arranged in an L-shape. The one block contains in the ground floor a medicine theatre with seats for 326 students; under it, in the basement, is a gymnasium and other rooms, and over it an anatomical theatre with seats for 230. Adjoining each theatre are convenient preparing and professor's rooms and lavatories. The theatres are approached by ample staircases of stone and iron, and every part is well lighted.

The other block contains the working rooms and museums, hereafter more particularly specified. In the basement are spacious anatomical stores, approached by a subway, servants' latrines, chamber for the heating apparatus, and several spare rooms, all entered from the quadrangle.

The ground floor is entered from Great Charles Street, and on one side of the entrance hall is a room for students' lavatories and lockers, and on the other side the dean's room, the staircase, and hall. Further down the corridor are the janitor's rooms, and yard, and beyond, near the medicine theatre, is the pathological museum, 47 feet by 45 feet, lighted from the top over more than half its area. Near the end of the medical corridor is the staircase by which the theatres are approached. On this floor also are latrines for students and for professors, and a hall from which the bridge to the old College is entered.

On the first floor are materia medica and public health and anatomical museums, 35 feet 6 inches by 32 feet and 46 feet by 20 feet respectively, and, adjoining the lift, the prosector's preparing room and a demonstrator's room. On the same floor, adjoining the theatre block, are a dental museum and laboratory and a bacteriological laboratory.

On the second floor is the dissecting room, 91 feet long by 21 feet wide, extending in one part to 34 feet wide, and with an area of 2,180 square feet, and adjoining are the demonstrator's room and the lavatory and coat room. The plan is very similar to that of the Anatomy School at Cambridge. The whole of this department is lighted from the roof, the lights having a nearly north aspect. The walls are lined with white glazed tiles, and the floor is of Seyssell asphalt with falls and surface gutters to the drains, so that the whole of the roof, walls, and floor can at any time be washed from a hosepipe.

The new building thus provides a very complete, spacious, and conveniently-arranged set of rooms, fitted up with all necessary appliances for the work of a modern medical school. The architects, Messrs. Cossins and Peacock, of Birmingham, have provided an ample system of ventilation, and the building will be warmed by a low pressure system of hot water pipes.

NOTES ON HEALTH RESORTS.

IX.—OROTAVA.

By GEORGE VICTOR PEREZ, M.B., M.R.C.S.,
Puerto Orotava.

OROTAVA, in the island of Teneriffe, the largest of the Canary group, had been visited from time to time by a stray wanderer in search of health even before it found a *vates sacer* in M. Gabriel de Belcastel. That gentleman's pamphlet¹ was a votive offering of gratitude for the restoration to health of a member of his family, who, after a stay of three years in the Orotava Valley, was cured of phthisis. The disease was so far advanced that the leading physicians of the day in Paris agreed in pronouncing the case hopeless. So thorough was the cure that the patient still lives to bear witness to the healing virtues of the Orotavan climate. Twelve years ago further testimony to the excellence of the climate was given by Professor Jaccoud, of Paris, who, however, pointed out that the natural advantages of the place were counterbalanced by the want of accommodation of the kind required by European visitors. This criticism was, it must be admitted, fully justified at the time; and M. Jaccoud's remarks gave the first stimulus to the development of Teneriffe as a health resort. My father, the late Dr. V. Perez, called attention (in the *Revista de Canarias*) to the exceptional position occupied by Teneriffe in having, with the narrow compass of its own shores, the two varieties of climate—sea and mountain—most suitable for persons suffering from chest affections. As the result of his untiring efforts, a local hotel company was

started, and a beginning was made in the provision of comfortable accommodation for invalids.

It was Mr. Ernest Hart, however, who really laid the foundation of the fame of Orotava as a health resort by his letters first published in the BRITISH MEDICAL JOURNAL in 1887, and afterwards republished as a pamphlet.² Mr. Hart's brilliant description of the natural charms and climatological excellences of Teneriffe caused an afflux of visitors in the following season too great for the resources of the place, which was not yet prepared for the popularity thus suddenly thrust upon it. Orotava, however, was not slow to profit by this indication of the great possibilities before it, and since 1888 the accommodation for invalids has increased and improved to a degree that makes it equal, if not superior, in that respect to any new health resort in the world. Intending visitors have now a choice of several first-class lines of steamers, sailing, as a rule, every week from Southampton and Plymouth alternately, which make the passage in from four and a-half to six days. Those to whom expense is an object may prefer to travel by the old-established Liverpool boats which call at the Canaries on their way to the West Coast of Africa. By this route, a return ticket, available for one year, costs £15.

The most favoured spot in Teneriffe is the valley of Orotava, which might almost be thought to have been designed by Nature as a harbour of refuge from the storms of ill-health. The ground rises at first with a gentle slope, and, after having attained an elevation of 2,000 feet, shoots up rapidly to the *Cordillera*, or range of mountains going across the island, which here averages from 7,000 to 9,000 feet in height. On the east and west sides two high ridges, fully ten miles apart, descend from the *Cordillera* towards the sea, enclosing between them an amphitheatre rather than a valley. Thus guarded on three sides from the winds that might otherwise occasionally visit it too rudely, it opens out on the northern side to the Atlantic, getting the full benefit of the pure, soft, and invigorating ocean breezes. The "balmy trades" which fan Orotava begin to blow some hours after sunrise, and cease some time before sunset, when they are replaced by the southern land wind. When the north-east or trade breezes begin to be perceived, small clouds form in the mountains, which soon coalesce, and about 11 A.M. the upper parts of the island are generally covered by a "parasol" of cloud. No doubt in this latitude, where even in winter the days might be unpleasantly hot, with a clear sky in the middle of the day, this cloud phenomenon is very welcome, and enables invalids to be in the open air when the strength of the sun would otherwise keep them indoors.

The comparative warmth of the night wind has doubtless a great influence on the remarkable equability of the climate of Orotava. The reason of this is that the air has to descend from a height of 7,000 feet, and in reaching lower strata is condensed, and, in doing so, becomes warm; no doubt, also, the heat absorbed by the ground during the day is gradually given off to this descending air. The almost clock-like regularity of the trade winds is very unfavourable to cyclones, and storms are very rare at Orotava. From May to August it does not rain, and in the rainy season the rainfall is very small—the average for ten years being only 13 inches, while that of Madeira is nearly 30. The average number of rainy days at Orotava is 51.

The table of comparative records of sunshine will serve to show the remarkable equability of the climate of Orotava throughout the year. The "means" for Orotava are those registered by Mr. Perry, at the Sitio de Cullen; the readings for Jersey and Southbourne are taken from a pamphlet entitled *Ten Years' Sunshine in the British Isles*, published by the Council of the Meteorological Society. These two places stand highest in respect of sunshine of any mentioned in the records there given.

These figures show that the months in which the sunshine almost reaches vanishing point in England hardly differ appreciably from the others in Orotava; in other words, there is during the winter months between two or three times as much sunshine in Orotava as at Jersey, and more than ten times as much as in London. As regards temperature, between the coldest and the warmest month there is a difference of only 14° F. The mean temperature for the winter (November, December, January, February, and March) is 63.8° F.; that of

¹ *Les Iles Canaries et la Vallée d'Orotava au point de vue hygiénique et médical*, Paris, 1882.

² *A Winter Trip to the "Fortunate Islands"* (Smith, Elder, and Co.).

Madeira being 61.7° F.; that of Nice, 49.6°; and that of London, 41.7°.

Comparative Record of Sunshine in Orotava, Jersey, and Southbourne. The figures indicate hours of clear sunshine.

Month.	Orotava.	Jersey.	Southbourne.
January	164	68	49
February	163	87	71
March	176	149	116
April	149	187	147
May	203	243	213
June	196	233	200
July	183	230	204
August	182	242	200
September	153	175	131
October	162	124	107
November	142	65	60
December	152	57	49

Comparative Record of Sunshine during the winter months at Orotava, Jersey, Southbourne, and London.

Month.	Orotava.	Jersey.	Southbourne.	London.
November	142	65	60	20
December	152	57	49	4
January	164	68	49	11
February	163	87	71	24
Total	621	277	229	59

It is not climate alone however which has made Orotava a favourite winter station, especially for persons intending to make a prolonged stay. The healthiness of the locality is unquestionable, the mortality at Port Orotava not exceeding 20 in the 1,000, a very exceptional rate in warm climates. The chief cause of this low death-rate is no doubt the very excellent and abundant water supply.

Another factor in its salubrity is the great porosity of the soil; however much it may rain, no dampness remains on the surface, and there is hardly a day in the year on which an invalid may not walk out and be in the open air.

On the excursions and other amusements which Orotava offers in abundance to all classes of visitors it would be out of place to dwell in a scientific journal; I therefore pass on to speak of the kinds of cases in which its climate is likely to be beneficial. Bronchial cases do extremely well, and pulmonary consumption finds in Orotava the conditions of hygienic treatment which modern knowledge demands to a greater extent, perhaps, than anywhere else. There a patient in the first and second stages of the disease can live in the open air all day, and can with less risk than elsewhere sleep at night with his windows open. He can stay on the island well into June; in fact he may pass the summer there without inconvenience.

Many cases of phthisis seem to lose their acute symptoms, and gradually become chronic. I have known several such cases. As for advanced cases, in the third stage, I can confidently assert that life is much prolonged, though of course I would not advise such patients to come out, or at any rate could not give much hope of cure by their so doing.

Scrofulous patients or those threatened with joint trouble, could not be sent to a better place. Rheumatic sufferers are almost certain to benefit, there is so little dampness in the soil or air, and rheumatic fever is a disease extremely rare in the native population. I have never seen a case of gout in one of the inhabitants. Convalescents from influenza rapidly regained their strength after a short stay at Orotava. The equability of the climate makes it particularly suitable for kidney disease. I have had several cases of albuminuria after influenza and scarlet fever, which have soon recovered; whilst nowhere could the chronic albuminuric patient be sent to pass the winter with so few chances of a fatal chill. Diabetics—a class of patients also requiring an equable climate—as a rule do well. Anæmia soon finds in our sunny winter climate, in an atmosphere so rich in ozone, a cure that has perhaps been sought in vain with endless tonics. Delicate, quick growing children, with bad family histories, also do admirably, a fact which is testified to by the many resident English

families. Another class of patients eminently amenable to the climatic influences of Orotava are those broken down by malaria, in countries like India, the West Indies, the West Coast of Africa, etc. Many such invalids doubtless would meet with a speedy death from inflammation of the lungs, etc., if suddenly hurried back to cold European climates; they will avoid this risk by recruiting their strength beforehand at some intermediate station like Orotava, where, it may be added, malaria is unknown.

THE SALE OF PROPRIETARY MEDICINES CONTAINING POISON.

On this subject the following communications have recently passed between the Chairman of the Parliamentary Bills Committee of the British Medical Association and the President of the Pharmaceutical Society of Great Britain:

British Medical Association, Parliamentary Bills Committee, September 13th, 1892.

To the President of the Pharmaceutical Society.

Sir,—Referring to my previous communications on the subject of the illegal sale of proprietary medicines containing poison, may I ask you to inform me what steps have been taken in the matter by the Council? The public records which have fallen under my notice afford very scanty information on the subject, and, indeed, seem to have led to a conclusion—which, however, I believe, would not be a correct one—that your Society has instituted but very few prosecutions since June—in virtue of the powers conferred upon the Society, and the consequent duties involved in the 15th Section of the Pharmacy Act of 1868—as a consequence of the action of the Treasury in prosecuting, at my instance, a test case to establish the fact that proprietary medicines containing poisons are subject to the provisions of that Act. I see it stated, in certain journals connected with pharmacy, that the Council is thought to be indisposed to take action, though there are persons ready to contest the further application of the decision arrived at, and to defend any charges brought against them under the above-mentioned section of the Act. It will be important for my Committee to be informed of the present position of the case, as they would desire to make the salutary results of the late decision, and of the action thereupon by the Pharmaceutical Society, as far-reaching as possible, and so extended in area as effectually to protect the public against the evils involved by disregard of the law.

Hoping that you may be able to favour me with a statement of facts up to date, and a further statement as to the intentions of the Council to carry out such proceedings until the illegal sale of proprietary medicines containing poison be abandoned, I am, dear Sir, yours faithfully,

ERNEST HART.

Pharmaceutical Society of Great Britain, 17, Bloomsbury Square, London, W.C., September 26th, 1892.

Ernest Hart, Esq., Chairman, Parliamentary Bills Committee, British Medical Association.

Sir,—In reply to your letter of the 13th instant, I beg to state that at the meeting of the Council in July last, the necessary evidence having been procured, the Council authorised legal proceedings to be taken for the sale of "chlorodyne" against several of the largest retail dealers of proprietary medicines in the metropolis, one of whom has a number of branch establishments throughout the country. Each of these firms, after consultation with their legal advisers, paid the penalties claimed without going into court. They also undertook not to sell proprietary preparations containing poison in future. So far as we can ascertain by means of our officers, the above-mentioned firms, together with many others who have been warned, have now discontinued the practice.

As penalties under the Pharmacy Act have to be recovered in the County Court, no publication of the names of the persons offending is allowable when the penalties are paid before going into court.

It is the intention of the Council of this Society, having regard to its responsibilities to the public under the Pharmacy Act, 1868, to carry out the provisions of that Act until the