A GRADED AND SYSTEMATIZED PLAN OF OUT-DOOR EXERCISE FOR THE DEMENTED INSANE.

By CHESTER L. CARLISLE, M. D.,

Manhattan State Hospital, East, Ward's Island, New York City.

The improved methods for the care and treatment of demented and filthy insane patients as inaugurated by Dr. A. E. Macdonald, Superintendent of Manhattan State Hospital, East, in establishing the out-door camps during the summer months of the years 1901 and 1902 (vide "Tent Life for the Demented and Uncleanly," by Dr. Arthur B. Wright, *AMERICAN JOURNAL OF INSANITY*, Vol. LIX, No. 2), have been attended by such encouraging results as shown in the remarkable improvement of both the mental and physical condition of this class of patients, that it was decided to continue the idea of allowing the patients as much out-of-door life as possible during their residence in the wards throughout the winter months.

The old methods of taking this class of patients out for a perfunctory walk around the grounds have been found deficient in many respects, especially during the winter months. Such mere "out-door exercise," without end or aim, fails to arouse any interest in the patients; their attitudes suggest the most extreme apathy and listlessness. Many appear totally oblivious to their environment, walking on and on in a mechanical and automatic fashion, their mental torpor associated with a low ebb of physical vigor, as shown in their cold and cyanosed extremities.

The ward notes of such patients show them to be dull, listless and apathetic, untidy in their habits, destructive to their clothing, evincing no appreciation of their own condition and showing not the slightest interest in their surroundings. Reading matter, when offered them, is either disregarded or torn up. Games and other forms of entertainment seem to awaken no response in their darkened intellects. If not constantly attended

while in the ward they will sit for hours in one position, taciturn and inactive, making no effort to use the toilet, drooling at the mouth and showing by their demeanor the most extreme and advanced dementia.

The first step towards the amelioration of the mental condition of this unfortunate class is to improve the physical health. The progressive attenuation of the general musculature must be combated by a judiciously selected dietary.

Advanced cases of terminal dementia are almost constantly associated with a sclerotic condition of the vascular system as a whole, which is responsible for a secondary atrophic process throughout the whole alimentary tract. The gastric and intestinal mucous membranes lose their tone, the specialized secretions become deficient, hypochlorhydria in the stomach, with concomitant deficiency of amylolytic ferment in the intestines are the most frequent results, shown clinically by anorexias, emesis after eating and sub-acute catarrhal enteritis. That there is a constant waste of aliment is indicated by the markedly defective metabolism—the progressive emaciation. The dietary must therefore be selected with the primary view of meeting the patient's limited powers of digestion. It should be a dietary which will contain the greatest possible amount of tissue building material with the least possible amount of detritus, for it has been demonstrated that simply increasing the ordinary diet, without regard to the individual patient's requirements, has not only failed to show results in increased assimilation and nutrition, but there is an actual increase in all forms of alimentary disturbances with a proportionate rise in the percentage of filthy and untidy cases.

The therapeutic adjuvants to such a selected dietary are found in the digestive ferments, and medication directed toward raising the general tone of the patient. Hydrotherapeutics and electrical treatment also find a useful field in these cases for their stimulant effect.

With the betterment of the physical condition and freedom from annoying intestinal disorders, comes an improvement in the habits of the patient. He is brighter and more receptive to the suggestions of the nurses. By patient repetition and reiteration the habits to which he is expected to conform are instilled into him.

The first noticeable improvement in his conduct is that he no longer soils himself. He grows less destructive and is more tidy. He begins to answer simple questions in monosyllables and shows in all ways a brightening of his enfeebled mental faculties.

The very gratifying results of tent life for demented patients prove conclusively that all dietetic and therapeutic measures must be supplemented by an abundance—a superabundance, as it were—of fresh air. The respiratory movements of patients in the wards are always more shallow than those habituated to prolonged residence in the open. Therefore, in devising an improved system of out-door exercise which will obviate the faults of former methods, the requirements of the individual patient must be noted and the indications met.

Every phase of the patient's physical exercise should have an end and object in view. It must never be aimless, but should have an inherent interest to the patient, which will stimulate his blunted concepts and tend to awaken every dormant mental process. The character of the exercise must be varied to avoid the possibility of deadening monotony. The amount of exercise must be graded to the physical capability of the individual. The kind of exercise which will produce the best results in a given individual depends somewhat upon his age, but to a greater degree upon his mental capacity before the onset of the alienation.

The simplest form of game in which the demented class can engage is passing a football from one to the other. The simplest form of useful exercise which can be devised is assisting, in company with a selected party of sufficient size of his fellows, in drawing a lawn roller. At first the demented patient's "habit of apathy" seems to offer an insuperable obstacle to his displaying any personal interest in his work; but, as a matter of fact, it has been found that a majority of this class can, after a time, be "passed on" to a higher form of useful exercise, requiring more complex mental processes in its execution. In this way patients can be "graduated" from the simplest forms of exercise to those more complicated, passing through the intermediary stages of barrow-men, etc., to become quite valuable assistants in the farms and gardens, and finally in the shops.

The out-door exercises designed for the pastime and amusement of the patients have also been graded in the same way. No patient

is forced to take part in one form of game, if another is more to his liking, and in order that all contingencies of this nature may be properly met, the Hospital has adopted a system of out-door amusements which embraces almost every game known to the field of sport; the form of game chosen depending upon the mental capability of the contestant, teams for baseball and similar games being equally matched in this respect, as far as possible, it being remembered that the games as here played are for the betterment of the individual, rather than to have the individual chosen to enter the game for any excellence of playing on his part. During the most inclement months of winter the hours devoted to these out-door exercises, designed for pastime, are spent in the gymnasium, where, under proper supervision, the patients can amuse themselves to their hearts content, supplementing gymnastic exercises with all manner of indoor games, including bowling.

By thus systematizing and grading the amount and character of out-door exercises for our patients, we have reduced the number of filthy cases to less than one-fifth of one per cent of the entire population of the Hospital, exclusive of those patients habitually confined to bed from paralysis and allied disorders. During the past year nearly twenty-five per cent of the patients in the ward for extremely demented and uncleanly have been "graduated," through the efficiency of these measures, into our wards designed for the better class of chronic, demented, working patients. Some, indeed, passing farther up the scale, are now taking their places regularly with the best class of shop workers.

Naturally, any expectation of either permanent or partial improvement in the mental and physical condition of the demented insane must be influenced by the etiology of the disease and the type under which it is classified. It has been noted that the most markedly beneficial results have occurred in cases of the secondary dementias, and particularly in dementia secondary to melancholia. Dementias secondary to mania have a greater tendency to chronic destructiveness and are less receptive to the usual means of instruction and suggestion.

Dementia resulting from organic brain lesions and general paresis, being progressive and associated with enfeebling somatic disorders, show the least improvement of any, and the prognosis is, of course, absolutely unfavorable.

Another class of patients in whom these systematic out-door exercises produce great benefit are those of psychopathic inferiority and the allied forms of adolescent insanity, including hebephrenia and dementia praecox, the youth of this class of patients being an important and favorable aid in the amelioration of their condition.

This systematically graded plan for allowing each patient a definite amount of specialized physical exercise in the open air has been of such marked value since its adoption at this Hospital, that its development warrants a greater degree of attention from those who have this unfortunate class of patients under their charge, than has hitherto been accorded it, for it affords to them an invaluable adjuvant to all the other forms of treatment. The prognosis is made more favorable, and, in a marked degree, it aids in freeing the State from these dependents, for the mental condition of many of them can be improved sufficiently to allow them to take up again some avocation in the world's work, humble though it may be, thus restoring the bread-winner to a perhaps destitute family.