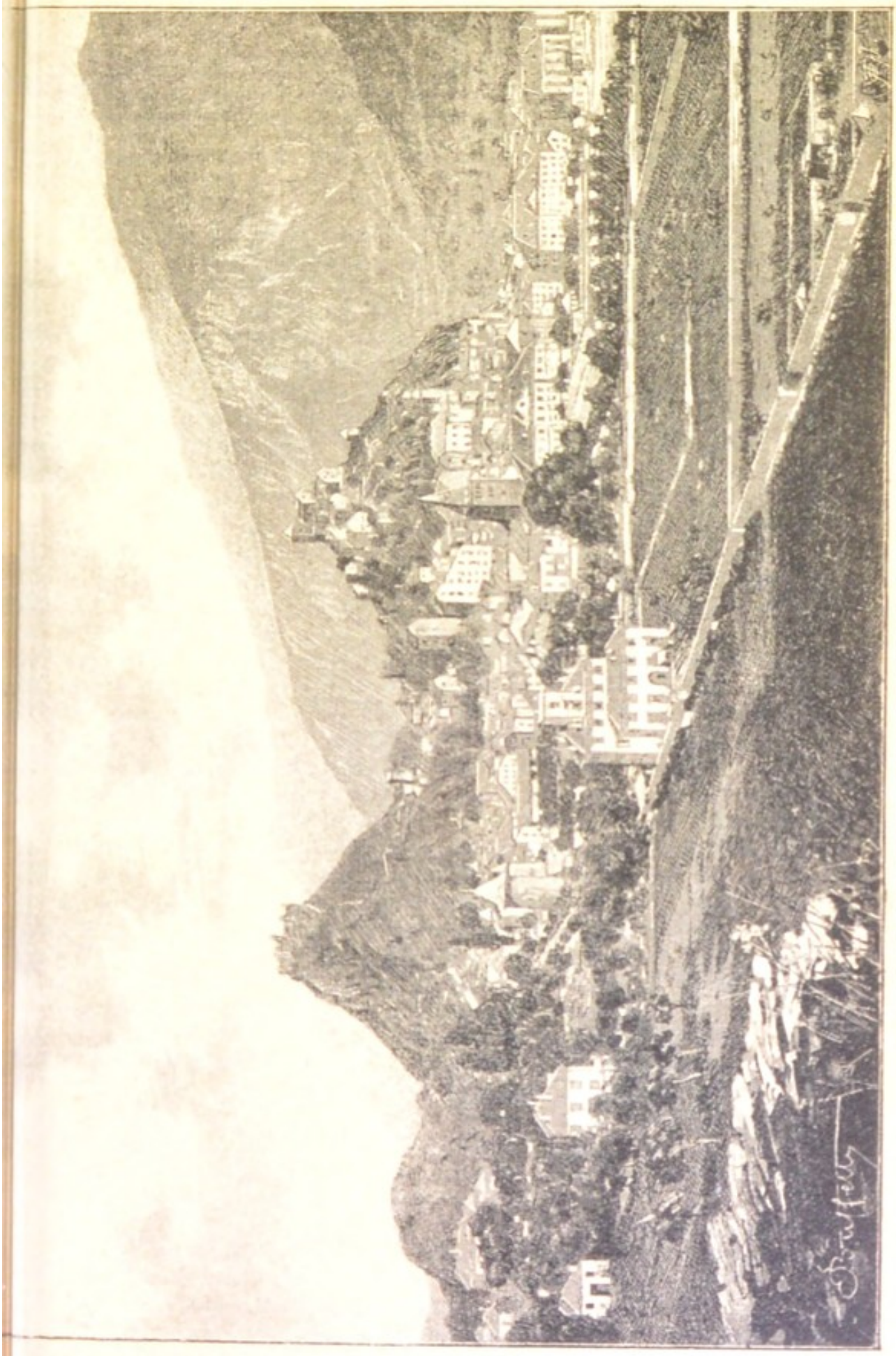
The water of the springs of Leuk is quite clear; gas bubbles appear on the surface. When first drawn it has no smell, but after exposure to the air for some time acquires an odour resembling rotten eggs. During the great melting of the snow in spring, or after continued rain in summer and autumn, the water becomes muddy and forms a grey deposit, so that it is sometimes very unpleasant to drink. Several chemical analyses of the spring of Leuk have been made. According to *Dr. Lunge's* analysis, made in 1885, the water contains the following fixed component parts in every 1000 gramm:

a. Gaseous Components:

Carbonic acid	1,97 cm.	0,00390 gr.
Oxygen	0,66 „	0,00094 „
Nitrogen	7,21 „	0,00905 „

b. Fixed solids:

Sulphate of strontia	0,00194 gr.
„ „ lime	1,42866 „
„ „ magnesia	0,26912 „
„ „ soda	0,08715 „
Carbonate of lime	0,09650 „
„ „ magnesia	0,02066 „
„ „ ferrous oxide	0,00011 „
„ „ oxide of manganese	0,00024 „
Chloride of sodium	0,00121 „
„ „ potassium	0,01127 „
„ „ lithia	0,00037 „
„ „ ammonia	0,00017 „
Aluminium	0,00051 „
Silica	0,03020 „
	1,94811 gr.



Sion (Sitten).

Arsenic	traces.
Carbonate of copper oxide	"
Sulphate of baryta.	"
Phosphorous lime	"
Fluoride of calcium	"

Specific Gravity 15° C. Temperature = 1,00194. The springs consist according to percentage of volume of

Carbonic acid	2,12 %.
Oxygen	traces.
Nitrogen	97,88 %.

These springs are admirably adapted both for bathing and drinking. The drinking cure is generally gone through in the early hours of the morning, the patients walking up and down in the open air, or in bad weather under cover. The dose is from one glass upwards The bathing cure usually begins with a bath of half an hour's duration, and increases in suitable circumstances, to six or seven hours, spread over the morning and afternoon, the temperature being 34—35°. This prolonged bathing is generally accomplished in the large public bath in which there are little floating tables on which guests take their breakfeast. The protracted bathing frequently induces what is called the "bath eruption"; this is a rash spreading in various forms over the whole body.

The baths are all close to the hotels with which they are generally connected by covered corridors. They comprise public baths (swimming for 25—40 persons) family and private baths.

As a supplement to the bathing cure most of the baths are furnished with arrangements for the different varieties of douche, inhalation, pulverisation, hydrotherapy, massage. etc. The baths are open from 5 to 10 in the morning, and from 2 to 5 in the afternoon,

Climate. One of the most potent factors in restoring health, and one which greatly heightens the favourable effect of the drinking and bathing cure, in certain forms of disease, is the mountain climate, which in proportion to the height of Leuk above the sea is to be called mild, although the mornings and evenings are rather cool. Changes of weather and of temperature are often considerable, even in the height of summer, but still more in spring and autumn, according to the prevalence of the south, the north or of the north-east winds. Indeed, it sometimes happens that in June and August snow falls, even in the valley. Patients should, therefore, provide themselves with warm clothing. The mean temperature for June, July, and August, during the last few years, was 13,3° C., the mean minimum, 3,8°, the maximum, 25.4° C.

The baths of Leuk have an old and deserved reputation for curing chronic affections of the skin. The diseases for which they are best adapted are; ecyema (moist eruption) psoriasis, herpes, ichthyosis, (scaly eruption) impetigo (pustulous eruption).

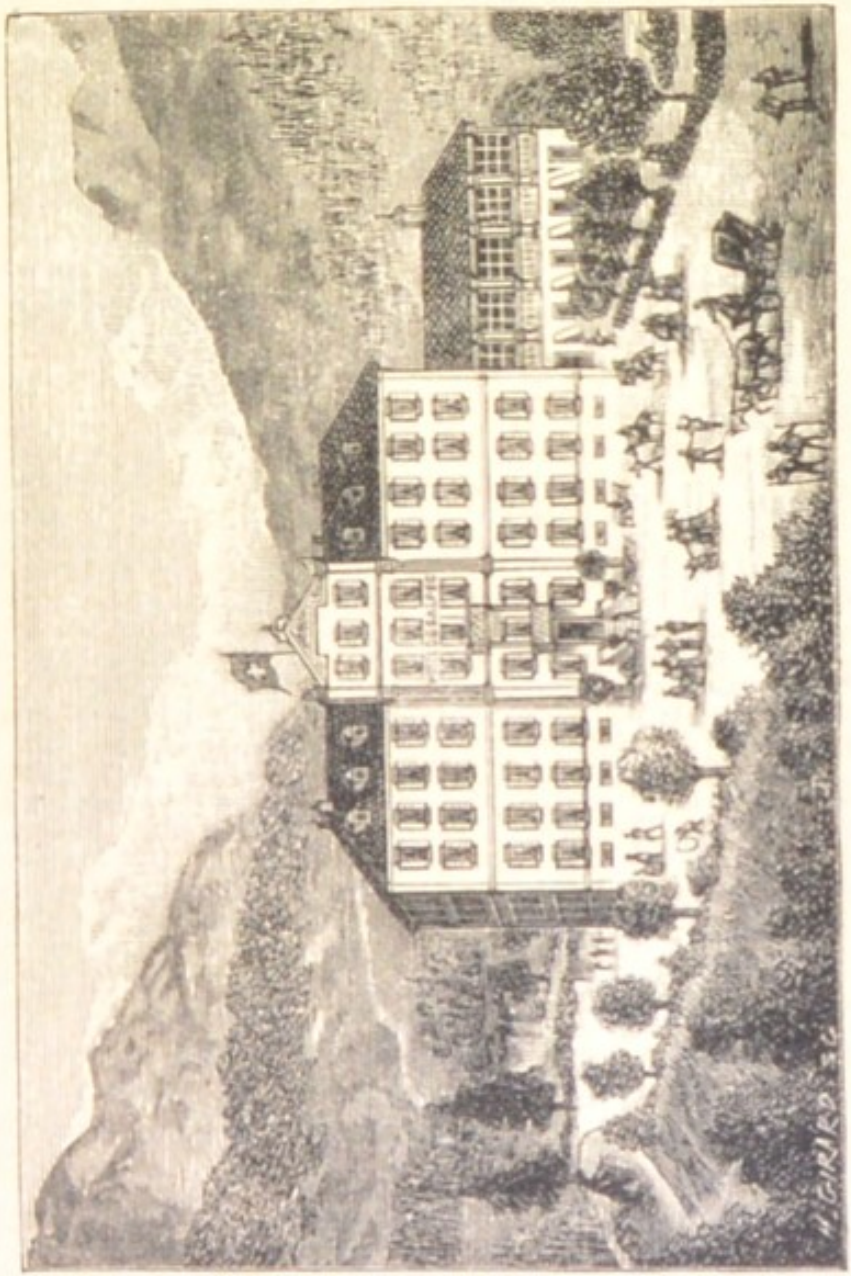
2 Scrofula. complicated by cutaneous eruptions.

3. Chronic rheumatism and rheumatic neuralgia.

4. Chronic catarrh of the mucous membranes of the digestive, respiratory and sexual organs.

5. Obstruction of the liver, plethora abdominalis, hæmorhoids.

6. Chronic nervous complaints (hypochondria, hysteria, cardialgia) and paralytic affections (aæsthesia paralysis).



Grand Hotel des Alpes at Loëche les Bains (Leukerbad).

7. Poverty of blood, chlorosis, convalescence, mental strain.

8. Dyscrasies.

9. Especially for women's diseases.

The baths are not adapted for: inflammatory affections with fever, failure of the heart, fatty degeneration of the heart and vascular system, tendency to congestion of the brain and to apoplexy, extreme weakness, consumption.

Hotel des Alpes *(Bros. Brunner)*, the largest and finest establishment in Leuk. The massive square building stands on a terrace at the north-east of the village, in an imposing and pleasant situation, with a capital view of the Balmhorn, Rinderhorn, Gemmi, Plattenhörner, Daubenhorn, and Trubelhorn. The hotel has pretty grounds and a park skirting the river Dala, where are aromatic larches and fir trees, and a play-ground with various kinds of games. The building which consists of four storeys, contains 116 well-furnished rooms, 6 salons, billiard-room, smoking-room, and beneath the gallery of the baths a glass-covered promenade looking south. Water laid on through-out and w. c.'s. The baths belonging to the hotel are accessible only from the hotel itself; they comprise three cemented swimming baths for 80 persons, one for both sexes, another for gentlemen, and a third for ladies; warm dressing rooms at hand for ladies and gentlemen, a douche hall, with every kind of douche; also douches at any temperature required in the 12 family and single baths; apartments for inhalation and electrotherapy; complete arrangements for hydrotherapy. Covered pump-room. Pension, 7 fr., room, 1—8 fr., according to the floor; salon and dressing-room 10 fr.

House physician, *Dr. Brunner* (author of a good work on bathing).

Walks and Excursions: There are good walks close to the baths. Next to the Trinkwandel-Allee, the most frequented walks are to the Albinen Ladders, south-west of the grand Promenade, through a fir plantation on the left bank of the Dala to a craggy cliff, where by means of eight wooden ladders we ascend to the village of Albinen; this way is used by the villagers as being the shortest to the Bad; in ¾ hour to the Dala waterfall, which is lighted twice a week by Bengal fires; an hour further up the precipice to Fluh, where milk, cream, and butter are to be had; in ¾ hour to the Dala glacier; in 1½ hours tothe Feuillerette-Alp, on a beautiful plateau, near the Altels Balmbach. In 1½ hours to the Tempethal, along a pretty wooded way to the Cytherahain and the Schneegrotte. In 3 hours to the Gukerhubel, through woods and meadows to the Torrent Alp and Alp Chermignon — the finest panoramic view of the Rhone Valley in the southern Alpine range. In 3½ hours from the Torrent Alp to Torrent Horn, the Rigi of Wallis, with a view over a very wide panorama of mountains — the Dent du Midi, Muveran, Diablerets, Oldenhorn, Sanetsch, Wildhorn, Rawyl, Lämmern Glacier, Plattenhorn, Rinderhorn, Balmhorn, Loetschthal and its glaciers, Bietschorn, Aletschhorn, Jungfrau, Schreckhorn, Fletschhorn, Monte Rosa, Weisshorn, the valleys of Saas and St. Nicholas, Mont Cervin, Dent Blanche, the valleys of Tourtemagne, Anniviers, and Herens, the whole of the Rhone Valley from Sierre to Martigny, and Mont Blanc.

Visp, 637 m. above the sea, at the mouth of the valley, near the junction of the Visp and the Rhone, 40 minutes by rail from Leuk-Susten station, is a considerable village with 800 inhabitants (Catholic).

The place was anciently called Hübschburg, for under the rule of the Burgundians and Franks the Counts of Visp resided at Schönbiel in Hübschburg. In the beginning of the 13th. century this large estate passed by marriage to the Blandrati, vassals of the Bishops of Novara. Their castle, the Hübschburg, was demolished first by Count Peter of Savoy, in the war against the Wallis bishop, Henry of Raron, and on Dec. 22, 1388, was finally destroyed at the battle of Visp.

The place is built over a cliff to the east of the River Visp. The two large and handsome churches and the large old houses of the burgesses give quite a civic appearance. For some years past there has been telegraphic communication between the postal station of Visp and the two valleys, and the daily diligence communication

Zermatt.

Hotel Riffelalp near Zermatt.

facilitates the ever increasing tourist traffic. Visp and its environs afford abundant opportunity for agreeable excursions, both short and long.

Hotels: *Hotel de la Poste* (with a branch at Saas Fee), *Hotel zur Sonne*, *Hotel des Alpes*, and the Restaurant de la Gare at the railway station.

Walks and Excursions: Fee ob Saas (1602 m. above the sea); a climatic health resort in the Valley of Saas, 6 hours from Visp by a good bridle path. A new and good hotel standing in shady gardens, amid magnificent surroundings. Not expensive. A telegraph station.

At the village of Halden, pleasantly situated on a eminence, 834 m. high, the Valley of Visp divides into two branches of almost equal length — 20 to 23 miles — the **Nicholas,** or **Zermatt Valley** and the **Valley of Saas** The valleys close round the ice-clad Saasgrat, which is the northernmost spur of the Monte Rosa range, and are both, the one on the west and the other on the east, girdled by the loftiest and noblest mountain peaks, from whose glistening summits more than 40 glaciers descend.

St. Nicholas. 1164 m. above the sea, the chief place in the valley of Zermatt, with 800 inhabitants, is reached in 4 hours from Visp, via Halden, by a good bridle path. The village lies on a cone-shaped elevation caused by a landslip; it is surrounded by great precipitous walls of rock which lend a majesty to the landscape.

From St. Nicholas a good road leads in 5 hours, via Randa (*Hotel zum Weisshorn*) to the most favourite centre for excursions among the glaciers, to that Alpine paradise,

Zermatt.

1620 m. above the sea, *air cure*, and celebrated *tourist centre* at the foot of the Matterhorn and Monte Rosa. Now it is more like a little town than the simple mountain hamlet which for 30 years has been the favourite resort of Englishmen. The village, consisting of picturesque houses dark with age, stands among pleasant Alpine meadows, above the line where fruit trees can flourish, though there are forests of stone pines in the neighbourhood. There are about 500 inhabitants, nearly one-fifth of whom are guides. Thousands of tourists visit the spot every year, its fame is world-wide, and the praises of its mountain marvels are sung in every Alpine Journal.

Historical. At the beginning of this century the bold mountain explorer, *De Saussure*, of Geneva, ventured with numerous guides and porters over the Theodule Pass into the Matter Valley. The appearance of these travellers struck such terror into the natives that *De Saussure* was unable to buy wine and meat, even of the parish priest, and had almost to use force with a sort of innkeeper in order to buy necessaries. Some years later these valleys were visited and described by *Hirzel* and *Ulrich* of Zürich, *Julius Fröbel* from Germany, and *Engelhardt* of Strasbourg. These journeys were veritable discoveries, for up to that time the magnificent valley of Zermatt, and the adjoining valleys of Wallis were unknown. Since then the conditions have entirely changed. The mountains have been robbed of their terrors; there are numbers of excellent guides and fine hotels which afford to the numerous travellers from all parts not only comfortable accommodation, but modern luxuries. With the advent in 1855 of **Alex. Seiler,** the unpretending, agreable and experienced hotel-keeper, hotel-business in Zermatt took a sudden upward bound.

The climate is pleasant and healthy; the valley is protected from cold, biting winds by an encircling wall of mountains, 2000 m. high. The pure, fresh evenly-blowing Alpine air is very stimulating and tone-giving. Zermatt is suitable as an air cure, particularly for weakly, cachetic persons, seeking to recruit their

The Gornergrat near Zermatt.

health for literary pursuits, and for business men whose brains are wearied, but who have physical rallying power.

Hotels: — *Hotel Monte Rosa,* three-storeyed, with 70 beds, dining, conversation, music, billiard, and smoking rooms; reading-room with home and foreign papers; *Hotel Mont Cervin* with 180 beds; *Hotel Zermatterhof* with 130 beds — all under the excellent management of the proprietor *Alex. Seiler.* — Pension prices 6—14 frs.; servants 5—6 frs.; room, 1,50—5 frs.; breakfast (tea or coffee) 1 fr. 50; lunch 3 fr. 50; table d'hôte, 5 fr.

Physician, *Dr. de Courten.*

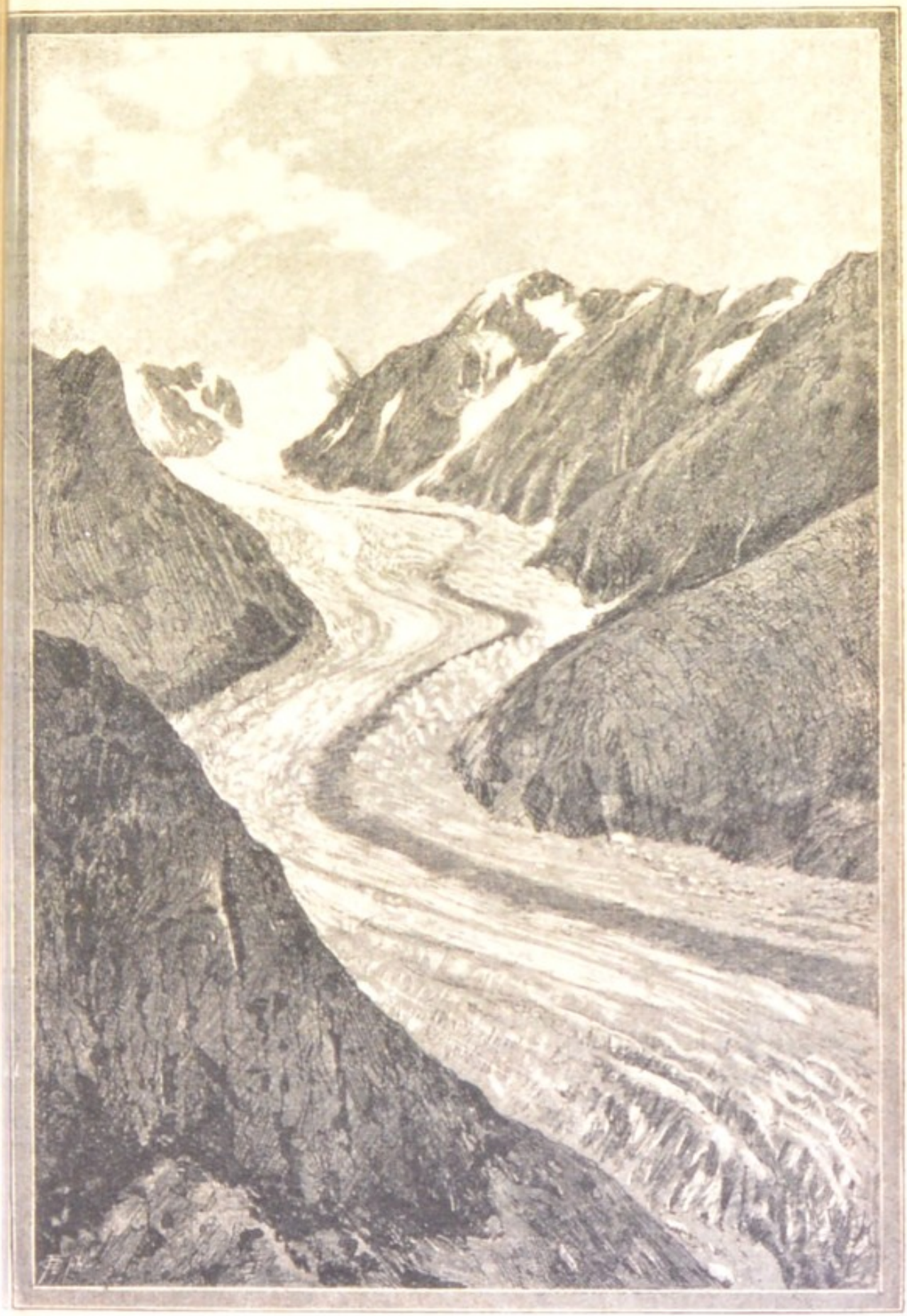
From Zermatt an hour's walk through shady woods of larches and towering pines leads to the new **Hotel Riffel Alp,** at the western base of the Riffelberg, built in 1880, 2230 m. above the sea, on a sheltered slope at the edge of the tree zone amidst fertile Alpine meadows. The four storeyed modern building has a verandah, 200 m. long, with a fine view; on the right is the beautiful icy pyramid of the Weisshorn, the Oberrothhorn, the Wellenkoppe, the Upper and Lower Gabelhorn, in fact the whole glacier range of the valley of Zermatt in all its glory. The central point of the panorama is the mighty Matterhorn which from here looks at its finest: on the left are the Matterjoch and the Breithorn, and lastly the Twins, all much frequented peaks which under the conduct of guides can be ascended easily and without danger. The establishment of Seiler leaves nothing to be desired in convenience, comfort and attention, and is still better adapted than Zermatt as a residence for delicate, weakly people.

An hour higher up the Riffelberg stands the **Hotel Riffelhaus,** 2500 m. above the sea, on an open Alpine hight, specially suited to tourists and also persons suffering from mental depression, a- more magnificent scenery is scarcely to be found anywhere.

Saas-Grund, 1562 m. above the sea, an air cure and tourist resort, with 373 inhabitants, in the long, narrow but beautiful valley of Saas, abounding in waterfalls; it can be reached in 4½ hours from Visp via Balen and St. Antonien. The village stands on beautiful meadow land, at the junction of the Trift with the Saaservisp; it is threatened by avalanches and surrounded by 28 glaciers and all the highest peaks of Switzerland.

The clear Rothbachquelle or Red Water Spring rises opposite the church; it is without taste or smell and slightly astringent. The temperature of the spring is 19° C.; according to the chemical analysis of Professor *E. Schweizer* of Zurich the chief constituents are first sulphate of lime, then sulphate of magnesia and soda, chloride of sodium, carbonate of lime and magnesia, traces of ferric oxide. There is a weak gypsum spring, but it has not yet been therapeutically applied. — *Hotel Monte Moro* (plain and good).

Brieg, 684 m. above the sea, the terminus of the Geneva Wallis railway, and of the Simplon road, is a fine large village in picturesque surroundings; the climate is so mild and soft that the choicest vines, saffron, and other products of the south flourish luxuriantly. Brieg is but little known as a summer resort. One hour below the village on the right bank of the Rhone, and only a few feet above the level of the water rises a subthermal gypsum spring, which was known to the natives even in the 15 century. The bath buildings and the Kurhaus belonging, erected in the beginning of the 16 century, were completely destroyed by a tremendous landslip and overflow of the Rhone, and the spring has scarcely been used since.

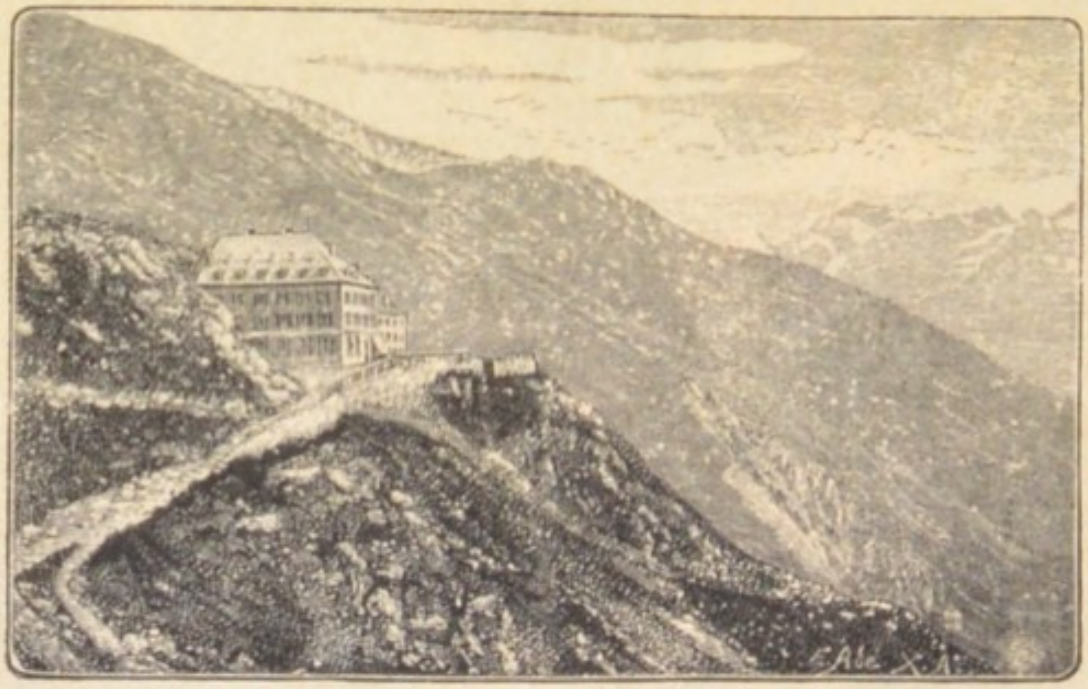


Viesch Glacier and the Finsteraarhorn.

Naters, opposite Brieg, on the right bank of the Rhone, at the foot of the Aletsch glacier, has a mild, balmy climate, as is shown by the vines walnuts, chestnuts and fields of saffron. A bridle path leads in 3 hrs. to the

Rideralp, 1947 m. above the sea, an air and whey cure, noted for its healthy, sheltered situation, bracing mountain air, excellent drinking water, rich, delicious milk and romantic walks. The mountain is free from snow at the beginning of June. The shortest ascent of the Aletschhorn is from here. The Kurhaus is specially adapted for modest requirements, and is a quiet and pleasant summer resort for families.

Bel-Alp, 2052 m. above the sea, a summer resort reached in 4½ hour from Brieg by an easy bridle path. The large wide plateau is a veritable flower garden, with the most inviting walks for the invalided and weakly and those seeking to recruit.



Hotel Jungfrau on the Eggischhorn.

Viesch, 1054 m. above the sea, a picturesque village at the foot of the **Eggischhorn,** (2941 m.) and at the entrance to the valley of the same name. The purity of its Alpine air, its fresh spring water, and the variety of mountain excursions of which it is the centre, have made Viesch a favourite summer resort. The summit of the Eggischhorn is reached by a good bridle path in 4½ hours. This is one of the most frequented spots in Switzerland, commanding as it does a view of the greatest of Alpine glaciers — the mighty Aletsch — in all its majesty. *Hotel Vieschergletscher; Aux Alpes.*

An hour and a half below the top close against the rock in a sheltered sunny situation stands the

Hotel Jungfrau Eggischhorn,

2193 m. above the sea, an air cure, and one of the most frequented of tourist stations. The ground on which the spacious house and its dependance stand, the large terrace with the little salad garden in front, and even the two roads leading

The Marjelen Lake, Aletschhorn and Glacier.

east and west, have all been wrested from the mountain, hewn out of the rock and rubble. The terrace commands the Upper Rhone Valley and embraces a magnificent and far reaching mountain panorama; on the left is the whole noble range of the Lepontine Alps. from the Furka to Monte Leone; opposite is the Simplon, with its broad high road winding in long curves up the Pass; to the right the eye lingers with delight on the finest portion of the Pennine Alps, that formed by the Fletschhörner, Mischabel, Monte Rosa, Lyskamm, Matterhorn, Weisshorn, and their numerous satellites.

The hotel which is 4 storeys high contains 60 comfortable bedrooms and salons, 80 good beds, a dining room, smoking and reading room with home and foreign newspapers. Telegraph office in the house. The catering of the hospitable and attentive host, *Mr. Cathrein*, has a good reputation.

There are **three excursions** from the Hotel which are especially worth making: 1. the perfectly easy expedition, along a bridle path, almost to the *top of the Eggischhorn*, from which we see lying at our feet the whole of the Aletsch Glacier with its numerous tributaries. The enormous masses of ice impinge against the steep northern foot of the Eggischhorn, between the sides of which and those of the opposite Strahlhorn, the ice channel stemmed in its course forms the most remarkable of all Alpine lakes, the blue *Merjelen See*. Looking up the glacier we see shining from afar the glistening, sublime "*Jungfrau*", and keeping guard by her side is the broad, bare and lowering "*Mönch*", her faithful "Ekkehard" and old companion. Innumberable peaks rise on both sides and form a glittering chain around the whole horizon. The Hotel Jungfrau and the top of the Eggischhorn both afford a high Alpine panorama in the fullest of the word.

2. To the Merjelen See, which is reached by a good ascending footpath in 3 hours. It lies 2350 m. above the sea, in a basin, 300 m. broad, nearly three times as long and over 40 m. deep encircled by lofty rocks and the ice masses of the Aletsch glacier. Blocks of ice float like white swans on its deep blue waters, the waves of which at the slightest breeze, break against the emerald sides of the glacier.

3. To the Aletsch Glacier which is 15 miles long and 1½ miles broad, a much more difficult and dangerous excursion.

Münster. 1380 m. above the sea, the chief place of the Zehnen Goms, with the Münsterthal lying northward and at the back of that the famous Löffelhorn with its splendid glacier scenery.

Ulrichen. 1340 m. above the sea, with a weak sulphur spring, only used by the natives. The little village is very remarkable historically, and is to be regarded as the "cradle of Wallis independence". *Hotel du Glacier de Gries.*

Obergesteln. 1339 m. above the sea, 20 min. above Urichen, lies at the foot of the Grimsel, and at the outlet of the Pass which leads into the Hasli valley and the Bernese Oberland. One hour further up is the mountain village of Oberwald where the territory of Oberwallis begins; there is a lovely larch wood near; 1½ hr. higher up still we reach the *Hotel du Glacier du Rhône* and the top of the *Furka Pass.*

The Rhone Glacier.

5. Health resorts on the northern spurs of the Jura range and the neighbouring high plateau: Soleure (in part) Baselland, Basle and Aargau.

Nowhere along the mighty Jura range are there such important mineral springs as among its northern spurs in Cantons Basle and Aargau; not only for their historical interest, but on account of their nature and efficacy, these spas enjoy a reputation far beyond the limits of Switzerland. At the head stand the hot sulphur springs of Baden, famous from the time of Tacitus; next to these are the no less prized sulphur springs of Schinznach, the iodine springs of Wildegg, the bitter waters of Birmensdorf and Mülligen. From Basle by Schweizerhall, Kaiseraugst and Rheinfelden as far as Ryburg, stretches the south west end of a shell limestone formation, with large rock salt deposits which, running in a belt through south Germany from north-east to south-west, are worked in many places for salt mines. This gave rise in Switzerland to many successful borings and to the establishment of brine baths.

On the other hand, there are no mineral springs of any importance on the neighbouring table land, and what there are have the same qualities as those of the interior of Canton Berne and the Emmenthal. The climate of the entire region is mild, on the whole, with in some places an unmistakeable Alpine character. There is, generally speaking, an abundance of heat from the sun except in those places where the Plateau lakes (the Hallwyler and Baldegger) and the great rivers, the Aare and the Rhine especially generate fog. The Rhine valley from Basle to the narrow defile at Laufenburg does not belie the general characteristics of a lowland surrounded by mountains: namely a high mean annual temperature (Basle 9,5° C.) and a Mediterranean flora. The pleasantly rural character of the scenery, with its abundance of fertile, velvety meadows, shady fir and beech trees, together with the delightfulness of the climate, have given rise to a goodly number of climatic health and summer resorts. Let us take as the starting point of the circle,

Olten, 393 m. above the sea, the chief railway junction for Basle, Zürich, Lucerne, Berne and Geneva, is a town of nearly 5000 inhabitants, and from its favourable situation in the plain of the Jura has rather a mild climate; the yearly mean is 9,00° C., and only in January does the monthly mean fall below 0 (−1,3°),

but it is on the other hand subject to strong north-east winds and to sudden changes of temperature, which render it unsuitable as a climatic resort. Good restaurant at the station.

Frohburg, 845 m. above the sea, an air cure, on a good high road, 1 hour from Olten station, and ½ hour from Läufelfingen. The *establishment* is high up on the east of the Hauenstein Pass, on the southern side of a hill which, together with the Wysenberg and a wooded mountain ridge, shelter it from sharps winds. Milk and whey cure.

Walks. — In 5 min. to the *Schafhügel* with its shady wood; in 10 min. to the *Sommerweide*, and in 10 min. to the *Frohburg ruins* and the *Signal*.

On the *Miesern*, lying to the south, 1 hr. from Olten, stands the rural **Kurhaus Grolimund.** Milk and whey cure. At Reisen and Hauenstein there are country pensions for invalids.

Lostorf-Bad, 500 m. above the sea, with three sulphur springs. Season end of May till the end of September.

The Bad lies 1 hour north-east of Frohburg, along a footpath through meadows and woods; from Olten station it is 1½ hours by diligence. Its situation in a wide mountain gorge looking south is charmingly romantic; hills and woods form a shelter on the north and north-east. The mean summer temperature is 21° C., the mean maximum 31° C., the mean minimum 12,5° C.

The two lower springs, one of which is considerably weaker than the other, contain chiefly chloride of sodium, sulphate of potash, sulphuret of potassium, carbonate of lime and magnesia; also hyposulphite of potash, carbonate of ferric oxide, alumina, silica, and a considerable quantity of sulphuretted hydrogen in a half free state; the upper spring is known for its sulphate of lime.

The two lower springs are used internally and externally for scrofula with its skin and bone affections; for skin diseases, especially eczema, impetigo, lichen, pityriasis; for rheumatism of the muscles and joints, troubles of the womb and hæmorrhoids. The upper spring (gypsum) is used for chronic catarrh of the mucous membranes of the respiratory, digestive and urinary organs, and for chronic pneumonia. — Physician: *Dr Cartier.*

Fridau, 670 m. above the sea, an air cure. Season May 15. to October 15.

Route: By diligence from the Egerkingen railway station which is 10 km. westward, or from Waldenburg station (Liestal-Oensingen).

The *Kurhaus* lies in an airy, sunny situation, sheltered from the north and east and open to the south; the air is pure, free from dust, and always gently agitated. In the neighbourhood are extensive pine and fir woods, with numerous walks, drives and seats. Excellent drinking water at a temperature of from 8° to 9° C. Systematic milk cure.

Fridau is adapted as a health resort for convalescents, the delicate, those suffering from bodily and mental exhaustion, for poverty of blood, chlorosis, scrofula, nervousness, chronic bronchial catarrh, and the remains of pleurisy where there is no fever. Physician: *Dr. Christen* of Olten.

Walks. — In 1/2 hr. to *Nack* (870 m.); in 3/4 hr. to the *Castle* (Schlosshöhe) (882 m.): in 3/4 hr. to the *Signal*; in 3/4 hr. to the lofty Fluh (Hohe Fluh). To *Langenbruck*, to the *Castle ruins of Falkenstein* and to the *Balsthal* with its romantic scenery.

Langenbruck, 717 m. above the sea, climatic health resort and "Terrain cure". Season from the beginning of June to the middle of September.

Route: By diligence in 1 1/2 hr. from Egerkingen station (Berne-Zürich line); from Liestal station (Basle-Olten line) in 2 1/2 hrs.

Hotels: *Bären; Ochsen; Pension Bider; Hänger.*

Langenbruck is the highest village in Canton Basle, and lies on the loftiest point of the mountain road along the Jura from Basle to Soleure. The place is surrounded by pretty high mountains, protected on the north against cold and west winds, and open on the south to the mid-day sun. The climate is rather mild, but refreshing even in the height of summer, as the air freely circulates through the six side valleys which debouch towards the village. Good drinking water. Milk and whey cure. Arrangements have just been completed for a "Terrain cure".

Langenbruck is suitable for a prolonged course of treatment for general weakness, poverty of blood, chlorosis, convalescence, chronic catarrh of the lungs, disturbances of the digestive organs, scrofula, obesity, functional organic weakness of the heart, nervous complaints; phthisis in the early stages. The Kurhaus is built on hygienic principles and endeavours to meet all modern requirements.

Phisician: *Dr. Bider* (Brochure: "Langenbruck as a Terrain cure").

Walks. — Level walks: in 1/2 hr. to *Schönthal*; in 1/2 hr. to *Holderbank*; in 1/2 hr. to *Bärenwyl*; in 1/4 hr. to *Weiherlegi*; in 1/2 hr. to *Dürstelboden*: Walks with a little climbing: in 25 min. to *Bachtelen*; in 3/4 hr. to *Breitenhöhe*; in 3/4 hr. to *Dürstel*; in 3/4 hr. to *Waldhaus*; in 3/4 hr. to *Neubrunn*; in 1 hr. to *Waldenburg*; in 1 hr. to *Fridau*; in 1 1/4 hr. to *Mümliswyl*; in 1 1/2 hr. to *Balsthal*. Walks with a good deal of climbing: in 20 min. to the *Kanzel*; in 1/2 hr. to *Wannenbänkli*; in 1/2 hr. to *Krähеggsbelvedere*; in 1 hr. to *Krähegg*; in 3/4 hr. to *Weidenflühli*; in 1 hr. to *Kilchzimmer*; in 1 hr. to the castle heights (Schlosshöhe), etc.

Kilchzimmer, 952 m. above the sea, a climatic cure. Season middle of May till the middle of October.

Route: By a romantic road in a north westerly direction from Langenbruck in 3/4 hr.; from Waldenburg station in 1 hr. (Carriages if desired).

The Kurhaus lies on a slope of the Jura at the foot of the Ankenballenfluh, is protected from the north and north-east wind, and from mid-day till evening enjoys a large share of sunshine. The mountain air is comparatively mild, free from dust and tone-giving. Good drinking water. Excellent milk.

Kilchzimmer is especially adapted for catarrh of the respiratory and digestive organs, chlorosis, poverty of blood and debility. Physician: *Dr. Bider* of Langenbruck.

Ruch-Eptingen, 571 m. above the sea, with a saline gypsum spring. Season end of May till end of September.

Route: By diligence from Sissach station (Basle-Olten line) in 1 3/4 hr.; by a footpath northward from Kilchzimmer to Ruch-Eptingen in 3/4 hr.

The Kurhaus lies on the northern slope of the Belchen, surrounded by steep, wooded crags, and has a mild climate, with an absence of keen winds. Milk and whey cure. Brine bath. The gypsum spring is used for rheumatism and women's diseases, externally; internally, for stomachic, lung and nerve disorders. It is a pleasant sojourn for health seekers.

Ramsach or **Ramsen,** 720 m. above the sea, a summer resort ¾ hour from Läufelfingen station along a good road, is situated on a slope of the northern declivity of the Wysenberg. It is sheltered from the cold north and north-east winds and surrounded by beautiful woods. Milk cure. The gypsum spring, which rises above the Kurhaus, is used for bathing as a remedy for rheumatism. — Physician: *Dr. Mesmer* of Bukten.

Sissacher Alpbad, 481 m. above the sea, a summer ressort, with a gypsum spring, reached by a good bridle path from Sissach station (Basle-Olten line). The pure, refreshing Alpine air is especially suitable for convalescents and health seekers.

Bad Maisprach, with a ferruginous mineral spring, a summer resort; in a beautiful, sheltered situation, 2 hrs. from Sissach station by diligence.

Liestal, 330 m. above the sea, the chief town in Canton Basle, with 4000 inhabitants, lies in a broad, pleasant, meadow valley, at the foot of a lofty, well-wooded range of hills, stretching from north west to south east. The climate is very mild; the mean annual temperature is 11° C. (?); there is little fog and the air is pure and healthy. Liestal is therefore used as an intermediate station on the way to the Alpine regions.

Hotel-Pension zum Falken, with excellent brine bath.

Walks to *Bienenberg, Schleifenberg, Schönthal, Schauenburg, Adlerberg, Wartenberg, Schweizerhalle, Kaiseraugst* with old Roman ruins, etc.

Frenkendorf, 346 m. above the sea, an air cure, 5 min. distant from Schönthal station (Basle-Liestal line) in a sheltered situation with a good view. Brine baths. *Hotel z. Wilden Mann.*

Bienenberg, 431 m. above the sea, an air cure. Season April 15. to October 15.

The modern and excellently managed *health establishment* stands on a picturesque slope of the Jura; its main front is open to the morning sun, and it is surrounded by large fir and beech woods which keep off sharp winds. Milk and whey cure. Brine baths. Bienenberg is suited to delicate convalescents, weakly persons and health seekers. From Schönthal and Liestal stations there is a good road up in ¼ hour.

Bubendorf, 385 m. above the sea, with a lime mineral spring, a brine spa. A summer resort.

Route: Bubendorf is a station on the Waldenburg Schmalspur line, and is ½ hr. by road from Liestal.

The *Kurhaus* lies at the southern foot of the Furlenhügel with beautiful grounds and a large wood in the immediate vicinity. Milk cure. A favourite country resort. — Physician: *Dr. Gutzwyler* of Liestal.

Bad Schauenburg, 486 m. above the sea, an air cure, with brine baths. Season May 1 to September 30.

Route: From Schönthal and Liestal stations, by a good road in 1 hr.; the Bad omnibus during the season. The *Kurhaus* lies in a deep valley of the Jura, open to the south and surrounded by forest and fir covered heights. The comfort of visitors is carefully consulted in the provision of shady seats and play-grounds in the prettily laid out grounds adjoining. The climate is mild, but exhilirating. The mean annual temperature is 7,03° C.; the mean monthly temperature is in May 9,12° C.; in June 14,17; in July 14,83; in August 15,48; in September 11,68.

Schauenburg is recommended for scrufula, disturbances of the digestive organs, chlorosis, nervousness, chronic bronchial catarrh and for the convalescent and the health-seeker. — Physician; *Dr. Gutzwyler.*

Walks. — In 20 min. to Schloss Schauenburg with its magnificent Alpine panoramic view; in 20 min. to *Chaos*, a rocky labyrinth; in 1/2 hr. to *Neu-Schauenburg;* in 3/4 hr. to *Bienenberg;* in 3/4 hr. to *Schauenburger Fluh;* in 3/4 hr. to *Marienfels* whence there is a charming view; in 3/4 hr. to the waterfall and gorge of *Rösern;* in 1 1/2 hr. to *Gempenstollen* with a glorious prospect of hill and dale.

Muttenz, railway station on the Basle-Liestal line, is a pleasant village at the foot of the ruin-crowned Wartenberg. A pleasant summer resort. *Pension Wartenberg.*

Basle.

248 m. above the sea, capital of the half-canton Basle-Ville, with 69,000 inhabitants. It is bounded by the fertile plain of the Rhine, by the Black Forest on the north, by the Vosges on the west and by the Swiss Jura plateau on the east. It stands on both sides of the tumultuous Rhine, which here attains a breadth of 200 m.

Four valleys debouch into the basin in which the town lies; on the south the romantic Münsterthal; on the west the picturesque Rhine-land; on the north-east the Wiesenthal, sung of by *Hebel,* and on the east the fresh, green, richly wooded district of the upper Rhine. One of the chief sights of Basle is the large old bridge over the Rhine with its view of the romantic and picturesque scenery along the shores; on the left bank is the ancient Great Basle with its curiosities; on the right, Little Basle.

The climate is very mild — the mildest among the larger towns of Switzerland, and not without traces of a Mediterranean character. This is partly due to the hollow in which it lies, but still more to the three mountain ranges which shelter the great plain of the Rhine. Even the three more southerly lake cities, Neuchatel, Lausanne and Geneva, are behind Basle. Hence it is that exotics and even cedars flourish in Basle, and fine cherries and choice vegetables are brought to market earlier than elsewhere, while excellent grapes ripen in the intense heat. The mean weight of the air at Basle is 738,16 Mm.

The mean annual temperature is 9,5° C.: the mean minimum 13,5° C.; maximum 30,6° C.; mean rainfall 92 Cm. The numerous bogs and marshes below Basle occasion a good deal of fog; the mean amount of cloudiness is, therefore, 6,1. At Basle the west wind blows at a ratio of 322 times per 1000; the easterly 286; the south-west 5,5, the north east 47, the south 33, the north 102, the east 286, the north west 84, the south east 71; southerly winds predominate in winter.

Basle is not used as a climate station, but is the centre of the international commerce of mid-Europe, and the principal starting point for tra-

Basle.

12 years of meteorological observations according to *Gsell-Fels.*

	Jan.	Feb.	March	April	May	June
Mean temperature . .	0,36	2,21	4,52	9,93	13,59	16,64
Cloudiness	6,9	7,0	6,9	5 7	5,7	5,6
Rainfall	47,2	42,1	69,6	68,8	104,3	111,3
Relative humidity . .	82,5	97,8	75,1	68,8	68,9	69,8

	July	August	Sept.	October	Nov.	Dec.
Mean temperature . .	19,28	17,45	14,97	8,93	4,10	—0,19
Cloudiness	4,8	5,2	4,5	6,8	7,7	7,0
Rainfall	93,2	81,2	52,9	82,7	72,4	56,3
Relative humidity . .	70,1	73,2	75,8	89,3	82,1	84,9

vellers in Switzerland. Basle offers so much that is interesting in architecture, art and science, that it may well invite the traveller to a prolonged stay. Among the objects of interest most worth seeing are: the Museum and Picture Gallery (Hans Holbein collection and very good pictures by Calame, Cornelius, Diday, Koller, Schwind, etc.) the Mexican Museum, the Council Hall, the picturesque Münster in Roman Gothic style; the Kunsthalle, with a permanent exhibition of pictures; the Bernoullianum, with the laboratory, the University, the highly interesting Library, the magnificent new theatre, the Musiksaal, etc.

Basle has two railway stations: the Baden station for travellers to Germany, and the Central station at the opposite end of the city for Switzerland, Alsace and France. There is a connecting line between the two.

Hotels: At the Central railway station: *Schweizerhof; Hotel Euler.* Little Basle: *Hotel Krafft* on the Rhine; *Michel, Schrieder* (z. Deutschen Hof); *Weisses Kreuz.* Great Basle: *The Three Kings; Hotel z. Wilden Mann* (Sauvage); *Hofer, Gold. Fatke, Storch, Krone, Kopf, de la Poste; Schiff.*

Meltingen, 595 m. above the sea, with a gypsum spring, 1½ hr. by railway from Grellingen station (Jura-Basle-Delémont line) is in a very romantic situation, with pure, mild, but tone-giving air. The spa is especially recommended for poverty of blood, chlorosis, and diseases of women. *Kurhaus (Dr. Richard).*

Ettingen, 354 m. above the sea, with a ferruginous lime spring, 1½ hr. by diligence from Basle viâ Oberwyl and Kerwyl, lies on the northern slope of the blue Jura; it is open to the north, so is agreeably cool in summer. A favourite summer resort of the inhabitants of Basle. *Badehotel* (Schmid). — Physician: *Dr. Pape.*

Flühen, 381 m. above the sea, with an iron spring, 2 hrs. from Basle by diligence via *Therwyl,* or by a romantic road from Ettingen; it is sheltered on the east, west and south by hills and mountains, and is open to the north. A summer resort. Hotel and Bathing Establishment *zum Ochsen.*

Mariastein, 514 m. above the sea, a milk and whey cure, ½ hr. south of Flühen, over a wild gorge. (A Benedictine monastery). *Hotel-Pension zum Kreuz.*

Burg, 530 m. above the sea, with a ferruginous earthy spring, ¾ hr. south west from Mariastein, on the borders of Alsace. A milk and whey cure; sheltered from the north and east winds. The spring contains much carbonate of lime and magnesia, and is used for digestive disturbances, rheumatic and nervous affections. The *Kurhaus* is surrounded by firs.

Schweizerhalle, 272 m. above the sea, a brine spa. Season, middle of May till end of September.

Route: By rail from Basle in ¼ hr.; from Olten in 1¼ hr.; from Rheinfelden in 20 min. to Pratteln station; thence by a good road in 20 min. to Schweizerhalle; also from Muttenz station by a pretty foot-path through a beech wood.

The *Health Establishment* stands on a terrace directly above the Rhine. It is sheltered from the north by the Black Forest chain, on the south and east by the Jura, and is surrounded by pretty, well-kept gardens on the river side, and extensive fir and beech woods

The climate is very mild and in the height of summer rather hot. The brine of Schweizerhalle contains, according to *Dr. Bolley's* analysis in 10,000 parts, 2441, 630 fixed solids:

Chloride of sodium	2391,694
Carbonate of lime	1,090
„ „ magnesia	0,350
Silica	0,168
Sulphate of lime	43,575
„ „ magnesia	2,953
„ „ potash	1,319
„ „ soda	0,431
Free carbonic acid	30,5 Cm^3.

Temperature 11,5°. Specific Gravity 1,19216.

The brine is carried to the baths by pipes direct from the spring. *Dr. Siegwart* of Pratteln has recently made arrangements for iodine and brine baths containing bromine.

The Schweizerhalle brine baths are used for scrofula, chronic rheumatism of the joints and gout, chronic feverish affections of the womb, chronic neurosis (hysteria, hypochondria, melancholy) and neuralgia. — Physician: *Dr. Martin* of Pratteln.

Walks: In 33 m. to Augst (Augusta Rauracorum) with remains of the ancient amphitheatre. Excursions to Basle, Liestal, Muttenz, Schauenburg, Arlesheim (with a beautiful view over the Grenzmacher Horn), Rheinfelden; across the Rhine to the Bavarian Black Forest.

Rheinfelden.

270 m. above the sea, a brine spa and climatic cure.

Route: By rail from Basle in 20 min.; from Zürich 2 hrs.; from Schaffhausen 2½ hrs.; from Constance 4½ hrs.; from Berne 3½ hrs.; from Geneva 8 hrs.; from Milan 12 hrs.; from Frankfort via Basle 8¼ hrs.; from Stuttgart via Singen-Schaffhausen 7¾ hrs.; from München via Lindau-Romanshorn-Zürich 12 hrs.; from Paris via Belfort 10 hrs.

The little town of Rheinfelden, with 2,300 inhabitants, is situated on the left bank of the Rhine, close to the river, being connected with the Baden shore opposite by a covered pile bridge. The lofty and six towered walls of this cheerful and inviting capital of Canton Aargau, at the foot of the Allmandsberg, carry us back to those war-like times when this important fortification played the chief part in the struggles of the four Forest Cantons of the Austrian frontier: Waldshut, Laufenburg, Säckingen und Rheinfelden. On the left, the valley or town side, rises the Jura, covered from base to summit with flourishing firs and beeches, with their fragrant shade so grateful to the health seeker; on the other side rises the dusky margin of the Black Forest. The hard rocky soil of splintered shell lime, sloping down to the Rhine, prevents the accumulation of water under the soil, and the deeply bored bed of the Rhine ensures the drainage and sanitation of the valley. The vegetation

is luxuriant; fruit and walnut, trees grow in abundance, and are on an average a fortnight earlier than in South Germany.

Climate. Rheinfelden, being on the upper boundary, shares in the climatic advantages of the upper Rhine valley as far as Bingen. It is sheltered on the north-west by a circle of low hills, on the north and east by the lofty Black Forest-while the Hotzenwald rising on the south forms a barrier to the east wind. The temperature is very mild, and although in summer it is tolerably warm, the air is not oppressive as the wind is blowing constantly up from the river and over the fir and beech woods with refreshing coolness. Rheinfelden greatly resembles Basle in climatic conditions differing in one respect, however, in that it is subject to great variations of temperature, even in the height of summer. While the average mid-day (1 o'clock) temperature in Rheinfelden is about 0,1° C. higher than in Basle, the evening temperature (9 o'clock), on the other hand, is about 1,12° lower than the mean temperature of Basle; in August the contrast is still more striking, mid-day being 0,33° C. higher and evening about 2,8° C. lower. The cause of this phenomenon lies in the situation of the narrow Magden Valley which runs from south to north, and whose cool air diffuses itself in the evening over the broad, sunny Rhine valley.

Observations taken at the Meteorological station since 1882: mean temperature:

	Rheinfelden:		Basle:		31 yrs. mean
	1883	1884	1883	1884	in Basle
Winter	2,62	2,58	2,09	2,9	0,7
Spring	8,08	9,50	8,3	9,65	9,3
Summer	16,72	18,0	17,1	17,71	18,4
Autumn	9,40	9,50	8,7	8,92	9,6
Average yearly temperature	9,04	9,58	9,37	8,81	9,50
Yearly depth of rainfall	907,45	623,0	594,5	493 Mm,	
Days of rain	174	148	204	143	

The **Rheinfelden Brine Spa.** Fifteen minutes above the town, right on the banks of the Rhine stands the Pump House with four borings which, extending to a depth of 120 m. reach a large salt bed. The brine is carried up the mountain into the reservoir on the Salinen Platz by two lever pumps, and by means of evaporation is reduced in boiling houses to common salt (80,000 centimetres a year.) The liquid residuum of the brine forms the so-called, "Mutterlauge" (mother water) which is clear, very salt and bitter tasting. The brine is also pure and clear, free from smell, salt to taste, and has a temperature of 9—10° C.

Rheinfelden is therefore pre-eminent for its strength not only among the few brine baths of Switzerland, but among all brine baths.

The brine baths are a useful accessory to the following treatments: hydrotherapy, including good douche arrangements; river baths in the Rhine: Russo-Turkish bath; massage; inhalation processes; electro-therapy; the drinking cure, when the brine is diluted and impregnated with carbonic acid. Milk and whey cure.

The chemical analysis of *Prof. Bolley* gave in 1000 gr.

Brine:		Mother-Water:	
Chloride of sodium	311.6320	Chloride of sodium	310,187
„ „ aluminum	0,6382	„ „ aluminum	0,094
„ „ magnesium	0.3240	„ „ magnesium	3,3689
Sulphate of lime	5.9653	„ „ calcium	2,144
Carbonate of lime	0,1830	Sulphate of lime	0,94
Silica	0,0874	Carbonate of soda	0,108
Traces of phosphoric acid.		Sulphate of ferrous oxide	0,0102
„ „ iron.		Silica	0,0113
Total of fixed solids	318,8299	Traces of chloride of lithium.	
Free carbonic acid	0,2015	Fixed solids	316,8635
Specific Gravity	1205,69	Specific Gravity	1209,78

Hotel Dietschy on the Rhine, Rheinfelden.

It is recommended for: 1. General weakness and disturbances of the organs of nutrition.

2. Scrofula and spinal disease.

3. Chronic affections of the bones and joints.

4. Chronic exudations and the remains of inflammation, especially diseases of the uterus.

5. Chronic rheumatism of the joints and muscles.

6. Chronic skin diseases, especially eczema.

7. Diseases of the nervous system, neurasthenia, hysteria, neuralgia, paralysis.

It is not good for: Painful eruptions, inflammatory feverish affections, diseases of the heart and vascular system, tendency to apoplexy, old age accompanied by marasmus. — Physicians: *Drs. A Fetzer* and *E Wieland.*

The **Health Establishments of Dietschy:**

A. **Hotel Dietschy on the Rhine** with Dépendance, **Hotel Krone,** and *Chalet,* together containing 105 rooms with 150 beds. The principal house, which is a comfortable four storeyed building, has 75 pretty rooms, with 100 beds, many of which lead out on to balconies with balustrades, affording a splendid view of the Rhine valley and the mountains of the Black Forest. Pretty assembly rooms, two dining rooms, the larger of which opens on to a spacious verandah leading to the garden, and is excellently ventilated by water on the Aeolus system. A large, covered court, artistically decorated, is a pleasant resource in bad weather; concerts are given here daily once or twice.

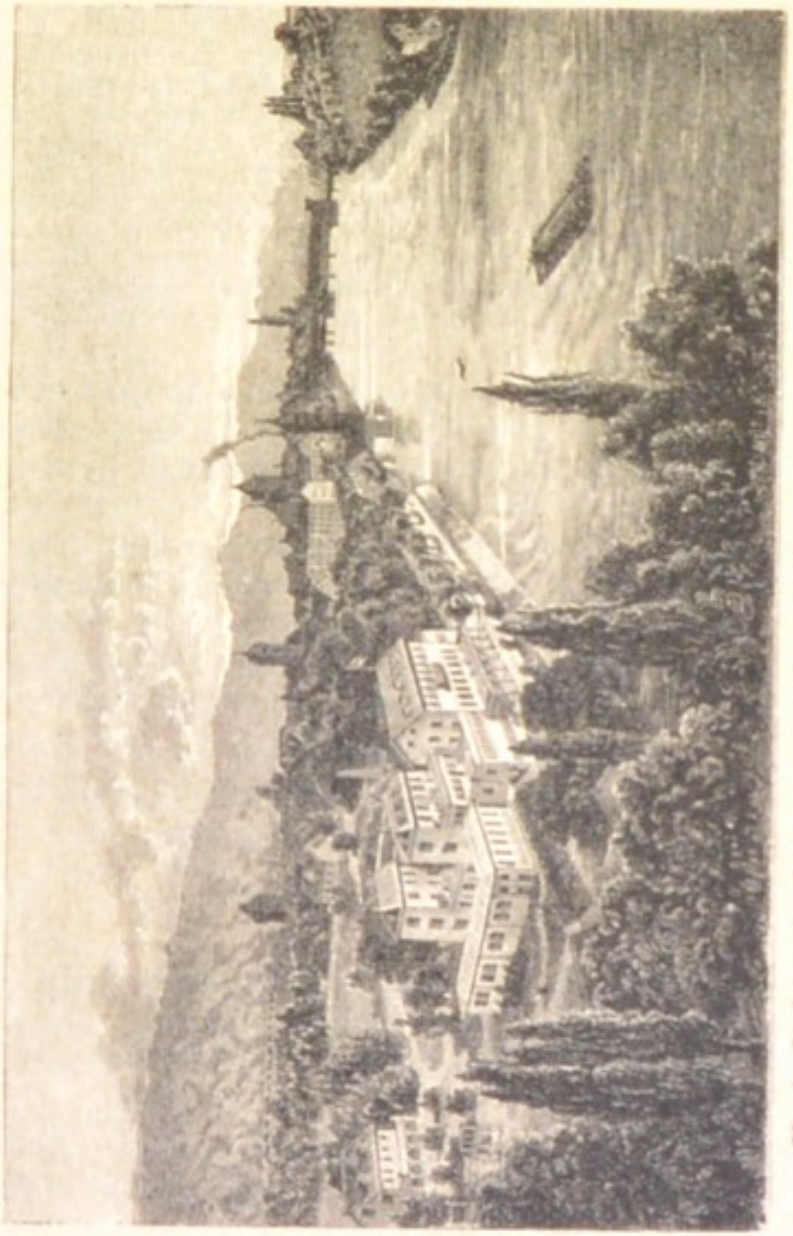
The Dépendance *Hotel Krone,* in a small garden, has 18 large rooms with 32 beds, several balconies and terraces surrounded by a shrubbery; it is well suited for large families.

The *Chalet* is a charming Swiss house in Bernese style, containing 12 rooms (with 15 beds) most of them opening on to balconies.

On the ground floor of the *Hotel Dietschy* are 21 baths in two divisions, with 30 (most of them enamelled) baths; in the new building are 13 good bathing cabins, each with separate dressing room, well ventilated, and, like the corridor, warmed. In this division are also a large douche apartment fitted up with the best apparatus, a massage and inhalation room with *Dr. Quehl's* Universal Inhalation apparatus, a room for vapour and Russian baths, a Rhine bath in the river. The garden, with its promenade along the river, is unequalled, and visitors delight to gather under its shady trees. The Kurhaus is arranged also for winter sojourn. "The whole establishment is excellently conducted and ranks as one of the best type of hotels in Switzerland". Garden for patients. Milk and whey cure. Postal and telegraph offices in the house. Telephonic communication with the *Hotel des Salines.*

B. **Rhine and Brine Bath Hotel des Salines** with **Villa Flora** and **Chalet Fridau,** 5 min. above Rheinfelden, a model Kurhaus. The main building and the two wings contain 52 comfortable apartments, several private sitting rooms, a large, pleasant, cool dining room, ladies' drawing-room, billiard and smoking room, two large, covered verandahs. A glass covered corridor artistically decorated connects the main building with the new bath house. This contains 12 good bath rooms with 18 enamel baths, apparatus for electric baths and douching, and an inhalation room. The Villa Flora has 26 rooms (40 beds), good bath room, and covered verandah. Chalet Fridau has 9 rooms, a salon with verandah. Large park. — Pension terms (3 meals) 5 fr.; children 2½—4 fr.; servants 3 fr.; room 1 fr. 25—2 fr. 50; with 2 beds 3—5½ fr.; salon 4—6 fr.; subscription to Band from the beginning of June to the middle of September 30 cts. a day. Baths: warm bath 60 cts.—1 fr.; electric and Turko-Russian baths 2—3 fr.; Rhine bath 30 cts.; brine and mother-water 5 cts. per litre. Douches: cold douche 80 cts.—1 fr.; warm 1—1½ fr.; Scotch 1½ fr.; circular 1—1½ fr.; with massage 2 fr.; sitz bath and local douching 1—2 fr. Inhalation 50—70 cts. Horses and carriages.

Walks: — In 5 min. to a splendid beech wood; from there in 10 min. through the Salinenwäldchen to Saline Rheinfelden. In 5 minutes past a guard house, along a good field path to the Eremitage (pudding stone grotto); from there in 10 min. to the Känzeli; in 10 min. to the Feldschlösschen, from the terrace of which there is a fine and distant view; from there in 15 min. to the Grümpele with a pavilion (a beautiful view); 1 hr. through the backwoods to what was formerly the Nonnenkloster, monastery of Olsberg (now a Pestalozzi establishment); in 1½ hr. to Maisprach and Magden; from the former to the Sonnenberg, with an extensive panorama, and to the castle ruins of Farnsburg. In a few minutes by the Bötzberg railway to Augst where there are the remains of a Roman amphitheatre. On foot through the beautiful Ergolzthal, or by train to Liestal and Muttenz with the three ruined castles of Wartenberg, Schönthal and Bad Schauenburg, and also to Basle. By the Bavarian railway to Beuggen, near which is the Tschamberhöhle which is well worth seeing; in 2 hrs. to the Hohenfluh-Thurm. By train in 20 min. to Säckingen (made famous by Scheffel's "Trompeter von Säckingen") with Berg-See and Scheffelstein 15 min. distant in the Tannenwald;



Hotel des Salines (Rhine Brine Spa) Rheinfelden.

to Laufenburg with the ruined castle of Habsburg-Laufenburg, and the ivy-mantled towers at the foot of the roaring Rhine Falls. Further on by train to Neuhausen and the Falls of the Rhine near Schaffhausen. In the Wiesenthal (the home of Hebel) to the ruined castle of Rötel and the heights of Feldberg, to Belchau, Zellen-Blauen, Rimmelisbühl; in the Wehrathal to the famous Tropfsteinhöhle of Basle, known as "Erdmännleinsloch".

Mumpf,

on the Rhine, 284 m. above the sea, with brine and Rhine bath. Season from the beginning of May to October.

The village of Mumpf with 445 inhabitants lies on the Rhine and has a station on the Bötzberg-Zürich-Basle line. The Rhine flows rather swiftly here; its greatest fall is at the border of the parish, the next greatest at the village itself, and the next at "Herffach", the boundary of the parish. At these three points great jagged rocks rise in the bed of the river which, when the water is low, impede navigation. The mean breadth of the Rhine at the Bad Hotel is 150 m. A cable railway leads from here over the Rhine to Säckingen. The Dorfbach, which rises in the pretty Bachthal intersected by winding walks, flows into the Rhine here. Great romantic looking fir and forest woods form a green shelter for the peaceful little village from rough winds.

The climate of Mumpf is very similar to that of Rheinfelden. The hollow in which it lies is protected on three sides by mountains and the Black Forest from the north wind, by the Jura from the storms of the south, by the Eggberg at Säckingen on the east, by the Katzenfluh (545 m.) on the south-east, and by the Kriesi and Zeiningerberg on tbe west. Tbe wind generally blows from west to east toward the Frickthal with its mild climate, while the Rhine adds a refreshing coolness to the air. The temperature for the year is 10,5° C.; for the summer months 18—22° C.

Meteorological Observations of 1859:

Mean Temperature.			Snowy and rainy	Dew and
Morning.	Mid-day.	Evening.	days	Rime.
5,77	10,91	7,84	121	70
Cloudy.	Clear.	Dull.	Over cast.	Storms.
26	69	171	125	16

The country round is abundantly supplied with water; the drinking water is excellent, cool and pure-tasting, the vegetation is fruitful, and the beautiful vine hills, cornfields, and soft green meadows bear witness to the mildness of the climate.

The brine and mother water for the baths are brought from Saline Rheinfelden and used for the same purpose as they are there. The complaints for which Mumpf is recommended are therefore similar, and it is adapted on account of its climate to delicate, sensitive constitutions which need country quiet. — Physician: *Dr. Wieland.*

Hotel and Brine Bath zur Sonne (Waldmeyer Boller) close to the Rhine.

Lauffenburg, 25 min. from the Baden station of Säckingen. It is divided by the Rhine into Great Lauffenburg in Swiss territory and Little Lauffenburg in Baden territory. From the bridge between the two is a splendid view of the Rhine Fall. Good salmon takes; large pool. On the Schlossberg in Great Lauffenburg is the interesting ruin of the ancient castle of the Hapsburgs of Lauffenburg. — *Hotel Rheinsoolbad.*

Eglisau,

337 m. above the sea, has a diatetic establishment under *Dr. Wiel*, with an alkaline muriate spring. Good place for the treatment of obesity. Open all the year round.

Route: By rail from Zürich and Winterthur in 1¼ hrs.; from Basle in 3 hrs.

The ancient, pleasant little town close to the right bank of the Rhine with about 800 inhabitants, stands in a romantic cleft of a valley; it is connected with the left bank (Seglingen) by a fine, covered bridge, 100 m. long, over which there is much traffic. Mountains rise precipitously on both sides; those on the right are covered with vineyards, those on the left with fir and beech trees: on the east the valley is completely enclosed by rounded mountain masses, clustering around and above each other (Tössriedernhorn, Buchberg, Irchel) and is only open towards the west. Owing to this favourable position the place is quite sheltered from the bitter north and east winds, and exposed only to the west and north-west winds; the force of the Föhn is broken by the opposite heights, the Laub and Rheinsberg. The Rhine itself has a very softening and beneficial influence on the climate, the constant evaporation inducing a refreshing moisture and in the height of summer rendering the air pleasantly cool. The extensive fir woods, with their shady paths and seats, which spread over the neighbouring and somewhat higher Rafzerfelde, as well as over the surrounding hills, regulate the humidity of the atmosphere and charge it richly with ozone and aroma. The mean annual temperature is 9,9° C.; the mean temperature from January to May is 6,5° C. (Zürich 4,7°); consequently the spring is a week earlier than there.

The average yearly rainfall is 966,6 mm.

The mineral spring most resembles that of Franzenbad, but is distinguished from it by the preponderance of common salt over Glauber salt.

The spring is used as a drinking cure for diseases of the digestive organs, catarrh of the stomach and intestines, dyspepsia, ulcers of the stomach and intestines, habitual constipation, hæmorrhoids, enlargement of the liver, jaundice, gall-tones, catarrh of the kidneys and bladder, catarrh of the throat and respiratory organs, poverty of blood, convalescence, diabetes, obesity: it is used as a bathing cure for gout, rheumatism, scrofula, chronic disease of the uterus. For special treatment Dr. Wiel's dietetic system, modified by Leube, Kussmaul, an apparatus for cleansing the stomach and intestines, electricity, massage for cases of asthenia and weakness of the stomach and muscles of the intestines, are applied. Systematic milk cure. River baths. —

Physician: *Dr. Lætscher.*

Walks: In 20 min. through the Murgass to the Stampfenmühle; in 15 minutes to the Pavilion and Vogelsang; in 40 min. through the wood to Hüntwangen; in 1 hr. through the wood to Wasterkingen;

in 1/4 hr. to Herdern; in 40 min. through the wood to Wyl: in 50 min. to Wyler and back; in 1 hr up the Hohenegg and back; in 1 hr. up the Bustberg and the Hurwig (Hoarbuck) with a pretty view; in 2 1/2 hrs. to the castle of Goldenberg; in 1 1/4 hrs. to the picturesque castle of Teufen, etc.

Zofingen, a little town in a pleasant fertile district on the Lucerne-Olten line, from which latter it is 20 minutes distant. The mildness of the climate adapts the place for a long summer residence.

Hotels: *Rössli; Ochs; Rabe.*

Hygienic gauze and under clothing at the excellent manufactory of **Bär and Co.** Zofingen.

Römerbad, 10 min. south-west from Zofingen, with an earthy mineral spring; very pretty gardens much frequented by the inhabitants of Zofingen. The remains of a Roman bath were found here in the year 1826. Good hotel; mineral, brine and sea-salt baths.

Bad Geisshubel, north west of Zofingen, 20 min. from Niederwyl station with an earthy mineral spring. Also brine and sea-salt-baths.

Bad Lauterbach, 1 hour north of Zofingen, on the southern declivity of the Engelberg, in a wooded, sheltered situation, with a splendid view of the Alps. Has an earthy mineral spring. Likewise brine baths. Goat's and cow's milk. Good and pleasant summer resort.

Pfaffnau, 1 hour distant by diligence from the station Reiden (10 min. from Zofingen), has an earthy mineral spring. The situation is sheltered and pretty.

Aarau, 20 min. from Olten, on the Olten-Zürich line, capital of Canton Aargau, with 6000 inhabitants, 388 m. above the sea, in a very healthy situation, at the base of the richly vine clad hills of the Jura. The prevailing winds are the east and west; fog frequently gathers over the Aar; mean temperature for the year 8,5° C.; minimum 14,3; maximum 29,8° C. This pleasant little town is neither used as a climatic station nor as a tourist centre.

Laurenzenbad, 518 m. above the sea, with a gypsum spring 1 1/4 hr. north-west of Aarau. It is enclosed on the north and south by two lofty mountains (Gleissfluh and Egg) and lies in a narrow, wooded valley of the Jura running from east to west. The air is mild but brisk.

The temperature of the spring is from 17—18° C.; it contains, chiefly, sulphate of lime, carbonate of lime and magnesia, chloride of magnesium, silica, alumina.

The water is taken internally and externally for chronic exudations from the skin, rheumatism of the joints and muscles, digestive disturbances, women's diseases. *Kurhaus* with good boarding. Brine and liver of sulphur baths.

Barmel, 485 m. above the sea, milk and whey cure establishment 1/4 hr. distant from Laurenzenbad.

Gränicherbad, an earthy mineral spring; can be reached in 40 min. by diligence from Aarau. It is sheltered from the east and south winds, but less so from the north. The spring is used for rheumatism, neurosis and women's diseases.

Bad Unterentfelden, an earthy mineral spring; can be reached in 25 min. by diligence from Aarau. It is sheltered from the north. The spring is resorted to for debility and rheumatism.

Muri, 462 m. above the sea, Mineral and Brine Bad *zum Löwen.* Season May to end of September.

Route: By rail from Aarau in 1 hr.; from Lenzburg in 1/2 hr.; from Lucerne in 1 hr.

The fine looking village of Muri, situated on a sort of moraine on the terraced shaped eastern slope of the Lindenberg, is enclosed by mountains of considerable height. The climate is very favourable and much resembles that of Interlaken. Mean yearly temperature 8,53° C. (Interlaken 8,79° C.) Minimum 14,4; Maximum 29,6° C. The west or more specially the north-west is the prevailing wind; the wind seldom blows from the south sometimes from the south-west and north, and is rarely violent. Mean cloudiness in winter 7,2; in spring 6,3, in summer 5,6, in autumn 6,1.

The spring contains 4,2388 fixed solids in 10,000 parts according to Dr. Simler's analysis:

Bi-carbonate of lime	3 4592
" " soda	0,3638
" " magnesia	0,1888
" " ferrous oxide	0,0240
Silica and soda	0,1156
Sulphate of potash	0,0882
Chloride of sodium	0,0460
Crenic acid	·,0502
Free carbonic acid	0,5468
Temperature of the spring	10,13° C.

The spring is used both for drinking and bathing, the treatment including milk, whey and brine baths.

Muri is a good place for weakly, delicate, susceptible persons, for the young and the aged, for chronic catarrh of the respiratory organs, chronic disturbances of the digestive organs, scrofula, and joint rheumatism. The Kurhaus *zum Löwen* is plain, but good, and cheap. — Physician: *Dr. Nietlisbach.*

Walks: — In ¾ hr. through a thicket of May to Merenschwand; in ½ hr. through the Eggerwald to the wonderfully beautiful point of view, the Kapf; in 20 min. to Birri; in 1½ hrs. to the castle of Horben. By rail to Lucerne (1 hr.); to Lenzburg (½ hr.); to Aarau (1 hr.).

Schloss Horben, 816 m. above the sea, 1½ hrs. from Muri, on the Lindenberg, a summer resort; fine view. Goat's and cow's milk. Good boarding.

Bad Schwarzenberg, with an alkaline earthy spring, on the north side of the Stierenberg (874 m.) ¼ hr. above the village of *Gontenschwyl*, close to the confines of Lucerne. The water is used externally by the natives, principally for rheumatism.

Brestenberg, 478 m. above the sea, a hydropathic establishment on the Hallwyler Lake, with lake baths. Open all the year round.

Route: From Boniswyl-Seengen (Lenzburg-Lucerne lake valley line) station by hotel carriage.

The establishment is built at the bottom of the southern slope of the Lindenberg, on a woody terrace with shady grounds, sheltered from the cold north and north-east winds. The mountain landscape exhibits great diversity, and on the south is an extensive view of the Alps. The mildness of the air is evidenced by the early, rich vegetation and the excellence of the vines. The establishment possesses all the necessary apparatus for the medical application of cold and warm water, viz, various kinds of douches, Irish-Roman baths, inhalation, massage,

electric and gymnastic apparatus. Milk and mineral water cure. Simple table d'hote, with special reference to medical treatment.

The following complaints are successfully treated here: diseases of the nervous system (neurasthenia, hysteria, hypochondria, hemicrany, nervous dyspepsia, sexual weakness); it is also useful for changes in the composition of the blood, chlorosis, anæmia, obesity, chronic rheumatism of the joints, gout, advanced syphilis, scrofula. Favourable results have been known from the treatment of certain skin diseases, pruritus, eczema, akne, hyperidrosis.

It is not indicated in: mental affections, organic heart disease, cachetic affections. — Physician *Dr. Münch.*

Walks: In 1/4 hr. to Castle Hallwyl; in 1/2 hr. to Eichenberg, with a beautiful view over the lake, the Alps and the Jura; in 1 1/4 hr. to Bampf with a charming view over the valley of the Aar; in 2 hrs. to the Homberg (the Rigi of Aargau) with a lovely view over the Hallwyler and Baldegger lakes, and into the Wynen and Leethal valleys, over the Alpine range of Säntis as far as the Stockhorn; in 2 1/4 hrs. to the picturesque castle of Heidegg.

Bad Schinznach, 343 m. above the sea, with a hot sulphur spring impregnated with gypsum. Season middle of May to the end of September.

Route: By rail from Zürich in 1 hr.; from Basle in 2 1/2 hrs.; from Berne in 3 hrs.; from Geneva in 7 hrs.; from Stuttgart in 8 hrs.; from Paris in 13 hrs.

Bad Schinznach lies close to the right bank of the Aar, 10 min. from the railway station in a pleasant, fertile plain, surrounded by picturesque, richly wooded heights on which stand castellated ruins, and castles still inhabited. Immediately north of the establishment rises the Wülpelsberg (514 m.) with the ruined castle of Habsburg, the ancestral seat of the counts of Habsburg. Towards the north-west on the bank of the Aar, running north towards Brugg on the slope of the Wülpelsberg, is a pleasant wood, with numerous footpaths, which has been cut through by the high road and railway line. On that side of the establishment which is open to the south a flower and vegetable garden is planted; there are also shady ornamental grounds, and along the Aar runs a fine, broad grove of plane trees. The air is mild, rapid changes of temperature seldom occur, usually preceding or following storms; the north-west, north-east and east winds are the most frequent. Mean summer temperature 18,2° C.; mean reading of the barometer 728 mm.

The spring bubbles up from several Trias clefts containing gypsum, rock salt and saliferous clay; it is 665 m. below the soil and is boarded in with oak. For supplying the new baths water is brought direct from the spring by means of a hydraulic pump and cast iron pipes. The chemical analysis of Prof. Bolley gives in 1000 parts the following fixed components:

Sulphuretted hydrogen	652	Ccm.
Carbonic acid	925	„
Carbonate of lime	1,42	Gr.
„ magnesia	0,04	„
Ferric oxide	0,01	„
Silica	0,12	„

Sulphate of lime	8,50
Alumina	0,10
Sulphate of soda	1,28
„ potash	0,80
Chloride of calcium	0,71
„ magnesium	0,149
„ potassium	0,11

Temperature of the spring 33°—34° C. The water is at all times of the year perfectly clear, slightly green, shows numerous small gas bubbles and emits a very decided odour of sulphuretted hydrogen; it tastes strongly of liver of sulphur and is slightly bitter and salt.

The spring is used for bathing and drinking in the following complaints:

1. Chronic skin diseases, eczema, akne, boils, gatherings.
2. Scrofula and spinal disease, glandular swellings, affections of the bones and joints.
3. Chronic metallic poisoning.
4. Chronic affection of the digestive and respiratory organs, hyperæmia of the liver, plethora abdominalis, chronic catarrh of the throat and bronchial organs.
5. Chronic rheumatism.
6. Chronic nervous complaints arising from weakness and excessive sensibility, migraine, cardialgia.

The admirable health establishment belongs to a company. Physicians: *Drs Amsler*, father and son, *Hemmann*.

Walks: In ½ hr. to the castle of Habsburg; in ¾ hr. to the Vier Linden; in 1 hr. to Brugg and Königsfelden (an asylum for the insane) in 10 min. from there to Windisch, with the arena and remains of an ancient amphitheatre, in ¾ hr. to the castle of Kasteln in ¾ hr. to the castle of Wildenstein; in ¾ hr. to the castle of Wildegg; in 1½ hr. to the Gislifluh, with a splendid view over the Black Forest and the Alps.

Wildegg with a chloride of sodium spring impregnated with iodine, between Schinznach and Aarau, at the foot of the hill crowned by the beautiful castle of Wildegg. The artesian boring carried out in 1836, 256 m. beneath the bed of the Aar, revealed a spring which gives out yearly 75000 litres, at a temperature of 15,6° C., at the lowest part of the bore, and at the surface of the ground 11,2° C. The chemical analysis according to Lané gives in 1000 parts:

Iodide of sodium	0,0284	Chloride ammonia	0,0064
Bromide of sodium	0,0130	Sulphate of lime	1,8454
Chloride of sodium	10,4475	Carbonate of iron	0,0080
„ potash	0,0052	Nitrate of soda	0,0442
„ calcium	0,2579	Carbonate of lime	0,0760
„ magnesium	1,6213	Silica	0,0040
„ strontia	0,0199		

The best curative results are experienced at Wildegg in certain forms of skin disease (eczema, prurigo) and diseases of the bones (caries, necrosis, periostitis) also in scrofula. Good results follow the use of this water in combination with that of the water of Schinznach both for bathing and drinking. The water is bottled.

The magnesia salt waters of **Birmensdorf** and **Müllingen.** — Birmensdorf lies at the foot of the Petersberg on the right bank of the Reuss; ¼ hr. from there on the left bank is Müllingen; the places are connected by a ferry. The sulphate of lime quarries of Birmensdorf have been worked for more than 70 years, the soundings being 50 m deep.

The mineral water contains in 1000 parts sulphate of potash 0,1042; sulphate of soda 7,0356; sulphate of magnesia 22,0135; sulphate of lime 1,2692; chloride of magnesium 0,4604; carbonate of magnesia 0,0324;

crenate of magnesia 0,1010; ferric oxide 0,0107; alumina 0,0277; silica 0,0302; altogether 31,0982 fixed solids.

The Mülliger water is strong Glauber salt water (32,439 parts sodium sulphate in 1000 parts of water), and is also obtained in sulphate of lime quarries by a process of lixiviation. Both mineral waters are bottled.

Wengibad, 512 m. above the sea, has an earthy spring.

Route: From Affoltern station (Zürich-Zug-Lucerne line) in a south easterly direction in 40 min. Hotel omnibus at the station.

The Bad is in a very pretty spot on the south-western slope of the Aeugsterberg with a lovely view of the valley of the Reuss, the Lindenberg and the Abbey of Muri. The climate is mild, and the place is sheltered from the north and east winds. The spring rises close by the bathing establishment and contains in 1000 parts of water according to Dr. Schweizer's analysis:

Sulphate of soda	0,0048
Chloride of sodium	0,0046
Carbonate of lime	0,2280
" magnesia	0,0709
Alum with traces of ferric oxide	0,0010
Silica	0,0023
Free carbonic acid	0,1720
Fixed solids:	0,4836
Temperature of the spring	10° C.

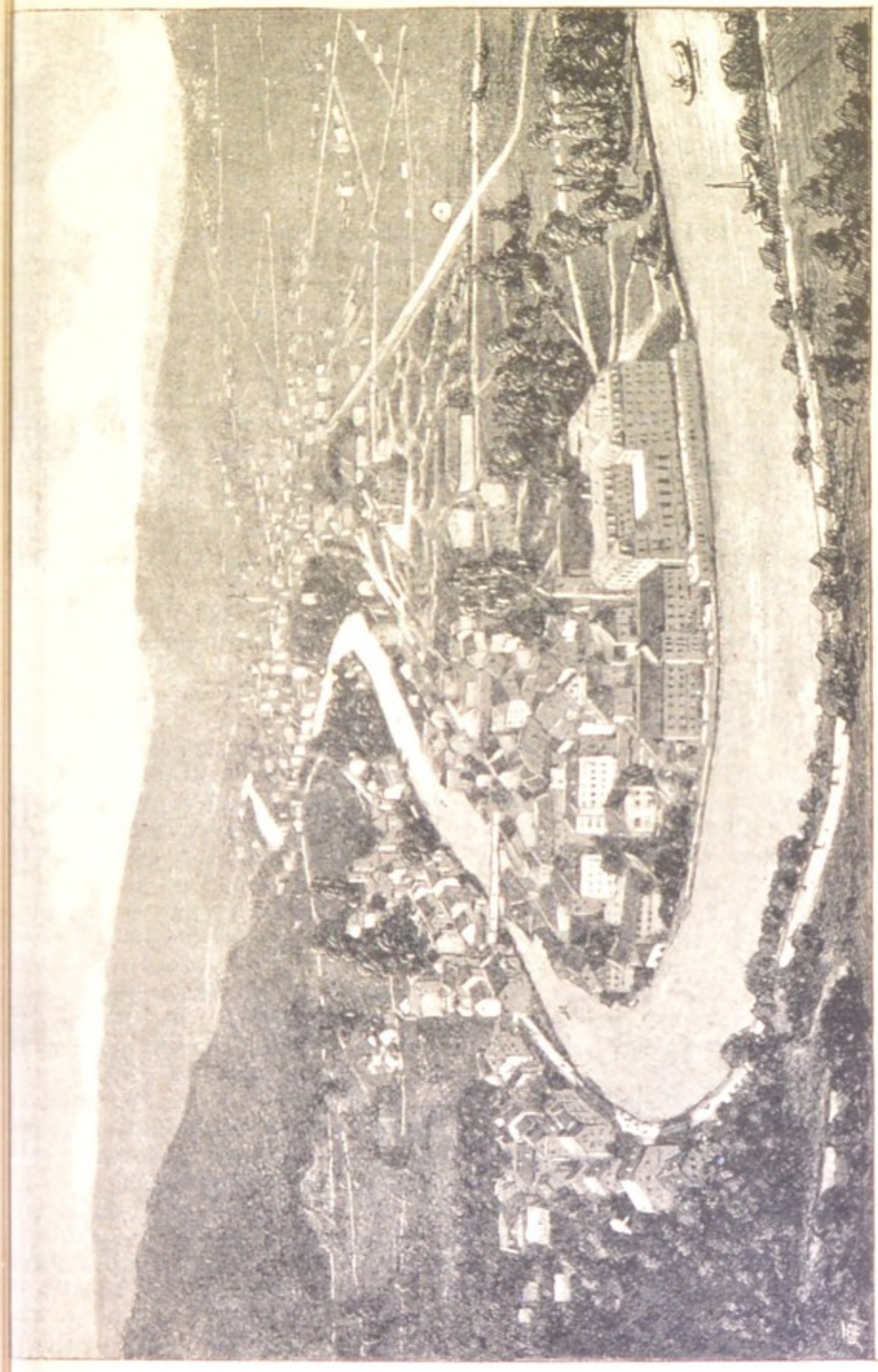
It is used both for drinking and bathing in rheumatism and gout, chronic exudations from the skin, and as an after cure in scarlet fever, measles, anæmia and chlorosis, and scrofulous affections, especially in children. Milk and whey cure. Physician: *Dr. Hegetschweiler* of Riffersweil. Plain but good boarding at the Health Establishment.

Baden.

383 m. above the sea, has a hot sulphur spring containing lime; climate and "Terrain" cure.

Route: By rail from Zürich ½ hr. (23 km.); from Basle 2¼ hrs.; from Berne 3¼ hrs.; from Waldshut 1 hr.; from Stuttgart 8 hrs.; from Paris 17 hrs

The picturesque old town of Baden with 3800 inhabitants, famous for 2000 years for its medicinal baths lies nestling in an almost circular valley 1½ km. in diameter, formed by two chains of the Eastern Swiss Jura running parallel from east to west and joined together by two slopes running cross-wise. The northern range consists of the Gebenstorf Horn, the Stoffelberg, Martinsberg, and the Geissberg; the southern, of the Petersberg (at Birmensdorf) the Baldegg, Hundsbuck, Schlossberg and Lägernberg. The crescent-shaped lofty height of the Oesterliwald, descending somewhat abruptly to the valley, forms the western connection between the two parallel ranges, and the saddle of the Höhthal Pass the eastern. The pleasant Limmat river, "the blue-eyed daughter" of the Tödi has, for countless ages, divided the southern range between Schlossberg and Lägern. and the northern range between Martinsberg and Geissberg. At the northern opening, a good ¼ hr. from the southern, the Limmat, which closely hugged the eastern side of the valley, turns off from the narrow gorge of Baden and



Baden (Ct. Aargau).

soon takes a more westerly course. In about an hour we find it joining the Aar, and 2 hrs. further both rivers unite with the Rhine.

On the narrow space between the river and the hills on the left bank, the summits of which are crowned with shady beech trees and the sides covered with vines and pasture land, stands the mediæval little town, or Great Baden, the luxurious and palatial hotels of the Great Baths clustering around the foot of the ever historically memorable "Steins von Baden".

The eastern portion of the valley on the other side of the river is yet more fertile and diversified. In the foreground, along the right bank, stretches the little village of Ennetbaden, or Little Baden, with the modest hotels of the Small Baths. A belt of dark green beech-wood crowns the heights above, whence there is a wonderful view of the baths below, and of the river winding among them, of the princely Kurhaus and its noble park, of the pretty houses and slender towers of the city, and of the ruins of the hoary old castle of "Steins", with its memories of long past glories. Below the margin of the wood is a very fine vineyard, sheltered from the deleterious blasts from the north and east, and exposed only to the gentle breezes from the west, and the hot sun from the south. The fragrant "Goldwändler", beloved alike by old and young, thrives and ripens here.

A thousand paces below the town, at the north end of the valley, where the Limmat cuts its way between the Martinsberg and the Hertenstein, and where the sinuosities of the river leave an open space on both banks and even in the bed of the stream, arise the warm medicinal springs of Baden.

The Great Baths on the left bank and the Small Baths on the lower right bank are connected by an iron open-work bridge, with a fall of 7½ % — an object alike of interest and of use, being much resorted to on account of the fine view its commands.

Along the banks of the river, at the foot of the slope which stretches from the town to the Great Baths, is a fine avenue of gigantic plane trees, which makes a pleasant promenade for those taking the waters, and together with the Limmat wards off the fierceness of the summer sun.

Along the left bank of the Limmat, from the Great Baths to the opening between the hills, stretches "die Matte" (the Meadow), a green, open space with a grove of trees, leading to the delicious woods which cover the rising ground. It is a favourite walk with all who visit Baden.

Climate. The climate of Baden is mild and pleasant and very salubrious. Surrounded on three sides by high mountains, it is not exposed to every fluctuation of weather. The temperature, accordingly, is, on an average, 1,5—2° C. higher than at Zürich, near as that place is to Baden. In winter, the thermometer varies between 5° and + 5°, and rarely falls below — 6° C. As the Baths are 30 m. lower than the town their position is more sheltered, and the temperature is 1.5—2.0° C. higher, and the fogs which often come from the Lake of Zürich into the Valley of the

Limmat and hang over the Schlossberg and the upper part of the town, rarely settle in the hollow where the spa lies. Violent gales are very rare, and deep down in the valley north and north-west winds are unknown. These favourable conditions render Baden excellent as a winter resort or as a spring sejourn for patients from the high stations (Andermatt, Davos, Maloja, St. Moritz). The mean relative humidity of the air is very high, and the rainfall, especially in summer and autumn, is considerable.

Meteorological Observations made in 1882 by *Gsell-Fels*:

Month	Temperature of the air						Relative humidity				Amount of rain-fall	Numb. of days		
	7 o'clock	1 o'clock	9 o'clock	Mean	Minim.	Maxim.	7 o'clock	1 o'clock	9 o'clock	Mean		Rain	Snow	Mist
Jan. . .	—1,8	1,1	—0,8	—0,6	—5,5	8,5	93,4	85,2	94,1	90,9	22,9	4	—	18
Feb. . .	—1,8	4,8	0,6	1,1	—8,0	14,6	94,1	81,1	89,3	88.2	20,1	5	—	9
March . .	2,2	13,6	5,8	7,0	—1,6	23,4	91,5	59,1	83,7	78,1	28,3	4	1	6
April . .	5,3	14,2	8,5	9,0	—4,4	19,9	86,3	63,6	79,2	76,4	47,9	8	—	2
May . .	10,4	20,0	11,7	13,6	4,7	31,7	82,7	62,2	82,0	75,6	62,9	7	—	4
June . .	15,5	21'1	14,1	16,6	6,9	33,1	82,3	67,4	82,9	77,5	188,6	11	—	3
July . .	15,6	23,2	15,3	17,5	9,4	31,8	84,7	63,9	89,3	79,3	124,8	14	—	6
Aug. . .	14,6	21,3	14,4	16,4	9,8	31,8	86,1	67,6	87,7	80,5	100,5	18	—	6
Sept. . .	11,6	16,7	11,9	13,1	5,0	29,7	90,9	71,2	90,8	84,3	216,1	19	—	6
Oct. . .	8,6	14,8	9,2	10,7	4,6	25,5	94,5	76,6	90,3	87,1	138,0	13	—	11
Nov. . .	3,4	7,4	4,1	4,8	—3,1	17,3	91,7	83,8	90,9	88,8	174,4	16	5	4
Dec. . .	0,5	3,1	0,8	1,4	—7,5	12,9	92,8	85,9	94.1	90,9	172,2	10	3	4

The Springs and Baths. The springs of Baden have a constant temperature of 46—48° C., and rise from a depth of more than 1,000 ms., from strata, therefore, at least as ancient as the Lower Trias. The Upper Trias, the red marl, comes to the surface in several places in the Baden basin and its western and eastern continuations between the northern and southern ranges of the Jura, and especially in the district of the thermal springs. Borings made below the boulders in the river's bed show the existence of a snowy-white stratum of gypsum. A violent upheaval of the strata, untold ages ago, rent a deep fissure in the hard rock, through which the therme now rises to the surface from its subterranean hot-bed.

The springs deliver more water in spring than in the late autumn, and more in wet seasons than in dry, which shows their dependence on atmospheric deposits, and also, in all probability, on the height of the Limmat. On an average, the twenty-one springs deliver altogether 700 L. per minute, or over a million L. per day, of thermal water. The Hot Stone spring yields most — 165 L., the Limmat spring gives 140, and the large spring at Ennetbaden, 109 L. per minute. The water is quite clear, and in sealed bottles will remain unchanged for years. The taste is saltish, something like chicken broth; there is no smell, the odour of sulphur in the neighbourhood coming from the escaping gases. According to *Professor Löwig*, of Zürich, who analysed the spring for the first time in 1835, the water contains no sulphuretted hydrogen gas,

and no metallic sulphide. On the other hand, *Dr. Müller*, of Berne, after several analyses of the Verenahoff spring, from 1866—9, maintained that in 10 L. there were 0,0105—0,8269 Gr. of free sulphuretted hydrogen gas among the gases; no metallic sulphide however, but bromine and iodine. Spectrum analysis shows the presence of rubidium and cæsium. The other apparent differences in the results arrived at by the two chemists are explained by the fact that *Müller* takes the sulphuric acid combined with the soda, and the chlorine with the lime.

The springs are conveyed through wooden pipes to the reservoirs which supply over 600 large baths. The warmth of the bath varies from 31—36° C., and can be regulated as required by the addition of cold or hot water, as in other sulphur baths (for example at Alvenue). When the air has access to the reservoirs there are found hanging on the sides, or floating on the water, algae growths, slimy lumps with tendrils (a species of Leptotricheen), and white algae, containing well-formed S-shaped sulphur crystals.

The thermal waters of Baden contain in 1000 parts:

According to *Lowig* (1835)		According to *Müller* (1869)	
Sulphate of lime	1,41418	Sulphate of soda	1,84270
„ soda	0,29800	„ potash	0,12730
„ magnesia	0,31800	Chloride of lithia	0,02380
Chloride of sodium	1,69820	„ sodium	0,32040
„ potassium	0,09262	„ strontia	0,01050
„ calcium	0,09362	„ calcium	1,34580
„ magnesium	0,07375	„ magnesium	0,01680
Carbonate of lime	0,33854	Iodide of magnesium	0,00016
„ magnesia	0,01992	Bc-carbonate of magnesia	0,35410
Fluoride of calcium	0,00209	Fluoride of calcium	0,00250
Carbonate of strontia	0,00066	Bromide of magnesium	0,00067
Phosphate of alumina	0,00086	Phosphate of alumina	0,00042
Silica	0,00096	Silica	0,04650
Fixed solids	4,35140	Fixed solids	4,09165
Traces of ammonia, lithium, organic substances.		Traces of iron, manganese, calcium rubidium, ammonia. Small quantities of sulphuric acid and organic substances.	

All the bath rooms are warmed by thermal steam which has a stimulating influence on the action of the skin. The vapour baths are in direct communication with the reservoirs, the vapour from which has a temperature of 39—40° C., and affects therapeutically, not only the skin, but the mucous membrane of the mouth, throat, drum of the ear, larynx, and air tubes. There is an apparatus for dry, in contra-distinction to wet, inhalation. For the dry inhalation the gases of the spring are collected from the surface of the water into a cylinder placed in a marble vessel with a glass lid, and are inhaled in any quantity required through india-rubber tubes with a glass mouth-piece. Pulverisateurs are not requisite, as their effect is accomplished by the spring. There are douches of every kind in all the hotels, the utmost care being taken to meet individual requirements. There are rain douches; shower douches; circular douches, with cool (20° C.), luke-warm (33°) and hot (above 35° C.) water; Scotch douches, with warm and cold water alternately, and graduated douches for diseases of women.

Each hotel has its own well for the drinking cure; in the square of the Great and Small Baths there are public drinking fountains.

Other means of cure, in use at all the hotels of Great Baden, are, massage, carried out by experienced masseurs and masseuses; and the newest applications of electricity.

The dietary of patients is regulated as carefully as hotel life will permit; anything like a compulsory régime is obviously impossible, and a tâble d'hote is the general rule.

Quite recently, by the advice of *Professor Oertel*, Baden has been made a station for the Terrain cure, for the treatment of certain kinds of circulatory disturbances (disorders of the valves and weakness of the heart, fatty degeneration, etc.), gout, rheumatism, obesity, etc. A very complete brochure, by *Dr. Wagner*, with topographical maps and tables, gives a good description of the various excursions, and of the length and steepness of the walks which patients are recommended to take systematically. As in Oertel's method, after gymnastics of the muscles, diet plays the chief part, and a hygienic dietary à la carte is absolutely necessary when a special treatment is to be followed.

1. The hot springs of Baden have, for centuries, enjoyed a reputation for the cure of gout (arthritis), when resulting from an excessive use of albuminous and fatty food, especially in the first stages before the disease has settled in the joints. From their use, together with a rational diet and regular exercise, very favourable results have ensued.

2. Rheumatism of the muscles and joints, when the heart is not affected.

3. Chronic diseases of the bones, excrescences, contractions, stiffness of the joints, especially after contusions, sprains, fractures, etc.

4. Chronic affections of the nervous system, Neuralgia, paralysis, metallic poisoning.

5. Disturbances of the pyloric artery, enlargement of the liver, hæmorrhoids.

6. Scrofula, especially glandular swellings, in combination with the iodine water of Wildegg.

7. Chronic catarrh and cellular inflammation of the uterus and the vagina, affections of the ovary, menstrual irregularities.

8. Chronic catarrh of the pharynx, larynx and bronchial organs.

The springs are not indicated in: failure of the heart, feverish inflammatory affections, tendency to congestion and apoplexy, extreme exhaustion, advanced stages of phthisis.

Physicians: — *Drs. Minnich, Wagner, Schneebeli, Borsinger, Keller, von Schmid, Barth* and *Zehnder*.

Hotels; *Great Baths*:

Neue Kur-Anstalt: Grand Hotel *(R. B. Saft* is the proprietor and excellent manager), a large, handsome, four-storeyed building of sandstone, in the modern Renaissance style, stands on the banks of the Limmat. It has two fine terraces, 6 m. broad, beautiful garden and pleasure grounds, a glass verandah, and numerous balconies. The hotel contains a spacious vestibule, on the left of which is a telegraph office, a restaurant, billiard and smoking-room; on the right, a reading-room and library, with newspapers in various languages; a comfortable ladies' salon, and a drawing-room. Opposite is the magnificent dining hall, its ceiling adorned with mouldings and oil paintings, its bay windows, 7 m. high, overlooking the river; it seats 300. There are 142 light, lofty, large, and well-furnished rooms, with double doors between each; broad and lofty corridors, a hydraulic passenger lift to all the floors and to the baths. Drinking water is laid on throughout the house. Hot air apparatus for warming the salons, and separate heating for the private sitting-rooms. In an airy basement are the kitchens, etc.; at a little distance are the baths, decorated in Pompeian style with a waiting room furnished with divans; three private bath rooms, floors and baths of white marble; a ventilating shaft in each room. A cooling apparatus keeps down the air of the hot pipes (49° C.) to 25° C., so that the temperature of the baths can be regulated at pleasure. At the east-end of the bathing place is the douching room with every kind of douche. Massage is performed by masseurs from Aix-les Bains and Nice. A covered swimming bath, 20 m. long, and 10 m. broad. Complete apparatus for cold baths on the newest system. The health establishment is also arranged for winter residence. There are altogether, including the older establishments, the "Hinterhof", and "Staadhof", nearly 300 apartments and 100 bath-rooms. Pension: Breakfast, 1 fr 25, carried up to room, 1 fr 50; table d'hôte, at 1 o'clock, 3 fr. 50; in private room, 5 fr., supper, 2 fr., servants full board 5 fr. Bed-room, in the new building, 2—5 fr., in the old building, 2—2.50 per bed; in the Staadhof 2—3.50. Complete suite of private apartments, 25—40 fr. Baths, 75 cts. to 1 fr.; with douche, 1 fr. 50. Douche alone, 1 fr.; massage, 2 fr., inhalation, 75 cts, service, 50—75 cts., lights, 50 cts.; heating, 75 cts.

Verenahof *(Bros. Borsinger)* on the Kurplatz and grand promenade of the Limmat.

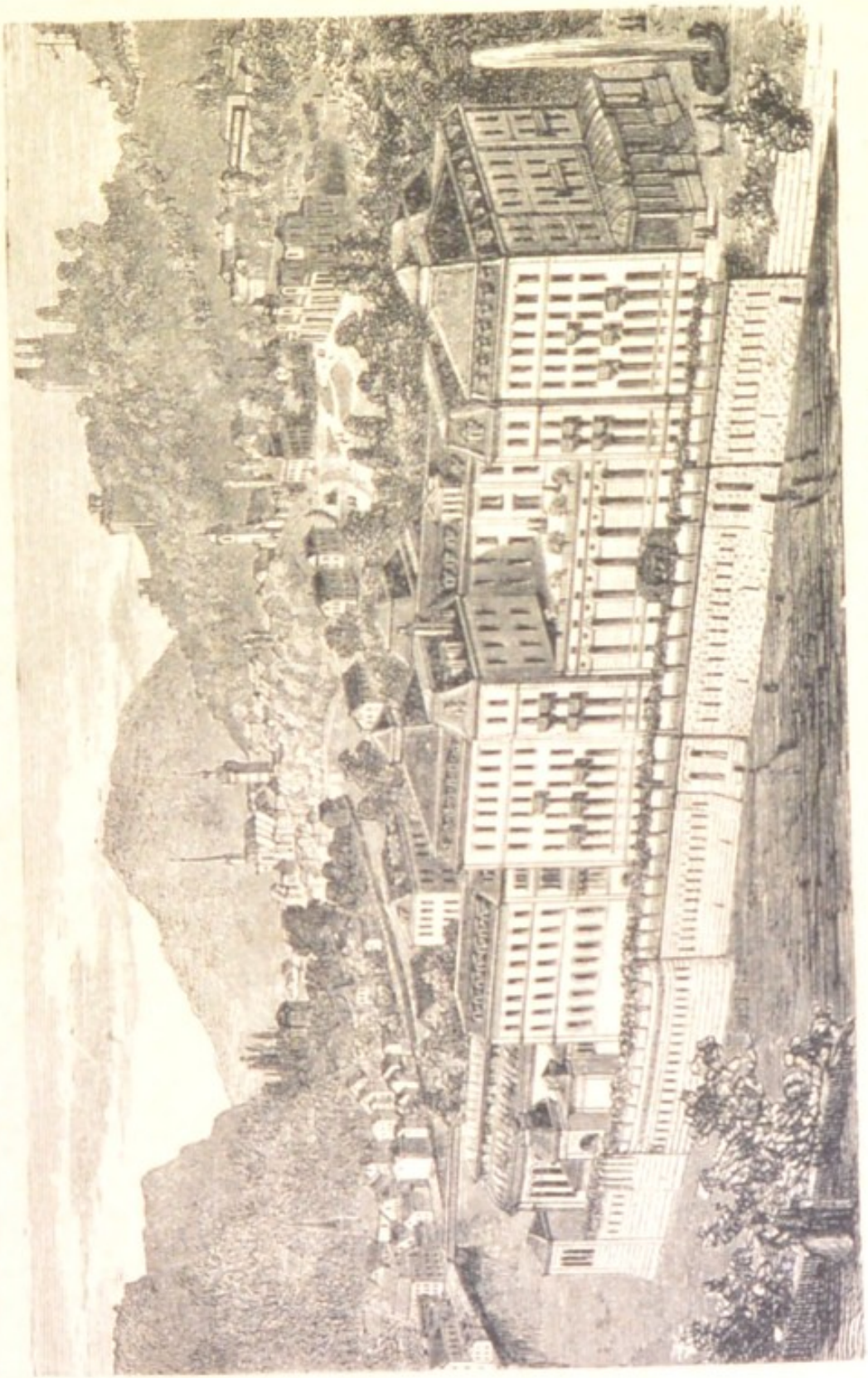
Limmathof *(Bros. Borsinger)*, a fine, four-storeyed building in an open and beautiful situation on the Limmat promenade.

Hotel Blume *(F. H. Borsinger)*, a good and popular second-class hotel.

Hotel zum Ochsen *(Diebold)* a well managed middle-class hotel, with a good dépendance opposite.

Schweizerhof; Hotel zum Bären (Dorer); *Hotel zum Schiff* (Brunner); *Hotel Freihof.*

The Kurhaus *(Casino)* is a very elegant, two-storeyed edifice, built of sandstone in the Renaissance style. At the east entrance is a cone-shaped vestibule, with Roman pillars and medallions. The *Kursaal* is 27 m. long and 15 m. high, is decorated with frescoes, and has galleries running round. In the south wing is a café, restaurant, and billiard-room; in the north wing, two ladies' salons, and a reading room, with home and foreign newspapers; over the restaurant a large room with a collection of antiquities. The building is pleasantly surrounded by trees. The four terraces outside the wings are connected by galleries, and afford a charming view of the Valley of Baden, watered by the swiftly-flowing Limmat, rich in verdant pastures, fruitful fields, and sunny vineyard; and encircled by wooded heights. The whole building is warmed by hot air. There are about ten yokes of land around it, which include well-kept English-park-like grounds, with flower beds, lawns, play-grounds, banks, and seats; in the middle of the park is a well-stocked fish-pond with water fowl; ancient Roman monuments around the pond. **Evening concerts by the Kur band;** réunions of foreign artists. Subscription, 5 fr. (2 persons for 8 frs., 3 for 10 frs., 4 for 12 fr., and then each extra person 1 fr. more); ten entrance tickets 3 frs. Visitors pay, according to the rank of their hotel, 50, 40, and 20 cts. for the right of entrée to all the amusements. An antiquarian collection in the Kurhaus, open every week-day from 4 to 5 o'clock; on Sundays and feast days from 3 to 5.



Grand Hotel (Neue Kur-Anstalt) Baden.

Hotels in the town: *Waage; Engel; Rother Schild; Falken; Linde.*

Opposite the pump room is the *Hotel zu den drei Eidgenossen*, with the Bathing Establishment for the Poor, where from 500 to 600 poor persons, without distinction of race or creed, are boarded and receive medical treatment for a fee of from 2 fr. per day.

Hotels at Ennetbaden: *Rebstock; Hirschen; Engel; Stern; Adler; Schwan.*

The **band plays** twice or thrice daily; in the morning at the Baths; in the afternoon in the park of the Kurhaus, and in the evening in the hall of the Kurhaus. A summer theatre. Catholic and Protestant churches; **English Chapel;** Synagogue at the *Schlossberg.*

Walks and Excursions: In 15 minutes along a path shaded by fine walnut trees to the ruined castle of Stein; along a narrow, steep ledge of rock to the St. Nicholas chapel, formerly the court chapel of the dukes of Austria. Immediately behind the castle, on an elevation, commanding a fine view, is the summer inn zum Belvedère. Ten minutes further, through the beautiful Oesterli wood (old beeches) to the summit of the Martinsberg, where there is a pavilion and a fine view over the valley and the mountains. In ¾ hr. to the Baldegg (572 m. above the sea) with a magnificent and unexpected view over the mountains, from Säntis in Canton Appenzell to the mountains of Freiburg. In 1½ hrs. to the Gebenstorferhorn, the point of junction of the Limmat, Reuss and Aar, a lovely and unexpected view. In ¾ hour to the Teufelskeller, an enormous chaotic mass of cloven rocks, stretching from south to north; numberless blocks of pudding-stone lie about, one of which is called the Devil's "Pulpit". From here to the "High Promenade", the back of which is reached from the Teufelskeller by more than a hundred steps, along a narrow, giddy ledge of rock, through the woods. In 3 hours to the Signal on the Lägern, one of the most beautiful spots around Baden, and from which one sees in a single glance the whole town. In 2 hours to the Burghorn, the highest point of Lägern, 862 m. above the sea, and after Staldegg the finest point of view around Baden. In ½ hour to the Abbey Wettingen with its beautiful paintings on glass of the Hertersberg and the Egelsee. By train to Brugg, Königsfelden and Habsburg.

6. Health Resorts on the Lake of Zürich and its Environs.

The exquisitely beautiful and crystal clear face of the Lake of Zürich, 409 m. above the sea, 25⅓ miles long and rarely more than 1½ miles broad, forms a glittering crescent gently curving from south-east to north-west. Its fertile and picturesque shores encircle it like a lovely frame. An almost uninterrupted series of pretty villages, most of them with their silk-weaving, spinning or dying industries, and charming villas and country seats nestling among vineyards, gardens and orchards, stretch along the gently sloping shores like an extended suburb of the "Limmat Athens". But the summer mildness and softness of vegetation gradually disappear; behind the near hills rise higher mountains crowned with forests and green pastures; on the north-west shore is the Uetli, and further south-west the Albis, while in the southern background is the majestic snow-clad range of the Alps of Schwyz and Glarus.

In spite, however, of their splendid situation, the Lake of Zürich and its environs do not possess the climatic advantages and Mediterranean character of the Insubrian Lake and Föhn Zone on the margin of the Alps, but share in the cooler temperature of the Swiss Molass Plateau. The lake of Zürich does not lie in a deep Alpine valley with high mountain sides to keep off the cold winds and warm it periodically with the breezes of the Föhn; the Uetli and the Albis range, which command the western shore, in one instance alone attain a height of 918 m. above the sea (Bürglens-Fluh), and only a single peak of the eastern range is as much as 853 m. The east and west winds have, consequently, a free passage through the Limmat Valley, and the north and north-east winds are often keenly felt, as the Zürichberg is not high enough to afford any protection against their force. This free play of the wind from all points of the compass induces frequent and sudden variations of temperature which render the district unsuitable as a climatic cure. There is an utter absence of mineral springs of any importance; but there are numbers of lovely spots which can be recommended for a prolonged stay to the tourist and to persons seeking change of air or a summer resort.

Zürich.

409 m. above the sea (Observatory 470 m.) capital of the Canton of the same name, divided into nine districts with a population of nearly 85,000, is charmingly situated at the northern end of the

Lake of Zürich. The city has for centuries played a leading part in the political and intellectual life of Switzerland, and its manifold activities in the domain of art have won for it, not undeservedly, the flattering title of the "Limmat Athens". Although the climatic conditions of Zürich do not adapt it for a health resort, thousands of invalids sejourn there for a longer or shorter period every summer, on account of the beauties of the scenery and the many diversions which the place affords.

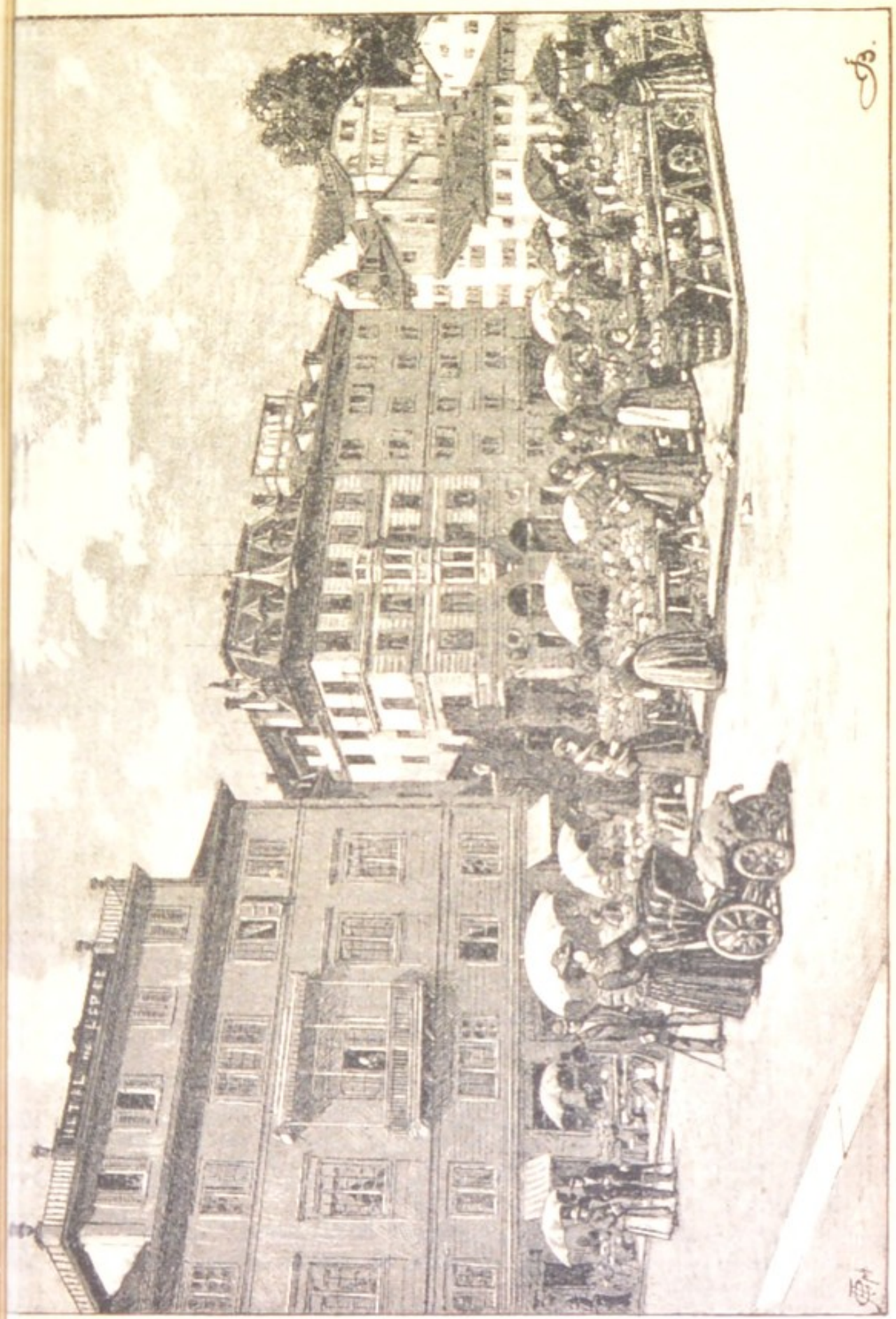
Meteorological conditions of Zürich from 1864—1880.

Month	Mean Temperature	Relative Humidity	Amount of Rainfall	Cloudiness
			mm	
January	—1,16	89,7	50,3	7,6
February	1,16	84,2	64,5	6,9
March	3,76	81,8	81,9	6,6
April	9,09	72,1	104,7	5,8
May	12,85	72,1	116,1	5,8
June	16,63	73,0	148,3	5,6
July	18,69	74,1	125,6	5,1
August	17,37	78,1	142,3	5,4
September	14,45	78,1	96,4	4,9
October	8,52	79,9	106,8	6,8
November	3,10	86,0	81,8	7,8
December	—0,87	90,9	68,7	8,1
Average	8,63	80,8	1187,4	6,4

Bathing establishments: *Bruppacher's*, Werdmühle 10 on the left of the Bahnhofstrasse. Mühlegasse No. 25 on the Predigerplatz. — *Treichler's* Badeanstalt zur Adlerburg in the Stadelhofen. — *Stocker's* Bad and Hydropathic Establishment Mühlgarten, Mühlebachstrasse 70. — Good public baths for men and women on the lake.

Objects of interest: The palatial Polythechnic and University (built 1859—62 on Semper's plans, at a cost of about 2,500,000 fr.) stand on an airy height like an Acropolis There are first rate classes for archæology, natural history and mechanics. In a southerly direction from the main entrance of the handsome terminus of the North Eastern Railway (lighted by electricity) runs the imposing looking Bahnhofstrasse with its avenues of trees. At the left and commanding a good view of the city is the terrace-like Lindenhof, a little elevated space in the middle of the town, dotted with lime trees, where in the middle ages were held the tribunals which decided between life and death; used afterwards for public banquets. On the right the Botanical Gardens, on the elevated slope of the *"Katz"* (Cat's bastion) commanding a fine view; the Paradeplatz with the noble buildings of the Creditanstalt and General Post Office; at the southern end of the Bahnhofstrasse the elegant buildings of the Bourse. A delightful view over the Lake and the Alps is obtained from the handsome and much frequented Münsterbrücke, with its charming colony of swans in the Limmat below. An equally good view from the Bauschänzli, an islet dotted with shady trees where the steamers used to stop. Close by are the charming Stadthaus Anlagen (Town Hall gardens). Beyond the railway station are the pretty gardens of the Platzpromenade, where in 1883 the national exhibition was held.

On the right bank of the Limmat close to the Münsterbrücke are the Helmhaus and Wasserkiche with the *memorials of Zwingli*. In these two building are the Town Library with over 100000 volumes, 3000 Manuscrips, antiquities both Roman and Swiss, paintings, stained glass, a raised map of Switzerland, some very interesting letters, the Museum of the Antiquarian Society with a large collection of coins and medals, Roman, Greek and Gallic, found in Switzerland. Opposite the Helmhaus on a raised terrace is the Gross-Münster, interesting both historically and architecturally, with massive Roman-Gothic towers, on which is



The Gemüsebrücke, Zürich.

carved the figure of Charlemagne with golden sword and crown. Further up along the Sonnenquai is the large new bridge (Quaibrücke) with its incomparably fine view; on the left is the Hohe Promenade, a shady avenue of lime trees provided with seats there too is the monument of Nägeli; splendid view of the surrounding country. A little further up the lake is the **Tonhalle** where classical concerts are given.

Hotels and Pensions:

Hotel-Pension Baur au Lac, on the side of the town, with only the new Quaistrasse between it and the lake. It has a large garden looking south. The house is well appointed, with all modern comforts, fine dining room, ladies' drawing-room, reading, music, smoking and billiard rooms, vestibule, broad staircase, corridor warmed on cold days, the windows and balconies on the south side with splendid view of the lake and mountains. Excellent cuisine. Pension per week 60–80 fr. The public gardens and lake bathing establishment are near.

Hotel-Pension Bellevue au Lac *(Pohl)* a fine boarding house in an open, delightful situation on the new quay, close to the new bridge on the right bank. It contains 125 very pleasant rooms (150 beds), 80 rooms looking on to the lake with 60 salons and 16 balconies, lofty, spacious breakfast and dining rooms, reading room and ladies' salon, large café-restaurant with billiard table. Baths in the house Its very open position on the lake and magnificent view of the surrounding lake scenery and Alpine ranges, its proximity to the Hohe Promenade, the public gardens, the Bauschänzli, the lake baths and the Tonhalle with its palm trees, together with the excellent catering and light airy rooms, make this hotel a very pleasant resort for health seekers, Pension (3 meals) from 6 fr. Room 2½—5 fr.

Hotel Baur en ville (Brunner Family) a large good house in the very centre of the city. At the Café Orsini belonging to the Hotel there is good beer (Löwenbrau)

Opposite the railway station of the North Eastern Railway, on the Bahnhofplatz are: *Hotels National; Victoria; Rabis; Bayrischer Hof. Hotel Gotthard* in the Bahnhofstrasse; *Hotel Central* at the Bahnhofbrücke; *Hotel Zürcherhof* on the Sonnenquai; *Hotel Schweizerhof* on the Limmatquai; *Hotels Storchen* and *Schwert* in the Weinplatz; *Weisses Kreuz*, Seefeld; *Concordia; Seehof; Limmathof; Adler; Rothaus.* **Excellent restauration at the railway station** (good cooking).

Pensions: *Pension Schwan,* with a garden, on the Mühlebach; *Neptun* in the inneren Seefeld; *Tiefenau* in Hottingen, 20 min. above the Polytechnic; *Forster* in a sheltered situation on the Zürichberg; *Karolinenburg* a little higher up; *Pension Bürgliterrasse* a favourite pleasure place.

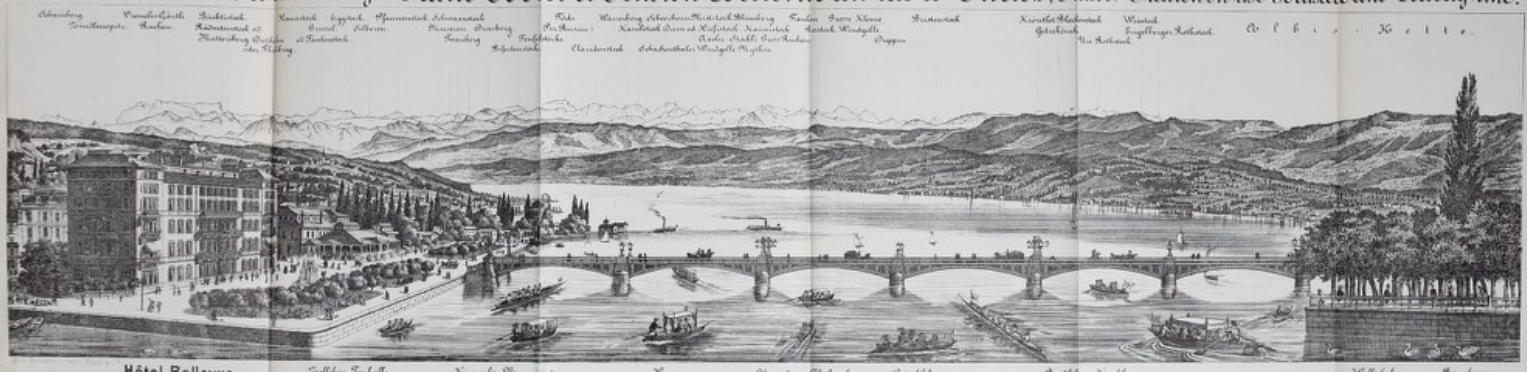
Excursions and walks: The neighbourhood of Zürich abounds in lovely an unexpected views. Leading up from the Tonhalle is the gay Seefeldstrasse, the Corso of Zürich with number of elegant tasteful villas. Eastward from here to the wooded slopes of the **Zürichberg** with its numerous pretty gardens, inns, and a delightful panoramic view of the near and distant landscape (for Pensions see above). The finest view is, undoubtedly, from the Belvedere, on the highest point of the Zürichberg (697 m. above the sea) and the summit of the Albisberg, with the Känzli and the Katzentisch. In a northerly direction the Waid (see below) and in a westerly direction the Bürgliterrase, and the **Uetliberg.** A rather more distant excursion, but one well worth taking, to the highest point of the Albis, the **Albishochwacht.**

The **Waid,** Kurhaus and Pension, 550 m. above the sea, on the top of the mountain slope which rises north east of the village of Wipkingen, its main front facing south, and the back protected from the cold winds by the mountain sides. From the fine terrace in front of the house is a beautiful view of the Limmat valley, the city of Zürich, a great portion of the lake aud the Alps. The Waid is a very popular resort and is specially adapted for convalescents. Milk cure.

Hotel-Pension and Kurhaus **Uetliberg** (Landry) 860 m. above the sea, a mountain air cure. A excellent first clan Boarding house for familys.

Route: By the Uetliberg railway in ½ hr.; on foot from Zürich in 1½ hrs.

Station du St. Gottbard et de l'Arlberg. Grand Hôtel et Pension Bellevue au lac à Zurich, Suisse. Station on the Gottbard and Arlberg line.



Hôtel Bellevue

Lift.

Ouvert toute l'année
Open during the Winter as well as Summer.

F. A. Pobl, Propriétaire.

Prix de Pension pour sejour prolongé depuis 8 fr.
Moderate prices for Pension.

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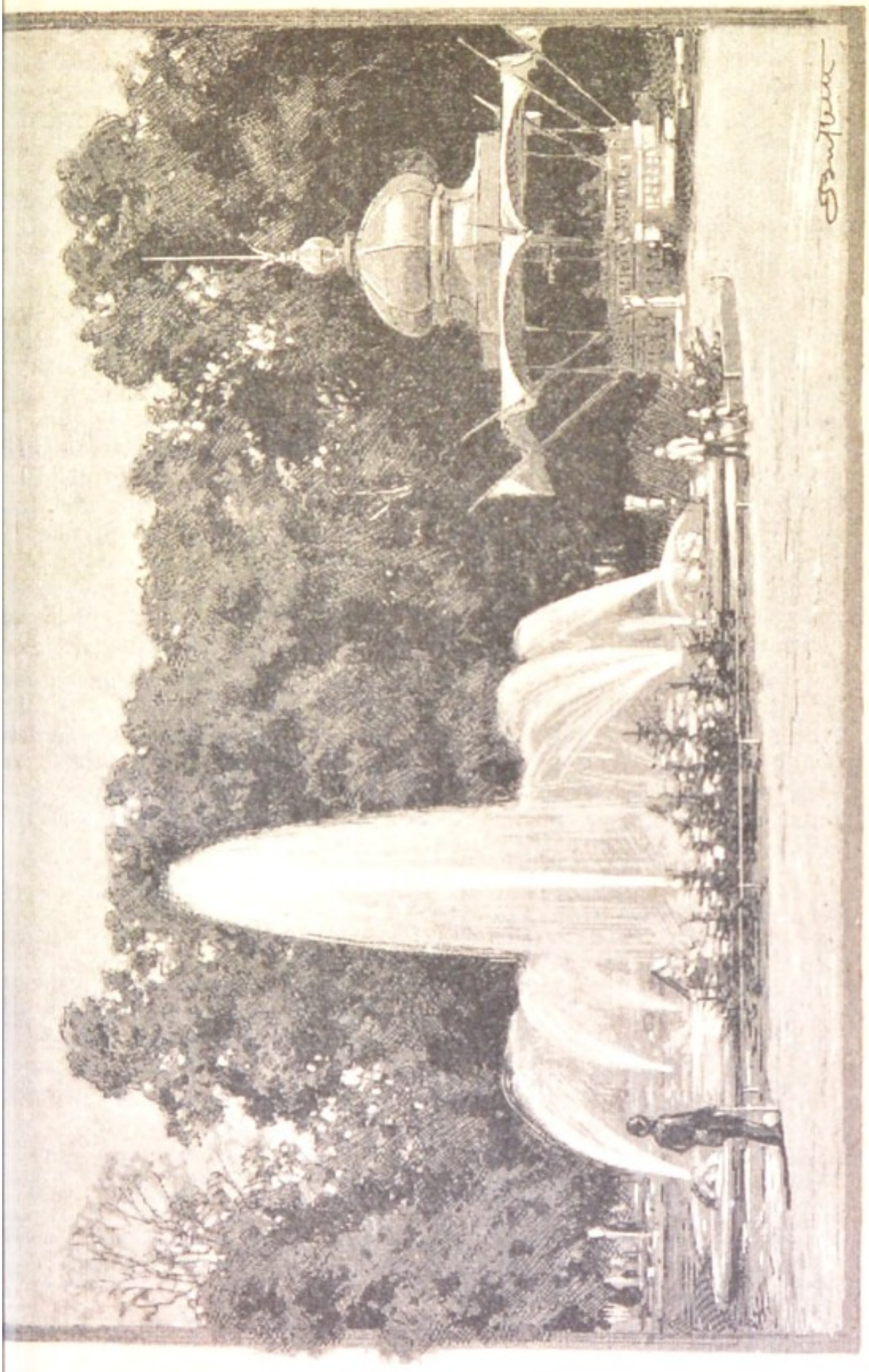


The Platzspitz Promenade at Zurich.

Bocken. 563 m. above the sea, summer resort, can be reached in 1/2 hr. from Horgen by a good road. The village stands on a small, high plateau, with meadows and orchards, commanding a beautiful prospect. Milk and whey cure. *Kurhaus.*

Pension and Health Establishment Au *(Leuthold)* 456 m. above the sea, 10 m. from the railway station and 5 min. from the steamboatpier, on a high wooded peninsula stretching out into the lake. Milk and grape cure.

Wädensweil. lake bathing establishment, 7 min. by rail from Au. Thence by rail in 6 min. to Richtersweil, a pretty village lying sheltered in a wide bay. Lake baths. *Hotel zum Engel* (Meyer); *Drei Könige.*

Hotel and Pension Feusisgarten on the Feusisberg (684 m. above the sea) a mountain air cure 1/4 hr. south from the railway station of **Wollerau** (Schwyz). Cold and warm baths. Milk and whey cure. 1/2 hr. south is the *Pension Luegeten,* with a pretty view. 1/4 hr. above the railway and steamboat station Lachen is the **Hotel and Pension Johannisburg** *(Wilhelm)* air and whey cure, in a good situation with shady woods and groves. Mild climate. Cold bath establishment.

Nuolen. 411 m. above the sea, has an earthy iron spring. It is on the Lake of Zürich 1/2 hr. north east of Lachen, in a sunny situation with plenty of fruit trees; a fine wood close by with walks.

The spring contains chiefly lime and crenic acid with soda, also carbonate of magnesia, chloride of magnesium, chloride of potash, chloride of sodium, ferrous oxide, alumina and silica, traces of free sulphuretted hydrogen. Tiled baths, vapour baths, douche rooms. Milk and whey cure. *Kurhaus* (Widow Vogt).

The spring is used externally for neuralgia, rheumatism and scrofula; internally for catarrh of all the mucous membranes, chlorosis and poverty of blood

Physician: *Dr. Steinegger* of Lachen.

Wäggithal, 864 m. above the sea, milk, whey, and air cure. Regular service of omnibuses from *Siebnen* station to Vorder-Wäggithal; thence to *Hinter-Wäggithal* and the *Kurhaus* in 2 hrs. The establishment stands on a wooded height in a romantic Alpine valley with lovely scenery. High cliffs shelter it from cold winds. In consequence of the favourable situation the climate is mild. The mean summer temperature is 19,75° C. There are great variations: between 7 a. m. and 1 p. m. 10° C.; from that time to 8 p. m. 6,5° C.

According to the analysis of *Professor Wislicenus* the water bottled from the lake contains a small quantity of carbonate of lime and magnesia, sulphate of lime, carbonate of soda and ferrous oxide, chloride of potash, chloride of sodium, silica and organic substances, which latter are found especially in large quantities after heavy rain. The water is used for bathing and drinking for poverty of blood and general disturbances of the nutritive organs. The climatic cure is indicated in nervous complaints and mental fatigue when there is not extreme sensibility.

Schmerikon. 412 m. above the sea, with an iron spring; it is on the Weesen-Rapperswyl line, on the right bank of the upper part of Lake Zürich. The *Hotel zum Bad* (Wenk) is pleasantly and healthily situated with a good view of the lake and the mountains of Schwyz and Glarus. Lake bathing house. Milk cure. The spring is used as a drinking and bathing cure for chlorosis, scrofula, chronic rheumatism of the joints, stomachic complaints, hysteria, hypochondria.

Rapperswyl, a little town belonging to Canton St. Gall, picturesquely situated on an isthmus which unites the upper and lower parts of the Lake of Zürich. A long causeway leads over to the opposite shore of Schwyz. There is an interesting old castle with a Polish national museum.

Hotels: *Schwan; du Lac; Freihof; Post.*

Stäfa a large straggling village north west of Rapperswyl. Steamboat pier. Vineyards, gardens and orchards. Silk manufactory. Pleasant summer resort. Hotels: *Rössli; Sonne; Stern.*

Männedorf, a good sized place, admirably situated, famous for its "Establishment for Healing by Prayer", (Zeller). *Pension zum Wilden Mann.*

Meilen, one of the most beautiful villages on the lake, abounding with vines and fruit trees. It is sheltered from the north wind by the long mountain range of the *Pfannenstiel* (704 m.) and is adapted for a summer resort. *Hotel zum Löwen*, with a terrace overlooking the lake; *Hotel Sonne.*

Küssnacht, 1 hr. from Zürich, a favourite place for excursions and pleasure parties. *Hotel zur Sonne.*

Mönchaltorf, 454 m. above the sea, with an earthy ferruginous spring. It can be reached in ½ hr. by diligence from *Uster station.* The situation is very agreeable, close to the *Greifen Lake.* Very mild climate. The spring, according to Professor Löwig's analysis, contains 3,43 fixed solids in 10,000 parts of water, of which the chief are carbonate of lime and carbonate of magnesia, ferric oxide. It is used for scrofula, rheumatism, chlorosis, cardialgia and hysterical complaints. — *Health Establishment* (Müdispacher). Milk and whey cure.

Inneres Gyrenbad, 781 m. above the sea, at the north west base of the commanding *Bachtel* (119 m.). It can be reached in ¾ hr. from *Hinweil* station (Uster-Wetzikon-Hinweil line). The spring, which has not yet been analysed and is apparently of an earthy nature, is only used by the natives, for bathing. The country inn is an excellent *milk and whey cure establishment.* On the summit of the *Bachtel* is a very good hotel where visitors can be received en pension.

Aeusseres Gyrenbad, 720 m. above the sea, with an earthy alkaline mineral spring, ½ hr. from the Zell station (Töss Valley Railway), on the south western slope of the Schauenberg, on a narrow terrace, amid romantic surroundings of fir and forest.

According to *Banhoff's* analysis the spring contains 3,110 fixed solids, in 10,000 parts of water, of which the chief are carbonate of lime, carbonate of magnesia and ferric oxide. It is used principally as a bathing cure for rheumatic gout, nervous complaints, cutaneous eruptions and hæmorrhoidal disorders. *Kurhaus* (Peter) with arrangements for douching and vapour baths. Brine baths. Oak-bark baths. Milk cure.

Winterthur, 443 m. above the sea, a railway junction for different lines. The pretty town of about 12,000 inhabitants, surrounded by green hills and vineyards, has several new buildings, notably the grand Stadthaus designed by *Semper*, the Bank in ornamental Renaissance style, the Technikum and Kunsthalle. It is a celebrated place for machinery. The climate of Winterthur is, as a rule, very agreeable; the mean yearly temperature 8,44° C.; minimum 16,20; maximum 31,5°. There are, however, considerable variations of temperature, as the north-east winds have free access. Winterthur is not suitable, therefore, as a climate station for invalids.

Hotels: *Goldener Löwe; Adler; Casino; Café Ritter; Excellent restaurant at the station.*

At the east of the *Neftenbach* station (Winterthur-Bülach-Waldshut line), 20 min. from the foot of the Wartgut, is the rustic **Wartbad,** already used by the natives. At Henggart station is *Pension Schloss Goldenberg* (Schlueb) on a pleasant eminence, surrounded by beech and pine woods. It is an enjoyable summer resort for those needing rest and change of air.

Frauenfeld, station on the Winterthur-Romanshorn line, capital of Canton Thurgau, on a high plateau, with an interesting old castle.

Hotels: *Gasthof zum Falken; Löwen; Schwert; Krone; Eidgenössische Kaserne* (Federal Barracks) with good restaurant.

7. Health Resorts on the Lake of Constance and the Surrounding Districts (as far as Schaffhausen), Appenzell and St. Gall.

The Lake of Constance, sometimes called the "Swabian Sea", on account of its imposing appearance, is, in the best sense of the term, international ground, where Switzerland, Germany, and Austria can meet on friendly terms. Its superficies is 539 square km., its circumference 265 km., equal to 26¼ geographical miles or 156½ English miles. The length from Bregenz to Ludwigshafen is 62 km. (in this measurement bends are evidently reckoned) the breadth between Arbon and Friedrichshafen 14,5 km., the greatest depth 276 m. It is not surrounded by towering cliffs, but by pleasant, undulating shores and gently sloping heights covered with meadows, orchards, and vines. It contains more fish than any lake in Switzerland, especially abounding in Felchen, salmon trout, groiniad, pike and carp. The clear, green waters of this lake, when the Föhn and north east wind blow in hurricanes, rage and foam and roar in great billows like the sea, making it very dangerous for steamers. In spring and autumn it is often wrapped in mist the whole day, so that the greatest care must be exercised in navigation. In summer the water is for a long period at a constant equable warmth of from 18—22° C., and is much used for bathing, almost every place on the shore having a good sized bathing establishment. The bathing places most resorted to by patients are *Rorschach*, *Horn*, *Arbon*, *Kreuzlingen* and *Constance*.

Although situated at the same level as the valley of Coire and lying in the Schaffhausen basin, Lake Constance and its shores have totally different climatic characteristics, the immense surface of water, as in the case of Lake Leman, but in a still higher degree, greatly cooling and diminishing the summer heat. The annual maximum temperature is 29,2° C., the mean average for the year 8,8° C., the rainfall 100 Cm. in the year. The Schaffhausen territory, which is riven by the north eastern spurs of the Jura range, has a much milder climate on account of the reflection from the chalk cliffs and the great shelter which these afford from the raw, bitter, north wind. The same thing is observed in the St. Gall portion of the Rhine valley, above the lake, which is shut in on both sides by the mountains of Appenzell and Vorarlberg, so that Schaffhausen with a mean yearly temperature of 8,94° C. is yet somewhat behind the Altstätten with a temperature of 8.96° C.

Canton Appenzell forms a remarkably striking group of elevations which range in height from Lake Constance (398 m.) to Säntis (2505 m.), from the hill region to the mountain and Alpine zone up to the snow region represented by the highest peaks of the Alpstein. This range, which bounds the Canton on the south, forms a broad rugged mountain wall, 18 miles long from west to east, and 12 miles high from north to south. It is a chalk formation with numerous petrefactions, mingled in the north with the pudding-stone of the lower mountains of Kronberg Hundwylerhöhe and the Gäbris and losing itself gradually in the sandstone formation of the hill territory. In this are included the fine, flourishing villages of *Teufen*, *Heiden*, *Walzenhausen*, etc.

The climate of this region is, on an average, comparatively mild (Trogen 900 m. above the sea, with 6,96° C.), although in the months of January and February the thermometer sometimes falls as low as 26,6° C.; for the intense heat of the sun and the warm Föhn raise the temperature on the heights, while thick fogs settle in the valley of Lake Constance below. A cold, dry, east wind, which frequently changes to the north, prevails in the spring, consequently the heights are often capped with snow during the night. A westerly wind is more general in summer, and like the south and south west commonly brings rain. The summer heat is very moderate (June 13,5° C., July 16,5, Aug. 14,5) partly owing to the north wind which blows from Lake Constance, partly to the large amount of rainfall. This is on an average 1436 Mm. of which more than one third falls in summer, the number of rainy days in the year being 167. The Föhn prevails in the autumn which is consequently one of the pleasantest seasons of the year (Sept. 13,5° C., Oct. 6,5° C., Nov. 1,5° C.). Fogs, which rise from Lake Constance, appear most generally in spring and autumn; they are rare in summer and winter; indeed, in the latter season, there is often for weeks sunshine and a cloudless sky on the high pastures of Appenzell, while the valleys are buried in mist.

Appenzell, the oldest and most celebrated district for the **milk and whey cure,** has but few mineral springs — only at the north base of the Säntis — but it has a great many famous climatic health resorts, which are noted for the relative humidity of the air, equable temperature, clearness, purity and salubrity of the atmosphere. Although at an altitude of only 800—1000 m. above the sea, they exercise a beneficially stimulating effect on the system generally.

The national characteristics are keen mother wit, pride in their self-won freedom, love of song, cheerful, buoyant disposition, love of simplicity and purity. The general health of the native population is therefore good, although there are, in addition to agriculture and cattle breeding, several industries, especially knitting and weaving. The mortality in Appenzell from consumption is only 1,33 ‰ of the population, and 4,7 % of the general death rate.

Schaffhausen, 397 m. above the sea, capital of the Canton of the same name, with 12,500 inhabitants, lies on the right bank of the Rhine, surrounded by sheltering and picturesque hills. The

town has very faithfully preserved its flourishing, mediæval character. Imposing-looking stone houses, with bay windows, arms and carving, are seen continually here and there, looking very quaint and interesting.

Objects of interest especially worth seeing are: the Cathedral, a Romanesque basilica, consecrated in 1104; the Imthurneum, with theatre, concert-room and picture gallery; the Library containing the manuscripts of the famous historian *Johannes von Müller*, whose monument stands in the pretty Fäsenstaub Promenade, with its picturesque views and summer casino; the castle of *Unnot* or *Munoth*, dating from the 16th. century, commanding the town and giving a pretty view of the surroundings also. Large waterworks.

The climate of Schaffhausen is mild. Mean annual temperature 8,94° C.; minimum —14,6, maximum 30,9°.

Winter	—0,1°	Spring	9,2°	Summer	17,8°	Autumn	8,4°
Dec.	—0,2	March	3,3	June	16,9	Sept.	15,1
January	1,8	April	9,7	July	19,3	October	8,2
February	1,5	May	14,6	August	17,3	Nov.	3,1

The mean amount of atmospheric discharge per annum is 83 cm. As the changes of temperature are frequent and considerable, Schaffhausen is not adapted as a climatic station; but it is much frequented by tourists on account of the neighbouring **Falls of the Rhine.** Good Rhine baths.

Hotels: *Rheinischer Hof; Hotel Müller; Post; Schiff; Schwan.*

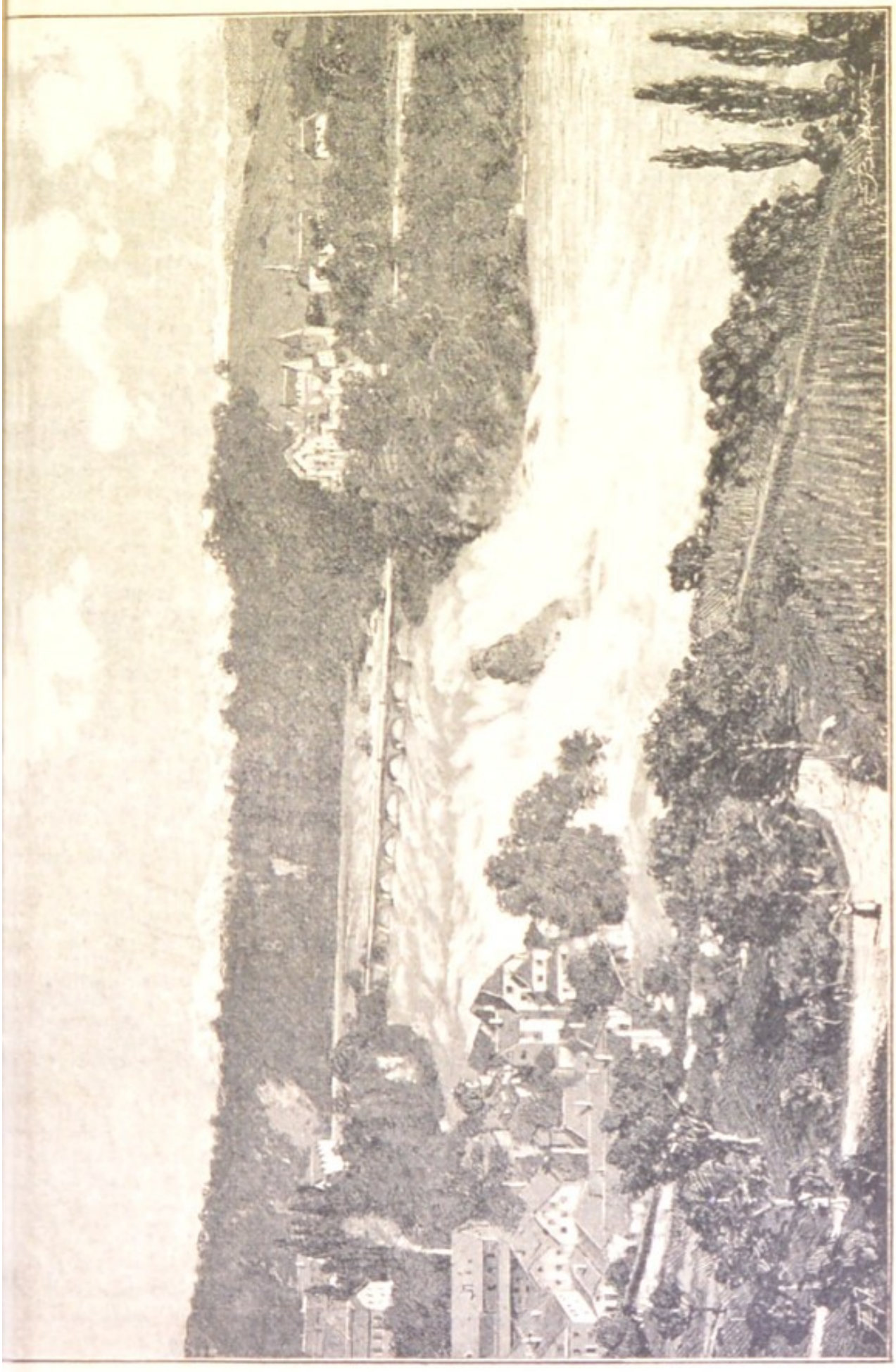
Neuhausen, on the Falls of the Rhine, 8 min. by rail from Schaffhausen. The view from here of the world-renowned Falls (25 m. high) is exquisite and the effect is heightened by the magnificent panorama of the Alpine range from the Säntis to the Jungfrau.

The Falls have a fairy-like effect in the early morning and evening, in the shimmer of the rainbow, on a clear moon-light night, or brilliantly lighted by Bengal fire, as in summer they often are. The rock in the middle of the Falls can be reached easily and without danger by a boat, and from the highest point, which is approached by a flight of steps with a balustrade, the view is indescribable.

To the visitor who can spare the time Neuhausen affords a number of delightful excursions, especially in the beautiful woods, while in the large public park there are charming walks. The climate is very pleasant in summer, as the spray of the Falls rises so high that it keeps the air always fresh. Neuhausen is a capital place for persons needing change of air and rest.

Below Neuhausen is the little *castle of Wörth* (Restaurant) whence there is a boat to the opposite shore; enthroned above is the picturesque *castle of Laufen* (Pension) 5 min. from *Dachsen station* (Winterthur-Zürich line).

Hotels *at Neuhausen:* **Hotel and Pension Bellevue** *(O. R. Lobenstein)* exactly opposite the Falls, with a splendid view of these and of the Alps; close to Neuhausen station, and very well managed. Pension from 6 fr. Room from 3 fr.; no charge for lights and service or the almost nightly illumination of the Falls. Shady gardens and terraces. Comfortable apartments in the Villa Bellevue standing in the gardens, chiefly used by boarders. Milk cure; baths; fishing; good beer from the cask. House physician, *Dr. C. Dannegger.* Five minutes from the station with a full view of the Falls is the **Hotel Schweizerhof,** a fine first class establishment. Lower down, *Hotel Rheinfall; Hotel Rheinhof.*



Falls of the Rhine.

Osterfingen, with an earthy iron spring, lies in a fertile district at the entrance of the Wangen valley, at the foot of the richly wooded Rossberg, 40 min. from *Wilchingen station* (Baden Railway). The spring is only used for bathing in rheumatism of the muscles and joints. A well managed rustic *Kurhaus* (Hablützel).

At **Unterhallau** ½ hr. from *Wilchingen* station is a gypsum spring used by the country people for bathing.

Merishausen, 558 m. above the sea, at the southern foot of the lofty Randen (914 m.) ½ hr. from Schaffhausen, on the high road to Donaueschingen. On account of its very sheltered situation it is adapted for a climatic cure. Milk cure. The country *Hotel zum Rössli* is good.

Stein on the Rhine, 3½ hr. east of Schaffhausen. A steamboat station with *Schloss Hohenklingen*. Air, milk and whey cure. Rhine baths. — Hotels: *Sonne; Schwan.*

Mammern on the Untersee (Lake Constance), a hydropathic establishment with dietetic treatment and electricity, 407 m. above the sea. Season April 1. to the end of October.

Route: Mammern is a railway station on the Winterthur-Etzwylen-Constance line, and has a steamboat station on Constance-Schaffhausen route. Postal and telegraphic offices next to the Kurhaus.

The Health Establishment built in 1866 by *Dr Frenler* of Schaffhausen has, since 1883, been owned and managed by *Dr. Ernst Maienfisch*, who is at Zürich in the winter.

The extensive buildings of the Kurhaus lie at the east end of the village which is prettily situated on a tongue of land; with the chapel they enclose a large square, well planted with trees, ornamental shrubs and flowers, open to the lake, and bounded by a long, broad, covered promenade where visitors can walk and enjoy the air in wet weather. The large, shady and well-kept park comprising six yokes of land (with a garden, containing about 900 dwarf fruit trees, laid out by Henri Kern of Horn) stretches along the south bank of the Untersee, extending peninsular-wise into the water to a distance of about ½ km. A lovely panorama presents itself on every side.

The **Kurhaus,** which in 1883-4 was enlarged by the addition of a spacious dining hall and large east wing, affords accommodation for 100 persons. The rooms are all lofty and well furnished, provided with sofas and chaises longues; very good beds. Most of the rooms are only up one pair of stairs. There are 6 large rooms on the parterre of the east wing, 6 more on the hochparterre of the west wing and 14 on the second floor.

The establishment possesses also a billiard room, reading room, ladies' drawing-room, a smaller dining-room for the special dietary, a newly built, covered bowling-alley, Russian bowls, and other games, such as croquet, ball, les graces, etc.

There are gondolas, rowing and sailing boats on the lake, and angling, so that the entertainment of visitors is well provided for, apart from the many charming walks close at hand, and the easy and delightful excursions by steamer and rail in the rural and historically interesting neighbourhood. There are always numbers of visitors at Mammern who do not exactly visit the Kurhaus for their health, but to spend their holidays amid such salubrious and pleasant surroundings.

In addition to the existing bathing appliances on both storeys of the old Kurhaus, the admirably constructed river baths (for ladies and gentlemen) and douches were erected in a private building in the park in 1882, and in 1883 elegant bath rooms were built on both floors of the new building besides electric baths (Faradaic and galvanic, mono and dipolare) and on the ground floor a large douching apartment. The amount and temperature of the water both of the douches and the foot and sitz baths can be almost instantaneously regulated.

There have also been newly erected warm air and vapour baths as well as vapour douches.

Arrangements have been made too for pine baths, the extract for which is always freshly prepared.

When we have mentioned the lake and swimming baths, the electric cabinet with the best apparatus, the much practised massage, the special table for gouty patients and these suffering from corpulence, we have enumerated the chief hygienic factors which Mammern offers.

The two springs, the one supplying drinking water unsurpassable in quality, the other an abundance for bathing and other purposes, belong to the establishment.

The pension tariff for breakfast, dinner, and supper is 5 fr.

Room 1 fr. 50 cts. to 5 fr. (1 bed).

The water cure, costs, on an average, 1 fr. per diem. The doctor's fee is left to the discretion of patients.

The larger proportion of visitors to Mammern simply need rest and bracing, or are suffering from nervous affections, poverty of blood, chlorosis, and long delicacy after exhausting illnesses (malaria-cachexy, etc.). By means of the ordinary water cure, or with the additional aid of electricity and electric baths great success has for many years been attained at Mammern in the treatment of what is known as nervous weakness and exhaustion (Neurasthenia) with the wearying, distressing symptoms of heaviness in the head, incapacity for mental work, failing memory, irritability of temper, depression of spirits, loss of energy, uncomfortable sensations, palpilation, anxiety, pains and giddiness, sleeplessness, pain in loins and back, shooting pains in the arms and legs, twitchings of the muscles, leaden weight in the limbs, etc., resulting from mental strain and excitement (professional and business worries, care and anxiety, want of sleep, severe illnesses, excesses of all kinds,

Slight cases of melancholy, hysteria, and hypochondria may also be treated at Mammern.

The next greatest number of visitors are patients suffering from disturbances of the digestive and abdominal organs: from so called digestive weakness, nervous dyspepsia, sluggishness of the stomach and intestines, irregularities of the digestive functions, tendency to constipation and diarrhœa, haemorrhoidal affections, menstrual irregularities and other abdominal diseases of women.

Thirdly come those suffering from disturbances of the heart's action: weakness of the heart, threatened fatty degeneration and palpitations, also decided tendency to catarrh (great susceptibility to cold) which gives rise especially to the above mentioned complaints; scrofulous patients or those whose parents have been scrofulous or tuberculous.

To these may be added patients with muscular and joint rheumatism which is less frequently treated with success by cool processes than through needle-pine and vapour baths.

A special diet, under medical direction, is arranged for patients suffering from gout, obesity, and certain dyspeptic affections, for whom in conjunction with the water treatment a strict regimen is necessary. Lastly, Mammern is much resorted to by those desirous of getting rid of the effects of an habitual indulgence in alcohol and morphia, for whom the strict regularity of life in the establishment, the constant presence and control of the physician and the stimulating and strengthening treatment are specially necessary. The fact that the use of electricity, combined with certain water processes and massage, frequently brings about rapid and successful results has, for years, attracted to Mammern, every summer, numbers of people with brain and spinal cord disease, nervous affections with pain and cramp, paralysis and lameness, and especially patients suffering from emaciation, (consumption of the spinal cord) sclerosis, palsy, the effects of apoplectic attacks with resulting weakness and paralytic affections. Lumbago also often yields more readily to combined electro-hydraulic treatment than to the use of hot springs.

The establishment has two-fifths of South German and two-fifths of Swiss visitors. The remaining one-fifth are Austrians, Russians, North Germans and Americans. Life in Mammern is considered, almost without exception, by patients, to be extremely comfortable and pleasant.

Walks. – To the ruins of Neuburg in the wood; to the Gründelhardhöhe; to the Castle of Engensberg at Berlingen; to the stately, embattled towers of Castle Salenstein over the Wannenbach; to Castle Arenenberg on a splendidly wooded height; to Castle Wolfsberg and to Hard at Ermatingen; in the middle of the Untersee is the Bavarian island of Reichenau.

Ermatingen, 417 m. above the sea, on the Untersee, railway and steamboat station, a large village in a delightful situation on a tongue of land projecting sharply into the lake, famed for its fishing (groiniad fishery). On one of the heights is *Schloss Hard* with a pretty garden. Private asylum for nervous patients belonging to *Dr. Nägeli*

Hotel and Pension Schloss Wolfsberg, 516 m. above the sea, a climatic health resort.

The Kurhaus *(Bürgi-Ammann)* on a pretty eminence in a mild, sheltered spot, with a picturesque view of the Ober- and Untersee, the island of Reichenau, the Voralberg Alps in Höhgau, and Tyrolese Alps, is 20 min. distant from Ermatingen. It stands in the midst of gardens and large woods with paths and seats; the climate is mild and the air pure and fresh. The centre building consists of three storeys, the side wings of two storeys; it is comfortably furnished throughout. There is a large, pleasant dining hall, a sort of tent-like conversation room, built in French style, supplied with various newspapers and books, a good piano, smoking room and restaurant, 40 cheerful bedrooms (55—60 beds); a large terrace looking north and east, two covered verandahs, one facing south and one north, two pinnacles and a balcony. Fresh cow's and goat's milk daily. Warm and cold baths in the house. Lake bathing establishment in the village of Ermatingen. Private carriages which on notice being given beforehand are sent to meet visitors at the railway or steamboat station. Excellent cuisine and cellar; good attendance. Pension with room 5—7 fr.; servants 3½—4 fr.

Physicians: *Drs. Nägeli* and *Ammann* of Ermatingen.

Pension Seefeld, 50 paces from the lake, mountain air cure and lake bathing place. Milk and wey. Physician *Dr. Ammann.* Only 10 min. from the Pension is *Schloss Arenenberg* with pretty grounds (Summer sojourn of the Empress Eugenie).

Kreuzlingen, 423 m. above the sea, a few min. above the shore of the lake, 10 min. from Constance, pleasantly situated with a splendid view. The climate is mild in summer, the mean summer temperature being 16,1 ° C.; in July 18,9; in August 17,1; in September 14,8. Excellent lake bathing establishment; also a climatic cure.

Hotel Helvetia, well conducted. *Hotel z. Löwen,* old established.

Münsterlingen, with the excellently managed Cantonal Lunatic Asylum. *Pension Schelling,* good. Only ½ hr. from there is *Altnau* with a private lunatic asylum under *Dr. Bridler, Kesswil,* with *Pension Seethal.*

Romanshorn, 398 m. above the sea, picturesquely situated on a projecting tongue of land: Formerly it was a little fishing village, now it is a fine well-built place with about 3000 inhabitants. Romanshorn is the chief station on the Swiss North Eastern line: it has the largest railway station and harbour on the lake and has much traffic. From the pier and from the prettily restored castle (with the arms "Cornu Romanorum") close to the church, and from Inseli are fine views of the lake, the surrounding banks and the Alps on the south. In the cove formed by the rocky mass of Inseli and the embankement planted with acacias which unites it to the shore stands the lake bathing establishment, pretty well sheltered from rough weather. The climate of Romanshorn is, in general, mild; on the other hand, owing to its semi-insular position it is exposed to the wind from all quarters, and is subject to frequent and severe changes of temperature, o that it is ill-adapted as a climatic cure, the less so as there are no shady grounds, walks, or woods in the immediate neigbourhood. For tourists it is a good stopping place on account of its convenient access to all parts by steamer and rail; in the matter of hotel accommodation it leaves nothing to be desired.

Hotel Bodan and Römerhorn (H. Guhl), a good hotel, opposite the departure platform of the railway station. It contains a roomy dining hall, a restaurant, coffee, and smoking room and 30 bedrooms. Pension 6—8 fr.

Hotel Falken (Hausammann), on the Bahnhofplatz, also comfortable and well managed. Good restaurant at the station.

Arbon, the "Arbor felix" of the Romans, on a broad tongue of land, surrounded by vineyards and orchards, a station on the Romanshorn-Rorschach line. It is an ancient picturesque, industrial little town. There is a weak sulphur spring used by the natives for rheumatism and skin diseases. Three public lake bathing establishments. Arbon is also resorted to as an air cure.

Hotels: *Hotel-Pension Bär,* near the railway; *Rothes Kreuz; Engel,* all three on the lake with gardens; *Krone.*

Horn, 398 m. above the sea, close to the shore; an air cure with a good, mild climate; can be reached in 7 min. from Arbon station. *Kurhaus* (Dätwyler) comfortable and well managed, with warm and lake baths.

Rorschach, 398 m. above the sea, air cure, and lake bathing place on Lake Constance; it is the junction of four different railway lines.

Route: Romanshorn-Rorschach, ½ hr.; St. Gall-Rorschach, ½ hr.; Heiden-Rorschach, ¾ hr.: Coire-Ragaz-Rorschach, 3 hr. Steamboats: from Lindau, 1¼ hr.; from Friedrichshafen 1 hr.

Rorschach is a pretty, well built town, at the northern base of the Rorschachberg. with about 3,500 inhabitants. The lower part of the fruitful slope of Rorschach is clothed with vine-yards and countless flourishing fruit trees, and the upper part with the dusky green of noble pine woods. Several picturesque and well preserved castles stand upon terraced heights: the old St. Anna Schloss, a pleasant place to stay at in summer with a good view; the Mötteli Schloss, the elegant little Castle of Wiggen, belonging to Hofmann of Leuchtenstern formerly the old Landammann Hofmann); the Castle of Wartegg: the Castle of Wartensee (burnt down in 1885 and lately rebuilt); all with splendid views. The climate of Rorschach in summer, is very pleasant and mild; the lake being exposed to the north exercises a refeshing effect on the air, local winds blowing backwards and forwards over its surface from the warm hillside. This purified air, so life-giving and strengthening, together with the lake baths and milk cure, is admirably adapted for convalescents and those needing change, for general weakness and for mental over-work. Rorschach is chiefly visited by south Germans. — Physicians: *Drs. Hemmer, Häne, Schuler, Pauly, Dudly.*

Hotels: *Seehof; Anker; Badhof; Bodan; zum Hirschen; grüner Baum; Krone; Schiff; Toggenburg.*

Heiden.

806 m. above the sea, an air and whey cure, 412 m. above Lake Constance. Season, middle of May till the end of September.

Route: From **Rorschach station by the mountain cable railway Rorschach-Heiden,** for a distance of 5,5 km., the steepest gradient 9%; runs four or five times daily.

The beautiful village of *Heiden* in the eastern part of Canton Appenzell-Ausserrhoden, with its tastefully and substantially built houses, is pleasantly situated on the northern margin of a wide. green plateau, amid rich, emerald meadows and dark, wooded mountain slopes. Long known, visited and valued for its **whey cure** the place has recently acquired a still wider reputation through the famous Berlin eye-doctor, *Professor Gräfe,* who has done a great deal towards increasing its popularity. Close to the village are beautiful woods of fir and larch, with delightful walks and seats. The soil, sandstone molasse, is dry, and allows the water to percolate freely, the purity of the subsoil being secured by careful drainage and an abundant water supply. Heiden is now provided with an extensive system of hydrants. The sewage is carried away regularly between 10 p. m. and 6 a. m.

At the Weiler "Bad" close by is a weak mineral spring impregnated with iron, which, in the two bathing establishments, the "Neubad" and the "Altbad", is used, morning and evening, for warm baths supplemented by brine, simples, whey, etc.

Heiden is now so far provided with health establishments, hotels, pensions, and private apartments, that it affords accommodation for 500—600 visitors; the total number during the season is something like 2000, besides a great many passing travellers.

The climate has the general characteristics of a high health station: that is to say, the temperature is moderately cool; the air is balmy, fresh, pure, and circulates freely, aud its vivyfying effect is greatly enhanced by the abundant exhalations of ozone from the fir woods and the constant insolation from morning till evening. The propinquity of Lake Constance renders the changes of temperature less sensible, for from this large sheet of water, especially when the wind is easterly, there arise moist, warm currents which temper the dry, cold mountain air.

According to the meteorological observations of the savant, Brändli, (1873—77) the highest summer temperature is 29° C., at times varying from 24—26° C.; the mean temperature is between 15 and 18° C.; the lowest 9—11°. The high temperatures always follow the warm Föhn which never blows for long. There are, on the whole, no very great variations which, in the case of an air cure, is of esssential importance. The following temperatures may be enumerated: in May, a mean warmth of 7,5 to 13,7° C.; a minimum never below 0°, a maximum of 20,2—22,6° (at the beginning of this month the snow often lies in masses in the neighbourhood of Heiden); in September, which is generally a fine month, the warmth of the air reaches a maximum of 20,6 to 24,3°; the mean is 12,5—15,3°; the minimum 5,0—7,8° C. The prevailing winds are from the south-west and north-east, rarely from the south-east and still more rarely from the north-west, the latter wind being warded off by a range of hills. The south-west wind generally blows morning and evening; between 9 and 10 in the forenoon the direction of the wind gradually changes to north-east. This moderately cool, gently invigorating and tone-giving climate, with regular exercise in the pure, fragrant, Alpine air, bringing into play muscles and lungs, stimulates the activity of the heart, increases the appetite, promotes bloodmaking, has a beneficial effect on the brain and the whole nervous system, while the varied and beautiful scenery tends to raise the spirits.

The air cure is generally combined with the milk or whey cure. The strengthening and delicious Alpine milk is an important element in nourishing the system, restoring the digestive organs to their normal condition and promoting change of tissue. But the whey, whatever difference of opinion there may be as to its action on the system, has, in certain cases, through its exciting influence on the secretions and excretions, a beneficial effect on the mucous membranes of some organs, especially in chronic catarrh of the throat, larynx, and bronchial organs, in habitual

constipation and hæmorrhoidal abdominal complaints. The air and the milk cure of Heiden are very successful for the following:

1. Mental over-strain, violent emotional excitement, constant sleeplessness, great irritability of the nervous system. To this category scholars, officials, and business men add the largest contingent.

2. Chlorosis and poverty of blood, weakly children, backward in development.

3. Great weakness during convalescence.

4. Chronic disturbances of the digestive organs, especially nervous dyspepsia, and for ulcer of the stomach when the milk can be taken.

5. Scrofula, especially in infancy.

Ample provision is made at Heiden for the entertainment and diversion of patients. On the high plateau just above the "Fre hof" of the Kurhaus are the **Kurgarten,** *Kurhalle* and *Musikpavillon*. The Kurhalle, built in Moorish style, with three dainty pinnacles, is provided with every possible requisite in the way of a restaurant, reading and conversation salon, large concert hall, play room, and whey room, etc. The Musikpavillon stands at a suitable distance, opposite the Kurhalle, and concerts are held there in the early morning, the forenoon, afternoon and evening. In the Kurgarten lovers of natural science will find a very interesting collection of "erratic blocks", known as the "Gletscher Denkmal" and where an airy pavilion has been erected. From the plateau, north-east of the garden, a full view is obtained of the lake and the surrounding hills and mountains.

Baths: the *old Bad* with 14 cold and warm baths, spray douches on the newest system; the *new Bad* with 10 baths, 4 of which are tiled baths; a running water bath in the Gstaldenbach just below the village. At Heiden, and especially at the *„Freihof"*, **hydrotherapy** has been practised since July 1886, under the direction of *Dr. Wirth*, late director of the hydropathic establishment at Mammern, according to the newest and most scientific methods. Physicians: *Drs. Altherr, Leuck* and *Wirth*.

Hotel-Pension Freihof *(Altherr-Simond)* a 3 storeyed, massively built and comfortable hotel, in the middle of the village with 15 windows in the main front. Beautiful terraces on the south, south-east and west, and shady gardens on the south. There are two comfortable *dépendances* which also have terraces; one has baths and douches of the newest kind; water laid on at every floor, well flushed closets, packs, etc. (newly arranged by *Dr. Wirth*). In the main building there are 30 large and lofty rooms, in one dependance 11, in the other 12, 100 beds in all; in the hotel are 2 dining rooms, a large and elegant conversation room with a piano, billiard and reading room, several private sitting rooms, whey room. An excellent cuisine and careful management. — Pension with room 7—10 fr. (breakfast 8—10 o'clock: tea coffee or chocolate, with bread, butter and honey; table d'hôte 1 o'clock; hot supper at 7.30 or thé complet with cold meat); children under 10, 4 fr.; servants 4 fr.; room from 2 fr.; salon from 6 fr.; service 3 fr. per week; lights ½ fr. (Breakfast and supper à part 25—30 cts. extra). *Goat's milk* in the hotel every morning daily 6—8 o'clock for 80 cts. Elegant carriages for driving.

Hotel-Pension Schweizerhof *(Altherr-Simond)* a very comfortable hotel with a large terrace above the glass covered hall whence there is a fine view of the lake; a beautiful garden with a playground for children and a croquet lawn; water laid on at every floor; spühlclosets. In the principal house are 20 comfortable rooms with 30 beds, 2 salons, a dining hall, a ladies' salon and a restaurant. In the *dependance* are 25 rooms with 35 beds, large verandahs on the ground floor and first floor with a full view of the lake. Beautiful gardens with ornamental and fruit trees. Prices as at the "Freihof".

Hotel-Pension Sonnenhügel (Moser); *Hotel-Pension Linde* (Widow M. Braun); *Hotel-Pension Krone* (Jos. Seiler).

Pensions: *Pension Blumenthal* (*Kreuzstr.*) a pretty, quite new building, near the *Kurhalle*; good cooking. *Pension Weiss zur frohen Aussicht*, a small house close to the railway station. *Pension Paradies*; *Pension Paradiesgarten*; in *Reuti* is a foreigners' boarding house (*Fremdenpension*); numerous private lodgings.

Half an hour west of Heiden at *Grub* is the spa of *Unterrechstein*, a weak sulphur spring.

Heiden affords a large variety of beautiful — some of them shady — walks and excursions. From the *Kurhalle* along the upper road to *Grub*, passing *hard* to the "*Waldchen*" (little wood) with shady paths, seats and pretty cottages. In 20 min. from *Rothplatz*, up a steep path to *Bellevue*, a wooded craggy height with paths and seats; in 30 min. to *Santisblick*; in 20 min. to *Guggenbühl*, in 20 min. to the pleasant neighbouring village of *Wolfhalden*; in ½ hr. to the *Rosenberg*, and to what is called the "*Hasenbühl*" and *Benzenreuti* (800 m. above the sea) with one of the finest distant views; in ½ hr. passing *Ward*, along a steep road to *Brunnen* and to *Steinchen Pavillion* on the *Schwendeln* (a splendid mountain panorama). In ½ hr. by way of *Bleesen* to the heights of *Bischofsberg*, with a fine view. In ½ hr. south-west to *Kaien* (1118 m. above the sea) with a very comprehensive view over *Thurgau*, *Lake Constance*, the *Vorarlberg*, and the *Kirchenstamma* mountains, the *Säntis* range, and in the background the *Tödi*. In 1½ hrs. to the picturesquely situated *St. Anthony's Chapel* (1208 m.) and in 2½ hrs. to the *Gäbris* (1250 m.), with a glorious panoramic view.

An hour further north-east, along the well-kept old road commanding a spendid view of the prettily situated village of *Wolfhalden* there nestles deep down in the valley a charming little town (*Hotel Anker*, with Pension and bathing arrangements); it is sheltered from the wind and surrounded by orchards and vineyard; is 10 min. distant from *Rheineck* station, and has an ancient ruined castle from which there is a fine prospect. Then ce by the Rhine railway to *St. Margrethen* in 22 min. where there is a weak sulphur spring used as a bath for rheumatism. Bathing Establishment. A romantic footpath leads up in ½ hr.

Walzenhausen, 678 m. above the sea, air and milk cure; it can be reached in an hour by diligence from Rheineck station. It stands on one of the spurs of the Appenzell Alps projecting over the Rhine Valley, and has a beautiful view of Lake Constance and of the surrounding mountain chains. As the place is open to the north and east the air is pretty fresh and stimulating, its keeness being, however, tempered by the fine woods around. Walzenhausen is suited for slight affections of the larynx and for bronchial catarrh without irritating conditions and catarrh of the apices of the lungs, but especially for weakness and unstringing of the nerves resulting from mental over-work, chlorosis and poverty of blood. — *Kurhaus Walzenhausen*; *Hotel-Pension Rheinhof*. Physician: *Dr. Höhner*.

Half an hour south of Walzenhausen is **Bad Schönenbühl** with a weak sulphur spring used externally for "limb and skin diseases". Milk cure. Rustic bathing establishment. ½ hr. eastward from **Au** station is **Wildegg**, a much frequented spot for views, with one of the finest mountain panoramas in Switzerland. Small, but very good hotel. Milk cure. On the height above **Berneck** (*Station Au*) is **Pension Tigelberg**, 480 m. above the sea, in a sheltered spot on a small plateau surrounded by woods intersected by footpaths. On account of its mild climate and fresh pure air it is adapted for convalescents and those needing rest. Well-conducted house.

Near *Heerbrugg station* is the pleasant village of **Balgach,** with an earthy iron spring used for rheumatism, poverty of blood and cutaneous eruptions. Country *Gasthaus zur Sonne.* Bathing establishment. Between the two next stations of *Rebstein* and *Altstätten* is the village of **Marbach** with an earthy mineral spring and rustic bathing establishment.

Altstätten, 470 m. above the sea, at the foot of the two passes of Appenzell Stoss and Ruppen, from which there is an extensive view. It is in a very pleasant, sheltered spot, and on account of its mild, favourable climate is a desirable summer resort. — Hotels: *Drei Könige; Frauenhof; Freihof* All well conducted.

An hour up the Rhine from the next station *Oberriet* is **Bad Kobelwies,** with an earthy mineral spring, 456 m. above the sea; a country inn, but good, and supplied with cold and warm baths, shower and rain douches. The spring is chiefly used for rheumatism and eruptions.

Gais, 934 m. above the sea, air, milk, and whey cure.

Route: From Altstätten station (Rorschach-Coire line) by diligence in 2 hrs. to Gais, from St. Gall station through Teufen in 2 hrs. New railway via St. Gall-Teufen-Gais-Appenzell-Gonten-Urnäsch.

The imposing village of *Gais* in Canton Appenzell lies in a pretty, rather open, high valley, with green hills around; *Ebel* describes it as like a vast English garden where the finest and most varied mountain scenery is contrasted with the loveliest sylvan landscape. Gais contains about 450 houses and 2,700 inhabitants. It is bounded by the three heights of the Gäbris, Sommersberg, and Hirschberg, and is watered by the Rothbach or Röthi, a tributary of the Sitter. In the valley formed by the northern and middle chain of hills stretching towards Schwänberg lies the Kurort Gais, protected by the Gäbris from the north wind, and in some measure from the west by the high meadow land; quite open to the south and south west, less so to the last. In the background is the craggy Alpstein.

The climate is not exactly mild, but still cannot be called keen. *Dr. Heim*, who has for many years made observations of the climatic conditions, says of Gais: "The humidity of the soil and of the atmosphere is much increased by the well cultivated meadow land and the rapid course of the wind. But the pure, dry, mountain air absorbs the dampness rising from the meadows, while the free ingress of sunlight and the constantly moving currents of air bring about the most perfect proportion between moisture and aridity. The ground dries up almost immediately after rain. This is owing to the nature of the soil which is a mixture of flint and clay, through which the water quickly percolates and on which grass grows abundantly up the highest hills. In the hottest summer there is no drought, neither is the place at all swampy or subject to inundations. The weather is very pleasant in spring, summer, and autumn, and the long winter is made bearable by the absence of the fog which hangs over the lower lying territories, the sky being generally clear." At the same time severe changes of temperature occur frequently in summer, especially after storms and rain, so that visitors do well to be provided with warm clothing.

Unfortunately, no precise meteorological observations have recently been recorded; still, by a comparison with the two meteorological stations at

Trogen and on the Gäbris, the following averages have been arrived at (1863—1875): June 13,17°; July 16,24; August 18,83; September 13,35; spring 6,53; summer 15,08; autumn 7,38; winter 0,74° C.; yearly average 7,06. The barometer never sank from June to September below 670 Mm.; from May to August the average of storms was 10; rainfall in June 190,7; July 174,7; August 209,0; September 119,9. Arboriculture is not extensively practised in the valley, but on the other hand there are very fine apple and cherry trees, wall plum trees, Reine-Claude, fine pears and vines. Wild chestnuts, limes, oaks, maples, poplars, beeches and larches are abundant. Gais has fine pine woods on the Hirschberg, Sommersberg, Gäbris, and on the high pasture land, etc.

The use of Gais as a whey cure, the first in Switzerland, dates from 1749, when a consumptive patient of Zürich, *Steinbrüchel* of Bleicherweg, who had been given up by the doctors of his native city, was sent by his brother-in-law, *Dr. Meyer* of Arbon to the then already existing Hotel zum Ochsen, to try the whey, and returned completely cured. After that Steinbrüchel went to Gais every year with his friends; the number of visitors increased year by year, and instead of as at first there being merely a contingent from Zürich and Winterthur, there was a constant stream of health seekers from all parts of Switzerland. By the middle of the 18th. century, besides the Swiss visitors, there were South Germans French, Dutch, Swedes, Italians, Russians, Poles, and English. Kings and Queens even, princes and princesses, lords and ladies, came for weeks together to go through the whey treatment, so that the numerous "Schottengäste" often had a difficulty in finding comfortable accommodation. However the visitors soon discovered other resorts, and one place after another was established in Appenzell and other mountain cantons for the whey cure.

The pure, refreshing, strengthening mountain air of Gais has, in modern times, raised it to the dignity of a mountain air cure, the beneficial effect on unstrung nerves, mental exhaustion, and constitutions radically weak being long known. Its popularity, not only as a health resort, but also as a centre for tourists, must, presumably, gain greatly from the construction of the new road from St. Gall to Appenzell, via Teufen and Gais, opened in Aug. 1886.

Gais is specially adapted as an air and whey cure for chronic bronchial catarrh, catarrh of the apices without fever, disturbances of the organs of digestion in persons suffering from poverty of blood, chronic catarrh of the stomach and intestines when a special dietary is prescribed, sleeplessness and depression of spirits following excessive mental exertion.

It is not suited for tendency to bleeding of the lungs; affections of the heart disturbing the process of compensation; advanced phthisis. — Physicians: *Dr. Zürcher* and *Kürsteiner*.

Hotels: *Krone* (Fisch); *Ochsen*.

Walks and Excursions: In a few minutes northwards to the Klausenbühl with a pavilion; southwards to Hocheggbühl. Along the post road to the charming waterfall of the Rothbach and to the pretty village of Bühler. On the Hohe Kelle is the Guggei, also the Kapelle am Stoss (see below). Westward from the village to the Hohen Wiesen with a beautiful distant view. In ¾ hr. to the Gäbris. In 1 hr. through beautiful woods to the Hirschberg, in 1 hr. to the Sommersberg. Mountain tours to the Kamor, Hohekasten, Wildkirchlein, Ebenalp, Seealp, Säntis range, etc.

Bad- und Gasthof z. Rothbach (Walser) has ferric acidulous springs, one of which is used externally for rheumatism and nervous debility, and the other internally for complaints of the stomach.

Pension Stoss (Dr. Küng) air and whey cure establishment, much frequented by ladies, ¾ hr. from Gais, on the old road to Altstätten. In the immediate neighbourhood of this Pension is the *"Schlachtkapelle"*, 951 m. above the sea, a chapel erected in memory of the victory of the Appenzellers over the Archduke, Frederic of Austria, in 1405.

Appenzell,

781 m. above the sea, as well known air, milk and whey cure.

Route: From St. Gall station by rail to Appenzell. By train from Winkeln via Herisau-Urnäsch-Gonten-Appenzell.

Appenzell is the capital of the half-Canton Innerrhoden which is Catholic; it is a well built village lying at the base of the Alpstein, in the midst of pleasant, green, undulating country. Some of the houses are old, dark-brown, wooden buildings, and some modern, elegant, stone structures. The fine church, with the old Gothic choir, was formerly the mother church of the whole Canton, and in the ancient Town Hall are some interesting national archives and the standards won in the battles of the 5th. and 16th. centuries. The love of and adherence to ancient manners and customs on the part of the natives of Innerrhoden is most strikingly evidenced on Sundays when both sexes attend church in the national costume. Besides cattle-breeding and hill farming the women in Innerrhoden practise hand embroidery a great deal, in which they have become quite artists.

Although only at a slight elevation the climate of Appenzell is not mild, owing to it being sheltered only on the south side and exposed to cold, raw winds from the north and east, while morning and evening the mass of the great Alpstein makes its influence felt. The daily variations of temperature being very considerable, warm clothing is essential. The mean t mperature in June is 16,1; in July 18,7; in August 16,5; in September 12,7; the maximum summer temperature is 23° C.; the mean minimum for the year 20,5° C.; average 7,0° C. The air is very pure, fresh currents continually circulating; it acts as a strong tonic, and is not therefore suited to very susceptible, weakly persons, but to constitutions with some amount of resisting powes, requiring a powerful stimulus to the nerves and general functions, such as those suffering from mental overwork, nervous dyspepsia, poverty of blood, and convalescents who are not excessively weak. Appenzell has conspicuous advantages as a soil cure (*terrain Kurort*), as not only is there a great choice of beautiful walks on level ground, but there are also numerous ascents of varying difficulty, such as the Ebenalp, Wildkirchlein, Hohenkasten, Säntis, etc. Every provision has long been made in the hotels for rational diet and medical care.

Physicians: *Drs. Brogger, Hersche, Römer, Sutter. Hotel-Pension Hecht. Hotel z. Löwen* (Ulmann). *Pension Steinegg* (Sutter) ½ hr. south-east of Appenzell on the Weissbad road.

Weissbad, air, milk, and whey cure with an earthy ferruginous spring, 820 m. above the sea.

The *health establishment* ¾ hr. from Appenzell (carriage sent if desired) is in a charming, romantic situation at the mouth of the valley whose streams flow into the river Sitter. It stands in a pleasant, undulating tract of land sheltered by a wood, while the range of the famous Alpstein, which forms a semi-circle along the east, south and west, affords protection from stormy blasts and sud-

den changes of temperature. The air in the valley basin is constantly purified by the influence of the rushing mountain streams, and the fresh, pure currents that sweep down the mountain come laden with aromatic odours. River baths in the Weissbach.

Weissbad in recommended for: Chronic catarrh of the larynx, air passages and mucous membrane of the bronchial organs, and for incipient phtisis; for weakness and arrested development in young persons; for scrofula, chlorosis, and anaemia; for exhaustion after mental or bodily strain; for convalescents after severe illnesses; for disturbances of the digestive organs and nervous diseases. — Physician: *Dr. Römer.*

Walks and excursions. Numerous walks with dry paths and seats in the park-like "Wäldchen" and the quiet and solemn "Ende der Welt." By a level road to the picturesque, pastoral little valley of Schwändi, and from Brüllisau to the chief place of Appenzell, Gontenbad, Gais, Stoss, etc. In 1 hr. through meadows and woods to the pretty Leuenbach Fall; in ½ hr. to the sunny heights of Schwarzenegg with a charming view over the Ländchen and the Alpstein In 1½ hrs. along the Swändlibach passing Escherstein, by a gentle ascent to the charming Alpsee lying in a green basin, with a foaming waterfall (Seealpfall). In 2 hrs. to the Lakes of Säntis and Fählen; in ¾ hr. to Wildkirchlein (a famous hermitage and grotto with remains of a bear's cave). In 2 hrs. to the Ebenalp (1600 m.) with a beautiful mountain prospect and from there to the Schäfler (1898 m.) In 2½—3 hrs. to the Kamor and Hohenkasten; in 5—7 hrs. to the Säntis (2504 m.) with a magnificent panorama.

Schwendi, 866 m. above the sea, air and whey cure, ¼ hr. south of Weissbad, following the road along the Schwendibach; it stands on a high terrace in a little, romantic, Alpine valley, with a comparatively mild, temperate climate. It is a favourite resort for those needing strengthening and for sufferers from poverty of blood and lung complaints.

Bad zur Felsenburg. — Physician: *Dr. Römer.*

Bad Gonten, 884 m. above the sea, milk and whey cure with an earthy ferruginous spring. Season from the beginning of June to the middle of September.

Route: By train from Winkeln (Winkeln-Herisau-Urnäsch-Appenzell line) to Gonten; from St. Gall by rail to Appenzell, and from there by rail to Gonten.

The spa is at the northern base of the Kronberg (1640 m.) close to the foot of the Blatternegg, on a raised tract of meadow land encircled by hills, east of the village of Gonten; opposite on the north and close at hand stands the green Himmelberg (1096 m.) and towards the west the Hundwyler height (298 m.). The broad green Valley is encircled by the Schwarzach which rises in the neighbourhood of the spa. The climate is refreshing, the air pure and moderately strengthening and tone giving.

The mineral water rises from four springs; the average temperature, is 12° C.; three of the springs are used for baths, and the fourth, the *"Goldbrünnelein"*, for the drinking cure. The springs contain, according to *Dr. Löwig's* analysis, 3210 grammes of fixed solids in 10.000 parts of water, namely:

Sulphate of potash	0,105
Chloride of sodium	0,058
Sulphate of lime	0,060
Carbonate of ferrous oxide	0,430
„ „ lime	2,143
Carbonate of magnesia	0,321
Phosphorus and alumina	0,025
Silicic acid	0,036
Organic substances	0,038

Gontenbad belongs to the class of rich iron springs. For the bathing treatment it is employed warm in a steam kettle, and in tub, vapour and douche baths.

Gonten is a first rate place for the cure of poverty of blood and the maladies resulting there from, and is, therefore, principally resorted to by women; it is also used for disturbances of the digestive organs, and in cases of recovery from illness, for rheumatic-nervous affections, and especially for cases of backward development in weakly children. — Physician: *Dr. Sutter* of Appenzell.

Walks and excursions: Through the neighbouring fir wood to Jakobsbad, Appenzell, Weissbad, etc.; in a southerly direction to the Kronberg (1640) with its fine view, northwards to the Himmelberg and the Hundwylerhöhe (1298 m.).

Jakobsbad *(Zimmermann)*. 869 m. above the sea, milk and whey cure, with an earthy ferruginous spring. Season from the beginning of June to the end of September.

Route: Jakobsbad is a station on the Urnäsch-Appenzell line. From St. Gall is a diligence in correspondence with the railway to Appenzell, thence by rail to Jakobsbad.

The Spa lies at the southern base of the Hundwylerhöhe, sheltered from cold winds; the climate is comparatively mild, the air very pure, strengthening and gently stimulating. The spring is very similar to that of Gonten, but has rather less iron.

According to the analysis of *Professor Kaiser* of St. Gallen, the spring contains in 10,000 parts 2,945 gr. of fixed solids:

Carbonate of potash	0,095
„ soda	0,263
Chloride of sodium	0,006
Carbonate of lime	2,155
„ „ magnesia	0,193
„ „ ferrous oxide	0,071
Silicic acid	0,040
Organic substances	0,122

The spring is used both for drinking and bathing. The water is warmed for bathing by a steam pipe apparatus to the desired temperature. The neighbourhood of the spa is pleasant, and adapted to rural life, so that Jakobsbad is particularly recommended to those needing rest and quiet; also to sufferers from poverty of blood and chlorosis (on that account much frequented by women) chest complaints with chronic bronchial catarrh, catarrh of the apices, stomach complaints (nervous dyspepsia) rheumatism. — Physician: *Dr. Germann* of Urnäsch.

Urnäsch, 856 m. above the sea, a spa and whey cure. *Hotel zum Rosenhügel.* There is an earthy ferruginous spring. Season May to Obtober.

Urnäsch is 1 hr. by train from Winkeln (Winterthur-St. Gall-line). The cheerful three storeyed *Kurhaus* (Ramsauer) is pleasantly situated on a spur of the lofty Ham, and has a splendid view over the hills of Appenzell and the northern chain of the Alps eastward of Säntis. The place is especially adapted for convalescents and those needing to recruit their health, and for poverty of blood, chlorosis, nervous affections, and chronic catarrh of the respiratory organs. — Physician: *Dr. Germann.*

Hotels: *Krone* (Kehl), well managed; *Ochs.*

Waldstatt, 823 m. above the sea, a spa and whey cure with an earthy ferruginous spring, is a station on the Winkeln-Urnäsch line. The spa is in a sunny, sheltered situation, and rejoices in pure, refreshing mild, mountain air. Like Urnäsch it is suited to convalescents and sufferers from poverty of blood, chlorosis, nervous affections, and chronic catarrh of the lungs. — Physician: *Dr. Goller.*

Hotels: *Hotel-Pension Hirschen; Bad and Gasthaus zum Säntisblick.*

Three quarters of an hour west of Waldstatt is the highest village of the Ausser-Rhoden, **Schwellbrunn,** 972 m. above the sea, whey and air cure.

Hotels: *Harmonie, Rössli.*

It is 20 minutes by train from Waldstatt and Herisau, the manufacturing centre of Appenzell, with 12,000 inhabitants. It is the largest place in Appenzell and the chief seat of its industries. The many public buildings, the town hall, the arsenal, barracks, hospital, orphanage, poorhouse, the fine schoolhouses and the handsome private houses surrounded by beautiful gardens, the shops of various kinds and the numerous manufacturies on the Glattbach at the bottom of the valley, give an impression of prosperity and commercial activity. There is a splendid view from the *Rosenburg,* the former seat of the lords of Rorschach.

Hotels: *Löwe; Storch.*

Heinrichsbad, 776 m. above the sea, with an earthy ferruginous spring. Milk and whey cure. Open all the year round.

The spa his 1/4 hr. north of Herisau, close to the road to Winkeln, at the end of a green valley; it is surrounded by gardens and pleasure grounds and wooded slopes. The ferruginous alkaline earthy spring is mostly used for bathing, little for drinking. The climate is very moderate, and subject to but slight variations of temperature; the air is pure and in constant circulation, the east and west winds keeping it fresh and cool. The establishment, which is in the hands of a Company, is particularly suited to convalescents; cases of severe illness are not received. "But whoever needs spiritual comfort and help finds it

here in abundance." Anaemia and nervous complaints form the majority of cases. — Physician: *Dr. Tobler.*

Teufen, 836 m. above the sea, air, milk and whey cure.

Route: From Herisau station by diligence in 2¼ hrs.; from St. Gall station by rail in 1 hr.; from Heiden in 2¾ hrs. by diligence.

The large, industrious, market town lies in a fruitful valley, completely sheltered from the bitter north and east winds by the lofty range of the Teuferegg (1040 m.) and the spurs of the Gäbris. The climate is comparatively mild, the temperature not usually subject to any great variations, on which account Teufen is particularly suited for weakly and delicate consumptive patients, chronic bronchial catarrh, nervous dyspepsia and asthenic states of the digestive organs, poverty of blood and nervous affections and for those who are convalescent. — Physicians: *Drs. Graf* and *Roth.*

Hotels: *Linde, Hecht.*

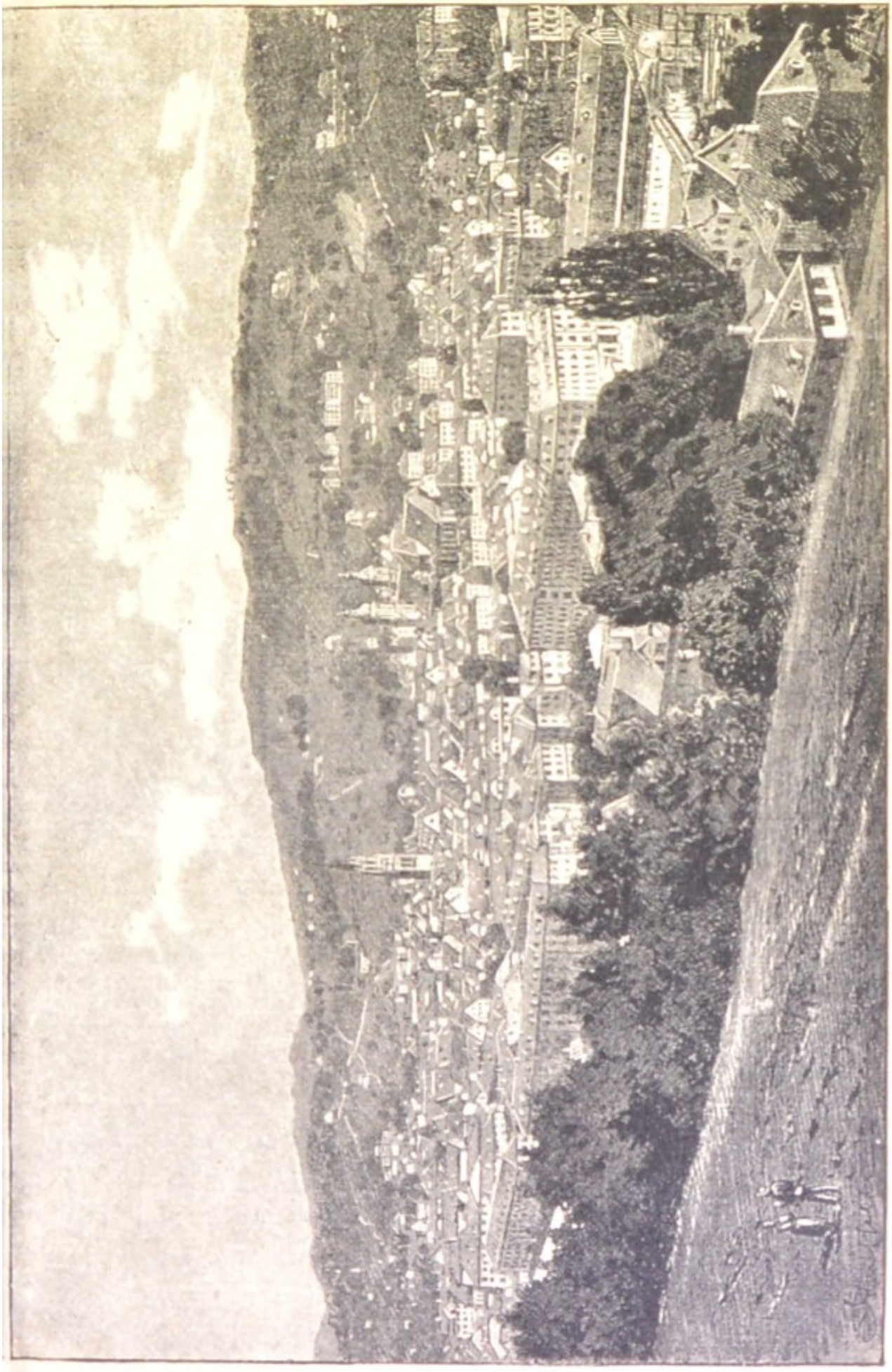
Bad zum Sonder, ¼ hr. northwards above Teufen, at the southern base of the Egg (920 m.) in a very sheltered valley freely exposed only to the south wind.

Beautiful beech and fir woods with walks and seats. The good and abundant spring water with its large infusion of carbonate of magnesia, is used for drinking and bathing. As an air cure Sonderbad is especially adapted for chronic affections of the breathing organs. A pretty *health establishment.*

Stövgelbad, ¾ hr. west of *Teufen,* ½ hr. from *Bruggen* station (Winterthur-St. Gallen line) lies in the very picturesque valley of Ramsen. It has a weak, ferruginous, earthy spring, used externally and internally for "rheumatism, skin diseases, and weakness of the digestive organs". — A country inn.

St. Gall.

676 m. above the sea, capital of the Canton of the same name, with 23,600 inhabitants, one of the highest towns in Europe, and surrounded by commanding hills. Very interesting historically St. Gall has, thanks to its skill and energy in commerce, gradually grown so prosperous that it now plays no unimportant part in national affairs. Among its articles of commerce, whiteware and embroidery take the highest rank. In consequence of this commercial prosperity, art and science have found in St. Gall a congenial soil, and the stirring enterprise of the place has caused the erection of a number of fine buildings: the large museum in the park for art and natural history collections, the literary museum, the Cantonal school buildings with the municipal library, the two excellent hospitals, the handsome bank buildings and other architectural works in progress. The city, with its environs, owing to its elevated situation, is exposed to the north-east and south-west winds and has no special climatic advantages, but offering as it does so many intellectual and social enjoyments it is becoming more and more popular as a centre and starting point for tourists.



St Gallen.

Spas in and around St. Gall: the *Löchlibad*, in the centre of the city with a spring containing iron and carbonic acid; the *Paradies*, 10 min. south-west of the city, where medicinal baths are also obtainable.

Very favourite excursions with splendid panoramas are: the easy ascent of the *Freudenberg* (885 m.), *Peter and Paul*, *Rosenberg*, and the *Solitude*.

Hotels: *Hecht; Stieger; Hirsch; Linde; Möhrli; Schiff.*

Vögelinsegg, 962 m. above the sea, an hour from St. Gall, along a far-reaching ridge of rock, from which is a splendid view of the chain of the Säntis, the Vorarlberg, and the country round Lake Constance. *Hotel and Pension Vögelinsegg.*

Speicher, ¼ hr. lower down, on the northern slope of the Vögelinsegg; a large village in a high valley, 937 m. above the sea. Hotels: *Löwe, Krone.*

Trogen, 905 m. above the sea, an air cure, 1 hr. 40 min. from St. Gall by diligence, the chief place in Ausser-Rhoden, with 3000 inhabitants; its handsome and substantial modern buildings are

"Auf der Waid" near St. Gallen.

surrounded by delightful gardens and lovely walks. The happy climatic conditions, the graceful idyllic life amid picturesques scenery, the excellence of the hotels and clodging houses and the numerous opportunities for splendid excursions, have long made Trogen a popular summer resort; and since the Zürcher school children, under the paternal care of Pastor Bions, began to spend their nolidays in the neigborhood, the place has been increasingly frequented.

Establishment for children in a private house and a *health establishment* at the *Lindenbühl*, a summer resort for adults and children, kept by *Dr. Zellweger.*

Hotels: *Krone, Schäfle.*

Rehetobel, 955 m. above the sea, on the western slope of the Kayen, a summer resort. *Hotel zum Hirschen.*

Kuranstalt **"Auf der Waid"** (formerly Untere Waid, at St. Gall) 600 m. above the sea, 1 hr. from St. Gall and Rorschach, is under the excellent management of the proprietor, *Dr. Dock*, M. D., and his sister *Frau Wittwe* (Widow) *Fischer Dock.*

The Collegiate Church (Stiftskirche) St. Gallen.

This much frequented establishment is in a magnificent situation, with pure and bracing air, and a glorious view over Lake Constance and the mountains. It consists of 2 large houses, fitted up for comfort and to meet all hygienic requirements — a very large and handsome dining hall, a pleasant garden, with charming arbours and pavilions, and couches both in sunshine and shade, so that those even who are seriously ill are able to spend as much time as possible in the air and sunshine. The temperature of the Waid is on an average mild, being tempered by the wind coming across the lake.

Delightful **walks and excursions**, both near and distant, can be made from the Anstalt Waid; for example: to the shores of Lake Constance; into lovely little Appenzell with its high mountains and its historic *Wildkirchli;* to the Rhine valley; to Ragaz; the *Gorge of Tamine,* and so on. Charges are moderate: 5½—9 fr. per day per head (board, room and ordinary baths included). Reduced tariff in winter. Service and board are both excellent.

The curative effects of Waid are very favourable, thanks to the natural means applied, such as dieting, water, air, exercise, rest, medical gymnastics, massage, electrotherapy, and chee ful surroundings. The nutritions and abundant dietary is more or less vegetarian, that is milk and vegetables, according to individual requirements, but there is meat for exceptional cases.

The cuisine at the Waid is noted for its excellence, and the co-proprietress, Frau Fischer, has recently published a cookery book containing the principal vegetarian recipes. Fruit, with its refreshing and blood-purifying properties, as well as brown or Graham bread (from the best wheat meal) play a very important part in the dietary at Waid.

Milk cures are very easily accomplished: eggs, butter and cream are much used in the preparation of the dishes. Strong drinks and other appetisers are either **not used** at all or very sparingly.

In the second place, *hydrotherapy*, applied according to individual requirements, plays a very important part as a curative means; it gives a healthy action to the skin, regulates the change of tissues, and combats the most serious forms of disease. Three very important processes deserve special mention: 1. *Sun baths*, especially the hot air baths with douches, which are a speciality of the place, and exercise a very marked curative influence, particularly in nervous affections, poverty of blood, gout and rheumatism, as well as obesity. Secondly the very practical, so-called Rikli *bed-vapour baths*, in which the head and lungs are kept free from vapour, and congestion is warded off.

A third factor is the pure, bracing air, and sitting and walking out of doors; the favourable situation of the Waid and its variety of walks admirably adapt it for a **terrain** (soil) and Bantamising cure, on *Ortel's* principles which, quite recently, have been successfully carried out in the establishment. The dietary for such patients differs from a strictly vegetarian one which, however, it resembles in being scientifically arranged. The greatest attention is paid to medical gymnastics, massage and electrotherapy. A normal condition of mind and spirits is

one of the curative means sought after, a comfortable, quiet, yet cheerful manner of life is, therefore, observed, and everything noisy or exciting avoided as much as possible.

The establishment shows very favourable results in the treatment of the following maladies: nervous affections and diseases of the blood, anaemia and scrofula, weakness and catarrh, complaints of the stomach and intestines, particularly habitual constipation and hæmorrhoidal affections; gout and rheumatism; lung diseases in their first stages; affections of the heart; skin, liver, renal and bladder complaints, as well as many of the diseases of women.

For those who wish to ride, the establishment is most easily reached from St. Gall (½ hr.), droskies meeting the train, or from Rorschach in about an hour, also by drosky (tobe ordered of the railway porter there).

But for those who can manage ½ hr. walk, the cheapest way of getting to the establishment is from the railway station of Mörschwyl, between Rorschach and St. Gall, where the luggage can be left and is quickly fetched by the hotel servants.

Further details about the method of cure and the hygienic and therapeutic principles pursued at Waid are to be found in the works of the famous physician of the Waid namely:

1. Sittliche und gesundheitliche Bedeutung des Vegetarismus.
2. Einfluss der Bewegung, Arbeit und Ruhe auf die Gesundheit.
3. Beschaffenheit und Pflege der Haut in gesunden und kranken Tagen.
4. Gesunde Seele in gesundem Körper.

Prospectuses sent gratis on application. Telephone, telegraph and carriage accommodation in the establishment.

Natural Healing Establishment Obere Waid, 660 m. above the sea also a summer resort. Air, light, milk, diet and water cures followed as well as medical gymnastics. **Vegetarian cooking;** a separate table for non-vegetarians.

Bischoffszell, a station on the Gossau-Sulgen line, a pretty little town on a rising spur of Bischoffsberg, just opposite the junction of the wild mountain streams, the Sitter and the Thur, with **Bitzibad,** on the north-east, which is chiefly used for rheumatism and skin diseases. Country inn.

Bad Sulgen, on the Katzenbach between Sulgen and Bürglen stations, especially resorted to for rheumatism. Country spa and inn.

Buechenthal (Buchenthal), 510 m. above the sea, a hydropathic establishment. Season: April 15 to October 15.

Route: — By train from St. Gall in ¾ hr. to Utzwyl, whence in ½ hr. on foot or in ¼ hr. by the Spa coach (to be ordered beforehand). Nieder-Utzwyl is the nearest postal and telegraphic office.

The quiet and peaceful situation of Buchenthal makes it especially beneficial and grateful to nervous patients.

According to the analysis of the Cantonal chemist, *Dr. Ambühl* the drinking water corresponds to all that is required for a pure and good supply.

The Gentlemen's Bath, built in the spring of 1886, as well as the Ladies' Bath, which was enlarged at the same time, are fitted with arrangements for half, sitz, and flowing foot-baths, and douches of all the newest kinds; light

and well-ventilated pack rooms adjoin. There are besides pine baths, Roman-Irish vapour baths, Russian vapour baths, compressed vapour baths, bed vapour baths and sun baths.

Mechanical Treatment: Galvanism, in the form of inductive and constant electric currents, hydro-galvanic baths, especially for functional nervous complaints (according to *Eulenburg* and *Professor Stein*), gymnastic exercises and massage. A new apparatus has lately been invented by *Professor Nycander* of Hanover, viz., a "Pantagon" for massage and gymnastics, besides a "rowing" apparatus, Inhalation of compressed and rarefied air with the improved pneumatic apparatus of Waldenburg, pine inhalation. Dietetic treatment, vegetarian and dry diet, milk cure.

Professor Oertel's method of treatment for the cure of obesity of all kinds, and fatty degeneration of the heart with its accompanying disturbances.

The water cure is also indicated in nervous complaints, diseases of the blood and the vascular system, chronic catarrh of the respiratory organs, emphysema of the lungs, diseases of the abdomen, rheumatic gout, skin diseases, indulgence in morphia and alcohol, metallic poisoning, general affections of the tissues. — Physician, *Dr Wollensack.*

Walks and Excursions. In ¼ hr. to the Säntisbänkli, along the margin of a shady wood with a splendid view; to the wooded and picturesque Vogelberg and Geisberg; to the Prä-Monstratenser Frauenkloster Glattburg in the fine woods of Niederhelfenschwyl and Bürerwald (especially adapted for a morning walk). In 1½—2 hrs. to the Kloster Magdenau; in 1½ hrs. to the Nollen (790 m.), the Rigi of Thurgau, with a splendid and extensive mountain view. To the Hohentannen (901 m.). Excursions to the Toggenburg, Appenzell, St. Gall, Lake of Constance, etc.

Kuranstalt Rosengarten (air cure), 666 m. above the sea, 7 minutes from Lichtensteig station (Toggenburg line) is a pretty house, and is especially visited by ladies suffering from poverty of blood, by scrofulous children, and convalescents. The climate is mild and pleasant. Baths. Milk and whey cure. Proprietor and physician, *Dr. Maag.*

Kappel, 634 m. above the sea, an air cure, a station on the Toggenburg line, and a pleasant summer resort. Cow's and goat's milk. *Hotel zur Traube*

Ebnat, 642 m. above the sea, an air cure, 10 minutes south-east of Kappel, a favourite and agreeable summer resort, with a mild climate. Milk and whey treatment. Warm, cold, and river baths. — Hotels: *Krone, Sonne.*

Rietbad, 854 m. above the sea, has an alkaline sulphur spring. It can be reached from *Ebnat* station on the Toggenburg line by diligence from Neu St. Johann, and thence by the hotel omnibus to Rietbad. The spa is at the southern base of the Säntis, and is only exposed on the west side. The situation is hilly and pleasant, and the air is gently stimulating.

The spring chiefly contains carbonate of lime, a good deal of free and semi-free carbonic acid and sulphuretted hydrogen, then carbonate of magnesia, soda, ferric oxide, sulphate of lime, chloride of sodium, silica.

The water is used both for drinking and bathing in catarrhal affections of the digestive, respiratory, and urinary organs, neurosis, scrofula, exudations from the skin and rheumatism. *Kurhaus.* Whey, cow's and goat's milk cures.

Unterwasser, 915 m. above the sea, a favourite summer resort, and the most convenient place for the ascent of the Säntis. *Kuranstalt zum Sternen.* Milk and whey cure. Physician: *Dr. Arquint.*

Wildhaus, 1104 m. above the sea, at the southern base of the Schafberg (1 hr. above Unterwasser), a mountain village commanding fine views, with fresh pure air, and surrounded by fertile meadows and beautiful woods. It is a very popular summer resort, and is especially suited to convalescents, and those suffering from mental over-work. *Hotel zum Hirschen*, an air and whey cure establishment.

8. Health Resorts of the Rhaetian Rhine Valley and Highlands (Grisons) and of the Linth Valley (Glarus).

The Upper Rhine Valley, from Sargans onwards, which for our purpose we will distinguish as the Rhaetian Rhine Valley, forms one of the main entrances to the Rhaetian Highlands, that is, to the surpassingly magnificent region of Canton Grisons. In geographical configuration and in character, especially in the neighbourhood of Coire, the valley vividly reminds us of Wallis. In both cases a great valley is traversed by a river, and hemmed in by mighty mountain ranges; the scenery is wildly romantic; and as from Tourbillon to Sitten, so from the heights above Coire, there is a view westward into the enormous Rhine Valley which, excepting the Gotthard peaks, seems to continue into the clefts of Wallis.

At an elevation of 600 m. above the sea, on the northern declivity of the Rhaetian Alps — at Coire, for example — the climate is such as on the mild eastern margin of the Jura, in the so-called Depression, is only met with 250 m. lower. This arises partly from the effect on the basin of the valley of continuous sunshine, partly from the warming influence of the Föhn. The Rhine Valley, like Wallis, is very free from cloud and fog, for the mean annual amount of cloud at Coire is only 5,0; at Basle, however, it is 6,1.

The vegetation, like the climate, shows an unmistakeable likeness to that of the South Alpine Insubrian zone. From Sargans to Coire grapes thrive excellently, and produce very good wine; the white Completer grape, indigenous to the vineyards of Maienfeld, yields a wine which contains the largest quantity of alcohol and is the most delicious of all our wines. Nor are chestnuts wanting in the Rhaetian Rhine Valley, and they are accompanied, as usual, by those two lovely flowers, the cyclamen with its carmine blossoms, and the stem-less primrose, which in spring spreads a sweetly perfumed golden carpet over the fresh, green meadows. Ascending towards the highlands of Rhaetia, the southern vegetation ceases, even at Ems and Reichenau, and on the Domleschg almost disappears. On the other hand, right in the midst of the Alpine world, at Tiefenkasten (861 m. above the sea) we come upon a colony of southern growths, which are not less surprising than the wonderful crater-shaped "Felsentrichter" itself, which falls sheer down to a depth of 600 m. on all sides, and is only connected with the Rhine Valley by the wild, narrow gorge of the Albula.

The Upper *Linth Valley*, lying close by at the western border of the mountains of the Grisons and forming the small Canton of

Glarus, bears a great similarity to the Rhaetian Rhine Valley. It runs from south to north, is only 15 miles long, and very narrow. Lying deep down among the mountains, surrounded on three sides by rugged gigantic heights, this exceptionally fertile valley, with its flourishing villages and manufacturies, enjoys, on the whole, a mild climate, subject as it is to intense heat from the sun and also to the refreshing current of the Föhn. As the valley is visited only by the north and south winds, the extremes of temperature are great, and the changes are severely felt. The south wind prevails in winter, and the north wind in summer, and the south wind blows more in autumn than in spring. The gales occasioned by the Föhn generally occur at the commencement of the spring and of the winter, blowing over the higher Alps in summer, especially over the mountain chain adjacent to the Grison Alps.

The vegetation of Glarus is wonderfully varied, thus bearing no relation to that of the South Alpine zone and the Rhaetian Rhine Valley. As a rule, the flora line is 150 m. lower than in the Grisons, where at the same elevation the temperature is 1 ° C. warmer. This phenomenon arises from the fact of the Glarus Valley being shut in on the south by the glacier-covered range of the Tödi, which only permits the entrance of the southern breezes through a few narrow chinks.

The great Rhaetian uplands of the south-east of Switzerland, with their world-renowned southern boundary — the *Engadine* — form a lofty tableland of mountains only equalled in extent by the range of the Pyrenees and the mountains of Scandinavia, and untouched in height by anything in Europe.

"If Wallis is the Swiss Spain, *Rhaetia* is the *Swiss Thibet;* and just as from the enormous plateau of Pamir, the roof of the world' the rivers of Asia pour forth, so from the uplands of Rhaetia issue the Rhine and the Danube (Inn), the great rivers of Europe." Facing the western Alps are long, high valleys sloping very gradually towards the lowlands.

Canton Grisons has an areal of 7180 sq. kils; its mountain masses, towering 4,000 m. above the sea, are furrowed by more than 150 valleys, through which alpine torrents dash. With the exception of a small portion in the south north, and east, the Grisons belong to the high alpine region. Its high valleys, however, even the Engadine and Davos, owing to the formation and grouping of the surrounding heights, the proximity of forests, and the direction of the prevailing winds, are wonderfully sheltered from keen blasts, and enjoy a very favourable climate. It has long been well known that the Grisons, especially in the central and south-eastern valleys, rejoice in a temperature above the normal. The most striking proof of this is that the line of vegetation extends 500—600 m. higher than in the Western Alps, where valleys at an elevation similar to those of Avers and the Upper Engadine are simply uninhabitable, and are sometimes covered with glaciers.

As regards climate, these highlands have quite the character of a continent, with great extremes of temperature between day and night, summer and winter. While the rest of Switzerland is largely affected by westerly winds blowing over from the Atlantic, the high mountain region of the Engadine, which has quite a climate of its own, is the only district where local conditions coun-

teract this general influence. The insolation in summer on this long stretch of elevated land is much greater than it would be in a district of abrupt, isolated peaks; and the refrigeration in winter is considerably increased by the uninterrupted radiation; there is a similar contrast between the temperatures of day and night. A comparison between Davos, Sils Maria, and Rigi Kulm shows this climatic contrast very clearly.

Christ's Table of Temperatures:

Place and height in M.	Annual mean	Winter	Spring	Summer	Autumn	Maxim.	Minim.
Sils-Maria 1810 M. . . .	1,93°	—6,5	1,1	10,5	2,5	22,8	—23,0
Davos 1650 M.	2,53°	—5,7	1,9	10,8	3,1	25,2	—24,7
Rigikulm 1784 M.	2,24°	—3,9	0,6	9,0	3,1	20,6	—18,9

Christ's Table of Mean Monthly Temperatures:

Place	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.
Sils-Maria . . .	—5,9	—8,4	—5,2	—4,3	1,3	6,5	7,4	11,9	10,2	8,2	2,1	—2,6
Davos	—5,4	—7,3	—4,5	—3,4	1,8	7,4	9,6	12,2	10,6	8,9	2,7	—2,3
Rigikulm . . .	—2,3	—5,1	—3,3	—4,5	0,9	5,6	9,3	10,4	9,3	8,8	2,5	—1,8

Accordingly, Sils and Davos in the Upper Engadine show differences of temperature between January and the middle of July of 20,3 and 19,5. Davos shows, indeed, a yearly minimum of 2,3° C. lower than St. Bernhard, which is 828 m. higher; the only place which shows a lower average is Bevers (whose yearly minimum is 26,9° C.) which is affected by a local wind blowing from the glaciers. These three places show the lowest temperature in Switzerland.

The continental character of the mountain plateau is also shown by the rainfall. The *Rhætian Uplands* are, after Wallis, the *dryest, least rainy part* of all Switzerland. Davos, owing to the propinquity of the rainy Prättigau (Klosters 120 cm.). has indeed a rainfall of 90 cm.; Sils, also, which is close to the Ticino frontier has 100 cm.; but Bevers has only 84 cm. Here, as in Wallis, whatever there is of moisture chiefly hangs over the lower mountain ranges of the north and south, while the currents that sweep over the face of the great uplands are dry. It is the same with regard to cloudiness which, although the Alpine regions are the most rainy and cloudy, is, at Sils for example, 5, 2, while at the Rigi Kulm, where in summer the cloud-belt rests at a height of 1600—1800 m., it is 7,5 in June, and 6,4 in July. With such conditions, the rapidity of the evaporation, that is, the drying power of the air, tends, in a great degree, to absorb the moisture. (Compare Introduction, P. III).

Among the greatest advantages of this high Rhætian district of the Upper Engadine are its lakes, which temper the keenness of the winter considerably, in spite of the extraordinary elevation. There is a flora corresponding to such an altitude; the trees indigenous to the Rhætian Alps are larches and stone pines, and in

the animal world is found the bear (especially in the Lower Engadine) which haunts by preference the dusky shades of the stone-pine woods.

Canton Grisons is richer in mineral springs than any other part of Switzerland. Among the mountains is found what is called the "Grisons slate," a chalky, decomposed shale, frequently streaked with pyrites, spa, gypsum, graphite, magnesia, etc., very often with Epsom salt, and even with alum and carbonate of soda. A considerable number of mineral springs issue from this bed of slate. Most of them are **ferric acidulous springs,** such as those of *St. Moritz*, which were famous in the XVI century; those of *St. Bernardino, Tarasp Schuls, Peiden, Rothenbrunnen, Temigerquelle, Passug, Belvedra, Fideris, Val Sinestra, the Sassalwässer*, the *Peter's spring* at *Tiefenkasten*, *Castiel* at *Schanfiggthal;* besides the **alkaline muriate springs,** such as the *Tarasp-Schulser* carbonate of soda springs which have been famous for centuries, and, finally, a few **sulphur springs,** such as *Alvaneu, Le Presse, Serneus, Spinabad*, and the spring of *Solis*, containing **iodine.** They, are, also, often remarkable for the quantities which they contain of haloid, boric acid, bromide and lithia.

Another, but much smaller set of mineral springs rises among the primary rocks (gneiss, mica-schist) from the shale of the Casanna, theDolomite chalk and Verrucano, and a few from the serpentine rock.

Most of the springs have a normal temperature of 8—12 °C. Those of St. Moritz and the soda springs of Tarasp are less warm. There are, indeed, **no really hot springs in the Grisons,** though the baths of Pfäffers and Bormio are on the boundaries. But there are **numbers of tepid springs** from 15—26° C., especially in the north of the Canton, south-west from Rothenbrunnen, such as *Vals, Pignieu, Starlera,* etc.; with the exception of the first named these are chiefly gypsum springs, containing some iron.

Besides the springs now used for bathing, there are a great many which, like the old bathing establishments, are abandoned; others, which the natives apply empirically, such as *Fläsch, Gavey, Friewies*, etc.

There are, at the present time, in Canton Grisons **17 mineral baths** and **26 springs** used medically for bathing and drinking; there are 9 springs the water of which is exported.

No less important are the **climatic sanatoriums** of this magnificent region; their number is now about 20, and their elevation above the sea is from 920—1856 m. Most of them are only open in summer, but *Davos, St. Moritz*, and *Maloja* are famous winter health resorts.

Thanks to the rapid development of the means of communication, there has been a great increase of visitors to the Rhætian Alps during the last decade. The excellent post roads of the Grisons traverse a wildly romantic region; they wind among high mountains whose sides are dusky with forests, pass by yawning pre-

cipices, run through fruitful valleys, past glittering glaciers, green pastures, dotted with peaceful cottages, old-world castles on the heights and rushing streams below, in hearing of the landslip and the avalanche, by foaming cascades and the clear dark waters of the Alpine lakes, over desolate mountain passes, and across bridges whence the traveller looks into a giddy depth below. The Arlberg railway has rendered the Engadine yet more accessible.

The Engadine calls for special notice, not only on account of its magnificent scenery, but still more from its importance as a lofty climatic and bathing resort.

The Engadine.

The Engadine is one of the highest inhabited valleys in Europe, and forms the south-eastern boundary of Canton Grisons. The length of the Valley, from its highest point at the Maloja (1811 m.) a few miles from the Italian frontier, to Martinsbrück (1019 m.) on the borders of the Tyrol, is 60 miles. It is watered by the Inn. It is enclosed on each side by high mountain ranges; the Upper Valley by the Bernina and Julier chains, the Lower by the Visoc and the spurs of the Silvretta group. The *Engadine* is generally divided into two parts, the **Upper** and the **Lower,** the climate and character of which differ considerably. The Lower Engadine is more narrow and gorge-like, and the sides of the Valley slope down to the river like steps. The fine villages and the old, gray, castellated ruins, high up on the thickly-wooded eminences, give it a romantic, picturesque appearance. In the Upper Engadine the valleys widen out to a breadth of 3—4 km., with a length of 37—38 km., and there are several lakes. The two parallel mountain chains, from, south-west to north-east, by which it is enclosed, are comparatively low; the south-eastern range attains an average elevation of 1000 m. above the Valley, the north-western, from 1200—1400 m. The lowest part of the Valley of the Upper Engadine is 1616—1811 m. above the sea. The mountains do not rise so sheer as in the Lower Engadine, consequently the rays of the sun penetrate all the year round.

The Upper Engadine is itself divided into an Upper, or southern, and a Lower, or northern, part; the former stretching from the *Maloja Pass* (1811 m.) to the Lake of St. Moritz (1767 m.) has a length of 17—18 km., only 44 m. Beautiful deep blue and green lakes occupy most of the Valley, and meadows and the dark stone-pines are sparse. The largest of these lakes is at Sils. The side-valley of *Fex*, with its splendid glacier, is 100—200 m. higher than the main valley. Here is the highest village in Europe, 1984 m. above the sea

The Lower and more northern portion is divided from the Upper by a little mountain wall, forming a natural barrier; its length is 14—15 km., with a fall of about 80 m. The Valley here broadens, but there are no lakes and forests; and there is no long stretch of green pasture land traversed by the translucent Inn. Among the side-vallays two are especially remarkable: the

Valley of Pontresina, with the glaciers and gorges of the mighty Bernina range and the Bernina Pass, running southward and only slightly higher than the main Valley; and the *Val Bevers* on the west.

Nearly all the villages are on the sunny side of the Valley, and are conveniently situated on the good post road. They are usually built on the solid rock, and this being on an incline and covered with a loose soil, water cannot accumulate to any extent under ground.

The eternal snows, though resting in enormous masses on the Bernina range, do not touch the main valley, but huge glaciers penetrate the side-valleys of Fex and Pontresina. Pasturage is now almost the exclusive culture of the main and the side-valleys. The woods have been much decimated in times past by the hand of man, but during the last ten years many bare hill-sides have begun to be clothed. More than half of all the forest trees are evergreens; such as, the stone-pine, fir, mountain-pine, and common-pine; the rest, mostly larches, are only green in summer; leaved trees are rare, and never form entire woods. Only in the upper part of the main Valley, and in the Valley of Pontresina — around *Sils Maria*, *Campfèr*, *St. Moritz* (spa and village) and the village of *Pontresina* — are there woods of any extent. *Silvaplana*, *Celerina*, *Samaden*, and *Bevers* are at some distance from wood of any kind; the barest district of all is that around the communes of *Madulein*, *Zuz*, and *Scanfs*.

Every place has an abundant supply of refreshing and excellent drinking water, at the low temperature of 5—6 °C.

Climate. The alternations of temperature in the Upper Engadine are often very great; most striking is the difference between the warmth of the air in the morning, and at mid-day under a cloudless sky. In the first few hours after dawn the temperature rises prodigiously; in August, for instance, between 7 and 10 o'clock, it rises from 7 to 12 ° C.; while a synchronous reading taken say in the city of Berne would be very much less. In the mid-day hours, between 11 and 12, the relative conditions would have so far changed that in Berne the temperature would register a little higher. But in the Upper Engadine, as soon as the sun sets, the temperature falls as rapidly as in the morning it rose. Warm and light clothing is thus required, especially at night-fall. With a cloudy sky the temperature rises and falls much more gradually, whilst in Berne, at the same time, the changes are much more rapid. The maximum warmth from the sun in the Upper Engadine on February 4th 1876, was 47, 8 °C. With a winter sunshine of such intensity, its duration every day is naturally of great importance for the purposes of a cure. This is, on an average, in Nov. 6—7½ hours; in Dec. 6; in Jan. 6½—7; in Feb. 8½; and in March 9 hours. On the shortest day there are only 8 hours and 20 minutes between sun-rise and sun-set.

In the Upper Engadine less than half the sky is, on an average, obscured by cloud, and the mean annual amount of cloud is ⅛ less than in the rest of Switzerland. The brighest months

are September, July, January, February and December. There being so little cloud fogs are also rare, and generally disappear at sun-rise. In winter, even when the lakes are frozen, the district between Sils and St. Moritz, and the side-valleys of Fex and Pontresina are quite free from fog.

The average annual rainfall — most of it being snow — is 83 cm., which for the winter and spring is the least in Switzerland. The winter snow generally lasts 5 months and 12 days; the place is generally snowed-up by Nov. 14th., and by May 1st. the ground is all clear again. Occasionally there is a slight snow-fall in July and August.

The absolute humidity of the air is very little, considering the lowness of the temperature. At Sils the average during 10 years was 75 %, which may be laken as the mean for the whole valley. The Upper Engadine has rather a moist air. But it is in the morning and evening especially that the moisture prevails, the middle of the day being very dry, like Davos, owing to the intense head of the sun.

Considering the height above the sea-level the barometer keeps low, showing at Sils an average of 612,8, at Bevers 621,4, at Pontresina 610,9 Mm. The variations of the barometer are very slight.

The wind is much modified by the mountains. The range of the Julier entirely keeps off the north wind from most places, while the Bernina chain breaks the force of the south-east wind. The winds which have freest access to the main valley are the south-west and north-east, and in summer a local wind blows along the river from Maloja to Scanfs. The most exposed places are Bevers. Ponte-Camogask and Scanfs; the most sheltered are Sils-Maria, Pontresina, Campfèr. St. Moritz village, and Zuz. The wind blows most in spring and summer, the winter is the calmest season of the year.

The sun-light is much stronger on these heights than in lower places, as the light, rarefied air presents scarcely any obstacle to the rays of the sun. This intense light is one of the most important factors of the mountain climate.

The vegetation is very good considering the great elevation. Beautiful meadows and mountain pastures cover the valleys and slopes with a soft green carpet. While in the northern, chalky range of Switzerland, in the Tyrol and Bavaria, the tree-zone ceases entirely at 1780—1950 m.; in the Upper Engadine, even on the northern slopes, stone fines are found in a flourishing condition at an elevation of 2275 m. Larches and firs likewise grow in the same manner at a height unequalled except by the trees on the Caucasus and Pyrenees. Barley is planted to a height of 1950 m., while in South Bavaria, the Northern Tyrol, and North Switzerland it never reaches beyond 1200 m. In good years potatoes, rye, oats and flax can be grown equally well, while in the trim flower and vegetable gardens of the Upper Engadine numbers of delicate plants and herbs are cultivated, and at Sils-Maria the cherry even bears sometimes, as the sparrows do not fail to find out.

The health of the population of the Upper Engadine is very good. According to *Dr Ludwig*. of Pontresina, who has written an excellent pamphlet on the district, the mortality averages 10,7 per 1000. Epidemics do not occur often or spread much. On the other hand there is a considerable amount of inflammation of

the respiratory organs, especially of the throat larynx and lungs which carry off many victims; indeed, 4 % of the population die of consumption. Apoplexy, affections of the heart, muscle and joint rheumatism and rheumatic neuralgia are common.

In Canton *St. Gall*, **at the entrance to the Rhætian Rhine Valley and Uplands,** just at the point whence the numerous health resorts radiate in all directions, there lies the ancient, world-renowned spa,

Ragaz-Pfäffers

251—685 m. above the sea. Seasons: at *Ragaz* from middle of May till the middle of October; at *Pfäffers* from June 1st till the middle of September.

Route: From Rorschach station on Lake Constance, by rail, in 2½ hours; from Zürich in 4 hours; from Schaffhausen in 6 hrs., from Basle in 7½ hours.

Ragaz lies in the midst of a multiform net-work of valleys, surrounded by a magnificent mountain world, on the right bank of the Tamina, flanked right and left by the old, grey picturesque ruins of Wartenstein and Freudenberg enthroned on wooded heights. On the left bank of the Tamina is the *village of Ragaz*, over-topped by the majestic, wooded crag of Guschenkopf. The *health establishments* of Ragaz stand in the midst of beautiful and extensive park-like grounds, stretching away upwards to pine and beech woods, and downwards to meadows thickly planted with fruit trees.

The hygienic and climatic conditions are favourable, for Ragaz lies on a gently rising ground a little above the Rhine; the soil, having been formed in process of time by the deposits from the Tamina, consists of gravel, sand and rubble. The water from the mountains has, therefore, a quick and constant outlet, and there is nothing like stagnation in the sub-soil water.

The rich vegetation in and around Ragaz, and the proximity of forests and pine trees, help to produce a health-giving air, full of ozone, which, in hot weather, is agreeably cooled by the mountain wind blowing from the gorge of Tamina during the night. The mean daily variations of temperature show an average from May till October of 5° C.; the mean height of the barometer is 716,27, the mean relative humidity, 78,36. Since 1871 no higher temperature than 31° C. has been observed. Severe storms seldom occur, and there has not been such a thing as a shower of hail within living memory. Fog only makes its appearance in the valley during winter, and then but seldom. Ragaz has, on the whole, a mild but strengthening climate, bearing some similarity to that of the Rhaetian mountains.

An easy, gently rising path leads from Ragaz along the left bank of the Tamina, following the windings of the river and the risings and fallings of the steep gorge, to *Bad Pfäffers*, ¾ hr. distant, 685 m. above the sea, lying in a romantic mountain hollow. Pursuing the long path by the bathing establishment, one reaches the source of the spring. A lofty, arched bridge leads to the right bank of the Tamina, and thence over a gallery nearly 500 m. long, hewn out of the rock, to the spring itself. The glen is one of the largest and most remarkable, and is visited yearly by over 20,000 travellers. The gallery over the gorge leads to the spot where the hot spring bubbles

Averages from 10 years' observations at the meteorological station:

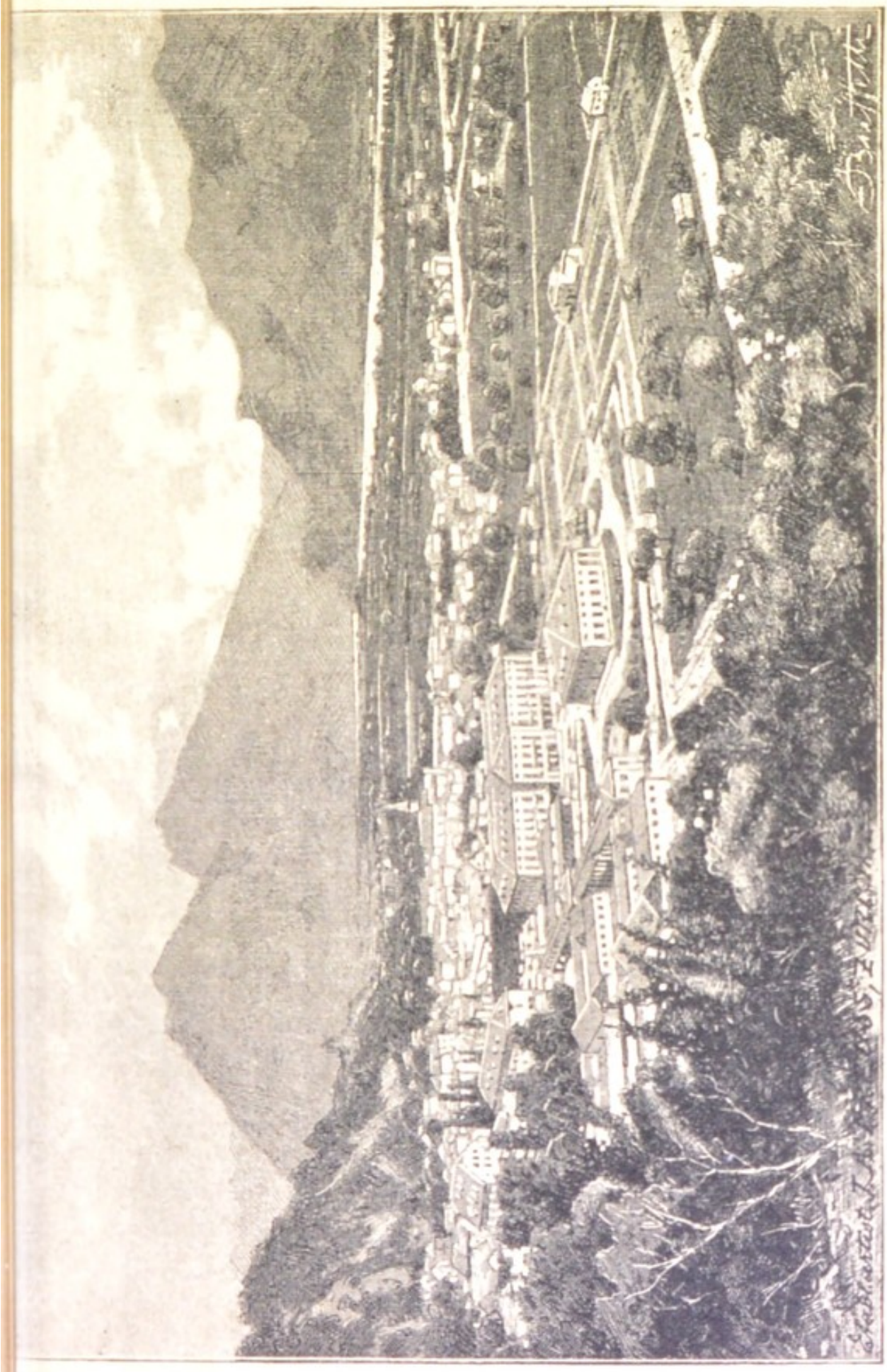
Month	Temperature				Height of the Barometer	Relative Humidity
	7 o'clock	1 o'clock	9 o'clock	daily average		
May	10,84	16,19	11,42	12,82	714,93	74,53
June	15,94	20,16	15,33	17,14	716,21	76,64
July	17,83	22,05	17,06	18,98	716,43	79,15
August . . .	16,68	21,12	16,53	18,11	717,23	82,01
September .	13,18	18,28	13,71	15,08	716,59	82,83
October . .	8,19	13,18	9,16	10,17	715,11	83,00

up from deep recesses in the earth, and forces its way out by diverse channels. The rock from which it springs consists chiefly of gray and black calcareous shale. Although all the thermal water springs from one source, its various outlets have received different names, such as the Stollenquelle, Kesselquelle and Stauquelle. They are all of the same temperature and chemical composition, and run into one common reservoir which was constructed in the winter of 1868—9. Thence the water flows into a pipe sunk into the rock, 451 m. long, and passes in 5 minutes into the branch pipes behind the bathing establishment. From these a smaller pipe leads the water to the baths of Pfäffers and by a larger one, 3751 m. long with a fall of 163, to those of Ragaz.

The hot spring is unusually copious, yielding 4000—10,000 l. per minute. Going back for many hundreds of years, the history of the spring shows that any considerable reduction in the quantity of water given out was the exception, and had only been observed two or three times in a century. In the year 1885 this phenomenon made its appearance, and was evidently connected with the exceptionally scanty rain-fall all over the Alps. In September, when rain at last set in and lasted for a long spell, the spring returned to its normal strength.

The temperature of the spring is very constant, being independent of outward influences; in the rock basin it is 37,5° C.; in the pipes leading to the Pfäffers baths, 36,5° C., and at the baths of Ragaz 35° C. Excellent arrangements have been made for reducing the temperature in certain cases by cold douches etc., which are always kept at the hot springs. The water is crystal clear, pure, without taste, and has a specific gravity of 1,0003. The chemical analysis of *Dr. A. von Planta-Reichenau*, made in 1868, gave the following components in 10,000 parts of Water:

Sulphate of lime	0,0746
„ „ soda	0,3219
Chloride of sodium	0,4934
„ „ lithia	0,0020
Bromide of sodium	0,0002
Borate of soda	0,0038
Carbonate of soda	0,6013
„ „ lime	1,3064
„ „ magnesia	0,5306
„ „ strontia	0,0152
„ „ baryta	0,0064
Ferrous carbonate	0,0172
Phosphate of alumina	0,0051
Silicic acid	0,1408
Traces of rubidium, cæsium thallium.	
Fixed solids	2,9905
Semi free and free carbonic acid	0,7761



Ragaz.

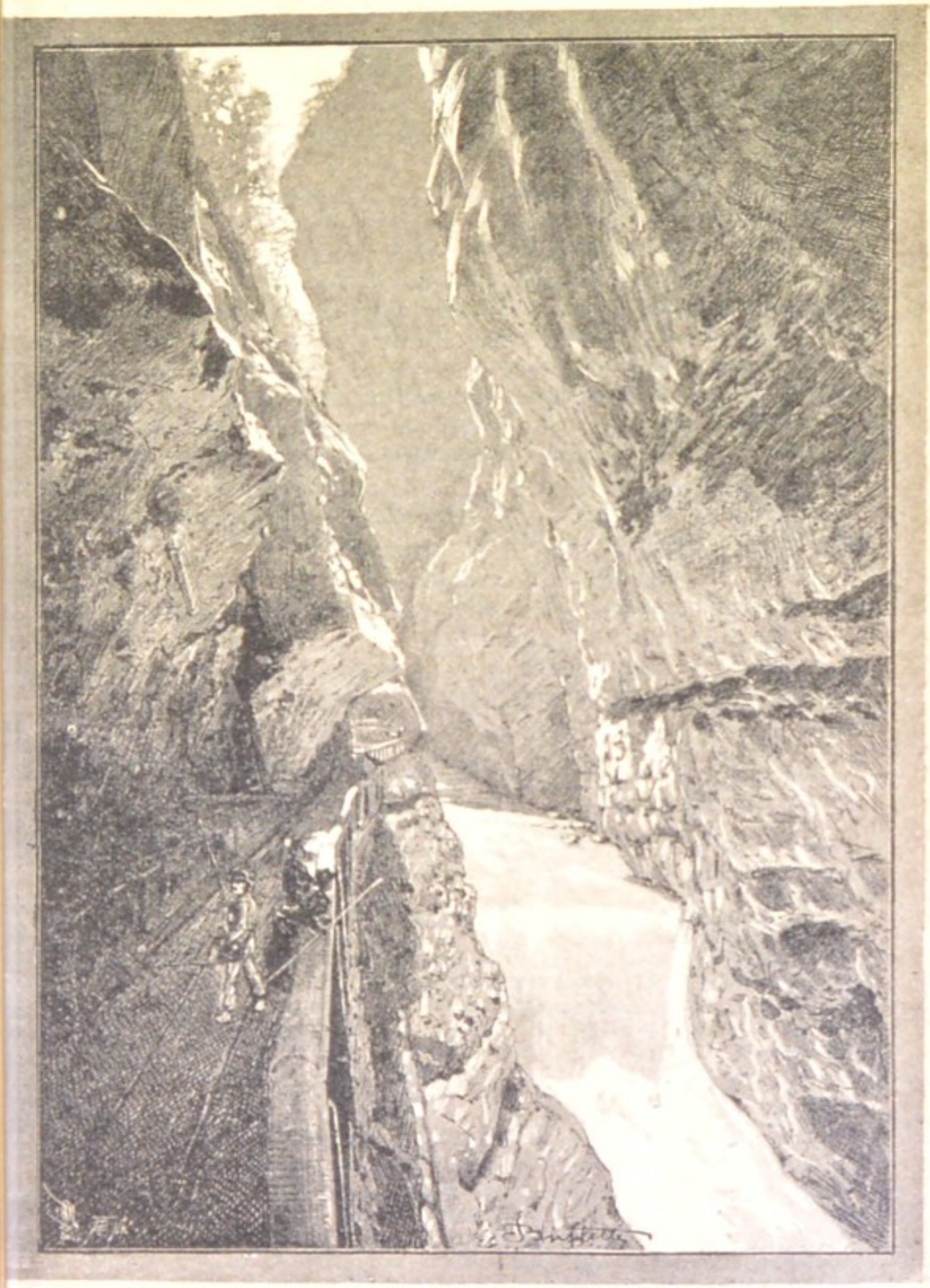
In addition to the above the spring contained gaseous mixtures of nitrogen, oxygen and carbonic acid. The decocted gas gave in 100 parts: carbonic acid 16,43, oxygen 24,24, nitrogen 59,33.

Historical. The honour of discovering the spring belongs, according to the most reliable records, to the Abbey of Pfäffers. A hunter of the Abbot Hugo II of Villingen (1242), is said to have been taking young ravens from a nest in the rocks, when he noticed smoke and steam rising from below; he descended by ropes, and discovered the hot spring. By means of a basin in the rock the spring then became used as a bath. The monks afterwards built a bathing house which, from the height the spring then was above the Tamina, must have rested on piles driven into the rock. Bathers were let down into this gloomy place by baskets and ropes. A subsequent abbot constructed, in 1545, a better means of communication, a wooden staircase and balustrade. Theophrastus Paracelsus, who visited Pfäffers in 1535, wrote the first description of the bath. In 1629 the chief part of the building was destroyed by fire, and the spring was then conveyed further out, where a more accessible and sheltered spot could be found for the bathing house. On May 19, 1730, the water first appeared at the spot where the present bath is, and a large establishment, with 100 rooms and 140 beds, was soon afterwards erected. Between 1704 and 1716 Abbot Boniface I built the present house at Pfäffers. The bathing establishment for the poor owes its foundation in 1821 to the last abbot, Placidus Pfister. For three weeks every year about 100 poor, without distinction of nationality, receive board, lodging, medical attendance, and take the baths. Applicants must be proved to be needy, and must bring a medical certificate and 20 fr. from the poor funds or some charity. The Bartholomew Bathing Establishment, called after its benevolent founder, has recently been established at Ragaz, and some 20 poor patients are received there every year, and well cared for.

In 1838 the monastery of Pfäffers was removed from Canton St. Gall, and the property made over to the State for the public benefit. In 1840 the present road from Ragaz to Pfäffers was constructed, and the water from the hot springs was conveyed to Hof Ragaz, formerly the government offices of the Canton. In 1868 the village Badehalle was opened. In the same year the property passed from the Government into the possession of M.B. Simon, the present proprietor of the health-establishment, Ragaz-Pfäffers, from which period the real prosperity of the place is to be dated. Then appeared in quick succession the present handsome Hotel Quellenhof, the new baths, the swimming-bath, the Kursaal buildings, the large park and gardens dotted with villas, and finally, the crowning point of all, the new establishment.

Baths and Drinking Wells. Ragaz has now 4 bathing establishments, with 81 fine, large, tiled baths and a swimming-bath. The finest is the *Neubad*, which belongs to the Quellenhof and has 30 baths of faience; the *Helenabad*, adjoining the left wing of the Ragaz Hof, with 12 faience baths, and the *Mühlebad*, connected with the right wing by a covered gallery, and having 15 tiled baths, 2 general baths, and 6 douche baths. South-west of the Neubad is the great *swimming bath (Schwimmbad)* in a large wooden building, with a gallery. Finally, there is the *Dorfbad* in the market square; it is an elegant structure, with an arcade in front and lofty waiting rooms at both ends. It is provided with every variety of douche — spray, rain, and local douches — also an apparatus for inhalation. The hot spring is also used as a drinking cure, and there are drinking fountains in all four establishments. The following means of cure are also used: Massage, electricity, milk, whey, foreign mineral waters, grapes.

The Indifferent spring of Pfäffers is to be recommended in general in those cases in which a violent reaction is to be avoided, and the nerves are to be gently soothed and regulated so that they may act on the



The Tamina Cavity.

system generally. According to *Dr. Alb. Schädler*, Ragaz Pfäffers is consequently especially adapted for the following affections:

1. Most nervous diseases, general over sensitiveness of the nerves, hysteria, hypochondria; paralysis of the brain and spinal cord after the subsidence of feverish reaction, irritation of the spine. emaciation, congestion of the spine; paralysis of the capillary circulation; neuralgia.

2. Diseases of the motary organs: chronic rheumatism of the muscles and joints, arthritis nodosa, gout, stiffness of the joints, shortening of the muscles, scars.

3. Skin diseases: disturbances of the excretions of the skin (sebaceous glands, acne, comedones, etc.), thickening of the skin (ichthyosis) chronic urticaria and prurigo.

4. Diseases of the digestive organs: cramp in the stomach (nervous cardialgia) chronic ulceration of the stomach, nervous dyspepsia, chronic intestinal catarrh (especially chronic diarrhœa from cold) intestinal pains, exudations from the peritonæum.

5. Diseases of the urinary and sexual organs; catarrh of the bladder with symptoms of irritation, urethral stricture: amenorrhaea, dysmenorrhæa, catarrh and congestion of the uterus.

6. Constitutional and general complaints: the acute form of scrofula, metallic poisoning, general weakness, convalescence.

7. Affections of the respiratory organs and of the circulation: dry catarrh of the larynx and air passages with great irritability, but without fever; nervous palpitation of the heart.

Physicians at Ragaz; *Drs. Dormann, Jäger, Kaiser, Schädler.* — Physician at Bad Pfäffers: *Dr. Kündig.*

Hotels and **Pensions** at *Ragaz:*

Kuranstalt Quellenhof (Kinberger, manager), a model establishment, in an open sunny situation, surrounded by beautiful gardens and a shady park. There are 143 elegant bed-rooms, balconies, verandahs and terraces. A private gas supply.

Hof Ragaz (Giger, manager), a model establishment of the first class, consisting of six blocks, with rooms for 238 visitors; in the two side-wings are the comfortable bathing establishments, Helenenbad and Mühlenbad. Hof Ragaz is chiefly frequented by visitors making a long stay.

Kursaal, with reading-room, conversation room, dancing-hall, café, billiards. *Kur garden* with a fountain, playgrounds, arcades, shops, a terrace where coffee is drunk, and a *music pavilion.* The band plays in the garden, on week-days, from 7 to 8 a. m.; 2 to 3, 5 to 6, and 8.30 to 9.30 p. m. On Sundays from 2 to 3.30, and from 5 to 6.30 p. m.

Other hotels. I. class: *Hotel Tamina, Schweizerhof.* II. class: *Lattmann;* Gasthof zum *Rosengarten; Fröhlich; Freieck; Neuhof; Hotel National.*

A large number of furnished apartments, and private houses.

The spacious bathing establishment of *Pfäffers* has accommodation for 300 guests, and the same arrangements as at Ragaz.

Walks and excursions. In ¾ hr. through the wildly romantic **Gorge of Tamina** to *Bad Pfäffers;* from there in 10 minutes to the Calanda. In ½ hour through the beautiful St. Nicholas wood to the ruins of Wartenstein; close to the road is the pretty castellated building, the Restaurant Wartenstein, commanding a splendid view. In 20 minutes to the ruins of Freudenberg on a vine-clad hill (a pretty view). In ¾ hr.

to the Guschenkopf, with a wonderful panoramic view. From Bad Pfäffers, by a very romantic path, to the village of Pfäffers and Valens. In ½ hr. to Maienfeld In 1½ hours to the Luziensteig (Swiss fortification), with a beautiful view. In ¾ hr. to Vättis, with a fine view of the Graue Hörner. From Vättis in 3 hours over the Kunkel Pass to Tamins and Reichenau. Longer excursions to the Prättigau, Coire, Vaduz, Wallensee, Lintthal, the mountains of Pizalm (14-1 m), Schlösslikopf (2229 m.), Piz Sol (2847 m.), Monte Luna (2416 m.), Ringelspitze (3249 m.), Falkniss (2566 m.), Calanda (28087 m.) etc.

Coire, 590 m. above the sea. climatic and Terrain cure, chief railway station of the Rhine Valley line. The starting place for the express post carriages to the Engadine, etc.

Coire, the chief town of Canton Grisons, with 8,900 inhabitants, is surrounded by picturesque scenery. It is commanded on the south by the cone-shaped, wooded Pizokel, on the east by the Mittenberg, from the plateau of which rise the pyramids of the Montaline (2263 m.) and on the north-west by the Calanda (2803 m.) Owing to its sheltered situation Coire has a very mild climate, but like that of the Rhaetian Highlands, subject to extremes. The mean yearly temperature is 9,44° C.; the mean in spring is 9,36; in summer 17,99; in autumn 9,54; in winter 0,68; the minimum for the year is 14,44° C.; the maximum, 31,1° C. The mean temperature of the summer months is: May, 14,09; June, 17,08; July 18,97; Aug., 17,94; Sept., 15,15° C. The air is very dry, the relative humidity being in May only 60,2; in June 64,7; in July 64,9; in Aug., 69,5; and in Sept., 69,6 %.

The rainfall, also, is only 88 cm. per annum; and the mean amount of cloud in summer very small — only 4,9. The autumn is the pleasantest time for a stay at Coire; as the temperature is not so high, and the variations are less extreme. As the neighbourhood affords an immense variety of walks of all degrees of difficulty, preparations are being made for establishing a "Terrain-cure", for which Coire is especially adapted from its being the chief centre of communication with the Rhaetian health resorts.

Hotels: *Steinbock, Lukmanier, Stern, Sonne, Weisses Kreuz, Rother Löwe, Drei Könige.*

From Coire the road leads westward along the Rhine through the *Grisons Oberland.* via *Reichenau, Tamins,* and *Trins.* to the fine **village of Flims** (1102 m.) *Hotel-Pension z. Post; Adler.* In a southerly direction we arrive in ½ hour at.

Waldhaus Flims, 1102—1130 m. above the sea, an air cure, 4 hours by diligence from Coire, in a lovely mountain region. The climate is tolerably mild, but fresh; during the season from May till Sept. the temperature is 14,06° C.; the prevailing winds are east and north-west, but their influence is much modified by the extensive woods in the neighbourhood. Excellent spring water. A lake bathing establishment on the deep blue little *Lake of Cauma,* the mean temperature of which from the middle of June till the middle of August is 20,6° C.

Waldhaus-Flims is especially adapted for: sensitive persons suffering from bodily and mental fatigue, delicate very weakly convalescents, disturbances of the organs of digestion and nutrition, catarrhal affections of the respiratory organs.

A **model Health Establishment** *(J. Guggenbühl* of Zürich). Physician: *Dr. Blumer. Hotel-Pension Segnes.* Other hotels: *Villa Belmont; Chalet; Bellevue; Posthaus.*

Walks and excursions: In the extensive and immediately contiguous woods is quite a net-work of dry paths with seats. In 20 minutes to Thäli and the Lac de Pran Pulte. In 3/4 hour by the side of the aqueduct to the Segnes Falls; in 1 hr. to Fidaz; in 1 hr. to the ruined castle of Belmont with a splendid view over the valleys; in 1 hour to the Runeawald; in 1 1/2 hours to the Crass la Giegia (a beautiful Alpine panorama): in 1 1/4 hrs. to the Rheinaussicht and Conn; to Flims, Laax, Salums, Ilanz, etc. Capital opportunities for excursions among the mountains and glaciers of greater difficulty, but well worth the trouble.

Laax, 1023 m. above the sea, an air cure, with a lake bathing establishment, 3/4 hour from Waldhaus-Flims, has a mild climate free from abrupt changes of temerature. Mean summer temperature, 19—25° C.; Maximum 29° C.; Minimum 15°.

Kurhaus. Hotel and Pension Seehof. (Coray).

Ilanz, 718 m above the sea, 4 miles up the Rhine from Laax, is a Romansch town, the highest in Switzerland and the first on the Rhine. It is pleasantly situated amid wooded slopes.

Hotel Oberalp, Lukmanier.

Bad Peiden, 825 m. above the sea, with 3 ferric acidulous springs containing gypsum; 5 1/2 hours by diligence from Coire, and 2 hours from Ilanz. It is in the *Lugnez valley.* This spa, which has been known since the 13th century, has 3 springs; the chief constituents of the well of St. Lucius are: — bi-carbonate of lime; sulphate of soda and sulphate of lime; carbonate of magnesia; chloride of sodium; sulphate of potash; carbonate of ferric oxide; silica, and a considerable quantity of free carbonic acid. The other two springs contain more fixed solids, but less free carbonic acid. — The climate of Peiden is particularly mild, and the spa is protected from the north wind by protruding cliffs, and from the north-east by the Signina range. Peiden is adapted for: Chronic catarrh of the respiratory and digestive organs and the urinary passages; disturbances of the liver and gall, poverty of blood, chlorosis, debility, chronic rheumatism, hypochondria, melancholy, mental and bodily exhaustion (among business and public men).

Kurhaus. — Physician: *Dr. Riedi.*

Walks and excursions. A shady path on the other side of the bridge over the Furth, and along the Wildbach, with its numerous waterfalls to St. Anna in the green, picturesque Valserthal, to Pleif Villa and to the Platte von Duvin; a glorious view.

Vals am Platz, or *St. Peter* a summer resort, 3 1/2 hours above Peiden, in the wild and romantic Valserthal. The air is comparatively mild, pure, and strengthening.

Hotels: *Hotel Albin; Piz, Aul, Europe.*

Ten minutes distant from the village lies the rural

Valserbad zu St. Peter, 1252 m. above the sea, amid magnificent mountain scenery, with a hot gypsum spring containing iron, and of a temperature of 25,5° C. The spring chiefly contains sulphate of lime, bi-carbonate of lime, sulphate of magnesia, soda, potash, ammonia, chloride of sodium, bi-carbonate of ferric oxide, strontia, oxide of manganese, silica, and a considerable quantity of free carbonic acid. The springs are only used for bathing in affections of the joints, lumbago, weakness of the muscles, chronic skin diseases. *Bathing house* with four bath-rooms.

Brigels, 1032 m. above the sea, above Ilanz on the Oberalpine route, an air cure, with a pleasant, bracing mountain climate, especially adapted for the wearied, overstrained nerves of sedentary workers. — Hotels: *Kistenpass, Capaul.*

Tennigerbad, 1273 m. above the sea, with a gypsum spring containing Epsom salts, in the Somvixerthal which is a tributary valley on the south side of the Vorder Rhein. The mineral water contains chiefly sulphate of lime, and sulphate of magnesia, then carbonate of lime, sulphate of soda, potash, ammonia, strontia, chloride of sodium, ferric oxide, alumina and phosphoric acid, silica, and a considerable quantity of free carbonic acid.

The climate is mild and sheltered from the north wind. There are beautiful and extensive woods in the picturesque environs, which makes the valley especially suitable for weakly consumptive patients who have sufficient resisting power to stand a mild Alpine climate. The spring is only used for bathing in cases of rheumatic and gouty affections and chronic skin diseases. Kurhaus (Cargienard).

Disentis, 1150 m. above the sea, an air cure, with a ferric acidulous spring, 12½ hours from Coire, via Ilanz, by diligence from Andermatt (*Göschenen Gotthard line*) over the Oberalp Pass.

Despite its lofty situation, Disentis rejoices in a comparatively mild climate — the mean summer temperature is 15° C. — of which the luxuriance of the vegetation is the most striking evidence, for cherries, apples, pears and plums ripen in sheltered places. The mineral spring contains the following fixed solids: bi carbonate of lime, and sulphate of soda; next, sulphate of potash, bi-carbonate of magnesia, strontia ferric oxide, chloride of sodium, phosphate of alumina, silica, and a small quantity of free carbonic acid.

Disentis is adapted for general debility, convalescence, disturbances of the digestive and nutritive organs, poverty of blood, chlorosis, nervous irritation and tendency to phthisis.

Health Establishment Disentiser-Hof. (Physician, *Dr. Condrau*). Also *Hotel-Pension Lukmanier, Hotel Condrau.*

Sedrun, 1398 m. above the sea, an air and milk cure, the chief place in the Tavetsch valley, and the highest point of the Vorder Rhine valley, is a pleasant station for mountain tourists.

Hotel-Pension Krone (Caveng).

Chiamutt, 1640 m. above the sea, an air cure, 1½ hours above Sedrun, a lovely village in the midst of magnificent mountain scenery. From Chiamutt the road winds through the Val Surpalix to the top of the Oberalp Pass, and down to the Lake of Oberalp and to Andermatt. *Gasthaus zur Rheinquelle,* well-kept.

Rothenbrunnen, 620 m. above the sea, with a tepid ferric acidulous spring containing iodine, at Domleschg. Rothenbrunnen is reached in 3½ hours from Coire, passing Reichenau, and along the Splügen-Bernhardine road.

The Bad is very rural, and lies in a mild, pleasant situation, with a pretty view of the picturesque rocky terraces of the Domleschg valley. The mean temperature during the season is 15° C.

The spring is used for drinking and bathing to promote bone-making in the case of weakly, ricketty infants; so much indeed that Rothenbrunnen is a favourite children's bath; for scrofula; it is also used for goitre; chronic catarrh of the mucous membrane of the digestive organs; the remains of, and convalescence after, pneumonia and pleurisy; rheumatic-gout; asthenic abscesses. *Kurhaus* (Buchli). In the neighbourhod are the ferric acidulous springs of *To ils.* Milk cure.

Thusis, 746 m. above the sea, an air cure and tourist station, 5 hours by diligence from Coire. (The Government have given a concession for the Coire-Thusis-Felisur railway line). Thusis is at the southern base of the magnificent Heinzenberg, in the midst of beautiful scenery: on the east is the *Schyn Pass,* leading along the Albula, through the dome-shaped gorge to Alvaschein; on the south is the wildly romantic narrow pass of the **Via Mala.** As Thusis enjoys a mild climate and is protected from raw, north winds, it is often used in spring and autumn as a **passing station** for Davos and the Engadine. It is especially adapted for those suffering from bodily and mental fatigue and for convalescents.

Hotels: *Hotel-Pension Viamala; Hotel Post and Kurhaus; Hotel Rhätia.*

Andeer-Pignieu, 979 m. above the sea, with a tepid gypsum spring containing iron. Climatic cure. Iron-mud baths. Season from the middle of May till the middle of October.

Andeer lies at the entrance of the Schamser Valley, on the Splügen road, above the Viamala, in the midst of magnificent mountain scenery and close to beautiful woods, well provided with seats.

The climate is mild, the mean temperature during the season is 13,5° C.; the mean temperature for June is 13,57, minimum 2,5, maximum 28,1°; July 14,36, minimum 3,7, maximum 30,0; August 13,42, minimum 2,5, maximum 29,6; September 12,6° C. Rainfall: in June 10²/₃ days, in July 10¹/₆, in August 11²/₃, in September 8 days; the mean cloudiness in these months is 4,8; fogs are very rare. Andeer is refreshed by a constant current of air from the valley. The prevailing wind is south-south-west.

The spring, the temperature of which is 18,8—20,2° C., has a specific gravity of 1,00221, and chiefly contains: sulphate of lime and sulphate of magnesia, then bi-carbonate of lime, sulphate of potash, soda, chloride of sodium, phosphate of lime, ferrous oxide, silicic acid, traces of alumina, manganese, strontia, lithia, caesium, rubidium and organic substances; to every 10,000 parts of water in the spring 23,400 fixed solids. This is according to the analysis made by *Dr. Abeljanz* in 1882. According to *Husemann's* analysis, the rusty red muddy iron spring contains soluble and insoluble salts, humic acid, hard substances and remains of plants. The mud is used for baths; the spring for drinking and bathing. Milk and whey cure.

According to *Dr. Goll* the drinking cure is indicated in chronic catarrh of the throat and air passages (especially where there is a tendency to angina); the remains of pleuritic exudations, the beginnings of phthisis; stomach and intestinal catarrh and stoppages of the arterial system (the diet being suitable); and chronic catarrh of the urinary organs. The bathing cure is indicated in chronic skin diseases, nettle-rash, boils, prurigo, ecyema, psoriasis, etc.; rheumatic and gouty affections.

Hotels: *Hotel pension Fraci, Hösli, Gasthaus zur Sonne.* — Physician: *Dr. Jörger.*

Walks and Excursions. Plenty of walks in the fields and to the neighbouring villages. In 5 minutes to a wood where there are numerous paths and resting places. On a hill-top quite close at hand is the pavilion, "Nina's Rest", whence there is a good view of the valley. In ¼ hour to the "Survis" wood, and upwards from there by a good path to Uaulla Tschera; ¼ further through the wood to Uaul da Plauns, and the cool gorge of Cuceléra with the good drinking spring of Gallus. In from ½ to 1 hour to the villages of Zillis, Donat, Burg, Fardün, then to the picturesque little village of Schamserberg, and to the Alp Badér (1245 m.), with a view of the Viamala and the Domleschg. Longer excursions through the Via mala to Thusis Splügenberg, and the valleys of Terrera and Avers.

In a southerly direction from Andeer, through the rocky, wooded gorge of Roffna to the *Rheinwald Valley* and its chief place,

Splügen, 1450 m. above the sea, and situated at the point where the *Splügen*-road branches off into two mountain passes, one going southwards over the Splügen to Italy, the other westward over the *Saint Bernhardino* to the Misocco Valley. In the neighbourhood of the village are several ferric acidulous springs of more or less strength, such as Stockgütern, Gadenstett, Ruttelti, Medels, Nufenen, which have not yet been made use of therapeutically. The magnificence of the mountain scenery, and the comparative mildness of the mountain climate render Splügen a pleasant air-cure and tourists' resort.

Hotel and Pension Bodenhaus *(Amsler)* pleasantly situated and facing southwards. It is a two-storeyed comfortable building, with 2 terraces, a balcony, 3 salons, 30 rooms (50 beds), a reading-room and dependance; a splendid view on three sides. The dependance is surrounded by the beautiful garden which adjoins the hotel. Fine woods at five minutes distance. Warm baths in the house. Bowls and croquet. Post and telegraph bureau. Pension from 7 fr.; servants 5; breakfast 1 fr. 50; lunch 2 fr. 50 — 3 frs.; dinner 3 fr. 50 — 4 frs., supper 2 fr. 50 — 3 frs. Room from 2 fr. Physician, *Dr. Scarpatetti.*

St. Bernardino, 1626 m. above the sea, an air cure, with a ferric acidulous spring, containing gypsum, at the

top of the Misocco Valley, on the southern slope of the Bernhardine Pass, about 1½ hours from the summit, amid picturesque surroundings, and with a fresh but mild Alpine climate.

According to *A. v. Planta's* analysis the mineral spring chiefly contains sulphate of lime, bi-carbonate of lime, and sulphate of magnesia, then sulphate of soda, potash, bi-carbonate of magnesia, ferric oxide, strontia, chloride of sodium, silicic acid, phosphate of alumina; in the whole, to every 10,000 parts of water 25,981 fixed solids. True free carbonic acid 110,175 cm.³; so-called free carbonic acid 11434,4 cm.³. Drinking cure, milk cure.

St. Bernhardino is indicated in: poverty of blood, chlorosis and the accompanying disturbances of the nervous system and sexual organs; scrofula and spinal disease; the effects of malaria; gouty pains; chronic metallic poisoning; chronic catarrh of the stomach and intestines; chronic catarrh of the mucous membrane of the air passages.

Physician: *Dr. Geronimi.* — Hotels: *Hotel Brocco; Bellevue; Ravizza.*

Passugg, 1 hour south from *Coire*, in the wild gorge of Rabiusa, 829 m. above the sea, with a ferric and soda acidulous spring. Season, middle of June till middle of September. The *Passugg springs* lie close to the right bank of the Rabiusa: belonging to them is the ferric acidulous spring of *Belvedra* on the opposite bank. The water of all the springs, and especially that of Belvedra, is largely expoted. The water is bright, pearly, rather tingling and saltish to the taste. The chemical analysis of *Dr. A. v. Planta* gave the following fixed solods in 10,000 parts of water:

	Ulricus Spring	Theophils Spring	Fortunatus Spring
Temperature	8,1° C.	7,5° C	6,2° C.
Specific gravity	1,0070	1,0036	1,0055
Chloride of sodium	8,371	2,221	5,442
Sulphate of potash	1,568	1,340	1,965
Sulphate of soda	0,862	1,970	0,610
Nitric acid	0,040	0,007	—
Boric acid	0,067	—	—
Chloride of lithia	0,060	—	—
Bromide of sodium	0,054	—	—
Iodide of sodium	0,008	0,00t	0,010
Bi-carbonate of soda	56,697	19,122	47,303
„ „ ammonia	0,214	0,006	—
„ „ lime	10,264	10,162	6,977
„ „ strontia	—	0,003	—
„ „ magnesia	5,769	4,332	4,771
„ „ ferrous oxide	0.107	0,139	0,182
„ „ oxide of manganese	—	0,007	—
Silica	0,190	0,114	0,202
Phosphate of alumina	0,074	—	—
Barium	Traces of	—	—
Total of fixed components	81,341	39,424	67,562
True free carbonic acid	9545,1 Cm³	11179,0 Cm³	92,45,4 Cm³
So called free carbonic acid	20439,2 „	16491,1 „	18513,7 „

The Viamala.

Belvedra spring (Husemann's Analysis).

Temperature	9,2° C.
Specific Gravity	1,003615
Chloride of Sodium	0,2923
Iodide of sodium	0,0003
Chloride of lithia	0,0028
Sulphate of potash	0,2383
„ „ soda	0,3459
Bi-carbonate of soda	3,0220
„ „ ammonia	0,1394
„ „ lime	20,8651
„ „ magnesia	2,2354
„ „ ferrous oxide	0,3014
„ „ oxide of manganese	0,0224
Silica	0,2344
Phosphoric acid	0,0007
Alumina	0,0011
Traces of strontia, baryta, nitric acid, organic substances	traces
Total of fixed components	27,7011
True free carbonic acid	10415,1 cm³
So-called „ „	15045,3 „

There is no regular health establishment at the springs of Passugg, but at the village of Araschgen (*the Kurhaus Mühlerain*), 20 minutes below, there is a house on a modest scale, which has been established three years, and is a good deal frequented. The *Passugg water* is especially used in chronic catarrh of the stomach and insestines, plethora abdominalis, haemorrhoids, congestion of the liver, jaundice, obesity, gout, goitre, glandular swellings, catarrh of the urinal organs, and of the mucous membrane of the respiratory organs. The *Belvedra ferric acidulous spring* is used for poverty of blood and chlorosis, chronic catarrh of the mucous membrane of the stomach and respiratory organs, and as a refreshing *table water*, like Seltzer water.

Physician, *Dr. Gamser* of Coire.

The **Sassal springs,** 700 m. above the sea, in the Plessur gorge, not far from Coire, are 7 ferric acidulous springs, all close together. Two especially are *exported*. There is no health establishment, but a modest inn. According to *Husemann's* chemical analysis, these springs contained in 10,000 parts of water:

	I.	II.
Chloride of sodium	0,0217	0,0290
Phosphate of potash	0,0403	0,0919
„ „ soda	0,1298	0,3896
„ „ magnesia	1,1978	—
Bi-carbonate of soda	—	0,0739
„ „ magnesia	2,2525	2,3197
„ „ lime	14,1284	9,6274
„ „ ferric oxide	0,0895	0,1340
„ „ manganic oxide	0,0651	0,0174
Silicic acid	0,1342	0,0876
Lithia, barium, ammonia Phosphate, organic matter	traces	traces
Total of fixed solids	17,0593	12,7705
Actual free carbonic acid	9714,5 cm³	6151,7 cm³
So-called free carbonic acid	12322,5 „	8080,0 „

The water is used for poverty of blood, debility, catarrh of the stomach, dyspepsia, and as a refreshing *table water*.

Castiel, 1100 m. above the sea, in the Schanfigg Valley, with a ferric soda acidulous spring, which is only exported.

Langwies, 1377 m. above the sea, a summer resort in the Schanfigg Valley. *Hotel-Pension Strela*, good and cheap.

Arosa, 1892 m. above the sea, an air cure on the south-eastern slope of the Plattenhorn (2560 m.), high up in the narrow Aroserwasser valley which debouches into the Schanfigg valley at Langwies.

Route: From Coire, by diligence, in 4 hours, to Langwies, up from there by a bridle path in 2½ hours to Arosa. (Sledges in winter).

A new climatic station, already much frequented. The climatic conditions resemble those of Davos, but in the depth of winter the sunshine lasts from ½ hour to an hour longer than at Davos. In winter it is resorted to for cases of constitutional phthisis when the general conditions are still good; in summer for nervous complaints.

Hotels: *Seehof* (1740 m.), *Waldhaus* (1850 m.), *Rothhorn* (1770 m.); *Kurhaus* (1840 m.), and *Pension Brunald* (1740 m.), the only establishment arranged for winter visitors.

Churwalden, 1270 m. above the sea, a climatic health resort. Season June 1 till September 30.

Route: By rail to Coire: from there by post omnibus three times daily to Churwalden (2 hours up, 1 hour down).

Churwalden, with about 850 inhabitants, lies in a beautiful mountain valley, with much pasture and woodland, and watered by the Rabiusa. It is enclosed on the west and east by high mountains: on the west by the Drei-Bündenberg range, one point of which — the Stätzerhorn — reaches a height of 2576 m.; on the east by the range of the Rothhorn, the Rothhorn itself attaining a height of 2985 m., and having a small glacier. Both peaks rise gradually and are funnel-shaped, so that they not only protect the valley from cold winds but give free access to the sun.

The climate of Churwalden is wonderfully mild. We find there, as *Professor Brügger* said in 1867: "a moderate summer temperature free from excessive alternations; neither frost nor oppressive heat; a gentle moisture, a small rainfall, but a great deal of dew, and storms that are all the grander on account of their rarity". Fogs and snow falls do not happen in summer.

The mean temperature in winter is — 1,41, in spring 5,16, in summer 13,76, in autumn 6,37; the mean pressure of the atmosphere in winter is 658,27 Mm., in spring, 658,33, in summer 661,80, in autumn 659,98; yearly mean 659,59; variations from 651,13 to 665,85 Mm.

The air of Churwalden is very pure and fresh, and owing to the propinquity of larch and fir woods very balmy and rich in ozone. The prevailing winds are from the north-east and south-west, but their presence is seldom noticeable; the wind from the valley, which blows regularly every morning, gives the necessary freshness to the air. There is an abundant supply of capital spring water.

Mean temperature of the air at Churwalden (1866—1875) according to *Prof. Brügger*:

Month	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	Monthly mean.
Jan.	1,05	2 47	4,63	2.64	3,96	5,50	0,28	0,79	0,41	1,51	—1,05
Feb	1,11	1,75	0,07	3,57	0,83	2.28	1,07	1,77	2,55	5,62	—0,30
March	1,20	1,85	0,81	3,32	1,29	2,28	2,46	4,03	0,01	0,03	0,64
April	6,40	5,06	4,0	6,44	4,63	4,81	6,13	3,82	6,49	4,42	5,23
May	7,21	10,20	14,98	11,64	11,41	8,25	8,61	6,01	5,83	11,86	9,69
June	14,50	12 75	13,82	9,71	13,09	9,18	11 97	12,76	12,56	13,41	12,47
July	13,95	13,27	14,48	16,89	16,57	15,25	15,10	16,50	16,90	13,62	15,25
August	12,03	15,46	14,51	12,25	11,63	14,34	12,44	14,95	13,36	15,64	13,56
Sept.	11,86	12,32	13,56	12.51	9,55	13,56	12,00	10, 2	13,25	13,27	12,10
October	7,46	4,70	6,71	3,79	5,16	5,05	7,95	7,96	8,59	5,03	6,24
Nov.	1,18	0,09	0,16	0,61	2 35	0,92	3,62	2,38	1,14	0,29	0,77
Dec.	0,01	1,48	4,93	3,12	1,34	5,36	5,62	1,82	4,84	4,03	—1,97
Year.	6,49	6,37	5,96	6,21	5,58	5,11	6,29	6,55	5,67	5,40	Annual mean. ***5,98***

Cloudiness and humidity of the air (1865—1875).

Years	Relative humidity in %									Average of cloud				
	Daily average					Absolute Minima								
	June	July	Aug.	Sept.	Sum. (3Mth.)	June	July	Aug.	Sept.	June	July	August	September	Season (4 Months)
1865	63,2	66,0	73,5	64,0	67,6	29	33	40	31	4,8	4,4	6,9	1,4	4,4
1866	67,3	71,6	77,4	69,2	72,1	30	31	36	32	5,3	5,8	6,6	4,9	5,6
1867	72,6	70,6	70,3	74,1	71,2	36	38	30	32	5,6	5,2	4,6	4,4	4,9
1868	71,4	74,2	73,0	74,2	72,9	34	45	35	36	5,7	6,1	4,9	4,7	5,3
1869	72,5	70,4	80,1	68,5	74,3	33	33	46	27	6,3	4,2	5,6	3,5	4,9
1870	69,7	64,1	76,4	74,9	70,1	28	23	33	37	5,2	4,6	6,7	4,2	5,2
1871	72,0	69,3	72,3	70,2	71,2	34	35	39	32	6,8	4,4	4,0	3,6	4,7
1872	—	70,8	78,2	71,2	—	37	37	42	35	6,2	4,6	5,6	3,9	5,1
1874	69,0	71,0	33,0	66,0	74,3	27	31	47	36	5,7	4,9	5,8	4,2	5,1
1875	67,0	77,0	72,0	73,0	72,0	39	37	26	32	6,1	5,9	5,7	4,0	5,2
Mean	67,2	70,5	75,7	70,5	71,1	32	35	38	32	5,8	5,0	5,5	3,9	5,0

The average rainfall, in summer, is 387,1; in June 116,2; in July 135,2; in Aug. 185,8; in Sept. 119,4, the number of rainy days is on an average, in June 14,9; in July 14,9; in Aug. 15,0; in Sept. 11,3; the mean 44,8.

Since 1868 the means of cure at Churwalden have been considerably increased, and it has assumed an important position as a sanatorium for various maladies. The resident physician, Dr. Denz, finds, as the result of a wide experience, that Churwalden is adapted for:

1. Digestive disturbances. Digestion is strengthened and made easier.

2. Anaemia (poverty of blood) in children, and as an accompaniment or consequence of scrofula or the result of illness, or as a symptom of tubercular consumption; also in cases of weakness after serious illnesses, servere mental effort, night watching, loss of blood etc.

3. Chlorosis, especially at the period of puberty.

4. Bronchial catarrh, without any considerable cellular changes, and with increased secretion.

5. Incipient tubercular consumption.

6. Emphysema is more relieved here rhan at places of higher altitude.

7. Bronchial asthma.

8. Pleuritic exudations and effusions.

9. Hypochondria and hysteria; neurosis of the most varied kinds.

10. Affections of the heart find great relief here.

Besides the air-cure there is a systematic application of the cow's and goat's milk cures, and the most important mineral-waters of the Grisons (Tarasp, St. Moritz, Passug); the further application of water in the form of baths, douches, rubbings, etc.; lung gymnastics. When needed an individual dietary is ordered, and the whole of the curative appliances are under the regular control of the resident physician.

Hotels and Pensions:

Kurhaus and Hotel-Pension zur Krone *(Joh. Brügger)* 2 pretty three-storeyed houses standing on a lofty terrace, the two main fronts of 5 and 9 windows each connected by a covered gallery. 5 terraces (1 facing due south, and 2 southwards), a covered glass verandah leading to the dining-hall and several balconies. Altogether 85 pretty rooms, with 110 beds. A dining-room for 80 persons, ladies' salon, reading room with home and foreign newspapers, music-room, billiard-room and café, a covered German bowling alley. A beautiful garden with seats, a meadow, and a petty little larch and fir plantation behind the dining room. New, and in every respect complete arrangements for cold and warm baths and douches: these rooms are at the south of the Kurhaus and in direct communication with it. Excellent spring water in the house. W. C's. Good cooking and waiting; excellent Veltliner wine. A dairy belonging to the house.

Pension 5 fr. Servants 3½ fr. Room from 1½ fr. per bed, according to position, size and style: a reduced tariff for rooms in June and September.

Hotel Gengel, with Dépendances; *Post and Chalet*; *Hotel Mettier* with a Dependance; *Pension Rothhorn; Hemmi; Weisses Kreuz; Braun*, Restaurant *"Löwenhof"*. Post and telegraph office. — **Meteorological observatory.** Physician: *Dr. Denz*, who has a *dispensary* of his own.

Walks and excursions. In 5 minutes to the Waldsalon. By a beautiful zig-zag road to the neighbouring Bellevue. In 20 minutes along a wooded path to the Rabiusa In 25 minutes along the high road to the Klosterwäldchen. In ¾ hour along a circular, wooded path to Parpan (see below). In ¾ hour by a footpath to Pradaschier. In 20 minutes to the Thalsperre in the Räbiger-Tobel. To the ruined castle of Strassberg at Malivi. In ¾ hour by a footway to the Ried, passing Eggenwiesen, with an opening into the Capfedus and Joch road, 1 hour by road to Capfedus. In 1½ hrs. by Bazzigher to Canal. In 1½ hours to the mineral spring of Passugg (see above). In 1¼ hours to the Lenzerhaide and the lake of the same name. In 3½ hours to the Stätzerhorn (2578 m. above the sea), the Bündner Rigi; in 3 hrs to Faulenberg (2525 m.); in 2½ hrs. to Dreibündenstein (2154 m.); in 2½ hrs to Joch (2038 m.); to Gürgaletsch (2444 m.; to Schwarzhorn (2690 m.), Rothhorn (2985 m.), etc.

Parpan, 1505 m. above the sea, an air cure, ¾ hour above Churwalden on the Julier road, is situated on a broad, open terrace, and has similar climatic conditions to Churwalden, but is more ex-

posed to the winds. Parpan has been a favourite place for tourists (ascend of the Stätzerhorn), but is also adapted as a summer resort for persons suffering from mental overwork, nervousness, poverty of blood, dyspepsia of the nervous kind, and during convalescence.

Hotel and Kurhaus Parpan; Stätzerhorn.

From Parpan the post road leads over the hill through a beautiful wood to the Lenzerhaide, with the Watzer-, or Lenzerhaide, Lake on the right of the road, on the little island in the lake is a chalet with a restaurant and a few rooms for visitors. On the other side of the Lenzerhaide, 2 hours from Parpan, is the romantic village of *Lenz* with a sulphur spring above the village. Then along the new Albula road in 2 hrs. to

Schwefelbad Alvaneu, 965 m. above the sea, in the Albula Valley, with the neighbouring medicinal springs of *Tiefenkasten* and *Solis*. The season lasts form the middle of June till the end of September.

Route to Bad Alvaneu: By diligence from the railway station of Coire, passing Churwalden, in 4½ hours; from Thusis, through the Schyn Pass, in 2½ hours; from Ponte, over the Albula, in 5 hrs., from Chiavenna, a day; from Davos-Platz by Wiesen and Crapaneira in 3½ hours. (The Government has given a concession for the proposed line of rail, Coire-Thusis-Filisur.)

Bad Alvaneu lies in a basin-shaped valley, close to the right bank of the Albula. The characteristics of this lovely spot are a luxuriant vegetation, with numerous specimens of southern flora; and splendid forests, above which, tower enormous pyramids of chalk. Towards the east rises the rounded form of the Stulsergrat (Piz Motella 2582 m.), part of the Flüela-Scalettagebirg range which forms the left side of the Davos Valley. Behind the Bad a sunny slope inclining southwards leads to the village of Alvaneu, through which runs the fine new road to Wiesen, the famous "Züge" and Davos. Behind the village is another mighty range, running from east to west, there terminating in the Lenzerhorn, and on the east forming the right side of the Davos Valley. On the west are the Muttnerberge, on the south tower the colossal heights of the Piz Aëla, Tinzerhorngletscher and Piz Michél. Opposite the Bad is a waterfall, 200 feet high, formed by a stream springing from the so-called Schaftobel, and still frequented by bears.

Climate. Alvaneu belongs to the so-called mountain regions in which corn is cultivated with tolerable success, and fruit trees flourish in sheltered places. The summer is comparatively mild. The mean summer temperature is 15 °C. at the Bad. The thermometer rarely sinks below 6,5 °C., and 28 °C. may be taken as the mean maximum. The changes of temperature are, from the position of the place, naturally considerable, and after storms or continuous rains are especially marked because in the highest Alpine regions snow is falling. It is well, therefore, to be provided with warm clothing for such contingencies. In general the air is very dry, and fogs in the valley are rare. The prevailing winds are from the north-east, from Davos; the Föhn blowing over the Albula, and the rainy west and south-west winds blowing up the valley; Alvaneu is completely protected from the north-wind.

The **sulphur** well was rebuilt in 1866, and delivers 515 l. of water per minute. In summer the spring is dammed up, and on the sides and on the sluice there is a thick deposit of sulphurous slime, hanging in thin threads (algae beggiatoa). The temperature of the water is 8,5° C.; the specific weight 1,00130. According to *Planta-Reichenau's* analysis there are in every 10,000 parts of water the following fixed solids (the carbonates of alkaline being reckoned as anhydrous bi-carbonate).

Sulphate of soda	0,199
Chloride of sodium	0,014
Sulphate of potash	0,101
Sulphate of magnesia	1,392
„ „ lime	9,545
Bi-carbonate of magnesia	2,034
„ „ ferric oxide	0,011
Phosphate of alumina	0,047
Silicic acid	0,038
Total of fixed solids	13,381
True free carbonic acid	0,227
Sulphuretted hydrogen	0,01338

According to *Dr. V. Weber*, the treatment at Alvaneu is indicated in: Chronic rheumatism of the joints with inflammation and chronic rheumatic pains in the marrow; chronic skin diseases (eczema, etc., and ulcerations of a varicose character); chronic diseases of the bones (ostitis, periostitis); chronic catarrh of the stomach and intestines; chronic catarrh of the respiratory urinary and sexual organs; plethora abdominalis and haemorrhoidal affections; scrofula, syphilis, chronic metallic poisoning and general weakness.

Contra indicated: Disposition to inflammatory affections with tendency to formation of abscesses; organic heart complaints (fatty heart, advanced stage of failure), tendency to apoplexey and active blood-forming (aneurism), advanced emphysema, consuming canker, pregnancy in the first months.

Further means of cure employed at Alvaneu are the two valuable mineral springs of *Tiefenkasten* and *Solis*, which have been purchased.

The **St. Petersquelle** at *Tiefenkasten* springs from the base of a schist cliff, below this village, on the left bank of the Albula, about 1½ hours from the Bad. The mineral water is chiefly exported. The spring delivers about 60 liters per minute, has a temperature of 10° C., a specific gravity of 100453, and contains in 10.000 parts of water (the carbonate being reckoned as anhydrous bi-carbonate) 51,565 fixed solids: chloride of sodium, 5876; sulphate of soda, 22,862; sulphate of potash, 1,150; sulphate of magnesia, 2,145; sulphate of lime, 1,757; bi-carbonate of lime, 17,048; bi-carbonate of ferric oxide, 0,292, true free carbonic acid with a temperature of 10° C = 6019,8 cm³. It is used for chronic catarrh of the stomach, asthenic states of the digestive organs, chronic intestinal catarrh, bronchial catarrh, plethora abdominalis, chlorosis and anæmia 1½ to 2 bottles a day, the diet being strictly regulated.

The **Donatusquelle** of *Solis*, about ¾ hour below Tiefenkasten, delivers about 3 liters of water per minute, with a temperature of 8,1° C., and a specific gravity of 1,0045. The spring contains in 10,000 parts of water (the carbonate being reckoned as anhydrous bi-carbonate) 51,597 fixed solids: sulphate of soda, 20,400; iodide of sodium 0,013; bromide of sodium, 0,024; chloride of sodium, 12,037; bi-carbonate of lime, 11.160; bi-carbonate of magnesia 3,823; bi-carbonate of soda 2,956; bi-carbonate of ferric oxide, 0.189; true free carbonic acid, 3825,2 cm³. The mineral water is used for scrofula, goitre, chronic rheumatism of the joints, chronic catarrh of the stomach; and syphilis.

Bad Alvaneu has quite recently come into use as a **climatic transition station** to Davos and the Upper Engadine.

Physician: *Dr. Balzer.*

Kurhaus and Bad Alvaneu, *(Bros. Balzer),* a massive new building, 3 stories high in the centre, and 5 in the two wings, the main façade facing south, and standing in a very sheltered and picturesque situation. In the garden adjoining the Kurhaus is a fine fountain giving out a column of water about 80 ft. high. A bridge connects the garden with the left bank of the Albula and a wood a few steps further on. The Kurhaus contains 96 comfortable rooms with 150 excellent beds. On the ground-floor of the right wing are a restaurant, reading-room, post and telegraph office, billiard-room, bureau, kitchen, etc.; on the first floor a roomy, elegant dining-room, 20 m. long by 8 m. broad, a ladies' drawing-room with a piano. A water supply on every floor; English w. c'. s. On the ground floor of the left wing are 31 pretty bath-rooms, with wooden and tiled baths. The sulphur water is warmed by steam, on the new system of *Sulzer* of Winterthur. An entirely new douche apparatus, in which the pressure and temperature can be regulated as desired. Vapour baths, Inhalation. Massage when suitable. Special dietary for cases of diseases of the stomach. — Pension 6 fr. Breakfast 1 fr. 25—1 fr. 50; dinner 3½—4 fr.; supper 2½—3 fr. Room, 1½—4½ fr., lights and service inclusive. (Passing visitors 2—5 fr.) Servants pension with room 5—6½ fr. *Sulphur bath* in a tiled bath 1½ fr.; in wooden one 60 cts. — 1 fr. Vapour baths 1 fr., cold 50 cts. Inhalation 50 cts. Solis and Tiefenkasten mineral water 50 cts. the bottle.

Walks and excursions. In 7 minutes to the Sulphur Spring in a beautiful wood where are seats; in ¼ hour to the Waterfall; in 1 hour along the left bank of the Albula through the (Au) meadow, by a shady path to Filisur, and Burg Greifenstein; further up along the Albula route to Bellaluna, and to the romantic gorge of Bergünerstein (2½ hrs.); then to Bergün (2¾ hrs); in 1½ hrs. to Tiefenkasten, a picturesque village in the gorge where the Albula and Julier meet. In 2 hrs. to the Alvaneuer-Mayensässen, with its grotesque looking rocks and splendid view. Mountain tours to Matetta (2582 m.) and Sandhubel (2766 m.).

Savognin, 1237 m. above the sea, an air and milk cure, 3 hours south of Tiefenkasten in the Oberhalbstein Valley. Opposite the village on the left bank of the Julierbach is the iron spring of "Lecsch", and the sulphur spring of "Parseiras". Savognin is adapted for chronic affections of the respiratory organs, convalescence, and nervous affections with poverty of blood. A favourite place for tourists. *Hotels Piz Michel and Rhätia.* Further south, from the Tinzner Ochsenalp in the Val d'Err, about 2000 m. above the sea, two remarkable springs issue from the serpentine rock, the stronger of which contains 7,380 fixed in 10 parts of water, viz: — copper sulphate 0,156, green vitriol 1,483, gypsum 2,430, Epsom salts 1,544, Glauber salt 1,612, sulphate of potash 0,085. At *Roffna* in Ried, 1400 m. above the sea, is a sulphur spring, now the property of the Bros Balzer. A bath used to be here. Opposite, on the left bank of the Julierbach is a ferric acidulous spring. — At *Samnecs* in *Val Nandro,* 1900 m above the sea, rises a strong ferric acidulous spring. Further above this is the Cuolms da bovs, 2000 m. above the sea.

Mühlen *(Molins)* air, milk and whey cure, in a sheltered situation, 2 hours south of Savognin. *Hotel Löwe* (Balzer).

Bergün, 1389 m. above the sea, air cure, with a gypsum spring containing iron; situated on the Albula, can be reached in 2¾ hours by a good diligence road, via Filisur, passing through the wild ravine of the Bergünerstein. At the outlet of the *Valley of Tuors,* 600 m. above the sea, is a sulphur spring. Hotels: *Piz d'Aëla*; and the new *Kurhaus.* Milk and whey cure.

Wiesen, 1454 m. above the sea, climatic cure, lying between Alvaneubad and Davos. It is pleasantly situated on an open terrace, high up over the gorge of the Landwasser, on the

south-eastern declivity of the sandy hill (2766 m.) — Wiesenalp — on the romantic Davos road, sheltered from the north, west and south. (Owing to its sheltered situation, Wiesen is one of the calmest of the health resorts and is quite open to the fierce action of the sun's rays. It has a temperature 2—3 degrees higher than Davos, and the variations of temperature are fewer, while the winter is also somewhat shorter and the melting of the snow quicker than at Davos. Comprehensive meteorological observations are still wanting. There are large fir woods near, which help to keep the air fresh and modify the heat considerably. Wiesen has recently become popular as a *winter cure*.

Hotels: *Hotel-Pension Bellevue; Hotel-Pension Palmy.* Physician: *Dr. Buol.*

Schwefelbad Spina, 1476 m. above the sea, with a sulphur spring, 1½ hours south-west of Davos, on a wooded slope of the left bank of the Landwasser. There is no exact analysis of the spring. It is used externally for chronic rheumatism, eczema, abscesses, and affections of the joints and bones. *Kurhaus Spinabad* (Landammann Gadmer).

Clavadel, 1938 m. above the sea, with a sulphur spring. It lies 1 hour south-west of Davos in the romantic Sertigthal, in a very sheltered situation, on a sunny terraced slope, with fine larch and fir woods near. Milk cure. Clavadel is a quiet, enjoyable place for health-seekers. *Kurhaus Clavadel* (Schmitz-Gadmer).

Davos-Platz, 1556 m. above the sea and **Davos-Dörfli,** 1557 m. above the sea, *climatic summer and winter cure.*

Route: From Landquart station, south of Ragaz-Pfäffers on the Rorschach and Zürich-Coire line, by diligence (in summer twice, in winter once daily) in 7½ hrs. through Prättigau to Davos (the best route for sensitive, weakly patients). The projected railway from Landquart to Davos has been sanctioned by the Bund. From Coire there is diligence communication once a day with Davos via Churwalden-Alvaneu, and also via Coire-Thusis-Alvaneu (projected railway). From Tarasp (Arlberg railway station Landeck) and St. Moritz via Süs and the Flüela Pass to Davos.

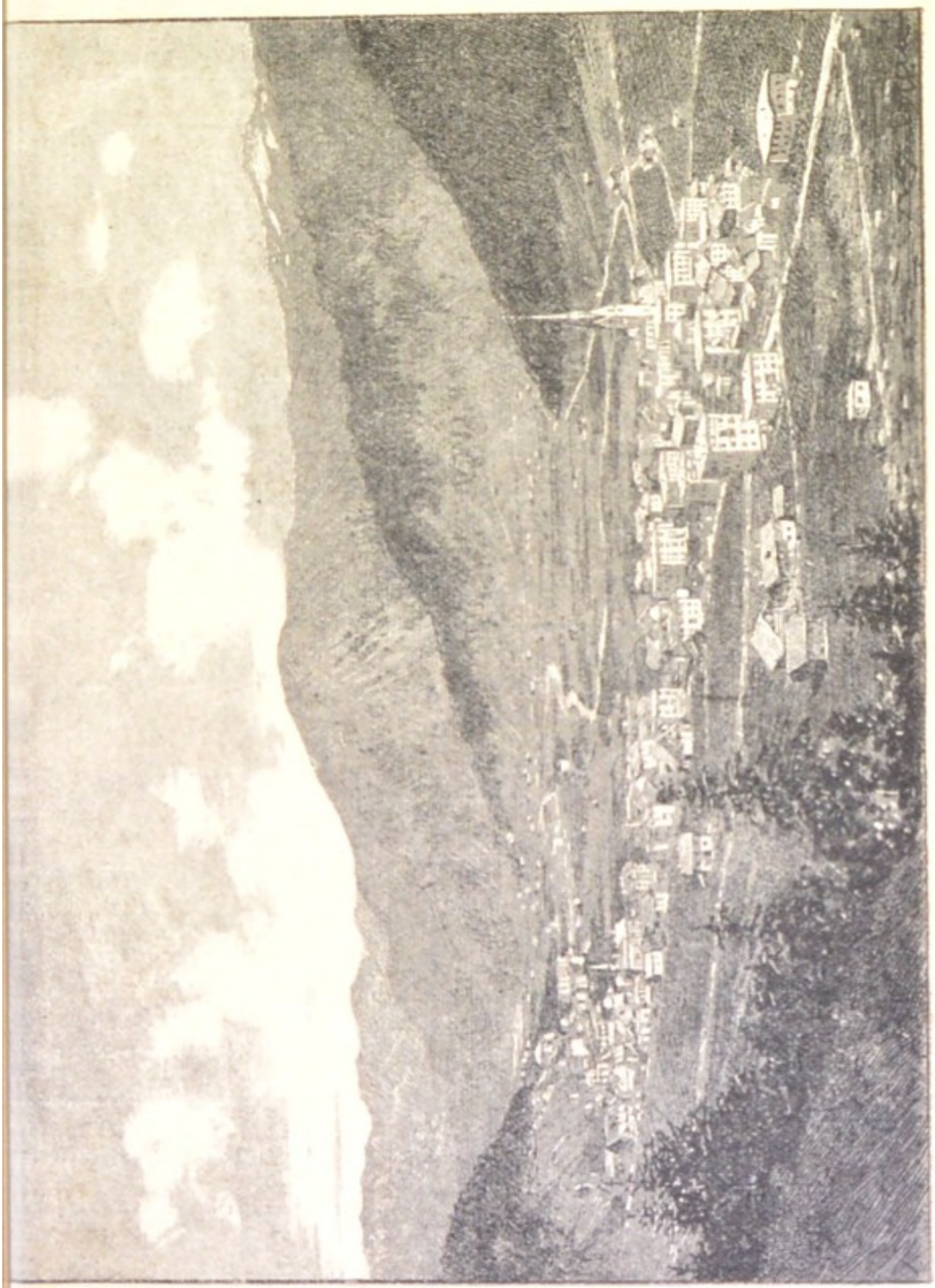
The district called Davos consists of a green valley running from north-east, to south-west, lying embosomed in the Rhaetian Alps. It is about 15 miles long, and 1 mile broad. On both sides east and west rise mountain ranges at a gradient of 30—35, 600—900 m. above the valley which, on the left side particularly, is clothed with beautiful larch and pine woods up to a height of 1,800 to 2000 m. above the sea. The right side of the valley rises more terraced-shape and is covered with fruitful Alpine meadows, pasture land, and sheds right up to where the pastoral life of the shepherd lads begins. Behind this side of the valley, more towards the west, rise the two Schyahörner joined by a saddle; the higher one, which can be ascended even by those with slight chest affections, affords a magnificent prospect. In the background at the south-west, where the valley narrows into the gorge of the "Züge", tower the majestic rocky heights of the Tinzerhorn, Piz Michel and Piz Err. At the northern end of the valley lies the dark blue lake of Davos, 20 minutes long, 10 minutes broad, and 47 m. deep, abounding in

trout; it is frozen over from December to the end of April. From the lake rises a small river, the Landwasser, which pours tempestuously along the whole valley, westward, and after being swollen by numberless mountain streams rushing down from the side valleys and ravines into the wild gorge of the Züge, discharges itself into the Albula. The two chief centres for patients are *Davos-Dörfli* not far from the south end of the lake, and *Davos-Platz*, ½ hr. further south, both on the broadest part of the valley, and separated from each other by a small spur of the north-western mountain chain. Davos-Dörfli is, without question, the finest spot of this high valley; it lies at the junction of the two side valleys, the Fluela and the Dischma, the Fluela Pass leading on one side into the Lower Engadine, and the Scaletta Pass on the other into the Upper Engadine. Davos-Dörfli, owing to the Dischma valley, has the morning sun somewhat earlier than Davos-Platz which is overtopped on the south-east by the Jakobshorn; the latter is however more sheltered, Davos Dörfli being subject to sharp changes of temperature caused by the ingress of cold winds from the two side valleys. The vegetation is of an Alpine character, and with the exception of birches and alders there are no leafy trees in the valley; but barley and rye ripen on the sunny slopes. From November to April both mountain and valley are covered with a layer of snow, more than a foot deep. The whole community, comprising five parishes, consists of 3,700 inhabitants belonging to the Reformed Faith; they are distinguished for their strongly built frames and general good health. Consumption, in particular, is seldom if ever heard of among the natives. The average length of life in Davos is 56. Of internal diseases by far the most prevalent are acute catarrh of the stomach, acute bronchial catarrh and croupous pneumonia (from April to June), the latter generally with good prognosis.

The high valley of Davos has during the last 20 years or so won for itself a reputation as one of the first of Alpine Sanatoria for chest diseases. In 1865, *Drs. Unger* and *Spengler* founded a model *health establishment for consumptive patients*, especially adapted as a *winter cure*. At the present time Davos contains altogether, from Dörfli to Frauenkirch, 20 hotels, with 12 dependances, 873 rooms and 83 places of public resort, 4 baths and 3 milk rooms; in addition there are 46 private houses for letting. *Davos-Platz* is a Swiss meteorological station

Davos has a high Alpine climate, with a moderately warm summer and a cold winter which, however, is very greatly tempered for patients by the extremely hot sun, so that they can sit out of doors in sheltered spots, at mid-day, by the hour without taking cold, when the barometer is below 0.

The pressure of the air is considerably less here, being on an average during 18 years (1867—1884) 630,8; the absolute humidity is much reduced; the mean relative humidity is 78, mean cloud 5,0, rainfall 947; the number of rainy days is 141, of which 73 are accompanied with snow, 3 with hail and 11 with storms. In the yearly average one may reckon 99 clear days, 94 dull and 17 foggy, which fall chiefly in September (3), October (3) and December (2). With regard to wind, the most prevalent is the north-east. Then come the east, south-west and north; it seldom blows from the west, south and north-west. There is an average of 702 calms. The average yearly temperature is 2,6° C.; the average minimum 21,7; average maximum 25,3;

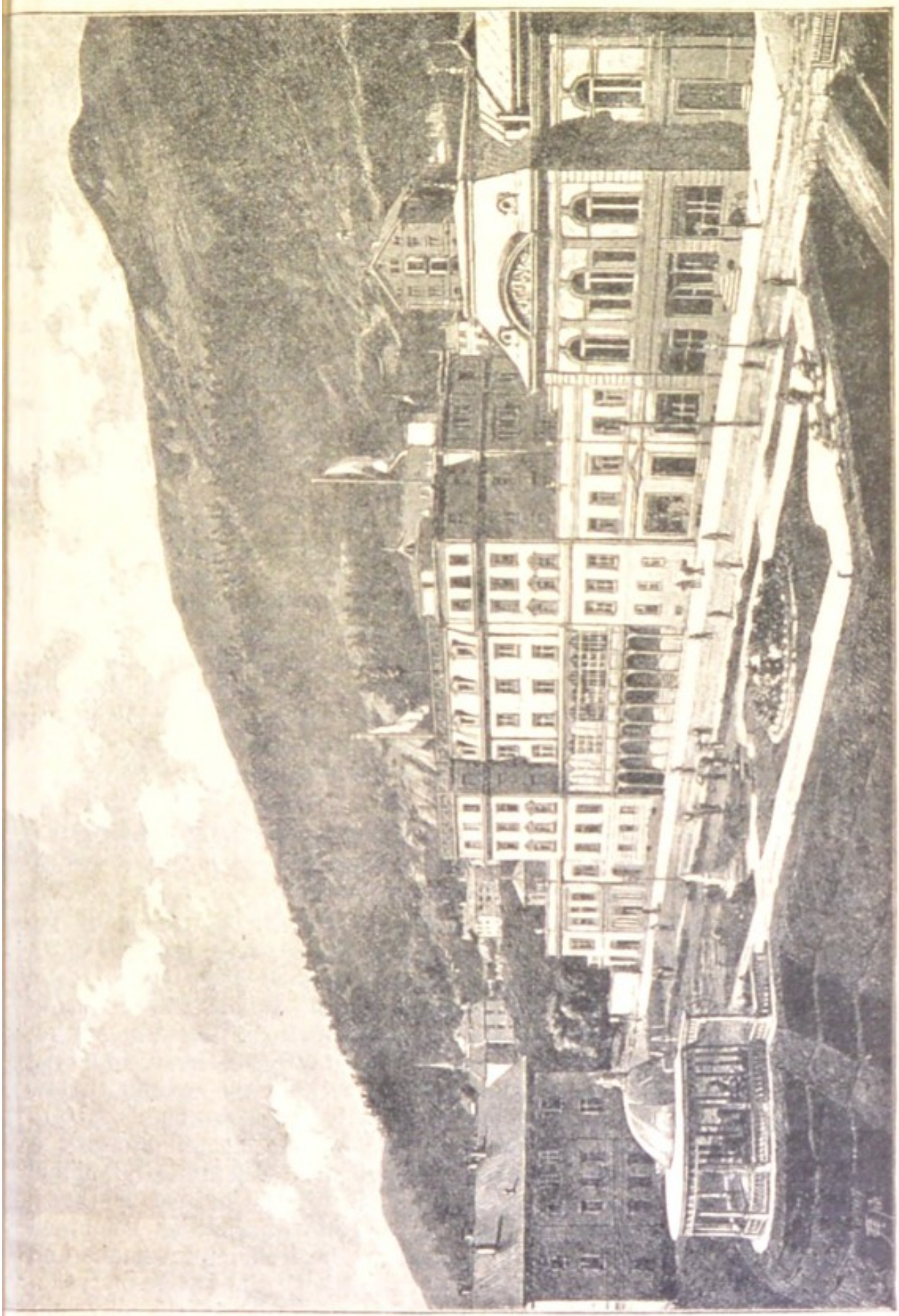


DAVOS.

Height: 1560 m. above the sea. **Meteorological Station Davos-Platz.**

1867/84	Pressure of the air	Temperature of the air						Relative humidity					Cloud			
	Mean 1876—80	7 hr.	1 hr.	9 hr.	Red. Mean	Mean Minim.	Mean Maxim.	7 hr.	1 hr.	9 hr.	Mean	Mean Minim.	7 hr.	1 hr.	9 hr.	Mean
January	631 9	—9 5	—2.5	—8.6	—7.3	—21.7	5.0	86	74	86	82	44	4.3	4.4	3 4	4.0
February	628 9	—7 1	1 3	—5.5	—4.2	—17.4	7.2	87	66	86	80	36	4 8	4.6	4.2	4.5
March	628 0	—5.6	2.5	—4.1	—2.8	—16.8	9.4	87	66	86	80	35	5 0	5 3	4 3	4.9
April	626 8	0 4	6.6	0.6	1.8	— 7 9	13.4	82	61	85	76	34	5.3	6 2	5 6	5.7
May	629.8	5.8	11.4	4.6	6.6	— 2.4	20.2	75	53	82	70	28	4.6	5 5	5 0	5 0
June	633 1	9.0	14.3	7.8	9.7	1.2	22.1	78	57	84	73	32	5 2	6 0	5 6	5.6
July	634 3	11.3	17.3	10 3	12.3	5.7	25.3	80	55	85	74	29	4 6	5.5	5.1	5 1
August	633 6	10.0	16.6	9.7	11.5	3.6	23.6	85	58	88	77	32	4 6	5 4	4.9	5.0
September	633.2	6.1	13 5	6.8	8.3	— 0 3	21.3	88	60	88	79	31	4 6	5 1	4.8	4 8
October	632.1	0 6	8.2	1.6	3.0	— 8.3	16.6	87	62	87	79	29	5 1	5.2	4.8	5.0
November	629.3	—4.6	2.1	—3.7	—2.5	—14.5	10.4	89	71	87	82	38	5.2	5 0	4.4	4.9
December	628.9	—7 6	—2.2	—7.0	—5.6	—19 8	5.1	83	72	82	79	44	5 4	5.4	4.7	5.2
Year	630.8	0.7	7.4	1.1	2.6	—21.7	25.3	84	63	86	78	28	4.9	5.3	4 7	5.0

1867/84	Rainfall	Number of Days							Distribution of Wind								
	Total	Rain-fall	Snow	Hail	Storm	Fog	Clear	Dull	N	NE	E	SE	S	SW	W	NW	Calm
January	49	9	8	0	0	1	12	7	2	11	3	1	1	4	1	0	70
February	46	8	8	0	0	1	9	7	2	12	5	2	1	4	1	1	57
March	60	10	10	0	0	1	9	8	1	16	10	2	1	5	1	3	57
April	67	13	10	0	0	1	5	10	1	16	11	2	1	7	0	1	52
May	59	13	5	0	1	1	8	7	2	20	9	2	0	7	2	0	51
June	109	15	3	1	2	1	5	9	3	17	11	1	1	7	1	1	49
July	126	15	1	1	4	1	7	7	2	18	10	2	1	6	1	0	52
August	121	14	0	1	3	1	8	7	2	19	10	2	1	5	1	1	51
September	90	11	2	0	1	3	9	7	2	18	6	1	0	6	1	1	56
October	70	11	6	0	0	3	9	8	2	12	5	0	1	6	1	0	65
November	74	10	9	0	0	1	10	8	1	10	3	1	0	5	1	0	69
December	76	12	11	0	0	2	8	9	1	8	4	1	1	4	1	0	73
Year	947	141	73	3	11	17	99	94	21	177	87	17	9	66	12	8	702



The Kurhaus at Davos.

the mean temperature of the *winter season* (from October, and including April) 2,1°; the maximum of cold 29,5°. The mean temperature of the *summer season* (May to, and including September) 8,8° C., maximum of warmth 29° C. The changes of temperature are seldom sudden, and not very great as a rule. The maxima of the sun's rays attain on an average in November, + 35,06; December 23,28; January 25,15; February 40,15, with the black ball in vacuum in November + 46,3; December 46,1; January 47,3; February 52,2° C.; while the temperature in the shade is, on an average, in November 0,81; in December 7,85; in January 9,65; in February 3,91° C.

The air, especially in winter when the ground is completely covered with a thick carpet of snow, is free from dust and effluvium. Sometimes, however, in the morning, especially on calm days, the smoke from the numerous chimneys, from the gas works and other factories clouds the lower strata of the air, and injuriously affects the atmosphere. *Prof. Weber* declares, with justice that these sanatoriums should be left in perce to develope into cure cities (Kurstädte). *Reimer* likens the Davos of to-day to a manufacturing town rather than to a country resort! — In the past winter of 1886—87 Davos had 1300 patients, in consequence of which not only the hotels and pensions but also the private lodgings were full to overflowing.

The sanitary arrangements of the place as a whole and of the hotels in particular are such as to satisfy all the requirements of the time. The only thing that is required is a more thorough ventilation, especially of the dining and general sitting rooms. In order to insure the greatest possible purity of air in the houses and dryness of soil, an excellent water supply from wo springs has been arranged, sluice closets have been made, and the sewage is disposed of by a system of drainage laid downthree years ago according to scientific principles. The river, running through the whole valley, the Landwasser, has lately been directed into conduits for drainage purposes.

Throughout Davos electric lighting has lately been introduced by means of 15 arc lamps on supports 30 m. high, which essentially contribute to the purity of the air.

Means of cure. In addition to the fullest enjoyment of the pure, dry, generally calm air by a lengthened stay out of doors, sitting in the sun on sheltered terraces, behind glass shelters and screens, lung exercises are introduced, in the simple form of regulated, methodical climbs up the numerous more or less steep walks; these are carried on by patients in tolerably good health all the winter. Then there is skating and sledging in the excellent snow and ice, the daily use of cold water with a professional rubber, cold rubbings or cold douches applied by the doctor himself; a strictly regulated milk, koumis or cheese diet; scientifically applied massage, galvanising and Faradisation in all the newest methods. Special attention should be given to a rational diet, as combined with the air cure it can bring about the desired improvement and strengthening of the constitution together with the necessary reactionary power. Certainly table d'hôte is the order of the day, but every prescription of the doctor respecting the diet is carried out

with the greatest readiness and care. No place of cure can be held responsible for the effects of excessive indulgence in tobacco, though a private establishment may.

Davos is recommended for:

1. Hereditary tendency to tuberculosis (Prophylaxis);
2. Simple chronic catarrh of the apices;
3. Peri-bronchial and chronic-pneumonic affections;
4. Chronic bronchial catarrh;
5. Pleuritic perforations and encrustings;
6. Nervous asthma;
7. Neurasthenia cerebralis, and all forms of over strain through occupation, manner of life, etc.;
8. Convalescence after severe illnesses, especially inflammation of the lungs and chest;
9. Scrofula in torpid forms;
10. Lupus, inveterate malaria.

It is **not** recommended for: 1. constitutions very much run down; 2. in cases when the diseases named under 3 and 4 have taken hold of the greater part of both lungs; 3. tuberculosis of the larynx; 4. albumimorie, following chronic diffuse nephritis; 5. diabetes, epilepsy, leucamia and pernicious anaemia.

The number of winter patients in Davos of late years has been from 900—1200. Unfortunately, no statistics have been issued of the 20 years experience of Davos as a health resort, which would have cleared up many disputed points and have made a more exact indication possible.

Davos has now become a soil *(terrain) cure*, in *Oertel's* sense of the word, and is adapted for weakness of the heart owing to anaemia, chlorosis, wasting diseases, fatty heart and obesity; also for disturbances of the circulation owing to compensation being weakened by faulty action, to pressure of the small circulatory system with deviation of the pillars of the arteries. Davos is not indicated for advanced stages of emphysema of the lungs, ore for failur of the heart's action of old standing when quite uncompensated.

Physicians: *Dr. Beeli, Boner, Buol, ten cate Hædemaker, William R. Huggard, Peters, Rüedi, Spengler, Unger, Walz.*

Hotels and Pensions in Davos-Platz:

Health Establishment, W. J. Holsboer, a model house arranged on sanitary principles, consisting of one central building (*Kurhaus* with conversation room) connected above and below ground with *Hotel Garni, Villa Germania, Villa Helvetia, Villa Britannia* and *Villa Wohlgelegen.* Large terraces, verandahs, promenades, galleries, balconies and beautiful winter garden. Heating by steam and tiled stoves in the corridors and vestibules, etc. Lift.

Pension Eisenlohr; Hotel Davoserhof; Hotel Rhaetia; Hotel Post; Hotel Schweizerhof; Hotel Strela; Hotel Victoria; Hote Belvedere; Pension Buol; Hotel

d'Angleterre; Pension Waldhaus; Pension Bergadler; Pension Rathhaus; Pension Nosco; Pension Garré.

Hotels and Pensions in Davos-Dörfli:

Kurhaus Davos-Dörfli (Stifler) an excellently conducted establishment; *Hotel Flüela; Pension Gredig; Villa Wieseli; Gasthaus Seehorn* 1/4 hr. from Davos-Dörfli.

Physician in Davos-Dörfli: *Dr. Volland.*

Walks and excursions: 20 min. along a carriage road to the Waldhaus and the adjoining Mattenwald with numerous footpaths and seats (pretty view over Platz and Dörfli). 1/2 hr. along the highway or by footpath to Davos-Dörfli where there is a fine view of the Scaletta glacier, Piz Vadret, and Schwarzhorn. 3/4 hr. to Frauenkirch (on the south are the Tinzerhorn and Piz Michel); 20 min. to the Stein with a pleasant outlook on to the valley (in the adjoining wood there are seats); 25 min. to the Gemijäger and Albertstobel. In 25 min. by the lower wood-path to the little douche house and the little pavilion on the height. In 1 hr. to Schatzalp (1878 m.) past the Hotel Strela, up towards the douche houses part of the way, and through the wood as far as the pavilion with a most beautiful view over the hill. In 1 1/2 hrs. to *Spinabad;* in 1 1/4 hrs. to St. Wolfgang or Davos-Culm down the valley, along the lake. In 1 1/4 hr. to the wood behind the lake with plenty of seats, one of the finest points for a view (Ausflugspunkte). In 1 3/4 hrs. to the Schwarzsee, in 2 hrs. to Alpenrose. In 1 3/4 hrs. to Dischmathal and the Bären Falls; in 4 1/2 hrs. to the Flüelahöhe (2405 m.); in 1 1/2 hrs. to the Strela-Alp; 1 1/4 hrs. to the Grünealp; 1 1/4 hrs. to the Innere Tschaalp and 1 1/2 hrs. to the Aeussere Tschaalp with a commanding view of Sertigthal and its mountains. In 2 1/2 hrs. to Sertig-Dörfli; 2 1/2 hrs. to Klosters; 2 3/4 hrs. to the Züge as far as Bärentritt; 2 1/4 hrs. to the top of the Strela Pass (2377 m.) with a fine view of Schanfigg valley.

Klosters, 1212 m. above the sea, a summer air cure, in the highest part of Prättigau, at the entrance to the long, level, high valley of Monbiel, 1 1/2—2 km. broad and 10 km. long, bounded on two sides by the Rhætian and Hochwang ranges, and on the east by the Silvretta group. The little river Landquart flows all through the district which possesses the finest pine woods in the whole of Canton Grisons. These woods stretch right down the slopes into the valley and to the hotels. An abundant supply of excellent spring water is conducted to the place through granite conduits and distributed to the hotels by iron pipes. Generally speaking the hotels are supplied with sluice closets and the sewage is carried off regularly. Baths, douches, and all forms of hydrotherapy are in use, as well as electricity and gymnastics. Table d'hôte is the rule, only in exceptional cases is there a special dietary.

The Climate of Klosters is mild on the whole, but stimulating and tone-giving. The mean summer temperature is 13,5° C., somewhat higher than the lofty situation would lead one to expect. The daily temperature varies to about 6° C., the average relative humidity of the air is 73,57. The prevailing winds are the north, north-west, south and south-east; on an average there are 50° of calm (still) days. From June to Sept. there are 31,2 quite clear days, 38,8 dull, 52,0 with rain; the mean cloudiness for the year is 5,2; total of rainfall 1203,2.

Klosters is recommended for: incipient phthisis; moist catarrh of the throat, larynx and bronchial organs; remains of pleurisy; asthma; real and nervous dyspepsia,

anaemia, slight forms of neurasthenia. It is adapted as a midway and after cure from Ems and Karlsbad.

It is not recommended for: failure of the heart; pronounced nervous exhaustion; dry catarrh of the throat and tuberculosis of the larynx.

Physician: *Dr. Siebenmann.*

Hotels and Pensions:

Kurhaus Klosters and Hotel-Pension Silvretta (Mattli); *Hotel-Pension Brosi* (Stiffler) with 2 dépendances; *Hotels Vereina* and *Florin*; *Kurhaus Dörfli*; *Swiss House* (for families who desire to board themselves).

Walks. In the immediate neighbourhood is a fine pine wood with numerous paths and seats. A very good road, quite free from dust, to Davos, Mombiel, Serneus, Fideris and to the heights of Novai, Sardaska, Pardenn, Spärra.

Serneus, 985 m. above the sea, an air cure, with a sulphur spring. Season middle of June to middle of Sept.

The Bad lies 4 km. north-west of Klosters, beside the diligence station *Mezzaselva* (Hotel-Pension Mezza-selva) at the foot of the mighty Casannastock in pleasant, wooded surroundings, with a mild climate, and sheltered from wind. Mean temperature during the season 14 ° C. Milk and whey cure

The sulphur spring has a temperature of 8,7° C.; specific gravity 1,000,571; it contains in 10,000 parts (the carbonate of salt reckoned as free bi-carbonate 7,1682 fixed solids: bicarbonate of lime 3,5653, bicarbonate of magnesia 1,58881, bi-carbonate of soda 0,9174, sulphate of soda 0,7675, sulphate of potash 0,1270, Chloride of sodium 0,0173, bi-carbonate of ferrous oxide 0,0044 and a small quantity of other salts. Sulphuretted hydrogen 8,86 cm.³ True free carbonic acid 625,9 cm.³

The spring is used for drinking and bathing and for inhalation. Hydrotherapy is brought into use for certain cases. Serneus is adapted for chronic irritation of the mucous membrane of the larynx and lungs in sensitive, nervous persons; for dyscrasia; gout, scrofula, bone and joint diseases, chronic metallic poisoning; plethora abdominalis, haemorrhoids and liver complaint; and for chronic eruptions.

Physician: *Dr. Siebenmann.* — *Kurhaus* (Mettler) well managed.

Küblis, 822 m. above the sea, 1½ hr. east of Mezzaselva on the Prättigau post road, with an ordinary bathing establishment for warm and cold baths. *Hotel Krone; Steinbock.* Opposite the village on the left bank of the Landquart, 900 m. above the sea, is a strong steel spring, the so-called "Kuonis water", much used by the natives.

St. Antönien, 1420 m. above the sea, 2 hrs. from Küblis in a narrow lateral valley stretching northwards, with two ferruginous springs. *Gasthaus St. Antönien-Platz* (Lötscher). ½ hr. higher up is *Hotel Salzfluh*, 1788 m. above the sea, on the Partuneralp; an *air cure Hotel*. East of Küblis close to Fluersch *(Flersch)* about 1200 m. above the sea is a full, strong sulphur spring. 1 hr. north-west of Küblis is the diligence station *Fiderisau* whence in ½ hr one can get to the *village of Fideris*, 902 m. above the sea, milk and whey cure, Hotels: *Badwirthschaft; Stern; Pension Quadrera).* On the romantic road to *Fiderisbad* lies the *Pension Aquasana* in a pretty, sheltered situation.

Fideris-Bad, 1056 m. above the sea, with alkaline-muriate acidulous iron springs. Season middle of June to middle of Sept.

Route: From Landquart station diligence runs three times daily to Fiderisau and thence by carriage or omnibus to Fiderisbad. If ordered before hand a private carriage can be had from Landquart to the Bad.

Fideris-Bad lie in a narrow gorge turning off in a southerly direction from the main valley of Prättigau. Here the Ratschitschabach hollows out its rough, wild bed, for the most part broad and choked with sand. The right bank is firm, very steep, often quite perpendicular, but open and covered with vegetation; the left bank slopes gently up from the stream, over rubble, to wood, meadow and hill. The bathing establishment stands at the junction of the Ratschitscha and Ariesch rivers on the right or eastern bank of the latter. Behind the Bad rise the heights, covered at the bottom with grass and higher up with pines, which shut the gorge off from the south.

Fideris-Bad belongs to the Lower Alpine region, and is one of the most sheltered places in the Alps. Lofty walls of rock closing one in upon another completely shut off the cold wind from the north, and the broad sides of the Batschitsch and the Mattlishorn are a protection on the west and east. The hot Föhn, enervating alike to mind and body, blows high above the gorge, leaving the Bad and the dwellers there untouched. As the basin of the valley, as it rises, broadens like a funnel does, the sun's rays find free access all day long. The air is pure, free from dust, and, owing to the surrounding pine woods of miles in extent, it is delicious and full of ozone.

The mean temperature during the season is 14° C.; during June 13,63; July 14,58; August 14,92; September 13,47; highest daily variations 5—8° C. The number of rainy days is very small, the average for the season being 21, of which 13 occur in June and July; the number of fine days is exceptionally large.

The temperature of the spring is 7,7° C., and the specific gravity 1,005. There are 19,8230 fixed solids in 10,000 parts (the carbonate of salt being reckoned as anhydrous bi-carbonate).

Chloride of sodium	0,0487
Sulphate of potash	0,3663
„ soda	0,4063
Nitrate of soda	0,0148
Bi-carbonate of soda	7,4227
„ lime	9,7308
„ magnesia	1,5785
„ ferrous oxide	0,1643
„ oxide of manganese	0,0011
Silica	0,0798
Alumina	0,0097
Traces of Phosphoric Acid, Ammonia, Nitric Acid.	
	19,8230
True free carbonic acid	7532,6 Cm³
So-called free carbonic acid	10511,7 „

The spring is used for the drinking and bathing cure. Milk cure also. Table d'hôte as a rule; for certain cases separate dietary. Fideris is one of the oldest and most frequented spas in the Grisons.

Fideris is recommended for constitutional weakness, especially during puberty, for poverty of blood and chlorosis; during convalescence; for chronic catarrh of the stomach

and intestines; dyspepsia; ulcer of the stomach with anaemia following; neurosis, mental strain, hysteria, chorea; chronic catarrh of the throat, larynx and bronchial organs; remains of pleurisy; incipient pthisis; chronic renal affections, albuminuria; diseases of the female generative organs.

Physician: *Dr. Grimm.* (The medical management changes very frequently).

The *Kurhaus* is a large building consisting of several parts, and affording accommodation for 250 persons with the salons and sitting rooms. Mineral baths with heating by steam.

Walks. To the large, fragrant wood, close by, with numerous footpaths; to the baths with plenty of seats by the way; right through the wood to the Friedenshain or Maiensässli. Excursions to the village of Fideris; to the ruined castle of Strahlegg on the Ratschitschtobel with a magnificent view into the Hintere Prättigau The Ratschitsch is easily ascended (1547 m.) commands a very fine mountain panorama.

Schiers. 688 m. above the sea, a pleasant summer resort, 1½ hrs. north-west of Fiderisau, at the southern base of the Marienberg, well sheltered from wind and surrounded with beautiful leafy woods *Hotel-Pension Post.* At *Busserein* and up at Schraubachthal stretching northwards is a strong acidulous iron spring and a sulphur spring; on the left bank of the Landquart, opposite Schiers, is an acidulous iron spring.

Seewis. 910 m. above the sea, a climatic air, milk and whey cure, in lower Prättigau. Season, beginning of June to end of Sept.

Route: From Landquart station by the Hotel carriage (ordered beforehand, runs daily during the season at 2 p. m.) to Seewis (2 hrs.) or by diligence to Paradisla and from there on foot in ¾ hr. (there is a railway talked of between Landquart and Davos.).

The handsome village lies on the southern slope of the Scesaplana range, the so-called Rhætian range, and numbers about 800 German-speaking inhabitants. It is protected from cold, raw winds on the north and east and is only exposed on the south and west; the general aspect of the place is picturesque and pleasant. The surrounding orchards, green meadows and hills, luxuriant vegetation and abundance of foliage give evidence of the exceptionally mild climate. The average temperature during the season is 16,7 °C.

Mean Temperature.

	7 a. m.	1 p. m.	8 p. m.	Daily mean.
June	11,9	18,2	12,1	14,1
July	18,3	25,1	19,3	20,9
Aug.	14,0	19,8	15,0	16,3
Sept.	13,2	20,3	15,0	15,8

The variations between morning, mid-day and evening are generally very slight, seldom beyond 3 °C. Even on rainy days there are no strong gales, though on the heights blow the south and south west winds, especially at the west of Seewis towards Fadara: but otherwise an almost continuous calm is the general rule. Still the air is not sultry on the hottest day, the large woods in the neighbourhood and the numerous mountain streams affording a refreshing coolness

Besides the air cure there are also brought into use the excellent cow's and goat's milk, goat's whey, and the various mineral waters of the Grisons (Fideris, St. Moritz, Tarasp, Solis, Passug etc.), baths and douches, and the Waldenburg apparatus for the inhalation of rarefied and compressed air.

Seewis is excellently adapted for recruiting mind and body after over-work, for convalescents from severe illnesses, for general weakness and sensitiveness, especially in delicate children and women; for affections of the respiratory organs; bronchial catarrh, emphysema, asthma, the first stage of tuberculosis; the treatment of all these complaints has, according to *Dr. Goll*, been attended with the best results. *Seewis* is, therefor, a very good mid-way place before proceeding to high mountain stations.

Hotels and Pensions:

Hotel-Pension Scesaplana (Andreas Walser) arranged on thoroughly hygienic principles; *Hotel-Pension Kurhaus* (Hitz) also well managed; *Pension Peter Walser.*

Physician: *Dr. Schiffmann* (formerly of Schimberg).

Walks and excursions: In 5 min. to the Tanzboden with a fine open view, thence to the Ahornen, the so-called park. In 1/4 hr. to the Markusplatz, a group of pine trees with seats and tables beneath. Below the Kurhaus to the Pottoli-Hügel, with seats. In 20 min. to Gällaplana. In 1/2 hr. through woods and green fields to Marnein, with its châlets, a pretty view of the Ganeibachtobel, to the Scesaplana, Tschingel, etc.) In 3/4 hr. to Maiensäss Matan, with shady resting places. In 1 hr. to Fadära and the Fadärastein with a fine view in 1 hr. to the rocky summit of Mains. In 3 hrs. to the Fromaschan with an open view In 4 hrs. to the Vilan or Augstenberg, the Rigi of the Prättigau 2378 m)

Valzeina, 1200 m. above the sea, a retired, country health resort, 1 1/2 hr south of *Paradisla*, in Schrankenbachthal, on the heights opposite Seewis.

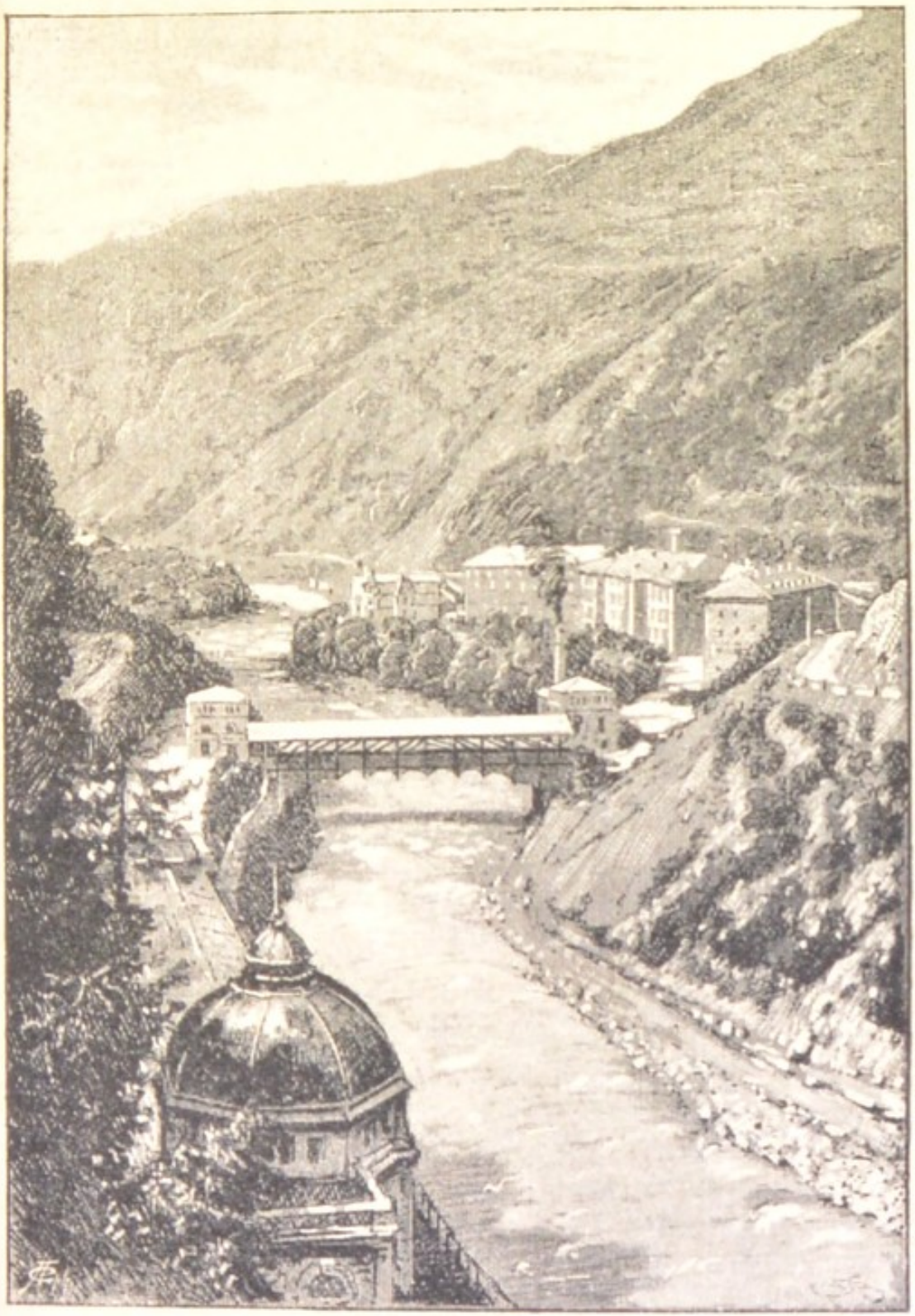
Tarasp-Schuls,

at an average height of 1200 m. above the sea, a climatic air cure, with numerous alkaline and iron springs containing glauber salt, all showing a great quantity of carbonic acid. Season from June 1 to Sept. 15.

Route: From Landeck station (Arlberg railway) in the Tyrol by diligence in 8 hrs. to Tarasp, without going over any passes. From the Swiss station Landquart *(Hotel Landquart; Hotel Davoser Hof)* on the Rorschach-Zürich-Coire line by diligence in 13 hrs. via Davos and the Flüela Pass to the *Lower Engadine.* From Meran by diligence through Vintschgau via Nauders-Martinsbruck to Tarasp. From Süden by rail as far as Colico-Chiavenna and thence by diligence through Bregaglia and the Engadine (a whole day).

The health resort Tarasp-Schuls is in the Lower Engadine, 3 hrs. from the Tyrolese frontier, in a wooded, Alpine district, watered by the Inn. It consists of the places, all near together, *Tarasp-Schuls, Schuls and Vulpera.*

The climate of the eastern Rhætian valleys and of the neighbouring Tyrol is characterised, as has been already stated in the Introduction, by great dryness of the air and a higher temperature



The Baths of Tarasp.

in relation to the height above the sea than the usual scale of warmth measured vertically would seem to warrant — conditions that prevail especially in the *Lower Engadine* which is protected on the north from cold, raw winds by lofty, precipitous mountains, and is exposed on the east to the dry, warm, south-west breezes from the Tyrol; and further, the glaciers are so hidden that the cold currents passing over them do not penetrate the main valley, and the nigth temperature is therefore kept from great falling.

Mean Temperature after 22 Years observations bi *Dr. Killias:*

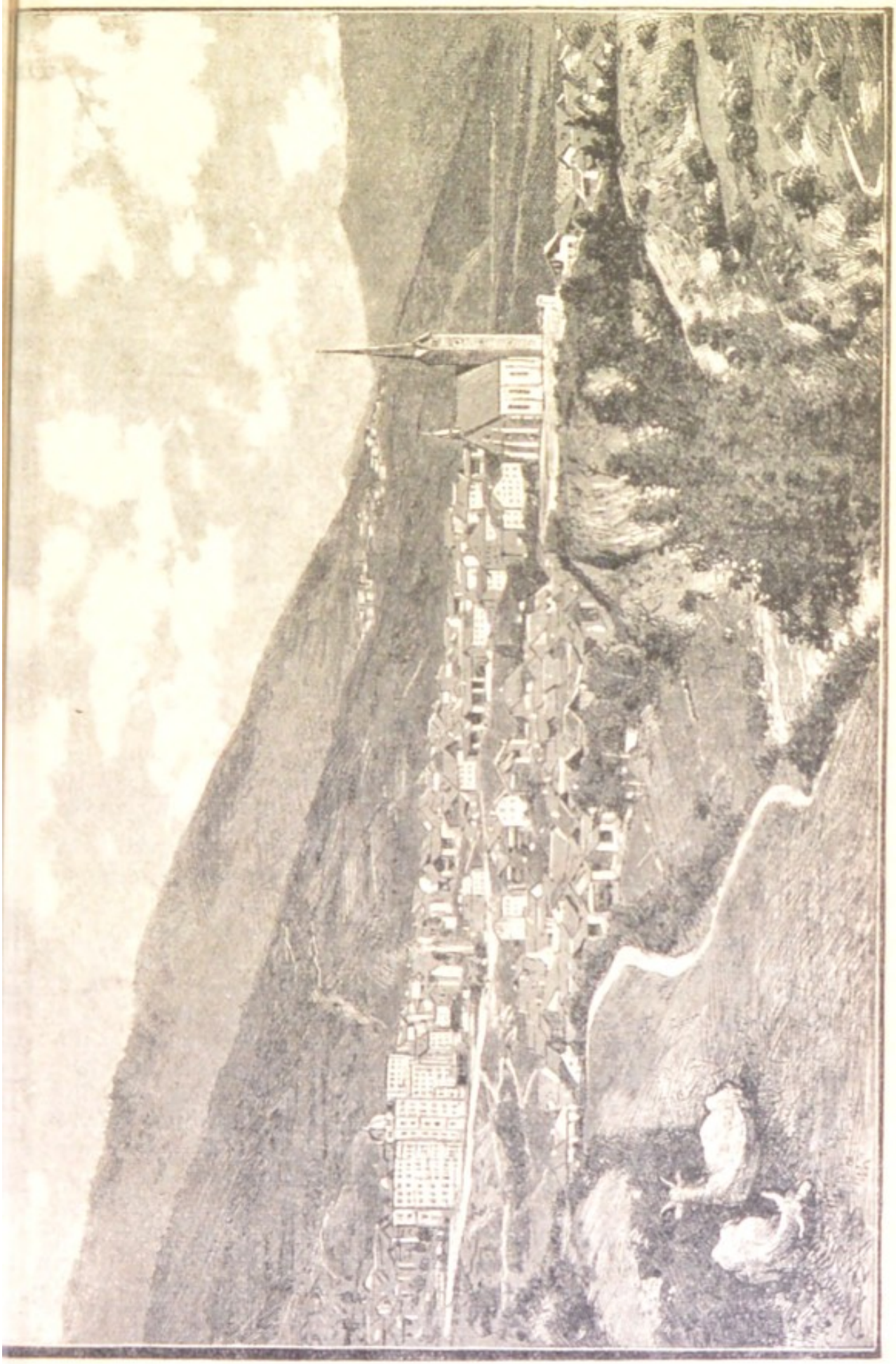
	Mean.	Max.	Minim.
June (15—30)	13,35	27,1	3,2
July	15,56	30,6	3,0
Aug.	14,47	27,8	1,0
Sept. (1—15).	12,41	26,0	1,0

The mean temperature during the season is 13,97° C., the maximum is 30,6, the minimum 1,0, the mean daily variation 8—9° C ; the mean relative humidity 65—75 %. The prevailing quarters of the wind are: west, south, and south-west 52,1 %, east and south-east 43,5 % north, north-east and north-west 4,2 %. Almost without exception the wind sinks to a calm in the evening The mean amount of cloud is 5,4; there are, on an average, during the season, 39 perfectly clear days, 27 partially clear ones, 34 more or less over cast, only 6 or 8 of which, however, are actually rainy days. A fall of snow, which when it does come is quickly over, is of very rare occurrence. There is, on an average, during the season, a rainfall of 236,8 Mm. while at Bevers, for example, it is about 330 Mm. Fogs enveloping the valley are quite unknown. The mean height of the barometer is 660 Mm., and it is subject to variations.

All the meteorological conditions essential to an Alpine health resort — diminished pressure of the air, moderate temperature, sheltered and calm situation, dry, clear air, free from dust, and increased intensity of the sun's light and heat — are present in a high degree at Tarasp-Schuls. For which season this health resort, which has long been famous forits excellent mineral springs, is coming more and more into favour and esteem.

The Lower Engadine is known to be very healthy, and many of its inhabitants live to a great age. Consumption is rare, and generally brought in from without. As in mountain regions generally, rheumatic affections are not infrequently induced by external circumstances, just as, on the other hand, cachetic conditions are usually the result of a gross neglect of hygiene. Contagious diseases are rare and of sporadic origin.

The **Mineral Springs.** The district of Tarasp and Schuls owes its wealth of mineral springs to a peculiar argellite formation known by the geologists as "Bunter Schist". In an area of 5 km. (from the Bonaface to the Sotsass spring) there rise, on either bank of the Inn, about 20 acidulous springs, of which 4 are alkaline and the rest iron. There are also at Halden ob Schuls the so-called Moffetten, or discharges of sulphuretted hydrogen and carbonic acid, while in the *Val Sinestra* are several acidulous springs very remarkable for the arsenic contained in them.



Schuls near Tarasp.

A. The Alkaline Glauber Salt Acidulous Springs.

The most important mineral springs of Tarasp-Schuls which have been brought into use are: the 4 alkaline Glauber salt acidulous springs, namely the *Lucius* and *Emerita springs* in the pump-room on the right bank of the Inn, used for drinking and bathing, and the *Ursus-* and *Neue Bade-Quelle*, on the left bank, only used for bathing.

Dr. Husemann's chemical analysis gave in 10,000 parts of water (the carbonate of salt being reckoned as anhydrous bi-carbonate):

	Lucius Spring	Ursus Spring
Sulphate of potash	3,7969	2,7717
„ of soda	21,0044	16,7109
Borate of soda	1,7200	2,4167
Nitrate of soda	0,0084	0,0083
Chloride of lithia	0,0299	0,0624
„ of sodium	36,7395	28,8734
Bromide of sodium	0,2188	0,1955
Iodide of sodium	0,0085	0,0032
Bi-carbonate of soda	48,7319	33,8340
„ „ of ammonia	0,6606	0,5384
„ „ of lime	24,4790	24,1965
„ „ of strontia	0,0069	0,0039
„ „ of magnesia	9,7973	8,8114
„ „ of ferric oxide	0,2146	0,1749
„ „ of oxide of manganese	0,0029	0,0026
Silicic acid	0,0900	0,1026
Phosphate	0,0037	0,0036
Alumina	0,0022	0,0025
Baryum, rubidium, caesium, thallium	Traces of	Traces of
Total of fixed solids	147,5105	118,7116
Free and semi-free carbonic acid	23806,1 Cm^3	21111,8 Cm^3
True free carbonic acid	10600,2 „	12832,9 „
Specific gravity	1,012347	1,010277
Temperature of the springs	5,5°—6,7° C	5,5°—6,7° C.

The *Ursus* and the *Neue Bade springs* differ only from the two first by containing a smaller quantity of fixed solids and having a somewhat higher temperature (9,5° C.). Compared with the most famous spas in Europe (Carlsbad, Marienbad, Franzensbad, Elster, Kissingen, Vichy) the *Lucius spring* surpasses them all in strength and in the excellence of its constituent parts. *Braun*, the famous balneologist, says: "The springs of Tarasp have, in every respect, a higher potency than those of Karlsbad and Marienbad; the quantity they contain of sulphate of soda is about the same as that of Karlsbad; but they have more than three time, as much carbonate of soda and chloride of sodium, and nearly three times as much carbonic acid; the chloride of sodium is only a fourth less than at Kissingen, thus these springs unite within themselves the healing properties of the springs of Karlsbad, Marienbad, and Kissingen. There is a little more soda in that of Vichy."

The water of the *Lucius spring* is much used for export, and *spring-salts* and *pastilles* are now being made from it.

According to *Dr. Killias*, who has had long and wide experience as a spa doctor, the 4 soda acidulous springs are therapeutically successful in:

1. Obesity, accumulation of fat and incipient fatty degeneration of certain organs.
2. Over development and swelling of the glandular organs, goitre, remains of exudations and effusions.
3. Chronic catarrh of the stomach and intestines, dyspepsia, habitual constipation, tape-worm.
4. Plethora abdominalis, hæmorrhoids.
5. Chronic liver complaint, jaundice, gall-stones, swelling of the spleen.
6. Affections of the kidneys and bladder, stone and gravel.
7. Swelling of the ovary, chronic congestion of the uterus.
8. Formation of uric acid, gout.
9. Diabetes.

The springs are contra-indicated in:

1. Decided cachexia, especially when accompanied with fever, cancer, tuberculosis, dropsy etc.
2. Considerable loss of strength and advancing age.
3. Great weakness of the valves of the heart and arterial sclerosis, tendency to apoplexy and blood forming.
4. Tendency to neuralgia, rheumatism; epilepsy, over excitement.
5. Pregnancy.

B. The Ferric Acidulous Springs.

Among the numerous chalybeate acidulous springs of Tarasp-Schuls 3 only are used medicinally, namely, *Wy-, Bonifacius and Carola;* the 4 *springs of Sotsass* are drunk as a favourite "table water".

The chalybeate springs are used for drinking and bathing, the Bonifacius for drinking, the Wy spring for drinking and bathing, and the Carola only for bathing. They are indicated in:

1. Poverty of blood, weakness of the muscular and nervous system.
2. Chlorosis, menstrual irregularities, whites.
3. Chronic irritation of the mucous membrane of the larynx and bronchial organs, especially in anæmic persons, while for those of full habit the soda springs are more useful.
4. Chronic discharge of oval albumen through the urine (Bonifacius Spring).

There are several kinds of disease in which a combination of the alkaline and iron springs proves very advantageous. The hydro-therapeutic processes of douching and massage, and regular out-door exercise are used as additional means of cure. The diet is, in general, suited for the purposes of a cure

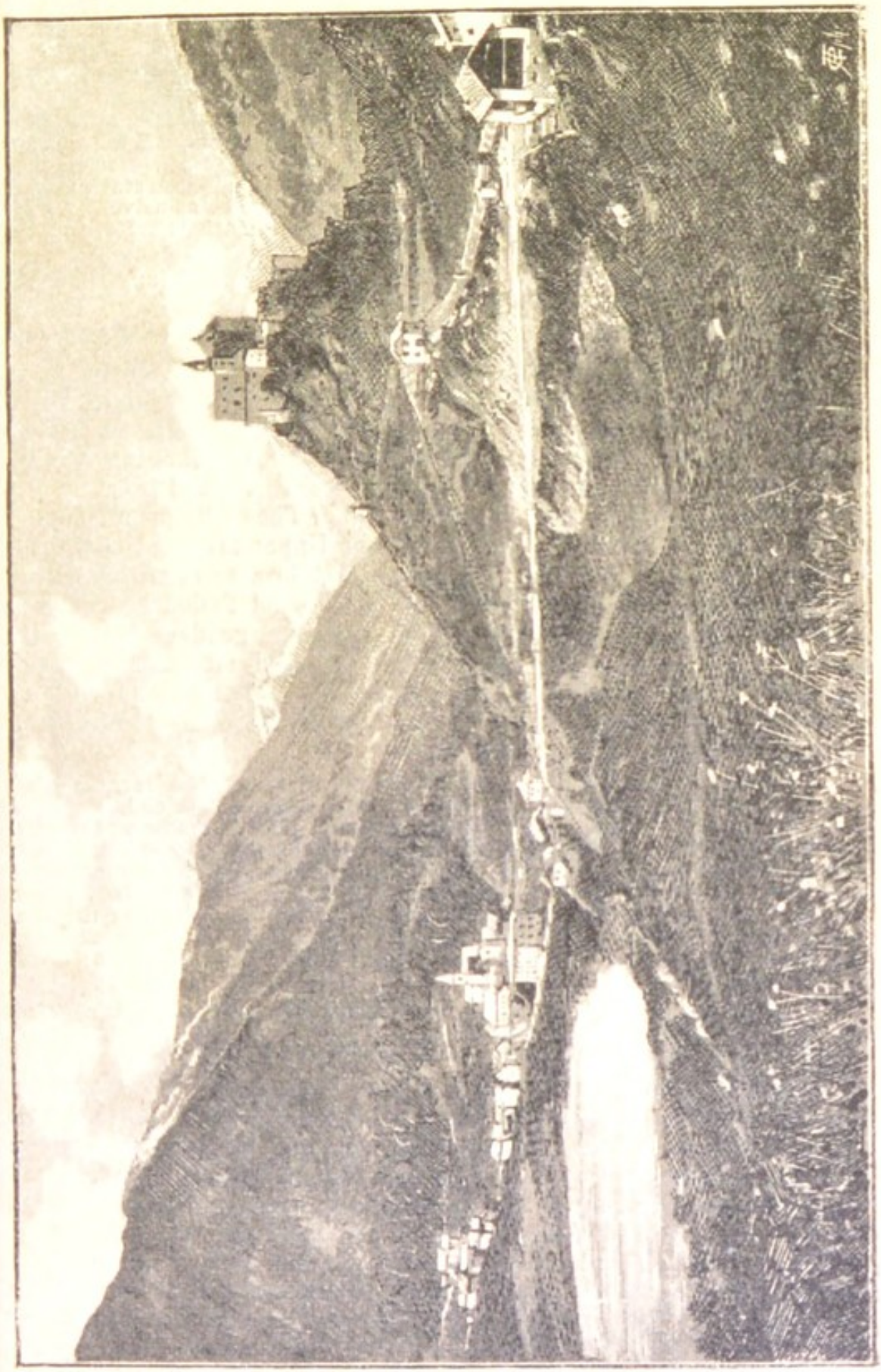
("kurgemässe"), but table d'hôte is the rule, and the doctor only orders a dietary à la carte in certain kinds of stomach complaints, diabetes, obesity, etc.; a strictly individual system has not yet been attempted, not being considered absolutely necessary, or, indeed, practicable. Milk and whey. For clothing, light woollen materials are recommended, and it is advisable to be provided with good over-coats and warm under-garments against cool weather.

A chemical analysis of these chalybeate springs gave in 10,000 parts (the carbonic acid salt being reckoned as anhydrous bi-carbonate):

	Bonifacius (v. Planta).	Carola (Husemann).	Wy (v. Planta).	Sotsass (v. Planta).
Chloride of sodium	0,570	0,2070	0,021	0,009
Sulphate of potash	0,955	0,1310	0,109	0,114
„ of soda	2,447	0,5300	0,113	0,199
„ of magnesia	—	0,8560	—	—
Bi-carbonate of lime	27,393	7,3960	17,750	14,944
„ „ of magnesia	5,129	1,0910	1,286	1,190
„ „ of soda	14,610	—	0,052	—
„ „ of ferrous oxide	0,455	0,1890	0,365	0,175
Silicic acid	0,185	0,1210	0,192	0,148
Manganese (organics subtance)	Traces of	Traces of	—	—
Sulphate of lime	—	—	—	0,188
Sesqui-Bi-carbonate of mangan	—	—	0,017	—
Phosphate	—	—	0,002	—
Alumina	—	—	0,001	—
Total of fixed solids	51,444	10,5210	19,908	16,967
True free carbonic acid	11848,8 Cm³	8921 Cm³	11991,9 Cm³	12342,8 Cm³
So-called free carbonic acid	19447,6 „	10326 „	15132,9 „	14485,4 „
Temperature	7,5° C.	6,5—7,5°	8,7°	9,3° C.
Specific gravity	1,0029	1,0009	1,0020	1,0019

From the favourable nature of the soil, lofty situation, and fine climate, Tarasp is well adapted as a **"Terrain" health** resort, meeting, as it does, all the requirements of this method of cure.

The **Kurhaus Tarasp** (1185 m. above the sea), belonging to the Tarasp-Schulser Company (Manager, *C. Gilbert*) is on the left bank of the Inn, between which and the house is a large, shady garden. The building consists of a centre and two wings at an obtuse angle, the main front facing south. It contains 220 apartments and accommodates 270 visitors, besides 120 servants'beds. Opposite the west wing is an elegant *villa*, with an octagonal tower and semi-circular balconies. On the south front of the Kurhaus are two terraces, a new café-verandah of glass and iron, several balconies, and beside the rotunda of the pump-room a long covered gallery (Wandelbahn) with numerous shops. Besides the garden, with its shady arbours and walks, German covered bowling alley, and music pavilion, there is, on the other side of the river, an extensive English park, with shady walks among the thick fir trees. Electric light throughout the establishment. Specially to be mentioned among the new and good sanitary arrangements is the flushing of the closets (Jenkins's system) together with the ventilation of the drains, and the rapid removal of all sewage matter into the Inn (Waring's system). On the ground-floor and in the basement of the east wing are 56 bath rooms, with wooden and metallic baths, and all kinds of douches; the water being warmed by steam. Besides the large dining hall, there is plenty of restaurant accommodation, and there are rooms for



The Village and the Castle of Tarasp.

private parties; a post and telegraph office in the Kurhaus, and telephonic communication throughout. Large stabling and a supply of carriages and horses. A special band plays 3 times a day in the garden, and in the morning in the pump-room.

To avoid infection should an epidemic be imported into the house a building where patients can be isolated has been provided.

Pension (3 meals) 7 fr. 50; breakfast, lunch, and dinner 3 fr. Room from 3 fr., according to position and style. A reduced tariff for rooms in June and September. Servant's pension 5 fr., service 75 cts., electric light 25 cts., band 25 cts. per day each person. Kur-tax for those staying at the Kurhaus 14 fr.; for those lodging elsewhere, band inclusive, 17 fr.; a reduced Kur-tax of 8 frs. in June and September. Baths 1 fr. 50, to 2 frs., douche 1 fr.

Resident physician, *Dr. Killias;* consulting physician, *Dr. Pernisch* of Schuls. Apothecaries.

From the Kurhaus the road leads in a short half hour to

Schuls, (1210 m. above the sea), the largest village in the Engadine, with 900 Latinspeaking inhabitants, Protestants, lies on a slope of the valley, amid green meadows and waving corn-fields, with the village church on a bold precipice over-hanging the sun. In the back-ground rise the Dolomite points of the Pisog, St. Jon, Lischana, Ajuz, Rosvenna, and Piz Lat. The village of Schuls is divided into the Upper and Lower; in the Upper are most of the new and modern hotels and pensions, and quite close to them the bathing establishment (Badehalle) with 18 bath- and 2 douche rooms for iron and fresh water baths. The park-like gardens now being laid out will make a sojourn in this splendid situation still more agreeable. During the fore-noon tram-omnibuses and special carriages run **gratis** from all the hotels of Schuls to the pump-room (Trinkhalle) at *Kurhaus Tarasp.*

Hotels in *Schuls: Hotel-Pension Belvedere* (Arquint) a large, modern building, with the main front to the road, and the rear, which has a battlemented frontage, looking south, with a splendid view over the valley of the Inn and the mountain range. The hotel contains 68 comfortable rooms, 3 large balconies, a large dining-room, breakfas-room and restaurant, ladies' salon, smoking-room, billiard-room and bar. Terraces and a shady garden. Pension 6½ fr.; room from 2½ fr. Service 50 Cts. Baths in the house if required. The *Pension Alt-Belvedere* in Lower Schuls, with 25 rooms, belongs to the hotel. Pension tariff 6 fr.; room from 1 fr. 50; service 50 cts. Milk cure.

Other hotels: *Hotel-Pension Post* (Könz, Pinösch & Co.); *Hotel-Pension Schuls; Hotel Könz; Hotel-Pension Helvetia.*

Physicians at Schuls: *Dr. A. Porta; Dr. Pernisch.*

Twenty minutes from the Kurhaus Tarasp, to the north, on a thickly-wooded height above the right bank of the Inn, lies **Vulpera,** (1275 m. above the sea) with a somewhat cooler climate and a decided Alpine flora. The situation is not less picturesque than that of Schuls, especially as the valley descends. There is a good road between the spas and baths of the Kurhaus and Vulpera.

Hotels and Pensions:

Hotel-Pension Bellevue; Hotel-Pension Waldhaus; Hotel-Pension Steiner; Pension Tell; Pension Alpenrose; Villa Conradin; Pension Vanas. At **Fontana-Tarasp,** below the castle, *Hotel-Pension Tarasp.*

Numerous and well-kept walks and paths through the woods. The "Unterengadiner Verschönerungsverein" takes care of the gardens, improves the gardens, and provides seats. *A fund for needy patients.*

Walks and excursions. In ½ hr. to Pradella, below Schuls, and close to the right bank of the Inn. In 1½ hrs. to the Castle of Tarasp. Behind Vulpera to Kranzberg, with a splendid view of the valley and mountains, from there to the lake and to Fontana. In 1¼ hrs. past Vulpera to Auerbachshöhe and the Hof Avrona, from there in ½ hr. to the Schwarzen See, with a splendid panoramic view of the rocky crags on the right. In 1 hr. eastward from Vulpera, along the steep road through the Scarl Valley, to St. Jon, with an old chapel (splendid view). In 4 hrs. to Scarl in the wildly romantic valley of the same name. In 1½ hrs. to Crusch, and by a new road out through the rock on the right to the Val d'Unia.

The **mineral springs of Val Sinestra** lie in the lower gorge of the valley, eastward from the commune of *Sins* (Sent) deep down on the Branclabach. Quite lately some acidulous springs, impregnated with arsenic, have come into notice; they are at least 12 in number and deliver such a large quantity of water that they "might turn a wheel". The strongest of them are the *"Ulrich", "Conradin", and "Edward" springs*. the first two of which only have been analysed, All have an average temperature of 9° C.

Dr. A. Husemann's chemical analysis of the **mineral springs of Val Sinestra** gave in 10,000 parts of water (the carbonic salt being reckoned as anhydrous mono-carbonate):

	Ulrich spring	Conradin spring
Chloride of lithia	0,0402	0,0616
„ of sodium	3,6258	6,0166
Bromide of sodium	0,0203	0,0361
Iodide of sodium	0,0012	0,0015
Borate of soda	0,7851	1,0940
Arseniate of soda	0,0171	0,0199
Phosphate of soda	0,0048	0,0051
Silicate of soda	0,1888	0,2458
Sulphate of soda	1,3486	2,0592
„ of potash	0,4133	0,6573
Simple carbonate of soda	0,9338	2,2160
„ sesqui carbonate of ammonium	0,0707	0,0790
„ „ „ lime	10,1294	10,4564
„ „ „ magnesia	2,0498	2,3219
„ „ „ ferrous oxide	0,2244	0,2334
„ „ „ manganese	0,0036	0,0039
Alumina	0,0020	0,0021
Strontia, baryta, rubidium, caesium, Nitric acid, organic Matter.	Traces of	Traces of
Total of fixed solids	19,8589	25,5128
Determined absolutely	19,6000	25,4500
Temperature of the spring with semi free and free carbonic acid and 760 Mm. Bar.	13047,3 Cm^3	14199,3 Cm^3
Specific gravity	1,0023013	1,0031914

The *Conradin spring* has been properly worked, and the water is exported; a bathing establishment is projected. The springs are adapted for curative purposes in poverty of blood and chlorosis, weakness of the nerves and muscles, neuralgia, hysteria; catarrh of the digestive and respiratory organs; diseases of women.

In the neighbouring territory of the Tyrol, at *Samnaun*, there are a number of mineral springs: iron springs at Alpbella (2236 m.) ob Compatsch, at Salas da Duora (2445 m.) ob Plan, at Salas da daint ob Ravaisch (2000 m.) and at Zebles; also a salt spring, ob Plan, which is known for its purgative effects.

Fettan (Vetan), 1657 m. above the sea, a summer resort, 1½ hrs. west of Oberschuls, on a green and sunny mountain terrace, with a splendid view of the valley and mountain range; two iron and gypsum springs in the valley above (Aua da Luot, Fontana Clüs); below the village, near the Inn, in Val Püzza is a rather valuable ferric acidulous spring; the rich ferric acidulous spring of Baraigla on the Inn is known as the *Innquelle*. In the late autumn of 1885 Fettan was frightfully desolated by a conflagration. *Gasthaus zur Post.*

Guarda, 1650 m. above the sea, a summer resort, on the steep slope of a lofty terrace on the left bank of the Inn, above *Giarsun*, is a hamlet in the sheltered spots of which apples and damson trees were planted as long ago as the 16 century. Owing to the mildness of the climate and the nearness of the woods Guarda has become a very favourite summer resort.

Hotels: *Sonne; Osteria Silvretta.*

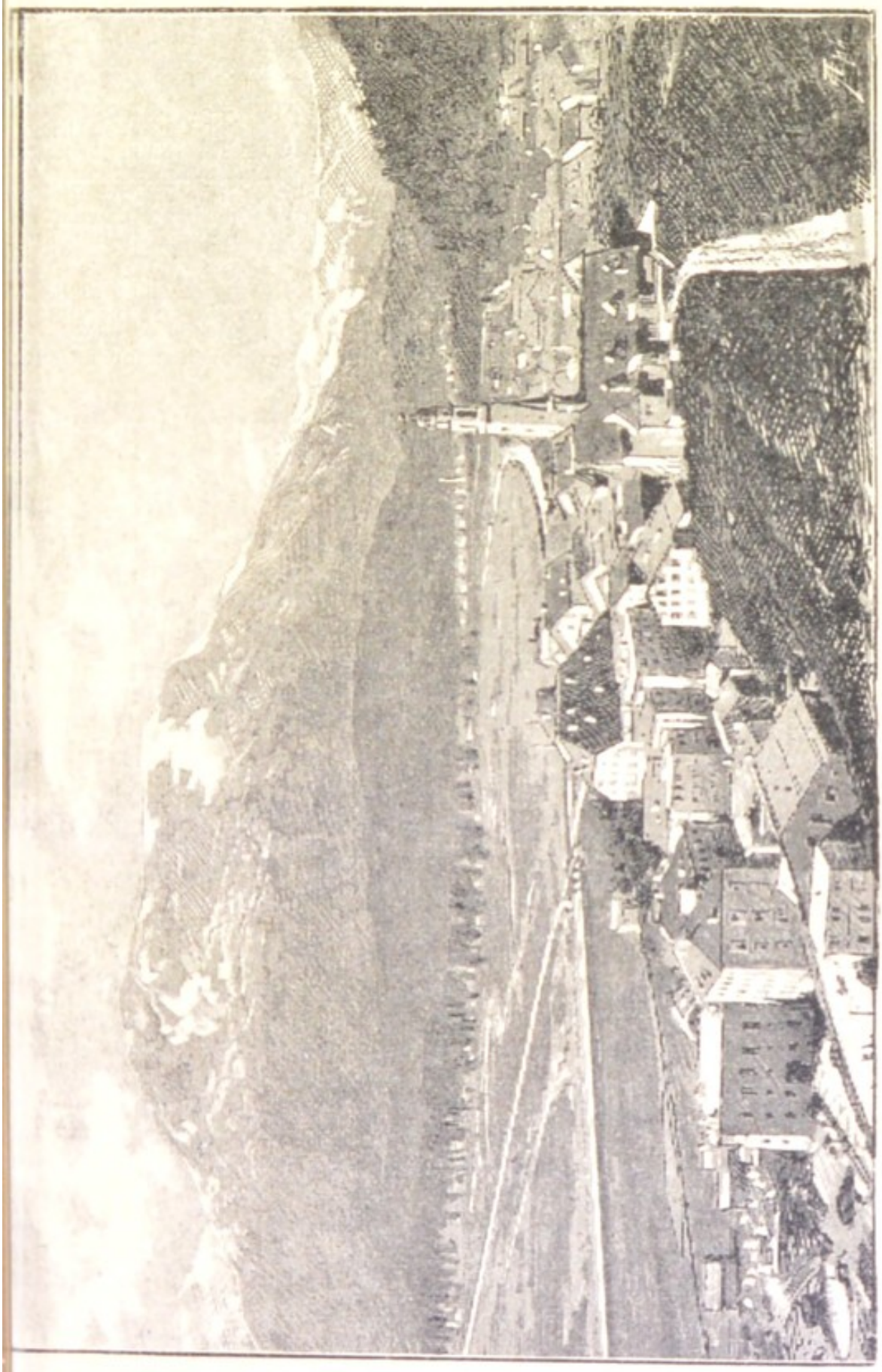
Lavin, 1439 m. above the sea, a summer resort, is a fine village almost entirely rebuilt. It lies in a sunny inlet in Val Lavinuoz, has a very healthy, temperate Alpine climate, and is adapted for those needing refreshment, for convalescents, and for weakly children.

Hotels: *Piz Linard; Steinbock.* — Physician: *Dr. Steiner.*

From Lavin ¾ hr. further up the valley to **Süs,** at the entrance of the Flüela *(Schweizerhof; Räthia)*, and 1¼ hrs. from there to **Zernetz** (1498 m.) above the sea, at fine, modernly built place at the junction of the Spöl with the Inn. On account of its mild climate and sheltered situation it is sometimes used as a transition station between the Upper and Lower Engadine. *Gasthof Bär.*

Scanfs, 1650 m. above the sea, a handsome, well built village, on a gentle, meadowed slope at the entrance to the Upper Engadine, with a sulphur spring — newly constructed — close to the village; at Val Muchiaun, on the left side of the valley, an arseniate iron spring, at Varusch, on the right side, a small iron acidulous spring, and a stronger one further up in Val Muschem. Scanfs is not adapted as a climatic cure, being too much exposed to the winds from the north-east and up the side of the valley. *Gasthaus Stern.*

Zuz, 1715 m. above the sea, an air cure, 20 minutes above Scanfs, is a fine place, combining the ancient and massive with the modern and elegant style of building. It lies amid soft green pastures which have grown over the rounded fragments of the moraine of the glaciers of the mighty Piz Kesch, and by this mountain and the Piz d'Esen opposite is protected both on the north and south; there is a pleasant hill on the south-west which affords good shelter, and there is much less exposure to the north-east than in other places of the Upper Engadine. Owing to this sheltered situation Zuz enjoys a very favourable climate, so that even in the severest winter the temperature is 2,5° C. higher than in the neighbouring village of Scanfs. The capital vegetable gardens, and the fields of rye, barley and potatoes are a striking proof of the mildness of the climate. Zuz is especially adapted for recruiting after any great strain, convalescence from severe



Samaden.

illness, poverty of blood, general debility, spinal complaint, scrofula, malaria-cachexia and incipient phthisis. — Physician: *Dr. Pernisch.*

Hotels: *Hotel-Pension Concordia; Gasthaus z. Schweizerbund.*

Walks and excursions: In ½ hr. to the Arpigliaschlucht with a fine waterfall exactly opposite the village. In ½ hr. to the Muot Crasta hill. In 1½ hrs., passing Maiensässen, to the gently rounded summit of the Belvair, with a fine view. In ½ hr to St. Gian and L'Arett. In 1 hr. to Alp Arpiglia, a very romantic point; in 1 hr. to Varusch, Flin, and Furnatsch. In 1 hr. to Capella, with the ruins of an old monastery. In 3 hrs. to Piz Casanella, easy of ascent, and commanding an imposing view of the mountains.

From Zuz 1 hr along the diligence road via *Madulein* leads to *Ponte*, the mouth of the Albula Pass towards **Bergün**; close by, above the village, is an acidulous iron spring. It is not however adapted any more than *Bevers*, which is an hour further along the valley, as a residence for patients, on account of its raw climate.

Hotels in Ponte: *Albula; Krone.*

Samaden, 1723 m. above the sea, an air cure, ½ hour above Bevers, the chief town of the Upper Engadine, with about 800 inhabitants; a thoroughly business place. It has the climatic advantages of the Upper Engadine and is suited for incipient lung disease, inherited or acquired tendency to phthisis, affection of the nerves, malaria-cachexia, poverty of blood, general weakness, digestive disturbances (nervous dyspepsia) torpid forms of scrofula.

Hotels: *Hotel Bernina; Kurhaus Samaden.* **Second class:** *Hotel des Alpes; Krone: Innthal.* — Physicians: *Drs. Brugger, Lendi.*

Pontresina, 1803 m. above the sea, an air cure and celebrated place for tourists, at the entrance of the lateral valley running south east, 6 miles long, which leads up from Samaden to the *Bernina Pass.* It is in an elevated, but well protected situation, fully exposed to the sun's rays. It is surrounded by shady larch and other woods and magnificent mountains. There is excellent drinking water from three springs. Milk and whey. The high Alpine climate of Pontresina, mild, but tone-giving and refeshing, is suited, according to *Dr. Ludwig,* for unstrung nerves, resulting from excessive mental work; nervous dyspepsia, sleeplessness, neuralgia, convalescent cases (except those from dysentry); malaria-cachexia, anaemia and chlorosis; scrofula; incipient phthisis; chronic catarrhal bronchitis. — It is **not** adapted for: Fatty degeneration of the heart, weak action, tendency to apoplexy, advanced emphysema, tuberculosis of the larynx and intestines; tendency to rheumatism of the joints and to inflammatory affections of the throat and larynx. — Physician: *Dr. Ludwig.*

Hotels and Pensions: *Hotel Roseg; Weisses Kreuz; Enderlin; Kronenhof* and *Bellavista; Saratz; Pontresina* and *Post; Languard.*

Private lodgings without board: *Villa Stiffler; Villa Jenny.*

At *Giarsun: Hotel Steinbock* with *dépendance*; *Villa Hans Grass.*

Pontresina.

The Morteratsch Glacier near Pontresina.

Meteorological Conditions during the Season (June to September).

Mean Temp.	7 a. m.	1 p. m.	9 p. m.	Mean Mid-day Temp.	Daily Variations
June	7.75	13.12	7.08	9.30	6.61
July	10 44	16.91	8 82	12.54	7.41
August	8.29	15.28	8.95	10.84	7 70
September	4.66	12.76	6.67	8.03	8.52
Season	81.5	15.44	9.05	11.00	7,72

Weather Averages (June to September).

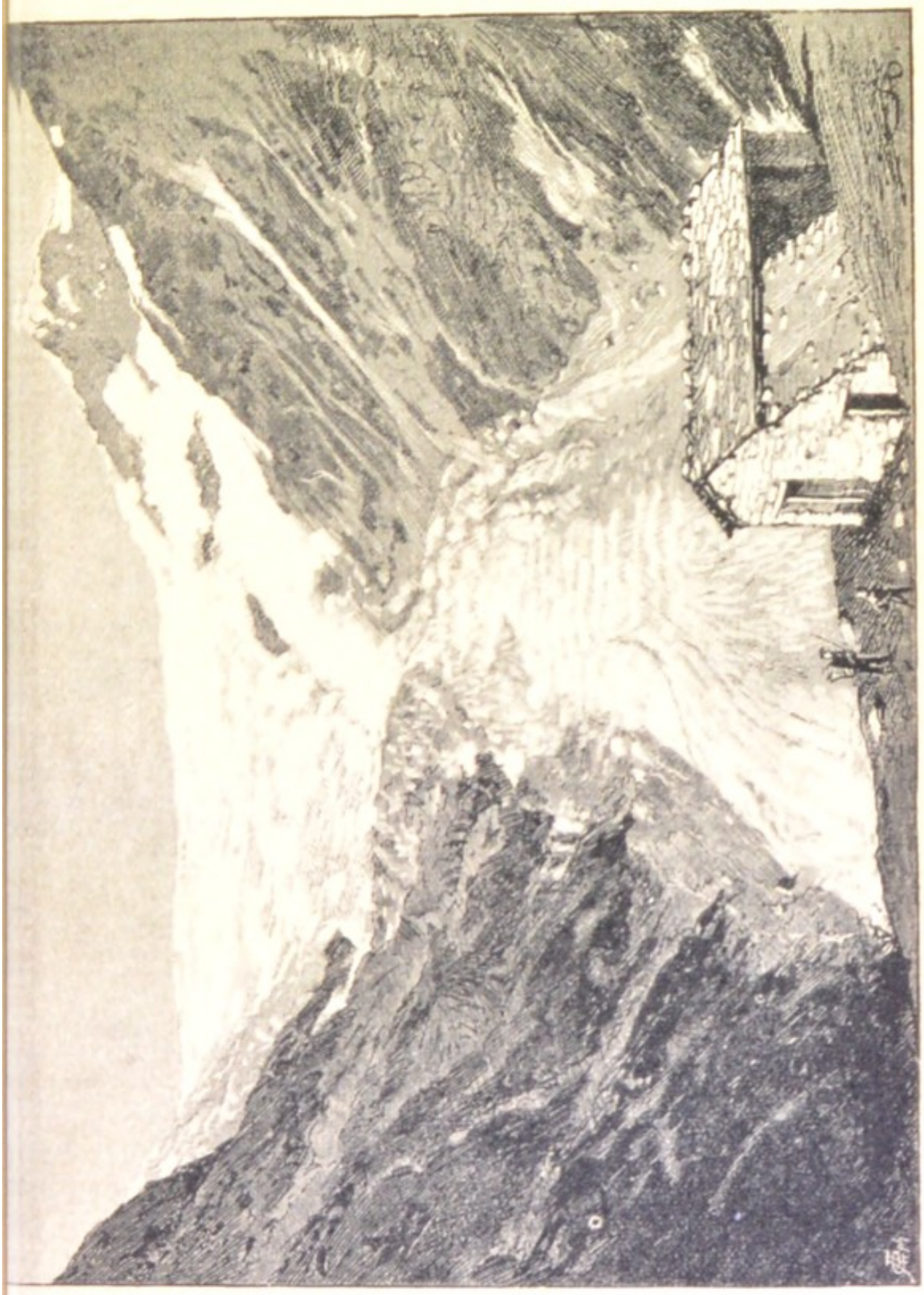
Month	Clear Sky	Cloudy Sky	Fog	Rain	Snow	Storm
June Days in	17,9	12,1	1,4	7,5	0,93	1,4
July " "	21,9	9,1	3,3	7,2	0,07	3,7
August " "	21,5	9,5	3,3	7,4	0,36	2,2
September " "	21,4	8,6	5,4	6,1	1,36	0,8
Season	63,9	28,1	10,8	21,4	1,57	7,6

Wind Averages.

Month	South-east and South	South-west	West	North-west and North	North-east and east
June Days in	5,1	22,6	1,2	2,7	20.0
July " "	2,8	26,1	1,8	1,2	19,4
August " "	2,8	26,2	1'5	2,8	16,4
September " "	2,5	27,1	2,5	1,7	9,7
Season	8,3	71,4	5,0	5,3	49,1

The two mineral springs which rise in the immediate neighbourhood of the Kurhaus are acidulous iron springs containing soda, with a large proportion of fixed solids and free carbonic acid. Both springs are perfectly clear and glistening and have a pleasantly astringent taste. The water of the *old spring* is quite free from iron and contains 0,7 more of carbonate of soda; that of the *new spring* contains a considerable quantity of very pure, suspended hydrate of ferric oxide, which after standing leaves a sediment of fine red flakes; it is richer in carbonate of ferrous oxide than the old spring. The temperature of the old spring is 5,4° C.; of the new 5,3° C.

The old spring, on account of its copious supply (22 litres per minute) is used for the baths, the new spring, which rises at the left of the bath houses, in the fine pump room (Trinkhalle), for the drinking cure. The water is taken cold or warm, alone or mixed, or with the carbonic acid partially withdrawn; it may be drunk in the morning, fasting, or at various times during the day. The water used for the baths is heated by steam to the required temperature. The treatment is supplemented by cold and warm douches and other hydro-therapeutic processes, massage, electricity, milk and whey.



The Palü Glacier, view of the Alp Grüm near the Bernina Hospice.

The chemical analyses of the two springs shows according to *Prof. Husemann* 1873—1874 in 10,000 parts, wiih carbonate of salt reckoned as free bicarbonate:

	Old Spring	New Spring
Chloride of lithia	0,00848	0,00885
„ „ sodium	0,43764	0,34683
Bromide of sodium	0,00536	0,00099
Jodide of sodium	0,00013	0,00024
Floride of sodium	0,00630	0,01740
Nitrate of soda	0,00333	0,00721
Boride of „	0,03614	0,05228
Sulphate of soda	3,07415	3,21101
„ „ potash	0,14382	0,14800
Bicarbonate of soda	2,72536	1,81518
„ „ oxide of ammonia	0,02928	0,02552
„ „ lime	12,26916	13,01950
„ „ strontia	0,00114	0,00119
„ „ magnesia	1,97097	2,02188
„ „ oxide of manganese	0,05292	0,05588
„ „ ferrous oxide	0,33098	0,38648
Hydrate of ferric oxide	—	0,06108
Silica	0,40169	0,53448
Phosphoric acid	0,00156	0,00144
Alumina	0,00050	0,00030
Baryta, caesium, arseniate copper, organic substances	Traces of	Traces of
Total of fixed solids	21,49711	21,71574
True free carbonic acid with temperature of the spring	12300,10 Cm^3	12828.10 Cm^3
So-called free carbonic acid with temperature of the spring	18916,06 „	19565,05 „
Specific Gravity	1,002315	1,042325

St. Moritz is recommended for:

1. All forms of anaemia and chlorosis together with the chronic affections that result from or accompany these disturbances of nutrition; dyspepsia, menstrual irregularities, irritation and weakness of the nervous system, etc.

2, Wasting of the nerves and muscles from various causes. Impotence.

3. Torpid forms of scrofula.

4. Gouty conditions. Albuminuria.

5. Torpid forms of tuberculosis of the lungs, lymphatic glands and bones, and pre-disposition to the same. In such cases the winter cure at St. Moritz-Dorf is recommended.

It is **not** suited for:

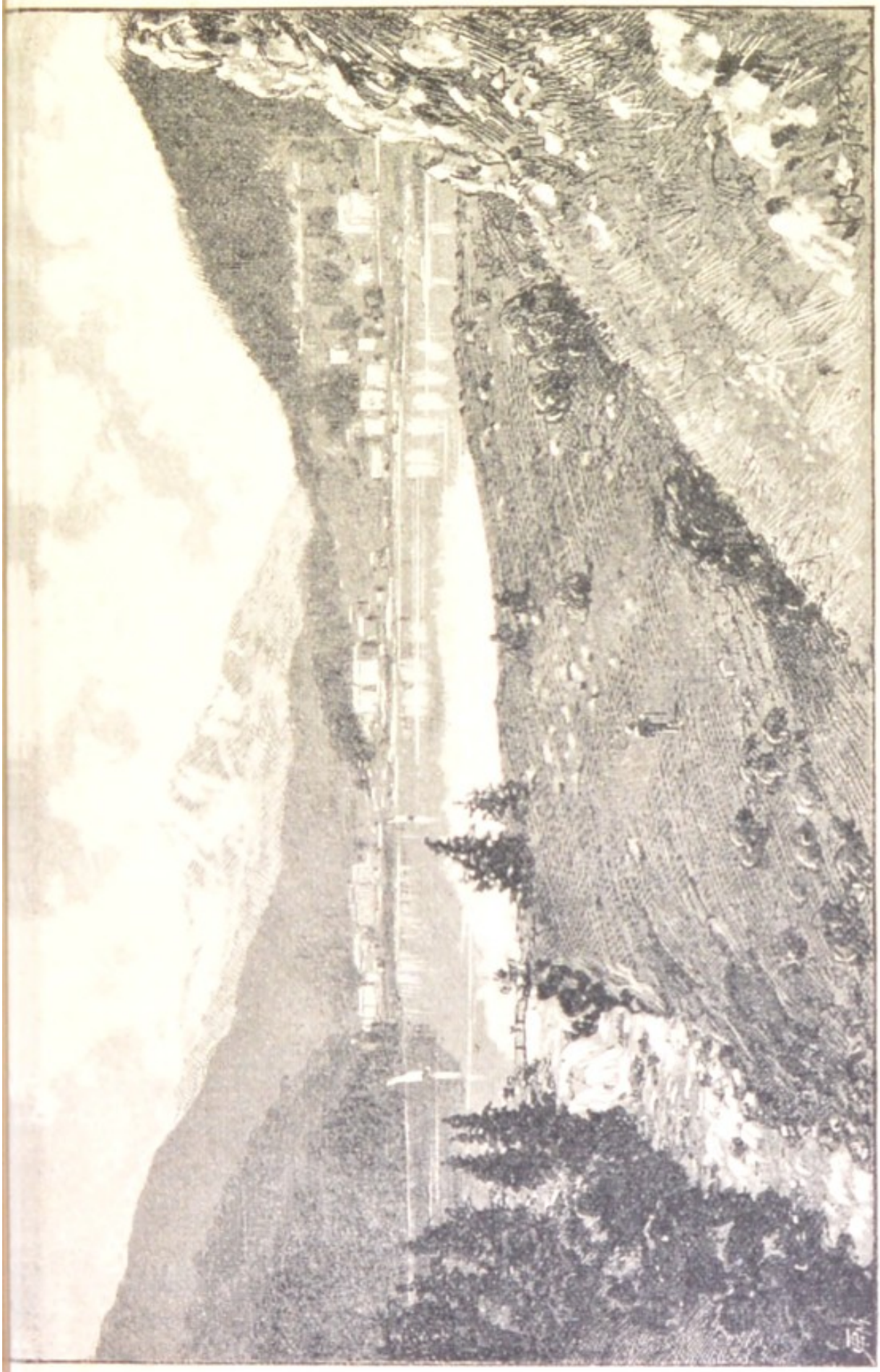
1. Chronic catarrh of the stomach and swelling of the stomach.

2. Heart affections which have not been compensated or only imperfectly so.

3. Various cases: climatteric periods.

4. Tendency to acute congestion and apoplexy.

Physicians: *Drs Berry. Biermann, E. Brügger, A. Christeller* (at Bordighera in the winter), *Javerney, Veraguth* (Kurhaus physician).



St. Moritz. (Upper Engadine.)

Hotels and Pensions:

I. St. Moritz-Bad.

The **Kurhaus** contains a great number of rooms varying in position and style, still visitors are strongly advised to make early application for accommodation. The proximity of the springs, the convenience of being able to get to the baths and pump rooms in bad weather by a covered passage, the comfort and good management, and last but not least, the comparatively low prices for the Upper Engadine, ensure the Kurhaus being full early in the season.

The Kurhaus consists of a large new building, with the big dining hall at the back forming a sort of wing. At the right, connected by a gallery, is the old Kurhaus with two wings, on the ground floor of which is the pump-room of the old spring. The two long bath-houses, on the upper floors of which the rooms are particularly dry and warm, are joined by a second gallery. Abutting on this is the light, covered promenade, used as a bazaar which leads to the fine, spacious pump-room of the new spring, and in rainy weather serves as a place for those who are taking the drinking cure to walk up and down. The two bath houses together contain 80 baths of wood or metal. In 1885 a large douche room was built, connected with the baths and Kurhaus by a covered way, and furnished with every modern requirement in the way of hydro-therapeutic arrangements: warm, cold and Scotch douches, douches for general and for specific purposes, running water sitz-baths, vapour baths, etc. The douche room and the adjoining dressing rooms can be heated in cold weather by steam. A practised masseur from *Prof. Winternitz's* establishment in Vienna and a masseuse are attached to the douche room staff.

There are generally about 380 patients in the Kurhaus, there being 240 bedrooms, some single and some double-bedded rooms, and 20 private sitting rooms with servants' apartments. The dining room seats 400 persons: there is a large music and dancing room, 2 ladies' drawing-rooms, library, restaurant, café and billiard room; newspapers in various languages. Postal and telegraph office, banking bureau, physician's consulting room, dispensary, etc., all in the house. All the general sitting rooms, the private salons and many of the bedrooms are supplied with stoves in case of cold weather. The corridors are laid with noiseless matting; gas lighting throughout. Pianos can be hired for private rooms.

The price of rooms varies according to size and style from 2 fr. 60 to 5 fr.; more by the day. Pension without room 8 fr.; 3 meals. The fare is good and suited to the climate and treatment. The kur tax is for the drinking cure 12 fr.; baths 1½ to 2½ fr. according to the hour at which they are taken; douches from 1 fr.

On Wednesday and Saturday there is dancing from 8 to 10 p. m.; réunions, concerts given by travelling artists, fireworks, etc. The kur band plays 3 times a day: in the morning from 7 to 9 in the pavilion or promenade; in the afternoon from 2 to 3, and in the evening from 8.30 to 10 p. m. in front of the main entrance. Boating and fishing in the neighbouring lake.

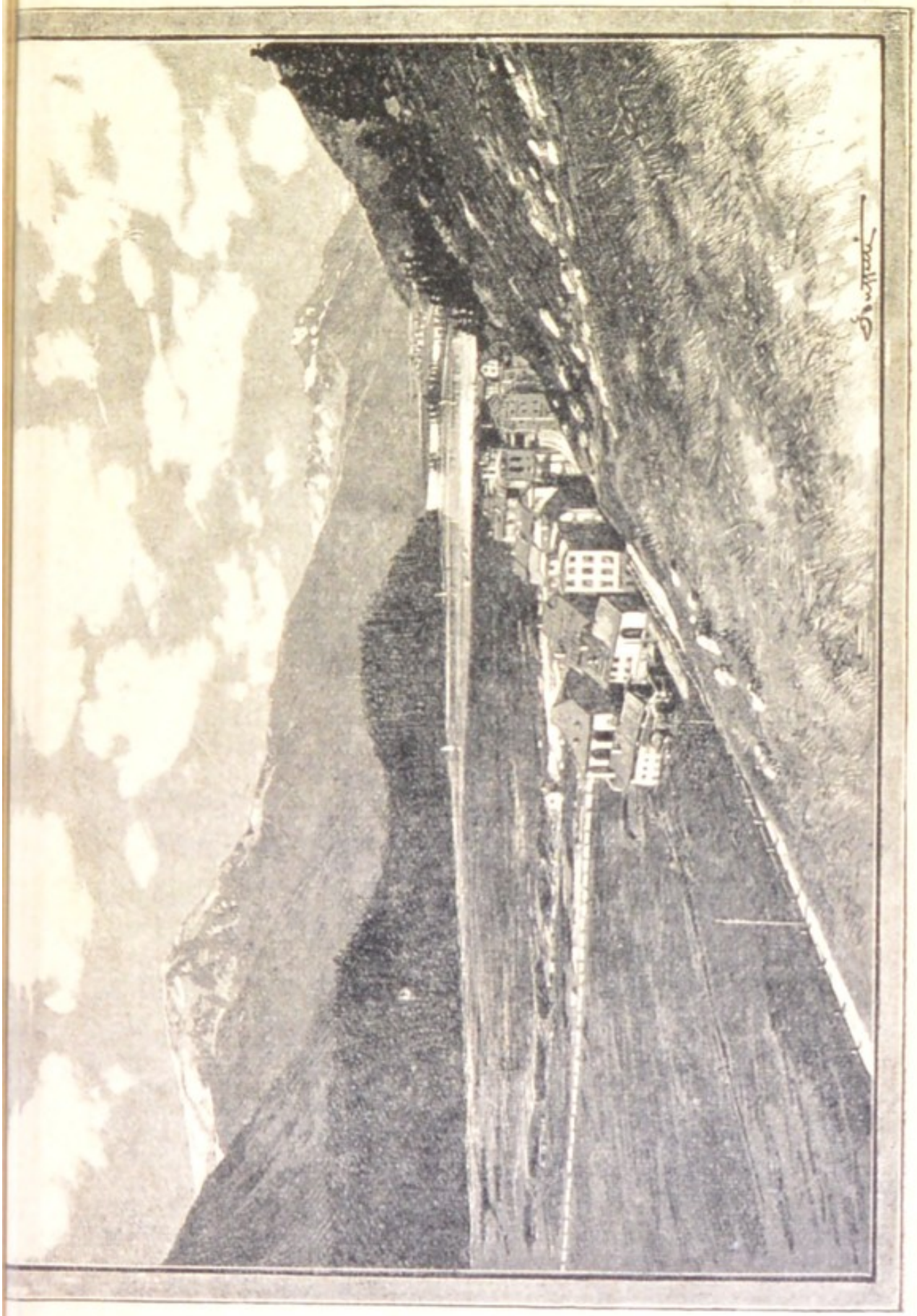
The gardens in front of the Kurhaus command one of the finest views over richly wooded country, the glistening icy peaks of the Margna, the naked granite rocks of the Julier, the savage Piz d'Err, Piz Padella, Piz Ot, and the lofty rocky cliffs of the Languard range with its projecting spurs. Behind the Kurhaus is an extensive needle-pine wood, with pleasant footpaths and seats. Belonging to the Kurhaus is the Dépendance, *Villa Inn.*

Hotel Victoria *(Proprietor Fanconi)* a large, handsome house with 260 beds, excellently managed. *Hotel du Lac* (Manager, Arras), 260 beds.

Hof St. Moritz (Proprietor *F. Gengel* of Coire) a very nice house, with 80 beds, family apartments, terraces commanding a good view, gardens; special arrangements for a lengthened stay. On the parterre, and belonging to the hotel, is the *Café Littéraire of St. Moritz* (Bavarian beer from the cask).

Engadiner Hof, 50 rooms, well managed; *Hotel Bellevue; Hotel Central; Villa Meyer; Stark; Berry; Pidermann-Brügger; Edelweiss, Flütsch,* with altogether 580 beds.

II. St. Moritz village.



Campfer.

In 1885 the whole place was drained on an improved system (Waring's), with a complete carrying away of refuse matter. There is accommodation for from 1200—1300 persons.

Hotel Engadiner Kulm *(J. Badrutt).* 1856 m. above the sea, the highest village in Switzerland, with a wonderful view over the whole district of St. Moritz. The hotel is quite a pile of buildings (7 main sections) with a handsome new portion, every conceivable comfort and a considerable amount of luxury. Large reception rooms, library with books in the four chief languages, a fine collection of copper-plate engravings and pictures. A dining room (nice, with pine wood floors) for 350 persons: 240 beds, room from 3 fr.; dinner, at 12. 30. 4½ fr., lunch at 1, 2½ fr., Dinner, at 6. 30, 5 fr. Supper, at 8, 3 fr. *(printed tariff).* Early and late in the season, and in winter, a reduced, pension tariff for families. Gardens, galleries, terraces, halls, verandahs, play-grounds. billiards. carriages, horses, mules, boats, fishing, etc. Milk from the hotel dairy (20 cows). Cooking and wines of prime quality. The establishment is supplied with all the newest sanitary requirements, and is resorted to by the best society — mostly English — both in summer, and in winter when, like Davos, it is visited by invalids. Electric light, general warming, ventilation, drainage, baths and douches.

Hotel Belvedere (Caviezel-Faller), 60 beds, view, Pension 7 fr *Hotel Caspar Badrutt,* 60 rooms, 30 can be warmed, garden, play-ground, verandah, balconies, view. Pension 7½—12 fr. Well arranged for winter.

Maison Rhätia, Villa Berry, Villa Joos, Maison Tognoni.

Pension Flugi (Flugi), two houses, one a small one with boarded-floor rooms and a kitchen, a larger one with 32 comfortable rooms, 16 of which are boarded, with 3 balconies and 10 salons; 50 beds in all. The establishment is in an open sunny situation, with a terrace and beautiful shady garden. A splendid view of the lake and mountains. The main façade looks south. Stoves in nearly all the rooms, water carried on to all three floors. W. C.'s. Both houses are suited also for the winter. Rooms, from 2¼—12 fr.; according to position, size and furnishing. Breakfast and evening tea are only served by request.

Hotel Suisse, family hotel, in the chalet style; *Hotel Pension Veragouth* simple but good; *Villa Schmidt,* with a good view, like most of the hotels; *Pension Wettstein; Pension Gartmann; Pension St. Moritz.*

Private Hotel Tognoni-Badrutt, chiefly for families, arranged also for winter. No table d'hote. Room 1½—5 fr.

Hotel Post (Josty); *Hotel Pension Steffani,* in an open situation with a good view, 33 lofty rooms, terraces, etc. Pension 8—11 fr.; *Maison Helvetia,* in a sunny situation; *Pension Peter* for Christian families; *Maison Pidermann,* in a sheltered situation, also arranged for the winter; a little further off *Pension Rovinatsch* (connected by a tramway), small, good. Park with trees near the house.

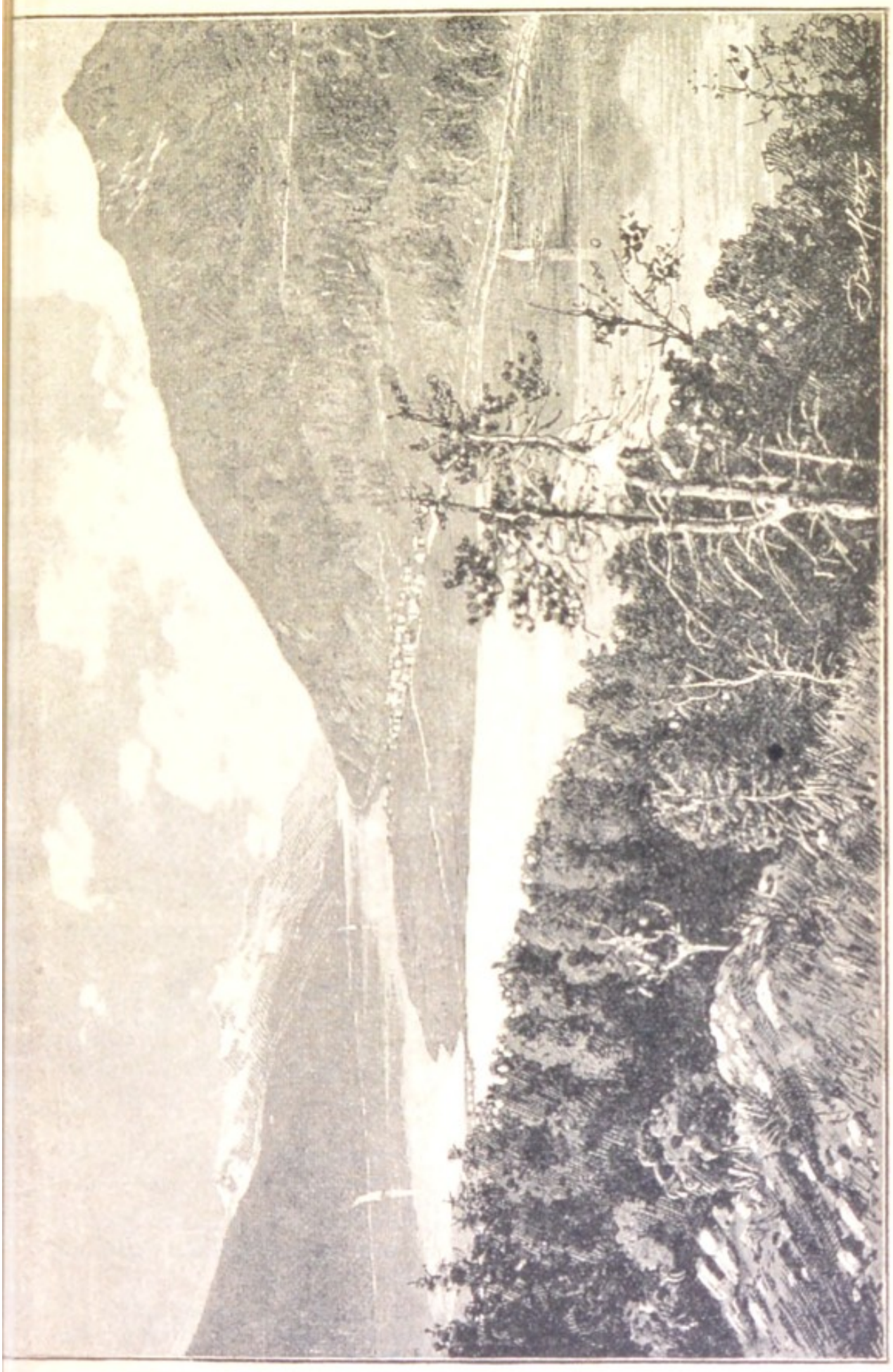
Hotel Beau Rivage (Caspar Badrutt) 50 m. above the sea, a similar view to that from the Kulm Hotel. Very comfortable. Pension 10—14 fr.

Total number of beds for visitors about 2750.

Walks. ½ hr. through the wood to the Kurhügel; ½ hr. along the a shady road on the right bank of the lake to the Aila d'im Lej, a picturesque by situated farm at the eastern end of the lake. In 20 min. to the Inn Fall; ½ hr. to Crest'alta; ¾ hr to the Johannisberg (fine view); 1 hr to Alp Giop; 1½ hr. to the Celerina Alp Muottas Laret (2367 m.) Carriage excursions to Samaden, Pontresina, Sils, Maloja, etc. — Boat trips on the lake of St. Moritz.

Campfèr, 829 m. above the the sea, a climatic health resort, 20 minutes from St. Moritz, is a picturesque little village lying between the lake and mountain, well sheltered from the north-east wind, and surrounded by meadows and trees. It is much used as an outlet from St. Moritz and accommodates 135 persons.

Hotels: *Julierhof, Hotel d'Angleterre, Maison Cazin, Villa Wohlgelegen.*



Silvaplana.

Silvaplana, 1816 m. above the sea, a climatic health resort with the gypsum spring *Surlei* containing iron of Season from June till September.

The pleasant village lies on an open level expanse of meadow land at the foot of the *Julier Pass*, and sheltered from the north and north-east wind. The prevailing wind is from the south-east, and it blows with more force and freshness than at Campfèr.

Opposite the village, and on the other side of the Lake of Silvaplana with its abundance of trout, there rises at the foot of the Piz Surlei a cold iron spring containing gypsum. According to the analysis of *Professor Husemann,* it contains in 10,000 parts of water (the carbonate of salt being reckoned as anhydrous bi-carbonate):

Chloride of sodium	0,0237
Sulphate „ potash	4,0459
„ „ soda	0,0756
„ „ magnesia	1,8726
„ „ lime	14,7216
Bicarbonate of lime	9,4145
„ „ ferric oxide	0,0953
Silicic acid	0,0867
Manganese, ammonia lithia, strontia, baryta, alumina, phosphoric acid, nitric acid, organic matter	Traces of
Total of fixed solids:	26,4359
True free carbonic acid	2142,6 Cm^3
So-called free carbonic acid	3630,6 „

The spring, together with the milk and air cure, is adapted for imperfect blood making and poor blood compositions, spinal complaint and scrofula, chronic bronchial, intestinal, and bladder catarrh; for the weakly and those needing to recruit. It is contra-indicated in the same cases as in the Upper Engadine generally.

Hotels: *Hotel-Pension Riv'alta, Wilder Mann, Maison Rizzi-Torrimann.*

Sils Maria. 1811 m. above the sea, a climatic health resort for summer and winter patients.

Sils-Maria is the chief place in the commune of Sils, it lies in a very sunny sheltered situation, on the right side of the valley, between the lakes of Sils and Silvaplana, it is surrounded by woods, has a mild climate, and is the very image of a peaceful idyllic spot. Excellent drinking water. A sulphur spring in the neighbourhood. A meteorological station.

Physician: *Dr. Courtin.*

Hotels: *Hotel Edelweiss* (Zuan) with baths and douches, *Hotel Alpenrose* (Barblan).

Maloja, 1817 m. above the sea, a climatic health resort for summer and winter guests, has an iron spring, containing gypsum.

Route. Postal communication from the railway station of Coire, over the Julier, to Silvaplana-Maloja (76 Km.). By diligence from Colico-Chiavenna through the Bergell.

The **Hotel Kursaal** lies on the Plateau of Maloja, which is about 2 Km. square. and forms the end of the Upper Engadine Valley on the south-east. The main front of the house looks north-east over the Lake of Sils, the largest in the chain of lakes between Maloja and St. Moritz. Large gardens lie between the house and the lovely shores of the lake. On the south-western side, towards the Bergell, extensive gardens have been laid out, with a skating rink, pavilions, etc. On the west the hotel is flanked by Piz Lunghino, on the east by Piz della Margna. The soil consists of a thim layer of black, peat-like earth resting on a great bed of gravel (the former bottom of the Lake of Sils). It absorbs moisture with great rapidity. The slopes on the eastern side of the Valley are covered with larches and pines to a height of from 300 to 600 m. above the level of the valley; on the western side are broad, abrupt escarpments, on which thick grass and sterile rocks alternate. On the plateau and on the surrounding hills dwarf pines, vegetables and myrtle trees grow chiefly.

This large **Kurhotel**, which has been arranged on thoroughly hygienic principles and with every modern luxury, was built by a Belgian Company on the plans of the Belgian architect, *Jul. Rau*, at a cost of over 5,000000 fr. The idea was to erect an air Kurhaus, in the true sense of the word, specially as a **winter residence**, in this celebrated High Alpine climate. To this end a completely new system of drainage was laid down which prevents the slightest smell from penetrating the house. The great difficulty in this elevated situation, namely, the freezing of the water pipes, was satisfactorily overcome. All the w c.' s. are well warmed in winter, thoroughly ventilated and supplied with good apparatus. By means of a propelling machine placed in the centre of the house underground, the fresh, pure air from outside is introduced, warmed, into every part of the Hotel, and carried off by an expelling apparatus. There is accommodation for 500 guests and for each person 100 m^3 of air is pumped in from outside per hour. Every room has one supply pipe and two waste pipes, one close to the ceiling for the warm air and the other near the floor for the cold air. The ventilation can be regulated according to the time of year. Means have been devised also for impregnating the air which is supplied to the rooms with antiseptic gases and steam. By a special apparatus the air of the corridor, theatre and principal salon is mixed with artificial ozone, generated by the electricity left over from the electric lighting.

The climatic conditions of Maloja are in the main the same as those of the Upper Engadine. The Kursaal is pretty well sheltered from the north, east and south winds, and esposed chiefly to the north-east and south-west. The valley wind is, however, felt a good deal at Moloja, especially morning and evening, though it diminishes in force and frequency as soon as the snow covers the surrounding country. On the other hand, the heat of the sun is intense and it shines longer than at most of the other climate stations of the Alps, as as the following record taken on the 1 January will show:

	Sunrise	Sunset
Maloja	9.35	3.45
Pontresina	8.30	3.15
Wiesen	10.—	3.45
St. Moritz	10.—	3.05
Davos-Platz	10.03	3.—
Andermatt	11.45	3.15

The duration of sunshine according to *Tucker Wise* is in winter:

	Maloja	Wiesen	Davos	St. Moritz
on the 1. November	7 1/6 hrs.	7 1/3 hrs.	7 1/3 hrs.	—
„ 15. „	6 3/4 „	— „	— „	6 hrs.
„ 1. December	6 1/2 „	5 1/4 „	5 1/4 „	5 1/4 „
„ 15. „	5 1/4 „	5 1/12 „	5 1/2 „	5 1/12 „
„ 1 January	6 1/10 „	5 1/6 „	5 „	5 1/12 „
„ 15. „	6 1/3 „	5 5/6 „	5 1/2 „	5 1/3 „
„ 1. February	6 5/6 „	7 1/4 „	6 1/3 „	7 1/12 „
„ 15. „	7 1/8 „	7 4/13 „	7 3/4 „	8 1/12 „

The winter at Maloja is somewhat longer than at Davos, which has its advantages for patients who with to proceed afterwards to lower stations as the spring is then further advanced. The climate of Maloja may be described as stimulating and strengthening, adapted especially for these who need recruiting, for nervous debility, mental over-work, poverty of blood, failing digestion and want of nutrition; also as a winter cure for hereditary tendency to and incipient phthisis, except in very delicate cases.

Hotel Kursaal contains 280 lofty, spacious, very comfortable rooms, a splendid dining room to seat 600, a large restaurant, reading, conversation, billiard, concert, and ball rooms, a theatre, 2 passenger lifts, 20 bathing cabinets. A Band; croquet and lawn tennis; fishing; gondolas. The iron and gypsum spring close by has not yet been officially analysed. — Smaller hotels: *Malojakulm, Wettstein, Longhini.*

Physicians (English): *Dr. Tucker, Wise.*

Proceeding from Maloja in a south-westerly direction the crater-shaped *Valley of Bergell* is reached, which on its southern side betrays its Italian character. Here lies **Promontogno,** 819 m. above the sea, a summer resort; there is a large chestnut wood near; the climate is mild, and it is suited as an intermediate station in the Upper Engadine for spring and autumn cure.

Hotel Bergeller Hof. — Physician: *Dr. Zendralli.*

Soglio, 1088 m. above the sea, on an elevation at the right side of the Valley, suited as an air cure on account of its being sheltered from the north wind and its sunny situation. Air Kurhaus *(Hotel and Pension Giovanoli).*

Castasegna, on the Italian frontier, quite surrounded by southern vegetation, with a Swiss meteorological station. *Swiss Hotel.*

Le Prese, 962 m. above the sea, a climatic station with a sulphur spring. Season June 1 to Sept. 30.

The spa is at the north end of the lake of Poschiavo, and can be reached from Pontresina hy the Bernina Pass, and from Colico on the lake of Como via Sondrio by carriage (diligence communication with the Engadine twice daily). The climate is very mild; the mean summer temperature (June to September) is 15° C., and the variations are very slight.

The sulphur spring which contains gypsum shows a temperature of 8,1° C., a specific gravity of 1,000,263, and has, according to *Dr. Wettstein's* analysis 3,05977 fixed solids in 10,000 parts of water, of which the principal are: sulphate of lime 1,25079, sulphate of potash 0,21794, chloride of calcium 0,10867, hyposulphite of magnesia 0,15151, bi-carbonate of magnesia 0,94697, bi-carbonate of ferrous oxide 0,03014, besides some free carbonic acid and sulphuretted hydrogen gas.

The Lake of Klönthal (Ct. Glarus).

The water is used for the bathing and drinking cure for scrofula, rheumatism, gout, metallic poisoning, chronic catarrh of the respiratory and digestive organs, of the bladder and sexual organs, chronic skin diseases, hæmorrhoidal affections. Spacious, comfortable Kurhaus. — Physician: *Dr Marchioli.*

Close to the boundary of the Grisons high up in the Veltlin Valley, lies

Bormio, 1435 m. above the sea, with a hot gypsum spring of ancient renown. An Alpine cure. Season, June to Sept.

Both the *old* and *new Bad* (Councillor von Planta) are provided with every apparatus for the water course. The spring, the temperature being 39° C., is used for the bathing and drinking cure; douche and inhalation arrangements, medical gymnastic apparatus, mud baths, whey and grape cure.

Bormio is recommended for: chronic skin diseases, scrofula, gout, rheumatism, malaria cachexia, sexual diseases of women, nervous diseases (hysteria, paralysis), chronic catarrh of the respiratory organs.

Physician: *Dr. Reali,*

Leaving the southern (Italian) border of the Grisons, turning towards **Ct. Glarus,** we come first to

Weisstannen, 997 m. above the sea, a high Alpine village of Weisstannenthal which is watered by the foaming Seez. It is a delightful health resort for those needing rest. *Gasthaus Alpenhof.* 3 hrs. above the railway station *Trübbach* is the **Kurhaus Balfries,** ¼ hr. distant from the top of the Balfries, in the midst of beautiful pine woods, sheltered from cold blasts. Country inn, plain but good.

Wallenstadt, 427 m. above the sea, on the upper, eastern bank of the Wallen Lake, close to the southern base of the Churfirsten, is a picturesque little town of 2,700 inhabitants, with magnificent scenery around; a favourite summer resort.

Hotels: *Seehof; Hirsch; Krone; Churfirsten.*

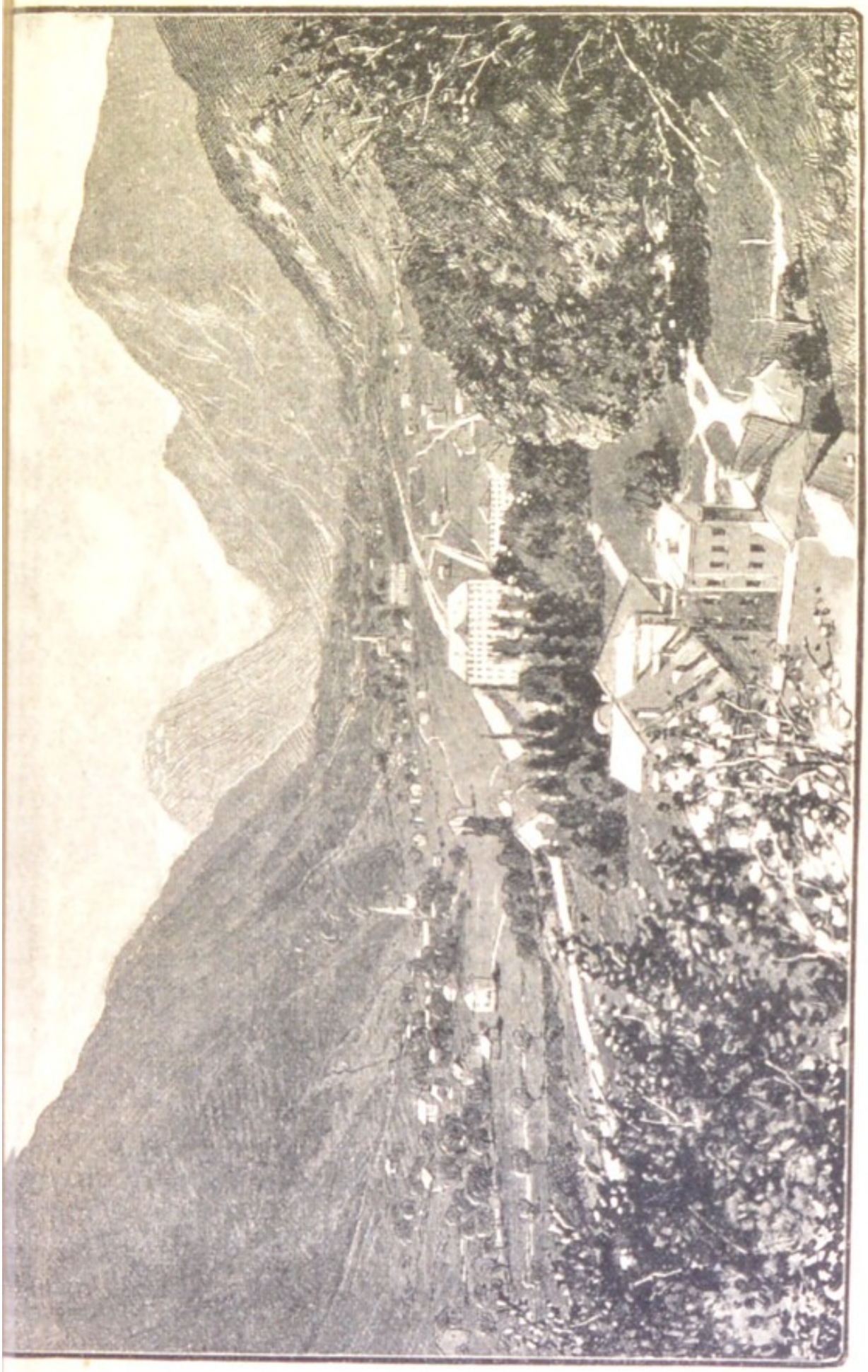
Murg, in a romantic spot at the end of the Murg valley, on a small tongue of land. It is a village of 1800 inhabitants; station ¼ hr. from Wallenstadt; very mild climate; delightful surroundings; luxuriant vegetation (nut and chestnut trees); favourite summer resort for those who need recruiting.

Hotels: *Hirsch; Rössli; Schiff.*

Mühlehorn, a picturesque village on the lake, situated on a peninsular. Very mild climate. Lake baths. Cow's and goat's milk; whey. — *Gasthof and Pension Seegarten.*

Obstalden, 683 m. above the sea, an air cure, the right bank of the lake of Wallen, on a pleasant sunny spur of the Kerenzerberg, with a very fine view of the lake and the majestic rocky sides of the Churfirsten; can be reached from Mühlehorn station in ¾ hr.

Wesen, 425 m. above the sea, an air cure, at the west end of the lake of Wallen, in a beautiful situation, and with the climate of the Insubrian lake zone. Pomegranates, oleanders, figs and tulip trees flourish out of doors in the winter. Wesen is specially suited for delicate patients with affections of the respiratory organs and larynx, needing great care, for convalescents, and those in want of quiet. Lake baths; milk and whey cure.



The Linththal Valley and the Baths of Stachelberg. Ct. Glarus.

Hotel zum Schwert with a well managed bathing establishment. *Hotel-Pension Speer.* — Physician: *Dr. Schneider.*

Niederurnen, close to Ziegelbrücke station, with a Spa on the Bilten road with an earthy mineral spring, used by the natives for gout, rheumatism, and women's diseases.

At **Mollis** is the *health establishment Hattli,* belonging to *Bergfeld,* the natural-healing physician; in connection, the *old spa,* and by the Linth bridge the *new spa* (Neues Bad zur Linthbrücke) with a mineral spring containing iron and sulphur.

Glarus, 454 m. above the sea, capital of Canton Glarus, with 5,600 inhabitants, at the foot of the pyramid shaped Vorderglärnisch. It is a fine, town-like village with broad streets and modern building. On account of the rapid and great changes of temperature Glarus is not suited for a climate cure, but it is a very popular place among tourists. — Hotels: *Glarnerhof; Rabe.*

Richisau, 1070 m. above the sea, air and whey cure in the *Klön Valley:* can be reached from Glarus and Netstal as far as *Vorauen* by carriage and thence by bridle path. The situation is very picturesque, and it is sheltered on the north, west and south. It is specially recommended for those needing recruiting, for convalescents, for catarrh of the stomach and nervous dyspepsia, poverty of blood, scrofula, obesity, and depression of spirits. — *New health establishment.* (Stähli).

Bad Stachelberg,

664 m. above the sea, has an alkaline sulphur spring *(Fr. Glarner,* proprietor) Season May to October.

Route: From Glarus in ¾ hr. by rail to Linththal station and thence in 5 min. to Bad Stachelberg (Omnibus at the railway station).

This health resort, which has been known since 1830, is on the left bank of the Linth, at the foot of the Braunwaldberg, it is bounded on the north and west by groups of maples and firs, but is open on the south and east, and commands beautiful views of the giants of the Tödi range with their spurs and their eternal snowfields and glaciers. From the spacious balconies at the front of the building an incomparably beautiful panorama is seen: the foaming Linth at the bottom, in the foreground the pleasant village of Linththal with its two churches, adjoining the village green pastures and meadows dotted with cottages and chalets, and in the background the mighty mountains and glaciers. Opposite the grand front is a large garden withfountains, grottos, trees, a pavilion, and a large croquet ground near, the whole surrounded by a well-laid, shady walk with a pavilion and tempting nooks with seats. On the south-west a little wood with maples of a century's growth affords shelter from the sun, and the foaming Brumbach, dashing wildly out of its narrow gorge, gives a grateful coolness. By way of amusement there are a bowling alley, stand for gymnastics, swing, playground, etc.

More to the north-west, on a hilly spur of the Braunwaldberg, there are numerous smoothly-kept and gently rising paths through the beech and fir woods which are very extensive. Seats and in-

viting resting places have been arranged so as to command the best points of view, and the spot is a favourite one both for the healthy and the invalid. Owing to its mild, Lower Alpine climate and sheltered sunny situation, Stachelberg is a good climatic station for sufferers from affections of the chest and nerves, for those who are convalescent or who need rest.

The means of cure ordered by the physician according to individual cases are: sulphurous water, milk and whey, warm and cold baths, douches of all kinds, and the various foreign mineral waters.

The mineral spring rises about a mile and a half above the spa in the romantic gorge of Brumbach. The special characteristic of the water is that the sulphuretted hydrogen gas is not merely diffused in the water but is formed into an alkali or alkaline earth, what is called Hepar. The temperature of the water is 6,1—9,5° C., and the specific gravity 1,000,39. The spring flows very scantily, only delivering, on an average, 51,4 liters of water per hour.

Dr. Simmler's analysis gave in 10,000 parts of water:

Free sulphuretted hydrogen	0,022
Sulpho-hydrate of sodium	0,686
Sulpho-hydrate of calcium	0,305
Hypo-sulphite of soda	0,169
Sulphate of soda	1,438
„ „ potash	0,042
Chloride of sodium	0,056
Bi-carbonate of lime	1,041
„ „ „ magnesia	2,323
„ „ „ lithia	0,051
Phosphate of alumina	0,046
Silicic acid	0,123
Organic substances	0,838
Total of solid components	7,140
Gases:	
Free carbonic acid	0,872
Semi-Free carbonic acid	1,136
Nitrogen gas	0,201

The mineral spring is used for bathing and especially for drinking in the following diseases:

1. Chronic skin disease and exudations.
2. Scrofula, affections of the glands and bones, tumours.
3. Chlorosis, leucorrhœa, menstrual anomalies.
4. Chronic catarrh of the respiratory organs, of the throat, and stomach, dyspepsia with obstruction of the liver and biliary ducts.
5. Chronic affections of the bladder, uterus and vagina.
6. Chronic rheumatism and gout.
7. Nervous complaints: hypochondria, hysteria, neurosis, neuralgia, paralysis.
8. Lead and quicksilver poisoning.
9. Latent syphilis.

It is contra-indicated in: febrile complaints, tendency to plethora and to acute congestion, organic heart-disease, aneurism, general dropsy, advanced tuberculosis. — Physician, *Dr. König.*

The **Bade Hotel** consists of four blocks of buildings connected by corridors and galleries; it contains 150 comfortable rooms and salons, a newly-built, elegant, and tastefully decorated dining-hall for 350 persons, ladies' drawing-room, conversation-room, smoking, reading, and dancing salons, large restaurant and billiard room, with shady verandahs. Seven minutes from Stachelberg is the Dépendance Secken, a pretty chalet, built in 1884, in the Swiss style with 18 large rooms, 3 with separate balconies, beautiful gardens, and a splendid view. The establishment is in every respect very good and is conducted on sound principles. The bathing house contains 24 bath-rooms; the baths are principally of wood, a few of zinc and one of marble; the newest douching appliances are provided — Scotch, Brause's graduated douches, and local douches. The whole establishment is supplied with water from the Brumbach. Well-flushed w. c'. s. Tariff for boarding and rooms very moderate

Walks and excursions. In ¾ hr. along a level road or footpath to the Falls of Diesbach. In ¾ hr., along a very shady footpath, to the lower Falls of the Fätschbach and the Schreyenbach (1¼ hr.); in 1—2 hrs. to the two upper Falls of the Fätschbach, the finest in Switzerland. The path is a new one. In 2 hrs., through the wildly-romantic gorge of Durnagel, to Durnachthal and the Hinterholz Glacier (4 hrs.). In 1½—2 hrs., through the Brumbach Gorge to the Braunwaldberg. In 1½ hrs to the Nussbühl. In 2 hrs to the Pantenbrücke; in 5—6 hrs to the lower and upper Sandalp; in 7 hrs to the Club hut on the Grünhorn, on the way to the Tödi (3623 m.).

Hotel Tödi 817 m. above the sea, air and whey cure, in the furthern most southern end of the Linththal, 1½ hrs. from the village of Linththal by a good high road. Owing to its sheltered situation from the north wind and the magnificent mountain world amid which it lies, the Kurhaus is very popular and much frequented.

IX. The Health Resorts of Canton Ticino.

No other canton in Switzerland presents such great contrasts both of scenery and climate as *Ticino* which, shaped like a fan, extends from the lone, lofty Pass of the St. Gotthard to the Hesperian shores of Lake Maggiore. Here the eternal snows and the rigid ribs of the glaciers, there olive groves and almond blossoms. Zschokke describes this picturesque contrast in the following poetical manner: "It is not easy to imagine a more agreeable surprise than that which awaits the traveller when, borne by the fleet mountain steeds, he is transported in a single day from the Bernhardine or Gotthard Pass to the glorious vestibule of Italy. There, on the banks of the Ticino the northman in his untamed independence and lusty strength woos the gentle zephyrs and luxuriant colours of the beautiful south, like a rugged warrior embracing a lovely bride."

Canton Ticino is divided by the low range of Monte Cenere into a northern and a southern portion — Cis-cenerian, and Trans-cenerian Ticino. To the former belong the High Alps (the Sopra-cenerian mountains); to the latter, the Lower Alps (the Sotto-cenerian mountains); in the former are the towns of Bellinzona and Locarno, and the northern portion of Lake Maggiore; in the latter, Lugano, Mendrisio, and the picturesque Lake of Lugano stretching out angle-wise. The population of the whole canton is about 120,000, Italian being the native tongue. Italian vivacity and the easy good-nature of the south characterise the people. They live simply but comparatively well, though their homes and the household arrangements show little regard for hygiene. There is a good deal of intellectual activity among them, especially in the domain of art and architecture, as is seen by the number of famous artists. An academy of arts with a subvention from the Government is shortly to be established before long in Canton Ticino.

The public health is good on the whole. The fever which until 1868 used to occur so frequently in the neighbourhood of Locarno has quite disappeared; in that year the swampy ground, owing to an inundation, was quite filled up with sand and rubble, and converted into a beautiful green meadow with tall trees. In summer it is a favourite walk. Isolated instances of malarial fever sometimes occur at Cadenazzo and Condola; typhus, also, may be induced by want of cleanliness, but its appearance in this district is very rare.

The climate, especially in the neighbourhood of the lakes, is very like that of Italy, but it is not a Mediterranean one. The vegetation, on the other hand, is thoroughly Italian: figs, pomegranates, cypresses, almonds, mulberries, maize, grapes, and many

other specimens of the Mediterranean flora, flourish most luxuriantly. The skies are clear, the heat of the sun is intense, and there is protection from the north-east wind, while the amount of moisture and abundance of water is something quite unprecedented, as is seen by the unbroken chain of large and beautiful lakes. These materially increase the mildness and equability of the climate and the amount of moisture in the air in their immediate neighbourhood. The rainfall in Ticino is, in consequence of the nearness of the mountains, very great; the yearly average being, at Lugano 157 cm., at Stabio 167, and at Bellinzona 180 cm. The most rain falls in spring and autumn; very little in summer and winter. Clear, bright summers and splendidly sunshiny winters are, therefore, the rule in Ticino. The mean annual temperature is 11—12° C., the mountain wall of the Alps sloping southward exercising a very marked sheltering influence.

There are only two mineral springs in Ticino of therapeutic importance, namely, the sulphur spring of Stabio and the ferric acidulous spring of Rovio. These have long been used for purposes of cure. But owing to the beautiful mild climate and protection from the wind, there are a great many much prized climatic stations, and two high health resorts, which the new railway through the Gotthard will probably render still more frequented. In the *Val Piora*, 2½ hrs. from the first Gotthard station, **Airolo** *(Hotel Post; Hotel Airolo; Hotel Lombardi)* lies

Hotel Piora, 1839 m. above the sea, an air cure, on a rock, overlooking the emerald-green *Lake of Ritom*, surrounded by splendid mountains, and with a very mild, equable climate. The wind never blows from the north, the east wind is very rare and of little force, and the rain-bringing south-west wind is the only one felt. Fogs are almost unknown and of very short duration. The mean monthly temperature in June is 11° C., in July 13,5; in August 12,3; in September 7,9. Piora is especially adapted for: debility, poverty of blood, and convalescence, in cases where there is sufficient rallying power to stand the strong mountain air; also for mental over-strain, nervous exhaustion, impaired digestion (nervous dyspepsia) the remains of pleurisy, and incipient phthisis. — A well-appointed *health-establishment*. Lake baths. Excellent drinking water. Cow's and goat's milk.

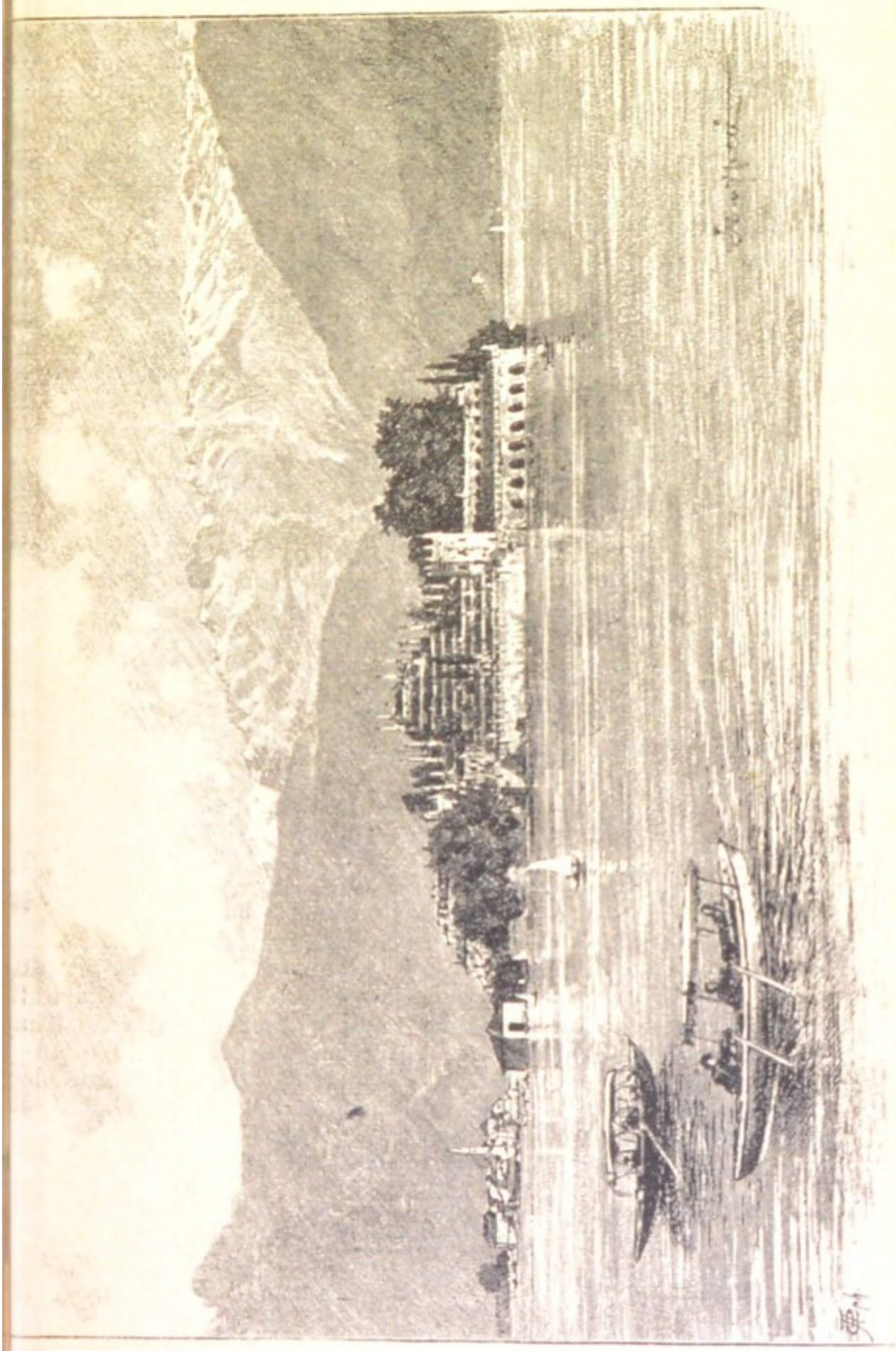
Faido, 712 m. above the sea, a summer resort, the chief place in Val Leventina, with about 800 inhabitants, lies in a lovely green valley, quite Italian in character, with two beautiful waterfalls, woods, and picturesque surroundings. The climate is very mild, the air pur and fragrant, and vegetation abundant and luxuriant. Faido is a station on the Gotthard line.

Hotels: *Hotel Pension Prince of Wales; Angelo; Hotel Vella.*

Biasca, a railway station, and the terminus of the great post road from Disentis over the *Lukmanier Pass*, the chief place of the district of the Riviera, with about 2000 inhabitants. It is in the region of the fig and the mulberry.

Hotels: *Hotel Biasca; Posta; de la Gare.*

The road leads form here to



Isola Bella (Lago Maggiore).

Bellinzona, the chief place in the Canton with about 3500 inhabitants. The town is defended by three defiant fortresses, besides modern fortifications. It is the junction of the roads from the St. Gotthard and Bernhardine to Lugano and Lake Maggiore. The place is not used as a climatic station.

Hotels: *Hotel Bellinzona à la Poste* (Motta, frères); *Hotel de la Poste* and *Schweizerhof* (Ant. Forni).

Locarno, 210 m. above the sea, a climatic station, on Lake Maggiore, 3/4 hr. by rail from Bellinzona.

The town, which has about 3000 inhabitants, is picturesquely situated in a wide bay of the lake, partly on the shore and partly on an acclivity. It is open to the north-west and to the mild breezes from the south. In the back-ground are wooded heights, on one of which was the fine old Minorite monastery, *Madonna del Sasso*, formerly a place of pilgrimage. The terrace there commands one of the most extensive views in the neighbourhood. The amphitheatre-like town is surrounded by the luxuriant tree-growths of Italy — grapes, figs, citrons, and mulberries. The climate, accordingly, is very mild, and the most uniformly warm of any in Switzerland.

The mean yearly temperature is 11,93° C., the mean monthly temperature in January (from observations of 6 years) is 1,65° C. the mean minimum —5,0, mean maximum 9,5, February 4,80, mean minimnm 2,2, mean maximum 14,9; March 7,18, mean minimnm 0,7, mean maximum 19,3; April 11,49, mean minimum 4,8, mean maximum 21,2; May 15,32, mean minimum 7,4; mean maximum 26,2; June 20,28, mean minimum 12,5, mean maximum 29,8; July 23,1, mean minimum 15,7, mean maximum 32,3; August 22,2, mean minimum 14,6 mean maximum 30,8; September 17,5, mean minimum 10,2, mean maximum 26,8; October 11,6, mean minimum 3,0, mean maximum 21,2; November 6,1, mean minimum —1,4, mean maximum 14,7; December 2,0, mean minimum —3,8, mean maximum 12,0. The mean amount of cloud in January, February, July, August, September, and December is 1,2 to 6,0, and rarely more than 3,0, to 4,0; but in March, April, May, June, October and November it rises to 7.1. the rainfall is heaviest in March, April, May, August, September, October, and November, in which months, accordingly, there are the greatest number of cloudy days. Towards the end of the autumn or in the middle of the winter a thick fog sometimes rests on the lake, and envelops the lowest part of the shore; otherwise fogs are rare; snow, too, appears very seldom (most in January) and only remains a short time.

Locarno is especially adapted as a climatic station in late spring and late autumn, because there are the greatest number of bright sunshiny days in those seasons; it is also a capital transition place to and from the south. Locarno is indicated in convalescence, weakness — especially of old age — rheumatism, chronic bronchitis, particularly of the dry irritable kind, and in chronic pneumonia. At Navegna, 20 minutes below Locarno, is an unused ferric acidulous spring.

Hotels: *Grand Hotel Locarno, Corona, Great Crown Hotel, Albergo Svizzero.*

Walks and excursions. In 1/2 hr. to the Madonna del Sasso where there is a fine view; an excursion much to be recommended. In 3/4 hr. to the Monte della Trinita with a good view of the lake; 1 hr. higher up to the Kapelle San Bernardo commanding an extensive panorama of the lake and mountains. 1 hr. to the Ponte Brolla over the romantic rocky gorge of Maggia. 3 1/2 hrs. by carriage to the fine waterfalls of Maggia *(Soladino and Bignasco)*. Excursions by steamer: for instance, to the Islands: *Borromese.*

Lugano,

275,5 m. above the sea, a climate cure on the Lake of Lugano.

Route: By fast train on the Gotthard line from Zürich in 6—7½ hrs., from Lucerne in 5⅓—6⅓ hrs., from Basle in about 8—9 hrs.

At the southern base of the great Alpine chain the spurs of the high mountains for an endless labyrinth of rocky ravines and high valleys

Midway between the Adda and the Doire lies the ever lovely region of the **Italian Lakes,** like a vast park compared with the monotonous plain of Lombardy. Nowhere else has nature brought the majestic, mighty mountains into such close conjunctien with the soft beauty of southern scenery, and the Italian Lakes have become therefore, the most sought after point of the whole civilised world.

The natural centre of this glorious district, and the one best adapted for excursions of all sorts in endless variety, is Lugano, situated between Lake Maggiore and Lake Como, especially as it is in communication with the south by a network of Italian railways and with the north by the universally known Gotthard line.

Zschokke has described with the utmost fervour this pearl of Italian lake scenery;

"Nestling on the bosom of the beautiful Lake 'Ceresio', in bewitching abandon, rests Lugano, the loveliest town in the disstrict with thoroughly Italian characteristics." Looking at it from the lake, surmounted by its semi-circle of beautiful hills, the shore dotted with picturesque hills, the shore dotted with picturesque villages, country houses and gardens, where the almond and olive, the peach and the citron mingle their hues, and vines trail their luxuriant branches over the edge of the still, clear waters, while on the south "like an extinct volcano, San Salvatore rars its crest to the clouds, it is easy to imagine with Bertoletti that one is looking at Naples."

Lugano emulates in loveliness the lake which winds along for 24 miles in zigzag fashion, presenting here a pretty cottage shaded by chestnut-trees, there an elegant villa, or again dark piles of rocks, or smiling villages between vineyards an maize fields.

The town itself with its churches, palaces, and public squares bears the stamp of sound prosperity.

A new attraction is the large quay, which spans the town in a wide arch stretching from the Hotel du Parc to the Casa Airoldi. This forms a promenade of rare beauty, end the evening Corso is very brilliant and lively.

Lugano, the largest town in Canton Ticino, with about 6,500 inhabitants, lies in an amphitheatre, at the north-western corner of a bay, close against green hills. One arm of the lake stetches from here north east-wards, another to the south-west. North of the city is the Valley of Cassarate, with which a broad chain of hills runs parallel, forming a shelter from the north wind. In the immediate background (about 2 hrs.) on the west and north are the special protectors of the Valley, Monte Camoghè, Monte Cenere, Tamar, Lemo, etc. On the east Lugano is sheltered by a long range of mountains 1000—1500 m. high. From the northern extremity of the city Monte Caprino looks as if it had been sent forward by Monte Brè to protect Lugano from the entrance of the east wind. South of Lugano, about ¼ hr. distant is the imposing mass of the rocky Monte San Salvatore, 1000 m. high, which shelters Lugano in hot weather from the south wind, the Breva, blowing pretty constantly from morning to evening, while permitting in winter the freest entrance to the sun's rays. Sometimes cold winds blow from the north, but only for a short time.

The following table is the result of 12 Years' Meteorological observations by Ferri in the Observatory of the Lyceum at Lugano.

Month	Average Monthly Minim. Temp 1865—1876	Average Monthly Maxim. Temp.	Average Monthly Temp. 1856—1859 and 1864—1876	Average Monthly height of the baromet 1856—1859 and 1864 1876	Average Monthly humidity 1858 1859 and 1864—1874	Average Rainfall 1865—1876
						Mm.
January	—1,54	6,46	1,25	738,76	77,4	75,4
February	0,02	9,57	3,58	738,7[illegible]	71,5	41,4
March	2,75	12,36	7,06	734,60	64,7	92,3
April	6,90	8,19	11,9[illegible]	735,68	63,2	148,6
May	10,56	21,29	15,65	735,89	70,4	158,9
June	13,97	25,05	19,68	725,97	68,1	220,6
July	16,49	28,24	22,29	737,03	67,2	152,7
August	15,46	26,72	20,90	736,93	70,0	171,6
September	13,20	24,17	17,81	738,63	74,4	139,1
October	8,28	17,93	12,54	737,35	76,0	173,7
November	2,72	11,69	6,06	736,89	75,0	128,9
December	—0,15	7,58	2,83	737,71	76,2	90,5
Mean of the Year	7,39	17,44	21,80	737,10	71,3	1593,9

Respecting the temperature the mean in winter is 2,6°, in spring 11,6°, in summer 21,0° and in autumn 12,1° C. The daily variations of temperature showed on an average between 1865—1876 as follows:

December	7,73	March	9,61	June	11,08	September	10,97
January	8,00	April	11,29	July	11,75	October	9,65
February	9,55	May	10,73	August	10,23	November	8,97
Winter	8,43	Spring	10,54	Summer	11,36	Autumn	9,97

According to the observations recorded above Lugano must be classed in spring and summer with those health resorts which have a fairly dry air, and in autumn and winter with those which have a tolerably moist one. The prevailing wind in winter is the north-west, which blows for days together. For the other seasons of the year it is difficult to assignany special direction to the wind, leaving out of account the local wind, though the north-west and south-west are the most frequent. As to rainfall 11—13 years of observation prove a small amount in Lugano (67, 76 in the year). Cloudy days are also much fewer than clear ones. The amount of cloud is in July only 3, 9; in the other months it varies from 4,0—5,0. The greatest amount of rainfall in the year is 1593, 9 Mm. on an average; of snow 44,6 Cm. which generally only lies a day or two. The largest amount of rainfall is in June, the smallest is in February. The specially rainy season occurs in Lugano, as in the neighbouring lakes, in the spring.

Lugano is noted for its mild climate and its clear bright weather, while the heat even in summer is seldom so great as to be unbearable. The air increases the appetite, assists nutrition, and has a soothing effect on the nervous system. The latter influence is owing in great measure to the beautiful scenery, the general feeling of restfulness and the absence of glare. The proverbial nervousness of the natives of Ticino must

be due to some cause other than the climate, for there is nothing irritating in the air.

There are innumerable driving and walking excursions in all directions. The walks in the immediate neighbourhood are not all dusty, and are skirted by fresh green hedges. The health of the city is good, the mortality being 1 in 40. Endemic diseases, proverly so-called, are not known, and there is no malaria.

The treatment at Lugano is further assisted by lake baths and warm baths in the *Hotel du Parc* and *Hotel Reichmann*, etc.

According to *Dr. Cornils*, Lugano is excellently adapted as a preparation for a southern climate which is recommended for so many forms of disease. As a winter residence it is a very good place for slight affections of the respiratory organs, and for assisting the process of nutrition and increasing the strength. As a permanent residence for all the year round it is suited to those whorequire a climate that is much the same summer and winter. Especially can it be recommended to those suffering with eye affections, as every where the eye rests on green, and even the lake is not at all dazzling.

Physicians: *Dr. Cornils* (who speaks English), *Dr. Readi* (German, Italian and French), *D. Zbinden* (Swiss German).

Hotels: On the west of the Hotel du Park from which it is only separated by the street is the charming **Villa Beau-séjour** (formerly Vassali) with its lovely flowers, towering, sweet smelling magnolias; magnificent Lebanon and Deodara cedars, cypresses, rare specimens of Lageostroemia Macrofila and Gingo-Bilaba (Salisbury), luxuriant camelias, rhododendrons and azaleas, in all their exquisite variety.

The gigantic bay trees which cast a deep shade over the piazzas, the wood sheltered from sun and wind in the romantic little valley (Valetta) behind the Palace, with its lake for swans, the picturesque rock work and the waterfalls afford refreshing coolness on hot summer days. A few steps from the garden over the little iron bridge lead to a wild, lonely ravine; which might well give rise to poetical inspirations.

A large estate in on of the most beautiful, spots in Lugano is the **Hotellerie Beha,** which speaks for itself; it is used as an hotel, open all the year round, and on account of its sheltered, warm situation is especially adapted for a winter residence. The salons and gardens of the Villa Beau-séjour are, of course, open to visitors at the Hotel du Parc, and a stay here will always be remembered with pleasure.

The **Hotel du Parc,** formerly known as a fine abbey, transformed by extensive alterations into a first class house, stands on the sady quay, at the south side of the town, on the pleasantest platz to be foundanywhere. On the north it is sheltered from cold winds by a gently rising range of hills.

The statue of Tell by Vela stands on the platz on a rocky pedestal with a running fountain. On the south side of the Hotel is a large park, and opposite, with only the street between, there lies on a tongue of land surrounded by a terraced garden, the pretty dépendance, the **Belvedere du Parc,** with an English chapel. The winnows and balconies of both houses command a view of the whole of the beautiful bay of Lugano. On the west side of the Belvedere, separated by a private house, is the **Casino;** along the lake is another dépendance with a large garden. frequiently hired as a private residence by families. The from there is exceptionally lovely.

Hotel-Pension Reichmann au Lac *(C. Reichmann-Oswald)*, a 3 storeyed, comfortable house, ½ hr. south-west of Lugano in the so-called Paradios standing by itself, the grand front facing the lake, close to the shore. It is aquient country spot, with large fine gardens diffusing aromatic odours around. In front are several balconies; it contains plenty of good sit-

ting rooms, a small library with newspapers of varies countries, a smoking room, 16 good bed-rooms and 30 beds, 3 salons, w. c.' s. tub baths There is a lake bathing establishment near. Beautiful arbours and shady nooks in the garden. Private boat, and the right of fishing in the lake. Various amusements, musical evenings. Pension with room 6—8 fr. (including attendance) according to the floor. Breakfast 1 fr. 25; dinner without wine 3 fr. 50; super 2 fr. 50; servants' board 5 fr.; room from 2—3 fr. Good, abundant table. From the beginning of March to the end of October the Hotel-omnibus goes to the railway station.

Other hotels: *Hotel National* in an elevated situation with a fine view; a tasteful house; *Hotels Washington, Lugano, Suisse, Beauregard, Belvue and Beau-Rivage.*

Pensions: *Zweifel; Flury; Induni: Grütli; Villa Castagnola.*

Walks and excursions: 1/2 hr. boat to the Caves of Caprino, a little further south to Cavallino with a waterfall; to Campione (steamboat pier) and Melide. 3/4 hr. to Osteno (a gorge and stalactite grotto). Excursions to the hills; to Paradiso and San Martino; in 25 min. to Sorengo; 1/4 hr. to Montagnola with the interesting Roccolo (Vogelheerd-Thurm), and splendid view from the roof of the tower. 2 1/2 hrs. journey round San Bernardo 2 1/2 hrs. round Monte Salvatore 2 hrs. up Monte Salvatore (909 m.: 2 1/2—3 hrs. up Monte Bre (930); 2 hrs up Monte San Bernardo 701 m.; 1 1/2—2 1/2 hrs. to Lanzo up Monte Caprino; 1 1/2 hrs to Santa Maria d'Iseo (774 m.,) a very good point for a view of Lake Maggiore

Soragno, 380 m. above the sea, a climatic health resort, 3/4 hr, from Lugano going via Trevano and Davesco, or by footpath via Pozzalino and Pregassone. It stands on a terrace at the base of Monte Boglia, surrounded by chestnut tres and vineyards with a beautiful vew of the Cassarate valley. Soragno has a more sheltered situation thau Lugano; the mean winter temperature is 2,6° C.; spring 11,6°; summer 21,0°, and autumn 12, 1° C. Excellent spring water. Warm baths. Milk cure. Inquiries may be directed to *Dr. Cornils. — Pension Therapia.*

Hotel Monte Generoso, 1209 m. above the sea, air, milk and whey cure on the southern slope of monte Generoso (1695 m.) the Rigi of Italian Switzerland, 2 1/2 hrs. north above the **Mendrisio,** railway station (*Hotel Mendrisio).* The position of Hotel Monte Generoso is exceptionally fine and the view lovely. Shady thickets near. The climate is temperate and the air very pure and refreshing. It is adapted for those needing to recruit their health, for convalescents, and sufferers from nervous irritability and mental strain. Proprietor and medical director: *Dr, C. Pasta.*

Rovio with a weak acidulous iron spring, between Mendrisio and Lugano, on an easily ascended height on the left bank of the lake, in a beautiful situation sheltered by mountains and woods The spring is used especially for catarrh of the stomach, nervous headache and giddiness (taken internally).

Stabio, 389 m. above the sea, with a sulphur spring Season June to September.

Stabio is in the district of Mendrisiotto, which stretches westward of Mendrisio in the broad plain of the Campagna Adorna, at the base of the hills Castello and Castelletto. The surroundings of Stabio are very picturesque; the air is healthy and the climate temperate. The fruitful soil and sunny sky favour luxuriant vegetation.

The sulphur spring rises in various parts of the white Dolomite shaped spur on which lies the Oratorio de Castello. The chemical analysis of *Prof. Frederigo Biraghi* (1880) gives in 10,000 parts:

Sulphuretted hydrogen	1,157
Carbonic acid	0,766
Chlorine	3,811
Sulphuric acid	1,501
Silica	0,015
Lime	1,710
Magnesia	1,100
Soda	2,649
Ferrous oxide	0,010
Organic substances	0,470

The temperature of the spring is 12,5° C., the specific gravity 4,5° C. of 1,005.

The sulphur water is used externally and internally for women's diseases: amenorrhœa, dysmenorrhœa, fluor albus, tendency to formation of boils, varicose abscesses of the feet, rheumatism, liver complaint, hæmorrhoids, scrofula metallic poisoning, chronic catarrh of the bladder. The diet is the same as that at sulphur spas. Patients at Stabio must take special care to avoid chills after bathing and to provide themselves whith suitable, not too light clothing.

There are three large and two smaller Kurhotels *Stabilimento Maderni*, (Sociale and Ginella); *Stabilimento Mola* and *Albergo dello Stabilimento*. At Stabilimento Ginella is an acidulous iron spring containing 5,617 fixed solids in 10,000 parts water: the principal being sulphate of soda 1,132, carbonate of lime 2,152, chloride of sodium 0,963, carbonate of magnesia 0,919, carbonate of ferrous oxide 0,092. It is used in combination with the sulphur spring for the drinking cure.

Arth-Rigi Railway.

Rigi via the Gotthard railway.

Opened in 1875 as a way to the health resorts

The shortest and most direct railway communication with **Berne** and **Basle** to **Lucerne** (via rail and lake), **Schaffhausen** and **the stations on the lake of Constance** (Arlberg route), from the **Engadine** and the **east** of **Switzerland** to Zürich, Zug and Rigi-Kulm. — From Zug either via **Lake of Zug-Arth** or **Rothkreuz** (Gotthard line to **Arth-Goldau**, or to the south direct by the Gotthard railway by way of **Arth-Goldau.**

Through tickets for **passengers** and **luggage** at the principal stations of the German, Swiss an Italian railways.

Carriages are closed and warmed in spring and autumn and can be shut when the weather is wed and chilly.

The **Rigi** is the centre for the enjoyment of all the incomparable beauties of Swiss scenery and no Swiss tour is complete without a visit to it.

The **Arth-Rigi railway** is a branch line of the Gotthard railway and is in junction with all the branches of the latter; thus affording a direct communication with Rigi Kulm and the health resorts on the Rigi from all parts of the world. — The mountain ride by Arth-Rigi railway, with the varied views it affords, the magnificent scenery through which it passes, and the sudden opening up of the world-renowned Rigi panorama at Rigi Staffel, is in itself a pleasure which the traveller never forgets. For travellers from the **Arlberg**, Glarus, the Grisons, etc., there is a junction at Einsiedeln with Arth-Goldau. — At Arth, on the Lake of Zug — that beautiful and picturesque lake — and at Arth-Goldau, there are exellent hotels with moderate charges.

Rigi

Cable railway Vitznau-Rigikulm.

Ordinary railway Rigi-Kaltbad-Scheideck.

From the 1st **of May** five trains run daily in both directions; after **June 1st** there are nine daily up and down the mountain. Extra trains if required. After **June 15th** there is a junction with the **Kaltbad-Scheidegg-railway**, the highest and most interesting railway line in Europe. In the early part of the year there are closed and heated cars. Special carriages for extra trains. To **Rigi-Känzeli** (Kaltbad), **Scheidegg** and **Kulm**, the most magnificent and worldrenowned view.

The tour of the Rigi viâ the Lake of Lucerne-Vitznau is preferred by most travellers because of its directness, shortness and cheapness and the incomparably beautiful scenery through which it passes. This route is regarded as by far the best. — Railway station restaurant and hotel at Vitznau. — **Direct communication** with all lines to **Lucerne** and **Flüelen.** — Single and return tickets are issued on the steamers to **Kaltbad, Scheidegg, Staffel** and **Kulm.**

Return tickets at reduced fares.

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