Cape Colony as a Health Resort for those suffering from Pulmonary Phthisis, with special reference to the Graded Altitude System.

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General Considerations.

One has heard much, and read much, about the South African Climate with regard to the treatment of Pulmonary Phthisis, but there has always been a certain element of vagueness associated with the subject. It was a very common thing at home, before the new air treatment systems were so much in vogue, for patients suffering from "Chest Complaints" to be told they should go to South Africa. The patient would say "why?" — for South Africa is a hot country, and the Doctor, very often an eminent specialist, would probably say "oh, is not very particular as long as you go to South Africa. Harris with has a reputation — suppose you go there." Now, nothing could be more irrational or unsatisfactory than this, for it matters a great deal in certain stages what altitude is selected, especially when the case is more or less on its trial. General rules may, however, be laid down, with special bearing on the various classes of cases, which will be discussed later on.

Generally speaking, and in all cases, a good rule is the patient when he arrives.
in Cape Town, to consult a post local Doctor of experience, who will decide how long the patient should remain at the Coast recuperating after the voyage, and getting his "land-legs", before proceeding to the higher and drier altitudes of further inland.

As I have indicated, I shall discuss the various classes of races later on, and in the meantime devote my attention to the consideration of the Suitability of the Country and its Climate for use as a Health Resort in Cases of Pulmonary Tuberculosis.

The formation of the Country seems to be peculiarly favourable for the development of what I shall call the Graded Altitude System of Treatment. From the Coast we ascend gradually to a series of plateaux, the first being at an altitude of about 500 feet, and the next about 1500 feet, and then we come to the Great Karoo, varying from 2000 - 5000 feet.

The 500 - 1500 feet altitudes have consider- able vegetation, especially in the winter months, when they are very dear.
The Great Karroo is very dry. There are no trees to speak of, and very few rivers that are constantly running. The general surface of the country is covered with a low scrub, known as the Karroo Bush. It may be mentioned that "Karroo" is a Afrikaans word meaning "barren," and is a guarantee of fresh air and open country, and certainly there one also gets a sufficiency of both. Vast undulating plains bounded by ranges of five mountains, and beyond these mountains more plains, and then more mountains, and so on, for what seems to be an almost interminable extent.

From November to March, the climate of Cape Town and the Coast generally, is fairly suitable for pulmonary invalids. There is very little rain during that period, and the heat, although somewhat oppressive, is very wearable. This too, is the best time of year to be at the intermediate altitude of 1,300 feet. (See "Rainfall Table"). Here the air is crisp, and much more invigorating than at the Coast, and there is just that amount of rarity sufficient to give...
expansion enough to the lungs to be an asset. After a
season of preparation for the higher altitude.
During this period in the Harrvos the weather
is hot, but never oppressively so, and, as a
rule, the nights are fairly cool. In March
the weather gets cooler at, say, 3000 feet, and
in April it is lovely - clear warm days,
and Cool, refreshing, nights.
From the Tet, High Mountains as far as
Laingsbury the rains fall chiefly from
May to August. They are, indeed, like Pillar-
based Rains considerably modified. The
Shade temperature varies from 32° F. in the
night to 60° F. in the day. The cold is felt
to be piercing, but it is a "healthy Cold",
and rarely do any bad effects accrue
from it. So long as a person is suitably
clothed.
From Laingsburg onwards it rains in
the summer months - during the thunder
weather. During this period, the Harrvos
proper there are some very hot days; but,
generally speaking, they are tolerable, ex-
cept, perhaps, just immediately before a
thunder storm, when they are very obstruc-
tive. It is a remarkable fact that people
nearly out from home stand the heat better than those who have been some time in the country.

In that part where you get the winter rains, i.e. from the Giant Mountains to Lamington, the wet weather seems to be worse than it really is, on account of its rare occurrence. This season is looked upon by Cape Authorities as the best for being on the Karoo. Here you will find the inhabitants of Cape Town and the Coast towns going up there to escape the "muggy" weather.

As a rule, the Karoo winter days are lovely, clear and invigorating - the so-called Champagne atmosphere - with a warm sun. The nights are cold, and suitable for sleeping. There is never the perpetual mist in the shade that is experienced in Switzerland.

From Leysburg upwards the weather in winter is neither than it is in the first part of the Karoo.

So much for the Country & its Climate, which latter is doubtless the chief factor in the treatment of Pulmonary Cases.
Complaints; but there are other factors which are also very important vizh.:
1. Food & Surroundings.
2. The Disposition of the Patient.

Food & Surroundings:
Until lately, there is no doubt that for love or money it was very difficult for the invalid to get suitable food, and the surroundings, so far as Hot and Cold, big house accommodation, were concerned, were also far from satisfactory.
Mutton in various forms—roasts, stewed, chops, rice, etc.—was the staple dish. Eggs and milk were difficult to get and vegetables were scarce. Cooking, as a rule, bad, and liquors were inferior.

Nowadays, however, those who are in the catering line have become alive to the fact that, if they are to be successful in getting and keeping good customers, they must advance with the times. The consequence is that there are now many good and comfortable hotels. Especially...
be mentioned those of Messrs James C. Logan, H.C. at Cape Town (sea-level), Cape (500 ft.), Worcester (800 ft.), Towner River (2, 400 ft.), Matjiesfontein (3,000 ft.), & Beaufort West (2,700 ft.).

The thing that must not be forgotten is the DeBeers Sanatorium at Kimberley (4,042 ft.) which cost £30,000, and was built with all the most modern improvements, at the instigation of the Right Honorable C. J. Rhodes, who, in a letter to Sir Schottky of Cape Town, said:

"Grote Schuur,
6th January 1897."

"Dear Sir Schottky,

I thoroughly endorse all your remarks as to South Africa being a Health Resort. Simply, as you are aware, have seen as many wonderful recoveries upon the Plateau.

"And, moreover, from my first faith in this climate, have induced the DeBeers Company to spend about £20,000 in erecting a Sanatorium at near Kimberley, which is now approaching completion, and I feel sure this Resort will be the means of saving many a life.

"Honestly believe, that, owing to the purity and dryness of our climate, the growth of the Intercide is frequently checked, and after a
period becomes entirely arrested.

Our plateau has the advantage over S.H. Moritz, and other places on the Continent, of having a dry warm climate, free from mist and cloud; and, in addition, you are not exposed to the chills which naturally occur in the shade at similar altitudes in Europe.

Yours very truly,

(C. J. Rhodes)

At all of these places just mentioned, good sanitation is assured. Here are good baths, an excellent cuisine, and the management is fully alive to the necessity of a good supply of eggs, fish, fruit, etc., for invalids, and the catering is carried out accordingly.

It must, however, be remembered that these things have to be paid for, and hence the great importance of the question of wages and means.

If people care to leave the beaten track, there are various forms they may arrange to go to, and live cheaply at, but there is always the difficulty about feeding and sanitary arrangements.

2) The Disposition of the Patient

This is an important factor in bringing
about a satisfactory result, or otherwise. There can be no doubt that those patients endowed with strong will power and a cheerful disposition do much better than those who are despondent, and, as it were, “lose the day.” The old saying that “Faith heals, and a woman’s heart” offers very sympathetically in the fight against this malady, i.e., Pulmonary Phthisis. This is, of course, more applicable when the patient has left home, and come to a country where he will be deprived of the society of his intimates, often of the society of his nearest friends, and where, until lately, at least, home comforts in the true sense of the word were unobtainable. Here the “faint heart” is in danger of giving in, and saying: “What is the good of fighting any more? I cannot stand this any longer. I would rather go home at all risks.” This is frequently done, and with disastrous results.

The patient with the strong will and stout heart, on the other hand, says: “It is always darkest before the dawn,” and “there is a silver lining to every cloud.” He
settles down to make the best of matters, get accustomed to his surroundings, which gradually get a sort of fascination for him, and the feeling of home-sickness wears off. He begins to take an interest in Colonial affairs. Perhaps he is lucky enough to get suitable and congenial occupation. His state of health has been gradually improving, and although he may be anything but anything but robust, he feels he can take an interest in life, and has a right to live. He may indeed become the most important and valuable life in the whole community.

The foregoing applies chiefly to the most important class of invalid, that discussed later on under head No. 3.

(3) Means and Employment.

The question of means is a most important one, more important, perhaps, than was at first appear to be the case. It is necessary that every invalid coming out to South Africa should have a certain amount of money. She is so sick, and only threatened with pulmonary.
mischief, perhaps he may risk coming with a limited amount: but, if the chance has got a fairly firm hold, it is absolutely necessary that he should have enough to keep him for a year at least. If he hasn't, the chances are that he will accept employment too soon, or employment that is unsuitable, and do him self harm in that way. Or he may feel that he cannot work, and then the awful worry comes—the worry that kills. He has to be dependent on others, and he has to live, and maybe even, existing on charity. Whereas, had he had means he would have been rid of that dread element of worry, would have been able to get the best of every thing, and, above all, would have had that blissful feeling of independence. Then he has no necessity to work, except as a recreation, and to keep his mind occupied.

How different, under the circumstances, are the chances and lots of the man who has means, and of the man who hesit,
As I have already said, I do think it well for anyone who is to be in the country for any length of time to have some form of employment, but that employment must be light, congenial, and suitable in every way.

After a man has been a year or so in the colony, he has given it a fair trial, and can usually tell whether or not it will be safe for him to carry on his profession or trade, or accept some employment that may be of a more suitable nature, if he is lucky enough to be in the way of getting such.

With regard to females: It is more difficult for them to get suitable employment. They may get situations as governesses, on a country farm, etc., but they must not on any account be allowed to lead indoor sedentary lives. With them, even more so than with males, it is necessary that they should have because of their disposition.
Precautious Measures:

Patients should always be instructed in the ordinary precautions that must be observed with a view to prophylaxis in their own case, and to the prevention of the spreading of the disease to others.

Pocket spitoons containing an antiseptic such as corrosive sublimate (1:1000) should be used, or, failing these, antiseptic rags, that can be burned.

All hands and cloths should be disinfected before being washed. Powerful antiseptics must be strenuously avoided.

The patient must lead a cleanly, hygienic life.

Proprietors of hotels and others who have to deal with patients on their premises, should see that rooms are properly disinfected, and that cloths are kept clean and, especially, when the sight-soil system is in vogue, see that disinfectants both powdered and fluid are freely used. Scrupulous cleanliness all through the premises ought to be rigorously enforced.
Classes of Patients

It seems to me that patients may be divided into four classes.

1. Those who have merely a tendency to be “Weak Chested”.

To these individuals, coming to the Cape is more or less of the nature of a pleasure trip. They must, of course, exercise common-sense precautions—going gradually from place to place, and gradually approaching from the coast the higher altitudes of farther north and further inland. This class of invalid (if invalid he can be called) has invariably means, or else he wouldn’t have left home under the circumstances. Therefore, he can command the best of everything in the way of hotels, luxurious travelling, and so forth.

I may here mention, parenthetically, that railway travelling at the Cape is very comfortable, even by the ordinary local trains. Refreshments are provided at various stations along the line. A system of dining cars, attached to the trains, is being introduced.
and will come be general.

To patients who have very inefficient chest lungs, chief, and who are able to get about well, and take a fair amount of exercise, but for whom it has been deemed advisable that they should come to a high altitude and dry climate for the purpose of aborting an insidious disease,

one of this class may be looked upon as a robust invalid. Well, for him, it is not so particular how he proceeds about going up country, as long as he goes soon and takes ordinary precautions. Provided he has means, he will have a comparatively easy, and pleasant time of it. But the question may arise, what is he to do if his means are scanty? Then he must sink pride, and apply for a clerkship, or some light job, in an up-country store, go on a farm and teach children for a small salary and board, or help in out-door work on a farm—indeed, turn his hand to anything in the way of employment that is light, and gives him the opportunity of having plenty of fresh air.
Being a robust invalid, the chances are that he will get something suitable. He should be as much out of doors as possible, in any case, take gentle exercise, or as light work, always stopping short of anything approaching fatigue. He should have plain, nourishing diet, including plenty of milk. Pay attention to the action state of his bowels, and take a laxative when necessary. No special medicine is required; but, in winter especially, cod-liver oil will be found to be beneficial.

Those patients on whom the disease has got a pretty firm grip, who have considerable catarrh, expectoration, and slight rise of temperature in the afternoon, breathlessness, but no, or only very slight, night sweats, and little hectic.

These are the cases which call for the most judicious handling.

As a rule, after a long sea voyage, the necessary hustle and excitement of getting ashore, the patient is fatigued and flat. He requires rest, and suitable food.
and stimulation. So he should go to a quiet, comfortable, hotel, (i.e. if he has no friends with whom he can stay) and remain there quietly for twenty-four hours or so. Then he should see a good local medical man so that the man get the necessary advice. The chances are that in a case of this nature, the doctor will recommend the patient to stay for a week or two in Cape Town, in order to get rested, and then go up Country, not too far at first—to an altitude of say, 1,500 feet. Here the air will not be too much rarified, the expansion of the lungs will not be too great, and the heart will not be too much taxed. In order to carry this out properly, the patient should arrive in Cape Town about the beginning of November, and get to this 1,500 feet altitude in December. He may remain at this till the end of February or the beginning of March, and then he had better be thinking of trying a higher altitude, provided he has found the moderate height at which he has been for the last few months has had no bad effects. He may now safely go to the Karroo—that
great desire sanatorium of South Africa. Here he can get an altitude varying from 2,000 to 3,000 feet. He will probably select a place at between 2,000 and 2,000 feet.

I would now like to give the patient a few hints for his guidance on arriving at a Health Resort. He should make it a rule that he does not discuss his condition with others, or allow others to discuss their condition with him. There are some people who take a morbid pleasure in this sort of thing, and they should be discouraged in every way.

The patient should never take his own temper.

The must take a moderate amount of exercise, always stopping short of fatigue. He can sit and stroll in the open air. He should have plenty of literature of a light nature—weekly illustrated papers are much appreciated. He must, in fact, take himself out of himself as far as possible.

If these happen to be a Doctor in the place, it is a good plan for the patient.
to report himself and give an account of his illness. This will help the Doctor to give advice with regard to Baths, amount of exercise, etc. He should sleep in flannel pyjamas and wear a corset belt, and if he perspires at all freely, he should change these things frequently. He should sleep in an airy room with plenty of ventilation, without having a draught over his bed. In warm weather he can rise early - say 6.30 am - and have a tepid sponge. This is a good time to have a glass of milk with a little whisky or brandy in it. He should not take exercise to any extent at least, before breakfast time.

His diet should be plain, nourishing, and stimulating - avoiding made-up and fancy dishes, especially if, as there is likely to be, a tendency to Dyspepsia. The moderate and judicious use of alcohol will often be found to be beneficial. As a rule, Whisky and water will be found to be the most suitable form in which to give alcohol; but good Hermitage (Colonial Claret), Beer, and Stout
are often found to agree well with this class of patient. Port and berry will usually be found to be too heavy, and to upset the stomach, and this should in all cases be avoided, if possible. Champagne is much too acid to be taken in any quantity, although it and brandy must always be remembered and regarded as the most valuable of emergency pick-me-ups.

Should this attitude be found to suit, and the patient improve — gain weight, temperature keep more normal, and sweating stop — he may stay on for a considerable time. After nine months or so, he will probably derive great benefit from a trip to the Coast. He cannot remain there for longer than a fortnight, and he ought, if possible, to go about the beginning or end of the year. He will be surprised to find how much energy he has in the so-called invigorating atmosphere of Cape Town. He feels lighter and better, and it is wonderful how he secures the help of nature's own when in Cape Town, he might take the opportunity of seeing the Doctor whom he
Concerning on landing, who can further as the time. Generally speaking, however, after a fortnight or so, he had better to get up country again. If he can get some light and encourage work, good I well. He may stay on the barrack for a while, or he can then go further up—say to Kimberley, or even to the Orange River Colony.

With these cases which are for advanced in disease:

When a case has gone so far that the patient cannot get about fairly well, when sight exists are severe and persistent, when expectoration is profuse, when the temperature is high, with greening or accentuation, and when there is extreme evacuation, then, I say most emphatically, such a case should not be sent to the Cape, not even if the circumstances will permit of it more. These cases never do any good. They miss the kindness, care, and attention, and careful training of home life, and eventually they die wrongly and in a land of strangers. So that, for their own sakes, it is best desirable
that they should be kept at home. It is also advisable, for the sake of others, that they should be kept at home. They cannot get better themselves, and they exercise a most depressing effect on those who are not in an advanced stage, and to retard this progress towards a good result. Of course, it is difficult to know where to draw the line between what is to all intents and purposes a hopeless case, and a case which appears to be very bad and which may eventually recover, to a certain extent at least. Still, when a patient has all the bad symptoms I have mentioned at the beginning of this paragraph, these remain persistently after the best surroundings that are to be got in the British Isles have been tried, then I say the patient should on no account be sent out here.

Anyone in South Africa who has had experience of such cases always thinks: "Why couldn't he have been kept at home, where he might at least have died amongst friends and surrounded by home comforts?" This is a very utoful picture; but,
Unfortunately, it is a very real one.

So much for the class of case, and the process of getting to a certain attitude under certain conditions.

**Outfit.**

How many people in the old country have been carried away with the idea that they are going to "Sunny South Africa," and that, therefore, only the lightest summer clothing is necessary. I may have been, because now-a-days the Cape trip is so common that people at home are getting better informed with regard to the subject of outfit.

For most of the year the ordinary Tweed Clothing, worn in Scotland, is quite suitable — lighter or thicker in summer than in winter. Flannel suits are very good for summer wear. Woollen shirts and Cricketing Shirts with Collars attached are very serviceable, although one who has been accustomed to wear starched shirts at home will find it quite convenient, and quite comfortable, to wear them at the Cape also.

Flannels should always be worn, and, in the higher districts, it will be
found that the very thickest procuroable can be worn in winter.

The patient should have two weights of
socks - heavier in winter than in summer;
although many people prefer to wear the
heavy ones all the year round.

Boots will be found on the whole to be more
useful than shoes. Thick boots are required
in winter.

Hats - soft felt hats, which are to be pur-
chased in any town, are the most service-
able. Straw hats and Caps are also useful.

Cholera Belts. Many derive much comfort
from Cholera Belts, and they can be got of
graduated weights. I think they do often pre-
vent chills, especially in a country like this,
where changes of temperature are often
considerable and sudden. Once worn,
however, they must always be worn.

Overcoats: One heavy cloths and one light
walking coat, and a poor Mackintosh
rug. He should have one good carriage
rug, or, what is still better, a Kaross
or Steer Rug. This latter is to be purchased
in almost any town.

A cushion is useful, especially when travelling.
travelling, and when sitting about.

Ardian nests are found to be very useful in water.

Time of year to arrive at the Cape—

Undoubtedly the best time of year to arrive at the Cape is in the end of November or beginning of December. The weather at the Cape then, and during the summer, is drier than in the winter months, and this also applies most emphatically to the Plateau of 1500 ft altitude in the Ceres district. It is lovely there in November, December, January, February, and March, but later than that it gets damp.

April, as a rule, is a perfect month on the Karroo. In May it gets colder, especially in that part from the Keet River Mountains to Kingsburg. Beyond these the weather is never quite so cold and there is little or no rain, the rainy season being in summer, when thunderstorms are frequent.
With regard to open-air treatment:

This has, more or less, been in vogue for many years, although perhaps not to the extent to which it is carried in England and on the Continent of Europe. If these methods, now so much in vogue, are good in the damp and variable climate of England, they must surely be at least equally good when super-added to the natural advantages of the Cape and its Climate. For here, open-air, real or semi-open-air, is always available to an extent that cannot in the faintest degree be approached at home in England, the feeding part of the treatment is certainly much more easily carried out, but, as above already indicated, South Africa is now rapidly improving in that respect also.