THE PULMONARY INVALID IN COLORADO.

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CERTAIN features in the life of a pulmonary invalid in Colorado have impressed themselves deeply upon me during a year and a half's residence in that State. They are non-statistical, every-day facts. They can be appreciated fully only by actual experience or observation; but they are of such direct and vital importance to the well-being of the invalid that I wish to bring them to your careful attention.

The meteorological statistics of Colorado climate which you are acquainted with, are chiefly those of Denver and Colorado Springs; but please remember that Colorado is nearly four hundred miles long by two hundred and eighty miles wide, and varies in altitude from three thousand to fourteen thousand feet above sea level. Short distances, particularly in the invalid belt, along the eastern slope of the mountains from Pueblo to Fort Collins, make marked difference in the weather conditions. This is especially so about Colorado Springs, where the isolated mass of Pike's Peak acts as a storm centre and meteorologic eccentric of considerable moment. Arrapahoe county, of which Denver is the seat, is alone as large as Massachusetts and of about the same shape. Parts of the state especially attractive to newcomers, because of game or gold mines, are entirely unsuitable for an invalid. Do not then think, from your knowledge of general sun and humidity statistics, that it suffices to send a patient simply to Colorado, to settle where he may please.

The two factors most essential to a successful use of Colorado climate for pulmonary tuberculosis are these: Early diagnosis with prompt exile, and especially medical control of the case from the start in the new climate. The importance of the first, and the great advantage of climatic therapeutics in the early stages of pulmonary phthisis, the malarial stage, if I may so call it, of debility, slight febrile movement, a quick pulse, and few or dubious signs on chest examination, cannot be insisted upon too strongly. It is not my purpose, however, to discuss here the question of climate or altitude. I assume throughout this paper that the invalid has been sent to Colorado as the place best suited for his case; and by *invalid* I mean a person sent to Colorado because of tubercular disease, no matter how slight or localized the invasion, or how little impaired his general health.

Let me only say that Colorado as a last resort, when the patient has gone steadily from bad to worse in Florida or Saranac or Asheville, is very different from Colorado at the start. As Fisk says, "There should be no more delay in the wise selection of climate than in the early diagnosis of the disease. Delay is dangerous. Tentative methods are not to be tolerated. The patient is entitled to the best that medical experience can offer."

What I wish to call particularly to your attention is the need of proper control of the patient while in Colorado. Hope alone, even "*spes phthisica*," or air even that of Colorado, if misused, will not cure tuberculosis. Many patients, arrived in Colorado, act, sometimes it must be said under advice from physicians at home, as if the end were gained and they had no more responsibility. In reality the fight has but begun and it is a fight to the finish with the deadliest foe man has. It lasts a man as long as he lives, and is won not by some great sacrifice, even the going West, but is gained only by constant unceasing watchfulness of little

things. "Every impairment of digestive power, every decline in muscular vigor, every breath of foul air breathed is a point lost in the fight in which every item, however apparently trivial, tells in the long run."

A change of climate, with no attention paid to change from confined, unhygienic occupation and injurious habits, to a proper out-door existence, is a game but half and poorly played. Proper housing and abundant nourishing food are as essential in Colorado as in New England, and require local knowledge and careful search to find.

The city of Denver itself is often smoky, and a city anywhere is not the place for a pulmonary invalid to live in. The suburbs of Denver, however, to the east, southeast or west, are so situated in reference to land configuration and wind currents as to be entirely free from smoke, and offer as clear an atmosphere as that of Colorado Springs. The elevation is a thousand feet less than the Springs and much more agreeable to many persons. I found, myself, that although I was not troubled by the altitude at the Springs, a return to Denver gave me an immediate sense of greater energy and well-being.

Such suburbs of Denver as Montclair, University Park, Petersburg or Berkeley, are admirably suited for invalids and are all within the street car service. Living in Denver is less expensive than at Colorado Springs.

Many places in Colorado, and especially some of the newly recommended towns in Arizona and New Mexico, while excellently adapted atmospherically, are absolutely unfit for an invalid by the impossibility of procuring proper food. Ordinary ranch-life, with its changeless diet of soda biscuit and bacon, is undesirable for a patient who needs easily obtained nutrition. A strong man can go with advantage into the wilds of the White River country after large game, but the hardship and rough diet of the trip will undo an invalid's winter gain. I have seen more

than one patient seriously and permanently set back by such a summer's outing.

Let me impress most deeply upon you that an out-door life in Colorado does not necessitate roughing it, and for the patient with phthisis should not include it, no matter how slight the invasion or apparently vigorous his condition. You do not realize, perhaps, how often patients, particularly incipient cases, are sent west with the remark by their physician, "Oh! live out of doors; have a gun; live in the saddle. So long as you gain in weight and are feeling stronger, you need not see a doctor." So they do not, till a longer ride than usual, or an exposure to a Colorado wind, with its penetrating power of tiring you out, puts a stop to their improvement and starts them "down hill." The golden opportunity for the invalid in Colorado is the start and the keeping it.

The first response of the patient to the new climate is often astonishingly quick. There is a quality in the dry, warm, gloriously sunny air which seems with each breath to efface that sense of hopeless tire so common in incipient cases. It is not uncommon to see patients gain two pounds the first week in Denver, and, *under proper regimen*, to continue at that rate for a month or more. In my own case, if you will pardon a personal allusion, there was a gain of fourteen pounds in the first six weeks, and an almost entire cessation of cough in the first three. With the gain in weight comes a similar and often greater gain in nervous energy. The sun and wind soon cover the pale cheek with the Colorado bronze. The patient looks and feels like a new person.

It is needless to say that the repair of invaded tissue does not keep pace with this general gain. The plump, bronzed face is not an index of the condition of the chest. It is difficult to make the invalid newcomer realize this and feel the importance of not jeopardizing the splendid start.

It is the reward of inactivity and is forfeited by overdoing. Once lost, experience shows that the climate is chary of a second gift where her first proffer of health is neglected or misused.

Out-door life, *without exercise*, is the secret of success during an invalid's early months in Colorado. The conditions of air and sun in Colorado are such as to make an out-door existence of continued inactivity possible, in a way hard to conceive here in New England.

A knowledge of local surroundings and care in the selection of a dwelling place can make such a life possible and pleasant. A veranda open to the south and sheltered from the wind by wall or canvas screen is as important an item to secure, when house-hunting, as a well ventilated, warmed sleeping room. It is even more so, for the patient is to spend the larger part of his time out-doors. An ideal arrangement is a recessed loggia above the ground open to the south, and so sheltered always from the wind, but giving a wide view over the plains to Pike's Peak and that unsurpassed stretch of two hundred miles of mountain range. In such a nook an invalid can sit even in the shortest cold days of winter, at least seven hours every day in clear, dry air, where every breath is one of benefit.

Exercise at first should be absolutely forbidden. The elevation alone causes sufficient pulmonary work. There is chest expansion gained while the patient is wholly still. After a few weeks of quiet gain, exercise may be begun by shork walks, beginning with an eighth or quarter of a mile, a distance which seems especially ridiculous in the clear air of Colorado, where objects twenty miles away do not look five. Keeping a close watch for slight rise in temperature, or digestive fatigue, the distance walked may be gradually increased. An excellent change and one agreeable to the patient, as it allows him to get farther from home and perchance out of sight of his starting point, is driving,—not

in a high jolting trap, as is too often seen, but in a buggy with an easy gaited horse, so that the patient has no drag upon his chest and arms from tight reining. From a short drive at first, the invalid can gradually come to spending the whole day in jogging about over the plains. Horseback riding is to be long deferred and most cautiously begun. It has proved a direful cause of hæmorrhage or of set-back. It is difficult to make the invalid wait patiently for this, the most prejudged and attractive feature of his western life. The objection to horseback exercise applies with double force to bicycling.

This continued quietness is not the manner of life pictured to most patients on going to Colorado to regain their health, but it is the only one which will be without serious risk.

Let me now call your attention to a few details which directly affect the daily life of the invalid in Colorado.

The climate is very uniform by monthly averages, but the weather day to day is not always at the mean. Changes from hot to cold are as abrupt and marked as with us. There is not, of course, the damp rawness of our eastern coast, but the contrast between sun and shade is more decided. I have, myself, seen in February two thermometers on my veranda, one in the sun registering 90° F., and the other not six feet off, in the shade, at 45°. The clear, dry air holds little heat and the warmth is all in the sunshine. A thin cirrus cloud, no more than is grateful to the eyes, will take all the warmth from the air and remind you that after all it is mid-winter.

The open cars run all winter, and there are but few days when the invalid cannot ride in them. He should always have a travelling rug to throw across the knees. I have ridden seven miles in an open car at eight o'clock in the evening in February without discomfort; but there is no time when a patient should go far from home without a

wrap, even in warm mid-day. The wind comes suddenly and strong from cloudless skies, and many days, though warm and sunny, are far too windy for an invalid to walk or ride. While the wind may last but a short time it rises suddenly, and the exposure in reaching home may be great. The dust storms are less frequent, but more trying.

The battle against tuberculosis is one of detailed watchfulness. The lack of care which the average invalid in Colorado shows for the important little things is most surprising.

To have a few friends in for tea of an afternoon will seem to you a harmless diversion. Here is the picture as you see it in Colorado Springs. At four o'clock, when the western sun is streaming warm and bright across the mesa, the patient leaves the open air of the veranda and spends the next two hours in her room with six or a dozen friends. The air becomes warm and close, and the energy gained by the day out-doors is soon spent. The dry and the moist cough, not heard when the guests first arrive, begin later in the hour, and soon become an integral part of the hum of conversation. Nature sends her flush of protest to the cheeks. Two hours of glorious possibility have been lost. They have been spent in-doors instead of out, and in-doors under bad conditions.

Young men sent to Colorado should be made before they start to feel the seriousness of the fight ahead of them, and the necessity for simple living. The West is open-hearted, cordial, and essentially a man's country. Club life is offered freely and may have proper use, but for an invalid to take his afternoon's rest from a morning's over fatigue at golf or coyote coursing, upon the couch in the smoking room of never so charming a club, is not conducive to his best recovery. Piquet and poker are excitants, but fresh air and early hours are better tonics for tuberculosis. The road to health does not lead in the way of dancing, dinner and

theatre parties. There can be no neutrality in the fight, and nothing that does not count,—whatever is not directly for recovery is against it.

I put this earnestly, but the recovery of health from tuberculosis is not a pastime. As Fisk says, "It is a hard business, requiring unremitting attention, constant daily care and a stout heart." The timely courage and restraining word which can come with effect from the physician only when he is in close touch with his patient, are of untold worth. From the few details, even, which I have called to your attention it will be obvious to you that we here cannot direct our patients out in Colorado. Do not then prejudice a quick and sympathetic accord between your patient and his new doctor by careless and erroneous speech about his new western life. Not for him are "the wild joys of living * * * * the hunt of the bear." His proper conduct is a quiet, well-nourished, out-door life. Our duty in the East, if we are to do it to the full towards the patients we send to Colorado, is:

To make earlier diagnosis.

To send our patient away at once while his chance for full recovery is best.

To send him not simply to Colorado, but to a *physician* in Colorado, unprejudiced as to manner of life, admonished to confide and obey.