

be accomplished in less than six or seven weeks, and usually about three months is required.

The results that I have obtained have been, on the whole, excellent, and 27 of the 32 cases thus treated have been absolutely cured. I say this because they have been closely followed for periods varying from eight months to four years after all treatment had been stopped, and have been submitted on several occasions to the beer test, which has always remained negative.

THE EMPLOYMENT OF THE BLIND FOR MASSAGE.*

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THE object of this article is to stimulate interest in supplying the blind with another profitable means of livelihood, massage.

I am not going to take up your time by quoting a mass of statistics in order to show you how many people in the world are blind and so unable to support themselves, nor do I intend to expound either the theory or the practice of massage, but what I do wish, is to give you a brief outline of the work which has already been accomplished in training blind masseurs, and to suggest a few ideas, so that some of you may be interested to help.

I had planned to have at this meeting a blind man whom Mr. Hallbeck has been kind enough to teach massage, so that he could show you practically how expert and skillful a masseur a blind man can become, even after a comparatively short and imperfect training. Unfortunately, however, this man in whom Mr. Hallbeck and I have been interested, is in Canada, sick. I shall, therefore, give you a brief summary of some of the results of teaching massage to the blind in other places and then relate the main facts about his teaching, and tell you how expert he has become.

Many if not most of the efforts directed toward utilizing blind people for giving massage have naturally been stimulated by the custom which has existed in Japan for a great many centuries, of employing blind masseurs. There, the blind have enjoyed a special protection and indulgence from the emperor. They have been exempt from taxation; they have formed a sort of guild. Practically all the massage employed in Japan is given by the blind. Most of them learn massage when quite young. There, a very complete treatment is within the means of a jinrikisha man or ordinary laborer. A treatment costs a European ten to twenty sen. The masseurs can be found in almost any street of a town and summoned to the person's house, or their services secured at various depots, or at the large hospitals and clinics.

Although this universal custom of employing

* Read before the Medical Section of the New York Academy of Medicine, Dec. 20, 1904.

massage by the blind in Japan has existed for a great many hundred years, comparatively few well-organized attempts have been made in other countries. Most of such attempts have been made in quite recent years and a few of them have been reasonably successful.

In Russia, A. v. Goustowsky¹ mentions that at the time of writing (1900) the only school in Europe where the blind were taught massage was in St. Petersburg. In this school the pupils were taught anatomy, physiology and massage technic.

Dr. v. Nädler, director of the Alexander-Marien Blind Asylum for Children at St. Petersburg, has also attempted to have appropriate blind pupils taught. He regards two years as necessary for the study, and considers it advisable to teach the pupils another occupation as well. Their teacher is a medical student who became blind while studying medicine, went to Japan, and learned massage within two years.

Mrs. Z. I. Venguéroff began teaching massage to the blind in St. Petersburg, May, 1903. She selected a young girl who was born blind, who learned so quickly and became so adept that Mrs. Venguéroff was encouraged to continue her work with the blind. At the time of publication of her article,² there were eleven blind pupils at the school. Apparently her results have been very satisfactory. Her exhibition of photographs of the blind pupils at work evoked considerable interest last year at the Congress in Paris.

"The 16th of May, 1903, I was called to a blind patient who had a fracture of the arm. The plaster being removed, I began massage. After having had a long talk with my patient I asked myself if it were not possible to give the blind the possibility of learning massage, in order to make them able to help their fellowmen. I went to the Curator of a Blind Institution and expressed my intention. Soon after a young girl, Miss B., came to me and expressed a desire to learn massage. Miss B. was born blind, but the difficult task that she undertook was facilitated by the extremely developed feeling that she possesses, a feeling that we who see find almost supernatural. After having once been present at the dissection of a corpse Miss B. was able the second time to distinguish the different organs, the muscles, etc. As to the bones of the skull and the face, she could show the very smallest, and astonished the examiners by her answers. The press says of this case as follows: 'Yesterday at the school of massage founded by Mrs. Z. I. Venguéroff, took place the first examination of the pupils finishing their course of studies. The pupils knew anatomy and physiology exceedingly well and skillfully performed the practical massage at the Infirmary of the school. The inspector especially noticed the detailed and judicious answers of a blind pupil, her explanations of anatomical preparations, and her techni-

¹ Congrès International pour l'amélioration du sort des aveugles à Paris. August, 1900, quoted in *Zeitschrift für Diätetische und Physikalische Therapie*. 1902. Band v, Heft 2.

² Quoted from her pamphlet, page 16, in the "Enseignement du massage aux aveugles," 1904.

cal knowledge of massage. Evidently this specialty may help those unfortunate creatures to work for their own and for others' benefit.' As to the technical ability of this blind pupil, I always heard the patients in speaking of her say, 'Oh, madam, do not deprive us of our blind angel. They are not hands, but the balm of life.' As to her accuracy and her interest in her calling one would wish these qualities were as well developed in thousands of masseurs and masseuses with sight. My first experiment having succeeded so well, I have now eleven blind pupils at my school. I have still noticed that the blind possess an astonishing capacity of guessing the sensibility of the patients. Having made different experiments on a patient suffering from neuralgia in the face, I found that the blind pupil after only three or four trials could soothe the pain. Not only do I think, I am convinced, that massage executed by the blind possessing so subtle a feeling will give the best results, and the pains taken by their masters will be recompensed by the consciousness of having done a good deal."

In Sweden, the home so to speak of massage, less encouraging results are recorded. Professor Nycander (Göteborg)³ attempted to teach the blind or partly blind for about six years, but without much success. He found it difficult to instruct them in the elementary anatomy and physiology, because he had no text-books with raised letters.

I have not found any later or more encouraging accounts from Sweden.

A Monsieur Stier,⁴ a blind man, studied massage in a private hospital at Bordeaux for about a year, and then settled in Paris, practicing there under the patronage of the "Association Valentin Haüy pour le Bien des Aveugles." He became very successful and was highly recommended, receiving as much as twenty francs for a single treatment. He died suddenly a few months ago.

The Association Valentin Haüy sent me an illustrated postal card showing a number of different ways of employing the blind. One of the illustrations was of a masseur giving massage.

Major J. Matignon, in a short article in *Le Journal de Médecine de Bordeaux* Nov. 22, 1903, No. 47, page 755, appeals for interest in the subject, and quotes some of the results obtained in Brussels.

A free school has been started there by a Dr. Daniel. At this school both massage and medical gymnastics are taught to appropriate blind persons. A committee of six gentlemen, some of them physicians, recently examined a small class of these pupils and pronounced their work excellent.⁵

In Denmark, Dr. Moldenhawer, in the King's Blind Asylum at Copenhagen, has attempted the instruction of the blind and has had some success.

³ Zeitschrift für Diätetische und Physikalische Therapie. 1901—1902, page 124.

⁴ IIIème Congrès National d'Assistance publique et de bienfaisance privée, Bordeaux 1er au 7 Juin, 1903. "Assistance et Education des Enfants Aveugles," par M. Albert Léon.

⁵ IIIème Congrès National d'Assistance publique et de bienfaisance privée, Bordeaux 1er au 7 Juin, 1903, page 13.

The course of instruction requires about ten months.

In Austria, a woman was taught by Dr. Kofranyni in Brünn. After four months' instruction and a certain amount of practice she found a situation in an institution and managed to earn about four hundred marks a year.

In Germany we find several isolated attempts, none of which are very striking, except in Leipzig. There, Dr. E. Eggbrecht, in 1899, began instructing the blind in massage, and some of his experiences and results are worth attention. In the first place he attempted to instruct them both theoretically and practically, quite as thoroughly as if they had had sight. He selected twenty-four persons, six women and eighteen men. Thirteen of these completed their course, four women and nine men. In selecting the pupils he chose those twenty years of age or older, who were energetic, patient, not nervous, and affected by no other difficulty such as tabes, tumor, weakness, or paralysis. A pleasant appearance was required and the eyes were concealed by a pair of smoked glasses. He naturally attempted to select persons of good muscular development, with strong hands, soft fingers, and a fine sensitive touch, which had already been trained and developed in some other occupation. The pupils were required to keep their hands and nails perfectly clean. They were first instructed in the elementary facts of anatomy and physiology. A text-book for nurses and masseurs was transposed into raised type. The skeletal parts were explained while the pupils felt the bones directly; and afterwards a living model, one of the class, was employed to apply their knowledge. The muscular system was studied first from plaster models and then upon the living body. The circulation and heart, nervous system, joints and other parts were studied from papier maché models. After several months the pupils were sufficiently trained to be able to undertake practical massage. They were shown the various movements upon their own bodies and then made them themselves with the instructor guiding their hands. He also had them give him massage while he corrected their manipulations. Active and passive movements were also taught. Dr. Eggbrecht was struck by their dexterity and by the fine sensitive touch which they possessed. In all they received about seventy-five hours of instruction before they began their practice upon real patients. They then went daily to various clinics and there massaged surgical, neurological, and gynecological patients. At the end of four months they became quite expert and gave complete satisfaction to both patient and physicians.

The effect of the massage upon the blind persons was excellent; they stood the exertion very well, gained in weight and strength, and developed a great interest in their work. The solution of the problem, where and how they were to obtain regular employment, has not been so easy. The author emphasizes the importance of having a blind masseur connected with each of the various clinics, hospitals, gymnasias,

baths and other institutions, of having a certain place in a town where the patients can come to the masseur for his treatment, and of having telephone calls to a central bureau when massage at people's houses is desired. He speaks also of the advisability of supervision over the calls for the masseuses.

It is in Great Britain, that the most perfectly organized attempt has been made to provide for the education, and more especially for the subsequent maintenance, of the blind as masseurs. There have been numerous individual attempts recorded, some more and some less successful. On the 21st of May, 1901, an Institute for Massage by the Blind was incorporated in London. The enterprise has already successfully trained a number of blind people, just how many I have not learned. At present they are in need of more financial help in order to secure a permanent central bureau, where the blind masseurs may practice their treatments, where some of them may reside, and where calls for their services may be received and responded to. Dr. J. Fletcher Little, who has personally superintended their teaching, informs me by letter that almost all the women whom he has taught have done well, but that greater difficulty has been experienced in regard to the men, and that but few of the latter are now self-supporting. In Vol. 2, No. 6, of *The Blind*, April 20, 1904, Dr. Little published an article embodying his experience. He says the Institute needs more financial help, and appeals for special interest in individual masseurs by groups of ladies and gentlemen, so that they may obtain more regular employment. He regards a three to six months' course long enough to fit them for this occupation, and considers them then capable of competing with those who see.

Turning now to America we find that in Boston there are two blind women who have been successful in their efforts at massage. One of them is not entirely blind; the other, Miss S., lost her eyesight at the age of ten. From the age of thirteen to twenty she resided at the Perkins Institute, where she was thoroughly well grounded in elementary science, anatomy and physiology. She paid sixty dollars for twenty class lessons in massage (with seeing pupils) and also took a course in regulation gymnastics and another in medical gymnastics. She subsequently instructed nurses in massage at the Danvers Insane Hospital. Dr. Page, the superintendent, speaks of her work in the highest terms. She has worked for several years twice a week at the Out-Patient Department of the Massachusetts General Hospital, under Dr. James M. Jackson. She now gives corrective gymnastic instruction at the Perkins Institute three mornings a week and finds that she can give, without over fatigue, from three to five treatments a day to patients at their homes, receiving two dollars per treatment. She works about eight months a year, and says that she is stronger than when she began. She thinks that people at first are apt to be rather prejudiced against the blind, but that later on they seem to overcome this prejudice. She

thinks the general training is very important and that it is better for the blind to be trained in classes with seeing pupils. Miss S. is, of course, a remarkably bright woman and would have succeeded in any work which she undertook.

Mr. E. E. Allen, principal of the Pennsylvania Institution for the Instruction of the Blind at Overbrook, Pa., informs me that eight of his pupils have been trained in massage either at the Polyclinic or at the Orthopedic Hospital in Philadelphia. I wrote to the pupils and obtained replies from seven of them.

(I) E. L. C., twenty-five years old, blind at eight, from an injury. Entered Philadelphia School for the Blind at ten, took a literary course, piano lessons, and learned three trades. Spent six months at the Orthopedic Hospital and began to practice massage at Cambridge, Ohio, May, 1902. Nine tenths of his work he does at patients' houses, and except for the first visit requires no guide. Is earning about \$100 a month.

(II) H. L. McD., recovered his eyesight four months' after finishing his course of massage at the Philadelphia Orthopedic Hospital. Is now a successful masseur.

(III) G. C. R., age twenty-six, blind at the age of twenty-three. Studied four months at the Orthopedic Hospital in Philadelphia and settled six months ago in Hartford, Conn. Is now paying about half of his expenses.

(IV) W. J. N., age twenty-nine. Lost his eyesight at the age of twenty-six, just before graduating from Jefferson Medical School. Studied massage for three months and began massage in Philadelphia, February, 1902. Has been self-supporting for over a year and has also taught massage and electrotherapy. He employs a boy as a guide.

(V) J. S. Blind at the age of thirteen. Began to study massage in September, 1903. Took three months' private lessons. Last winter was reasonably successful. Goes to patients' houses sometimes with and sometimes without attendance.

(VI) W. W. L. Became blind at the age of eleven. Studied in Philadelphia, worked both in hospital and outside for three years with the help of a friend who is a masseur. Was reasonably successful at massage, but went into business and has been fairly successful in business.

(VII) E. W. E. Has a little vision in one eye, enough to get about comfortably. Studied at the Polyclinic and the Orthopedic Hospital in Philadelphia for three months. Practiced for three months, at the German Hospital, settled at Williamsport, and did fairly well. Has since moved to Washington, D. C.

In New York I have been able to find an account of only one person, a Miss P., who studied and practiced massage for a short time here. She gave it up, for what reason I am unable to learn.

My own limited experience is about as follows: I applied to the superintendent of the New York Institution for the Blind, some three years ago, in order to find the appropriate blind people to teach. He suggested my searching some of the charitable blind institutions of New York City and I did so. I was unsuccessful in finding a suitable pupil at the blind asylum upon Blackwell's Island, and I then interviewed some seventy or more individuals from a list of the blind poor who receive a small yearly allowance from the city. Among these people I was unable to find a single person who was both willing and, in my opinion, fitted to start the occupation. I had

already consulted Mr. Axel C. Hallbeck, a masseur who has been very successful here in New York, and in April of last year he sent me Mr. Arthur Martineau, a French Canadian, thirty-six years of age, blind for about ten years, fairly well educated, intelligent, formerly a bank-note engraver. After a week of preliminary trial, Mr. Hallbeck was convinced that he could be taught, and gave him daily one or two hours in lessons and practice for two months, until the 20th of June, when he began actual practice in the wards at the New York City Hospital upon Blackwell's Island. I quote Mr. Hallbeck's account of his instruction: "While teaching him at my home, I always had some of his male relatives present, who were the material for work. At first I taught him general massage by doing the manipulations myself and having him put his hands on mine. After he had mastered the general massage I taught him local massage for special purposes. While teaching local massage, the greatest difficulty I experienced was to make him confine himself to the necessary region. I used to make him place his right hand as the upper limit for massage and the left hand as the lower limit. We applied massage for imaginary cases; for instance: False anchylosis, sprains, muscular rheumatism, lumbago, neuralgia, constipation, etc. At the same time I taught him anatomy and physiology, at least the most necessary points for him to know. I taught him the form of the skeleton, excepting the inner cranial bones; I taught him the construction of the joints with ligaments and cartilages, also about one hundred muscles and the principal motor and sensory nerves. In regard to physiology I explained to him the process of the digestion, the circulation of the blood, and the function of the nervous system. When he came to the City Hospital, after having practiced with me one or two hours every day, during two months, he commenced real work and soon attempted as many as nine cases every day. He treated patients of hemiplegia contracture, of tabes, of neuralgia, of progressive muscular atrophy, of dyspepsia, constipation, muscular rheumatism, lumbago, gout, sprains, false anchylosis, stiff joints, etc., in great varieties. As the house physicians can testify, Mr. Martineau was very useful and successful in many cases, and I believe that, as an assistant to a physician or surgeon and working according to their instructions, Mr. Martineau will be of great value as a masseur."

Dr. A. G. Bennett,⁶ in a paper read before the New York Medical Association in October, 1897, brought out an interesting point from his correspondence with the directors of a number of the blind asylums throughout America, namely, the very small percentage of blind people who are self-supporting. The figures he quotes are at such variance that it seems hardly worth while to read them, but an especially suggestive fact is, that a much smaller proportion of blind women are able to support themselves than blind men.

⁶ Philadelphia Medical Journal, Vol. i, No. 10, March 5, 1898, p. 426.

This would seem to add some importance to our idea of employing them in massage, because, as is quite evident from the few instances which I quote, the women have been especially successful. Dr. Bennett also urges the importance of one or more blind masseurs in all hospitals, dispensaries, sanatoria, insane asylums, private retreats, gymnasiums, Turkish baths and the like.

In what I have already quoted, I believe that I have covered, or at least suggested, most of the essential points in the difficulties of teaching the blind massage. I only wish to emphasize the very special importance of a most careful selection of the person who is to be taught, since upon that the success of the project will most intimately depend. This selection can, of course, be made only by teachers in blind asylums, who are thoroughly interested in the plan and in perfect sympathy with its aims. The great necessity of a thorough fundamental training, in order that the blind masseurs may be quite as intelligent and well trained as seeing masseurs, is a point which cannot be too thoroughly emphasized.

The compensation which the blind masseur should receive for his services in private practice, is a detail which I do not feel can be decided off-hand. In many more or less novel business undertakings, the most efficient plan to introduce the business is to underbid the other competitors. There is one thing to be considered, and that is, a great many patients who are unable to pay large fees would employ massage, and very gladly, if the expense were less.

The necessity for a guide if the masseur is to go about from patient to patient is also a detail which would depend entirely upon the individual and the place where he was located, as you may well judge from the examples which I have quoted. My own idea of the special utility of the blind as masseurs is, however, that they should be employed largely in stationary places, such as clinics, hospitals, bath resorts, gymnasiums, sanatoria and the like. There, at least, they are quite as independent of locomotion as the seeing masseurs.

No doubt, as Miss S, of Boston, writes, nervous people, the class of patients who are especially apt to require massage, might feel a certain repugnance to employing blind people, and might quite naturally be made more nervous than before the treatment. You will note, however, that Miss S. mentions that this difficulty usually vanished after the first visit. Moreover, this is a point upon which custom would undoubtedly alter most prejudices.

In one country, Japan, the blind have a practical monopoly over massage. There, massage is cheap and within the means of all classes. The blind are protected by the government, self-supporting, and contented with their lot. This condition has persisted for centuries.

In four countries, Russia, Belgium, England, and Germany, we have read of well-organized and reasonably successful attempts to teach selected blind people massage.

Here in America, the only definite series of

attempts in this direction which I have been able to learn have been made by Mr. Allen; but there is, it seems to me, very strong reason for expecting renewed and more persistent efforts. I am presenting this communication to the New York Academy of Medicine merely in the nature of a preliminary report, in the hope that further information and assistance may be forthcoming; in the hope that a well planned scheme may be devised for providing suitable blind people with instruction in massage and for furnishing a practical organization, so that they may obtain continuous employment after they have learned; in the hope that you, the physicians to the various hospitals, dispensaries, sanatoria and homes in New York, may be sufficiently interested in the problem to find places in some of these institutions for blind masseurs to work and prove their efficiency, and in the hope that some of the directors or superintendents of blind asylums may see this communication and select appropriate blind people for instruction.

I have purposely refrained from expressing any personal views as to the selection of appropriate candidates for such instruction, because it has seemed to me the few hints which I have incorporated from England and Germany are much more suggestive than any I might make myself. In closing let me tell you how thoroughly appreciated by patients with the chronic ailments at the New York Hospital, were the services of this blind masseur whom Mr. Hallbeck was kind enough to teach for me, and how keenly many of them missed his services when he left the institution. You are all too well acquainted with the value of massage in such ailments to warrant me in emphasizing its utility. I only wish to beg of you to give this matter your attention and your co-operation whenever in the future an opportunity occurs to further its accomplishment, and so gain the satisfaction of having aided some poor blind person to become an active, useful, interested, occupied and, best of all, independent individual.

CHRONIC BRONCHITIS IN THE ADULT AS INFLUENCED BY A CHANGE OF CLIMATE.

BY EDWARD O. OTIS, M.D., BOSTON.

It is a fact of common experience that chronic bronchitis in the adult and elderly person waxes and wanes from winter to summer in this latitude. In many cases, depending upon the stage of the disease, the "winter cough," as this malady is frequently designated by its most prominent symptom, markedly diminishes or quite disappears during the warmer months of the year, to recur as the colder, damp, changeable weather of late autumn or winter returns. As time goes on and the cough becomes more severe and extends over a greater period of the year, emphysema is developed, so that, in addition to the annoyance of the paroxysms of coughing, dyspnea on any exertion with asthmatic attacks increases the discomfort of the patient.

The bronchitis is, of course, frequently but a symptom of degenerative change in other organs, but from its insistence and the suffering it entails, demands the first therapeutic consideration, and, moreover, the climatic treatment of the bronchitis is equally favorable for the underlying causes.

From the fact that the cough subsides, or is greatly ameliorated during the warmer months of the year, it is an obvious inference that this improved condition can be maintained throughout the year, if we can transfer the patient to a similar climate to that of the warm months in his own latitude on the approach of cold weather. In other words, the oxygen of the air, as Thompson¹ well puts it, is the natural disinfectant for the respiratory passages, and "all catarrh will cease when the air tubes have been thoroughly disinfected." Therefore, if we can but put the patient where he can live as continuous an outdoor life as possible throughout the year, we are not only affording him temporary amelioration of his condition, but offering him a curative remedy as well.

To advise a change of climate, and one that must be repeated each succeeding year, is, it is true, a "counsel of perfection" in the majority of cases, for the treatment is an expensive one and involves the sacrifices due to absence from home for a considerable period. There remains a minority, however, who can avail themselves of a more favorable climatic environment without too great prejudice to their domestic or material interests; and even if the sacrifice is considerable, the compensation is commensurate with it, in the relief obtained from the distressing cough and the ability to pursue one's occupation, if it is such as can be conducted at a distance from the "office." Furthermore, one's life and working days may not infrequently be prolonged by the winter change of climate, which, again, is ample compensation.

What, now, is a favorable winter climate for chronic bronchitis? In a word, that in which the patient can pass most of his time out of doors, in a pure atmosphere. A moderately warm, equable temperature, an abundance of sunshine, freedom from chilly winds and dust, are the essential climatic elements. The humidity is of secondary importance, although if the cough be irritative and the secretion scanty and tenacious, a rather moist atmosphere with warmth is desirable, as, for example, Nassau or Palm Beach. If, on the other hand, the secretion is abundant, a drier climate is preferable, like Aiken, S. C., or Redlands, Cal. In not a few cases, a dry, warm inland resort of moderate humidity will serve well both classes of patients,—those with scanty and those with abundant secretion.

Wherever the resort, the first great essential must always be borne in mind, namely, that the patient is enabled to spend a very considerable portion of the day out of doors, and do it with comfort; he must bathe his bronchial tubes constantly with the disinfecting oxygen of a pure air.

¹ Reference Handbook of the Medical Sciences, Vol. II, p. 497.