Chapter 1

BUILDING YOUR OWN HOME

SINCE the end of World War II, over 90,000 families in this country have moved into homes that they have built entirely or partly by themselves. Twenty-five years ago, the idea of building your own home was almost unheard of-it was so much of a novelty, in fact, that it was sure to make the feature section of the Sunday paper. Today, more and more young couples, and some not so young, are getting tired of waiting for high costs to go down and are going out to build their own homes by themselves. It is, of course, the obvious solution for anyone with good health, a small income and a strong desire for a home of his own.

There seems little chance that the cost of either building materials or building labor will go down much in the immediate future. As there is no way to reduce the cost of the materials that go into a house without using inferior products, the solution is rather obvious—cut out, or at least cut down, the labor cost, which is over 60 per cent of the total construction cost. Of course, someone has to do the work, but that someone can be you—the only

person in the world willing to work for nothing to get your home.

Building a House by Yourself

The first question that naturally comes up is just how much of a job it is to build a house by yourself. Well, it's a big job. On the other hand, there is nothing too complicated or difficult about it. You will find that the great majority of the work consists of measuring a piece of wood, sawing it to size and then nailing it in place. When you know what the measurement should be, where the piece is to go and the size and number of nails to use, this work will not be difficult. If you can do just these three steps-measure, cut and nailand almost anyone can, then you can build most of the house yourself.

The next big question is just how much of the entire house the average person can build by himself. That is going to depend on how much skill he has with his hands and how well he can follow directions. Each step in the construction of a house—and that includes installing the plumbing, heating and electrical systems, as well as the ma-

sonry and other jobs-is discussed in this book fully. Therefore, if you can follow simple directions and illustrations and have a modest amount of skill, you can do the entire house from basement to attic without having to call in any professional assistance. This does not mean that you will not need some help now and then. There are some jobs-such as getting the roof rafters in place—that will require two men, but that second man does not have to be an expert carpenter. He can be an unskilled laborer or just a good friend. We might better say a very good friend.

Professional Help

Probably only a few persons will decide to build a complete house by themselves. There are various arrangements that can be made with local contractors and builders, and such arrangements are especially helpful if you do not mind spending a little extra money to get the house up in the shortest possible time. For example, you may feel that it would be better to have the foundations dug and the house frame put up by a professional. After this has been done, you can go ahead and do the semi-skilled work, such as installing the sub-flooring, the sheathing, the roofing and the insulation. After the house is weathertight, an electrician, a plumber and a heating contractor can be employed to install the utilities. When they are finished, you go to work again and install the interior walls, the flooring, the trim and the thousand and one other jobs that must be done before the house is finished. Now, this may not seem much like building your own home by yourself, but you will be surprised at just how much of the total building costs you save by doing only the rough and semi-skilled work yourself.

A very satisfactory arrangement that has been used frequently is for the owner-builder to work along with professional labor and do as much of the work as the professional feels that he is capable of doing. For example, why pay a plumber twenty dollars or more a day to uncrate and place plumbing fixtures in the various rooms when you can do this work yourself. Or why should a skilled electrician waste his talents and your money drilling holes through studding for BX cable when you can do the job just as well as he? This arrangement of working with skilled labor will save you a good deal of money, it will reduce the time that a job requires and it will also insure you of getting a satisfactory finished system.

In some communities, you may find it impossible to make this arrangement for various reasons, and in some cases, you will find that the professional builder will not be willing to take the job if you are going to help him out. The best thing to do here is to go to someone else. It is not surprising that the really top men in their trades are glad to have you help them out, because they are not interested in making a job last any longer than necessary.

Their services are always in demand and the quicker they get through one job the sooner they can take on another. Also, top-quality building men are enough interested in their trade that they are only too glad to teach you all that they can and all that you can absorb. An interesting example of such a set-up is a young veteran who built his own home by himself. Each evening, after his working day was over, a plumber would come around, check over the work that the owner-builder had done that day, and then explain how the next job should be done. The owner-builder completed his house with a perfect plumbing system, a good working knowledge of plumbing and a bill for practically nothing from the plumber. Find craftsmen of that type and you will not have any trouble building your own home.

If you feel that you are capable of doing the entire job of building the house yourself with the aid of a little unskilled help now and then, pick a person who can follow your directions and who can do simple jobs like sawing and hammering. Watch out for friends with good intentions and nothing else. They can often cause more trouble than they are worth.

Building Codes

No matter how much of the building you feel that you can do by yourself, there is another point that must be considered and that is the various local codes. Some communities have codes that insist that the electrical system be installed only by a licensed electrician. If you are building where such codes exist, the problem of whether or not you will install your own electrical system is solved for you—you don't. The same may hold true for plumbing and heating. So before you even start thinking about building your own home by yourself, check over these codes and see how much of the work the community building laws and codes will permit you to do yourself.

The Time to Build

Another important factor to remember always in building your own home is not to become discouraged. Once the foundations are in, the frame, roof and sheathing will go rather fast. But after that, your work will apparently slow down and it may seem that you can work all day and not make any noticeable progress at all. Don't let this get you down. Every piece of wood you saw, every nail you drive, is getting your house that much nearer to completion—it is just unfortunate that the last half seems to go so much slower than the first.

It is assumed that anyone building his own home wants a complete home in a hurry, and, therefore, it is important to plan your affairs so that you will be able to devote as much time as possible to active work on the place and also so that you will be able to move in just as soon as feasible. The best procedure to follow here is to get the house weathertight and the utilities installed as fast as you can. Once this

has been done, you can move in and actually live in the house while you go ahead with the rest of the work.

The best time to start construction is in the spring as soon as the frost is out of the ground and the earth is sufficiently dry for the excavation work to get underway. By getting an early start, you will have ample time to get the house weathertight during the warm months when working outdoors is a pleasure. With luck, by fall your house will be near enough to completion so that you can move in and, with a heating system installed, do the interior work.

Living on the Site

An owner-builder is a hardy soul and many a family has pitched tents right on the building site as soon as the weather permitted and lived there during the summer or until the shell of the house was complete. When the utilities were installed, they then moved right into the house. If you have tight walls and a roof, a half-completed house makes a good summer camp. If you have utilities, it is almost a country club.

Another method, preferred by many builders, is to put up the garage first and use this for temporary living quarters until the house is far enough along to be lived in. This is a good arrangement, especially if you get a late start and need a place to live during the first winter or part of it.

The advantage of living right on the site is, first of all, that you can order larger quantities of building materials and have them on hand when you need them—and without the risk of someone walking off with them during the night. Midnight requisitioning of building materials is, unfortunately, much too common a practice.

Another advantage of living on the site is that it gives you more frequent opportunities to work on the house during your leisure moments. Holding down a nine-to-five job and then working on your home for three or four hours each night is probably the best cure for insomnia that exists. But those few hours of work each evening will get you into that house months before you would be able to move in if you confined your work merely to weekends and vacations.

WHAT YOU GAIN BY BUILDING YOUR HOUSE YOURSELF

The obvious answer to the question of what you gain by doing your own building is that you gain a saving of over 60 per cent of the total cost of your house. That should be a sufficient inducement for most of us, but there are a great many other advantages in

building your own house yourself. One of the most important of these advantages is that you get just the sort of house you want and not one that has had to be trimmed down here and there so that it will fit into your budget. Almost everyone is familiar with the story

of the couple who started out to see an architect with a beautiful vision of their dream house and finally ended upafter they had seen the architect, the real estate dealer, the contractor, and the banker-with a small one-story cottage, which they did not particularly want. Well, that can't happen to the man who builds his house himself, because if he wants an added feature here or there, he puts it in and the only cost is the relatively slight one for the materials. No matter how well you plan and how carefully these plans are drawn up, as the work progresses you will always find ways to improve on things. If the building is being done by hired help and you decide, after a wall is in place, that it would be nice to have a doorway at that point, you may find that, by the time you have paid for the extra labor, the door has cost you as much as several doors. But when you are doing the work yourself, you can put in doors or take out doors without adding much to your original cost.

One of the great complaints you hear from people that have just moved into new homes that were designed for them is, "Well, it's nice but we had to leave out a lot of things that we had our hearts set on having." This is a very sad state of affairs because few of us ever get a chance to build more than one house, and when you spend so much time and money, the final result should be perfect.

Another advantage of building your own house is that you can be absolutely certain that it is a good house. When you yourself have selected each piece of wood, cut it to size and nailed it in place, you can be certain that there were no short-cuts taken that would produce an inferior-grade construction. You don't have to worry about sagging floors caused by under-size joists or lack of bridging because you put the joists in and nailed the bridging between them yourself. No one can kid you into believing that the pipes in the plumbing system are something they aren't because you bought the pipes yourself and hooked them up.

And still another advantage in building your own house is the satisfaction you get when the job is finished; the feeling that this is yours, built with your own two hands and the sweat of your brow. This can be a mighty nice feeling and this in itself can be worth all the time and effort you spent on the place.

In this day and age, the creative urge that most of us have is more or less frustrated. Some people take this out in hobbies of one sort or another, but there is no hobby in the world that can compete with building your own house yourself.

THE BASIC HOUSE

If you will study the plans for the basic house described in this book, you will

see that they have been carefully designed to give you the most house pos-

sible for your time and money. It is an attractive house and one that you can be proud to live in, to own, and to have built yourself.

One reason for its attractiveness is the simplicity of design, and you will thank your stars for this simplicity as you go ahead with the work, because there is nothing that wastes more time, money and temper than having to do a lot of fancy and tricky work that, rather than adding to the beauty of the house, may detract from it.

Variations

The basic house can be built in many ways and with many different materials. It can be built with or without a basement. It can be built with or without dormer windows, or they can be installed later on, after the house has been completed. The house can be built with any one of several different types of foundation. It can be built out of wood or with masonry blocks. Each method of building has been covered in the text and your only problem will be to decide which one you will select.

If you are building your own house, the time factor plays an important part. You want to get into the house just as soon as possible and yet you probably do not want to live in a half-completed house any longer than is absolutely necessary. At the same time, you do not want to have to do any jobs more than once. In view of these needs, the construction plans for the basic house have been worked out so that certain items can be done at any of various

stages of construction without involving any considerable amount of extra work.

For example, the attic can be converted into two bedrooms and a bath at some future date. We have run the water pipes for this extra bathroom up to the second floor and capped them so that additional plumbing, other than fixtures, will not be required. The ceiling joists in the attic have been framed so that a stairway can be put in, but if you do not care to install the stairway at this time, it can be left until later. The opening in the attic floor is left temporarily covered and the space on the first floor reserved for the stairs can be used as storage area for the time being. If the house is to have a basement, the inside basement stairs may also be omitted. Access to the basement is provided by the outside basement stairs and there is no positive, immediate need of inside stairs.

The same procedure has been followed with the attic dormer windows. You may find that installing these three windows during initial construction will require too much time or too much money. What you can do, however, is install the necessary rafter framing so that later on, when you are ready to finish off the attic, the only thing to be done as far as the existing roof is concerned, is to remove some of the roofing material and roofing boards. The time and money required for the additional roof framing for the dormer windows are almost nothing. Of course, if you prefer, you can install

all the stairs as well as the dormers and other items of this nature as you build. The choice is up to you, depending on your time, money, energy and desires.

The breezeway and garage can be constructed as the house is built or you can leave them out for the present. If you decide to omit them, the construction plans are such that adding the breezeway and garage later will not be difficult.

You will find that the time-consuming jobs are those that involve finished work, such as interior trim. Work of this sort can be done after you have moved in without much personal inconvenience.

Cost

It is, of course, almost impossible to make generalities about prices for a country as large as the United States. However, the materials list for the basic house—built on a concrete slab, with an expansion attic, and without the garage and breezeway-was submitted to a building supply firm in four sections of the country, the east coast, middle west, Rocky Mountain area, and Pacific coast. The total cost in each case came within the limit of \$3500 which had been set. Likewise, the Vacation Hideaway came within a \$1500 limit, and the Cape Cod Cottage totaled approximately \$2700.

In warm sections of the country, where a central heating system is not required, or where a house may be built on piles, the cost will be reduced. Likewise a certain amount of insulation will not be required. On the other hand, in sections where an excavated cellar is necessary, this will add to the cost. But this will be a matter of several hundred dollars, and still adds up to an economical house.

Basic Assumptions

The only basic assumption in this book is that you know the nature of such woodworking tools as the saw, hammer, plane and square. Practically everybody knows that a nail driven through the end of a board that has split will not hold well, if at all, and that, once a nail has been used, to bend it back and use it again is not only a waste of time but also makes for a weak joint. It is also taken for granted that all cuts will be square unless an angular cut is specified and that all measurements will be made accurately. When, for example, the text mentions that a piece of studding must be plumb, it should be plumbed from both sides so that it will be absolutely upright and not leaning at a slight angle. Be sure that your cutting tools are kept sharp. It is impossible for the best craftsman to do good work with dull tools.