develop the mental process by educating the hands, eyes and muscles, just as is done in children.

Dr. Dunton has said: "Another purpose of occupation may be to afford the patient a hobby or diversion which may serve as a safety valve and render the recurrence of an attack less likely." But until the present time, little thought has been given to vocational education, which necessity has arisen as a result of the changed conditions in the lives of soldiers injured and disabled. If the need for occupation for those physically disabled has asserted itself, how much more essential is it in mental illness!

Many patients break down as the result of the struggle in certain lines of employment where if he were given a complete change he might live in comfort. Too little attention has been given the study of the relationship which exists among the personality of the patient, his former occupation, the deterioration resulting from his illness and the compromise which has been affected with the new occupation.

Occupation may afford means of recreation and relaxation from disagreeable duties which the patient, without this outlet, would be unable to support. After his leaving the hospital his ability to earn his livelihood is of tremendous economic importance to himself and his family. We often wonder if it is wise to advise an immediate change of occupation for patients who have broken down, when there is no substitute offered; nothing other than they have been advised not to return to their former work, and have not been taught nor given a different occupation.

What many persons suffering with a psychosis need is an opportunity for self expression. They have been unable to fit in to harmonize their ability with their surroundings; many of them have longings for a life which they think would be ideal, such as music, art, or other coveted vocation. They are forced by financial circumstances or responsibility to do other work, to plod along in an every day life which does not satisfy, which does not give them that means of expression that they long for. Many patients have magnificent talent bound by circumstances which they cannot comfortably change; as a result they may become dissociated, fantastic, and develop the tendency to drift to a world of fantasy and enjoy that which their reality does not offer.
Dunton gives as the fundamental principles of work; that work should be carried on with recovery as the main object. Work must be interesting. Patients should be carefully studied. One form should not be carried to the point of fatigue. Work should have some useful end. Work should lead to increase in patient’s knowledge. Work should be carried on with others. All possible encouragement should be given. Any work is better than idleness.

With work and enthusiasm, patients otherwise left to the daily tedium and aimlessness, rise daily with the feeling of purpose and retire at night with more or less a sense that the day has meant something, that something has been accomplished. This renewed sense of purpose has come with the discovery that they, the patients, are again capable of action and of work.

The increased activity that prevails in our hospitals for the mentally sick has come from our full persuasion that work is a great remedy, and that occupation in a greater or less degree, for every one according to his or her personality, gives to each day diversion, interest and benefit.

All the remarks pertaining to the universal need, the extensive application and advantages of occupational therapy, may be applied to recreational work as well. Occupational therapy and the recreations are so closely associated that it is impossible often to tell where one ends and the other begins. Occupation being pleasurable is recreational, and indeed recreational activities occupy the mind and body. Recreation, more technically speaking, is play activity, games, physical development or training, and relaxation exercises. Recreation has assumed a tremendous importance in the life of the nation. Towns and communities have given time and money to the development of playgrounds, and means for the proper recreation of the people, old as well as young.

When we speak of recreation we mean, broadly, the way in which time is spent by men and women away from their regular occupation, or by children away from school or work. Recrea-
tion is to impart new vigor to, to refresh body and mind. To nourish, develop, and direct the play spirit in men and women, is essential to the development of an efficient and worthwhile life. Through recreation the backward person grows in intelligence and becomes capable of better work. To the normal person recreation adds new mental qualities, initiates alertness, mental ability, foresight and leadership. It should include (1) complete break in routine activities and obligations, with rest for overworked organs; (2) exercise for unusual faculties and functions to the point of wholesome fatigue. It should contain (3) an element of pleasurable surprise to reawaken interest in every day life, and (4) absolute freedom during the period. Any activity may be considered play if it is done for the love of it. All kinds of free, spontaneous activity are play. With the present day stress of economic and social existence there has been developed the necessity for an activity which brings about rest, diversion and relaxation.

Play implies overflowing energy; a fund of surplus energy is necessary if there is to be any real play life. The problem of adult recreation is but a phase of the play of children and youth.

Prof. G. W. Patrick says:

It is as if one should say that under normal conditions the child or the man rests or works and that when energy accumulates or superabounds, then he plays. Truer it would be to say that a child or man is a playing animal, and that on rare occasions when he has to, then he works.

The term play may be applied to all human activities which are full and spontaneous, which are pursued for their own sake alone. The play of children and the sports of adults are to be closely coördinated and explained by reference to the same general principles. There is a striking similarity between the plays of children and the sports of men on the one hand, and the pursuits of primitive man on the other. This similarity is due to the fact that those mental powers upon which advancing civilization depends are developed in the child and subject to
rapid fatigue in the adult. Hence the child’s activities and the play activities of the adult tend to take the form of old racial activities, involving brain tracks that are old and well worn.

For the mature, art, literature, music, the drama, take the place of games but never supersede them. It is just as necessary for adults to play golf, tennis, and to swim, as it is for children to play ball and skip. The play spirit is often lacking in persons and in communities. The play habit should be formed early. Industry has long ago recognized the recreation problem. Society as a whole has begun to appreciate the increase in industrial efficiency which has come when the value of play is recognized. It has been generally conceded that play is as much a part of life as work.

Mr. Joseph Lee says that play is not a luxury, but a necessity. All agree that play is serious and educational and that it must be reckoned with in the home, in the school, and in the community at large.

The psychological basis of movements and attitudes is predominant. Emotions are reflected in and expressed by bodily movements. One frequently hears such expressions as covered with confusion, to recoil with disgust, to shrink from fear. Persistence of an idea may be indicated by stilted and awkward movements and postures which act as an impediment to freedom of activity. Hypertensions are manifestations of habitually strained attention. With this there is always a physical stress, for physical hypertensions are closely associated with unconscious muscular tension. It is not difficult for one to recall many instances of wastefully suppressed energy, or its opposite, prodigality of activity, which steadily saps gravely needed reserve forces, of agitations often well hidden inducing reflexly distressful perturbations, especially in the psychomotor sphere which react hurtfully upon nutrition and other vital processes.

Kempf says:

One may observe in himself and in his relatives and friends, that the general carriage and postural tone of the muscles of the body, style of walk, and voice sounds, reveal the characteristic affective tensions and
wishes more than what is said and done. The postural tensions of the individual reveal the character. Psychologists who have studied closely physical reactions to emotional stress are impressed with the tensions of posture among psychotic patients. Even in normal life, changes of expression are continuous, but in mental illness the altered expressions, the unnatural postures, reflect much more frankly the mental content. Those unaccustomed to close contact with these patients are often struck with the generally altered appearance, but such change is an indication of altered mental attitude. We see daily the drooping form and measured tread of the melancholy; the proud and arrogant paranoid who displays his affective compensations in his carriage, gait, play and work. The slovenly appearance and characteristically relaxed, slouching carriage, which reveal the marked indifference of the deteriorations, while the fixed poses are mere reflections of the rigid attitudes of the dissociated personalities. The postures of timidity, anger, hatred, love, shame, joy, and sorrow, are recognizable on sight and cannot be concealed from the trained observer.

Along with the development of mental poise, methods for cultivation of physical grace, to overcome resistances and to prevent rigid attitudes, should be more definitely instituted in our hospitals. Patients are often shy, timid, self conscious, with many feelings of inferiority. They begin new activity unwillingly, mechanically, but soon lose the awkward movements, begin to cooperate in group spirit, and improve in social adaptation. Recreation and play are essential in the attempts to socialize the psychotic. Play implies exuberance of energy, and carefree mind. The patients in psychiatric hospitals have often apparently lost the ability for spontaneous play and activity. Excited patients, of course, are overactive but the retarded, the depressed and the pre-occupied respond meagerly. An inability to get away from delusional content or an overwhelming depression for even a short time of relaxation is felt.

Those interested in recreation have realized how little spontaneous activity often is possible for the patients who so easily drift into narrow grooves of habit formation, and resist efforts to distract or employ them. While delusional content and profound depression may cause an apparent poor return, more
enjoyment is had in distractions by passive than by active participation. Accepting this comparatively poor return on the part of the patient as physiological, the workers should be content with indifferent response, for the influence of recreation has extended farther than they know. They must remember that the psychosis brings about a loss of play impulse and initiative; the loss of ability for spontaneous activity. Painstaking, persistent effort may be rewarded by a complete awakening to full activity at an unexpected moment.
IS DIVERSIONAL OCCUPATION ALWAYS THERAPEUTIC?

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To have asked the question of workers with those mentally or nervously ill a few years ago, is diversional occupation always therapeutic, would have catalogued one as an asker of foolish questions. The answer then would have been an emphatic "Yes, it always is." The answer now is "No, it is not always." Granted, the answer now given is not voiced by a complete chorus of workers, but those who do subscribe to this, do so with a conviction that grows stronger with each year's round of observation.

Occupation, as a therapeutic agency, was dreamed of over one hundred years ago and has been spasmodically applied with more or less success every twenty-five or thirty years since its conception. During all these years its curative value has been thought to rest largely, or solely upon the diversional character of the work. Those who question the correctness of this statement, should recall that the present healthy movement now called "occupational therapy" had its birth some twenty-five or so years ago, in a number of widely separated hospitals treating those mentally and nervously ill, and was spoken of as "diversional occupation." This term has continued in use among these workers until it was gradually replaced a few years ago by the now almost universally used term "occupational therapy." Those who wrote of occupational experiences during this period put much stress upon the curative value of the diversional element of the crafts used.

1 Read at the Fifth Annual Meeting of the National Society for the Promotion of Occupational Therapy (now the American Occupational Therapy Association), held in Baltimore, Md., October 20–22, 1921.
The war called for occupational therapy to enter new fields and with the broadening of the horizon many new attributes of the science of curative work were discovered and developed. Much has been done in these new fields, but these remarks will be confined to work with those mentally or nervously ill. What progress has been made here? Facilities have been multiplied, craft knowledge has been increased, and much has been learned about application; but while the name has been changed from diversional occupation to occupational therapy, still it is to be feared that many workers recognize only the merits of its diversional element.

Is it patent because a mental patient enjoys the work he is doing, that he is receiving the maximum of benefit therefrom, or is it even self-evident that he is benefited at all? Can it be said of all cases that because their period of occupation cannot be progressively increased that this is a gauge of the benefit they are receiving? Can the fact that the patient has made a very interesting piece of work always be accepted as evidence that he has been helped thereby and not in certain peculiar cases really harmed? Must the instructors feel that unless they can find something that each case will enjoy, for them occupation is a failure? The answer to all of these questions is “No.” There are many other attributes of occupational therapy of equal importance. For some cases these other attributes or principles of application, are all important while the diversional phase is unimportant and perhaps even degrading. These principles will be designated by names when they are more thoroughly understood. Now it is better to present cases in occupational treatment to illustrate the use of these principles and show the results obtained. If compared with cases requiring diversional occupation the application of these principles will become clear.

Case 1. A young construction engineer who read abnormal meanings into irrelevant happenings. Annoyed much at night by imaginary persons. Developed a morbid playfulness which manifested itself in pranks like hiding others’ hats, untying apron strings and removing and hiding all the electric bulbs used on one of the halls. He came to
the occupation building shortly after admission to hospital, being employed at basketry. Shortly afterward was transferred to the carpentry and cabinet making shop. Here he made many pieces of fine cabinet work as presents for members of his family. He seemed to enjoy more the planning and contemplation of a new problem than the finished piece. He would often give way to his morbid desire to play by striking his work repeatedly with a hammer. Then having gotten the desired satisfaction, he would set to work to remove the dents in a workmanlike fashion. For six months he was thus happily occupied but his condition did not improve, although we then felt that occupation was doing all that it could do for him. Then came the need for occupational equipment and he was asked to help. Up to this point his work was simply diversional. It was his own, and he could gratify upon it the unhealthy subtle desires to play. Now he recognized that he was doing vitally needed tasks for us, therefore any gratifying of this morbid playfulness not only marred but delayed the finishing of equipment we needed. This made him try to curb this tendency. When at the end of nine months we found that letting him do too many occasional pieces for himself was paralleled by lapses, we planned to occupy all of his efforts with our needs. Six months before this change was made his outlook was not considered very hopeful. The changed interest paralleled a progressive improvement and after being treated twenty-eight months, he was discharged as well. Is it too much to claim that the change in presentation contributed definitely to recovery?

Case 2. An actor and dancer who was in a very elated condition and quite over-active, spending much of his time in the hall in dancing wildly from one end of it to the other. In the odd moments of comparative quiet between these periods of action he designed in color, a number of extremely fanciful posters. These he made very rapidly. Nothing held his interest long. When he came to the shops we wondered what we might offer that would hold his interest and keep him in one spot a little while. He wanted to model and with relief we gave him clay and tools. He constructed a skeleton of wire and set to work completing in four days, a dancing girl. He used no visible motive and the figure was purely a portrayal of his mood. He entertained us with very convincing accounts of his achievements in certain studios abroad. These experiences also were children of his over active imagination. Next he started a totem pole lady in clay, but work upon her lagged as she grew taller. He saw others making jewelry and wished to try
enameling. He designed and executed a most exquisite peacock plaque in enamel on silver, completing it in four days. Within the next week a butterfly brooch was planned and made of copper, silver and enamel. The color was very fine but to the structural details he would not give sufficient thought to make the piece the success we expected. All the while he was becoming quieter, more rational and less overactive. When five days latter he finished a pair of enamel cuff links we felt discouraged because his interest was lagging more markedly each day. Finally he started a silver ring and worked over it with lessening interest for a week. He seemed almost ashamed of, and embarrassed by his inability to get results. He started to skip occupational periods until finally after two more weeks he refused to come at all, giving no reason but his indifference to occupation in general. The interesting fact is that a progressive mental clearing up paralleled the growing indifference to occupation. The facts are very clear; in all cases of this type much is accomplished by the patient through the urge or drive of the extreme excitement. The results are the outcome of his over-active condition and not the product of a previously acquired artistic or craftsman like skill, or even present instruction. The occupation presented serves as an outlet for pent up energy, at the time when a safe outlet is most needed. Having helped dissipate and slowly curb the unhealthy over activity, one must expect the patient to be more and more unable to accomplish wonders. He has no vast background of knowledge and skill with which to work and that imperative urge to do the unusual and the impossible is fast ebbing from him. As he slowly clears up he realizes this and comparing his more glorious achievements with his present laborious efforts, is embarrassing and he covers this with indifference while he transfers his interest to the world to which he will soon return. It will be seen that with this type of case to observe a decreasing interest paralleled by decreasing periods of occupation is what the worker must expect.

Case 3. A young architect whose illness developed while in an officers training camp. He had disturbing ideas of persecution. When less disturbed he came to occupation. Modeling was presented with the idea of making his efforts both educational and therapeutic. Material was carefully selected from an album of photographs from a collection made in a large museum of comparative historic architectural details. The method of working clay was explained and demonstrated. While polite and attentive he followed a different plan giving what appeared to him plausible reasons. He changed his motive every fifteen
minutes during the day and could not be led or persuaded to return to the original. After ten days thus occupied, the result was a fairly good piece of work but a very disturbed patient, who had to be dropped from occupation for twenty days. He returned and at his own request, started to model another piece of ornament but followed the above procedure. He produced, at the end of ten days, a better piece of work than before, but was then so disturbed that occupation had to be discontinued. Occupation was presented again after twenty-six days, but he was still too disturbed to accomplish anything, and after a few days all efforts had to be discontinued for another twenty-one days. It was decided that while he was producing a fair result the fact that he could get results without obeying instructions gave the instructor no control. Instead of occupation curbing his hallucinations, it was presenting him a flexible medium in which to give them an added expression. When he returned again he was employed at brush making. Here, when he let go, he made mistakes which he had to correct. The instructor now had control and through the occupation could apply the brakes. While he objected to the craft yet it held him steady. After about a week he was allowed to weave neckties; here again to drift meant mistakes to correct. Of course he did not like it, it was not as diversional as modeling, but by this time we too were convinced of this fact. Next he was allowed to try simple metal work. Each problem was prescribed by the instructor. The method of execution was outlined and he was held rigidly to this course. No further lapses occurred. A progressive improvement was noted and after the later course had been pursued for three months, he was discharged. Is it not fair to feel that his reaction to modeling, contributed in some degree to the relapses noted? May we not also believe that the reaction to occupation as finally presented helped eliminate some of the causes if these relapses and thus contributed to his recovery?

Case 4. A man above middle age, depressed but hopeful in a worried sort of fashion, was very profuse in expressing his distress. Certain physical conditions were contributing to his distress, but these were being taken care of, although he seemed to derive satisfaction from complaining that nothing was being done for him. His reaction to an invitation to try occupation was all that you could imagine. His eyes were too bad, his hands were in woeful shape, his false teeth did not fit and the doctors and the dentist did nothing about it. This got us nowhere, so we started him at brush making; compelling him to do this work by force of insistent and continual argument. He said that this
was the most distasteful work he had ever done and he wished to change to metal work. We permitted the change. Before he was in the new class-room thirty minutes he felt more distressed than ever over the mistake he had made in changing. As his distress increased he pleaded to be allowed to return to brush work and finally we gave way. Then began all over the worry and distress over the injustice of asking a man in his condition to do such things. We held him at brush-making two months before we allowed him to change to chair caning. When he wished to know why we would not let him change we told him this; “You seem to be two natures warring within one body; the one says I will, the other says I won’t. Our problem is to retrain you to face and solve problems, not avoid them because they appear distasteful. Here you are, better self and baser self fighting almost equally balanced; first one is up and then the other as if upon a teeter board and the havoc this strife is causing, is evident even in a physical way. Can you ask us to side with the baser self by allowing you to avoid simple problems like irksome occupation? No, we must help hold the other side of the teeter board down until thus assisted, better self has a chance to recuperate. Now be a man and face it squarely and help us help you. You can make no changes as long as we feel a change will undo what has been accomplished.” After a while when he had given us a rather stormy morning he would come after lunch and ask to be allowed to work, so as to undo the damage he had done. Gradually he became less distressed over supposed lack of attention and would even acknowledge with a half-way smile that our course was right and that he was gaining control. After caning chairs for six months we felt there was little danger of his lapsing and changed him to metal work. He spent five months working in this craft before he left the hospital. He did not learn to enjoy even this work but he was able to use it to develop self-control. As some of the other causes of his distress disappeared he found himself in a much more stable and happier frame of mind.

Is it not clear just how occupation was made to contribute to this end, when if misapplied it would have contributed to his distress.

Other cases could be given but these should be sufficient to identify these other attributes of occupational therapy which are fully as important, and in many cases are far more important than simple diversion.
OCCUPATIONAL THERAPY AS APPLIED AT EUDOWOOD SANATORIUM

MARTIN F. SLOAN

In order to establish an historical medical background for my remarks on occupational therapy at Eudowood Sanatorium, which is the same fundamentally as is used in all well rounded sanatoriums, I would call your attention to some of the conceptions of pulmonary tuberculosis and its treatment which prevailed as late as the last quarter of the nineteenth century.

In the absence of pathological information concerning this disease little was known of the exact relation of cause and effect and the mere name consumption indicated that the disease was considered primarily from the standpoint of its obvious symptoms, namely, emaciation, muscular weakness and reduced energy. The logical treatment as seen by observers of that period was to offset these effects by oversupplying the tissues of the body with the elements so rapidly being consumed and to restore by stimulation and coercion the slowly declining strength and energy of the patient. The fundamentals of treatment were: a sojourn in the mountains or the arid West for a period of six months or more where a maximum of fresh air and sunshine were available; milk and eggs forced to the capacity of the individual digestive organs; alcoholics, the amount to be governed also by individual capacity and taste, and exercise uncontrolled. Tersely, the medical and lay advice to the victim regardless of the stage of the disease and indifferent to his financial resources was reduced to the well known injunction, "Go West, drink plenty of whiskey, and rough it."

1 Read at the fifth annual meeting of the National Society for the Promotion of Occupational Therapy (now the American Occupational Therapy Association), held in Baltimore, Maryland, October 20-22, 1921.
With the development of medical science and scientific apparatus, the pathology and pathological physiology of consumption were better understood. One of the first results was to change the name of the illness from a vague and deceptive one to the more correct and euphemistic one of tuberculosis. Eventually a more rational therapeutics was developed but even at this date we find the faith of many pinned to the terse advice of years ago (though some have omitted going West), which Dr. Marcus Patterson of England, the founder of the modern school of graduated exercise as applied to the tuberculous, would term a "shibboleth."

Today the principles of treatment based upon a knowledge of the pathology and physiology of tuberculosis are: (1) immobilization of the lungs as far as possible; (2) conservation and development of the natural resources by forced rest of the body and the judicious supply of food and elements; (3) promotion of a favorable mental attitude; and, (4) after the inflammation has subsided, restoration of functional and economic capacity. Climate and elevation have a relative value; sufficient nourishment is essential; contentment is imperative, but rest of the body is compulsory.

I hope all will get the full force of the statement, "When pulmonary tuberculosis is in an active state rest is of paramount importance." Rest in the far West; rest on the mountain top; rest on a porch in the suburbs, rest in a room in the city if it cannot be obtained otherwise. Pulmonary tuberculosis is a stubborn inflammation involving the delicately constructed lung tissue and through the blood stream it bathes the entire body with its products and its germs—the tubercle bacilli. Movement of inflamed tissues wherever located in the body irritates inflammation, keeps it active and jeopardizes health and comfort. Therefore, immobilization of the diseased area is one of the first protective laws of nature and of man. We have a forcible demonstration of the application of this law in the case of a man with a boil on his neck—his head is held as rigid as a post. The lowly boil is analogous in principle to the inflammation excited by tubercle bacilli. Movement means continued
inflammation but fixation produces subsidence and less discomfort. The lungs in health with the body at rest contract and expand sixteen times a minute to supply all the tissues with oxygen and help rid them of carbon dioxide. Respiration accelerates in proportion to the demand made upon the lungs by parts extraneous to them, by the amount of oxygen in the atmosphere and by the area of the lungs functioning. Tuberculosis decreases the aerating capacity of the organ and thus quickens respiration; consequently disease activity increases, inflammatory products surcharge the blood, respiration is accelerated and a vicious circle is established. The first step toward breaking this circle is to keep the patient quiet in bed, thus reversing the sequence of pathological events that have occurred. Not only does this procedure lessen the demand for accelerated respiration but it promotes heat, energy and blood, conservation forces that can be diverted to combatting the disease. Thus inflammation subsides and with it the symptoms of local irritation—cough, expectoration, shortness of breath, pains in chest, and those of systemic toxicity as fever, rapid pulse, insomnia, night sweats, and gastric disturbances. Rest with varying intensity must be continued as long as the healing processes are tender and liable to be injured by motion. When symptoms have disappeared for some time and physical examination shows that the scars of healing are forming and toughening satisfactorily the time has come to assist the body to restore working and economic capacity. The logical way to accomplish this is by the use of graduated exercise or occupational therapy.

The Hospital for Consumptives of Maryland popularly known as Eudowood Sanatorium was reorganized and removed from Baltimore City to a site in Baltimore County near Towson in 1900. It was the first sanatorium in the state and indeed among the first in the United States. Being a pioneer institution and more or less an experiment it was handicapped by a lack of funds. It was the desire of the management to return the patients to their homes restored to their working capacity in so far as possible as well as with disease arrested. This, however, entailed the extra expense of keeping them through a period
of reconstruction which had not been figured on in the beginning. There was also the problem of keeping the patients contented during this extra time. After some experimentation a very practical and efficient solution was found in the use of graduated work as a therapeutic measure. Chores about the dining room, store room, in the shacks and cottages were carefully studied and translated into terms of physical effort and were listed in consecutive order from the easiest to the hardest grades. All of the patients, men and women, were graded according to their stage of disease and clinical symptoms and were given chores to perform compatible with their strength and convalescence. A bulletin board was placed at the entrance of the dining room and on this board were listed the chores and the names of those expected to perform them. So interested were the patients in changes on this board that it became a source of news and discussion, sometimes heated, at the beginning of each month when routine changes of chores were made. To them it was a practical indication of the progress of their endurance as interpreted by the doctor and if their work were increased they were happy, if it were decreased they were discouraged. The temperature and pulse of all patients were recorded three times daily and guided by this record and other symptoms the workers were moved up and down on the scale of work. Temperature was taken as the chief indication of one’s condition as most often it is the first indication of a change for better or for worse in the inflammatory process. A temperature of 99–99.2° indicated close observation; 99.4° indicated lighter exercise; 99.6° meant no exercise; 99.8° permitted him to go to his meals only; and a temperature of 100° (p.m.) sent the patient to bed until it became normal again. Other symptoms local and systemic were given their full value as indicators.

From the humble calling of paring vegetables in the beginning of one’s reconstruction, one went through the gamut of household duties to waiting on tables and making beds according to the sex. In season, garden chores were added and sometimes as many as twelve patients were assisting the gardener assorting seeds and vegetables and gathering truck for hospital use.