last winter, a season of such severity as will be remembered by us all, the thermometer at Hyères only sank one single night to the freezing point. To how many scrofulous and hence possibly phthisical children may not this southern annual journey have been the means of stopping the first advances of tubercular disease, and how many cases of the already established malady may not valuable lives have been prolonged for months and perhaps for years?

We have been carried away by our subject, and we fear we have trespassed too long on your time and attention, or we would have referred to the advances made within the period alluded to in the diagnosis and treatment of other chest-diseases, to the sounder views regarding asthma and its causes, to the improvements in the treatment of pleuritic exudations, and, last and not least, to the fresh data we have acquired for the management of the disease of the heart and large vessels. Here there has been indeed a change. The alterations produced by mechanical obstruction to the circulation are now recognised, not as disease, but as the consequences of disease; and the hypertrophy of a heart, when the valves are diseased, or when obstruction exists in the course of the aorta is no more the disease itself than is the accompanying dropsy. Within a very short space of time a valuable addition has been made to our means of diagnosis of heart disease by the invention of the sphygmograph and cardiograph, by which instruments the rhythm of the pulse and heart can be accurately recorded on paper. Already have these ingenious instruments done good service in the diagnosis of the obscure forms of cardiac and aortic disease; but the whole subject must be revised by their aid, numerous and accurate observations must be made and recorded, before the profession can appreciate their importance relative both to diagnosis and to treatment of these recent inventions.

All that we have laid before you this day, gentlemen, is to prove that medicine as a science is not standing still; that there is before us yet an ample field for investigation; and that so long as we continue to practice our noble profession we must ever be content to be students, and not rest on our oars in the belief that we have mastered all the intricacies of medical science. We are keeping pace, we believe, with this rapidly progressive age; we are working earnestly and faithfully in the true paths of close observation and conscientious induction; and though in our difficult profession there is much that is obscure, yet, when we ourselves remember how much that thirty years ago was dark has now become light we are willing to hope that the maturer years of our professional life, will witness changes as great and as important as those that have marked the earlier part of our career.

ON THE INFLUENCE OF THE ALPINE CLIMATES ON PULMONARY CONSUMPTION.*

By HERMANN WEBER, M.D., F.R.C.P.,
Physician to the German Hospital.

CASE III. H. F., aged 31, a German, came to London in 1852, had a chronic cough in 1853, and hæmoptysis in the summers of 1854 and 1856. He spent then seven months in Cairo, where he became better, without, however, entirely losing his cough. He had again hæmoptysis in March 1857 in Cairo, and much cough during the summer of 1857 in London. There was improvement during the following winter at Cannes and Nice; but he was much worse after his return to London. He was first seen by myself in July 1858. He had lost 29 lb. in three years. There was dulness on the left side from the apex to the fifth rib, with bronchophony and crackling rhonchus in the supra- and infra-clavicular spaces; and an analogous condition on the back of the same side. Nothing abnormal was discovered on the right side. He had shortness of breath. Pulse 85; thoracic expansion, 35 to 36½ inches. He went to Valparaiso, and had there again hæmoptysis. He spent then eight months on the Peruvian Andes (at an elevation of between 9,000 and 10,000 feet), and gained flesh and lost cough. He went afterwards to New Orleans, where he again began to cough and lose flesh. He was sent thence to the table-land of Mexico, where, to his own feeling, he entirely recovered his health. When seen by me in the autumn of 1860, the dulness on the left side reached only from the apex to the third rib. This portion was much flattened; and there was absence of vesicular breathing, but no bronchophony, and no rhonchus. He had gained 24 lb. in twenty-seven months. Pulse 66; expansion of chest, 36 to 38 inches. He remained well until the spring of 1866, when he again began to cough, was often feverish, lost much flesh, and had some hæmoptysis. When seen in the beginning of October 1866, the old affection of the left side had remained almost unchanged; but on the right there was dulness from the apex to the fourth rib, with broncho-

phony and occasional crackling rhonchus in the subclavicular space. He had lost 20 lb. in twelve months. Pulse 95; chest-expansion, 35½ to 37 inches. He went to the Valley of Jauja, in the Peruvian Andes, and lost his cough almost entirely; and, when seen in June 1867, he had gained 15 lb. The dulness descended on the right side only to the second rib. There was no rhonchus, but scarcely any respiratory murmur over the dull space. Pulse 74; expansion of chest, 36 to 38 inches.

The rapid improvement repeatedly obtained in this case by the removal to elevated regions is very striking; and it is also important to remark, that the improvement effected by the stay at Cairo and in the South of France was neither so great nor so lasting as that from the mountain sojourn.

CASE IV. B. D., from the lower parts of Switzerland, came to London in 1864, aged 22. He was much depressed by the fogs and dulness of the atmosphere. He had repeated attacks of bronchitis during the winter; and in the spring of 1865 he coughed, and became emaciated during the summer. There was slight dulness in the left clavicular and infraclavicular region, with diminished respiratory sounds. He spent the winter at Bordeaux and at Cannes; he never lost his cough entirely, and continued to lose weight. He returned to London in May 1866. Dulness extended on the left side from the apex to the third rib. He had, early in June, an attack of sore-throat, which was with him the usual forerunner of bronchitis; he became feverish, and by the end of the month a pleuropneumonic affection was ascertained in the lower part of the right side, which gradually crept upwards to the upper third of the scapula. By the end of July, the pyrexia had almost ceased, under a treatment of milk, quinine, and cod-liver oil; but the dulness over the back of the right side had not yielded. There was crepitant rhonchus over the upper part of the dull space, and absence of respiratory murmur over the lower; pulse 92 to 100; expansion of chest, 31½ to 33 inches. The dyspnoea was great at every exertion; frequent cough, with about two and a half ounces of mucopurulent expectoration. He had lost 27 lbs. in as many months' stay in London. In this state he went, towards the end of July, to the Righi (Kaltbad and Scheideck), lived there almost entirely in the open air, and drank about two quarts of milk every day. In less than six weeks, he was able to take considerable walks; and in October he had lost his cough almost entirely. He spent the winter in different parts of Switzerland, usually above 2,500 feet above the sea-level. He had not a single attack of sore-throat and bronchitis; and when he returned to London, towards the end of May, the right side was quite normal; the left side was in front, in the supra- and infra-clavicular spaces, slightly sunk in; there was moderate dulness and scarcely perceptible breathing from the apex to the second rib. He had gained 19 lb. in weight during ten months, and felt in every respect perfectly well.

CASE V. B. K., aged 21, had pneumonia of the left side about ten years ago. He came to London in spring 1865, and began to cough and lose flesh in the winter 1865-66. Hoarseness supervened in spring 1866, and the cough gradually increased. When seen in July, he was thin and pale, with circumscribed red cheeks; he had chronic swelling of the tarsal portion of the eyelids; pulse 105 to 110; respirations 26 to 30; temperature every evening slightly increased. There was fresh pneumonic affection of the lower part of the left side; dulness and absence of respiratory murmur on the right from the apex to the third rib. The evening pyrexia gradually subsided under perfect rest and milk diet; but the pneumonic affection slowly crept upwards, the dulness extending on the posterior part of the left side from the bottom to the upper third. When he left England towards the end of August, there was crepitation with slight bronchophony over the greater part of the left scapula; and the older affection of the right side had remained unchanged. He was advised to go to the Davos, but went first to Germany; and only after having been attacked by fresh colds he repaired in November to Davos am Platz, where he stayed until the middle of April, and, in spite of a rather unfavourable winter, entirely lost his cough, and gained 7 lbs. in weight; and the spirometer showed an increase of pulmonary capacity amounting to more than 900 cubic centimetres. According to Dr. Unger's report at the time of A. B.'s departure from the Davos, nothing abnormal could be discovered on the left side, except, perhaps, slight dulness in the lowest part; and the dull space on the upper portion of the right side was likewise diminished. In addition, the affection of the eyelids, which had existed for several years, had entirely disappeared without remedial interference.

With regard to the experience collected at Davos am Platz, accurate records date only from February 1865, when Dr. Unger, himself formerly consumptive, and then not yet quite recovered, came to the village, accompanied by a young gentleman with extensive lung-disease. Between February 1865 and March 1867, 35 patients with consumptive affections had been under the observation and treatment of

* Concluded from page 59 of JOURNAL of July 27th.

Drs. Spengler and Unger, who have kindly furnished me with a report; of which, however, I can only give a very short summary. Of these 35 cases, only 1, belonging to a consumptive family, offered no distinct signs to auscultation and percussion, although the spirometer shewed a considerable impairment of the respiratory capacity. Of the other 34 cases, 19 were in the first stage, with distinct deposits; 15 in the second, with cavities. Of the 19 in the first stage, 2 had deposits in both sides, and some had other complications, as pleuritic effusion; 7 of the 19 left cured, 6 improved, 6 remained under treatment; 18 of the 19 had gained in weight; 8 had previously had attacks of hæmoptysis, which only in one of them returned in a very slight degree during the stay. Attacks of fresh colds were remarkably rare in all of them. Of the 15 in the second stage, only 2 were free from fever; 3 of them had pleuritic exudations; 5 of the 15 died (3 from gradual consumption, 2 from hæmoptysis); 1 left worse than he arrived; 1 improved; 2, who had arrived with considerable pulmonary distension, are steadily improving; and 1 is regarded as perfectly convalescent. It is worthy of remark, that diarrhoea did not occur in any of them, and that the night-perspiration in almost all cases disappeared after a short stay. In one case only, careless exposure led to a croupous pneumonia of the left lower lobe, with a favourable termination on the fifth day.

The treatment adopted at the Davos consists in the use of much milk, and light nourishing food; a moderate amount of wine, principally the red wine of the Valteline; and graduated exercise, first on level, later up hill. The cold douche is likewise in many cases used with advantage.

Those who consider the facts related will probably not deny that they offer testimony in favour of mountainous climates. The two cases which at a later period ended fatally are particularly instructive, by shewing that a curative process had taken place during the stay in elevated regions. Both cases, and probably also the three others related, belonged to the class described by Addison under the head of pneumonic phthisis. It is probably on these low forms of catarrhal pneumonia, with a tendency to chronic infiltration, cheesy transformation, and formation of cavities, that the Alpine climates have a truly curative and prophylactic influence.

The question, how the mountain climates exercise so favourable an influence, can probably not be answered without entering the field of theories, which I wish to avoid as much as possible. There are, however, some undeniable facts. Thus the air of elevated regions is lighter, more rarefied, and cooler; and it is usually free from the foreign admixtures found in towns, and also free from the various kinds of malaria. The food, the occupation, and the whole manner of living, are generally different from those prevailing in large towns and much inhabited districts. The influence observed by most people on their removal to mountainous climates is an improvement of appetite, digestion, formation of blood, and nutrition in general. Exhilaration and increased inclination to exercise are likewise frequent attendants of the change. All the influences enumerated, to which others might be added, are of importance in the consideration of the question before us. I will only allude to one; viz., the rarefied air. A given volume of air contains absolutely less oxygen and other constituents at an elevation of 5,000 feet, than at the level of the sea. The movements of the thorax must, therefore, be increased, if the same amount of oxygen is to be introduced; or a smaller amount of oxygen will be introduced, if the movements of the thorax remain the same. It has been asserted, but, as far as I know, not yet been proved experimentally, that the inspirations on mountains are deeper. Healthy persons, at all events, usually have an inclination to take deeper inspirations; and the broad chest of mountaineers may be regarded as an effect of increased respiratory movements. If this view were correct, it might be asked, how far this augmented action of the organs of respiration, and, as a necessary consequence, those of circulation, influences the sanguification and all the processes of nutrition—how far, I say, this mere increase of chest-expansion would go to explain the facts before us. All influences, climatic, physical, or mental, by which the breathing is habitually increased, appear to act beneficially in the tendency to consumption; while all those causing diminished breathing seem to favour, in man and animals, the development of scrofulous and catarrhal inflammations, and of consumptive diseases of the lungs in general.

Although I have already occupied too much space, I must still add a word of caution. Not all consumptive constitutions probably are fit for the Alpine climate, and not all the stages of consumptive disease may be benefited. The invalid ought not to be allowed to go to any Alpine climate he likes, and do there as he pleases; but he ought to be directed to a place where he can have the advice of a medical man who will carefully superintend his diet, his exercise, and his whole manner of living. Many invalids lose the benefit obtained in the commencement by over-exercise and careless exposure; and the very help which these

climates have given them may be turned by them to their ruin. It is further necessary that the invalid be sent in an early stage of the disease, and that he remain long enough, if possible, to regain the full capacity of healthy lungs; and that he be not allowed to return too early to his former unhealthy residence and occupation. On all these points, however, I cannot suggest better advice than that embodied in the excellent works of Sir James Clark on the *Sanative Influence of Climate*, and on *Pulmonary Consumption*.

A CASE OF INVERSION OF THE UTERUS.

By G. F. HODGSON, Esq., Brighton.

A TRADESMAN'S wife, a delicate woman, aged 27, in confinement with her second child (the first having been born two years previously, with the aid of forceps, and then dead), sent for me on the 5th January, 1867. She had then been in labour about four hours, the pains being of average frequency and moderate in severity. The child's head was still above the brim; but the os uteri was so low down and so very patent and flaccid (as was also the os externum) that I thought it right to stay with the patient. Three hours, however, afterwards elapsing without any advance being made, I then absented myself to visit a few urgent cases, first leaving word where I might be found. On returning in about an hour, I was met in the street by the husband, who reported the child as already born. On my arrival in the room, I found the child separated by the nurse and on the hearth-rug, and the nurse herself at the bedside, holding on by the cord, which she declined to let go of, until I should take it of her; as if she thought that it would slip up and be lost, if tight hold were not kept of it. Observing a large amount of blood in the bed, I hastily passed my hand over the abdomen to ascertain the absence of a twin (but did not examine for the uterus more precisely), gave the patient a dose of ergot, and directed a friend of hers to press her hypogastrium whilst I proceeded to remove the placenta. This I found already presenting at the os externum, and on my making gentle traction by the cord, it readily passed into my hands; not, however, in the usual flaccid form, but in a firm, solid, and apparently much larger mass, some of which still remained in the vagina, and was ascertained to be of smaller and smaller bulk the higher the finger proceeded to trace it. This led me to suspect that the uterus was inverted, and to search for the fundus uteri in the hypogastrium; and failing to find it there, I was convinced of the nature of the case. At this moment, the patient's friend whispered to me that she seemed to be dying; and certainly she was in a state of utter collapse. I therefore dispatched the husband to the Old Steine for a second medical man, and he soon returned with Dr. Hall.

In the meantime I arranged for the patient to have a liberal supply of brandy egg-flip and other cordials, and then again gave my attention to the placenta. It was extensively adherent to, and therefore enveloping, the inverted fundus uteri, and had to be peeled from it. When I had accomplished its removal, I returned the uterus into the vagina, and then endeavoured to re-invert it within itself, at which I had made but little progress when Dr. Hall entered the room. At this stage the hæmorrhage was slight, but whether this was owing to the syncope, or to the special condition of the uterus itself, I cannot tell. Dr. Hall quickly examined the case, and promptly agreeing with me as to its nature (the fundus uteri still being undetectable in the hypogastrium) he took a turn at the taxis, and in a few minutes—with his fingers—accomplished it most satisfactorily. The vagina and os uteri then appeared so intensely relaxed as to make us apprehend that a relapse would occur, wherefore we plugged the vagina with a good-sized sponge, previously wrung out of cold vinegar and water, and secured it by a perineal band attached to the abdominal binder. The collapse of the patient continued so extreme that I was obliged to remain with her for several hours, giving stimulants and small doses of opium with quinine at short intervals. She passed a better night than might have been expected, and the next day had fairly rallied. The sponge was then carefully removed, and found to be but slightly soaked with hæmorrhage. The lochia afterwards proved scanty, but foetid, requiring disinfecting ablutions. The patient re-acquired her strength but very gradually; and, although she did not attempt to suckle the child, only left her room for the first time at the end of a month, and continued the use of tonics and extra diet for some time subsequently. Menstruation re-occurred two months after the parturition, and has been "regular" ever since, the patient being now (six months since her confinement) in other respects also quite well for her.

I think there can be no doubt that the inversion of the womb was, in this case, caused by the nurse pulling violently at the funis (the placenta being adherent to the fundus), and that it was favoured by the very flaccid and patent condition of the os uteri, which I detected at