atrophy of the optic nerves, with partial external ophthalmoplegia was a distinct sequel to a true diphtheritic paralysis. Hence we may hope that the discovery of the mechanism by which diphtheria affects the nervous system, will take us a step nearer to the elucidation of these mysterious sequelæ of syphilis.

It may, I believe, be regarded as a general law—and a law of much importance in practical diagnosis—that the isolated impairment of nerve structures that have a certain function when acute indicates a toxic influence, when chronic a degenerative process. It is instructive to note that these two mechanisms are not entirely dissociated—that the degenerative process may be a late result of a toxic agent.

The problems we have last considered have an interest which is at present, alas, purely scientific. It is a strange anomaly, this scourge of the sinister side of civilised life. Its direct effects we can control more than those of any other malady of like nature, and yet both the essential element of the disease and its remote effects seem alike beyond our reach. But the knowledge that is not power now may be power in the future. When the specific organism has been identified and isolated, when it has yielded the secret of its life history, then we may look for means, if not of destroying it, at least of modifying its processes and effects, and of modifying them not only in the experimenter's flask, but within the human body. Until this can be accomplished, the light of research does but reveal, in vaster range and more complete detail, the grim features of the malady. Still, the light is welcome. We see how far the grasp of the disease extends into regions believed to be beyond its reach; we see how long its consequences endure, living on their own life after the disease itself has ceased to be a power for evil; but we see also how much more vast than once was thought will be the saving influence of prevention or of cure.

GRASSE, ALPES-MARITIMES, AS A HEALTH-RESORT.

By I. BURNEY YEO, M.D., F.R.C.P.,

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MUCH impressed with a short visit I paid to Grasse last Christmas, and convinced that its value and claims as a winter resort are imperfectly known and appreciated in this country, it may not be inopportune that I should, at this season, state some of the advantages it seems to me to possess as a health-resort. And first of all, to those for whom a quiet life possesses some attractions, and who share the oft-quoted opinion of Sir G. Cornewall Lewis that "life would be tolerable were it not for its amusements," Grasse is exactly the kind of quiet retreat to suit them. A quaint old town, bright, sunny, olive-clad terraces, fields of odorous blossoms all around, a girdle of picturesque mountains, a fine sweep of undulating country stretching down to the shores of the Mediterranean, excellent carriage roads leading to drives of great beauty, promenades amongst the hills around of endless variety and interest, and the sun of Provence overhead—such is Grasse!

One reason, perhaps, why Grasse has not hitherto been frequented in the winter by visitors in numbers proportioned to its obvious merits is that it has only been within the last few years that visitors have been able to obtain there the accommodation of a really first-class hotel. The Grand Hôtel at Grasse is in an admirable sunny situation, quite out of the town, though close to it, commanding a fine view, and under the same excellent management as the noted Beau Séjour at Cannes.

The old Provençal town of Grasse is situated about ten miles to the north of Cannes, with which it is connected by rail as well as by a good carriage road. It contains over 12,000 inhabitants, and is built on the southern slope of a hill (the Rocavignon), at an elevation of about 1,000 feet above the sea. Having a screen of mountains close behind it, it is greatly protected from those winds which are the bane of the other winter resorts on the Riviera, while it gets all the advantage of the abundant sunshine of this highly-favoured region, and those who find the sea breezes and the sea air of the coast too exciting and injurious will obtain

at Grasse the same dry, sunny climate removed ten or twelve miles from these disturbing influences. This is a very important consideration also to those sensitive invalids who suffer from sleeplessness when dwelling close to the sea.

It is true that when snow falls low down on the mountains, as occasionally happens in the course of the winter (snow seems to have been a much more frequent visitor to this coast of late years than it used to be), Grasse is somewhat colder than the towns on the coast, but those who have passed the whole winter there declare that they have found these cold days bracing and health-giving, and by no means unpleasant.

For some of the following details of the climate of Grasse I am indebted to a careful and scientific observer who passed the greater part of last winter there.

The Marbrière and Rocavignon hills of limestone rock overhanging the town assist, by absorption and radiation of heat, in keeping up an equable temperature. The air is very light and dry. October and November are generally the rainy months, but, the showers being frequently almost tropical in their violence, the number of rainy days is not high. From about December 20th to January 20th is the coldest time of the year.

The following meteorological table refers to the year 1887:

Month.	Cloudless Days.	Rain Fell.	Snow Fell.	Cloudy Days.
January	16	1	3	4
February	10	3	1	4
March	11	3	—	4
April	9	3	—	2
May	7	3	—	8
June	16	—	—	3
October	13	4	—	2
November	8	13	—	3
December	13	4	2	3

"Cloudless days" are those on which at no time was the sun obscured by cloud. Under "Rain Fell," all the days are reckoned in which there was even the smallest quantity of rain. "Cloudy Days" refer to those on which the sun was obscured the whole day. The days not included in this table were those on which the sun was obscured during portions of the day.

The following is the temperature table for the same period.

Month.	Average Maximum.	Average Minimum.	Greatest Maximum.	'Lowest Minimum.
	Deg. F.	Deg. F.	Deg. F.	Deg. F.
January	46.9	34.8	55.4	32
February	48.7	36.5	57.2	32
March	57	48	66.2	33.8
April	61	48.9	68	37.4
May	64.04	50.3	73.4	44.6
June	73.2	61.3	84.6	51.8
October	58.8	46.04	71.2	39.2
November	51.08	42.08	60.8	39.2
December	48.2	36	57.2	26.6

The excellent observer to whom I am indebted for these figures says of the winds: "There is, perhaps, no prevailing wind." The north-east and east winds appear to be the wet winds. The north wind is a cold wind, and it is the wind which generally brings such snow as falls there. The mistral (from the west and north-west) is unpleasant while it lasts, but has this compensation, that it always brings fine weather, and purifies the air. It blows with much less force at Grasse than on the western side of the Esterels, as this range of mountains affords this district a considerable protection from its violence. The sirocco, from the S.S.E., generally brings cloudy weather, but not rain. The S.E. is a warm, fine weather wind.

As Grasse is situated at an elevation of nearly 1,000 feet above the sea, the air there is lighter and drier than on the coast, and many persons with chest affections, and especially asthmatics, find they can breathe more freely there, and for the same reasons they sleep better. Many people who find a difficulty in sleeping at the sea-level are able to sleep soundly at Grasse.

The mists which are occasionally observed hanging over the undulating tract that lies between Cannes and Grasse do not, as a rule, reach the latter place. Grasse is much freer from dust than some of the coast towns, such as Nice, and when, owing to a continuance of fine weather, there is a certain amount of dust

on the high roads, this can be avoided by availing oneself of the many paths through the olive groves, where one is protected both from wind and dust. The roads are kept in excellent order, and that is one reason why there is comparatively little dust.

There is an ample supply of excellent food. Mountain mutton, beef, game, fresh-water fish, good bread, abundance of vegetables, and fruit are afforded by the locality itself, while sea fish and poultry are brought from Cannes. The water-supply is abundant and good, but the water is rather hard from the presence of chalk.

My own visit to Grasse was necessarily a brief one; but my most trustworthy informant, whom I have already quoted, writing of the hotel accommodation, says: "Here one has every comfort. The sanitary arrangements are most carefully studied and carried out on English principles. Most of the bedrooms and sitting-rooms have a southern aspect. The charges are from 10 francs to 16 francs a day for *pension*. The food and cooking are very good indeed. The house is well warmed throughout. The chief amusement is walking or driving through lovely scenery in the bracing mountain air. There is lawn tennis in the hotel grounds, also an excellent fencing room. Trout fishing is to be had in the Loup and also in the Siagne. The roads are all of easy gradient, and the Route Nationale, which passes in front of the hotel, is almost absolutely level, thus enabling invalids to take walking exercise with perfect comfort."

Of the various excursions which the attractive country around affords, this gentleman observes: "The favourite expeditions are the Gorge and Saut de Loup, where there is some very bold scenery; Gourdon, an old fortified place commanding the entrance to the Gorge de Loup, to which there is a good carriage road; Pégomas and Auribeau on the Siagne, both within an easy drive; Castelers, from which there is a most lovely panorama containing twenty villages, showing for its boundaries the snow-covered Alpes-Maritimes, the Basses-Alpes, the Mediterranean, and the Esterels; Mongins, with its old fortifications; St. Vallier, on the Digne road, on the journey to which are some lovely views; Cabris, an old place most picturesquely situated to the south-west of St. Vallier; St. Césaire, perched on the edge of a precipitous cliff overhanging the Siagne; near home we have the Plateau Napoleon, on the top of the Rocavignon Spur, where the great Emperor, having been refused admission into Grasse, breakfasted on his journey to Paris after his escape from Elba."

Grasse itself is an industrial town of considerable wealth, carrying on a flourishing trade in the manufacture of scents, liqueurs, soaps, candied fruits, wine, olive oil, etc. The cultivation of flowers for the manufacture of scent gives occupation to a number of families, and the extensive gardens that surround the town consist almost entirely of orange groves and beds of roses and jasmine, while the ground is literally carpeted with violets, jonquils, mignonette, and other odorous plants.

There are some well-kept public gardens and a few objects of antiquarian interest in the town, but nothing of any special importance. It has been stated in some works on the Riviera that hay-fever prevails in Grasse, on account of the diffusion into the air of the pollen and scent of the flowers grown in such abundance for the perfume manufacture; but I am assured, on the faith of an English gentleman who has lived in Grasse for six years that he has only heard of one case amongst visitors during the whole of that period, and that was the case of a gentleman who suffered annually from severe attacks in England. My informant also states, as the result of his inquiries amongst the medical and other residents there, that this disease is of rare occurrence in the neighbourhood.

The climate of Grasse would seem to be especially useful to those pulmonary or nervous invalids who find themselves better in a tonic, dry, bracing air than in a moist, relaxing one, but who, at the same time, are unable to support the more rigorous climate of such winter resorts as Davos, the Engadine, Grindelwald, or Les Avants. At Grasse they have the advantage of the same warm and brilliant sunshine as they obtain at Cannes or Mentone, but with the benefit, on account of its elevation, of a lighter, somewhat cooler, more tonic air than in these coast towns.

Some cases of asthma appear to prosper remarkably at Grasse, and some sufferers from this malady have built themselves villas there on account of the immunity from attacks they enjoy in that locality.

Many patients also suffer from sleeplessness, loss of appetite, and nervous irritability when living on the coast, and many cannot bear the glare of the sun on the sea. To all these, who yet desire

to live in the winter under a Provençal sun, and who derive benefit thereby, a trial of Grasse may be recommended.

Also, in the spring months, when the heat becomes a little oppressive on the coast resorts, a migration to the cooler climate of Grasse may prove a beneficial change. There can be no doubt that Grasse has distinct and special climatic advantages, and that they have not hitherto been utilised as much as they deserve to be.

ON RAISING THE EPIGLOTTIS.

By ROBERT L. BOWLES, M.D., F.R.C.P.,
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ON October 22nd, 1888, Dr. B. Howard read before the Medical Society of London a paper on "A New and Only Way of Raising the Epiglottis." The first intimation I had of this paper was its publication in the medical journals, and I missed the debate from being told that it would not come on for a year at least, in consequence of Dr. Howard's absence from England. Dr. Howard has done me the honour of quoting me in his paper, but not, I think, in a way for my views to be well understood. I would, therefore, wish to give publicity to the following extracts from some papers of my own, by which it will be seen that I had already done (at various times since 1856) all the work which is now in 1888 presented to the public as new and original.

Extract No. 1, is a letter to the *Lancet* from R. L. Bowles, 1856, and reproduced in Dr. Marshall Hall's book on *Drowning* in August, 1857: "On cutting down and removing the right side of the pharynx, with the corresponding halves of the hyoid bone and thyroid cartilage, in another subject, a tolerable view of the position of the parts was obtained. The epiglottis was in direct apposition, by its laryngeal surface, with the posterior wall of the pharynx, so as to preclude the possibility of the passage of air. When, however, the head was allowed to hang backwards over the edge of the table, the bending of the cervical vertebrae caused the posterior wall of the pharynx to recede from the epiglottis, so as to allow the free passage of air. If the tongue had been drawn forwards, would the epiglottis have been removed from the pharynx, or would the prone position cause it to fall forwards?"

Extract No. 2, from "Observations on Stertor," by Robert L. Bowles, in the *Medico-Chirurgical Transactions*, 1860: "It is well known that the cavity of the pharynx, having a fixed boundary only posteriorly, may have its capacity materially affected by the ever-varying position of its sides, of the soft palate, the tongue, and the larynx. The larynx and the sides of the pharynx have, I believe, little connection with the cause of stertor. I shall, therefore, not further refer to them. The tongue, being attached to the lower jaw by its mucous membrane and its muscles, has its relations with surrounding parts altered as the mouth is opened or closed.

"When the mouth is closed the ramus of the jaw forms nearly a right angle with the spinal column, from which the symphysis is then at its greatest distance. When the mouth is opened by the dropping of the jaw, the symphysis describes the arc of a circle, and approaches more nearly to the spine, where the posterior wall of the pharynx is attached. (See drawing at end of paper, Fig. 1.) The tongue, having its chief attachment to the symphysis, would consequently be drawn from the pharynx in the former case, and allowed to rest in contact with it in the latter. This, if not true in every case, is at least true in some, as the plate demonstrates. (See Fig. 2.)

"The dissection from which the drawing was taken was made with great care, so as not to displace the parts more than was necessary to give a fair view of the base of the tongue and the epiglottis. The two sketches, with the open and closed mouth, were kindly taken for me on the spot by my friend Mr. (now Dr.) Fitzgerald, and they very accurately represent the parts as they appeared at the time. When the mouth was opened and the subject on its back, the road to the larynx was completely obstructed in consequence of the tongue resting in contact with the back of the pharynx; but the obstruction could be removed by hooking the tongue forward. When the mouth was closed the tongue was lifted from the pharynx, leaving ample breathing space. But, even with the closed mouth, if the chin were much bent on the sternum, the base of the tongue was almost in contact with the back of the pharynx.

"It would seem from this dissection that the muscles of the tongue attaching it to the symphysis of the jaw, are too short to admit of the base of the tongue reaching the back of the throat