SOME CONSTRUCTIVE EXPERIMENTS IN A BOYS' CAMP: BY
CHARLES K. TAYLOR, M. A.

WILLIAM JAMES said, you know, that for the best moral and mental development, hand work should predominate over book work till the fifteenth or sixteenth year. And the further up the "financial-social" scale of society we go, the more it looks as though hand work were the one activity from which the boys are especially guarded!

I remember very well one mother—a most fashionable mother, I assure you—who was really quite shocked at the idea. "Hand work, to her mind, was merely "carpentering." "Really, you know," said she, "there is not the slightest reason why our William should learn to be a 'carpenter.' It is not at all likely that he will ever be called upon to earn his living with his hands!" The lady was quite indignant. This may seem ludicrous to you, but it is such a characteristic attitude among the well-to-do, and the "near-well-to-do," that it is not difficult to understand why the phrase "four generations from shirt sleeves to shirt sleeves" has passed into a proverb!

The private schools, as is logical, are largely dominated by the attitude of their patrons. Said one head master to me, "We have just as good a school as the parents will permit!" So they are not greatly given to developing the side of education which comes particularly well through hand training. But, fortunately, now comes the summer camp, and more and more boys every year are sent away camping, so that in the hands of the camps lies the possibility of developing in these boys the very qualities they will most need for future happiness and success. The schools can give what we are pleased to term an education. But the camps can, and some of them do, aid in giving a "character," which, I think you will agree, is almost as important as the education!

THE OLD IDEA OF BOYS' CAMPS.

That is, some camps do this. A few of them realize their immense privilege and are doing all they can to be worthy of the responsibility. But many camps still hold...
all camps, a system which would aid in bringing out the fine qualities which owe much of their fineness to the stimulus and experience that comes through hand work.

We cannot go into the psychology of it. That word “psychology” is enough to scare most folk half to death, anyway! So we will not talk about the “region of rolando” and the relation between manual dexterity and mental development, the development of such qualities as perseverance, patience, accuracy, self-control, self-reliance, and so on. That the relation does exist, and is a very close one, I do assure you, but if you wish to look into the matter yourself, well, just hunt up some standard work on educational psychology, or, better still, observe, for a little while, the differences in behavior between children who can do things with their hands, and like to, and those who cannot, and do not like to!

Now we can come to the experiment which proved to us not only that boys really like to be able to make things for themselves, but that, even without expert training, if sufficiently stimulated, the quality of the work they will do is nothing short of
marvelous. Of the benefit coming as a result—well, we do not have to describe that.

First of all, it was necessary to build up a general feeling of responsibility and self-dependence. So, from the beginning, nothing was done for a boy he could do for himself. Even the nine-year-older had to put up their own tents and manufacture their own canvas cots!

THE NEW CAMP LIFE.

Again, set, definite work was never given. Except for making their own necessary tent furniture there was no hand work that the boy really had to do. But by using the natural, generally latent, liking for "making things" and the innate spirit of competition, the boys were carefully led to desire to make many kinds of things. Even then they were not given outlines to work upon. They were encouraged to plan out things for themselves. So it was that if a boy, or group of boys, wished to make anything, from a diving pier to a table, well, they had to plan it themselves and the rough material was provided — unless it was something they could cut in the woods. If an older "staff mem-

THESE TWO TENTS WITH WOODEN FRAMES AND STRONG FOUNDATIONS WERE BUILT BY BOYS TWELVE YEARS OLD.

ber" worked with them, it was much more as a member of a "squad" than as an instructor.

The beginning of the real constructive work happened several years ago when a couple of youngsters wanted to make a thatched hut. So they made that, and great was the admiration of the juvenile onlookers. It was not very beautiful and not very waterproof. But it was a building, and it did not blow down in the wind. That was a start, and it interested the boys.

The next structure came about through the desire of a thirteen-year group to

STONE, WOOD AND CANVAS RECREATION ROOM BUILT IN FRONT OF A TENT BY A GROUP OF THIRTEEN YEAR OLD BOYS.

THIS VERY PICTURESQUE RECREATION DWELLING WAS BUILT AS AN EXPERIMENT IN THATCHING BY THE BOYS WHO LIVED IN IT.
startle the whole camp with something extraordinary, and, at the same time, to make their living quarters more commodious. They cut some rough cedar in the woods, brought up a ton or two of stones from the beach, and were given a couple of bags of Portland cement and a bundle or two of laths. With this material they fashioned, in four or five days, a little recreation porch in front of their tent, with masonry and latticework, using their original porch fly for a roof.

Then the other groups came around and were consumed with envy! It was too late for rivalry or imitation—but when next summer came, well, you’d see what they would do!

**Home-making in Camp.**

When the next summer came the third structure appeared. That thirteen-year group, now fourteen, with a slight change in membership, started right out to make competition ridiculous. Whereas the previous season they had built a porch in front of their tent, now they proposed to build something or other behind their porch! This time they cut more trees and were given some bunches of shingles and laths. One or two had roughed out the idea, and all got to work, including their “counsellor,” who worked merely as a member of the group. The result was a kind of “tent-bungalow” twelve feet wide and thirty feet long, with the porch of the previous year covering the middle entrance. The “windows” were of latticework, covered on rainy days by roller awnings, and the roof was a great khaki fly—for one must have a canvas roof when one camps.

Well, the excitement of the rest of the camp was almost comic. So the new thirteen-year group—a small one—got promptly to work with the idea of making their tent the most beautifully equipped in the camp—and succeeded. They furnished it throughout in white birch—with the bark on, beds, chairs, taborettes, even to a birch-bark scrap-basket! Then, outside of their “porch,” they placed a neat birch rail, and outside of that planted some small evergreens! Altogether the effect was remarkable. So much so that the first group, actually startled, went to work again and furnished their new “tent-bungalow” also in birch. Then the twelve-year-agers became interested and began work, making the fourth real structure. And so that
PORTABLE GREENHOUSES

summer ended, but the plans for the next summer would have frightened a seasoned and hardened architect.

One of the old fourteen-year group was now fifteen, and had developed a real talent for such matters. He now designed a neat little two-roomed bungalow for the "chief" and his group. All the fifteen year old boys turned to and built it, in a little over a week—a bright, cheery little structure, with ten windows, hinged at the top—the windows being bought, to be sure—and, though lightly constructed, the little building was quite capable of bearing the frequent gales of that windy place.

This aroused the whole camp and very ambitious projects began to shape themselves. For one thing, they all thought they should have a "chapel." Well, if they wanted one, they had to do the planning. So many plans were drawn, and that of a thirteen-year boy—who will be a real architect some day for sure—was accepted, with few modifications. Then the older boys of the camp, from twelve to fifteen years old, got to work and built it, the staff members, as usual, when they did help, acting merely as members of a squad. And the result was by far the most beautiful structure they had yet accomplished. And now they are planning for the most remarkable kind of dining hall you ever heard of!

It seems almost incredible that untrained boys should, with a little encouragement, be able not only to plan, but actually to construct such creditable affairs. But the reason is very simple. All normal boys possess such characteristics to some degree, though, unfortunately, with many they lie latent until too late. Early in life they are waiting for use, invaluable influences which could be used for the immeasurable benefit of the boy. Given the incentive, given the basic competitive spirit, given the encouragement, the materials, and the proper tools, it is amazing to see the latent characteristics come to life. And can you believe that such an awakening and such an experience does not mean much for a boy's future? Surely, and even when he is heir to untold thousands—and, in fact, the more so for that very reason.

Such a life educates the whole boy. It not only fills his mind with valuable information, but teaches him to use his hands, his feet, his every faculty of mind and body, develops character, forms individuality, creates ideals and sane ambitions.

PORTABLE GREENHOUSES

A NEW method of intensive farming coming to us from England brings to its aid a portable, traveling greenhouse. At first thought a portable greenhouse seems most impracticable, but after we have read a detailed description of its construction, its practical worth is readily granted.

From a paper read by A. Pullen-Burry at a recent meeting of a horticultural club in London, England, printed in full in the "Florists' Exchange," we are enabled to give an account of the cleverness of the plan. An acre of land, 440 ft. by 100 ft., was divided up by longitudinal foundations, 16 ft. apart, center to center, and cement 6 in. by 5 in. cast in moulds and placed thereon. A shallow division wall for the side lights to shut on was provided at intervals of 40 ft., center to center, thus making in eleven traverses 60 beds, 13 yds. by 5 yds. in each bed. It is not necessary, so the paper states, that land be level in constructing such a greenhouse, except in the 100 ft. direction or length of greenhouse. In any other direction, there may be varying gradients, as a gutter acts like the back of a book and thus allows movement. The house itself might be termed the "tonneau" and can be of any width or any height under the ridge eaves. If necessary, it can be made large enough to cover quite large trees. The side lights in these circumstances would be like barn doors and back to back, passing with the house through the trees over the cement rail.

This greenhouse, running on its track from place to place, covering the vegetables and flowers that need protection or are desired for forcing, can thus with very little manipulation be placed over the beds.

Within this greenhouse paths were made of the smallest, so that the soil area was developed to its fullest extent. One can readily see how market gardeners could by laying their gardens between regular tracks advance the time of their marketing by several weeks. The dome of glass could be also used later in the season when the need of steam heat had vanished, taking the place of cold frame or hotbed. The plants under a glass roof which at the same time shuts away the wind and keeps away the storms that beat and destroy them, would certainly be of better quality as well as several weeks in advance of the community in which the greenhouse was in operation.