

OROTAVA AND THE CANARY ISLES.

NOTES OF A WINTER SOJOURN.  
By W. VIGNAL, D.Sc. PARIS.

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II.—OROTAVA: ACCOMMODATION AND CLIMATE.

OROTAVA is divided into two distinct parts, the town (villa) and the port (puerto). The town is built almost in the centre of the vast amphitheatre which constitutes the valley of Orotava, and is about four miles from the sea, and about 1,000 feet above the sea level. On the sea coast on a little promontory is the port; between the port and the town of Orotava there are two or three dome-shaped cones—the Montañetas—curious volcanic formations which exist only at Orotava, and are apparently former volcanic cones.

*The Hotel Accommodation.*—About half a mile from Puerto, on a rising ground 300 feet above the last houses of the port, the Taoro Company has built a new hotel; it was opened two years ago, and has the form of a big parallelogram, of which the south side—the one which would look on to the sea, is missing; thus the garden comprised between the right and left wings of the hotel is sheltered from the winds. The eminence on which the hotel is built is on a sort of cape and there is a sea view from the north, east, and west sides of it. M. Coquet, already known as the architect of the Lyons Hospital, also I believe of the medical and scientific faculties of that city, furnished the plans for the Taoro Hotel. Everywhere in this hotel there is fresh air; the rooms are large and lofty, the corridors and staircases are vast, and ventilation extremely well carried out.

*Sanitary Arrangements.*

—As to the sanitation of the hotel, it has been assured by the superintendence of an English doctor, Dr. E. P. Thurstan, who had working under his directions an English workman, certificated by the Plumbers' Company. They have left nothing undone; the sanitation appears to me perfect. A main sewage pipe (glazed earthenware) runs round the hotel, lying in a concrete bed; the sewage from every water-closet and every sink runs into this main pipe by branch pipes, but without communicating with each other. Each pipe carrying sewage into the main pipe is furnished with a double siphon and an independent ventilating pipe. The incline of the main pipe is considerable, and the water current is also strong. As water is very plentiful, it is impossible for matter to remain stationary for any time in the main sewer; this I ascertained by examining the man hole. Furthermore, the water-closets and sinks are built against the

exterior house walls, thus all the sewage runs at once into its separate pipe, and is carried at once away from the house to flow into the main pipe. No pipe carrying sewage passes under the hotel buildings. The water used at the hotel comes from pure sources, and the drinking water is brought every day to the hotel in little barrels from a spring in the cliff near the sea. Water for domestic use is brought from a vast reservoir belonging to the hotel on the side of one of the montañetas, from which it runs into a cast iron pipe. This water comes from a spring at a long

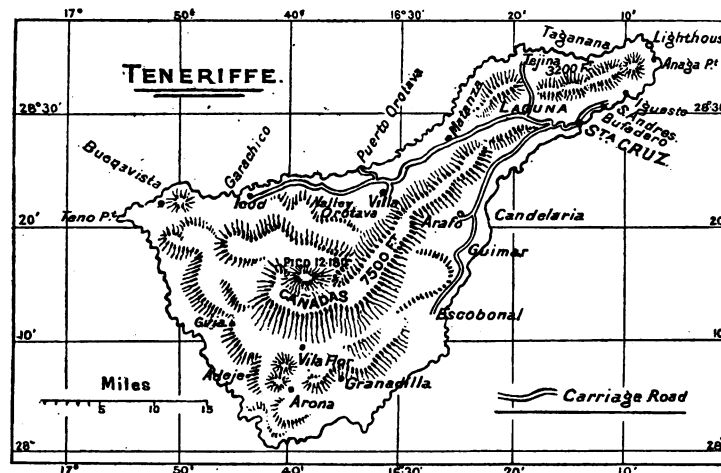
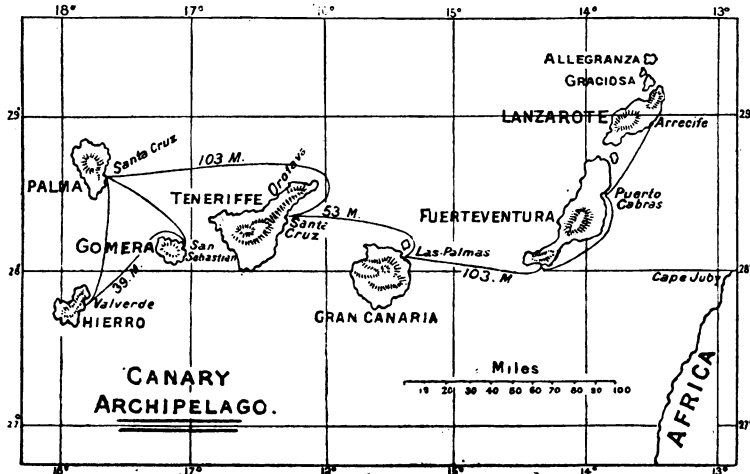
distance, and is brought to the reservoir in a pipe, which during a long part of the route is open; as it is only used for domestic purposes, filtering it through a triple sand bed is considered sufficient.

*Climate.*—I may at once say that I do not think it is possible anywhere to find a more perfect climate, and, as far as I know, there is none comparable to it. This is not only my opinion; I share it with a number of other people whom I met here. I have recently had long conversations with an English doctor who has visited Orotava for a pleasure trip, and who has been to many places. He considers that Orotava is

much more delightful than Cairo or Palermo: these cities are not to be compared to it. The heat at Orotava is not so great as might be expected from its geographical position. There are many local meteorological causes which serve to lower the temperature. At a future time, when my stay has become more lengthy, I will speak of these causes; I shall have had time and opportunity to examine them, and shall not speak from hearsay. Orotava, notwithstanding its contiguity to the equatorial zone, can be classed among the hot temperate regions. This is what constitutes the great charm of the place; the even climate. During twenty-four hours there is but a slight variation in the thermometer, and from one day to another there is generally but a slight change. In the valley of Orotava, when one passes from the sun into the shade, that painful sensation of sudden chill—felt all along the Riviera, especially in the hottest localities, like Mentone—is not experienced.

*Weather.*—During the first week of my stay at Orotava, the weather for this part of the world, it seems, was very bad; there was a great deal of rain, nevertheless never a day passed without being able to go out for three or four hours, and I was never cold enough to endure a fire, or think of having one. These facts apply to Puerto Orotava and the locality where the Taoro Hotel is situated (300 feet above sea level). The Villa Orotava being higher the climate is colder and damper; it is situated just at the height where here, in bad weather, the cloud vapours become condensed into clouds.

*Meteorological Notes.*—The following meteorological notes have



been taken in four different parts of Orotava during the month of December, 1892. The first was taken by Mr. A. Perry, the correspondent of the Meteorological Office, who is now at Orotava. The instruments were placed at 70 feet above the sea level:—

*Meteorological Observations taken at Sitio de Cullen, Puerto Orotava, 70 feet above Sea Level. December, 1892.*

	Means.		Extremes.	
	9 A.M.	9 P.M.	Highest	Lowest
Barometer corrected and reduced to 32° F. at mean sea level .....	30.137	30.122	30.335	29.954
Dry bulb .....	64.1	59.5	—	—
Wet bulb .....	58.8	55.7	—	—
Dew point .....	54.4	52.3	—	—
Elastic force of aqueous vapour .....	0.427	0.397	—	—
Humidity (per cent.) .....	71	78	—	—
Maximum in shade .....	—	70.7	74.8	—
Minimum in shade .....	—	56.0	—	53.0
Black bulb maximum in sun .....	—	127.1	139.8	—
Minimum on grass .....	—	50.7	—	47.0

Sunshine, 141 hours; mean 4 hours 52 minutes.  
Rain, 3.04 inches.  
Number of days when 0.01 inch rainfall, 9.  
Greatest daily rainfall, 1.40 inch.

The notes which follow were taken at Puerto; the third and last were taken at San Antonio, almost on the same level as the Taoro Hotel. Mrs. Boreham, who took them, thinks that all the figures ought to be increased by 1.3°, because the instruments were placed against a north wall and completely sheltered from the sea wind; however, I give them as the instruments registered them.

*Meteorological Observations taken at Puerto Orotava.*

Hours.	Dry bulb.			Wet bulb.		
	Means.	Extremes.		Means.	Extremes.	
		Highest.	Lowest.		Highest.	Lowest.
9 A.M.	63.4°	66.5°	59°	59.1°	62°	57°
2 P.M.	63.8°	71°	63°	63.3°	66°	59°
9 P.M.	61.9°	65.3°	58°	58.5°	62°	55°

The minimum variation was observed on December 11th: 63°, 63°, 62°.  
" maximum " 20th: 63.3°, 70°, 62°.  
The rain during this month of December was ... .. 3.78 inches.  
The greatest rainfall was ... .. 1.54 inch.

*Meteorological Observations taken at San Antonio.*

Hours.	Dry bulb.			Wet bulb.		
	Means.	Extremes.		Means.	Extremes.	
		Highest.	Lowest.		Highest.	Lowest.
9 A.M.	60.7°	65°	57°	57.6°	61.4°	51.2°
9 P.M.	58.8°	65°	54.1°	53.5°	65°	52.1°

*Rainfall.*—Rain falls more especially during the night; this fact has been noticed by myself as well as by many people who have come to Orotava several times, and also by the residents. I inquired if the difference between the night and day rainfall had been registered. I could not find that anyone had done so, although the observation would be interesting; I cannot, therefore, state in figures what the difference is, but I believe that there is one.

**SUCCESSFUL VACCINATION.**—Dr. Samuel W. Hamill, medical officer of the Burnham District of the Docking Union, has again been awarded by the Local Government Board the grant for successful vaccination.

The final tie in the Hospitals Football Challenge Cup will be played on Thursday next at Richmond, when Guy's, who won from King's College by 9 goals and 5 tries to nothing in the penultimate round, will meet St. Thomas's, the present holders.

### THE TRAINING AND CERTIFICATION OF SANITARY INSPECTORS.

We have received official communications of the letters addressed by the Lord Mayor and the British Institute of Public Health to local sanitary authorities on the above subject as the outcome of the meeting held at the Mansion House on February 18th. The letter of the Lord Mayor records and commends to notice the resolutions which we have reported, and appear to meet—as they deserve—with general approval. The letter from the British Institute discloses a further development of the question.

The British Institute of Public Health, 20, Hanover Square, London, W., February 25th, 1893.

SIR,—In compliance with the terms of a resolution passed at the Mansion House on the 18th inst. at a conference of delegates of sanitary authorities of Great Britain and Ireland, under the presidency of the Lord Mayor, you will have received copies of the resolutions passed thereat.

The Council desire to draw your special attention to the first resolution, which was unanimously adopted after considerable discussion, in which the greatest stress was given to the necessity for a proper systematic training of those desirous of becoming sanitary inspectors, and the desirability of a central board being formed to conduct the necessary examinations and grant certificates in connection therewith, the constitution of the board being subject to the approval of the Local Government Boards, or, in Scotland, the Board of Supervision.

The Council are anxious to call your attention particularly to this matter at the present time, as an application from the Sanitary Institute is now before the Privy Council for the grant of a Royal Charter of Incorporation, which, if granted, would tend to defeat the objects which the conference concluded were desirable, and would obviously be detrimental to the interest of the public health.

The Council understand that a circular letter has been issued by the Sanitary Institute asking the support of the various local authorities to their application by requesting them to petition the Privy Council in their favour, and setting out that the Sanitary Institute has carried on systematic courses of instruction for sanitary officers. This assertion is inaccurate, as that institute has not conducted such instruction, but has merely organised desultory courses of lectures of a semi-popular character. The circular letter further sets out that the Sanitary Institute examinations are the only ones which have received the approval of the Local Government Board, but it omits to mention the material fact that a communication was addressed to the Sanitary Institute from the Local Government Board, dated December 21st, 1892, practically withdrawing such approval by suggesting the formation of a conjoint board on which this institute should be represented.

In these circumstances, the Council have to submit that your authority should not lend itself to the support of the petition of the Sanitary Institute without first communicating with the Local Government Board or the Privy Council, or instituting such other inquiries as may be thought desirable.—We have the honour to be, Sir, your obedient servants, FRANCIS T. ALLAN, M.D., D.P.H., Medical Officer of Health for the Strand District; C. A. JAMES, M.R.C.S., D.P.H., Honorary Secretaries.

We need only at present say on this point that we are not at all sure that the granting of a Royal Charter by the Privy Council would in this case, any more than in the case of the Royal British Nurses' Association, have any legal importance in giving more real value to certificates or registers, whether of inspectors or of nurses, than if such certificates or registers were made by the respective bodies as at present constituted without a charter. But such a charter has a certain glamour which gives it an undesirable, fictitious, and sentimental appearance of authority; and it is very undesirable that the Royal Charter should be used to do that in appearance which if desirable should be done in reality by Act of Parliament. Bodies which do not feel their case to be strong enough to go to Parliament for an Act such as can alone give public and legal validity to their certificates and registers, ought not, we think, from reasons of public policy, to be favoured with a showy but valueless sanction from the Privy Council by the granting of a Royal Charter which is worthless for the purpose in view. As a rule this sort of preferential monopoly should not be accorded to any but duly constituted and representative boards. The model which Parliament has set up and approved in the case of doctors, chemists, and veterinary surgeons, and which it is now approving for plumbers, should be followed in the case of nurses and inspectors. On the same grounds that we disapproved of the application to the Privy Council by a well-known nursing body, we think the application of the Sanitary Institute equally open to objection. The object is a good one, but the means employed and the constitution of the body making the application do not seem satisfactory.

A sum of £5,000 has been sent anonymously to the Leeds Infirmary.