## HOW TO BUILD A DOLL'S HOUSE.

By the Author of "The Telephone, and How to Make One," &c.



N giving directions how to build a doll's house, I feel sure that I have hit upon a subject which will interest both boys and girls. The former will be, of course, ready to devote themselves to

the construction of the dwelling, while the latter will manage the domestic arrangements of the home. They can thus both work together to one common end—and their work will partake of business as well as pleasure.

In order that the task may not seem too trivial,

we will endeavour, in carrying it out, to pick up a few crumbs of useful knowledge by thinking over the subject as if we were actually engaged in building a real house for our own occupation. It is quite probable that in years to come such a work may engage the attention of some among us, and the time now devoted to it will therefore not be wasted.

The first thought in building a house is to select for it a favourable site. Intowns, where ground is so limited that the poorer people have to live more like herrings packed in a barrel than like human beings, the choice of a site is not often to be had, but in country districts the

builder and architect have a better chance for their labours, for they can there have the choice of many different spots for their work.

Suppose, then, that we select for our site a level plateau on the side of a hill. Our first precaution must be that the future building be well sheltered from the north-west wind, and that the finest aspect be chosen for the scene which the windows of the more important rooms will command. We must next examine the nature of the soil upon which we are about to build, and which may possibly be quite unfit for the purpose. For instance, it may consist of wet clay, which would not only mean rheumatism for all the inhabitants of the future mansion, but which has a still worse disadvantage, in sometimes shifting its quarters. In fact, houses have been known to gradually slide down sloping ground, together with the soil upon which they were unluckily built. Again, the soil may consist of peat bog, which means a mass of decaying vegetation, sometimes several yards in depth, which would cause any building upon it to gradually settle down by its own weight. Moreover, this sinking would not be always equal, it being quite possible that one side might sink lower than the other side, leaving the building quite out of the perpendicular.

Having decided upon the site, we must next consider the number of rooms requisite for our accommodation. Here, of course, the ladies of the family must be consulted, for they will want pantries, linen closets, and all kinds of conveniences

that the male mind is apt to treat with neglect. Then the number of sitting-rooms and bedrooms must be decided upon. Having settled these matters, the architect will now be able to prepare the plans for our inspection.

These plans will enable us at once to see what kind of a house we shall have, for we shall see on paper, drawings or elevations, as they are called, of every side of the future dwelling, besides ground-plans of every floor. The plans being approved, the real work can now be commenced.

If the soil be of a rocky nature, so much the better, for there will be no difficulty in finding a firm

be no difficulty in finding a firm foundation for the house, but in most cases it will be necessary to form a bedding of concrete on which to build the walls. This concrete is a mixture of lime, pebbles, and water, which hardens into a rocklike mass. On this artificial rock the foundations can be built without any fear of subsidence. First the cellars are built, which should extend throughout the basement, in order to keep the upper rooms nice and dry. Then the walls are gradually carried up by means of scaffolding, the floor joists being laid in their places as the work progresses. These joists serve the double purpose of receiving the flooring boards on their upper surface, and the ceiling of the room below on their lower face. Then the roof is put on, with its heavy beams of timber; then come the slates, and the

In preparing the plans of a doll's house we need not take so many things into consideration. Doll-

strips of zinc or lead which are used to keep out

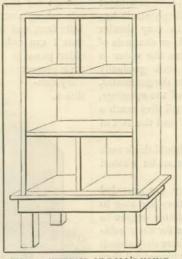


FIG. 1.—INTERIOR OF DOLL'S HOUSE,

kind, unlike mankind, is not subject to the pains of rheumatism, therefore we need have no fears as to the proper choice of a soil; dolls, also, are too robust to be affected with colds and sore throats, so that we need not trouble ourselves about the north-west or any other wind. The selection of a site is not then a matter of very great difficulty, and a favourable locality is usually discovered in some corner of the nursery.

This being settled we can at once begin the erection. As our dolls may be said to be only just commencing housekeeping, and have had no previous experience of its expense, they had better begin in a humble way at first, and have a house

with the least number of rooms in it which they can do with. Perhaps five apartments will be quite sufficient, namely, dining-room, drawing-room, two bedrooms, and a kitchen. They might possibly dispense with the latter apartment. for they are no great eaters; but a doll's kitchen is always a pretty place. Its bright pots and kettles, and the various little utensils, which can be bought so cheaply to furnish it, really make it one of the most interesting features of the house; so we cannot afford to leave it out. But there is one thing that I think they can easily dispense with, and that is a staircase. As this happens to be rather a complicated piece of carpentry for young people to undertake, it is perhaps as well that it can be left to the imagination.

We shall want no bricks and mortar, for the walls can be made of

wood. The house then will resolve itself into a box, divided into five compartments to represent the rooms which we have named. Let this box be one foot deep, two feet broad, and three feet long. I need not tie you down to these exact measurements, for you will probably find some packing-case which, with a little cutting down, or adding to, will answer the purpose admirably. The accompanying sketch (Fig. 1) will guide you in its general treatment; the wide compartment in the centre is intended to represent the drawing-room, the two upper compartments bedrooms, while the two lowermost rooms are respectively the kitchen and the dining-room.

The box should be placed on end on a stand made for the purpose, or a piece of board may be screwed on each side of it to serve as supports, and to raise it from the floor. The partitions should be cut from a piece of well-seasoned pine-wood, and should be secured in their positions by those invaluable helps to the amateur carpenter, French nails. Having seen that the structure is really strong, and having carefully cleared off all roughness and splinters, we can commence to decorate. We must here look upon wall-paper as our sheet anchor. This may be procured from some builder, who, for a very small consideration, ought to be able to find small some scraps or remnants of little use to him, but of great help to us. The patterns should be as small as possible; but this is a matter about which we must to a great extent take our chance. Their selection will find employment for good taste, good patience, and, what is of im-

portance, good glue. Prepare this by soaking some bits of best glue in cold water. After some hours each piece will have swollen to double its former size, and will be soft and elastic. Dissolve this softened glue by heat, without adding any water, and it is ready for use. In fastening wood to wood use it as it is, but in attaching paper to wood mix the glue with an equal quantity of flour-paste, and you will then have a cement which will stick very firmly indeed. With this mixture the wall-paper can be hung, and it can also be used for attaching good white paper to the ceilings of the different rooms to imitate whitewash.

We can now consider what fixtures we shall require. Of course, you all know what "fixtures" in a house mean, for the word itself tells you. Cornices, shelves, the kitchen

dresser, and mantel-pieces come under this description. They can all be constructed without much trouble, by means of wood and glue; and we need not go far to seek patterns to copy from. The mantel-piece, when made, can be covered with marbled paper, such as bookbinders use; and gilt paper can be pressed into the service for cornices, &c. If we want the drawing-room to look very smart, we can have a mirror above the mantel-piece, and pictures hung in frames round the walls. But these things are luxuries, not necessities.

Next we must think of furniture; but here I cannot give much advice, for the way in which we furnish must depend greatly upon our means. But I can give you a hint or two by which tables and chairs of the plainest description can be made to look quite handsome.

Let us suppose, for instance, that we have a



FIG. 2.—EXTERIOR OF DOLL'S HOUSE,

common round deal table that we wish to turn into fashionable black and gold, or perhaps we might prefer white and gold-it makes very little difference.

The way to proceed is as follows:-Break a stick of black or white sealing-wax into small pieces, and pour over them some methylated spirit until quite covered. Now heat this mixture (or what is better, ask some older person to do it for you) until it is of the consistence of ordinary paint. It should be applied while hot, with a brush, to the little table, when in a few minutes it will dry into a beautiful smooth enamel. Little strips of gilt paper will complete our work, and what was once bare wood will now have a very finished appearance. By using sealing-wax of different colours, you can ornament different pieces of furniture in the most varied manner, and I hope that this enamel process will be found useful for other things as well.

The entire house can be closed by a wooden door, which will effectually keep out the dust, but it is just as well that this door should be made to represent the front of a real house. It may, too, be pierced with windows, glazed with real glass, through which we may peep, and look upon our handiwork within. If we can use a pencil and a brush this outside decoration will not give us very much trouble, for we can draw it on thick paper, and transfer it bodily to the wood when finished. The sides of the house can also be treated in the same way, or merely covered with red paper scored with lines to represent brickwork.

We may either copy some house which we have seen, or depend for our design upon some friend who is more learned in architecture than ourselves; but for those who do not see their way to get the information required, I append a design which may possibly meet all their wants.

### OUR SUNDAY AFTERNOONS.

# BIBLE EXERCISES.

"Teach them the good way wherein they should walk."-I KINGS viii. 36.

Does God teach His people?-Ps. xxv., xxxii. xciv. ; Isa. ii.

He teaches them also by prophets and ministers.— 1 Sam. xii.; Is. xxx., lxii.; Ezek. xxxiii.; Eph. iv.

"Concerning a stranger, that is not of thy people Israel, but cometh out of a far country for thy name's sake."-1 KINGS viii. 41.

Examples of strangers who came to Canaan for

God's name's sake .- Ruth i.; I Kings x.; Matt. ii.;

The Gentiles were to be brought nigh. - 2 Chron. vi.; Isa. xlix.; John x.; Eph. ii.

"That he may incline our hearts unto him."-I KINGS viii. 58.

We must walk before God with all our heart .-I Kings viii.

We must repent and return with all our heart .-I Kings viii.; Jer. xxiv., xxix.; Rom. vi.

We must love God with all our heart.-Deut. vi.;

Matt. xxii.; Mark xii.

### THE CHILDREN OF THE BIBLE.

THE WIDOW'S SON.



N the time of the kings of Judah, there stood, in the broad road which ran along the sea-coast of Palestine between the two ports of Tyre and Sidon, a small town or village called Zarephath or Sarepta. Fishing boats and nets were on the shore, and

people moved here and there about the place, but every face wore a dull despairing look, which seemed to say that it was useless now to work, for toil brought them no return. Through all Galilee and Samaria there was a terrible famine; already there had been two years in which no rain had fallen, and in the plain country the brooks were dry, the grass burnt and brown, so that the cattle, seeking pasture in vain, fell and died where they stood.

Zarephath was beyond the northern bound of Palestine; but the dwellers in the little town were sharing the dearth, and wearied, as did every one in the land, for the sight and shadow of even one small cloud across that hot, blue, burning heaven.