susceptible to its action than others, as much so as is the case with opium and its preparations.

The course followed to my own satisfaction is to commence with a half grain for a child a year old, and increase a half grain for each additional year, and repeat every three or four hours. After noting the effect of that dose, to increase it from a half to one grain each day, according to the severity of the attack, and the peculiar tolerance of the medicine. Yet in some cases this plan may be deviated from with benefit, and the increase may be much greater and more rapid, but in the majority of cases I have found the above plan satisfactory. Of course it is necessary to watch the effect of the article (as it always is in the use of potent drugs), and, when decided symptoms of hypnosis are manifested, to suspend its use until the subsidence of such symptoms, then to begin it again in diminished quantity, to be increased as before.

I have found the "campeach syrup of sarsaparilla" a good vehicle for its administration, as it masks the taste and destroys the pungency of the elixir more effectually than anything else I have tried. Some of the stimulant expectorants will prove valuable adjuvants.

I hope other practitioners who have not given this treatment a trial will do so, and all who may or have done so will report the result, that we may have more data upon the question.

ART. XIII.—*Remarks on the Climate of Florida.* By C. W. HORSEY, M.D., of Fernandina, Florida.

THE climate of Florida has attracted much attention for many years, on account of its known adaptability as a place of winter residence for those suffering with pulmonary disease. Particularly has such been the case for the few years immediately past, each succeeding season bringing a continually increasing number of those afflicted to be benefited by its genial influence.

Having resided in Florida, and conducted an active practice for several years, I have been necessarily brought in contact with many cases of lung disease, and a fact more constant and invariable than any noted is a want of knowledge exhibited by the majority of patients as to the true character of the climate, and of that portion of the State best suited to their special condition. This consideration prompts me to give the result of my personal experience and observation, and to offer for the information of the profession, and under whose advice so many come to Florida, a few general remarks on the climate and its variation in different parts of the State. I am not prepared at this time to give accurate statistical tables in support

of the view presented, but think the statements made will be found correct.

It has occurred to me to be too universally the case that invalids are indiscriminately recommended to come south, and especially to Florida, with the idea that because it is south the climate must be warmer, and therefore beneficial. The number of deaths that occur here, and the considerable number of those who leave at the close of every season without permanent benefit, is unfortunately the best evidence of the unsoundness of such views. In as few words as possible I shall endeavour to note the peculiarities of different sections of the State, and give my reasons for preferring some over others. The most accessible points, and for that reason, the most frequented, are the resorts on the St. John's River, namely: Jacksonville, Hibernia, Magnolia, and Green Cove Springs, situated nearer the coast, with Palatka and Enterprise further south. On the seaboard Fernandina and St. Augustine are the only towns of any importance. Individuals and small parties penetrate as far south as Indian River, on the Atlantic, and others westward to the Gulf, as far south as Tampa, Manatee, Clearwater Harbor, and Key West. These far-away points, however, are too much off the highways of travel to be visited by the majority of invalids, and we find the larger percentage congregated at the places first mentioned.

Fernandina and St. Augustine present the same features of climate met with on the seaboard of semi-tropical countries elsewhere. The atmospheric conditions of both are identical, being invariably moist, especially at night and morning, and under the continual influence of the sea breeze and wind currents from the ocean. During the winter months all points on the coast are exposed to the frequently prevalent northerly storms, which last at times for days, and whose fierce and penetrating blasts are difficult to be borne even by the hardy. On the St. John's but little difference is observed in the atmosphere at the several places of resort on its banks. The country along the river, for the greater part of its course, is flat, with little elevation above the water level, and, as a rule, extensive swamps and hammocks fringe its borders. The river presents a succession of expansions and contractions, conveying the idea of a continuous chain of lakes, some of which are indeed immense surfaces of water, and it is usually upon such expansions that the resorts are located. The evaporation from the water necessarily causes a very considerable amount of moisture in the air, which is so great that at morning and evening perceptible mists hang over the river, and to a considerable extent on either side, and not infrequently heavy fogs prevail. It is consequently at the beginning and close of the day constantly damp and chilly, or damp, warm, and relaxing, as the temperature may happen to be at the time. This varies probably a very little less on the river, far, lying further inland, it is more protected from the wind, though the difference

is slight. The climate on the Gulf coast is much milder, though the atmosphere is more or less humid, and fogs are of frequent occurrence. It is apparently less subject to storms, and the wind less penetrating, than on the Atlantic. The mean winter temperature for the Atlantic and St. John's may be set down at between 55° and 60° , the thermometer, however, often indicates 75° and 80° , and falls to 35° and 40° , and occasionally as low as 20° . The mean is somewhat higher on the Gulf, increasing as we go south.

In the interior of the State a very different atmosphere and climate are found, which present also, however, considerable local variation. The surface of the country ascends gradually from both Atlantic and Gulf coasts, and reaches its highest altitude at very nearly the centre of the eastern and peninsular portion of the State, forming a flattened ridge or table-land, which traverses it in a direction northwest and southeast, and extends to the southern extremity of the peninsula. The soil throughout this region, which embraces the largest area of the State, is generally sandy, the country flat and covered with immense pine forests, interspersed, here and there, with savannahs or everglades.

The topography of the middle and western portions is more undulating and hilly, with greater prevalence of clay subsoil, and a vegetation and forest growth more suited to such soil. The climate here is more rugged and bleak than in any portion of the State, being the only section in which a marked fall of snow has ever occurred. The highest elevation in the central sections is about 300 feet, but varies in different localities, the general average being from 150 to 200 feet. The air here, as a rule, is always dry, and when changes in temperature occur, though at times sudden, provision or accommodation, by means of proper clothing, etc., can be made to meet such effects, which is difficult, if not impossible, in humid atmospheres with high barometric pressure.

In selecting the climate best adapted to an individual case, arbitrary rules, of course, can never be laid down, yet there are general conditions of atmosphere and climate which experience teaches to be best suited to peculiar pathological states and classes of disease. If I mistake not, the received opinion of to-day is, that the essential points to be regarded in seeking a climate for pulmonary affections are its dryness, freedom from sudden and frequent variations in temperature, and from unhealthy local conditions, while of sufficient mildness to promote and sustain good skin action. In tubercular phthisis, especially when destruction of tissue is considerable, in chronic bronchitis and pneumonias, broncho-pneumonias, and general caseous infiltration of the lung substance as the result of inflammatory changes, where the functional integrity of the air-cells is greatly impaired, the absolute necessity of sustaining and increasing, if possible, cutaneous action and transpiration, is acknowledged to be of paramount importance.

Such being the case, I contend that the seaboard, even of Florida, is not, in the vast majority of cases, the place to fulfil these conditions; nor again, is the climate of the St. John's better, or any habitually moist atmosphere. I am aware that exceptions do occasionally occur where benefit is derived from residence in such regions, but have been, in my experience, too infrequent to be considered in this connection. My remarks, be it understood, are applied directly to those cases which form, by far, the largest proportion of the invalid ranks, whose organic changes have progressed to a notable extent and diseased action existed for a length of time.

At the places under consideration there is so much humidity in the atmosphere that at nightfall and early morning it is so chilly that fires become necessary very early in the fall, and have to be continued late in the spring, while in winter this operates most unfavourably upon the sensitive invalid. It is a complaint constantly to be heard from the many that though the difference in temperature may be great, yet they cannot bear the cold here as in the north.

I do not desire to convey the impression that this is the invariable character of the climate at these points, for there are days, and sometimes weeks, even on the coast, when the atmosphere is mild, pleasant, and balmy. Changes there are so frequent, however, and so marked, and the consequences to the sick so grave, that in choosing a permanent winter residence such important facts should not be overlooked. I will candidly admit that for beauty of scenery, picturesque landscape, and general local attractions, together, on the whole, with good accommodations, I must agree with the multitude, that for the mere pleasure-seeker very little here is left to be desired. For the invalid, however, whose main purpose is, or should be, to gain the greatest benefit from climatic influence, the case is very different, and while acknowledging the importance of such instrumentalities in effecting improvement, I do not lose sight of those more absolutely essential, and, therefore, am forced to say, that I do not think the localities in question by any means suited to the larger class of cases who come here.

Let it not be supposed that I am enthusiastic on this subject, for, far be it from me to mislead, nor is it my intention to disparage any portion of the State. Considering the interests of the sick alone, numbers of whom I see blundering from place to place every winter, I feel it my duty to state what I believe to be true, and shall be more than repaid if even one only is saved from the fatal mistakes so often made.

In the interior, on the contrary, when we consider the climate alone, there are many points that are particularly adapted to these conditions, and when patients come to Florida, whose physical condition warrants under favourable circumstances a reasonable chance for restoration of impaired function and arrest of diseased action, they derive decided benefit

from an inland residence. The section of country to which I especially desire to invite and direct attention, is the *central pineland* regions, of which the towns of Gainesville, Micanopy, Ocala, and Brooksville are the centres. Situated as these points and their surroundings are upon the highest and driest section of the State, sufficiently removed from either coast to be beyond the effects of dampness, they appear to me to possess peculiar fitness to merit all requirements of climate that are to be obtained. We have here the healthful influence of that peculiar aromatic element proverbial to the air of turpentine countries, which I regard as not altogether mythical in its effects, for at least it is inviting for out-door exercise and exertion, and thereby plays a very important role in my idea of the requisites for improvement.

My observation has led me to believe that this climate is especially suited to that class of cases associated with organic disease of the heart, and to those in whom irritability or excitability of the heart's action exists either as an anterior condition or a developed result of the lung affection. Those who are unable to live in high altitudes, consequently, will find great benefit here, for the country being level, dry, and not too much elevated, the circulatory apparatus is not subjected to the great disturbances induced by rarefied air. In cases of chronic broncho-pneumonia attended with excessive expectoration, the immediate benefit derived is probably more marked than in any other. I feel assured that in this condition particularly a moist or damp atmosphere is not the place. On the contrary, I have seen the most decided improvement occur speedily by change of residence. The explanation of this is sufficiently evident, and speaks volumes in favour of the interior, for during cold changes in moist atmospheres the catarrhal circulation is so retarded and interfered with, and capillary retrocession so complete that organic hyperæmias occur, and when kept up for any length of time, as is so often the case, the digestive functions become deranged, the diseased lungs are overcharged, secretion and proliferation from the affected mucous surfaces largely increased, and debility rapidly augmented. I cannot better illustrate this part of my subject than by stating my individual experience.

I have the misfortune to suffer with this affection, and in common with many who have been under my treatment, have tried the experiment of residence in both climates. Living upon the coast in the autumn of 1872, I succumbed to an attack of acute broncho-pneumonia, and being very much reduced by long-continued fatigue, was unable to throw it off. It became chronic, and in the course of eight or ten weeks my condition was extreme. I coughed incessantly, expectorated at least ten or twelve ounces of mucopurulent matter during the twenty-four hours; nutrition was at a standstill; night sweats excessive; prostration complete, and a fatal termination apparently imminent. At this juncture, in obedience to my fixed convictions, I determined, as a last effort, having been prevented by extreme weakness from attempting it earlier, to try the interior, and about the beginning of January, 1873, removed to a convenient point about seventy-

five miles inland on the line of railroad, and within the area regarded by me as most beneficial. Within a short time, probably not over a fortnight, my symptoms were better. My digestive organs slowly resumed their function; nutrition increased; expectoration materially diminished; strength and a capacity for exercise gradually developed, until at the expiration of three months my improvement was so great that I was able to walk considerable distances, and undergo a reasonable amount of exertion without much fatigue. I returned home about the first of April, not found to my cost that I had done so too soon. By the most careful attention, however, to every measure suggested by prudence, I was enabled to hold my own until the advent of summer, when I found myself strong enough to resume the duties of an extensive practice. This I conducted as cautiously as possible, and steadily improved throughout the continuance of warm weather.

At the approach of winter, however, the indications were sufficient to admonish me that it would be at my peril to remain upon the seaboard longer, and consequently as a precautionary measure I again sought the interior, choosing Guinesville as my location, and have every reason to feel satisfied with my selection. I am fully aware that I am not cored, but as an instance of improvement is an extreme case, I have narrated this history for what it is worth.

Following the ideas that I entertain as regards the phenomena of improvement in such conditions, I am bound to conclude that the influence of climate was my salvation, for while I relaxed not for an instant economic remedial measures, yet such agencies had been powerless in face of the moist atmosphere. A most thorough comparative auscultatory examination in my case has determined the fact that extensively impaired function has been largely restored, and diseased action so far as can be discovered arrested, and it seems reasonable to suppose, that, in course of time, pursuing the prudent course adopted, restoration will be complete. I can adduce numberless instances of individuals who have become permanent inhabitants of this region, and who fifteen and twenty years ago were the subjects of apparently hopeless pulmonary diseases, and yet are to-day in the enjoyment, some of them, of robust health, and others, of at least comfortable existences, who probably in the light of sound advice would have long since entirely recovered.

Invalids, often when making good progress, commit the sad error of not only returning home too early in the spring, but of returning at all. A continuous residence in this climate for several years, or as long as may be necessary to thoroughly re-establish health, is not only advisable, but is the proper and necessary thing to do when it is possible. I have observed more permanent benefit in those who have adopted this plan than in the larger number who return north in summer to come out again in winter. Many of the points suitable for winter, however, are not so for summer, owing to the prevalence of malarial influences. This difficulty, though, is easily obviated, as the seaboard during mid-summer and autumn is equally as pleasant and delightful as any on the Atlantic, and offers an agreeable change.

Fernandino and St. Augustine are both singularly exempt from epidemic influences, and at this season are apparently suitable for cases not in extreme condition. I have thoroughly explored the country around Gainesville for a considerable distance, and do not hesitate to recommend this region, which embraces the counties of Alachua, Marion, Sumter, Orange, and parts of Hernando, as in my opinion the most eligible section in the State.

The only drawback existing at present is a want of better accommodation, which difficulty, however, will be speedily overcome as soon as the influx of visitors in this direction warrants the outlay of capital. All necessary requirements for the sick can even now be obtained, and school facilities of a very high order exist, which make it a very desirable winter resort for weak and delicate children.

It is not my purpose to enter into detail as to the views entertained in regard to treatment, or, preferably, management of such cases. It is sufficient to remark that I believe that the influence of climate conjoined to personal prudence in regard to avoidance of draughts and adaptation of clothing, together with generous diet (in which I include cod-liver oil), and out-door exercise will accomplish all that can be done.

In concluding this very imperfect article, I cannot refrain from condemning the practice of sending patients out here to die.

Surely the science of medicine has progressed sufficiently far at this day to place it within the power of all who profess it to understand and appreciate the indications presented by the majority of patients seeking advice. When, therefore, the physical (I use the word in its most comprehensive sense) condition of patients indicates no reasonable chance for recovery, save them the terrible ordeal of death in a strange land away from home and friends. That recoveries take place from seemingly hopeless conditions is no argument for sending some out here who come, for to one recovery under such circumstances there are ten deaths. Send patients in the incipiency of their disease when possible, and when there is sufficient organic life remaining for nature to work upon, and there will be but little doubt that reasonable anticipations will be realized.

ART. XIV.—*Remarks on the Climatic Influence of Colorado in the Cure of Asthma, with a Review of a Large Number of Cases Reported by a Convention of Asthmatics, assembled at Denver, in December, 1873.*
By W. R. WHITEHEAD, M.D., of Denver, Colorado, formerly of New York.

MANY physicians have, very properly, a distrust of popular efforts to establish the reputation of a particular climate for the cure of a certain disease. This distrust has sometimes been strengthened by the injudicious