purchasing department, laboratory and testing bureau, restaurant and hotel, hospital and first-aid station, gymnasium and concert hall, craft and repair shop, a place for study and repose, and occasionally—at least in the eyes and ears of the housewife—a madhouse!

Therefore, the plans of T.V.A. houses are based on time-and-step principles of determining the layout of work spaces and the placement of fixtures. But these studies have been based upon observation and experience as well as theory. They recognize variations between individuals in methods of work and in their definition of comfort or convenience. For instance, we have made no attempt to develop a standardized kitchen to be incorporated as a fixed unit in every house we build. Within the limits of systematic and orderly planning we work out various arrangements suited to individual requirements and desires, always, however, based on the relation of work centers to each other and to the house as a whole. Economy in time and conservation of energy is the aim through-The sequence of work; whether the worker is standing or sitting; width and height of table and other work surfaces; width, depth, and spacing of shelves—all these and many other factors are carefully studied in the arrangement and equipment.

Due to the low electric rates of the T.V.A. it was perfectly feasible to electrify these houses to an extent that might appear wholly impractical in most places under present costs of current. Too, the electrical household equipment was bought in large quantities and for cash, thus effecting large savings in first cost. The equipment of a typical T.V.A. electrical kitchen consists of a range, a refrigerator, and a domestic water heater—all electrified and largely automatic in operation. Space for an electric washing machine is also provided either in the kitchen or on an adjacent recessed porch.

In these houses the typical grouping of kitchen equipment is based upon the sink as the work center. Immediately adjacent to and above the sink, wall cases are built in for the storage of packaged foods, dishes, utensils, and so on. On one side, and usually at right angles to the sink, are the food pantry and refrigerator, and on the other side is the electric range. In narrow kitchens one or several of these articles are placed on the inner wall opposite the sink.

In some cases sinks are placed on an inner wall at right angles to a nearby window. This position is considered excellent by many authorities; it has the merit of providing full wall space for dish cabinets immediately above sinks and is said to reduce fatigue due to the glare of a window facing a sink. On the other hand, in many of our kitchens the sinks are placed on outer walls immediately below the windows. because many women feel that to be able to glance outdoors from time to time merely by raising the eyes makes work at the sink seem less monotonous and tiring, and that in summer it seems to offer a cooler place to work.

Combination laundry tubs and sink are placed in the kitchens and so related to the rear door or porch that waste steps and commotion are avoided when hanging out clothes. In a few cases laundry tubs are located in an enclosed portion of a rear porch convenient to the kitchen. The bathroom is usually next to the kitchen, with a common wall between them, thus simplifying plumbing.

In size the kitchens vary from the very compact kitchenettes of the efficiency apartment type to those which also contain ample space for dining purposes. In many cases a screen or partition may be used to separate the dining space from the kitchen if desired. A few of the houses have separate dining rooms, and in some cases meals may be served in an end of the living room.