

*The Organization of Occupational Therapy

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Leprosy has been described as the "disease of laziness." We are hardly warranted in attributing this human weakness as the cause, else the disease would be prevalent more universally. Laziness is certainly manifest as effect. A leper colony under the old regime was simply a Sleepy Hollow where men and women, torpid in body and soul, were cared for till they died. Broken in life and often maimed in body they were unfit for much manual labour. The Leper Home and Hospital of to-day has before it a different ideal. If it is to achieve its end Occupational Therapy must have a prominent place in its regime. With a treatment which is largely the injection of curative oil the advantage of wisely regulated physical activity is obvious. So also are the psychological benefits. Work is one of the divine amelioratives, and to be engaged for some hours daily at a task which absorbs interest and attention, as well as the physical powers, is a profound relief. These benefits are so manifest to our patients at Dichpali that there is never any reluctance to undertake appointed tasks, and we rarely have any malin-gering.

Our subject is the *organization* of this manual labour in a leper settlement; so we propose to state what is being done at Dichpali where, in the judgment of those competent to judge, we have attained some success in this sphere.

One distinctive feature of Dichpali, however, must be noted. Of our 700 patients all are treatable, without exception. An all-the-year-round daily average of six applicants for admission enables us to choose those patients likely to respond most speedily to treatment. Naturally a large proportion of these are in otherwise good bodily health.

For our 170 young people special arrangements are made. In their education we follow, as far as possible, what is known as the Project Method. Their reading, writing and arithmetic is centered in their larger gardens, the entire work of which they undertake. Since most of them come from the villages this course is of immense advantage to them in later life.

The remainder of our people, 450 men and 80 women, are all divided into work gangs and all the manual activities

*Paper read at the Mission to Lepers Conference in Calcutta, February, 1936.

of the place are undertaken by them. No "cooly" is paid. All service is entirely gratuitous. The names of the different work gangs indicate their various activities,—

The hospital staff of injectors and ward boys, made up of the smartest of our young men-patients, who are specially trained for their task by the nursing sisters.

The Cooking Gang composed of caste people who undertake the only communal cooking we have,—the preparation of a wheat *chapatti* daily for each inmate.

Two Cleaning Gangs, who have the roads and trees and flower plots near the main buildings under their care.

One Malarial Gang, whose service in oiling all the pot-holes in and around the Home has made very perceptible difference in the incidence of malaria.

Three Garden Gangs and four Farm Gangs, whose work we shall describe in fuller detail.

Four Spare Gangs, who when they are not on farm work are engaged in road making and jungle cleaning.

All the men are absorbed in one or other of these gangs and nearly all the women are attached to the Farm Gangs. When necessary, the choice of the gang in which any one patient should serve is left with the medical staff and, naturally, weak and ailing patients have lighter tasks assigned, if any at all.

At Dichpali we have no special industries. We attempted weaving but, in the judgment of the medical staff, the work was too sedentary, so we gave it up except that we still can do an occasional piece of cloth and the youngsters can weave our cot tape. Brass work also was attempted, but while it served for physical exercise it was, we found, too unremunerative. No building work is undertaken by our patients. We have wished but have never been able to introduce minor spare-time activities such as silk cocoon production, work which the women could very well do. Our main energies hitherto have been spent on horticulture and agriculture, since in our judgment these best suit our purpose.

A bell at 8 o'clock every morning calls all patients from the residential wards. All must come, either for treatment at hospital or their definite work. Normal treatment is given twice a week to different sections of the patients and on their day of treatment work is excused them, though frequently no advantage is taken of this privilege beyond the brief time of treatment. Till the bell rings again at eleven all work gangs are at their respective allotted tasks. Each gang elder is responsible for the presence and diligence of his gang during the three hours toil and the whole work is controlled by Indian assistants.

Our gardens are in the charge of a specially qualified man trained at our Mission Farm School and at the Lal Bagh, Bangalore. The Farm is likewise controlled by a trained overseer.

The gardens, extensive in size, are worked intensively. Over fifty different vegetables are grown, and in the orchard a wide variety of suitable fruit trees. A living interest is inspired in this work on the part of all who share in it, and every one in the place has personal concern in this side of things, since all fruit and produce are exclusively their own. Every Friday all the year round there is distribution of vegetables with any fruit in season. We consider this a valuable contribution to the dietary of the Home.

It is however in our farm that the bulk of our manual labour is utilised. The farm has forty-eight acres wet land and sixty dry. The larger part of these have been properly terraced and laid out, entirely by the patients. A small irrigation tank within our lands supplies the needful water for the wet cultivation, and it is supplemented by two large wells at which Persian wheel-lifts are installed. Our dairy farm with its fresh fodder fields and ensilage pits adjoins the farm proper and it supplies all the milk used in the institution. In these activities, apart from the two overseers, only patients are employed, but since some all-day and occasional night labour is involved two ex-patients serve permanently in the gardens and three on the Farm. These receive ordinary daily cooly pay, and apart from this there is no expense on labour.

One main crop is rice, and though as yet we have not managed to grow more than a six weeks supply for our big family we steadily increase year by year. Five acres of land are given to sugar-cane. For obvious reasons we are now doing the cane crushing by healthy coolies, but the patients do all the work up to that point.

The Agricultural Department of the State has recognised us as a Demonstration Farm. They provide a grant for plant and implements, and their officers are frequently in attendance with counsel and help. Under their direction we undertake some experiment crops and control tests in new strains of rice, sugar-cane and other crops. These do not involve any extra expense on our part and they are a source of abiding interest to our people, as well as of instruction to them and to the whole countryside.

Here we touch upon what we believe to be the secret of any success we have had in this organization of manual labour. That secret is two-fold. First, we have been able

to get our patients to realise that it is to their very obvious benefit to participate in more or less strenuous physical activity for a period day by day. Our people are all so eager to get better that they are open to conviction on this matter. "Faith—Oil—Work, but the greatest of these is Work." This familiar dictum in leprosy treatment is amply demonstrated at Dichpali. The exception proves the rule. There are always with us, from all over India, some twenty-five to thirty men, usually young men, in our private wards. These maintain themselves and pay a small sum for accommodation. No persuasions of ours have as yet sufficed to inspire these young men to share in regular manual labour. It is beneath their dignity, forsooth! A comparison of results among any same number of general ward patients shows that the period taken to arrive at the disease-arrested stage is invariably longer with the private ward patient. Laziness delays their cleansing.

The one other secret of success lies in the stimulation of interest in the work attempted. The next hardest thing to moving heaven is moving earth and in the laying out of garden and farm there is much sheer hard work. Anything, however, like wearisome tread-mill should as far as possible be avoided. This interest in their task is maintained by the introduction of innovations the value of which our people can easily apprise. Here, two items should be mentioned. First, *"Indore Compost" a humus composed of vegetable rubbish. From time immemorial the Chinese have used this preparation. A perusal of that book of absorbing interest, "Farmers of Forty Centuries" by King, makes it clear that, along with their immense canal system, the use of this material is the secret of the wonderful intensive cultivation whereby the crowded population of China exists. Sir Albert Howard, who for years worked at the Institute of Plant Industry, Indore, has in his "Waste Products of Agriculture" given us the scientific explanation of this compost and the simple technique of its preparation. The process is very simple. It consists in using the fungi and bacteria which occur in nature as agents to break down suitable mixtures of vegetable and animal wastes—the residues of the farm itself or dead leaves from any adjoining forest. By arranging these mixtures in the proper way and in the right proportions and by controlling by the simplest means, namely by watering and turning, the supply of moisture and air, these wastes are transformed in about 90 days into

*Directions for the preparation of Indore Compost may be obtained from Mr. A. D. Miller, Purulia, Bihar.

finely divided humus, rich in the foods required by growing crops. The process can be undertaken in shallow pits or low heaps. No buildings or expensive plant are required nor are cultures of the organisms concerned necessary as they occur everywhere. The universal adoption of this compost throughout India would have a revolutionary effect on its agriculture. Certainly it has worked transformation in our lands at Dichpali. We found ourselves with rice fields which were utterly worn out. The soil was of the poorest nature, large patches of it so salty that a white alum-like powder lay on the surface. Thanks to Indore Compost the larger parts of these fields are quite recovered and we had a bumper crop of rice this season.

Two years ago we made a control experiment. We divided a piece of land into three equal squares. Each had the same tillage and the same amount of seed of the same quality. On Plot No. 1, into which $1\frac{1}{4}$ " depth of Indore Compost was ploughed, 422 lbs. of rice with 138 bundles of straw was gathered. On No. 2 plot $3/8$ " depth of compost was mixed and 236 lbs. of rice with 106 bundles of straw were the results, while in Plot No. 3, which had no compost, only 60 lbs. of rice and 40 bundles of straw formed all the harvest.

Demonstrations of this nature are naturally of immense interest to our leper patients. It is something within their easy comprehension and experience. Ex-Dichpalites return to their villages with a new outlook on a subject which is so vital to most of them.

One other innovation which has stirred a live continuous interest in the manual labour given them is a system of deep drainage in our rice lands. From our irrigation tank there is a heavy seepage in the fields below. We therefore, along the middle of the fields, dug a trench 5' deep and, on broken brick at the bottom of it, laid a clay pipe of 5" diameter made cheaply by the local potter. The individual pipes are 18" long and loosely laid into one another, then the trench filled in. Since there is a fall on our ground away from the tank bund this drain, for seven months of the year, is always full of water which can be tapped anywhere in its course by a cistern through which the pipe flows. This seepage water can be used over again for any crops in the immediate neighbourhood of any cistern built in the course of the pipe. No harm is done to the land along which the piping lies and to retain this water-supply, which otherwise would be lost, is a great gain.

We claim no credit for originality in this simple device.

We merely give it as our experience that for a group of leper folk, from whom a few hours toil is expected day by day, this and similar useful innovations, which afterwards they themselves may introduce in their own home villages, are well worth the trouble involved. It is by such means as these that we may awaken intelligent desire and thereby save any organised manual industry in our institutions from degenerating into enforced labour, dull and unwelcome.