

THE CHIMNEY.

By H.C.F.

ONE of the commonest things in the world is the chimney; yet, if you should send out to a thousand builders for a definition of the word "chimney" you would not get an answer from one per cent. of those who might reply, that would convince a master workman's conception of the structure. A large percentage—perhaps fifty per cent.—taking the general range of dwelling-house chimneys, and other chimneys, are essentially defective, because they violate the requirements of the following definition: A chimney is a perfect tube, perpendicular in structure, so built as to admit smoke, gases, and air at the bottom of the tube only, and permit their escape at the top of the tube and nowhere else. The following are some of the violations of the requirements of this rule, where the chimney is built of brick. 1. The bricks are porous, and are laid so poorly that sufficient air enters the chimney through the brick and mortar joints to destroy the draught. 2. The brick may be good, but laid without being thoroughly bedded in the mortar, and air enough may in this way be admitted through the sides of the chimney to destroy or weaken the draught. 3. The mortar may be poor, and its strength easily destroyed by the sulphur and other injurious fumes and gases of combustion. In my experience, I find that about twenty per cent. of chimneys permit sulphurous and other gases to pass through them into the rooms. The rotten-egg smell, so often found in closets, bedrooms, etc., is due to this.

In the first place, the style of the house itself ought to be considered, then the furniture for which the walls are to form a suitable background, and afterwards comes the question of colour, and, too often, that of expense. However, there are such a number of materials available that it is quite impossible to get good results in almost any style if only sufficient care and skill are bestowed on the selections.

To begin with wall papers, the most usual form of wall decoration, we all have found to our cost that for one really good paper—that is, good both in colour and design—there are quite 100 perfectly outrageous specimens which no persons with any taste could tolerate for a moment.

It is well to remember when selecting wall papers that colour is really more important than pattern, although we would not on any account depreciate pattern; still the truth of this statement is readily appreciated when we see the same design in two different treatments, the one in harmonious soft colourings, the other in showy contrasting tones. Another fact worth knowing with regard to wall papers is that the very cheap machine-made papers are not the most economical as regards wear. They often hang well, and look well for a short time, and then the colours gradually begin to fade away, whereas in the best papers the wear far exceeds the small extra cost.

Most people are aware that there are two makes of wall papers, the machine-made and the block-printed. In the first the whole of the work is done mechanically; in the second the process is all by hand, and it is thus possible to get a gradation and softness of tone quite unknown to machine-made specimens. At the same time there are

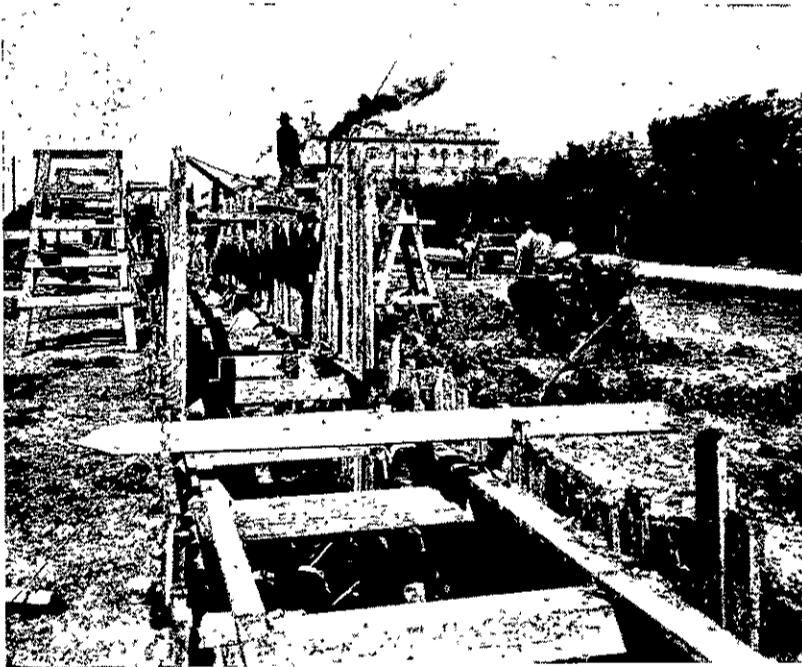
houses, but they can be used with great success in the country for bedrooms or halls, when the walls themselves are to be the chief decoration and not a background for pictures.

Sometimes it is advisable (writes Mr. J. Whyte-Walton in the *Bazaar*) to have a plain paper, in which case the ingrains are the most durable, and in rooms of limited size it is wise to have a patternless wall. The demand for plain wall coverings has also been met by the introduction of canvas, which is now dyed to any colouring, and only comes slightly more expensive than good wall paper.

Another form of decoration is provided by stencilling, which, when finished and shaded carefully, can be made most effective; while for a still more important treatment there is Spanish leather paper, reproductions from the old examples, which, when used in conjunction with wood panelling, is capable of forming a very handsome background.

The prices of oak panelling and wood panelling generally have been much reduced of late years, and are no longer prohibitive to the moderate income. This is, without doubt, the finest wall decoration, and can be made to harmonise with almost any style of furnishing. The white painted wood dado always looks well, and in an eighteenth century style of room panelling is almost a necessity. An inexpensive form of panelling is provided by having wooden mouldings fixed to the walls and painting alike walls and woodwork.

Sometimes walls are hung with cretonne or chintz, in which case the material should not be fixed to the walls, but should be arranged to hang from a rod fixed under the cornice to the top of the skirting board, where it is fixed with pins or



TRENCHING FOR SEWERS.



REINFORCED CONCRETE PIPES FOR SEWERS.

[Guy, Photo.]

DUNEDIN DRAINAGE AND SEWERAGE SCHEME.

This is mostly due to porous bricks, which seem to invite these gases to hide in their recesses and creep out into the rooms, most of which evil has been discharged to the discredit of the furnace. 4. A chimney may be placed on an outside wall, with one 4in. course between the draught and the weather. Such a chimney, even if ordinarily well constructed, may have its draught greatly impaired by air forced through the wall by wind pressure, which has a decided effect at times. 5. The value of a proportion of cement in the mortar is not as generally understood as it should be. 6. Chimneys for dwellings often cause great vexation by being too small, or by becoming a tuel thief when too large. Furnace chimneys should never be less than 12in. by 12in. inside, with a damper of solid construction and simple control for reducing the capacity.

now some very fine machine-made papers, and the difference in cost will have to be considered seriously by the majority of people.

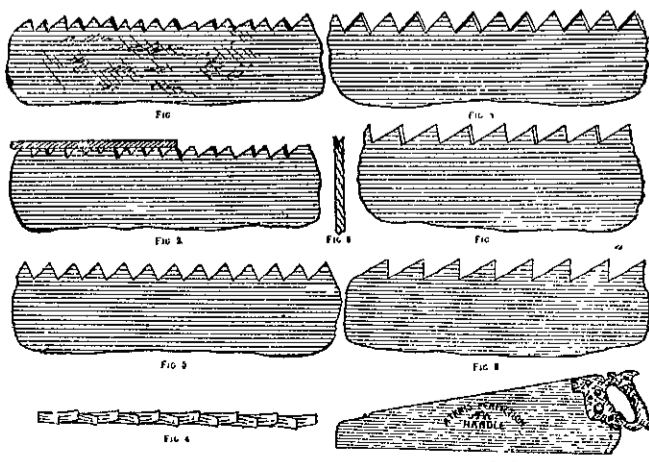
Foremost amongst the different examples of wall papers are the damasks, which produce much the same effect as material or silks, and can be used most successfully either in panels or as an entire covering, being also very adaptable to various styles. As a rule the design of wall papers should be conventional, as nothing could be in worse taste than the clumsy imitation of flowers or the eccentric meanderings of meaningless figures. The chintz papers are not so appropriate for town

tacks, so that it can be easily removed when cleaning is necessary. It is a fatal mistake to paint the walls and woodwork the same colour, as this produces a monotony of effect which is far from pleasing, and there should always be a distinction between walls and woodwork. As a rule, white-painted woodwork is by far the best, and increases the apparent size of the room, and unless real wood can be employed, such as oak, mahogany, or walnut it is quite the most effective.

A word as to doors, which are of great importance in all decorative schemes. We all know how very much a room can be improved by a mahogany, oak, or walnut door, and whereas such things have been so expensive hitherto as to be almost prohibitive except to the few, they are now brought within the reach of all. The Gilmour hardwood door, which is built on scientific principles so as to counteract any possible warping, twisting, splitting, or blistering, is made in every possible style, and the process of veneering is infinitely superior to the old-fashioned one, while it is practically indestructible. Thus we have a door superior to a solid wood door at about one-third the price. It is a new invention, which is likely to prove a boon and a blessing to the decorator.

The Walls of the Home.

THE last few years have marked a notable development in decoration, and there has been a steady advance in taste and knowledge; but there are still many difficulties with regard to interior decoration which only the initiated have thoroughly mastered or understood. We say difficulties, because the art of wall decoration presents anything but an easily acquired skill, and is so closely allied to architecture (or ought to be) that it is impossible to consider them apart if there is to be any degree of success.



REPAIRING A SAW.

(For description see page 167).