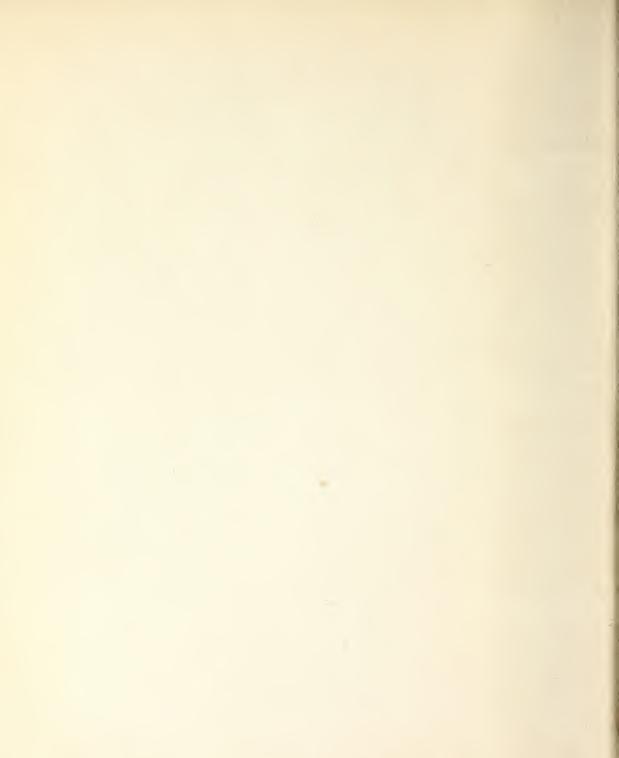
A BOOK OF COTTAGES AND LITTLE HOUSES: FOR LANDLORDS, AR-CHITECTS, BUILD-ERS AND OTHERS:

> WITH SUGGESTIONS AS TO COST, THE HOUSING DIFFICULTY, & THE IM-PROVEMENT OF TASTE IN THESE MATTERS BY C. R. ASHBEE, M.A., ARCHITECT.

1265/5/ PE 169 R 8 5 5 5 F Essertiment from

Withens Williams 35 Avenue Road Gegenis Sarth N.W. 1906



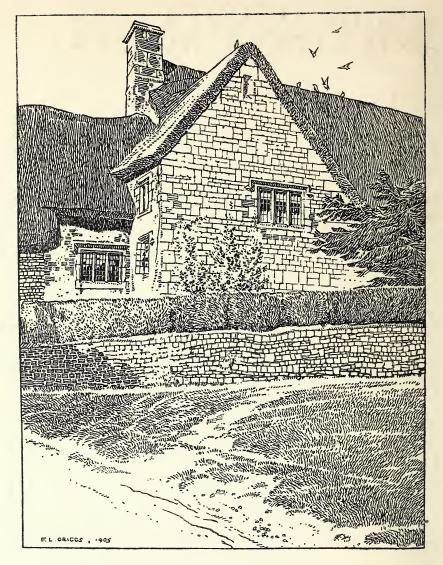


.

Digitized by the Internet Archive in 2017 with funding from Getty Research Institute

https://archive.org/details/bookofcottagesli00ashb

A BOOK OF COTTAGES AND LITTLE HOUSES



THE THATCHED COTTAGE AT WESTINGTON.

A BOOK OF COTTAGES AND LITTLE HOUSES: FOR LANDLORDS, AR-CHITECTS, BUILD-ERS AND OTHERS:

> WITH SUGGESTIONS AS TO COST, THE HOUSING DIFFICULTY, & THE IM-PROVEMENT OF TASTE IN THESE MATTERS BY C. R. ASHBEE, M.A., ARCHITECT.

CONTENTS.

FOREWORD.

		PAGE
СНАРТ	TER I. On the General Principles underlying Cottage Building	- I
,,	II. Cottages and Little Houses, &c., built by the Author in Kent, Sussex, Gloucester- shire, Buckinghamshire, Somersetshire, Cheshire, &c	-
>>	III. On the Repair & Reconstruction of Small Buildings in the Country	l • 41
,,	IV. On Æsthetics and Tradition in Rural Building	l - 81
>>	V. On the Duty of the Landlord	- 89
>>	VI. On the Duty of the Architect and the Builder	e - 97
>>	VII. Country Crafts and Machinery	- 106
>>	VIII. On the Need for the establishment of Country Schools of Craft	f - 119

APPENDIX OF PHOTOGRAPHIC ILLUSTRA-TIONS.

LIST OF ILLUSTRATIONS IN THE TEXT.

NO.				1	PAGE
	Thatched Cottage at Westingt	on	-	Frontis	spiece
Ι.	Izod's Cottage, High Street, C			-	8
2.	Ground Plan -	-	-	-	10
3.	First Floor Plan	-	- 0	-	ΙI
4.	From the Garden		-	-	I 2
5.	Gainsborough Estate Cottage, S	Sheep St.	,Camp	den	13
6.	Ground Plan - First Floor Plan	-	-	-	14
6.		-	-	-	14
7. 8.	Pair of Cottages at Catbrook	-	-	-	15
о. 8.	Elevation - Ground Floor and Bedro	- Plan	-	-	17
			-	-	17 18
9. 10.	Cottage for Trinity College, O Ground Floor Plan	xiora	-	-	
10.	Upper Floor Plan	-	_	_	19 19
11.	Little Coppice, at Iver Heath	_	_		21
12.	Bedroom Plan -	_	_	_	22
12.	Ground Floor Plan	-	-	_	22
13.	The Shoe Horn, Orpington	-	_	-	24
14.	Ground Floor Plan	-	-	-	25
14.	Bedroom Plan -	-	-	-	25
15.	The Nursing Cottage at Findor	n. Front	Elevati	ion	26
15.	Side Elevation -	-	→	-	26
15.	Ground Plan -	-	-	-	26
15.	Upper Plan -	-	-	-	26
16. Group of Four Cottages in Gloucestershire.					
, ,	Front Elevation	-	-	-	28
16.	Back Elevation -	- 	-	-	28 28
16.	Ground Floor and Bedro	om riar	15	-	28

17.	Group of Six Cottages and Shops in Buck	ingham	shi	re.
	Front Elevation	-	-	29
17.	Bedroom and Ground Floor Plan	-	_	29
18.	Back Elevation	_		30
18.	Garden Plan	_	_	30
10.				30
19.	House at Dromenagh. Front Elevation	-	-	32
19.	Ground Floor Plan -	-	-	32
20.	NW. Elevation -	-	-	33
20.	Bedroom Plan	-	-	33
21.	SW. Elevation -	-	_	34
21.	Attic Plan	_		34
				34
22.	The £150 Cottage for Garden City.			
	Front Elevation		-	36
22.	Back Elevation		-	36
23.	Ground Floor and Bedroom Plan	-	-	38
23.	Side Elevation	-	-	38
23.	Section	-	-	38
-	Old Catterney & David Camadan Eland			
•	Old Cottages at Broad Campden. Elevat	lon	-	43
24.	Bedroom Plan	-	-	43
24.	Ground Floor Plan -	-	-	43
25	Thatched Cottage in Watery Lane, Cam	nden.		
~3.	Elevation	-	_	15
0.5	Bedroom Plan – –			45
25.	Ground Floor Plan -	-	-	45
25.		-	-	45
26.	Seen from the Garden	-	-	47
27.	Another Cottage in Watery Lane	-	-	49
28.	Thatched Cottage, Westington. Upper I	Floor Pla	ın	51
28.	Ground Floor Plan -	-	_	51
	The Cedars, Westington. Upper Floor F	lan		53
29.	Ground Floor Plan -	-	-	53

PAGE

30.	Coombe End, Whitchurch -	-	-	55
31.	Bedroom Floor Plan -	-	-	56
31.	Upper Floor Plan -	-		56
31.	Lower Floor Plan -	-	-	56
•	The Carlyle House Chalses Recomment	Dlan		-
32.	The Carlyle House, Chelsea. Basement Ground Floor Plan -	I lan	-	58
32.	Bedroom Plan – –	-	-	58
33.	Top Floor Plan	-	_	59
33.		-		59
34.	The Turner House, Chelsea. Elevation	-	-	62
35.	Plan – – –	-	-	63
36.	Interior of Studio -	-	-	64
37.	Woolstaplers' Hall, Campden. Interior	_	_	67
38.	Ground Floor Plan -	-	_	68
38.	Upper Floor Plan -	-	_	68
39.	Longitudinal Section -	_	_	69
39.	Transverse " -	-	_	69
40.	Holcombe Rogus Poorhouse. Screen	- 1	-	73
41.	Plan of Poorhouse -	-	-	74
42.	Elevation " – –	-	-	75
43.	The Island House, Campden -	-	-	77
44.	Ground Plan		-	78
45.	Upper Floor Plan -	-	-	79
46.	House in Watery Lane, Campden	_	_	102
40.				
47·	Ellesmere Port Buildings. Elevation of T	wo Bloc	ks	I I 2
47.	Block Plan of Six Blocks -	-	-	I I 2
48.	Elevation of One Block enlarged	-	-	113
48.	Upper and Lower Plans of Ditto	-	-	113
40.	Campden School of Arts and Crafts	_	-	I 27
17	1			/

NO.

FOREWORD.



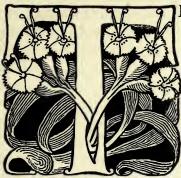
UCH of the interest in the pages here following is due to those who have worked with me, not only in the making of the book, but what is after all more important than any book-making, the building of the houses to which it refers, and the handling of the many complex problems which the repairing of the old workhas entailed. I desire there-

fore to acknowledge my indebtedness to my colleague Mr. Fred Griggs for his skilful renderings of the buildings which he has drawn for me, and to Mr. Ernest Godman & Mr. E. G. Stevenson for their labours either in my office or as clerks of works in those buildings upon which they severally were engaged. To the former, whose untimely death we are lamenting as these pages are going through the press, is due much of the interest and character in Izod's House at Campden, the 'Shoe Horn' at Orpington, the Nurses' Cottage at Findon & 'Little Coppice' at Iver. To the latter the Catbrook Houses and the Abbot's Langley Cottage. In many cases it is difficult to adjudge merit or individuality; perhaps where, as in modern English building, we are seeking to develop character in building rather than personal idiosyncracies in the designer, merit figures greater the nearer we stick to the tradition of those who wrought better than ourselves.

C. R. ASHBEE.

Magpie & Stump, 37 Cheyne Walk, Chelsea.

CHAPTER I. ON SOME GEN-ERAL PRINCIPLES UNDER-LYING COUNTRY BUILDING



HERE has recently been much talk about cheap cottages, cheap houses in the country, accommodation at low rentals for people living on the land, or desiring to return thither. I have sought in the following pages to offer a few contributions of a more or less practical nature towards the solving of this problem, and as they suggest themselves to a practising

architect who has designed and built cottages and small houses in different parts of the country.

It is necessary at the outset, however, before we go into any detail as to the building of cheap houses, houses for the poor, or accommodation for folk of small resources, to clear our minds as to what we mean, & also to clear out of them certain misconceptions. The landlord means one thing when he pleads for cheap cottages for the labourers on his estate, the clerk and the workman mean something quite different when they ask for a cottage or a cheap house in the country, the city man or the professional man have again a different standard when they desire "a week-end cottage," or seek to reconstruct for modern uses some old yeoman's dwelling of the past.

I would lay it down therefore, to begin with, that good building is only possible financially where it stands in proper relationship to rental; that, in the second place, good building cannot be cheap; and thirdly, that the lowering of the rents of cottages is not and never can be a solution to the problem of agricultural housing.

bт

ing and to Rental

Good Build- To take these points in detail. What do we mean by good building standing in proper relation to rental? The answer is best Relationship given by an example. A man invests £ 1,000 in buying a piece of land and building a house upon it, and-after reckoning all charges of depreciation, taxes, repairs-reaps from it a net rental of $f_{1,50}$ or $f_{1,45}$ a year. This, representing as it does 5 or $4\frac{1}{2}$ per cent., which is now considered a fair return on the capital outlay, may be taken as illustrating a proper relationship of building to rental. The same man, however, being desirous that the labourer on his estate shall have a small cottage, builds one quite simply & of the same relative value—*i.e.*, builds one for £ 250 or £ 300 instead of £ 1,000. He finds he cannot get his 5 per cent., or anything near it. The building is no longer in proper relation to rental, and one of two things happens. Either the element of philanthrophy enters, and he gives a portion of the value of his cottage away; or he must wait till he gets some other type of tenant, a tenant of a social status superior to that of the labourer for whom the cottage was first planned. This, in the former case, is what has actually happened on many of the great landed estates; in the latter, where bodies like the London County Council and, I believe, the Penshurst District Council have sought to build for one class & a superior class have availed themselves of the privileges. I do not say that it should not be done, but it is outside those considerations of finance usually imposed upon the architect, and it illustrates what I mean by good building being in relationship to rental and the reverse.

> Nor do a man's social status & pecuniary means modify relationship to rental when what may be called sound finance in building is considered. A tithe of a man's income is usually considered to be the outside limit that he ought to devote to rent, and whether this be paid in the form of capital invested at the rate of from 4 to 5 per cent. or in the form of rent to a landlord the position is the same. The man who pays 5s. a week in rent obtains one type of building, the man who pays 20s. or its equi

valent capitalised, necessarily inhabits another-the building may be good or bad in either case, but the relationship of building to rental, if the finance is to be sound, remains the same. The good architect or builder is he who, with the maximum of taste, is able to effect the most economy to his client-is he, in other words, who most nearly attains for his client a proper relationship of building to rental.

My second point is equally axiomatic. Good building cannot Good Buildbe cheap. That is to say, structurally there is a point in every ing cannot be building below which we cannot go in our costs without sacri- Cheap ficing either the quality of our material, the character and individuality of our design, or the truthfulness and sincerity of our structure. It is well to remember this, for when the country landlord has in mind the erection of timber cottages cut to a type, with Norwegian doors & windows picked from a pattern book, he is thinking of something quite different from the architect or the good local builder who is engaged in putting up a cottage here & there. Cost in such cases can only be diminished by reduplication, and reduplication is rarely compatible in country districts with good building. In short, stated in architectural terms, there is a certain point in the calculation per cubic foot in each building district below which good building becomes impossible.

It is of course arguable that in some country districts the poor should be cheaply housed, rather than that they should be well housed. There may even be social exigencies which make what to the architect is bad building, desirable in preference to good. Just as it may at times be desirable for hygienic reasons to use cheap clothing material so that it may soon wear out, it may at times be desirable to erect cheap houses that shall the sooner tumble down; but that is an argument which, as practical builders, we may dismiss as not within our province in this book.

Likewise may we dismiss from our minds the belief-delusion, Cheap Buildrather-entertained by many that cheap building is going to ing & Rural help check rural depopulation. It is not by lowering the rents Depopulation

that the people will be kept on the land, but by raising the wages, whether in cash or in kind; and the raising of wages has the effect of bringing building and rental once again into proper relationship with one another.

That this is not the case at present with rentals below a certain figure, say 4s. a week, is patent to every owner of house property in country districts. A house costs him \pounds 200 or more to build, and he perhaps cannot get as much as 2s. 6d. a week from the tenant labourer; in other words, the thing does not pay—building and rental are out of relationship. This appears to be the condition in most agricultural districts where the need for labourers' cottages is felt.

The Return on Cottage Property

I have found that with cottage property bearing below a certain rental the percentage upon the capital outlay may be roughly taken as equivalent in pounds to the figure of the weekly rent. Thus 5s. a week bears a 5 per cent. return, 4s. a week 4 per cent, 2s. a week 2 per cent. As this usually includes the value of the land and is further liable to income tax and other charges, it is evident that the right relationship between rental and building is not attained, and good building that is to pay is under such conditions consequently impossible. Indeed the pecuniary return on cottage building is often reduced to nothing at all. The question how this is to be remedied is social rather than æsthetic. It is a problem for the politician rather than the builder or the architect, and as such we may for the time being dismiss it.

On the assumption that the principles above laid down as to the relationship of building to rental and the necessary exclusion of cheapness from good building are accepted, we may now go further and deal with other points—points practical, human, æsthetic. These I shall develop in fuller detail as we proceed, but I would touch upon them in this chapter: for they lie now, & always have lain, at the root of all good building.

Good building is essentially the expression of practical needs.

Men may not always get what they need : they may get bad

The Practical Need building as a makeshift for good; but no building can be really good that is not the expression of a practical need cast into the plan of a good house in stern reality.

There is next the human quality to be considered—the quality The Human that gives to good building its livableness, its lovableness. It is Quality by the human quality that our buildings, just as we ourselves, shall come to judgment. We may be foolish, frivolous, & wasteful: we shall assuredly show it in our buildings. We may be sterling, stolid, strong, severe : stone reflects, and all is told by the little brick voices.

But there is still another something, - the æsthetic quality. The What is this strange and subtle something in good building? A Æsthetic something hidden in its colour, in its position, in the texture Quality of its surface, in the pitch of its roofs, in the proportion of its windows. It comes to the architect and the builder by study, by tradition, by feeling. Deny it as we will, some people have not got it-will never get it. They had better go and sweep roads, write newspaper paragraphs, file pins, anything but build.

As the livableness & lovableness of a building mark its human quality, so there is that other something, the æsthetic quality, indefinable perhaps, which we may call its soul. A thing not to be touched nor seen; a thing of atmospheres, of sensibility, of loving inheritance; the gathering together of tradition; the seal of reverence living and past. The æsthetic quality is, in the words of the philosopher, the

> animula, parvula, vagula, hospes, comesque corporis;

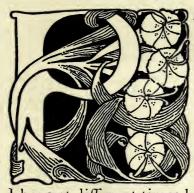
the little white sensitive wanderer, guest of the body and questioner, that finds its resting-place in every building created in Their joy and cherished in understanding. The practical, the human, the æsthetic, are in all good build- Opportunity ing; but with building in the country they have a better chance. in Rural

Greater There is a peculiar individuality that buildings in the country Building

must always possess over those in towns. They stand alone, their setting is the landscape, they may be seen all round, the road leads up to them. When we design in the town we think, or we ought to think, of the street ; & the interest of our house is limited to the interior and the façade. As Ben Jonson would have called it, "the brave frontispiece," our "end is lost in loving of a face." But it is not so with a house in the country: there are trees and flowers; it is a lovableness of sky and sunshine; there are eaves for birds; there are vistas seen through window lights from within; even the chimney-smoke losing itself in the clouds has a blue mystery for us; scent and colour blend for us in evening landscape; the hedge, the garden, the spinney, and the wood near by, all make for the beauty of the building; all have to be considered, and all these considerations enter, whether it be the most exalted palace or the homeliest cottage. Indeed of the two the cottage has the better chance-for it is nearer to earth, to reality.

Therefore no one can really build well in the country who has not to start with some love for landscape, for colour, for wind, rain, and sunshine; for the open air. With us in these days this love of the country is self-conscious. Alas that it should be so, but it is so; we have in these days to understand, to approach beauty again—the beauty of building, through the avenue of the understanding. In mediæval times it may have been otherwise; and yet it is impossible to study old building, to observe —for instance—the placing of a Gothic church, a wool hall, an ancient vicarage, a yeoman's cottage, or any other distinctively country building of the 14th and 15th centuries, without feeling that though the old men seldom talked about landscape as we do, they most certainly understood.

CHAPTER II. COTTAGES & LITTLE HOUSES, SELECTED FROM BUILDINGS IN KENT, SUSSEX, SURREY, OXFORD-SHIRE, GLOUCESTERSHIRE BUCKINGHAMSHIRE, ETC.



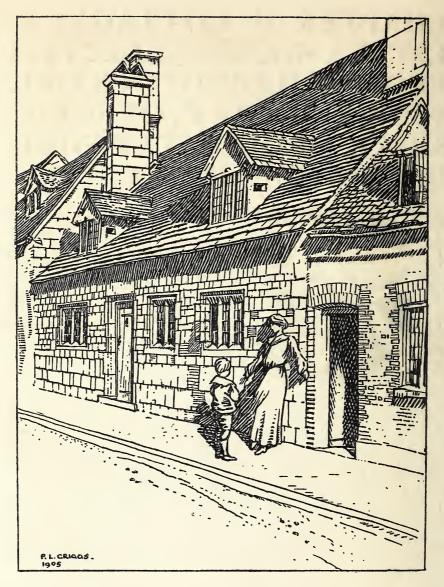
ASSING now from the general principles of rural building which I have laid down and which have served me as a guide, I would like to give a few examples of simple buildings that I have had to deal with in person. They are taken from various counties — Kent, Sussex, Surrey, Oxfordshire, Buckinghamshire, and Gloucestershire—where

I have at different times had building work on hand. I shall endeavour as fairly as I can to give the cubing of each piece of work and its relation to building conditions in every case, but, though the practical architect will scarcely need the warning, it is perhaps advisable to remind the layman that the price per cubic foot of any building, however correctly taken, is always modified by local conditions — the proximity of materials, the rates of carriage, the conditions of the labour market, and so forth. Thus, I have built for 5d. a cubic foot in Gloucestershire work which in Kent I could not build under 8d.

The cottage (No. 1) here following is an entirely new one, but *Izod's cot*constructed in part of old materials. I built it from two con- *tage at* demned & unsanitary cottages for Mr. William Nathan Izod, *Campden*

b 4

7



No. 1.

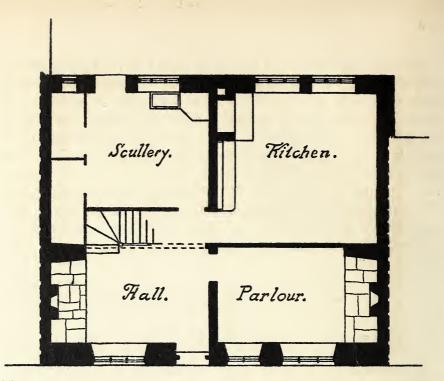
IZOD'S COTTAGE SEEN FROM THE HIGH STREET, CAMPDEN. 8 a farmer of Campden in Gloucestershire; and the problem set was to provide good accommodation for a London craftsman, and conform to the spirit and beauty of what is perhaps the finest High Street in England. It will be observed that there are moulded stone window jambs and iron casements, thus carrying on the noble building traditions of Campden. The stones were very carefully coursed so as to assist the rather subtle proportions aimed at, & the roofing slatts were similarly laid in gradation—the larger and heavier at the eaves, the smaller near the ridge. The beauty of old masonry and roofing lies in observing details of this kind; and a little study of such things makes it quite possible to do the same nowadays if one works with intelligent masons, or masons who have some feeling for their work, and are honest about it. I was singularly fortunate in this respect.

This little house cost £270 to build: I was both architect and builder, so that this price included all professional commissions and payments for clerk of work's services. It brings in a rental of from £13 to £16 per annum, tenant paying rates and taxes; &, cubing it up in the usual way upon the cost given, it stands at 5d. a cubic foot. This, it will be seen, is very economical. True, we had in hand a certain amount of material from the old condemned cottages, a couple of oak ceiling beams and some slatts; but setting this against the fact that the workmanship, banker masonry, and lead light casements, is such as one usually connects with the most expensive type of building work of from 1s. to 2s. a cubic foot—we had reason to be quite pleased with ourselves at the result. I question whether the work could be produced as cheaply under the ordinary conditions by which the architect is paid to watch the builder.

9

It will be seen (Nos. 2 & 3) that the accommodation given is more than would be needed for an artisan with a small family. The plan shows an open hall or houseplace with ingle, the ingles of the two existing cottages being retained, a parlour & a kitchen with offices, while above are four bed-rooms. The

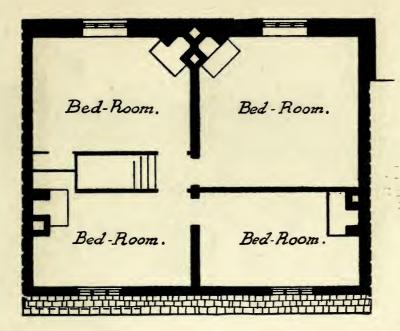
9



No. 2.

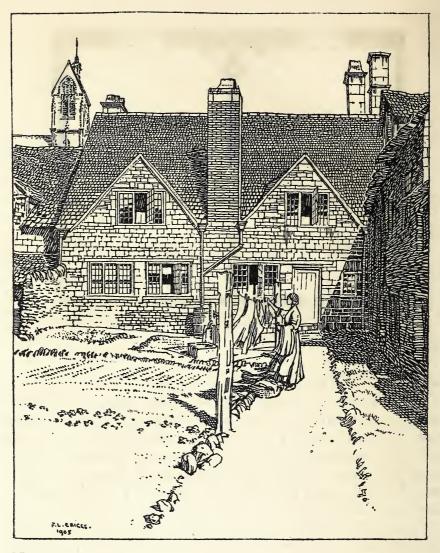
plan, however, was in this instance determined by the width of the frontage and the size of the garden, which stretches down to the stream. On page 12 (No. 4) will be seen the back of this cottage, which stands well with its two gables. We ran out of stone when we got to the building of the chimney, and so finished this off with brick. As it is solid and square it looks quite well, & adds a touch of colour to the golden grey stone of the Wolds; brick, indeed, seldom looks amiss if it be solidly treated, and if the top courses are well capped.

Gainsborough Estate Cottage in Sheep Street. Campden The cottage next following (No. 5) I built for the Earl of Gainsborough at Campden. Here again the problem set was a simple & cheap piece of construction that should give accommodation for the skilled artisan, and be in character with surroundings that are very beautiful. The plan (No. 6) will show how the house is divided and arranged. An additional interest



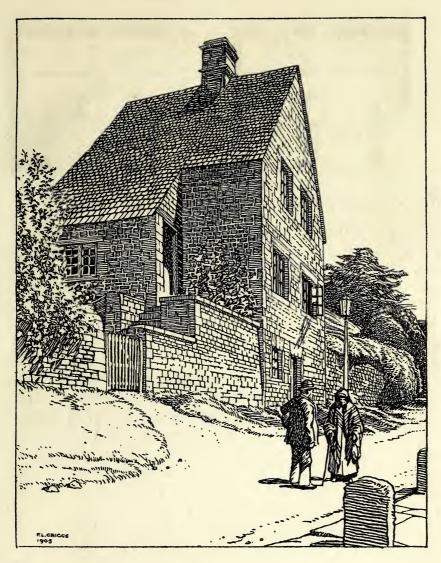
No. 3.

attached to this house because it was built on the foundation of an old Cotswold cottage that had fallen into ruin. The old door is shown below opening to the street. Finding these foundations firm enough, I pulled the whole house down to the door level, used what had been the labourer's living room—it must have been a very damp room—as a cellar, laid a damp course on the top of the walls, and built the whole of my new house above. This treatment has helped to give a rather charming proportion to the house and made it look somewhat larger than it really is, for there is a steep fall in the levels, some 8 or 9 feet from back to front. As for the cost it came out very low, costing about £170, the material being of the very best— Campden Hill stone and stone slatts—but here again we had the bulk of our stone on the ground, using it from the old building that had been destroyed. Cubing the work up from



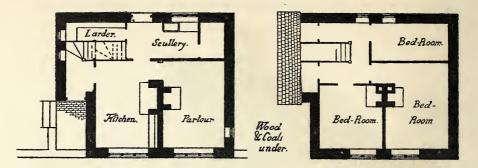


IZOD'S COTTAGE FROM THE GARDEN.



No. 5.

GAINSBOROUGH ESTATE COTTAGE, SHEEP STREET, CAMPDEN.





the middle of the basement floor to the centre of the roof, which I think is fair, we get 10,500 cubic feet, which works out at a cost of $1\frac{3}{4}$ d. a foot. A figure to be congratulated upon. Here again no builder was employed, I acted as architect, a few reliable workmen were engaged, and the landlord's agent paid the wages and looked after the weekly time-sheets. This is, I think, the right method on a country estate.

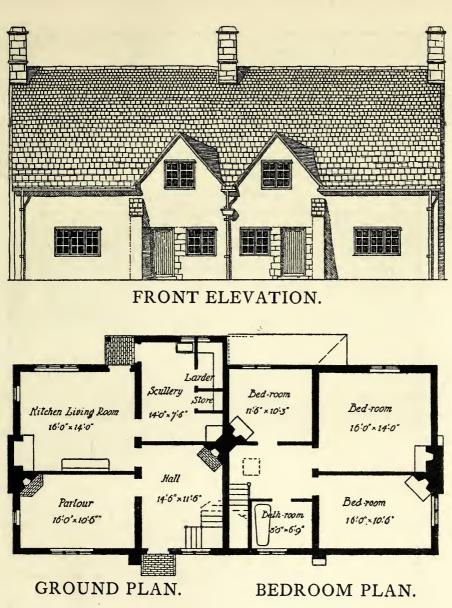
Cottages at Catbrook The next picture (No 7), on page 15, is a set of two small houses built for Mr. J. Gripper at Catbrook, Campden. They are what the house agent would term semi-detached. Here again the object was to find good accommodation in a house of the artisan type and to avoid as far as possible the thing that is called a villa. All who take the trouble to observe the methods of building affected by the suburban jerry builder will notice that he has for the most part two types of house, the house with a porch and the house with what he calls a bay. The "bay" is an erection in the front of the parlour, & is calculated to hold a table eighteen inches square, upon which is a machine crochetted cloth and a vase of wax flowers, or some other useless ornament. Without departing too much from the average, my problem here was to build something that should not look like the "villa," that should tell well in the beautiful bend of a country road, and give the utmost value to an acre of garden 14



No. 7. PAIR OF COTTAGES AT CATBROOK.

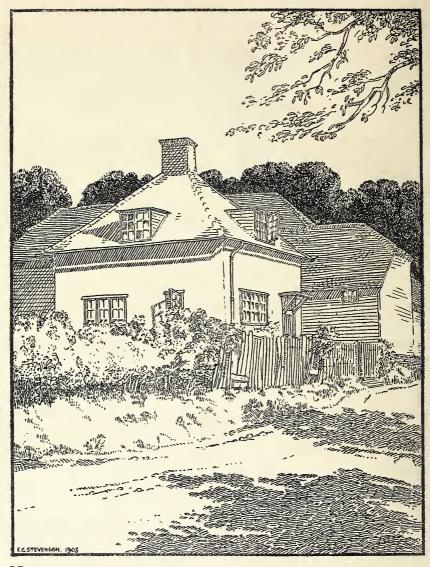
land surrounding the cottages; these, moreover, were to be let at from \pounds_{17} to \pounds_{20} apiece yearly. The drawing (No. 7) shows the cottages taken from the back at the end of one of the gardens. A wattle fence constructed with that traditional skill & deftness which some Gloucestershire village craftsmen still possess, divides the two houses, and the E.C.'s, ash-pits and wood-sheds, are at the end of it and already fairly screened with flowers and shrubs. The plan (No. 8) will show the disposition. I again adopted the plan of the open hall with a fireplace, which I think is a good and healthy method. Each house above contains three bed-rooms and a bath-room, while on the roof of each is a box-room or attic for storage. These houses have perhaps a larger cubic content than is necessary, and were I building them again I might possibly reduce them, but on the assumption that they might be inhabited in the customary manner of the town artisan's house-that is to say, one family with its lodgers-they are not too large. The method of construction, with the exception of the beautiful new slatts from the stone quarries, and the ashlar chimneys worked traditionally by the Campden masons, is quite simple. The houses are of stocks rough cast with stone quoins, & special attention was paid to the angles of the gables and the proportion of the external chimney stacks. A further point to be observed in the design is the appearance of solidity under the heavy slatt roof, which has been gained by bringing out the windows flush. The block cubes out at 36,850 cubic feet. It cost, all told, including the sinking of a well and the planting of privet hedges & some trees, £873 138. 6d, or 5⁵/₆d. a cubic foot. In addition to this, there were also architect's and clerk of works' fees, amounting to f.42. It will be seen that here we have built a little more luxuriously than the present rental warrants, but the block is none the less a cheap one. Once again we dispensed with the builder, and I was both architect and paymaster.

Cottage for Trinity College, Oxford, at Abbots Langley The cut with accompanying plans (Nos. 9 and 10) on pages 18 and 19 shows a cottage I built in Hertfordshire for Trinity College, Oxford. Here we were asked to design something that should look unobtrusive, should snuggle at the side of the black-boarded brown-tiled barn and be Hertfordshire in character. In other words—yellow washed rough cast, with golden lichen-bearing tiles, or, as the catalogues call them, vegetating tiles; and a note of black somewhere, say in the plinth. The 16



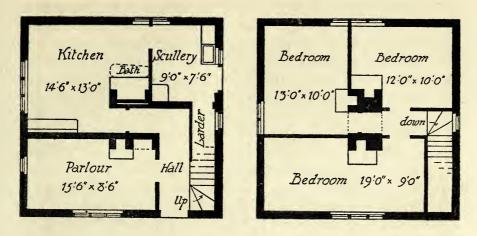
No. 8.

(See also Appendix, No. 5.)





(See also Appendix, No. 6.)



No. 10.

rafters showing under the eaves and the weather-boarded sides of the dormers are Stockholm tarred a warm brown colour.

I adopted the square plan, which seemed the most simple and straightforward; and, as worked out, it will be shown to avoid waste of space in passages, upstairs and down.

This little building cost the College f_{230} , which, taken at 11,500 feet, works out at 4²/₃d. a cubic foot. The price included hedging, front fence and gates, drain and cesspool, a weatherboarded coal shed and E.C., together with the usual architect's charges.

The next design shown (No. 11, page 21) is a house of rather "Little more importance, though still distinctly of the type of the Coppice," country cottage. It is "Little Coppice," Iver Heath, in Buck- Iver Heath inghamshire, which I built for Mr. H. Wrightson. I give the plans in their double form (No. 12, page 22). The house as it was originally built, & the house with its subsequent additions and any others that may yet be made.

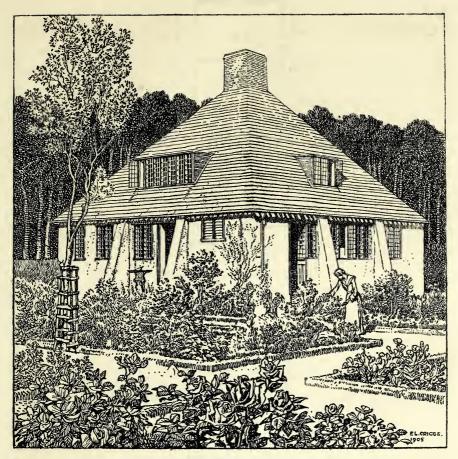
Aesthetically the problem was to build something that would

look well beside a splendid pine wood, be a cottage, and at the same time admit of expansion. I therefore adopted a completely square plan, and so arranged the rooms and the roof on all sides of the central chimney stack. The second drawing shows the way in which the house is capable of expansion on the cruciform plan, and a part of this has now been carried out.

Whether rightly or wrongly, few people nowadays have enough love for the abstract beauty of architecture to allow their sense of petty comforts to be interfered with by the pleasure they get from a good plan. They do not care for plan or the beauty of planning as the Elizabethans did. The sense for a good plan is a very subtle sense. A good plan must convince by its simplicity. Compactness is an essential and so is serviceableness, but to the architect something more is needed; for him the roof should really cover, and the walls be really boundaries, nor should there be a number of patches and excrescences upon his first design.

It is not alone symmetry that meets the need, though a definite square, circle, octagon, cross, or E has its own peculiar charms. Gothic building is rarely symmetrical, but it always has the convincing simplicity which good planning demands; while if we look at the smaller works of the essentially symmetric architects Bramante, Vignola, Inigo Jones, John Thorpe, we shall find that they feel the same. They have the subtle sense of plan.

This slight digression is not meant to point to any special virtue in Little Coppice, but is suggested by the square. There is a famous saying, applied I believe by Confucius to human beings—"be square but not angular." My roof the architectural critic may say, carried from the eaves up to a central chimney stack will give too many angles in the ceilings and so not conform to the human canon of the great sage, but for my part I would rather sleep in an attic and have my house warm and compact than spoil its beauty by cutting off its eyebrows

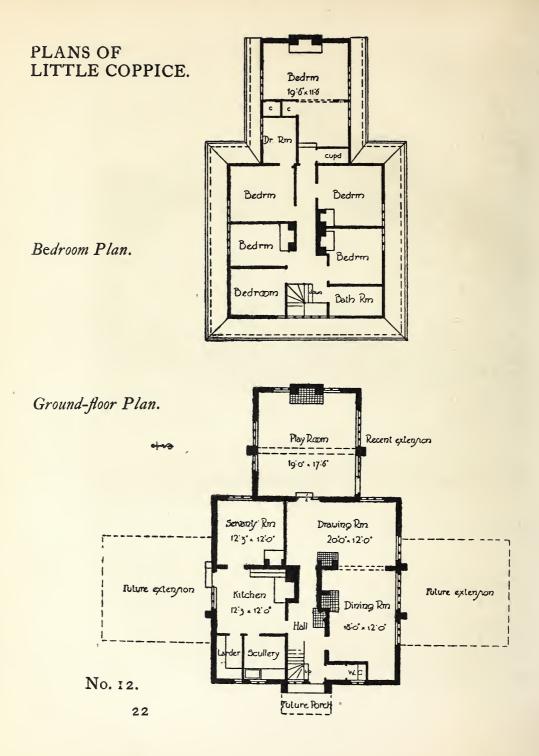


No. 11. "LITTLE COPPICE" AT IVER HEATH, BUCKS. VIEW FROM THE ROAD.

or lessening the pitch of its roof. Is it perchance the angular person who would allow his comfort to interfere with his enjoyment of the square in the plan?

Since the completion of the house as here shown, the first portion of the extension has been added. It has a little hurt the character of the square, but when the three little future

c 3



additions are made, and the square thus changed into a Greek cross, the Confucian harmony, if indeed it ever had any, may return to it.

Little Coppice is a rough cast house with lead lights and green slates. The slight note of red brick in the stack tells against the wall of black pinewood. The wood work of window and door frames, which is carried almost flush to the rough cast, is painted a warm green, and there is a long straight path planted with trees up to the front door. The house was built under the customary contract system. It cost with outbuildings, well and drainage complete f_{375} , *i.e.* $7\frac{1}{3}$ d. a foot cube, or rather less, as this included f_{54} os. 6d. professional fees, &c. The additions on the east side worked out at slightly over the original rate of cubing, i.e. about 9d. a cubic foot. (See Appendix, Nos. 7 & 8.)

The next drawing & set of plans are of a house I built in Kent "The for Mr. Henry Fountain-"'The Shoe-horn." (Nos. 13, 14.) Shoehorn," It was on a building estate that was being developed by others, Orpington and what I was asked to do was something that should be a little more restrained, quiet & restful than what was customary and also be in very small compass.

The simple red brick and red tile of the district was used, the woodwork was painted white. The little projecting porch in front was constructed to hold a lobby below and a bath-room above. (See also Appendix, No. 9.)

The cost of house, including many extra fittings in study, cupboards and other fitments, architect's commission, with travelling and out-of-pocket expenses was f_{1260} , or $9\frac{1}{2}d$. per cubic foot. This was exclusive of laying out the garden.

Much the same plan as that of the Shoehorn has been adopted Nursing in the cottage here following (No. 15) which I built for Mrs. Cottage at William Hunt in Sussex in connection with her nursing Findon home. Here it will be seen the front porch which faces East is open at the top, and devised for a patient to sit or sleep out. In many ways the plan will be seen to be the same as the preceding square houses. (See also Appendix, No. 10.)

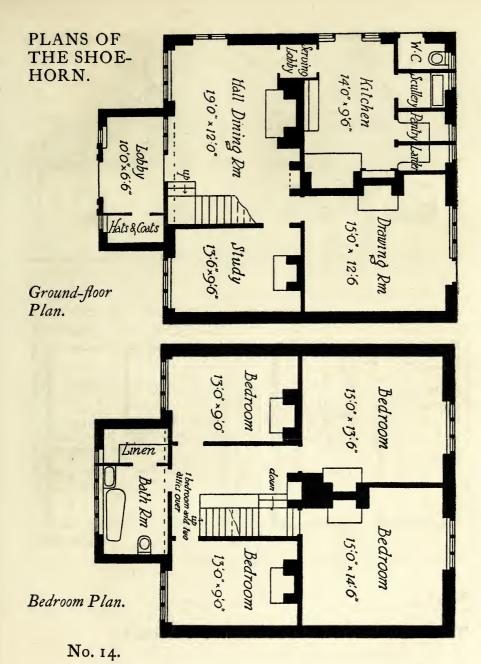
C 4



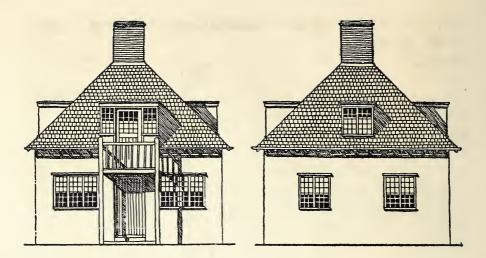
No. 13.

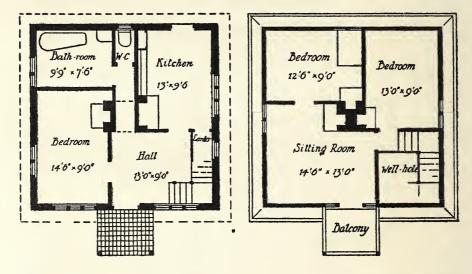
THE "SHOEHORN," ORPINGTON.

The cubic contents of the house is 28,000 feet; the price per cubic foot and cost are as given on page 23.











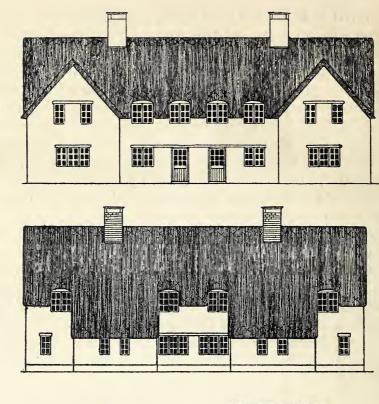
THE NURSING COTTAGE AT FINDON.

The material is brick and flint walls, covered outside with rough cast whitened, the red tiles and bricks of the chimney stacks are of local manufacture. The woodwork of window and door frames is painted green and the balcony and sides of the dormers are Stockholm tarred a golden brown colour. The building was carried out by contract with a local builder. SIt cost, including the fitting up of an already existing stable building as a scullery and coal shed, constructing a separate earth closet away from the house, and making tiled garden paths & approaches £ 376 os. 9d., with £ 23 16s. architect's fees, &c.,say f_{400} in round numbers, or $8\frac{1}{3}d$. per foot cube. This was exclusive of laying out the garden.

I come to deal now with two blocks or rows of cottages. The Group of one to be built in Gloucestershire, the other in Buckingham- Cottages in shire. The former on land belonging to me, the latter on an es- Campden, tate that is to be developed owing to its having been scheduled Gloucesterfor a new railway. In both cases the plans pretty well explain shire themselves, and the object of setting five or six cottages side by side is the economic one. Greater cheapness is obtainable by building in block. I will take the Gloucestershire group first. (No. 16.)

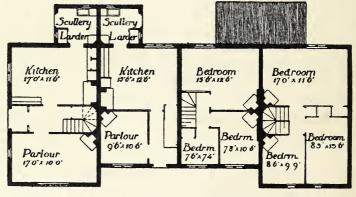
Here we have a building of stock bricks rough casted, the roofing is to be thatch, and the thatch tucked up under the eaves to give a soft line. The chimneys are red brick, with stone caps. The woodwork is painted green. A long stretch of garden with path and dividing privet hedge, is designed to lead up to each cottage door; and there are similar plots at the back, sufficient for growing such vegetables as are most needed for home consumption. The internal accommodation shows parlour, kitchen and scullery, with three bed-rooms, also wood shed and E.C. in outbuilding. There are various other needs for the type of tenant paying, at the present rate of rentals in Gloucestershire, from 4s. 6d. to 7s. 6d. a week.

The cubic content of the group is 46,500 feet; and the cost estimated, but not yet checked, is $f_{,900}$ —*i.e.*, $4\frac{1}{2}$ d. a foot cube.



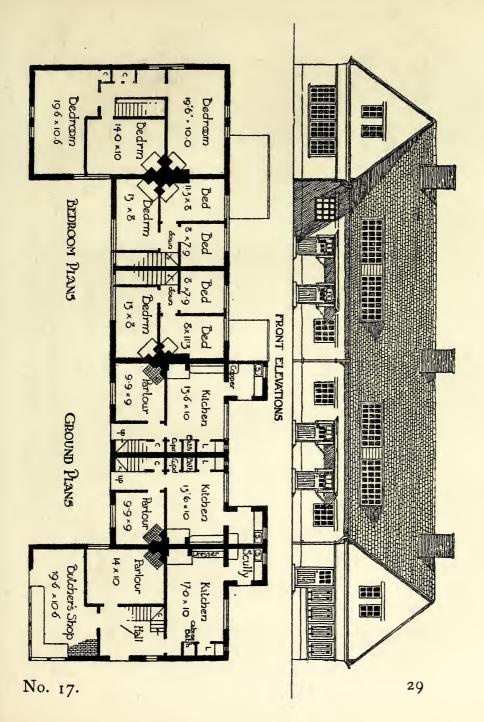
Front elevation to the road.

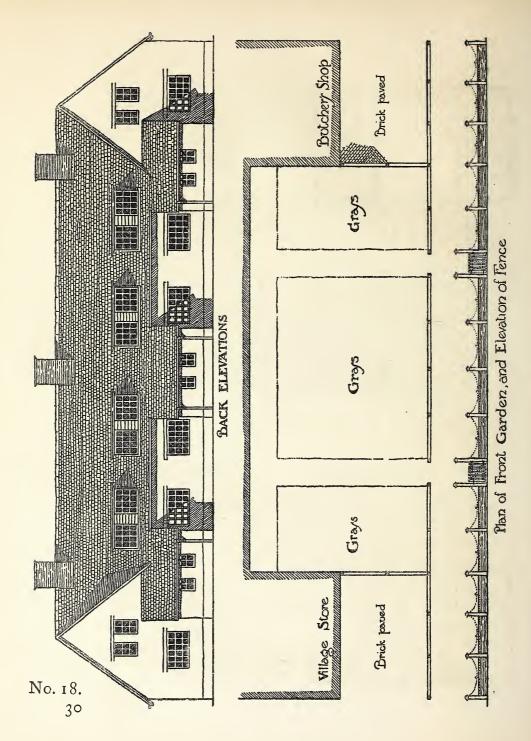
Back elevation to the garden.



No. 16.—GROUP OF COTTAGES IN GLOUCESTERSHIRE.

Plan of upper and lower stories.





The Buckinghamshire group (Nos. 17 and 18), which are Group of about to be built for Mr. Alan Tompson of Iver, are designed Cottages in to serve the double purpose of cottages & shops. To this end I Buckinghamhave adopted a planning with two projecting wings. The one shire

wing holds the butcher, the other is to hold the grocery store. They are rather more elaborately planned than the previous group, and they command higher rentals.

The shops contain: shop, hall, parlour, kitchen, scullery, larder, and cabinet bath, with three good sized bed-rooms over; and the cottages: parlour, kitchen living-room, scullery, cabinet bath, with three bed-rooms over-two with fireplaces. Over each is a loft in the roof, and at the rear an outhouse containing E.C., with coal and wood shed.

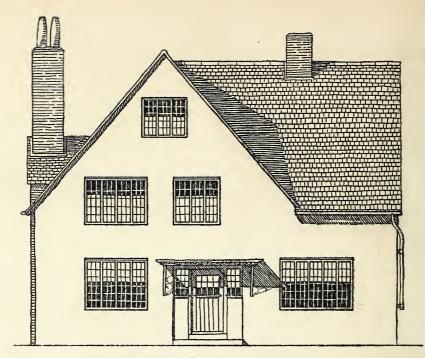
The cubic contents of the block are 54,000 feet and the estimated cost about £1,300, including hedges, fencing, and outhouses; being $5\frac{1}{2}d$. per foot cube.

On the same estate, Dromenagh, at Iver Heath, has been built the little house shown (Nos. 19, 20, 21) on pages 32, 33, 34. Like its neighbours it is rough casted and tiled, and a weathered and gabled chimney stands at the south-west side. Reference to the plan will show that the arrangement of the rooms is very simple. Six bed-rooms, or seven if the attic be included, are set on the top of the parallelogram into which the ground floor appears to arrange itself. The house cubes out at 19,000 cubic feet, and the cost was $f_{1,850}$, thus standing architecturally at $10\frac{3}{4}$ d. a foot cube. This figure includes the construction of outhouses, sheds, &c., but not the laying out of lawn, garden, additional plantation, road-making, &c. done by the landlord, nor professional fees. (See also Appendix, Nos. 11 and 12.)

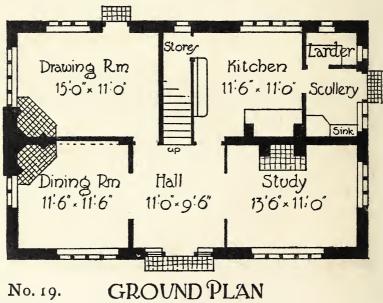
I give as a fitting conclusion to this chapter a set of plans (Nos. The f, 150 22 and 23) for the £150 cottage, the reductio ad absurdum of Cottage for architecture.

The accompanying plans were offered as one among the many Hertfordsolutions towards the problem of rural housing. How, in other shire words, to build the labourer a house for f_{150} . The pair are to

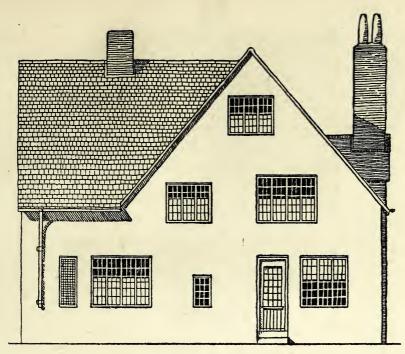
Garden City



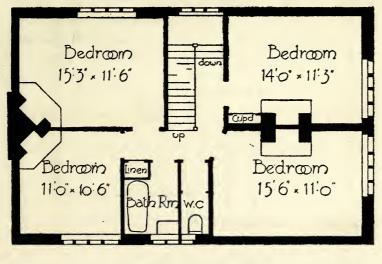




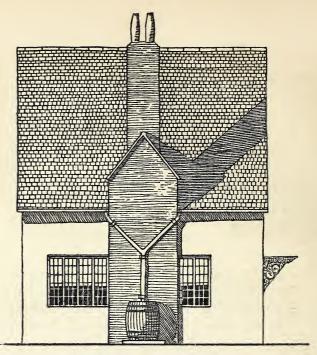
32.



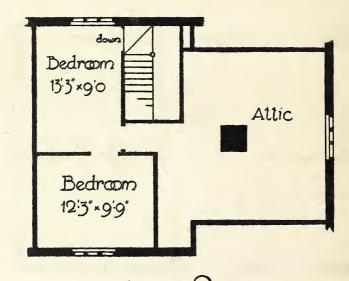
N W ELEVATION



No. 20. d I BEDROOM PLAN







No. 21. ATTIC PLAN

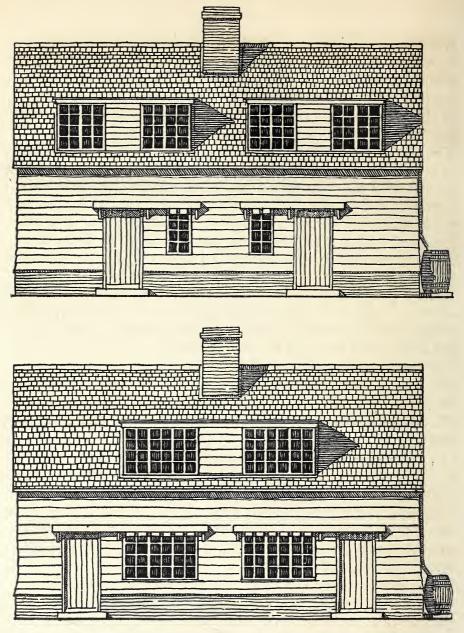
be built at the First Garden City in Hertfordshire. Our sole concern here is economy; therefore it will be seen that in the first place the two cottages are set side by side so as to economise in party walling, in warmth, and in compactness. Next, the bulk of the structure is of timber, boarded Norwegian pine or some cheap but durable English wood.

The roof is of boarding, slates, or tiles. I have shown the latter. Timber It is a foolish regulaton of some modern bye-laws that timber Structure must not be used. Timber as shown in my drawing is used in America and all over the Continent where similar problems occur, & timber was until quite recently used in many English counties. I have myself lived for some years in an Essex cottage constructed in this manner 50 years ago, and very comfortable it was.

A brick plinth and a dry concrete base is the next requisite in Brick Plinth order to carry the timber framing, and, as the weight is very & Concrete slight, nine inches of concrete will amply suffice for this, while the plinth may be taken up two foot from the soil externally in order to prevent the wood from rotting.

The stack is the next important thing to observe. It should be The set square in the centre & carry six flues, three for each cottage, Chimney all of them having nine inches outside. The stack should come Stack well above the roof, & it may be necessary to set simple cowls or preferably two or three slates set anglewise as a protection against wind. It should also be designed to hold a kitchen range such as the cottager's wife will need. It must contain a boiler & small oven. I find a Nicholls & Clarke" Clanic" or "Colonial," or a Falkirk Iron Coy. of a similar pattern with open & closed fires, the most serviceable, and have used a good many on different buildings of mine.

In the scullery and wash-up should be the copper for the Mon- The Scullery day's linen; and a space of yard or garden for the clothes- & Wash-up line, set in a part where it shall look least unsightly, should be provided. The little larder under the stairs, with perforated zinc grille instead of glass and an external shutter to keep off



No. 22. — THE £150 COTTAGE, DESIGNED FOR THE FIRST GARDEN CITY, HERTFORDSHIRE. 36

the sun is the next consideration, this latter being desirable if the larder faces other than northward. The coal and wood shed takes the corner space on the other side, opening from the scullery.

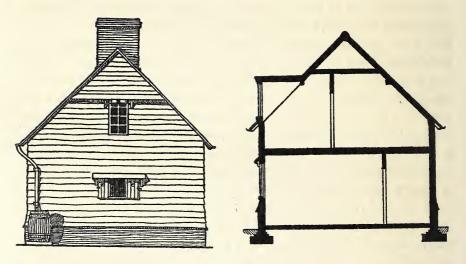
On either side of the kitchen range must be dresser and cup- Cupboards boards, for it is advisable that as much of the furniture as possible should be structural; and, as the more cupboards given the better, one is shown in my plans over the head way into the bed-room and another under the stairs next the larder.

The principal thing to observe in so simple a piece of work as Proportion this f, 1 50 cottage must necessarily be the proportion; obviously where every farthing has to be studied we cannot build with good scantling, and all our materials must be thin. But we can always have good proportion. The points to observe are the following:-the pitch of the roof, the laying of the boarding, the ranging of the window and door line, the placing of the window frames in the windows, and last but not least, the proportion in themselves of the panes of glass.

The same applies to internal proportions: the panelling of cupboards, placing of styles, and setting of rails; there is a right and a wrong feeling in these matters that is irrespective of cost. There is then to be considered the colour. I conceive the Colour best way to treat a simple woodland cottage such as this, is to make it bright and clean. It should look happy. Therefore I build my chimney and plinth in red brick; paint my boarded woodwork with two good coats of white paint or carbolinium, with a good whitewash after; have the roof black tarred and well sanded unless tiles are used; and let the window frames, ledges, and shutters be bright green. When the cottager once appreciates the real fun there is in a good colour scheme-such as the black, white, & green, I suggest-he will put the colour on himself if you give him the paints; and purple poppies, and hollyhocks, and the pink maiden's blush rose will do the rest. Fresh Air There is one great thing to bear in mind in building or design- and Housing ing a house for a country labourer. It is the thing that essen- Conditions

d 3

Wood Scullery and Coals Bed Room Bed -Room C rider Living Room 14'0° × 13'.0" Bed -Room Dresser





THE £150 COTTAGE, FOR THE FIRST GARDEN CITY, HERTFORDSHIRE.

tially differentiates his house from that of the town workman, the factory hand, or the suburban person. You are building for a man who is always out of doors. This means further that he is a man whose occupation is seldom in repose, is filled with fresh air, and all the cleanness and sweetness which nature brings.

Our labourer may be quite a dirty person, he probably moves very slowly, he may even gum up the lattice windows with newspaper the while he keeps the kitchen door wide open, but the point to remember is that he has not the townsman's essential needs, and the rules that apply to the building of a house for the townsman do not apply to him, air, light, height, size, space and sanitation, are not such important matters as they are for his town brother, and they certainly do not require such close and fussy regulation. That the well should not be near a cess pit or a midden heap is of course an essential, that most windows should be made to open is desirable, and that there should be certainly two fireplaces in three bed-rooms; but height of rooms is not so vital as in a town, nor is the size nor air space of windows.

Another thing to bear in mind is that building for a country Heating and labourer we build for a man who cannot afford to pay for coal. Compass of Casual wages at 15s. a week with rent of half-a-crown, and the Rooms keep of a family of let us say six, means that only such fuel can be burned as is needed for cooking, hence no warming of rooms is possible, hence smaller and lower rooms are essential for economy, and to apply to the country the regulations in force in towns for houses bearing rental of from 5s. to 7s. 6d. and inhabited by families with wages of from 20s. to f_{3} is foolishness. It may be unsanitary, it may be sad that the labourer should be so closely cabined, but to put him in a large room which he cannot heat is merely to increase his discomfort, and perhaps his resentment.

Outside at a distance of about 20 ft. from the house are two E.C.'s and E.C.'s constructed together with a boarded partition, as a Boundaries

boundary between the two premises; they should each have a coal and wood shed adjoining, the boundaries have beds of flowers against them, while the yard or kitchen garden should be at the side.

Cubing and Cost I think the whole of this set of plans will be shown to be devised with the minimum of waste, no space is lost, & each cottage covers an area of only 20 square feet. The cubing of the pair is 12,000 feet, which taken at $5\frac{1}{2}$ d. represents £ 300, and as it is probable that in many parts of the country $5\frac{1}{2}d$. is considerably beyond the cost of labour, the accommodation I have shown could either be enlarged or the price and amount invested be decreased. I would undertake to again build such a pair of cottages under normal conditions for any landlord with $f_{1,300}$, and if the type were to be reduplicated and several sets put up, further economies might be effected by the judicious use of machinery. Such use, however, involves ethical and social considerations which may be of more importance in the village where the cottages are to be built than even the cottages themselves. I deal with these considerations in my later chapters, therefore I will leave them here, saying only in conclusion that though the machine may be of the utmost service towards solving the housing question, it will never of itself solve it, and in many matters even the machine will to the community prove a broken reed.

CHAPTER III. ON THE RE-PAIR & RECONSTRUCTION OF SMALL BUILDINGS IN THE COUNTRY.



EPAIR and reconstruction of old work is for the architect in these days quite as important as the building of new. It implies for him a knowledge of those human and fundamental things in the past as in the present that architecture expresses and reveals; it tests his study, taste, & experience. Our canons of taste in building, as in all art, are modelled upon

the past. Nor does old building and its maintenance involve only taste; it involves also a knowledge of history, more particularly social and economic history—often it goes further and involves an acquaintance with characters and their settings. Henry Eveleigh, William of Wykeham, Sir John Harrington, Sir Baptist Hicks, Bess of Hardwicke, Charles I., Ben Jonson, Robert Adam, Horace Walpole have a special significance to the architect, and will always be very real people to him if he knows his subject. When he comes upon their work, or even the indirect traces and influences of it, in country nooks and corners, he will, if he have the true poetry of scholarship, know how to deal with it reverently.

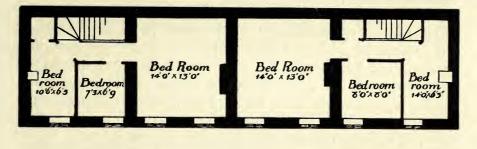
It may be taken as an axiom that it is often quite as expensive to repair an old building, especially of the type I am dealing with in this book, as to pull it down & build afresh. It is always a pity, however, to pull down a building if by any manner of means it can be saved. Every old building, however simple, set Pre-Machine Handicrafts

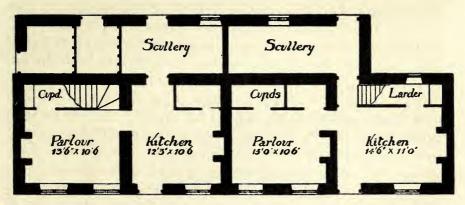
up before the machine era, i.e. before the beginning of the nineteenth century, is an expression of craftsmanship, a combination of handicrafts which can perhaps never be reproduced. People do not sufficiently realise this. They will appreciate an old building if it be picturesque, or if it be built by somebody whose name they have heard of; that is, if it appeal to their pictorial sense, or their literary sense. They do not understand it for its construction or its beauty. If it happen to be disguised, as old buildings often are, with bad or commonplace additions, they may ignore it altogether. The name of Sir Christopher Wren has saved many a building, & the fact that he could not be proven its author has lost us as many more. We are a foolish and half-cultured people; & that "principle of beauty in all things" which we enjoy in the poetry of Keats, we deface, obliterate, and forget in the poetry of Thorpe, of John of Padua, of Gibbs, of Pugin, of the hundred and one little lyrics of stone that such as they have inspired by the wayside. To the pious architect the repairing of old work in an old country steeped as England is with the poetry of building is a great joy, for it brings him into direct communion with the masters whence his own tradition springs.

I have had a good deal of work of this sort through my hands from time to time, and have always, in deciding what should be maintained and what should be sacrificed to modern needs, taken traditional craftsmanship as the determining line. A thing should not be saved merely because it is old: the question we have to ask is what does it stand for, and what purpose can it still be made to serve. With the machine era traditional building ends, but there are damp, unsanitary, ill-built cottages of the pre-machine era; as such let us destroy them, but before we decide to destroy them let us see what they express of traditional craftsmanship, and let us see whether we can bring them up to date.

S. P. A. B. A cottage should be treated as the thoughtful forester treats Methods oaks: he marks them at least twice before he decides to apply

3				冒	111		Ē
-							
			ψητριή	<u>un hin</u> n			
推开的部件		在調告		時代			
	THE		14-1	計程	TTTT	T.L.	
		TT - CT		L. I		PET 18	
	누구 등 등 등 하	 		⊸나		臣中	
		守 川川王					
			HITH	411			





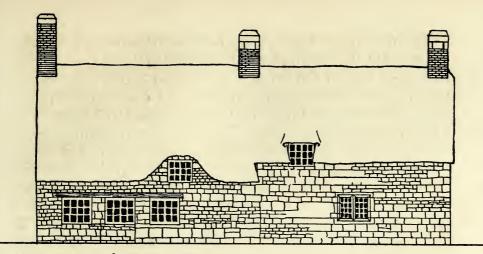
No. 24.—OLD COTTAGES AT BROAD CAMPDEN.

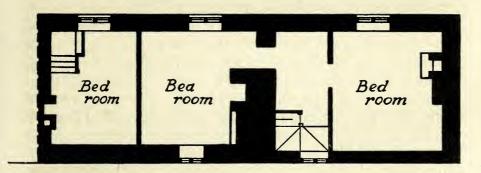
the axe. As a general principle I have, in this matter of the repair of old cottages & little buildings in the country, followed the lines of the Society for the Preservation of Ancient Buildings. All their teaching is helpful and practical, and though to carry it out often costs more than to build cheap new buildings, it is worth paying for.

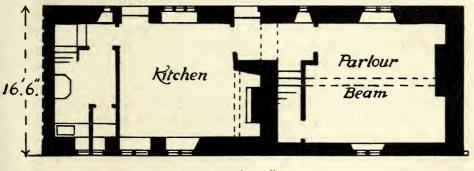
Old Cottages at Broad Campden, Glos.

I will give a few instances of the application of these principles to cottage building. In the hamlet of Broad Campden I acquired a group of dilapidated labourers' cottages. They had been rightly condemned as unsanitary, the fences were broken down, the roofs beginning to fall in, there were no proper washouses or sanitary accommodation, no kitchen ranges; the water from the roofs soaked under the floors; each cottage had two bed-rooms, one leading into the other; most of the windows did not open, except where they were falling with their lead cames into the road. The thing looked very hopeless, and perhaps if I had been working for anybody else I should not have inspired my client with the architectural imagination necessary to decide upon saving them. What did decide me was the traditional handicraft & the evident appreciation that the old builder had for his proportions, the coursing of his stones, and the long roof-line. That was good enough. So I set to work and gutted them, converted four slum cottages into two decent workmen's houses, as will be shown on the plan (No. 24), picked out and re-leaded the casements, built the necessary back premises, and put in the ranges. With the trimming up of the gardens and the painting of the woodwork in new doors and windows, the old life seemed to come back to them, and now they look quite human & pleasant. The tenants have added to their interest by planting roses in the little foregardens & hanging curtains of turkey red in the windows. An outlay of about f_{158} upon a decaying property gave me back all I needed, and I think all that was best worth preserving of the past.

The next cottage I would like to refer to (No. 25) is one in the







No. 25.

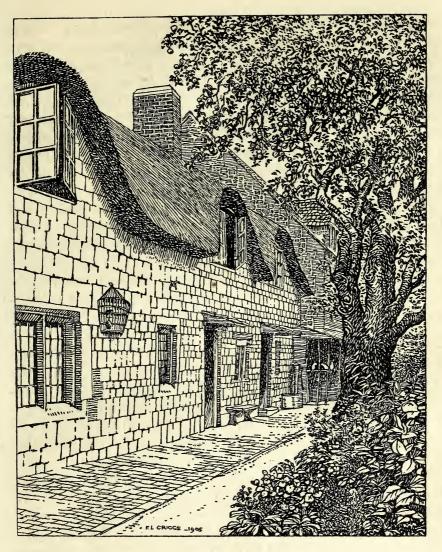
The Thatched Cottage in Watery Lane, Campden

The Thatcher's Craft High Street of Campden, which I remodelled with its neighbour for Mr. R. Martin Holland. Here again it was a question of two dilapidated and unsanitary dwellings. I gutted them, raised the eaves, and re-roofed with thatch; but I was careful to retain the exceptionally beautiful thatch line to the High Street side, a line which appeared to have been most carefully thought out by the thatcher. A close observation of the work of a first-rate thatcher is very instructive : he works instinctively in line and in mass together. Every little break or stepping in the wall face is an opportunity, and the diminishing curve of a projection is to him a chance of producing forms peculiar to his material, & forms often very beautiful indeed: they are not exactly spirals, nor volutes, nor cones, nor azimtotic curves, but all these they suggest; and all out of mere straw !

It is impossible to show them in elevation—perspective and modelling alone can give them—but the sort of thing I mean, the peculiar beauty of thatch, its susceptibility to soft modelled forms at the curves and angles of a roof, is shown in the drawing given in the frontispiece of this book, where a new wing has been added to an old cottage, & the art of a very skilful thatcher has expressed itself in the junction of the roof ridges with an intersecting chimney. (See also Appendix, Nos. 13, 14, 15.)

The Watery Lane cottage above referred to is perhaps more interesting at the back than in the front, and here again the thatcher saw his opportunity. I raised the gables, so as to give the bed-rooms more head room to the south, and this gives to them and to the thatcher's work more interest from the garden side. (No. 26.)

Is the craft of the thatcher dying out? it is sometimes asked; and it is added that a good thatcher is worth his weight in gold. But the answer lies, I believe, in the condition of agriculture, and the need for a greater flexibility of building byelaws and insurance regulations. Thatching is an agricultural craft : in old days hedging, wattling, ditching, and thatching



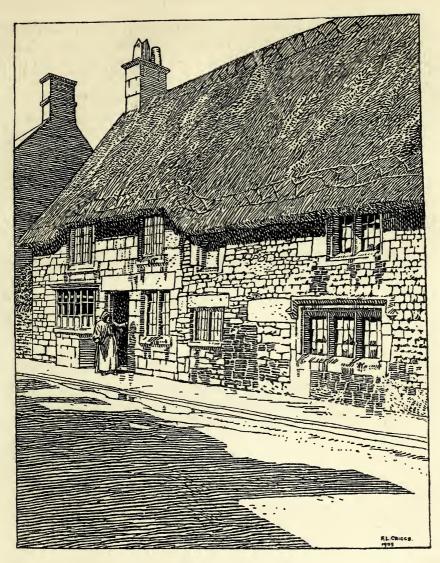
No. 26.

THATCHED COTTAGE IN WATERY LANE, CAMPDEN, GLOS.

were branches of the skill and mystery of agriculture; it was understood by the independent husbandman presumably, who had studied his craft all round. I do not think thatching as a craft will perish, because it is not directly influenced by machinery: you cannot thatch with a machine. But for the time being the craft is affected mainly by the decline of wheat, and the consequent scarcity of wheat straw, which the thatcher needs. The sub-division of labour, too, and the absence of most forms of technical teaching in our villages has occasioned the present scarcity of thatchers. This could easily be remedied; so could the stupidity of bye-laws that forbid thatch, and the exaggerated premiums of insurance companies-these are usually 5s. as against 1s. 6d. for slates. But thatch in our damp climate is scarcely ever set alight from the outside, and if chimneys are well constructed, there is no risk of burning from within. It would be difficult to imagine this little cottage as better covered than by the homely craft of the thatcher.

Another Thatched Cottage in Watery den, Glos.

The cottage I show on page 49 (No. 27) is another that I reconstructed in Watery Lane at Chipping Campden. It was purchased by two ladies-Mrs. Gilchrist Thompson & Mrs. H.W. Wrightson-who wisely wished me to preserve it. The draw-Lane, Camp- ing will show how all the principal features that make for its character have been preserved. Like so many of the Campden houses, it may originally have been one-possibly the house of some Elizabethan husbandman : his home in the High Street, his yardland holdings in the open fields around. Then when the days of shrinking-in came upon the little Cotswold town, when her fields were enclosed and her small yeomen starved out, it was perhaps cut into two & made two rather miserable hovels for the labourer. I re-cast it; blocked up the poverty-stricken doorway shown at the side of the mullioned window; gave it once more a good houseplace, a parlour and three bed-rooms, with larder, wash-up, outhouses, and garden at the back. In.



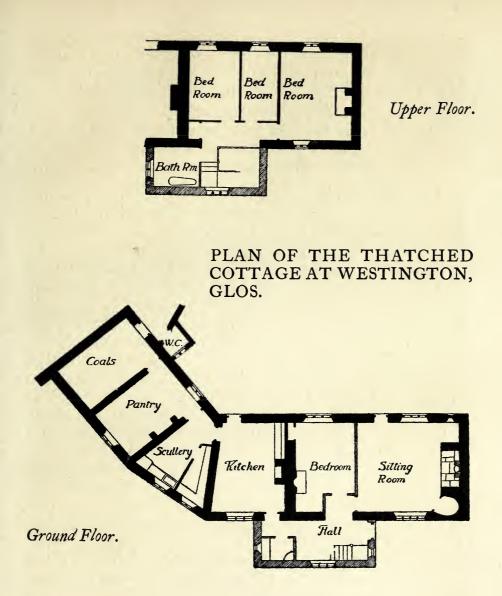
No. 27. COTTAGE IN WATERY LANE, CAMPDEN, GLOS.

this cottage, again, there is an interesting variation in the thatch line at the eaves, but this is, I think, due to the structural alterations made probably in the late 18th century, when the projecting bow was added.

The house to which I referred just now is, as will be seen by the plan (No. 28), a rather more important piece of work. I completed it recently for Mr. Paul Woodroffe, adding the gable or front wing, as shown in the first perspective drawing, in the frontispiece, to a somewhat melancholy little Cotswold cottage. Melancholy because it had been so neglected and illtreated. In its day it had probably also been a small yeoman's house, with open houseplace, parlour, and two or three bedrooms above. As the farming age developed, it would seem as if further kitchen, dairy, and outhouse accommodation, all under a rather pleasant thatch line, had been added on. When I came to handle it, the box & yew had grown out of all reason, the thatch was open, the stones covered with moss, and the damp thick upon them. We gutted the interior, re-lit the rooms, opened out the great ingle in the houseplace, turned the stone bread oven to service as a cupboard, re-glazed the windows, re-thatched the roof, and damp coursed the whole house. In the annex under the gable shown in the frontispiece, a gable that now forms a pleasant feature in the beautiful village of Westington, we built a hall, staircase, bath-room, and other necessary things. The old stone slatted stable at the back was re-cast, a chimney stack and furnace added to it, and it was converted into a studio with cutting and firing rooms for Mr. Woodroffe's stained glass work. (See also App., Nos. 15-18.)

This yeoman's house, and others of a similar nature that I have handled, brought home to me many interesting points of similarity between the life of our ancestors and our own. The humanism and culture that seems to have come over so many country districts as the result of the spirit of the later Middle

The Thatched Cottage at Westington, Glos.



No. 28.

Ages and the Renaissance left its enduring mark on 17th century cottage and farmhouse building. More particularly did it do this in the Cotswolds. A modern poet calls the Evenlode-

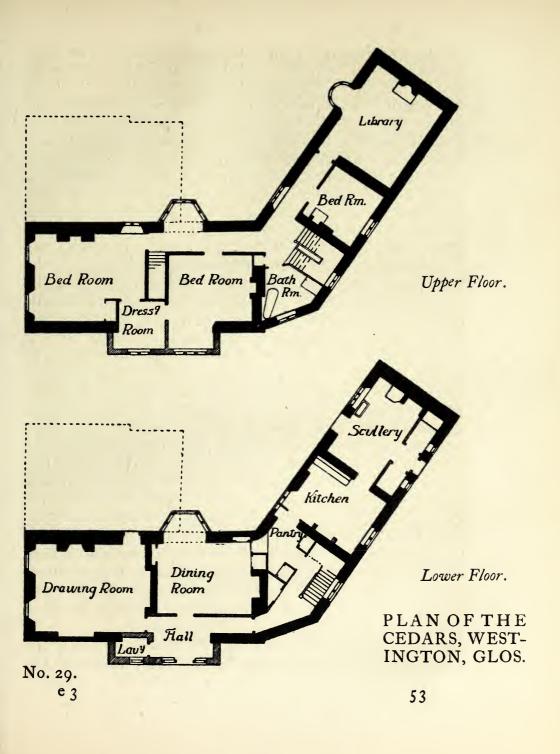
> A lovely river, all alone, She lingers in the hills and holds A hundred little towns of stone Forgotten in the western wolds.

Humanism in the 17th Century

And forgotten is the right word for the building, as for the human service it symbolised. The spiritual and intellectual apathy, together with the trade wars of the 18th century and the industrial expansion that followed in the 19th century, took much of our humanism from us. The buildings remained, but they were often used by others, who maybe were the direct descendants of the builders, but others who had forgotten, who did not feel the need of living daily life with the same dignity or directness as those who came before. When we unbury and re-cast such old yeomen's houses in our days, or the houses of the silk merchants, the wool staplers, or even the country craftsmen, we are conscious of a kinship in taste with the builders : our life is sympathetic to theirs; we desire to efface ugly things that have come in the intervening time; our humanism touches theirs across the centuries.

"The Westington

Another little reconstruction that might be mentioned here, & Cedars" at of which I give the plan & two elevations (No. 29), is the house adjoining the previous one in the village of Westington, which has been re-cast for Mr. St. John Hankin. Here we again had a Cotswold yeoman's cottage, to which had been added about fifty years ago a rather pompous ashlar villa. A building that looked very conscious of its superior propriety over its neighbours, the mid-Victorian building that one connects with a "monkey-climber" on the lawn, or, as our fathers preferred to call it, the "oracaria." Around such a house there must be trimmings of scarlet geranium, blue lobelia, and yellow cal-



ceolaria, mechanically potted out to season, and from the door a gentleman issuing in a hurry to catch a train, equipped with handbag, umbrella, and silken hat.

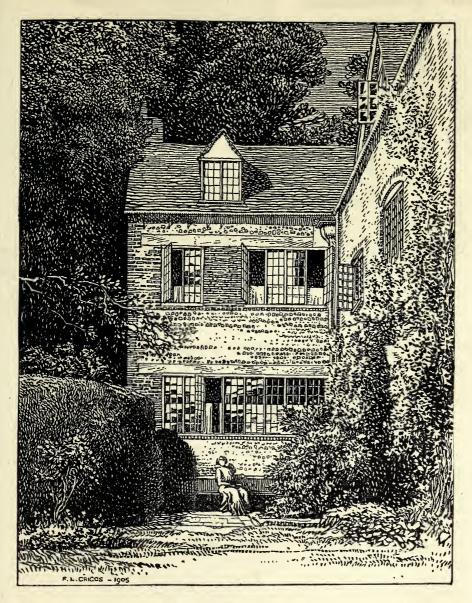
We pulled down half the villa where the line is dotted on the plan; we left the "monkey-climber" as a concession to the proprieties; and we drew forth again, as it were, the little yeoman's house from the background, and let the sun shine into it once more. The elevation shows the new gable to the garden the octagonal bow window thrown out to give additional space in the living room, and a small circular oriel set in the library on the first floor. (See also Appendix, Nos. 19, 20.)

The interest architecturally lies in the fan shape of the plan. This has grown to the garden, the lane, and the path across the fields; also it seems to have adapted itself to a little group of thatched cottages called, perhaps euphemistically, "Heavenly Corner." Heaven's purpose was there right enough, could we but bring the sanitation up to the celestial standard !

Combe End, Whitchurch, Berks.

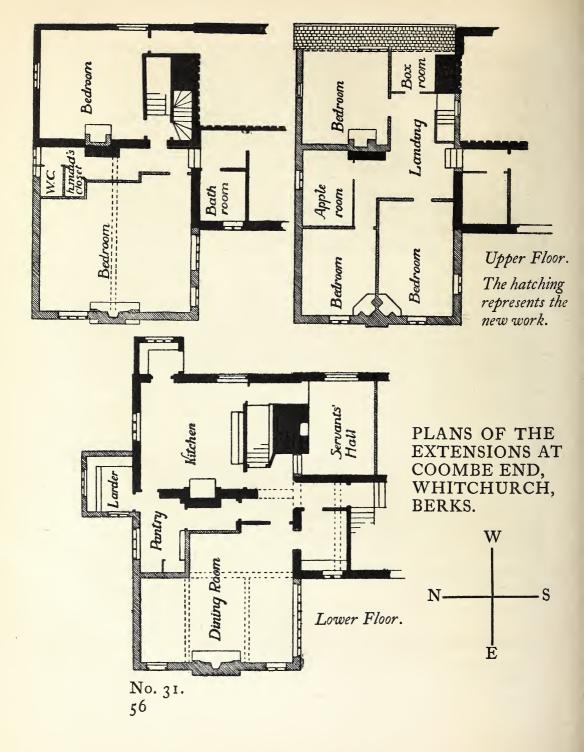
The next building to which I would like to refer in this connection is the one shown (No. 30) on p. 55. It represents certain additions I made for Mr. J. Rickman Godlee to the beautiful farmstead of Combe End in Berkshire. Standing high up over the lovely Thames valley, it is surrounded on all sides with most noble lines of landscape. Many centuries of use and thought have resulted in a fine grouping of trees round the house and though this itself had been in part rather badly treated, its character was very definite & suggested the course to be adopted. The materials in this part of the Thames valley are red brick and flint, built as a rule in coursed panels & boldly bonded at the quoins. The roofs are of red tile and the old tiles being well sanded vegetate to a golden colour, bearing a yellow lichen. I was asked to build on a wing that should give extra sitting-room & bed-room accommodation and be in the spirit of the old work. (See also Appendix, Nos. 21, 22.)

The plans (No. 31) together with the drawing of the South front (No. 30) will show how this was done. They best ex-54



No. 30.—COMBE END, WHITCHURCH, BERKS.

e 4



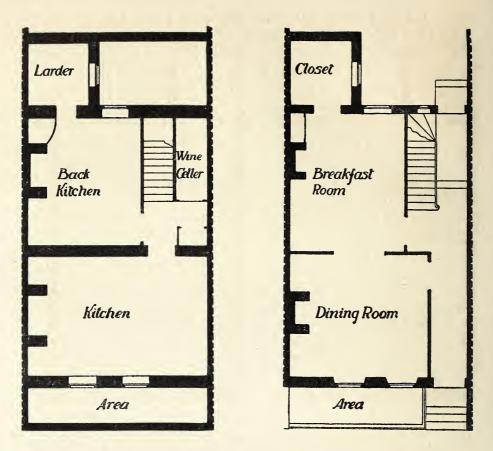
plain the need there was of commanding a particularly beautiful view on the one hand and not cutting down certain trees on the other. A characteristic of this portion of the Thames valley is the lead lattice set in a wooden frame, and much of the interest and good proportion of building is here as always obtainable by the careful arranging of the lights; these are set as in the case of Combe End, in flat wooden window frames painted white and carried fairly flush under a flat arch of brick work. In the South front oaken beams are used in lieu of arches. There is about all Berkshire building a quiet and homeliness, the Thames valley cottage resents the intrusion of fussy angles, broken corners and garish balustrades. A row down stream suggests no little contemplation of the right and wrong in building.

The opulent shopkeepers who dot the bank side with villas like those that Horace Walpole might have bought out of Mrs. Chevenix's toy shop, have such a burning desire to show off. Each house must make its hit, but they have not yet come to perceive that the houses that really tell are the most retiring —those built upon the lines of the old cultured tradition of Thames side building. The mark of true aristocracy is now as always modesty and reserve, and that is a lesson aptly learned from the red brick farmsteads of the Berkshire Thames.

The Thames valley suggests other buildings, and upon the river's lower reaches. It sometimes happens that the great city engulphs some little wayside or riverside cottage, overwhelms it with ugliness, isolates it from what were once its green and natural surroundings. This had happened with two interesting Thames side houses in what was once the village of Chelsea, & which it was my good fortune to handle, interesting all the more for the historic associations with which they were connected. The one the house of Thomas Carlyle, the other the house of J. M. W. Turner.

The Carlyle

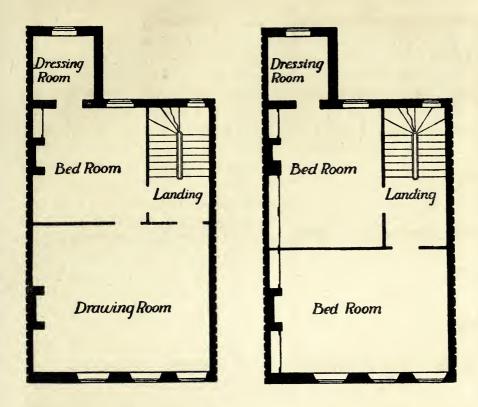
The history of the Carlyle house is pretty well-known, and as *House*, it is now one of the London show-houses, it is perhaps needless *Chelsea*



No. 32. THE CARLYLE HOUSE, SHOWING BASE-MENT AND GROUND FLOOR PLANS.

to enter into any detailed description of it. I show a front view and the plans which are given above (Nos. 32, 33, and Appendix No. 23.)

A distinctive feature of 18th century houses of this type in plan is the closet or dressing cabinet leading out of the larger room. Those closets were used for powder. The lady emerged



No. 33. THE CARLYLE HOUSE, SHOWING BED-ROOM PLANS, ABOVE THE TOP BED-ROOM IS THE ATTIC BUILT BY CARLYLE TO WRITE IN.

thence for her levee gloriously accomplished, or the gentleman after exquisite valetting for his saunter to Cremorne. There are many such houses in Chelsea, and indeed the village of palaces seems in the 18th century to have contained a very considerable society of refined and polished people who required as much show and stateliness as was compatible with slender means and modest domestic conveniences.

The Committee with and for whom I worked wished me to render the house exactly as Carlyle left it. We put fresh drainage, re-cast the front basement area, patched up the roof, painted and papered and carried out the interior in conformity with the quaint old oil painting by Tait, and other pictures and notes that we had gathered together. The work was necessarily antiquarian, but the amusing part of it was how to decide between which of two periods to adopt when repairs had to be done.

Carlyle's description of the house gives the picture of it-the literary picture of a man who understands, but not with his eyes :--- "The house itself is eminent, antique, wainscoted to the very ceiling, and has been all new painted and repaired; broadish stair with massive balustrade (in the old style); corniced and as thick as one's thigh; floors thick as a rock, wood of them here and there worm-eaten, yet capable of cleanness, and still with thrice the strength of a modern floor. And then as to rooms, Goody ! Three stories beside the sunk story, in every one of them three apartments, in depth something like forty feet in all-a front dining-room (marble chimney-piece, etc.), then a back dining-room or breakfast-room, a little narrower by reason of the kitchen-stairs; then, out of this and narrower still (to allow a back window, you consider), a chinaroom or pantry, or I know not what, all shelved and fit to hold crockery for the whole street. Such is the ground area, which of course continues to the top, and furnishes every bedroom with a dressing-room or second bedroom; on the whole a most massive, roomy, sufficient old house, with places, for example, to hang, say, three dozen hats or cloaks on, & as many crevices and queer old presses and shelved closets (all light and new painted in their way) as would gratify the most covetous Goody-rent, thirty-five pounds !"

But Carlyle, for all his philosophy, knew nothing about good workmanship, nor what in this book I have so often insisted 60

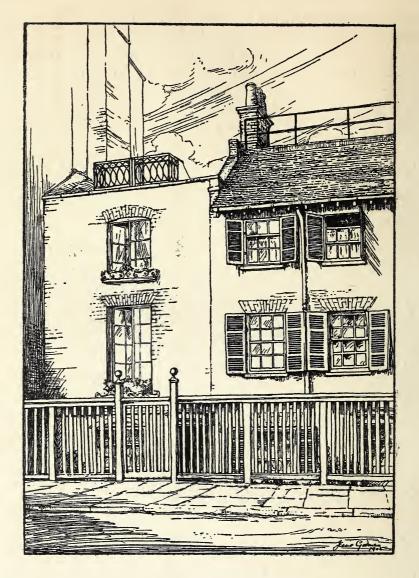
on, its traditions. When he came to repair his windows he replaced some of the fine early 18th century front sashes with shoddy Victorian work. He also had built for himself an equally inferior attic room on the top of the house, in order to write in peace; but as the scantlings were all so thin & the work so bad, the sound of his neighbour's cocks and hens came through and disturbed his philosophy. In despair he admitted after all that his fine new attic room was "mere work of Belial, father of lies." As restorers, we compromised with Belial. We replaced the Victorian sashes by new windows of the Queen Anne type, but we left the room on the top of the roof-it was the room where "Frederick" was written-out of regard for the heroworshippers.

The Turner House stood in Cheyne Walk. In the front, facing The Turner the river, were the two old houses, one of 17th and the other House, of 18th century date, in a very dilapidated condition-indeed Chelsea they had recently been condemned as unfit for human habitation and closed by a magistrate's order, the windows were boarded up, & the whole place had become the nightly resort of tramps and homeless wanderers.

Owing to the embanking of the river and the consequent raising of the roadway and pavement, the level of the lower floor and the front garden is between two and three feet below the pavement.

Reference to the plan will show the relative position of the other buildings now covering the site. The scullery and outbuildings replaced some wretchedly tumble-down additions; beyond this came a yard, with stables of the same nature; and beyond the stables and facing Little Davis Place was a collection of two-storey buildings in a ruinous condition, last used as a pipe manufactory.

On the north side of Little Davis Place were two cottages, closed & uninhabitable, which were bought subsequently and pulled down, the land they stood on being formed into the studio garden.



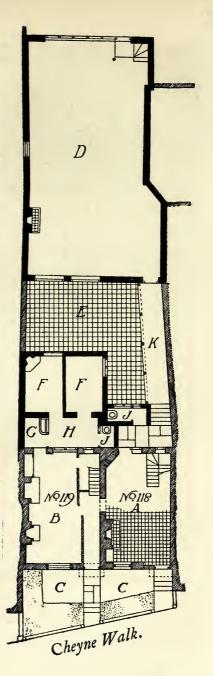
No. 33. THE TURNER HOUSE.

REFERENCES TO THE PLAN.

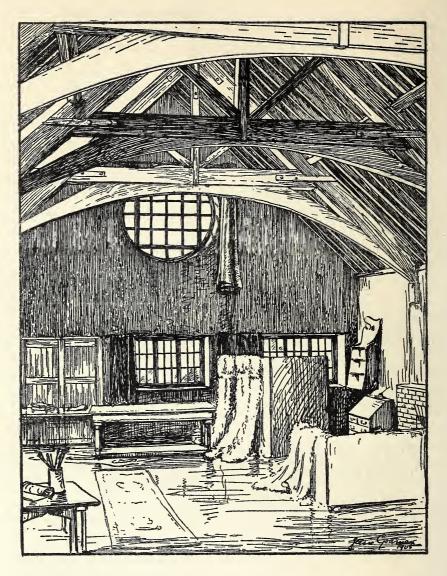
A. Panelled Dining Hall.
B. Kitchen.
C. Garden.
D. Studio.
E. Tiled Courts.
F. Bedrooms for Servants.
G. Scullery.
H. Covered Yard.
J. W.C's.
K. Covered way from House to Studio.

PLAN OF THE TURNER HOUSE.

The black work and square hatching show the new work.



No. 34



No. 36. THE TURNER HOUSE. Interior of the new Studio.

This miscellaneous group of buildings, which one would, after a hasty and superficial survey, be inclined to condemn as altogether useless and in many parts structurally dangerous, had to be carefully examined, especially where, as in the case of the western house (No. 119), there were so many interesting links with Turner. In this house he lived, & the iron balcony which he erected on the roof in order to paint from still remains from it the finest sunsets in London may still be seen across the reach—while in the room facing the river, immediately below this balcony, he died in his solitude.

This portion of the building we left much as we found it, beyond the repairs and decorative works rendered necessary by the predatory habits of the thieves and tramps, who not only stripped the buildings of all their movable brass & other fittings but succeeded one night in stripping all the lead from the roofs and getting it away. The dining-room and kitchen were also formed in this house. The other portion (No. 118), which is the late 17th century building, we found somewhat better preserved. All the rooms, except those on the lower floor, were panelled in the simple large panelling of the period; there were also some wooden fireplaces. All this, of course, we left, and on the lower floor formed the new hall with white panelled walls and red tiled floor, the fireplace and cupboard recess adjoining it being treated in the same manner. Oak beams were placed in the ceilings to carry the floors, and partition walls over.

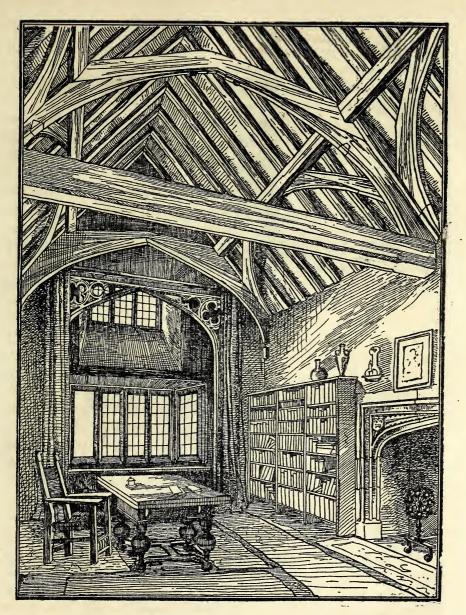
The entrance doorway to the hall has a pair of very beautiful wrought iron brackets, with scrolls & foliage treatment. These we discovered in one of the old outbuildings, where they were used to support a shelf.

The pipe manufactory & stables were taken down—they had not one reason, either sanitary, artistic, or structural, to justify their retention—& in their place was erected the large studio, with open timber roof and wood block floor, that is shown on plate No. 36.

To me, as to all lovers of Turner, the interest of this house lies f 1 65 in the obvious relation it bears to his landscape work. Had any point in or near London been chosen to build a cottage from the roof of which the sunsets and the river lights could be studied, I doubt if a better could have been selected. Just before the work started I found, lying among the dust and litter of the roof attic, an empty and disused portfolio. That was in 1900. Turner died in 1851. Time, if you keep your building weathered, passes very slowly after all; it must have lain there over fifty years.

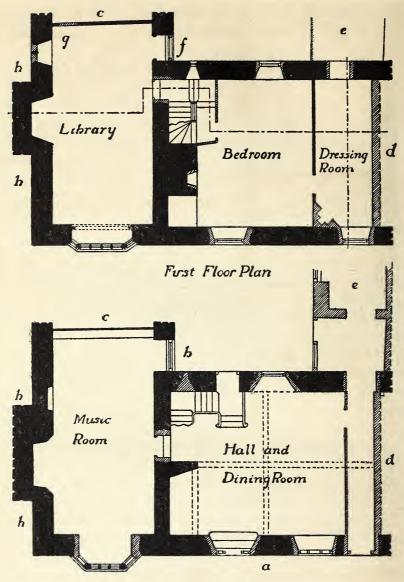
The Woolstaplers' Hall, Campden

Every now and then some special architectural plum falls to one's lot. When this is so the pious architect should be duly thankful. Such was my chance with a quite unpretentious little house, much defaced in part with a new ashlar front & an ugly plate-glass bow window, in the High Street of Campden. It was known as the "Laurels" or the "Hollies" or some equally pointless suburban name, and it turned out to be the 14th century hall of the merchants of the staple. It would take me too long here to give a detailed description of this most interesting building and there is doubtless a great deal that I have yet to discover concerning it, but I will say a few words about the drawings here given and of how the practical part of the repairing and opening out was dealt with. The building appears since the year 1712 to have passed through the hands of a number of different people, mostly small craftsmen, tradesmen, and farmers in Campden; none of their additions and alterations have improved the property. In the deeds of this date is a clause by which the vendor guarantees the purchaser against any possible exaction to be levied on the property by the merchants of the staple, doubtless then already a forgotten and shadowy fraternity. The wrecking of the front, the sealing up of the interior, the encroachments of the neighbours on all sides had pretty well effaced the fact as well as the recollection, but a front bed-room revealed some interesting wind-braces in the roof under the plaster and whitewash, and above the sealed



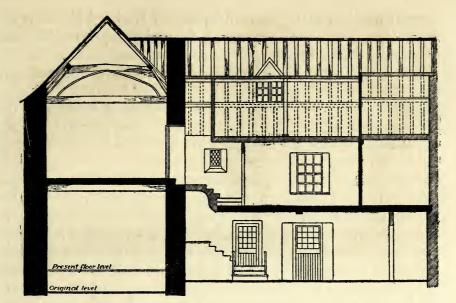
No. 37. WOOLSTAPLERS' HALL. INTERIOR.

f 2

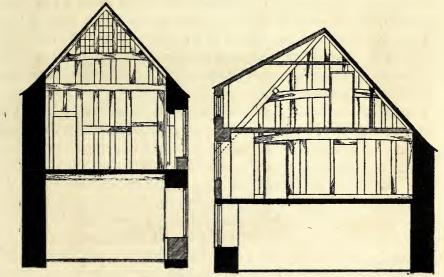


Ground Floor Plan

No. 38.—WOOLSTAPLERS' HALL, CAMPDEN. 68



Longitudinal Section.



Transverse Section.

No. 39. WOOLSTAPLER'S HALL PLANS.

upper window was a beautiful piece of Richard II. tracery. I show it on page 67. For the rest, the early perpendicular stone doorway that led to an outside staircase, had been utilised to light a most unsanitary W. C., and the label of the carved open fire-place, with the coats of arms, presumably of the wool merchants—three ox-heads on a shield carved in leafage on the right side and three fleeces or calves, perhaps the arms of the Calf family, similarly executed, on the left—had been in part chopped away and blocked up.

I opened all this out, replaced about nine of the rafters, strapped the wall plate with iron, and shingled the half timber of the south gable externally. The great upper room, probably the chamber of business of the wool guild, is—now that it has once more some of its original dignity—perhaps the most beautiful room in Campden. It will be observed that it was formerly approached by an external staircase (No. 38, f.), that it had a two-light perforated window (g.) that would once have looked out in the direction of the church, and that there was a doorway through the half timber work on the south wall, for the 14th century framing has on it a contemporary chamfer (c.). Along the frieze line, or rather the beam, of this wall is a series of circular holes; these, it has been suggested, may have once held pegs to carry arras.

The other rooms in the house have also their character. The sections (see No. 39), when compared with the plans, will show what fine chambers these once must have been. It is much to be regretted that the entire destruction of a portion of the front has lost us the key to the position of the old entrance into the hall. Some old stones walled up in the masonry of the garden side go to show that there was probably a carved Early Perpendicular arch. There seems little doubt that the masons who wrought it were the same as did not only the rest of the stone work, but the building of Grevel House on the other side of the High Street, and also the church.

One building of a communal type—the meeting-place, doubt- The Holless, of some fraternity—suggests another. And it may be of combe Rogus interest to place here, among the reconstructions and repairs Poor-house, of small houses in the country, the Holcombe Rogus Poor- Somerset house, which I am at present setting in order.

That newer social conception which is beginning to touch us —an awakening of conscience, perhaps, after our long spell of individualism—is having the result of making us look with greater care and reverence upon works of this character. More and more of such buildings are being revealed to us. We are beginning to realise their purpose and object in the past. We are beginning to ask ourselves whether in the village life of our own time it should not be our duty to put them again to communal service. The new life that is beginning to shape itself often grows articulate in these beautiful settings of long ago. They seem once again to have for us an imaginative purpose.

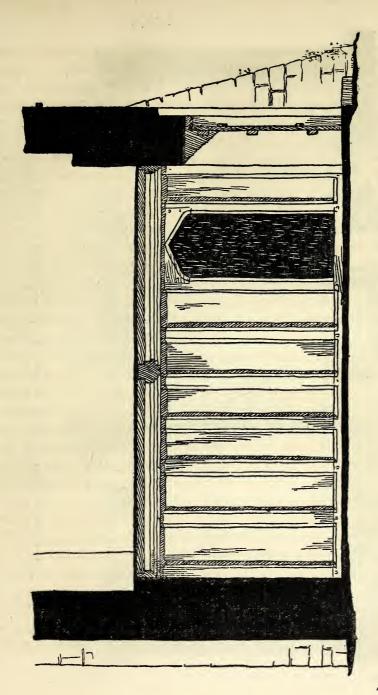
There are many such buildings all over the country; indeed it is the exception rather than the rule in an English village where the mediæval work stands still undisturbed, not to find some such old building, the intention of which was more than merely that of private residence.

I do not propose here, even if it were in my power to do so, to give any historical account of this most interesting piece of architecture; but I will let the plans (Nos. 41 and 42) speak for themselves, and say a few words about the method of rebuilding adopted. Like all Gothic village building, there is a noble and broad simplicity about it. It is so obviously not the work of the complex designer from afar, but of the village craftsman schooled in centuries of tradition. In this case, too, a peculiar interest attaches to his handling of timber. A glance at the plan (No. 41) will show the extraordinary dignity obtained in the two fireplaces by the placing of the two immense timbers that carry the chimney stacks, of which one is shown.

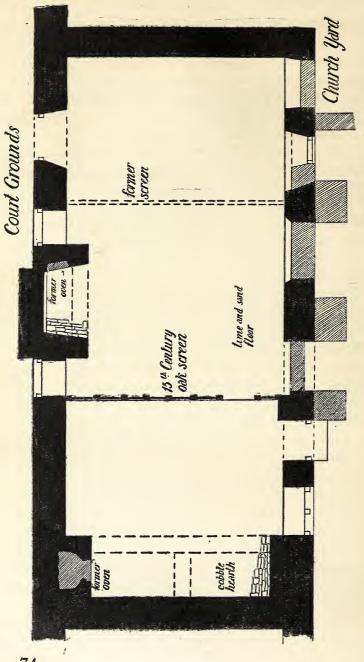
The two screens also have a character and style of their own. Like other similar buildings, especially such as had an ecclesiastical connection, there was once an external staircase in the Holcombe House on the church side; and the large screened room on the ground floor is so disposed that it must to my thinking have been used for some communal purpose in the village, some guild or fraternity. Mediæval life was infinitely various and delightful, and its building shows this; but, as the historian knows, it rested upon local government, upon an order corporately regulated by the villagers or the townsmen. The architectural unit or shell in all cases was duly blessed by the Church, & was committed to the care of the "religious," using the word in its old sense, *i.e.* to the keepers of some chantry, to the chaplains of some guild.

By a disastrous mistake, the result of handing the building over to those who did not appreciate its importance, the screen and upper oaken floor had been removed and the great beam that carried the rafters had been sawn across. My problem, to retain the structure in its original position, was therefore not so easy as it might have been. I had as my guide a report drawn up by the Society for the Preservation of Ancient Buildings before the demolition; and the bulk of the old timbers, which had been somewhat unceremoniously stacked together in a local builder's yard, were carefully sorted out and set once again in position. The great central beam was tied with iron, flitched, and supported beneath the screen.

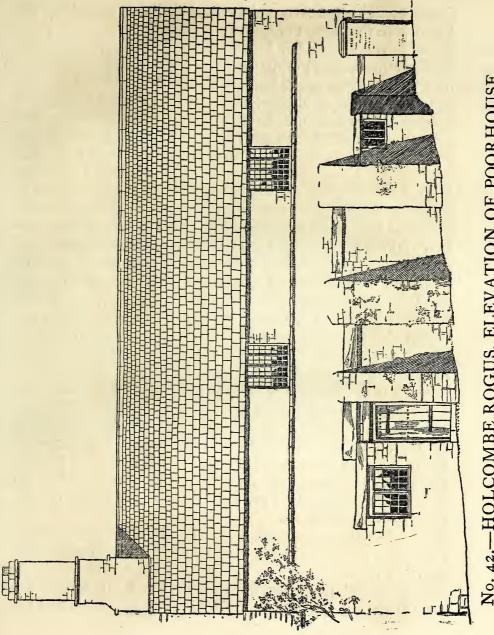
Among the other reconstructions that I have undertaken as the result of the coming to Campden of the Guild of Handicraft, I will give only the two following; and I give them because they have, each in its way, a special architectural significance. The one is known as the "Island House," shown on page 77 (No. 43); the other as the "Elm Tree House," shown in the last chapter : both are prominent features in the High Street. Of the latter, as it has been re-cast and now serves as the



No. 40.—HOLCOMBE ROGUS POORHOUSE SCREEN.



No. 41.-HOLCOMBE ROGUS. PLAN OF POORHOUSE.



No. 42.-HOLCOMBE ROGUS. ELEVATION OF POORHOUSE.

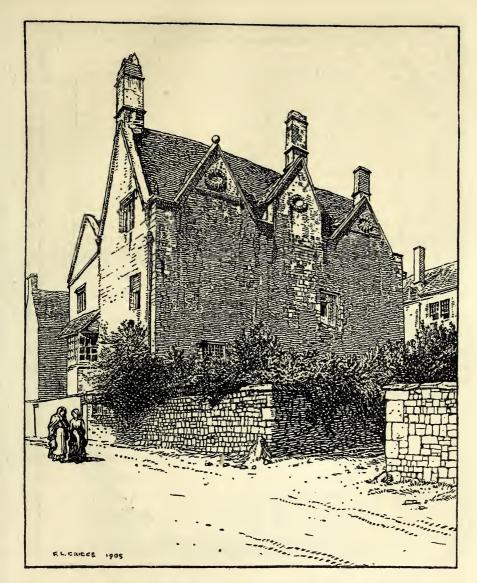
Campden School of Arts and Crafts, I shall defer speaking till I deal with the subject of country schools.

The Island House, or Middle Row Campden

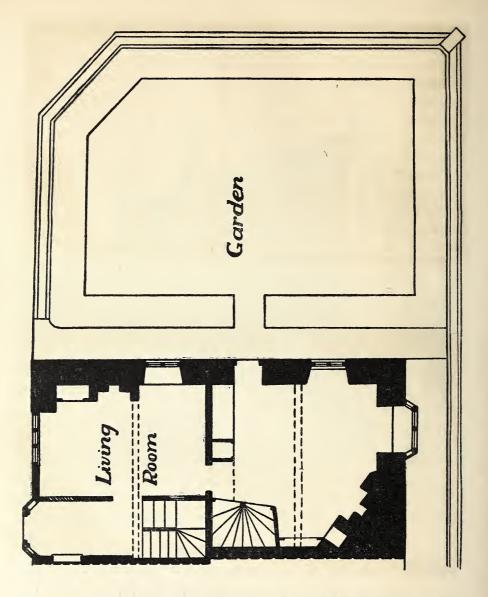
The "Island House" or Middle Row, I put in order for Mr. E. Peter Jones who purchased it for use in part as the Craftsman Club, in part as the bindery of the Guild, a third portion of it was let for residential use. It might almost be called a curiosity of architecture, & it is essentially non-utilitarian. It is clear to any one looking at this beautiful building with the understanding of the designer, the inner eye of the architect, that the one great idea of its author was the placing of his three fine gables of stone to the High Street. They are the feature at which he aimed, and he apparently sacrificed all other considerations to this. So anxious was he that the line and proportion of these gables should not be interfered with, that he permitted no water-spouting or down pipes to break the surface or disturb the attention. Having however to carry off his water somehow from the two valleys of the triple roof, he adopted the bold expedient of taking it away inside, and to this day leaden channels may be seen under the window-sills where once the bedroom windows were. It is not a method in itself to be recommended, but who would not forgive it here?

There was but little for us to do to this beautiful building, and I was careful to interfere in no way with the essential design. Indeed to the outside we did nothing but a little pointing, flashing, glazing, and painting. In the interior sundry foolish partitions were removed, floors made good, and a new kitchen and wash-up constructed in the basement. The plan (No. 44) shows how interesting is the disposition of the rooms in relation to the High Street.

The club-house at the back of the gabled front was also re-cast internally, and set up with reading-room, billiard room, and bar. Up till recently the three-gabled house was left in its divided state—two little houses where one larger one was probably at the outset contemplated; now a single tenant has



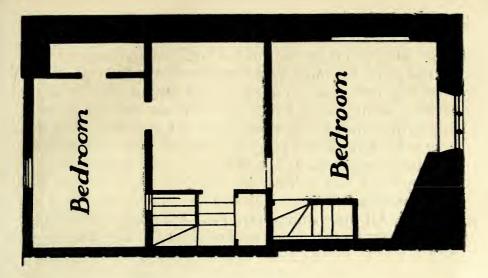
No. 43.—THE ISLAND HOUSE OR MIDDLE ROW, CAMPDEN.

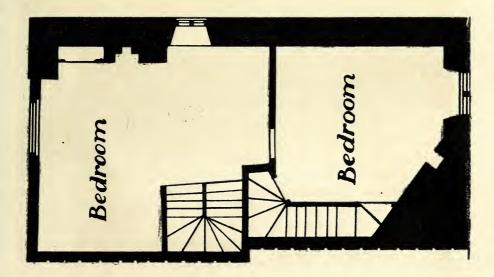


No. 44.—GROUND PLAN OF ISLAND HOUSE.

78

1-00

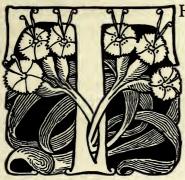




No. 45.—ISLAND HOUSE UPPER FLOOR PLANS.

again come and the old building once more been made one. Often do I wonder who was the well-minded man of such sweet fancy and taste who cut his initials with the date in the central gable. He must have been one from whom all of us in these days have much to learn—for he appreciated the delight of being un-utilitarian for a higher purpose, and was prepared to pay the price. Once when I was at Cincinnati I was told how a wealthy citizen had left a sum of money for building a hall—it might be a hall of silence—the condition of its builder being that it should be definitely un-utilitarian. The idea was wise, and it was deemed wonderfully new. But it was not new. All these things have been done before, and maybe much better, by the old village builders of an England of long ago.

CHAPTER IV. ÆSTHETICS AND TRADITION IN RURAL BUILDING.



HE last two chapters will, I hope, The Prinhave made it clear that underlying ciple of every most modest detail in building Beauty is some principle of beauty, of ethics -perhaps of both together; for, so at least is my belief, to the artist they are and must ever be one and the same. "If I should die," the poet John Keats once said to himself, "I have left no immortal work behind

me-nothing to make my friends proud of my memory-but I have lov'd the principle of Beauty in all things." That is the attitude of mind with which the architect, the builder, should approach his work; and with this before us let us ask ourselves what do we mean by æsthetics and tradition in building? And what, more particularly, do we mean by them in rural building? Asthetics in building may be called that principle of beauty In Rural which underlies its conception, judges its serviceableness, and Building tests its fitness. Tradition in building is the gradual expression of this principle from time to time in craftsmanship.

And thus it comes that even the smallest, the most modest cottage, if built in the love and reverence of this principle, may rank as a work of art. There is no need for greatness, for majesty, for expense ; there is need only for conscientiousness, for sincerity-to love, as did John Keats, the principle of beauty in all things.

And how great is not the need of this in the day of industrialism, for us who are learning from America the "gospel of hus-tle," this latest of the inversions of Antichrist? The mediæval 8τ g I

builders could do without many things that we appear to need, but they could not do without leisure.

The W Invasion of th Ugliness al

What is the meaning, we are perpetually asking ourselves, of the invasion of ugliness with which nowadays we are perpetually being overwhelmed? It enters into the marrow of modern life; it makes our towns hideous, our public buildings vulgar and pretentious; it intrudes into our homes and everything about us; and its latest and most furious manifestation would seem to be the dusty storm of the motor car into the quietest and most remote of little country villages.

Is it economic pressure that brings this ugliness?—surely not entirely. It is also very much in ourselves, a sort of inverted kingdom of heaven to which for the time being we have attained.

Is it materialism?—there is some subtle connection between the creed or philosophy of that name and what we call ugliness. To the artist or the poet there is implied in it a want of unity, an imperfection, a disbelief in the essential form of good. How perpetually does not the waste and futility of modern life bring this home to us? The great sums we spend in getting to each little spot of beauty, which we have no eyes to see when there, would be often better spent in keeping it beautiful.

Why, then, this invasion of ugliness? — what is the reason for it? The reason lies rather in the relative value we attach to the things of life. Our material comforts, the multiplicity of our personal wants, the useless things of life with which we cumber ourselves, appear so much more important to us than this thing I am pointing to, this principle of beauty in building. It would never have been possible for the builder of the "Island House" of Middle Row in Campden High Street to have made those three gables of which I spoke before had he not had this principle at heart. It was more to him than the waterspouts.

"There is an evil which I have seen under the sun, and it is common among men : a man to whom God hath given riches,

wealth & honour, so that he wanteth nothing for his soul of all that he desireth, yet God giveth him not the power to eat thereof this is vanity, and it is an evil disease." The Preacher might have added, had he lived in our own day, that we call the disease materialism; and architecture and materialism are incompatible.

To save ourselves from this invasion of ugliness we must first grow conscious within ourselves of the principle of beauty, and of how tradition has gradually and instinctively expressed it. The beauty that has thus been unconsciously created for us in a country like England, with its centuries of architecture, handicraft, and loving regard for landscape, we have now consciously to preserve & consciously to develop. In other words, it behoves all of us who have to do with these things to study and understand, in order that we can again attach a proper value in life to the principle of beauty. It behoves us particularly as architects, builders, landlords, all who have to do with building.

But it behoves us much more as having to do with rural building. Here our problem is both more complex and more delightful; here, also, we have as a rule a freer hand than as builders in the great towns. Our problem is more complex, because it embraces so much of nature; the disposition of trees, the value of flowers, distance & the turns and curves of country roads, green grass and blue sky. It is more delightful, because it is more in the open air; and we ought in these days of thickly populated life to appreciate the privilege that is ours in the building of any, even the slightest, cottage in the open country, or, better still, the saving of it when we are called upon to preserve. We have a free hand because-well, I was going to say because we are less hampered by building bye-laws and those Building other difficulties that are the outcome of the economic pressure Bye-laws of the great town. To me it is one of the greatest privileges not only to have built, but to have had it in my power to re-build and save from ruin some twenty or thirty Cotswold cottages in 83

g 2

and about Chipping Campden, among the plum and apple blossom.

But I was forgetting the building bye-laws-forgetting Mr. Justice Grantham and his troubles in the Times. Here at Campden, owing happily to the innate and healthy conservatism of the Gloucestershire farmer, we have not been plagued with bye-laws. I, like others, have been troubled with them in different parts of the country. Indeed their futility has been brought home to the public recently-though architects have been long familiar with it; they are but a picture of the application of average stupidity to the complexity of modern conditions. To draw them up properly, much more to administer them wisely, requires the greatest skill, intelligence, and grasp of local difficulties; yet we leave this work often to foolish and uneducated men, men to whom we are content to pay f_{2} a week—we leave it to necessitous counter jumpers or surveyors' assistants, to men who have been failures as craftsmen, shopkeepers, or clerks.

Any hard and fast line in these days between rural, urban, and suburban building is in itself foolish. Does a house stand by itself in field or garden, or does it stand in such relation to others as to make some common system of sanitation, &c. desirable in the public interest?—that is the only question that need be asked. Any other classification is undesirable, and any application of the regulations suitable in towns to country cottages is mischievous & almost invariably harmful to the beauty of the countryside.

Agents and Stewards of Landed Estates

Ignorance of But there are many equally serious deterrents to the keeping beautiful of our villages. Let me give another. Here again it is something within ourselves. How about the agents & stewards of some of the big landed estates? Building bye-laws are measures of self-protection, often foolishly drawn up or foolishly administered. The ill-considered action of agents and stewards is often fraught with much more serious consequences.

Incalculable damage has often been and is continually being 84

done to our villages and to the little country cottage by ignorant agents and stewards. Men who do not understand, who regard the trust reposed in them as purely a commercial matter; men to whom the management of an estate that has centuries of tradition and beauty stored up in it is merely the means for exploiting a livelihood. Some of these men are capable of education; others, perhaps, would never have the necessary taste or feeling. Here, again, it is the absence of tradition in building that is the rock on which we founder. In the times of the Plantagenets, as in the days of the Georges, it would have mattered little whether an agent or steward was cultured to understand the principle of beauty. The village craftsman understood by tradition-that sufficed. Now where the village craftsman can no longer guide the landlord or his agent, a double duty devolves upon the latter, the duty of understanding as well as of getting things done. How, one wonders, would "the Preacher" to whom we referred before-to whom in life we may so often refer-how would he have dealt with this matter? Corrugated iron, broken leading, zinc bars, mouldering thatch, the productions of the factory and the bagman's catalogue-what place would these things have had in the loveliness of existence for him? "By much slothfulness the building decayeth; & through idleness of the hands the house droppeth through." But with us it is no longer a question of idleness: idleness in an age of "hustle" hardly applies; with us it is before all a question of understanding. Rather by much restlessness is the face of the building changed, & by ignorance of the spirit the beauty passeth away.

I could give among many others two illustrations of the reten- Loss of tion & the loss of tradition in the craft of building as they have Village entered into my professional experience. They are illustrated Tradition by the buildings (Nos. 1 and 4) on pages 8 and 12. In these in Craftstwo pictures it will be observed that the stones are very care- manship fully coursed, and the leaded lights well set and nicely disposed to a good proportion. For the latter I personally as architect am

g 3

responsible, the former happens to be entirely the work of the local mason. The former is the traditional village craftsmanship of an old man whose father and grandfather before him were masons in a stone country; the latter is the product of a factory in Birmingham, for the craft of lead-glazing is practically dead in the village : it has merely been copied by us from other village forms. I will not here enter into the reasons for this, or the suggestions I make for its revival-they will be dealt with later-but what I wish here to show is how the former is still spontaneous, whereas the latter is perfunctory and self-conscious. The traditional village mason will lay his stones all right if you leave him alone, but who would trust the Birmingham factory without an architect to send up the drawings and dimensions of each window. Yet how wasteful is not the present system? Why pay all these expensive profits and fees if your village craftsman, left alone, will do as well. Indeed, one of the disastrous results of this decay of tradition is that æsthetics tend to become an object of special study, & that people have come to look upon beauty as a luxury for the rich. Yet this also is vanity & vexation of spirit. Beauty is not at all for the rich, but for the understanding. The rich are often singularly stupid people, I know many such. Waste not your substance upon useless things, and you will have plenty and to spare upon your own education & upon the things that are beautiful. This is a maxim that applies to rich and poor alike. This is where above all enters the application of æsthetics to small simple rural buildings. Good proportion is as cheap as bad proportion, intelligent planning is cheaper than stupid planning, and understanding of human and social needs is easy with sympathy-sympathy is a condition of religion rather than of economics.

Enough has been said to show how great is the need in those of us who are producers—those of us who are architects, builders, landlords, or landlords' agents—of a study of æsthetics in the simple direct manner in which they must be understood if our 86 rural building is to be good, but I would like here to say something more about tradition and particularly about its decay in rural building.

The decay of tradition in English building has been going on Decay of pretty steadily for the last hundred years all over the coun- Tradition in try; in the last twenty-five years it may be said to have been English increasing at an alarming rate, and this more especially in the Building rural districts.

It will be remembered that I defined tradition as the gradual expression in craftsmanship of the principle of beauty. Where the medium of expression is itself undergoing change the thing expressed must be affected. There is scarcely a craft that has not in the last hundred years been disintegrating, and the various crafts grouped under the great mother art of architecture have suffered like the rest.

Machinery has done this, the grouping of crafts into great centres, and the various influences that have gone to make up what is known as the industrial system.

It is difficult to predict any finality for this; it is probable that machines of all sorts will go on being invented, and each newly invented machine bring with it some further displacement. But it is also not improbable that there is a finality in certain directions, and that we are getting to a time when we shall attach more importance to the direct bearings of such inventions upon human life, the life of men collectively and the life of the producer.

There are very evident signs, too, of a re-settlement of certain industries, the revival of certain crafts, their re-organisation, a recognition that life is incomplete without them, & that though the machine may be a valuable asset in modern life, it does not in building for instance, as in other forms of production, compensate for the loss of the crafts that go to make up building & for the tradition stored up in these crafts. I shall have more to say of this later when I deal with the question of country crafts and machinery. What I wish to emphasise here is that we can

and should make every effort to consciously revive and keep living tradition; we should study its history, its origin, consider its action as an educative influence upon the young, use it in modern life as one of the principal forces for the building up of character.

William Morris used to say that it was the work of the artist in these days, less to create than to hand down the golden chain of creation—the art of the past—to later and happier times than our own. That is where tradition enters, not alone for the artist, but for all who having to do with rural building are to that extent artists.

CHAPTER V. ON THE DU-TIES OF THE LANDLORD.



T is sometimes difficult to discuss certain questions in a way that shall have practical value and yet benonpolitical. I will at least try to do this, for I conceive an artist in these days to have no concern with politics. But speaking as an artist, and also as myselfalandlord & as having charge of property for others in a similar position, I think that it is possible to

lay down certain general principles-principles of a human & social character. It is necessary also to limit the application of these principles and to show how far that application may be practical.

I think a landlord's first duty is to come down from his pedestal To be and be human. This it is often rather difficult for him to do, Human especially where, as so frequently is the case nowadays, he is an absentee. He will also be apt to find his humanity an expensive possession. He must resist the temptation of allowing it to be cheapened.

But when a landlord has once made up his mind-or shall we say, discovered the truth-that house property is a trusteeship in which the rent producers share in the benefits of the trust, he will be the better able to determine what the rate of return upon the invested capital in his land and house property should be. Something, surely, he should have for himself, he often gets nothing, but his low rental is not unfrequently the result of mismanagement and want of sympathy. Want of sympathy The Trust has brought him out of touch with the needs of his tenants; of Property mismanagement superimposed upon misunderstanding of social conditions has brought his affairs into confusion. A man 89

who looks upon his rentals merely as a source of income, and gives to society no quid pro quo for their enjoyment, is but a drone and an encumbrance. That, I think, is a root principle, but it must be left to a man's own conscience to determine how far he is to apply it in each case. Is he to yield back to his village, to his estates, to the country? This brings us to another great question that affects rural building: the influence of commercialism upon the country side, how it affects the type of building in every county.

Life

Commercial- But, first, what do we actually mean by commercialism ? When ism in Rural we use the term we do so disparagingly and often with some contempt; it is a term used loosely, and less to describe a state of things than an attitude towards things. It implies the measure of value that we attach to things : in so far as we give to things merely a value in exchange, that is commercialism. In the Middle Ages they built churches and they pulled them down to build better : time was no consideration; & there was a value outside the value in exchange which men considered. In our days we pull churches down, as we have pulled down Sir Christopher Wren's masterpieces in the City, because their sites have an exchange value. That is commercialism applied to religion, & the Ecclesiastical Commissioners carry out their trusteeship as a commercial institution. In the days of the early Georges the copyhold tenures on English estates implied a human bond between tenant and landlord: land was secured upon lives, & the security implied a mutual trusteeship. There entered into value another consideration, the human consideration. When in the 18th and 19th centuries the money lease was substituted for the old arrangement, value based upon such human consideration gradually made place for value in exchange; and this, again, is commercialism applied to land. And so the same could be shown in labour, in craftsmanship, in conduct, in numberless other conditions of life. Little by little we have become accustomed to value all things from this one limited standpoint-their value in exchange. In old days there were

many values—the religious value, the human value, the æsthetic value; we, although we shrink from acknowledging it, are apt to have one value only—the value in exchange—& this applied to life is commercialism.

How deeply this has entered into rural life we scarcely realise until we begin to examine the question of building in the countryside-until we study materials, markets, conditions of labour. Then we begin to see. Then we begin to realise how the whole rural economy has, in so far as it affects building, undergone in the last fifty years a complete change. The interdependence of the country crafts has been upset and their relation to agriculture destroyed. This is largely due to the development of machinery, but it is due also to the unsatisfactory character of the English land system and its inapplicability to modern conditions. The land system, as we see it, appears to be steadily starving out the little man and impoverishing the countryside. The land system as it presents itself to us historically, the picturesque and splendid feudal reconstruction of the Elizabethan period, or the kindly comfortable opulence of the early Georges, is a thing very different from what is now before us. It was human. We think of Petruccio & his servant Grumio roystering home to some Warwickshire manor, we think of Sir Roger de Coverley and his hounds, we remember Will Wimble and Squire Western.

Now everything has become commercialised; the relation of landlord and tenant has become one largely of cash value. To everything a man makes or does in the countryside is now applied only the value in exchange, and that has brought with it the inevitable fluidity. Stability of life has passed out of agricultural condition, for commercialism has destroyed it; & land itself is no longer regarded from the point of view of what population it will actually feed and maintain per acre, but from the point of view of its gross exchange value, or the exchange value of its produce with that of the industrial produce of towns. The land of England, in short, is no longer what up to the middle of the 19th century it for the most part was, a national possession, the trusteeship of which was vested in certain classes; but private property, & private property that is largely in the hands of lawyers and bankers. The inevitable result has been rapid depopulation, which under present conditions is likely to continue. In many counties we see already that the agricultural labourer is dying out; and instead of landlord, farmer, & labourer as of old, we have the landlord, the mortgagee, the farmer, and the "casual"-a very different combination. There are no longer any little men; and the large farmer, even with the aid of machinery, cannot make things pay. Everything, in short, has become commercialised; and commercialism does not necessarily mean economy.

of Country Building from

The Divorce The bearing of this upon rural building will be seen in many ways. In the first place, building in the country has been divorced from the craft of agriculture : it no longer follows its times and seasons; it no longer draws as of old its best craftsmen from Agriculture local agriculturists.

This in its turn has resulted in a change in the use of materials. The local craftsmanship having been lost, or having grown scarce and costly, it has often become easier to use materials from afar-bricks instead of stone in a stone district, Welsh blue slates instead of tiles in an atmosphere where the latter are perhaps even better adapted to weathering. Both the supply of labour in the craft and the traditions gathered up in the use of local materials have been affected-the one has decayed with the other.

The Decay of Building Types

So it comes that what may be called the building type in any county or district has been impaired. Buildings are being set up all over the countryside that are out of character with what the countryside can best produce.

It is our duty to maintain wherever we can the type of building in each county; in every type are stored centuries of wisdom -the stone building of the Cotswolds, ashlar, rubble, and dry walling; timber work & pargetting in Essex; half timber and 92

brick work in Staffordshire; and so on. It is a truism of building that the materials and their methods of use which have been tested by many centuries of wear are those most likely to survive.

The decay of tradition in rural building, of which I spoke in the last chapter, at once challenges the question-What is the landlord's relationship towards this problem? Can he do anything to stop the decay? Is it desirable that he should?

Let us deal with these points for a while. An English landlord in our own day stands as a rule in a dual relation to society. His first relationship is the economic one of drawing certain rentals from certain lands; his second is a social one-he is the custodian of certain customs, certain conditions in society. The right or wrong of either we need not discuss : he is in the position, how is he best to fill it?

It stands to reason, to begin with, that he can do little or no good if he be an absentee. He must live among his people if he is to lead or to guide them, if he is to work with them or understand them. Occasional shooting parties will not do it.

Then I conceive he should do everything in his power to meet The Landthe depopulation difficulty. And there is a great deal that he lord and can do, if he once realises that he himself may be one of the Rural Decauses of depopulation. It is a significant thing that in England, population side by side with vast towns of millions of inhabitants, we should have great estates where the ratio of permanent employment to acreage is one man to every hundred acres of land farmed by the tenant farmer.

Our subject in this book, it may be said, is rural building-and what, it may be asked, has this to do with it? The problems of rural building and rural depopulation are intimately connected with one another, it is impossible to discuss the one without considering the other. A little investigation of them seems to lead us to our country landlord's third duty.

If he has decided that his first is to be human, and his second to regard property as a trusteeship, he may go further and find

The Landlord and Maximum Productiveness how his third duty will be to give to his land its greatest productiveness. That productiveness must be in human live stock, not in commodities for exchange, least of all in partridges. He will, if he looks about the countryside, observe what a number of young men there are who have the making of good agriculturalists, but for whom English agriculture & life on the land has no longer any attraction. It gives them neither hope nor opportunity : they go. Also he will probably find, if he looks deeper, that he is often one of the causes of their going. If it should be true that the breaking up of some of his large farms and game preserves into small holdings would materially help toward solving the depopulation question in his district, it is his duty to break them up.

If it should be true that the small man working as the mediæval or Elizabethan yeoman worked will get much more out of the land than the big farmer with his listless casuals, his third duty is clear; and the question of rural building at once assumes a different character to him.

It is sometimes disputed that this is true. It is argued that the standard of comfort and intelligence in the 14th and 17th centuries was lower for the agricultural craftsman than it is in our own time, and it is affirmed that a living now, just as much as a living then, was dependent upon the fertility of the soil in each case. The first argument I am not prepared to accept, as I do not find that it is proven historically. The second is probably true, but is qualified by what I have already insisted on, the presence of commercialism in rural life. The agriculturist of old lived and subsisted on his land; now he lives by exchange, he is no longer self-dependent.

This greater dependence of the small man upon the whole organism has, however, to be reckoned with in estimating his chances of success as against the large holder; hence it is probably wiser to say that these depend primarily upon the fertility of the soil in each district. The question of the small holding therefore becomes a technical one which every conscientious landlord will investigate and seek to solve in reference to the varying fertility of his estates.

One other qualification of the small holding question has to be The Landmade, and that qualification is machinery—the conditions of lord and mechanical production in modern industry, whether it be build- Machinery ing or whether it be agriculture. And here we have the country landlord's fourth duty-to study the conditions of machinery as they affect his estates and to bring his tenants to an understanding of and a collective use of machinery. A big problem, truly; but one that must be faced, and that can be faced by a conscientious application to detail. Every object, every instrument, in use on an estate must be examined and studied, the conditions of its manufacture traced, its utility tested, and the human labour that might be employed in co-operative as against individual production measured beside it. I shall deal with this side of my subject more fully in the next chapter, when I come to speak of country crafts and machinery, but here I need only point out that the re-employment of this labour through the agency of machinery will be found to be one of the principal means of re-peopling country districts, of re-building the countryside, and with it the little houses of the countryside.

The last duty of the landlord as it bears upon rural building I The conceive to be social. It is his business to preserve & maintain Amenities of the amenities of life. It is his duty to do this, not for himself Rural Life alone, but for all those to whom he is related economically.

The peculiar distinction of English over American or Colonial civilisation, it is often said, is that there is a leisured & cultured class who by virtue of their existence keep up a certain standard of manners, of taste, of refinement. Matthew Arnold, it will be remembered, called this class the "barbarians," as distinct from the "philistines" on the one hand & the "populace" on the other. Perhaps Matthew Arnold's classification was more to the point fifty years ago than it is now; perhaps a greater measure of eugleia has come to us all with the times. It has been said that Arnold himself had reason to modify his

views after visiting Pittsburg, U.S.A. Be this as it may, it is not only possible but right and fitting for the English landlord, so long as he holds that position of guardianship to the amenities of life—the trust of culture, as we may call it—to see that he does not absorb it all for himself and his own family. It is his duty to disseminate it.

Obviously, absentee landlordism is quite incompatible with any such dissemination of culture; so are the occasional shooting parties. But here again the limits of each man's duties must be left to his individual conscience.

This question of the amenities, however, has a very direct and pointed bearing upon taste in rural building. There is nothing that is so handed down and accepted from class to class as taste. Every class takes its cue in matters of taste from the class that it conceives to be a little above it, and this applies more in building than in any other art. As for the artist, if he wishes the public to take a new idea, his best chance is to inoculate some peer or grand duke with it.

In looking back upon all the plans and drawings described in these pages—all of them, with the exception of those on page 58 and page 62, distinctively rural work, and those two were originally no exception—I am impressed with the great influence for good or evil exercised by the landlord. In most cases I am glad to think this influence has been for good, and indeed I hope that the results, as shown in the work done & the pictures presented, may stand as some little token of what he may do if he sympathetically studies the subject of rural building under modern conditions.

CHAPTER VI. ON THE **DUTY OF THE ARCHITECT** AND BUILDER.



HE first duty of the architect is to interpret his client's wishes, and the first duty of the builder is honesty. It may seem paradoxical to place them thus in juxtaposition, and it is not to be hastily assumed that because the architect is primarily an interpreter, he shall not therefore likewise be an honest man; but the relationship in which modern industrial develop-

ment has placed architect and builder towards one another, setting the former to check the latter, challenges the paradox. I consider myself that the system is a false one: it is the Relationship outcome of commercialism, it postulates dishonesty, & it dis- of Architect sociates the producer from the man who employs him. I hold and Builder it to be uneconomical, wasteful of human material, and detrimental to the development of good tradition in craftsmanship. Such work as I have been able to do by the establishment of the Guild of Handicraft, or on building operations where I have been left free to try experiments, has I hope helped to undermine it. As a matter of experience, however, we have to accept it as we find it, and make the best of it. In discussing here finally therefore the duty of the architect and the builder, I necessarily postulate existing conditions.

Every man's craft bears upon his conduct, and vice versa, nor is it any use pretending that they do not. The architect's temptation is to sacrifice what he believes to be good-the standard of excellence, the honour of the craft-to the bad taste of his client. The builder's temptation is to elude the vigilance of

97

both, and protect himself against loss if by some ill chance he has miscalculated at the outset. Both answer to their conscience if they sin: they do not stand before the judgment of the craft as of old. Architects of most questionable taste have in our own days erected great buildings, builders of most questiontionable honesty have been known to effect great financial successes. In an age of individualism the craft goes unprotected since it is left to the individual.

In old days it was different. The code of regulations drawn up by the London builders of Richard II.'s reign shows how in the time when English building was at its highest pitch of excellence, the ethical morale was inextricably interwoven with workshop rules and customs. There are few more suggestive studies for the modern builder or the modern architect than this famous code of the masons of London, bearing as it does the signature of Henry Eveleigh, the master mason of the Abbey, the builder of the roof of Westminster Hall and the old Charterhouse. And the key to it all appears to have been that the craft as a whole was organised co-operatively and had a corporate conscience. That is what we, as builders and architects, should between us try and re-establish. It may not come for a very long time; we may have much of the Slough of Industrialism still to pass through; but if English building is ever once again to become a national honour, and not only a joy for the few who in these days are privileged to spend with taste, the corporate conscience has to grow once more from some new organisation of the industry. Here again, perhaps, what I have called the guild system may help us.

Country Builders I have had dealings with some forty or fifty country builders, and I have almost always found them to be honest men. Perhaps that is a little to be accounted for by an instinctive and rapid judgment of character, which I have always tried to cultivate in myself, and which is a very necessary quality in an architect, or indeed in any one who has not only to handle and weigh the worth of men, but to do this quickly. Chat with a

builder or a workman before you ask him to tender to your specification, or before you accept his tender-look into his eyes, and you may often learn how far it is desirable to place your specification in his hands. Of course you may after all be wrong in your judgment; but if your judgment is to have any driving force behind it, you must be ready always to back it.

My experience, however, has also shown me that while my builders have been honest, very honest, their ignorance has been equal to their honesty. This needs qualifying: it does not apply to the large builders, the men of large finance and good education, to whom a few small cottages are as hors d'œuvres in among the big contracts; but to the little men, of whom fortunately there are yet so many, who work with their own hands among their own men. Shrewdness they have, and a gift for figures, also a capacity for handling and coaxing workmen; but they are often ignorant of tradition, ignorant of the materials of the district and the need for working in them, ignorant of the influence of machinery upon the crafts they deal with, ignorant of the value and beauty of old work, & as a consequence lamentably ignorant in taste, vandals and iconoclasts. In other words, they have lost the old education of the workshops, and they have not yet attained the newer education of the schools of craft.

How, then, is this to be given to them? At first sight it does Their Ignornot appear to come within the scope of a book on cottage build- ance of the ing, to make plans for schools of craft. And yet how is good or, Craft let me say, tasteful building to be reintroduced without? The very person who most needs, is ignorant most.

In the little Somerset village of Holcombe Rogus, of which I spoke before, one of the local builders, when I was called in to advise, was engaged in destroying the 15th century Poor House. He had torn out the windows, pulled down the screen in the hall, part stripped the roof, while the great 15th century timbers, too strong and sturdy to shift, he had deliberately sawn through before he could remove them. These things had stood,

h 2

an honour to the village, for 500 years—and there was another 500 years' life in them—yet he, their traditional guardian, was destroying them. What impressed me, what perhaps is most impressive in cases of this kind, and I have met a great many such in my professional experience, is the blind ignorance of the men who do these things, acting doubtless upon orders, yet often without a word of protest.

One can, as I suggested in a previous chapter, understand an owner of property being ignorant of the historic value of a building, his ignorance is less culpable; but the local builder ought to know.

How are we to help him once again to a knowledge of what is good and bad, right & wrong ? It appears that whereas in a big town with its great Polytechnics the thing can be done, in a village the difficulties are greater, the opportunities for instruction and for the association of students are less, and the money is less.

But village schools of craft must be established if local building traditions are to be kept alive. They are an integral part of that workshop reconstruction at which we must aim, in order to strike soul once more into modern industry, to once again awaken creativeness, and give a guide to taste. We shall have to make such schools a part of our secondary education system, and every local builder with the various crafts he represents will have to take a prominent part in it.

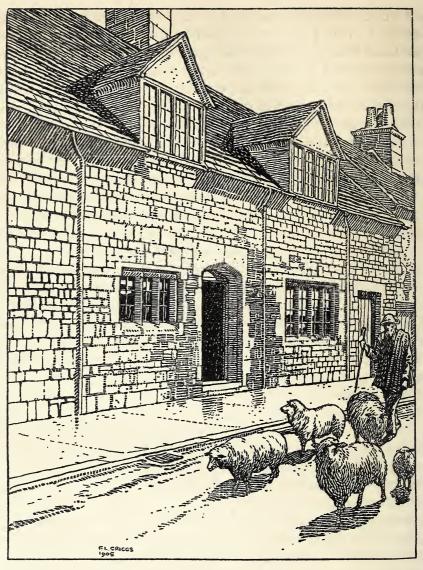
Change in the Builder's Relation towards the Craft

I shall have more to say of this in my last chapter, but I refer to the subject here among the duties of the builder, because people do not fully realise as yet what the position is to which the local builder is being rapidly reduced. Modern industrial conditions are destroying him as a craftsman—in many villages he has disappeared altogether, especially in those that are any distance from a building centre. In the suburbs of large towns, he leads, from the point of view of craftsmanship, a feverish and stimulated existence; he jobs; he speculates; he dodges building acts and bye-laws; and he retires upon ground rents. He is in fact becoming transformed from a workman to a clerk and financier, from a man who constructs to a man who indexes and takes risks; he keeps catalogues & watches prices; he also watches labour, such as it is. Craft after craft has been taken from him, and his principal concern is coming to be a fitting together of the variety of machine-made goods tabulated in his different sample books. Doors and frames to a size from a factory that imports from Norway; casements of zinc to a size adapted to the particular machine laid down by a firm in Birmingham; roofing material-local slate or thatch being no more in the market-from a point of convenient carriage by the adjoining railway: it may be Welsh slates, the colour or texture is of no consequence-it may be corrugated iron from Wolverhampton. Then there are all the minor trades. It is now his business to know in what parts of England or even abroad are the last refinements of the competitive system. He does not realise that instead of summing up the local crafts in himself, it is now his occupation to cut the throat of each one of them in turn. The smith, the plumber, the joiner, the glazier, the painter, the decorator-can their work be cheapened by introducing the article of the pattern book, the last machine product, a line in this or that? If it can, it is his business to introduce them and to cheapen. In fine, the builder of our days has become the medium for the destruction of the local crafts. In the light of all this, what is the poor man's duty, what is he to do? I have said honesty, and honesty covers a great deal; but may we not add also that honesty towards himself, that conscientiousness which shows him how the craft most gains if he understand it, if he be properly educated in its traditions, and if he realise that practical spirit of co-operation by which the builder links in himself all the minor crafts.

On page 102 I give a picture (No. 46) of a little building carried out for me at Campden some time ago by a local builder. It illustrates a few of the points I have raised. I was not in a position to accept the building responsibility, and it

h 3

IOI



No. 46.

COTTAGE IN WATERY LANE, CAMPDEN.

102

was not erected from drawings of mine, but the builder agreed to follow certain general instructions. These were that he was to build in stone, that he was to use stone slatts, that he was to employ again the old stone door-head and the window adjoining, which had belonged to an existing ruin; and that he was to course his stone, much as the old stone had been laid. Beyond this he was left free to work out the plan, and he carried through all the details himself. On the whole the work is very creditable, and the picture does full justice to it-perhaps improves it-but any architect looking at the house will at once spot the blemishes. The plan is not considered in proper relation to the elevation, the dormers are too large and too high, the timbers are too thin, and what purport to be leaded lights are cast iron fac-similes. I could mention other minor details; but these suffice to show how the building, though much above theaverage, just misses the mark of good traditional craftsmanship.

Let us leave the builder for a moment, and deal with the archi- The Architect. He, as I have said, must be before all an interpreter: he tect as the must interpret his client's wishes. But to my thinking he has a Guardian of much greater duty than this to fulfil; or, rather, his interpreta- Tradition tion must be educative. He is the guardian of the æsthetic tradition; he must guide his client and the men he has working for him with this always before him. It is his duty to supply the brain and the taste-perhaps the two are interchangeable -that must take the place of lost tradition until such a time as tradition is again brought back to the workshops. But the brain of one man is after all but a poor substitute for the inherited tradition of hundreds; and so it comes that a modern architect's work, conceived in his office and out of the sketch book, is but a soulless substitute for tradition in rural building. The Archi-To the architect in our time has fallen the task, as I con- tect and ceive it, of workshop reconstruction in the building trade. It is Workshop his duty to become the centre of a group of crafts; it is his duty Reconstructo see that they are properly co-related; he has to drive the tion

team, to keep them in hand, to guide them along a difficult and dangerous road. He has to gather up in himself all those traditions which, before their destruction by the age of machinery, made for good building in this country. And not only that, he is, more than another, called upon to weigh and measure the value of the new conditions introduced by machinery.

To do this well another system than that of "professional architecture" has got to be created. It cannot be done in a hurry; it must come by degrees, and as the want shows itself. Failing a better name I have called it the "guild system"; and by the guild system I mean the gathering together of a number of different workshops or groups of men whose work collectively is needed for building, & giving these men a corporate morale. I do not think this can come without personal initiative on the part of the architect. We architects-indeed all artists in our day, the day of industrialism, of commercialism-the time when things are measured for their value in exchange-minister to the rich. This is necessarily so because we deal less than other producers with machine commodities; and the poor, the majority, are forced by economic exigencies into greater de-His Duty of pendence upon machine commodities. Many of these we can, as I shall try and show in my next chapter, influence and beautify; and many we can discourage. What I would wish to emphasise here in this consideration of the duty of the architect, is that after his business of interpretation, two secondary duties devolve upon him, that of selection and that-perhaps it is a duty he can but dimly discern as yet-of sifting what is right from what is wrong in the productions of machinery.

Machinery

Selection

And of Sift- It is difficult to say which of these comes first, perhaps the one ing the Right is contingent upon the other. Perhaps the selecting of good & Wrong in work is dependent upon a knowledge of the conditions as well as the technicalities of production. The standard of excellence is in the producer, says the neo-platonist; and though this standard can as a matter of practical choice often only be felt or dimly seen, modern social evolution appears to be guiding us 104

in that direction. The instinctive right or wrong in workshop conditions appears to be determining for us our canons of taste. That is as the neo-platonist would have had it.

The architect deals with all sorts of labour, and has the choice and handling of hundreds of commodities; if he shape for himself any practical philosophy of æsthetics, there is vested in him an immense power for good work, a power of determining what is good and bad, of finding what is well and ill paid. To him therefore does fall, within the region of building, a certain duty of selection, a discovering of what is right or wrong in the productions of the machine. Let us then leave him at this, and deal in our next with what it leads us up to — the problem of machinery, the sphinx riddle in modern economics.

CHAPTER VII. COUNTRY CRAFTS AND MACHINERY.



ECTURING once for the University of London at one of the great Polytechnics, my subject was "The Workman & Craftsmanship." As I wanted to learn more of it from the workmen who formed my audience I set them the following problem in the form of a question, "What in your opinion has been the influence of machinery in the building trade

during the last one hundred years for good or for evil?" The men were bidden to take the ordinary builder's specification with all the crafts in their traditional order, the excavator, mason, bricklayer, joiner, plumber, painter, and so forth; they were asked to think these over and then give their experience, each from his own branch of the craft, as to what machines had entered in, and what their influence had been, whether for good or evil.

The result was curious and interesting. Each group voted on its machines, voted on the benefit they had brought in saving labour, especially rough & wearisome labour, on the evil they had brought in throwing men out of work, in destroying their skill, in dislocating different industries, and depriving young workmen of the benefits of learning the craft. The pros and cons were cast up, the rougher portions of the builder's work, excavator, bricklayer, and so forth had gained by machinery; the more highly skilled such as mason & joiner, modeller and carver had lost. The results were averaged on the men's vote, and they finally decided on a rough average that 60 per cent. of the machinery now used in the trade of building was to the good, 40 per cent. to the bad.

106

How to differentiate was of course the problem; how to say Differentiadefinitely whether a machine was an evil, whether if it were tion of an immediate evil it might not become an ultimate good. The Machinery machines were had up in review, some of them were actually thrown upon the screen; and it was interesting to observe how plumbers, masons, bricklayers, decorators, carpenters, smiths, and glaziers criticised the ethical significance of machines with which they were personally unfamiliar.

The great cranes and derricks that carried heavy loads were good, for they saved the human back; but the carving machines that reduplicated a thousand fold carven panels of oak were bad, because they destroyed the individuality and inventiveness of many craftsmen. Inventiveness was in modern life a thing to be desired, the broken back a thing always to be avoided. There was the moulding machine that ran out mouldings. It was agreed if the mouldings were near to the eye so that you could see the work of the hand upon the material it was better to rule out that machine, but what of the great cornice of a building, high out of sight, needed only for shadow and specified "per foot run"-was that a matter for the hand or not? Perhaps the direct test of this lay in the conditions of the shop itself-the æsthetic dependent upon the ethical. In some cases the men welcomed as consumers what they condemned as producers. If that were so, it was agreed that the producer as representing the standard of life must decide. It was agreed also that we had not got on far enough in our social evolution to determine many of these questions. The Luddite for sure was dead, & so was the intellectual Luddite of the type of John Ruskin, who condemned all machines. The machine of a truth had brought its quota, and must continue bringing it towards the building up of the reconstructed workshop; but the machine must be dominated, must in short take that place in social service which in classic civilisation was taken by the slave.

This was the drift of the discussion, and most valuable and in-

107

structive it was. Above all was it interesting to the artist, for it gave him the clue to that connection between art and ethics which he is so often seeking, which if he is an Englishman he cannot cease from seeking, and which in the art of architecture at least, it is possible for him to find. Art, our discussion insisted, must be free from the machine. This the men were unable to express, but it was obvious that they felt it. Dimly did they discern the force that would like to escape if it could, the caged bird calling to be free, the "principle of beauty in all things" longing for release, for expression.

Ethical Standards of Artists and Workmen

The ethical standards of the workshop and of the artist, then, are one and the same. The stoical, heavy-handed, slow-seeing, conservative English mechanic -- uninterested from the nature of things in the dull routine of the workshop in which he is employed, but absorbed in his Trade Union, his one pre-occupation the wages question-shares the artist's point of view, for what lies beneath in either case is the standard of life. They are neither of them interested in the consumer, or rather they feel instinctively that the consumer is the enemy. He is perpetually for cheapening, for bringing the standard down, for making life more sordid, less valuable. They both of them are at war with the industrial system, with competition. The protest of the one is in the active organised resistance of the Trade Union movement; the protest of the other is in the passive appeal for leisure to create, to be, to find expression.

Fight with the Machine

The Artist's We artists, indeed, who in these days would touch the many different handicrafts that go to make up building and the many more different machines that are displacing the handicrafts, have no easy task. Our problem of eluding, of dodging the machine is insistent. Each time we have lit on some new fancy, struck some new line of invention, the machine follows after; it copies, reduplicates, mechanizes, degrades, and makes loathsome. It treats our best productions like some loved air that is doomed to walk the streets with a barrel organ. It seizes upon us with trills and flourishes: we stop our ears in disgust and fly. 108

Worse than this, it makes us compete against ourselves, against our own designs, our own invention. More than this, too, we know that when the machine is thus upon our heels it means that the craft is in danger, for as a practical workshop fact reduplication by machine process almost invariably displaces human skill, and that displacement means loss of tradition in the craft.

The architect, the designer, the craftsman is in these days engaged in a continuous struggle with the machine. It is not a struggle for life as it was a century ago, but a struggle for mastery. Even the intellectual Luddite, as I said, is a thing of the past; and those of us who are seeking to reconstruct industry from within, to apply ethical principles to the ordering of our workshops or an industrial policy to our technical schools, know that we have reached a point where we must judge between the good and the bad in machine production. We know that both exist, we believe that it has become a duty of the community to differentiate. Destroy the machine we cannot, but give it its place in the body politic we can. We have to play the beast like a fish to the rod, charm it like a snake to the flute, humour it like a cub to his tricks. We are at a perpetual game of hideand-seek with the machine; for us it presents the play of pussin boots. Like some great thing in the fairy tale, the elusive monster is perpetually deceiving us, escaping us; but each time we get nearer, each time its protean accomplishment grows more wonderful, so each time also it grows less formidablethe ogre will end by being the mouse that puss may strike. And then !--- the good things will remain; the waste, the terror, the futilities be discarded—at least that is what we hope.

Yes, we have come to perceive that there is a right and wrong The Right in the productions of the machine; and that this right and and Wrong wrong, this ethic of production & consumption, must find its in Machine solution in the working-class movement. The artist, perhaps, is Production for an immediate, an intuitive solution. He recalls how "every man that striveth for the mastery is temperate in all things."

He says to himself: How curiously applicable is this when turned to the root problem of modern social organisation; and he paraphrases, "man that striveth for mastery of the machine must use it temperately in all things." In this may lie the truth, but the community has got to find it out step by step, slowly, inductively, scientifically.

The Little House and the Machine

It looks sometimes as if in our country districts the little house, the cottage, were the one thing needed for the future. The f, 150 cottage, of which I gave a picture before, and of which so much has been written of late; or if not that, then the nearest approach to it economically. Do not, however, let us deceive ourselves-the little house will not serve us unless the man who lives in it is given a wage that makes life worth living. In other words, the housing question in the country is dependent not upon the house, but upon the conditions of country life, & until the labourer receives wage and freedom sufficient to induce him to stay in the country he will continue to go into the town. No £ 150 cottage will solve the question of rural depopulation, no $f_{1,5}$ cottage, no cottage at a gift. The solution to the question is social and economic, not architectural. But if we are as a people seriously about to grapple with the problem of repopulation in our country districts, if there is to be a decentralisation from the great towns, if agriculture by some form of small holding where the nature of the soil admits, or some form of combination with a view to the raising of the standard of life of the labourer, is to solve the land difficulty in this country, then the little house will be one of the great wants of the future, and architect and builder must supply it as well and as efficiently as possible.

In this the machine can help us, for there enters the element of reduplication, and in this I hold as an artist that we are justified in using it for the production of all such things as do not obviously destroy human individuality. But I would again as an artist touch it with the utmost reserve, nay, suspicion. I would have no machine-made ornament of any sort. I would allow the

bare utilitarian things alone to be made by machinery, and if there were any doubt as to whether an object in my cottage should be produced by machinery or not, if I could get no direct clue from the producer as to whether its production were good or bad for human life, for the life of the producer himself, I would give the benefit of the doubt against it; for the presumption would be that human individuality would be better served by allowing the production to remain that of the hand. As an illustration of this I would like to give the buildings Ellesmere at Ellesmere Port, where I am erecting what is practically a Port village for one of our captains of industry. Here are some forty houses to be built for town workmen, taken from the great city and earning from 25s. upwards. Whenever we touch the wages question, we touch as builders the bed rock of the economic difficulty. Modern life postulates certain requirements; it is often only the machine that can give them. I have sought in the Ellesmere Port cottages to work solely with the machine, to eliminate all æsthetic superfluities, all hand work, and above all every pretence at it; but inasmuch as this building scheme brings us into direct touch with the machine problem, I thought it worth while introducing it here. The scheme is not far enough advanced yet to test its cost, but the plans will tell their own story. We shall probably build for £ 160 a house. We have sought to work to such amenities as we had: a few oak trees, the use of white rough cast with grey Welsh slates, and the making of flower gardens. When you buy a million bricks at a time and lay out a street, the question is perhaps hardly any longer one of country building; and Ellesmere Port, though open fields, woodland and oaks now, is not likely to remain so long.

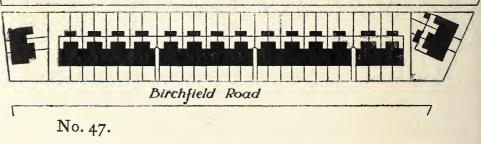
The plans of the scheme shown over leaf are four. A block plan of the whole site and a cut showing the treatment of two of the blocks. There is a fall in the levels of about 10 feet from end to end, so that each block steps up a little higher than its neighbour. With the object of getting over the difficulty of the

III

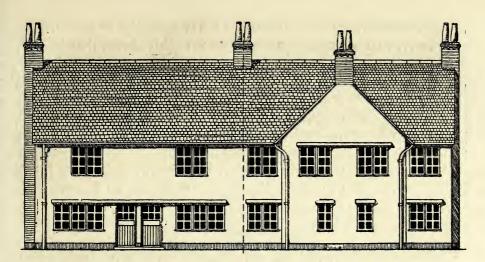


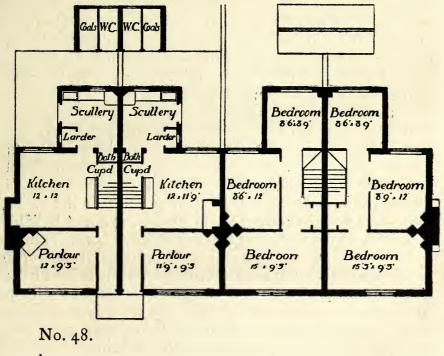
ugly end which the ordinary street necessitates, a slight modification has been made in the planning so as to group external chimney stacks at the outside points of the blocks in all cases. On the opposite page I give the ground and upper floor plans of a single block and also the block in front and back elevation. It will be seen that the whole scheme is as simple, severe and economical as it can be made. I have tried indeed to carry out as far as possible the main principle which in this book I have sought to establish, namely, the elimination of all sham or machine made Art. I cannot be absolutely certain that some trifles may not have crept in unawares, some wretched cast iron scroll or squirm, some plumber's evil quirk or kink, but at Ellesmere Port I have tried my best to keep them out.

I do not purpose to enter into a discussion of the ethics of production in the machine produce of the Ellesmere Port buildings. This would involve in itself a practical treatise on economics, and postulates a technical knowledge of at least fifty different workshops in this country and abroad. The investigation, how-



II2







i I

ever, would not affect the thesis I have sought to establishnamely, that all machine made ornament is harmful, wasteful, and useless, and that the producer must decide as to the rightness or wrongness of all utilitarian production concerning which there may be a doubt. If, as I said, there be a doubt, we must give the benefit of it to the hand, for the presumption is that human individuality will be better served by allowing the production to remain that of the hand.

Production

Agricultural And surely this view is a reasonable one, for when we think and Æsthetic deeply over the question do we not find that all human production is reducible to two forms only: that which feeds man, and that which ministers to his finer, his higher life? In other words, agriculture and art. There are a hundred and one forms of life that tend to those two: the hygiene of the doctor, the search for truth of the man of science, the practical service of distributors, organisers, financiers, educators, and so forth; but when all is said and done there are only two people in the community who are in the fullest sense indispensable to its life, and they are the agriculturist and the artist, the man who tills the soil and the man whose purpose it is to bring to the life of the community its ethical and spiritual beauty.

As opposed to Factitious Wants

It was a wise saying of William Morris's that the greatest achievement of the 19th century was the creation of marvellous machinery for the production of innumerable things that people do not want. The whole fabric of modern industrialism is built up on these factitious wants. There is little doubt, too, but that all the fine ingenuity and invention which in the Middle Ages went into the crafts, and especially the craft of building, goes in these days into the making of machinery. As in the Middle Ages the mason, so in these days the spoilt child of our time is the engineer. It is a great thing assuredly to have belted four continents with lines of steel, to have spanned Victoria falls, or made an ocean service; but take a walk down any street in any town in Europe or America, and look into the shop windows. Cui bono? Fifty per cent. of what is behind the glass is

114

useless, soulless, machine made stuff for which there is no fundamental human need, for which there is merely, in the words of the economist, a demand—a demand that is factitious.

Country and town learn of one another, and one of the most The Waste impressive lessons which in these days, read in the book of its of Machine building, the country may learn of the town is the waste of its Production machine production. Go into any town in England, look at its public buildings, and the same lesson of waste is set before us. At the same time in all the larger, more pushing, and energetic towns the same outcry is heard against the apparently endless raising of rates. People never appear to connect this increase of expenditure with the waste of machine production. Yet that is how it strikes the architect, that is how it strikes those of us who have studied the question from the builder's point of view, or as I have in a previous chapter called it, the point of view of æsthetics & tradition in building. This waste is writ large upon the public buildings of our towns. Endless, useless, soulless machine production; thousands of mouldings, foolish ornamentings, mechanical carvings and trimmings-things not wanted -gathered together and presented as the language in stone of the great half-educated British middle class, the work of Matthew Arnold's Mr. Bottles standing forth as the criterion of taste on the town council. All sheer waste and futility.

And yet the intention is good. It is right that our town councils and public bodies should aim at something that they think to be dignified and handsome. The trouble is that they do not know how to attain it, that as units they are not sufficiently educated to know the good from the bad, that they have not attained to a proper understanding of the right value of machine production, of where the place of the machine product is to be. The waste, in short, is due to a want of æsthetic knowledge, and to a want of that greater knowledge which reduces the æsthetic The Public into terms of the ethical. There is a right & wrong in this, and Conscience we must, as I have insisted, learn it from the producer. What then is the solution of the machine problem in country the Machine

must control

II5

i 2

districts? I doubt there being any immediate solution. The ultimate solution is co-operation and the public ownership and control of at least certain forms of machinery. I am not concerned with this or that particular doctrine of social reconstruction, whether we call it co-operation, collectivism, state or municipal socialism, the form matters little, the fact is the important thing. The fact for us, who desire to see once again good, honest, and enduring work made the heritage of all, is that the action of the machine shall be made directly amenable to the conscience of the community. In this way only shall we get to determine the right or wrong in its use. In this way only shall we find a means of again protecting local tradition.

I would like to see such machines as the circular saw, the band saw, the planing machine established in every large village or centre of not less than 1,000 inhabitants, or where there was work enough to keep them going-established not so much for the purpose of exporting commodities, as for the purpose of preventing commodities of certain kinds from being imported. An interesting illustration of the influence of machinery upon local tradition and the village crafts is given by the building shown on page 13; it will be observed that it is the cheapest building on my list. Here our money was very limited. I got two tenders for the doors, windows, and woodwork: one from the local builder, the other from the steam joinery works in the county town thirty miles off. The latter came out about £8 less than the former. I pleaded hard with the landlord's agent to leave the job with the local man. He recognised the force of the plea, but the economic pressure was too great: the whole thing had to be done for f_{170} ; the local man lost the job. The landlord in this case was $f_{0,8}$ in pocket, the village about $f_{0,60}$ out of pocket; and a few months later, when the slack time came, one of the village carpenters, the guardian of the village tradition, was tramping for work. Now this is not used as an argument against machinery, for in certain things the machine must be used against the man, just as in others the man must be

used as against the machine. Nor is it an argument against the landlord for saving his £8, nor the steam joinery works for underselling the local man. But it is an argument against the private & undirected exploitation of the machine. All things considered it was probably better that the hand work should be superseded by the machine in this case, but it was not good that this should be done at the expense of local tradition. The public control by the village of the machine that caused the displacement would have settled the relative right and wrong of the case immediately.

Entirely quixotic & impossible? Perhaps! but for us the question in this book is how to build the little house, how to make a good piece of work of it, and how to maintain that standard of craftsmanship which made the little house of the past what it is. The machine stares us in the face. We cannot in these days build the little house without the machine : we must, unless we are to lose our traditions of country building altogether, bring the machine under control. Here, then, is just one of these cases where the craft of building, especially of building in the country, guides us into legislation, gives us a clue, an aim. We cannot say as yet definitely such or such a course shall be adopted, but we can say in this direction must we move. If it be so, and few cultured Englishmen would deny it, that the standard of fine building, of taste, of craftsmanship has been determined for us by the old buildings of the past, then we must, if we want to attain to that standard once again, re-establish conditions of life and work that had in them the old objective and are yet in accordance with modern requirements.

That is where my tramping carpenter comes in. He was a good *Country* illustration of the sacred economic doctrine of the fluidity of Labour not labour, a doctrine so often on the lips of Free Traders. As a Fluid matter of fact, where country building is concerned the fluidity of labour hardly operates. Beyond a certain point labour is not fluid, and this point in country building is soon reached. Up to a certain age a young man's labour may be as free as the capital-

117

i 3

ist's uninvested money; beyond that age the ties begin: wife, family, schooling, house, garden, all the things that make for a good & steady citizen, militate against the fluidity of labour in a country district where employment is limited. Disorganise the craft by the introduction of Norwegian & Canadian doors, machine joinery and so forth, and the man cannot offer his labour at all.

The doctrine of the fluidity of labour as applied to country districts, in short, is only sound if qualified by a corresponding protection of labour, a minimum wage, a labour bureau, a certainty of good education everywhere, and many of the things that the great town as against the country supplies, and that go to make up the programme of working-class legislation; even then the fluidity of labour is a questionable boon. It is because the items of this programme are so in harmony with the ethical principles that guided mediæval building—witness the 14th century masons' code of which I spoke before—and do so bear within them that same instinctive Christian *morale*, that most of us who have the crafts at heart see in them our greatest hope for the future.

The Three Tests of Craftsmanship

And what, after all, are the crafts there for ? What is their objective? They are there for the ministration of life, and their ultimate test is fine citizenship. The producer, the artist, as I have said, & not the consumer, holds the key. It is for the producer to apply the ethical test upon which as a consumer he may base his own *morale*. Here is my piece of work, and here are the three tests of its value to the community. Has its making injured human life, has it brought happiness in the making, has it built up national character? If it has not rung true to these three tests, we are better without it.

CHAPTER VIII. ON THE NEED FOR THE ESTAB-LISHMENT OF COUNTRY SCHOOLS OF ARTS AND CRAFTS.



NE of the ways of attaining once again to that higher standard of work and life in country crafts, to which I alluded in my last chapter, is the establishment of country schools of art and craft; & I would like in this chapter to show what should be their purpose and service for the community, and what they should mean for us in England in

our present state of development. I postulate country, not town, conditions-that is to say, the conditions of any community where the population does not exceed from 4,000 to 5,000 souls-and the school I have in mind should be possible in villages where the population is not less than 500. Where there is energy & earnestness and a little intelligent enthusiasm on the part of resident landlord or parson it can be carried on in a humbler form with even smaller numbers.

Now, while I shall look at my school first from the point of The Art in view of the producer, and in more particular detail from that Modern of the builder and his allied crafts, its service must not be for Education is the producer alone. The net must be spread for the whole the Art of village. The art we have by modern education to find is, as it Life always has been, the art of life; and to build well or to do anything else well, means first and foremost that we must well

IIQ

i4

live. Now, all I have been saying in previous chapters as to craftsmanship, tradition, the failure of industrialism, the need for the sense of beauty as a recognised factor in life once again, points to the desirability of instituting such schools. We need give ourselves no concern as to the number of their pupils. If the population of our village be growing, tending toward the town, there will be the more scope for classification of students and variety of subjects. If the place be small, there will be the more scope for the human quality which made for the greatness and sweetness of old work.

The Three Conditions of a Rightly Educated Life

Often has it been insisted that all social reconstruction, like the serpent devouring its own tail, begins and ends with education. We cannot give good education until we have citizens sufficiently intelligent to see the need of it: we cannot attain to a high ideal of citizenship until we educate. Or, looking at the circle from the other side, we cannot give work to the unemployed because he is unemployable; he is unemployable because we have never rightly educated him to work. Education and workshop reconstruction must proceed side by side. Now there are three conditions for a well educated life, and they are these-health, joyousness or interest in our work, and good citizenship. They are not unlike the three tests of craftsmanship with which my last chapter closed; and it is curious to observe how the Christian morale is one and the same, whether we apply it to the things we make or to the men that make the things.

It will be seen that I rule out religion. I do so because I regard it as the basis of all education. No educated life is possible without it. But we have to be sure ourselves what we mean by it. Among my friends I count members of the Church of England, the Church of Rome, a dozen different English sects, Agnostics, Unitarians, Positivists, German Lutherans, Scotch Calvinists, Mahometans, and Japanese. I find they all have definite views on varying doctrinal questions, but that, when they make each their own reservation upon them, there are 120

certain fundamentals in education on which they agree. "I find nothing in Christianity," a Japanese educationalist once said to me, "that conflicts with Bushido." If then we rule out doctrinal religion, I think all those of us who are educationalists can say with the Japanee: "I find nothing in Christianity that conflicts with the right education of the citizen." But we must set aside our own pitiful squabbles as to whether the egg should be eaten from the big or the narrow end.

Now the main assumption upon which the last two chapters The Chrisrested was perhaps a faulty assumption, but it was this-that tian Morale the Christian morale which once underlay the organisation of in the Reorthe workshop was sound. That morale we have lost. On the ganisation hypothesis, then, that its practical reintroduction into industry, of the and more particularly the industry of building, is not only a Workshop thing to be aimed at, but a means towards the attainment of some of the things I have in this book been pleading for, let us recapitulate, and ask ourselves from the point of view of the craft of building what these pleas are.

I have pleaded for good building as the expression of practical needs in life. I have pleaded for the human quality in good building and for the checking and limitation of waste, the waste particularly of machine production. I have pleaded for tradition, for its reverent regard in old work, and its carrying on into the new work we have yet to do. I have pleaded for an awakened understanding among landlords & country builders of these questions that affect the craft, and for an intelligent examination of their economic significance. And, finally, I have pleaded for a definite study of the right and wrong in machine production-for the treatment of the machine as an ethical, not merely an economic, problem.

To bring all this about will take a long time and means much work in other lines of life besides building, but it will come; and one of the ways of bringing it about is by the formation of schools of art and craft in country districts—the secondary school developed in a sane, comprehensive & practical manner.

The Necessity of the Secondary School under Modern Industrial Conditions

Now it is not only possible to establish such schools of arts and crafts in most country districts, but it is educationally sound and serviceable. We cannot reconstruct the old workshop system, but we can adapt what remains of it to modern conditions and use it as part of our educational material to work upon. In every place of over 500 inhabitants there is almost certainly a blacksmith, a builder, a carpenter, perhaps a plumber, perhaps a few other crafts; there are certainly labourers & boys of no training; there are constant repairs and object lessons in construction to hand; there are long winter evenings unemployed. It should be the object of our village schools of craft to get hold of these fellows, to observe these local needs, to employ these vacant hours. The newer developments of the Education Act make the work of constructive education in our villages possible; and the doing of this sort of work will more help to keep people on the land than all the theories, will more help to improve and cheapen our building than all the architects. It will do something else too. It will help to pick up again the broken threads of building tradition. Terrible it is to observe how, owing to the disintegrating forces of machinery, craft after craft has been driven out of the villages, not necessarily to be destroyed, but to be swept up and centralised in the factories of large towns. Thus simple pieces of plumbing, portions of smith's work, the leading of casements, joinery framing, indeed numberless things about a Its Function building that one could mention are now no longer practised in English villages at all: they have died out. If they are wanted they have to be sent for from afar. In my district of the Cots-Reference to wolds, where the tradition of centuries has been to lead light the beautiful stone work, it was, until we revived the industry, practically impossible to get lead glazing done, and when we needed it we sent the dimensions up to an "art factory" in Birmingham; or if we could not, as impoverished landlords, small shopkeepers or cottagers, afford that, we had to do worse - we made shift with stock patterns formed of zinc bars, 122

in the Village and in Building

and produced also in a factory, without even the "art" as a solatium.

Thus do we ruin what is left of our building tradition, and at the same time waste what we have of the good human stuff in our villages-the stock that would only be too willing, if given the opportunity, to be allowed to work at such simple crafts once again.

I am sanguine enough to believe that this will not continue. For human reasons, if for none another, it must not be allowed to continue. We have got to a point in the development of the history of machinery in this country where, as I have insisted, it is quite possible for us to say that development in one direction is right, in another wrong. The problem of machinery has become an ethical one, and as such must be dealt with in our educational, in our social legislation. When once the County Councils are sufficiently enlightened to see this, & the county ratepayers sufficiently far-sighted to appreciate the need of spending more money in order to keep the people out of the towns, it is likely that great reforms may ensue. To the craft of building in our villages, this problem of determining the limitations of machinery is vital.

What then is to be the plan upon which we are to build up our educational work, our country school of arts and crafts-based, as it should be, upon the elementary school system?

I think we should set before ourselves a four-fold objective, The Four and it is this. We should, in the first place, get into direct touch Objectives with local wants. We should, in the second place, be frankly of a School experimental, always trying something new and testing ever of Arts and the changing value of old methods. We should, thirdly, teach Crafts citizenship, making this a definite end and giving all our practical & technical subjects a bearing upon it. We should, fourthly, make the last object of our study the ethics of production. To take the first : By getting into touch with local wants, I do not alone mean what these wants appear to those in power -the kindly and benevolent landlords who reside upon their

123

1. To get into estates, the humdrum parsons, the often excessively conserva-Touch with tive farmers, who for the time being have the future of our Local Wants country districts in hand. Still less do I mean what his wants

appear to be to the labourer. Beyond an immediate increase in his weekly wage, the latter poor fellow does not know what he wants; and it is affectation to pretend that we shall get from him a far-seeing constructive policy in education. When you are supporting a family on 12s. a week it requires every bit of your brain to do it well.

To discover the local wants we must examine closely what are the actual social conditions. What do the people live on? what do they earn? what land have they that they can till? what is the family budget? what social ramifications are there with other grades of life? is there a carpenter cousin, a sailor brother, a colonist away? We must look at the boys standing at the street corners, and ask why they stand there and what we can do to stop it. We must ask at the same time why so many fields are covered with thistles, & why the roofs of so many cottages are falling in. Any conscientious examination of local wants will quickly reveal what they are; and we shall then be able to discriminate the particular wants of certain districts: the craft, the trade, the special wants of farmer, labourer, carpenter, builder, plumber and so forth, and the general wants that go to building up character and fitness, and that apply to all alike.

Now whether they be special or whether they be general, these wants will vary in all places. They will vary with the standard of intelligence and the occupation of the people in each case; but we shall find that in most places there is a percentage of the population who are badly fed, badly clad, badly housed, and as far as secondary education goes, not taught at all. We shall find that the agencies of local charity, however well administered, are often inapplicable to these wants, and that the parochial system is an inefficient & obsolete method for dealing with them. The parochial system, excellent in its day, rested on the assumption that industry and the conditions of labour

were static, whereas they have been disintegrated by machinery. Industry and the conditions of labour are now fluid. In old. days the squire and the parson were the units round which the little community turned : now the squire often looks to outside means for making his estates pay, the parson is often left high and dry in his pulpit, while the people are drifting away. In my part of the country the ratio of permanent employment to acreage is given as one family unit to every 100 acres of land. Thus there will always be wants that our school can supply. We shall find, for instance, that the teaching in cleanliness, order, intelligence, inventiveness, national history, social duties, are always wanted; we shall find that teaching in such things as cookery, hygiene, physical drill, life saving, and all that is implied in these, is always popular.

Our second objective is the experimental. We must, as I said, 2. To be Exbe perpetually trying new methods and testing old ones. In an perimental age of fluidity such as ours, no educational system can have. any permanent value; the quickly changing wants of modern industry, the equally rapid changing of our ideals of life, make a frank experimentalism necessary. Moreover, to boldly do this is a check upon the uniformity and dull levelling of modern democracy. We want, in our schools of art and craft, variety, diversity, individual character, both in system of teaching and in the boy or girl product.

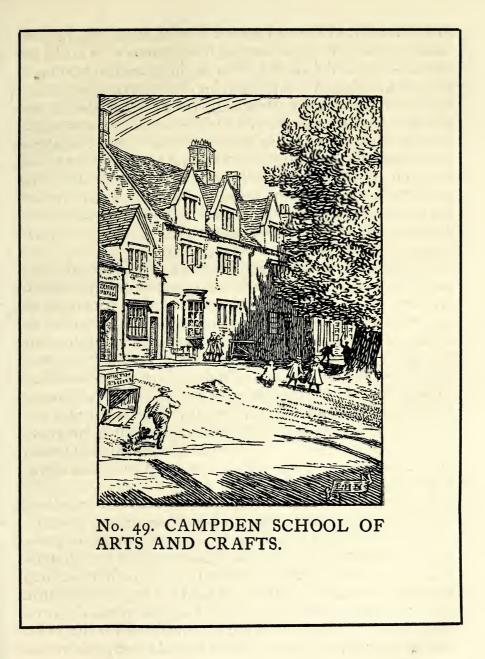
I would like to give a practical example of what I mean. I have often thought that the somewhat rigid system of definite classes in particular subjects is not sufficiently educative, and that it should be supplemented by something that will give more freedom to individual invention. To this end I started at our village school an experimental shop, which was open at all hours, under certain restrictions, to any student who cared to use it. Metalworkers, plumbers, carpenters used it at different times, and produced some quite good pieces of work there. But two village lads had been observed with much mystery for some time experimenting in various mechanical details of their

own. Finally, after three months' hard thinking, and much collecting of odd scraps of copper, brass, zinc & wood, a model ship appeared, whose boiler was a disinfectant tin. She was a really beautiful little craft, who did several knots an hour by means of methylated spirits on the miller's pond. I was formally invited to the launching, and no cruiser created more excitement on her first trip. The peculiar interest attaching to this example is that neither of the young constructors had ever seen a ship or been far out of the county. I could no more construct a model steamship myself than fly, & yet it was a product of my experimental shop. While my heart was set upon building and the allied crafts-lead glazing, metalwork, carpentry, smithing-those two boys were thinking of something quite different. I anticipated we should turn out good examples of the builder's craft, we did as a matter of fact; but we did better still, we turned out two boys who were using their own brains and invention in a manner that was entirely original & entirely off my lines. That is as it should be. But no class system would have quite provided this.

Citizenship

3. To Teach Our third objective is the teaching of citizenship. This I conceive should not merely be done by classes in the rights and duties of the citizen, but by showing the bearing of everything taught in the school upon life. Our school, therefore, should be so comprehensive as to include every form of village activity from the highest to the lowest. There should be in it something for everybody.

> I have found in our Cotswold village of 1 300 inhabitants that it is quite possible to get together some 200 to 250 students, men, women and children, in various branches of secondary teaching, and teaching often that leads indirectly to a better understanding, not only of the crafts but their relation to life. Cookery, needlework, laundry, gardening, hygiene, carpentry, physical drill, life saving, carving, drawing, various branches of craftsmanship in metalwork, music, lectures and discussions on a number of different topics-all these subjects are dealt with in



different ways. We spread the net as wide as we can, with the result that we can show cases of the labourer's lad doing his course of physical drill and attending biographical lectures in the same week, and the village plumber's apprentice keeping his school garden, and attending a class on lead glazing one night, and music on another. The school, in short, is getting to have a definite meaning in life to these lads; and that also is as it should be. In the appendix I show some pictures of this little school of craft which illustrate what I mean. The main building, which has been carefully repaired and which stands in the village street, is given on page 127. The workshops and technical school proper are at the back, and have been formed out of a derelict malthouse and stables.

Few things are so distressing in modern English social conditions as the waste of educational opportunity observable in boys and girls of from 13 upwards-lads when they leave the elementary school, when the loafing period begins; girls of the same age when there are several in the family. The facts of the craft, the realities, must always be taught in the workshops, on the jobs, in the household. But in these days, when machinery has centred industry into factories and taken the home crafts away from the home, the principles, the theory, and above all, the taste, or as I would prefer to call it, the feeling, for what is right and wrong in workmanship must be taught in the secondary school. It is the school that must be the bulwark against the brutalising, the ugliness, the uniformity of the machine. And this brings me to the fourth objective of our village schools of art and craft, the need for a wise study of the ethics of production. This is a thing we can only attain to by slow degrees. We have not yet come as a community to realise that the complete destruction of the handicrafts which has resulted from the industrial revolution of the 18th and 19th centuries has transformed the whole purpose of education. From the universities, so remote from the practical wants of life, at one end of the scale, to the elementary schools, so equally remote 128

4. To Study the Ethics of Production

from the higher wants, at the other, the relation of men to things is no longer understood as of old; and the ethical meaning of the things we touch and use is lost to us. Of old it was not so. Almost all old handicrafts were educative in themselves: they contained within them that graded skill and thought which is necessary for the right development of the individual; they had in them a direct connection between mind and hand; they touched life immediately. Not only this, life was so constituted that everybody came into direct contact with the crafts practised by others; human beings were nearer to one another in consequence. Hundreds of stories from the workshops, all well authenticated, might be quoted to illustrate this. The story of Caparra the blacksmith and the municipality of Florence, of William of Wykeham the master mason of Windsor and his repartee to Edward III., of Hans Sachs the cobbler of Nurenberg singing over his shoes, of Caradosso the goldsmith piqued by the haughty Spanish nobleman over his fine jewel in the little shop in Milan, of Ucello the cabinetmaker and his humiliation at the shrunken panels of his priceless cabinet, of Grinling Gibbons and his pot of carven flowers before the queen. The tales are innumerable to show how the man was educated in and by his craft. The artist can see it in the work; to him who has no eyes to see it thus, let him read the written record in Theophilus, in Cennino, in Vasari, in Cellini, in Henry Eveleigh, in Rabelais, in Sir Christopher Wren, in Sir Joshua Reynolds. Nay, let him study again those English poets who more particularly sympathise with the craftsmen-Chaucer, Langland, Blake-let him do this and he will realise how the crafts of old contained in them those fundamentals of education which we are seeking to reintroduce into modern life. Sometimes we term the object of our search humanism, sometimes technical skill, sometimes labour organisation, sometimes merely efficiency; but all these things were stored as a treasure in the crafts of old before the coming of the machine.

k

To go back is impossible; and why should we repine? The machine has brought immense good with its evil; but it is necessary to understand, and above all it is necessary to determine, how much of what is lost we can and should consciously reintroduce into our educational system. In short, we have to diagnose the good and bad, the right and wrong, in the things we make and handle; the problem of the ethics of production is the ultimate problem of our schools of art and craft. I have pictured our secondary education school from the standpoint of the village craftsman and the country builder. I am an architect, hence my practical bias. Educationally any other craft or calling would have done equally well. The school may start at a single craft, a single interest : it must become universal; it must embrace everything, everything in petto; it must give the little citizen the opportunity of making himself. To repeat-the art we have in modern higher education to rediscover is the art of life.

C. R. ASHBEE.

Campden, Glos. 1906.

PRINTED AT THE ESSEX HOUSE PRESS, & PUB-LISHED BY B. T. BATSFORD, 94 HIGH HOLBORN, LONDON. 1906. 250 Copies only, of which 50 are issued on paper with the Essex House Press mark and reserved for subscribers to the Press.

APPENDIX OF ILLUSTRATIONS

No. 1. Izod's house from the High Street, Campden

- No. 2. The condemned houses from the materials of which Izod's was constructed.
- No. 3. Izod's house from the garden.
- No. 4. The condemned houses from the materials of which Izod's was constructed.
- No. 5. Cottages at Catbrook from the road.
- No. 6. Cottage in Herts for Trinity College, Oxford.
- No. 7. Little Coppice at Iver before extension.

No.	7A.	>>	"	showing exter	nsion.
No.	8.	>>	"	Interior of the living room.	
No.	8a.	"	"	"	"
No.	8в.	>>	"	A bedroom in	the extension.
No.	8c.	>>	"	"	"

- No. 9. The Shoehorn at Orpington.
- No. 10. The Nursing Cottage at Findon (in construction).
- No. 11. A house at Iver, on the Dromenagh estate.
- No. 12. Another "
- No. 13. The thatcher's craft.
- No. 14. The thatcher's craft : showing new and old methods of laying thatch.

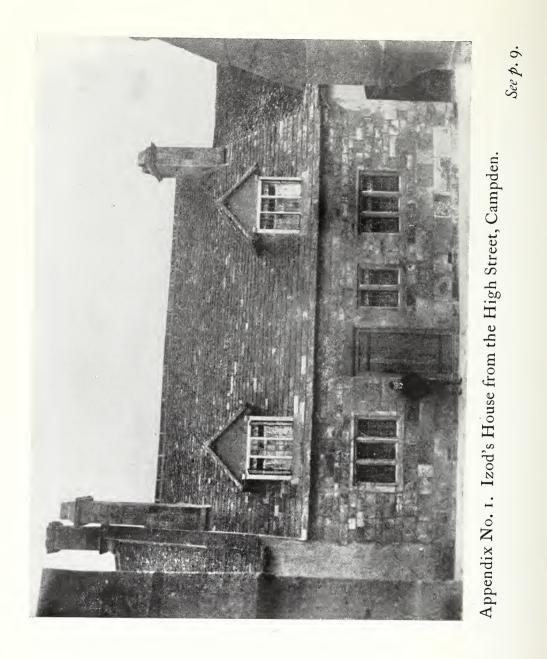
"

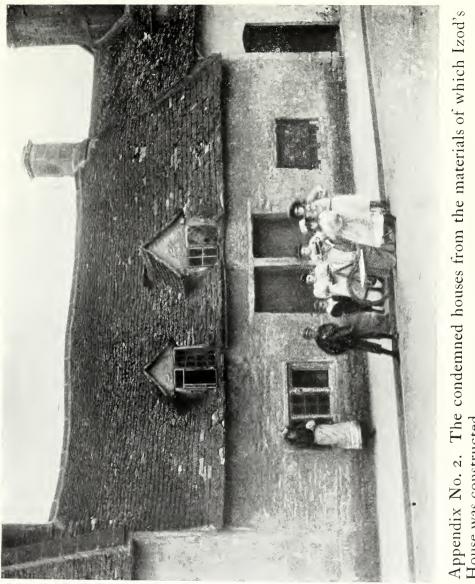
,,

- No. 15. The Thatched Cottage at Westington.
- No. 16. ", ", Interior of living room.

No. 17. The Thatched Cottage at Westington. The studio at the back formerly the stable. No. 18. Interior of the studio. " " No. 19. The Cedars at Westington. No. 20. Interior of a living room. " " No. 21. Coombe End, Whitchurch. No. 22. Interior of a living room. • • " No. 23. The Carlyle House, Chelsea. No. 24. The School of Arts and Crafts at Campden, showing interior of a malthouse reconstructed as a gallery.

No. 25. The same from another point of view.





Appendix No. 2. The condemned houses from the materials of which Izod's House was constructed.



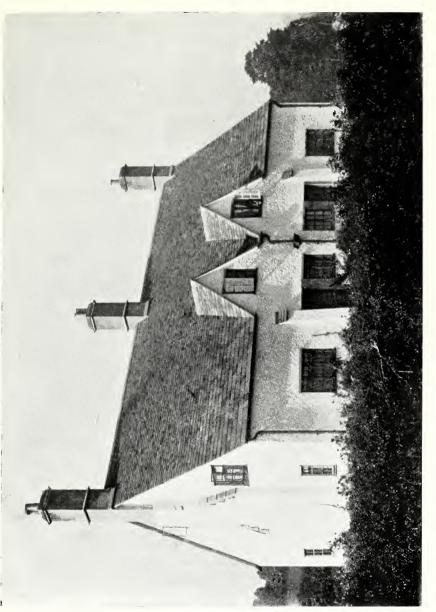
Appendix No. 3. Izod's House from the Garden.

See p. 9.



See p. 9.





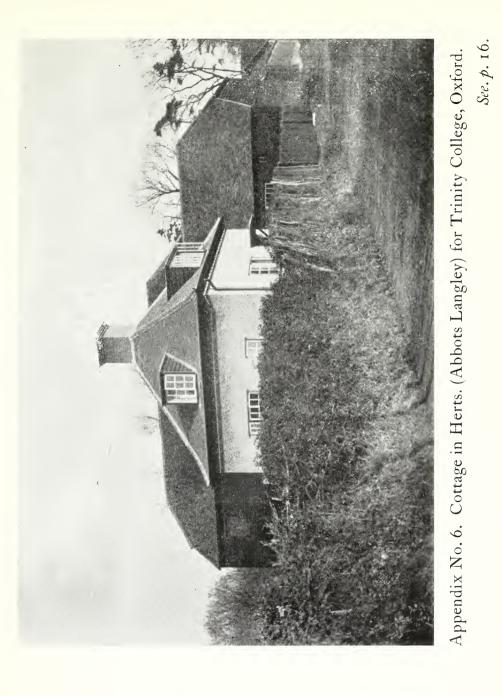
Appendix No. 5. Cottages at Catbrook from the road.

See p. 14.







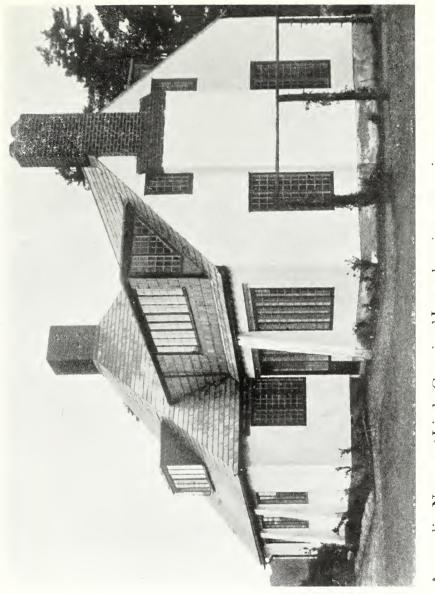






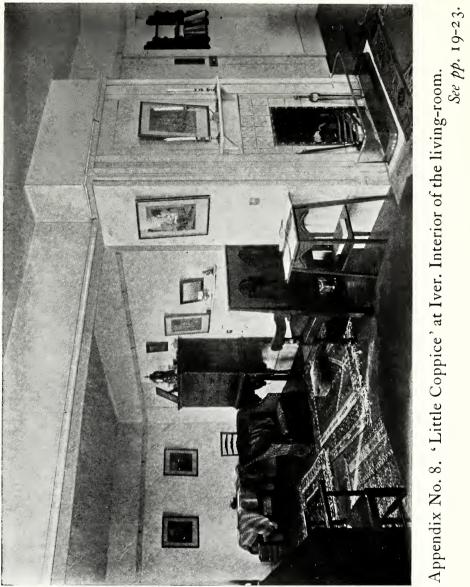
Appendix No. 7. ' Little Coppice' at Iver before extension.

See pp. 19-23.



Appendix No. 7A. 'Little Coppice,' Iver, showing extension.

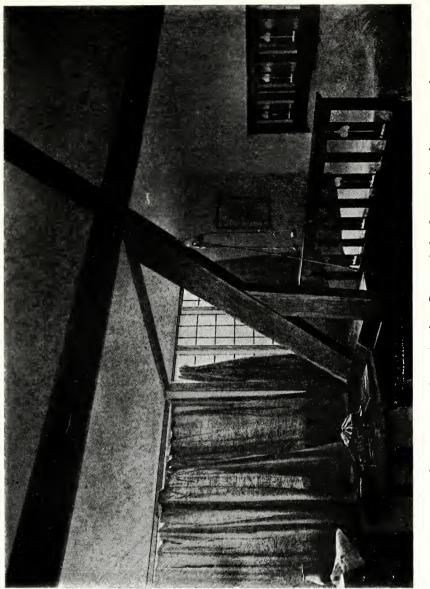
See pp. 19-23.



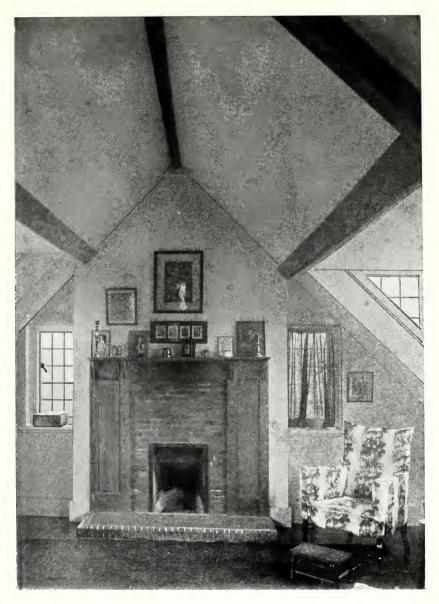




Appendix No. 8A. 'Little Coppice' at Iver. Interior of the living-room. See pp. 19-23.



Appendix No. 8B. 'Little Coppice' at Iver. A bedroom in the extension. See pp. 19-23.



Appendix No. 8c. 'Little Coppice' at Iver. A bedroom in the extension.

See pp. 19-23.

...



Appendix No. 9. 'The Shoehorn' at Orpington.

See p. 23.



Appendix No. 10. The Nursing Cottage at Findon (in construction).

See p. 23.



Appendix No. 11. A house at Iver, on the Dromenhagh estate.

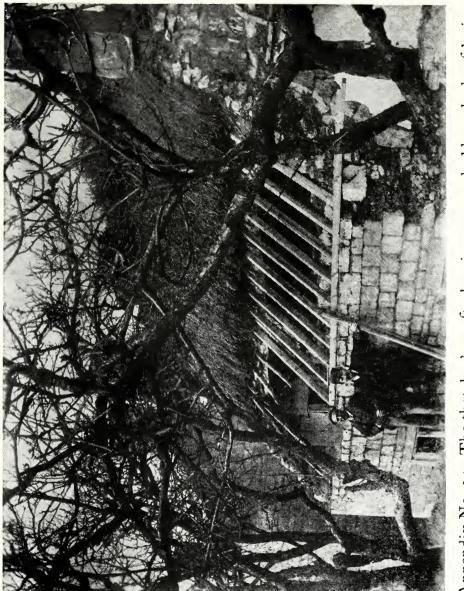
See p. 31.



Appendix No. 12. Another house at Iver, on the Dromenagh estate.



-

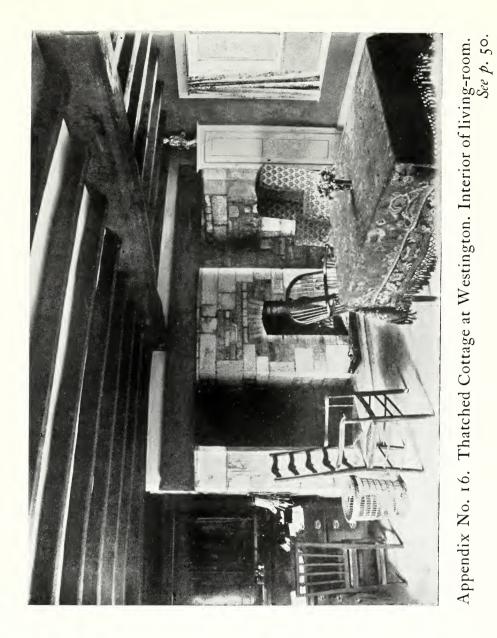


Appendix No. 14. The thatcher's craft, showing new and old methods of laying thatch.

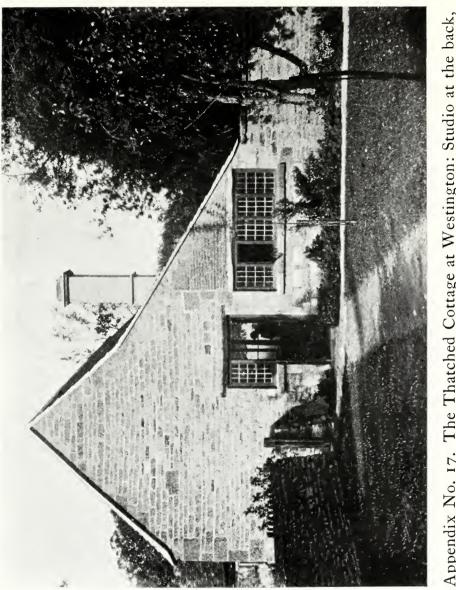
See p. 46.



Appendix No. 15. Thatched Cottage at Westington. See p. 50. ذ







Appendix No. 17. The Thatched Cottage at Westington: Studio at the back, formerly the stable.

See p. 50.

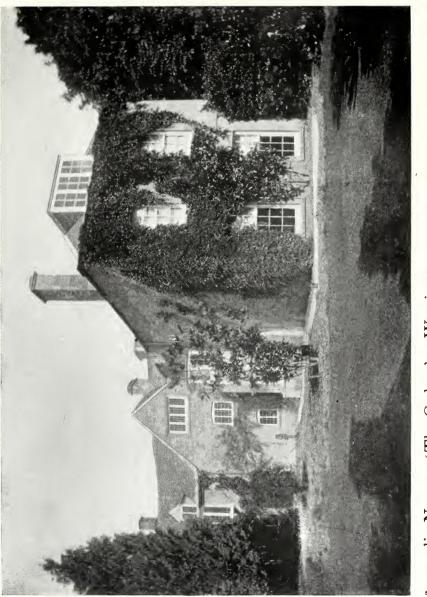




Appendix No. 18. Thatched Cottage at Westington. Interior of the studio.

See p. 50.





Appendix No. 19. 'The Cedars' at Westington.

See p. 54.



Appendix No. 20. 'The Cedars' at Westington. Interior of a living-room.

See p. 52.





Appendix No. 21. 'Coombe End,' Whitchurch. See p. 54.





Appendix No. 22. 'Coombe End,' Whitchurch. Interior of living-room.

See p. 54.

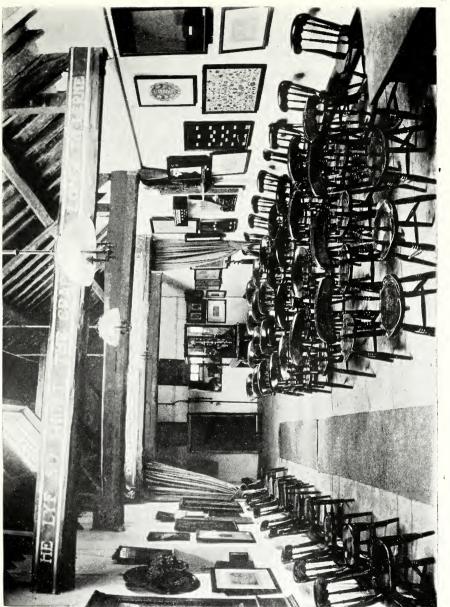


~



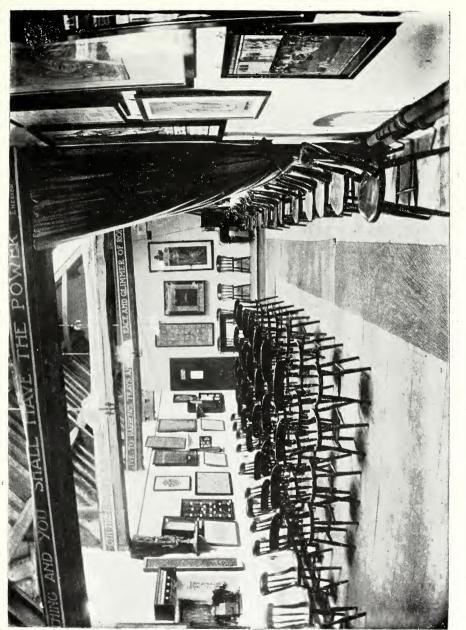
Appendix No. 23. The Carlyle House, Chelsea. See p. 57.





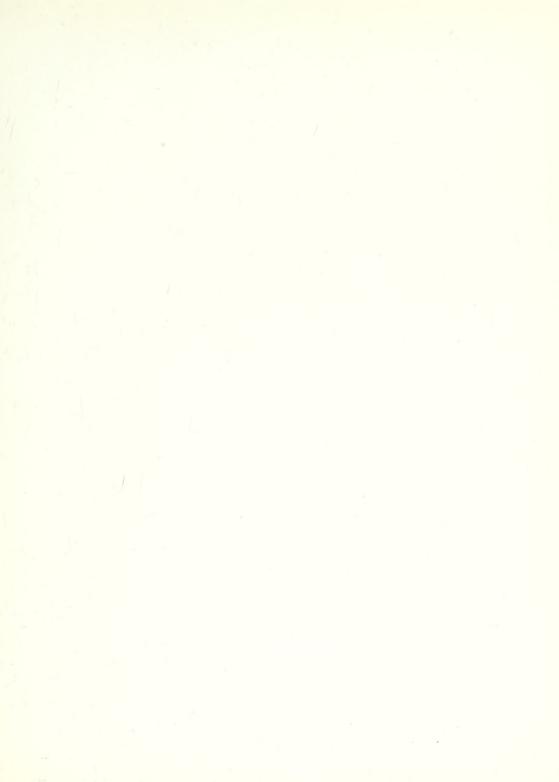
Appendix No. 24. Campden School of Arts and Crafts, showing interior of a malt-house reconstructed as a gallery.

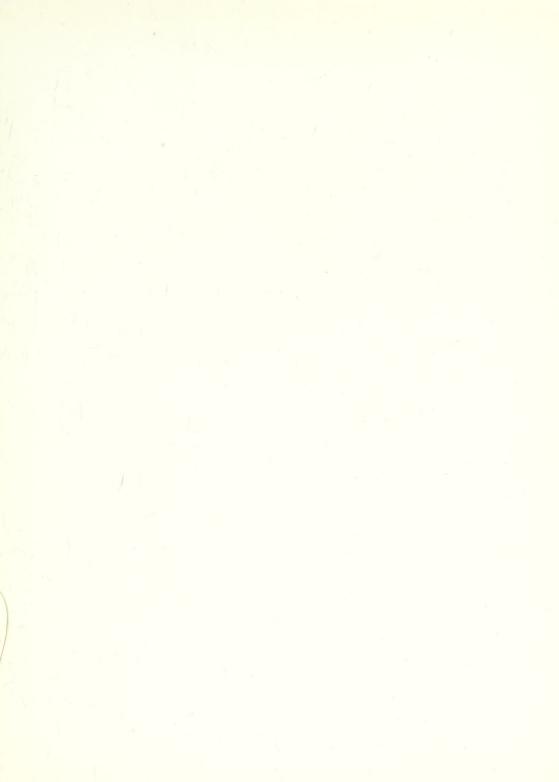




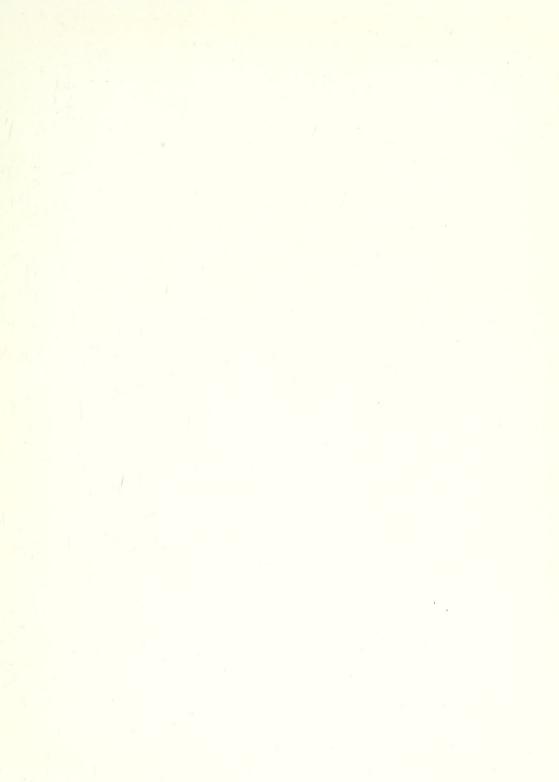
Appendix No. 25. The same from another point of view.

See p. 128.





· ·



A List of Standard Books on ARCHITECTURE & ART, BUILDING, ETC. Published & sold by B. T. BATSFORD

HIGH HOLBORN, LONDON. 94,

Imperial 8vo, cloth, gilt. 31s. 6d. net.

GOTHIC ARCHITECTURE IN ENGLAND. An Analysis of the Origin and Development of English Church Architecture, from the Norman Conquest to the Dissolution of the By FRANCIS BOND, M.A., HON.A.R.I.B.A. Monasteries. Containing 750 pages, with 1,254 Illustrations from photographs, measured drawings, and sketches, including 20 full-page Collotypes and 469 of plans, sections, diagrams, and moldings.

"This is, in every sense of the word, a great book. . . . It is a book that at once steps to the front as authoritative, and it will be long before it is superseded."—*The Athenænn.* "A book of the very highest type, reliable and perfect in all respects, and magnificently illustrated. It is unquestionably the one book on Gothic Architecture, which must, as a matter of course, be possessed by every architect."—*The Architect's Magazine.* "It brings the study of architecture up to the standard of modern ideals, and should, we expect, long remain the best book of its kind in the language."—*The Brit'sh Architect.*

Large 8vo, cloth, gilt. 18s. net.

THE ARCHITECTURE OF GREECE AND ROME. A SKETCH OF ITS HISTORIC DEVELOPMENT. By WILLIAM J. ANDERSON, Author of "The Architecture of the Renaissance in Italy," and R. PHENÉ SPIERS, F.S.A. With 185 Illustrations from photographs and drawings, including 43 full-page Plates, of which 27 are finely printed in Collotype.

"As a comprehensive résumé of the history and characteristics of Greek and Roman architecture this must certainly be considered to be the best one-volume work of its kind that has yet appeared in our language."—The Builder. "A vivid and scholarly picture of Classic Art."—The British Architect. "It is such a work as many students of Architecture and the Classics have vainly yearned

for, and lost precious years in supplying its place."-The Architect.

Large 8vo, cloth, gilt. 12s. 6d. net.

THE ARCHITECTURE OF THE RENAISSANCE IN ITALY. A General View for the use of Students and Others. By WILLIAM J. ANDERSON, A.R.I.B.A. Third Edition, with 64 full-page Collotype and other Plates, and nearly 100 smaller Illustrations in the text, from photographs and drawings.

"Mr. Anderson's book is of the greatest value, and enables the student, for the first time, to grasp the true significance of the movement."—*The Builder's Journal.* "The book is evidence of earnest study."—*The Architect.*

[&]quot;Should rank amongst the best architectural writings of the day."-The Edinburgh Review.

2 vols., large folio, half morocco, gilt. £8 8s. net.

LATER RENAISSANCE ARCHITECTURE IN ENGLAND. A Series of Examples of the Domestic Buildings erected subsequent to the Elizabethan Period. Edited, with Introductory and Descriptive Text, by JOHN BELCHER, A.R.A., and MERVYN E. MACARTNEY. Containing 170 magnificent Plates (19 ins. × 14 ins.), 130 of which are reproduced in Collotype from photographs specially taken, and 40 from measured drawings by various accomplished draughtsmen. With 153 further illustrations of plans, details, &c., in the letterpress.

"One of the most remarkable and fascinating works in architectural illustration which has appeared in our time."—The Builder. "A very sumptuous and beautiful publication."—The Architectural Review.

"Every admirer of the Renaissance in this country should possess a copy of this work."-The Building News.

2 vols., large folio, half morocco, gilt. £,8 8s. net.

ARCHITECTURE OF THE RENAISSANCE IN ENGLAND. Illustrated by a Series of Views and Details from Buildings erected between the years 1560 and 1635, with Historical and Critical Text. By J. ALFRED GOTCH, F.S.A., F.R.I.B.A. Containing 145 folio Plates (size 19 ins. × 14 ins.), 118 being reproduced from Photographs taken expressly for the work and 27 from measured drawings, with 180 further Illustrations of plans, details, &c., in the Text.

"The volumes are very beautiful in themselves, and a striking proof of the almost unknown wealth of domestic architecture of ancient date in which England stands alone."—*The Times.*

Large 8vo, cloth, gilt. £, 1 15. net.

EARLY RENAISSANCE ARCHITECTURE IN ENGLAND. An Historical and Descriptive Account of the Tudor, Elizabethan and Jacobean Periods, 1500-1625. By J. ALFRED GOTCH, F.S.A. With 87 Collotype and other Plates and 230 Illustrations in the Text, from Drawings by various accomplished Draughtsmen, and from photographs specially taken.

"A more delightful book for the architect it would be hard to find. It is quite a storehouse of references and illustrations, and should be quite indispensable to the architect's library."-The British Architect.

Large folio, cloth, gilt. £1 10s. net.

SOME ARCHITECTURAL WORKS OF INIGO JONES. Illustrated by a Series of Measured Drawings of the Chief Buildings designed by him, together with Descriptive and Biographical Notes, and a complete List of his Authentic Works. By H. INIGO TRIGGS and HENRY TANNER, AA.R.I.B.A. Containing 40 Plates and other Illustrations in the Text.

"The plates are quite perfect as specimens of draughtsmanship, and possess a crispness and freedom of handling which differentiate them from ordinary measured drawings."—A. A. Notes. "The authors have illustrated all that they have found good reason to regard as Jones's work, and their capitally produced volume forms a worthy addition to the history of the Later . Renaissance in England."—The Building News.

Thick demy 8vo, cloth, gilt. £1 15. net.

A HISTORY OF ARCHITECTURE for the Student, Craftsman, and Amateur. Being a Comparative View of all the Styles of Architecture from the earliest period. By Professor BANISTER FLETCHER, F.R.I.B.A., and BANISTER F. FLETCHER, F.R.I.B.A. Fifth Edition, revised and greatly enlarged. With about 2,000 Illustrations, reproduced from Photographs of Buildings of all Ages, and from specially prepared Drawings of Constructive and Ornamental Detail.

"Par excellence The Student's Manual of the History of Architecture."-The Architect.

'A complete, trustworthy, and extremely attractive manual."-The Builder.

"Immeasurably superior to the original edition. . . ."-The Architectural Review.

Large 8vo, cloth, gilt. 12s. 6d. net.

ARCHITECTURE, EAST AND WEST. A Collection of Essays written at various times during the last sixteen years. By R. PHENÉ SPIERS, F.S.A., F.R.I.B.A. Now first brought together and issued, with further illustrations, as part of a testimonial to the Author. With 40 full-page and other Illustrations, reproduced from the Author's drawings and from photographs.

"The essays on some phases of the Architecture of the past here gathered together have been arranged by Mr. Spiers, in answer to a request that he would allow them to be reprinted. It was feit that, scattered as they were, these valuable contributions to the history of the Building Art were not readily accessible, and did not take the place they should do amongst works of reference."—W. R. L.

Large 8vo, cloth. 7s. 6d. net.

HOW TO JUDGE ARCHITECTURE. A Popular Guide to the Appreciation of Buildings. By RUSSELL STURGIS, M.A. With 84 full-page Illustrations, reproduced in half-tone, from photographs of some of the chief buildings of the world.

A study of this book will enable the reader to acquire such an independent knowledge of the essential characteristics of good buildings that he will always enjoy the sight, the memory, or the study of a noble structure without undue anxiety as to whether he is right or wrong in his appreciation.

Large 8vo, cloth. 7s. 6d. net.

THE APPRECIATION OF SCULPTURE. A Popular Handbook for Students and Amateurs. By RUSSELL STURGIS, M.A. With 64 full-page Illustrations, reproduced in half-tone, from photographs of some of the most notable examples of the sculptor's art.

This volume treats of sculpture, both architectural and monumental, dwelling upon its history, the characteristics of the principal schools, and the criticism of standard works, an appreciation of which will enable the reader to understand this noble art.

> B. T. BATSFORD, PUBLISHER, 94, High Holborn, London.

2 vols., royal 4to, half bound. £2 2s. net. (Published at £5 5s.) ANCIENT DOMESTIC ARCHITECTURE IN GREAT BRITAIN. By F. T. DOLLMAN, Architect. Containing 161 beautiful Lithographic Plates, illustrating by means of careful measured drawings and sketches the principal examples of Mediæval Domestic Architecture in England, with Analytical and Descriptive Text.

"Mr. Dollman's is the best illustrated and most generally useful book on the *civil* architecture of the Middle Ages. The buildings here drawn and described comprise not only dwelling-houses of varying degrees of importance-from the mansion of a lord-of-the-manor or merchant-prince to the cottage of a small tradesman in a country town-but also palaces, colleges, halls, schools, hospitals, and almshouses."-*Arthur S. Flower*, M.A., F.S.A., A.R.I.B.A.

2 vols., royal 4to, cloth, gilt. £2 2s. net. (Published at £5 5s.) DETAILS OF GOTHIC ARCHITECTURE, measured and drawn from Existing Examples of the XIIth, XIIIth, XIVth, and XVth Centuries, by J. K. COLLING, Architect. Containing 190 Lithographed Plates, chiefly of measured drawings.

"Mr. Colling's beautiful and accurate records of a great architectural epoch and of the indigenous art of this country have an inherent value and interest which can never entirely disappear. The illustrations offer invaluable assistance towards understanding and comparing the various phases of Gothic design, from the general lines of composition down to the most minute details of construction and of ornamentation."—Arthur S. Flower, Esq., M.A., F.S.A.

Royal 4to, cloth, gilt. 15s. net. (Published at £2 2s.) MEDIÆVAL FOLIAGE AND COLOURED DECORATION IN ENGLAND. BY JAS. K. COLLING. A series of Examples taken from Buildings of the Twelfth to the Fifteenth Century. Containing 76 Lithographic Plates, representing 600 examples.

A book of exceptional and very nearly unique interest. Apart from Pugin's "Gothic Ornaments," it is the only collection that exists of welldrawn specimens of old English carved work, both in *stone and wood, and* ranging over the whole of the Middle Ages.

Large 4to, art canvas, gilt. £ 1 5s. net.

THE ART AND CRAFT OF GARDEN MAKING. By THOMAS H. MAWSON, Garden Architect. Second Edition, revised and much enlarged. Containing upwards of 200 Illustrations (50 of which are full-page) of perspective views, plans, and details of gardens, ranging in size from a tiny cottage garden to gardens of twelve acres in extent.

Folio, half morocco, gilt. \pounds , 4 4s. net.

FORMAL GARDENS IN ENGLAND AND SCOTLAND. A Series of Views, Plans and Details of the finest Old Gardens still existing. With an Introduction and Descriptive Accounts. By H. INIGO TRIGGS, A.R.I.B.A. Containing 125 fine Plates, 72 from the Author's Drawings, and 53 from Photographs specially taken.

"That the book will make a charming addition to the libraries of artistic-minded people there can be no doubt whatever, and to the lover of gardens, from an architect's point of view particularly, we can hardly imagine a more welcome or elegant publication."—*The Building News.* Crown 4to, handsomely bound in art canvas, gilt. Price 215. each, net.

- OLD ENGLISH COTTAGES AND FARM-HOUSES. A Series of Volumes designed to illustrate the most typical and beautiful remains of minor Domestic Architecture in England. Each volume contains 100 Photographic Plates, artistically printed in Collotype, accompanied by Descriptive Notes and Sketches.
- (1) KENT AND SUSSEX. Photographed by W. GALSWORTHY DAVIE and described by E. GUY DAWBER. The rural buildings of Kent and Sussex are typical of native homely English work, and amongst them may be found nearly every style of architecture.

"Every cottage illustrated has interest through its picturesqueness, and the variety of them is remarkable." — *The Architect.* "All lovers of our domestic architecture should buy this book." — *The Antiquary.*

(2) SHROPSHIRE, HEREFORDSHIRE, AND CHESHIRE. Photographed by JAMES PARKINSON and described by E. A. OULD. This volume illustrates the half-timber buildings

characteristic of these counties.

" No districts in Great Britain are more richly endowed with specimens of genuine halftimber work than these three beautifully wooded counties, so that Mr. Parkinson has had little difficulty in providing an attractive series of photographs in his well-produced and useful volume." — The Building News.

(3) THE COTSWOLD DISTRICT, comprising parts of Gloucestershire, Oxfordshire, Northants, and Worcestershire. Photographed by W. GALSWORTHY DAVIE and described by E. GUY DAWBER. The buildings illustrated in this volume are essentially of a stone type, and present a special variety of architecture, very dissimilar to those illustrated in the two previous volumes.

"This charming volume contains one hundred photographs of the most beautiful domestic buildings in the country"—*The Daily News*.

Large 8vo, art canvas, gilt. 15s. net.

OLD ENGLISH DOORWAYS. A Series of Historical Examples from Tudor Times to the end of the XVIIIth Century. Illustrated on 70 Plates, reproduced in Collotype from Photographs specially taken by W. GALSWORTHY DAVIE. With Historical and Descriptive Notes on the subjects, including 34 Drawings and Sketches by HENRY TANNER, A.R.I.B.A., Author of "English Interior Woodwork."

"A most admirable addition to any library of architectural and artistic books. The subjects brought together in this volume comprise many of the best types of doorways to be seen in England."—*The Building News*.

Imperial 4to, cloth. 105. 6d.

ORDERS OF ARCHITECTURE - GREEK, ROMAN, and ITALIAN. A Collection of Typical Examples from Normand's "Parallels" and other Authorities, with Notes on the Origin and Development of the Classic Orders, and descriptions of the plates, by R. PHENÉ SPIERS, F.S.A., Master of the Architectural School of the Royal Academy. Fourth Edition, revised and enlarged, containing 27 full-page Plates, seven of which have been specially prepared for the work.

"A most useful work for architectural students, clearly setting forth in comparative form the various orders. Mr. Spiers gives recognised examples of the principal forms of capital and base, and of the finer and bolder profiles of entablatures, with their decorative complements. A good feature of the plates is the scale below each in English feet. Mr. Spiers's notes are also very appropriate and useful."—*The British Architect.* "An indispensable possession to all students of architecture."—*The Architect.*

Large folio, cloth. £, 1 105. net.

EXAMPLES OF GREEK AND POMPEIAN DECORATIVE WORK. Measured and drawn by J. CROMAR WATT. Containing 60 Collotype Plates (17 ins. × 13 ins.), reproduced from the original Pencil Drawings of the Author, and comprising Architectural Details, Ornament in White Marble, Painted and Modelled Terra-cotta, Mosaic Pavement, and a variety of Ornamental Bronze Work.

"The best drawn and most charming book of illustration of classic ornament which has been published."-The Builder.

Small folio, cloth, gilt. £, 1 5s. net.

THE HISTORIC STYLES OF ORNAMENT. Containing 1,500 Examples of the Ornament of all Countries and Periods, exhibited in 100 Plates, mostly printed in Gold and Colours. With Historical and Descriptive Text (containing 136 Illustrations), translated from the German of H. DOLMETSCH.

A well-selected "Grammar of Ornament," which gives particular attention to the Art of the Renaissance.

Royal 8vo, cloth, gilt. 5s. net.

A MANUAL OF HISTORIC ORNAMENT. Treating upon the Evolution, Tradition, and Development of Architecture and other Applied Arts. Prepared for the use of Students and Craftsmen. By RICHARD GLAZIER, A.R.I.B.A., Headmaster of the Manchester School of Art. Containing 500 Illustrations.

"Not since the publication of Owen Jones' celebrated 'Grammar of Ornament' have we seen any book, brought out on popular lines, that could compare with Mr. Glazier's 'Manual,' In many ways it is the better book of the two. . It simply abounds with beautiful, delicately-drawn illustrations, and forms a perfect treasury of designs."—*The Bookseller*.

"It would be difficult, if not wellnigh impossible, to find a more useful and comprehensive book than this, which contains examples of all the leading groups of ornamental design, and many more minor ones, but invariably interesting and valuable."—*The Athenaeum*.

Thick demy 8vo, cloth, gilt. 12s. 6d.

A HANDBOOK OF ORNAMENT. With 3,000 Illustrations of the Elements and the Application of Decoration to Objects. By F. S. MEYER, Professor at the School of Applied Art, Karlsruhe. 3rd English Edition, revised by HUGH STANNUS, F.R.I.B.A.

"A LIBRARY, A MUSEUM, AN ENCYCLOPÆDIA, AND AN ART SCHOOL IN ONE. TO RIVAL IT AS A BOOK OF REFERENCE ONE MUST FILL A BOOKCASE."-The Studio.

In stout wrapper-envelope. 2s. 6d. net.

AN ALPHABET OF ROMAN CAPITALS, together with three sets of lower-case letters, selected and enlarged from the finest examples and periods. By G. WOOLLISCROFT RHEAD, R.E., Hon. A.R.C.A., Lond. Each letter 7 ins. square, with descriptive text.

Professor W. R. Lethaby writes :- "I am very glad that your specimen Alphabets have been published. Some definitive examples to which one could point have been badly wanted. I hope every Art School in the country will soon be provided with a copy, and in that case I do not doubt we shall shortly see a much-needed improvement in this simple matter of lettering."

Crown 8vo, cloth. 3s. 6d. net. ALPHABETS, OLD AND NEW. Containing 150 complete Alphabets, 30 Series of Numerals, Numerous Facsimiles of Ancient Dates, &c. Selected and arranged by LEWIS F. DAV. Preceded by a short account of the Development of the Alphabet. Second Edition, revised and Enlarged, with many further Examples. The most handy, useful, and comprehensive work on the subject.

The subjects new to this Edition include Modern Alphabets, designed by R. Anning Bell, Selwyn Image, A. M. Mucha, M. P. Verneuil, E. Grasset, J. Walter West, and others. The work also includes a series of Old and New Lettering specially selected or photographed, as showing characteristic design in different materials.

"Everyone who employs practical lettering will be grateful for 'Alphabets, Old and New. Mr. Day has written a scholarly and pithy introduction, and contributes some beautiful alphabets of his own design."—*The Art Journal*.

Crown 8vo, cloth. 5s. net.

LETTERING IN ORNAMENT. An Enquiry into the Decorative Use of Lettering, Past, Present, and Possible. By LEWIS F.

With 200 Illustrations from Photographs and Drawings. DAY.

"The book itself is an admirable one, and the author's clearness of thought and expression makes it most readable and instructive. . . The illustrations range over a wide field and are invaluable, as they show at once what has been done by the artists of many nations." -TheBuilder's Yournal.

Crown 8vo, cloth. 5s. net.

ART IN NEEDLEWORK : A BOOK ABOUT EMBROIDERY. By LEWIS F. DAY and MARY BUCKLE. Second Edition, revised, containing 80 full-page Plates, reproduced from photographs, and 45 Illustrations in the text.

An invaluable Review of the Art and Practice of Embroidery.

Demy 8vo, art linen, gilt. 6s. net.

THE PRINCIPLES OF DESIGN. A Textbook especially designed to meet the requirements of the Board of Education Examination Syllabus on "Principles of Ornament." By G. WOOLLISCROFT RHEAD, HON.A.R.C.A. With 16 photographic plates and over 400 other Illustrations, chiefly line drawings by the Author.

MR. LEWIS F. DAY'S HANDBOOKS of ORNAMENTAL DESIGN.

Demy 8vo, cloth, gilt. 7s. 6d. net.

PATTERN DESIGN. A Book for Students, treating in a practical way of the Anatomy, Planning, and Evolution of Repeated Ornament. Containing 300 pages of text, with upwards of 300 Illustrations, reproduced from drawings and from photographs. "Every line and every illustration in this book should be studied carefully and continually by everyone having any aspiration toward designing."—*The Decorator*.

Demy 8vo, cloth, gilt. 8s. 6d. net.

ORNAMENT AND ITS APPLICATION. A sequel to "Pattern Design," and an Introduction to the Study of Design in relation to Material, Tools, and ways of Workmanship. Containing 320 pages, with 300 Illustrations of Decorative Objects and Ornament, reproduced from Photographs and Drawings.

Mr. Walter Crane, writing in the "Manchester Guardian," says: "... The work can be confidently commended as a most workmanlike and accomplished treatise not only to all students of design, but to artists and craftsmen generally. The illustrations are extremely rich and varied."

Thick crown 8vo, cloth, gilt. 125. 6d.

NATURE IN ORNAMENT. An Enquiry into the Natural Element in Ornamental Design, and a Survey of the Ornamental Treatment of Natural Forms. With 450 Illustrations. 3rd Edition, revised and enlarged.

Crown 8vo, art linen. 3s. 6d.

PRINCIPLES OF EVERY-DAY SOME ART. Second Edition, revised, with numerous Illustrations.

"If anybody wants a sensible book on Art as applied to everyday ornament, let him buy Mr. Day's nicely-printed little volume. Easy to follow, well arranged and extremely concise. Mr. Day knows what to say and how to say it."—*Athenæum*.

In ornamental paper wrapper. 1s. net.

MOOT POINTS. Friendly Disputes on Art and Industry between LEWIS F. DAY and WALTER CRANE. With amusing Caricatures by WALTER CRANE.

Medium 8vo, cloth, gilt. £1 15. net.

WINDOWS: A BOOK ABOUT STAINED AND PAINTED GLASS. By LEWIS F. DAY. Second Edition, revised, containing 50 full-page Plates, and upwards of 200 other Illustrations. "Contains a more complete account-technical and historical-of stained and painted glass than has previously appeared in this country."—*The Times*.

Large Svo. cloth. 55. net.

A HANDBOOK OF PLANT FORM FOR STUDENTS OF DESIGN. By ERNEST E. CLARK, Art Master, Derby Technical College. Containing 100 plates (size $10\frac{1}{2}$ ins. by $7\frac{1}{2}$ ins.), illustrating 61 varieties of Plants, comprising 800 illustrations. With an Introductory Chapter on the Elementary Principles of Design, Notes on the Plants, and a Glossary of Botanical Terms.

"Such a book has long been needed, and the appearance of this handsome volume at such a moderate price will be hailed with satisfaction by students of design everywhere."—Arts and Crafts.

"A twentieth-century Herbal."-The Art Journal.

STUDIES IN PLANT FORM FOR THE USE OF STUDENTS, DESIGNERS, AND CRAFTSMEN. By G. WOOLLISCROFT RHEAD, R.E., Hon. A.R.C.A. Containing 25 photo-lithographic plates, reproduced in black-and-white from the author's drawings, illustrating upwards of sixty varieties of Plants, together with over eighty illustrations of Detail. Folio (size $17\frac{1}{2}$ ins. by 13 ins.)

in cloth portfolio, 20s. net.

Mr. Walter Crane, writing to the author, says :--" I think your 'Studies in Plant Form are well selected, and powerfully drawn, and give the characteristics of growth and structure very definitely, in a way likely to be useful to students and designers."

"Drawings more trustworthy have not been published in our day, nor yet studies upon which designers could so surely rely for information."—*The Art Journal.*

Imperial 4to, handsomely bound in cloth gilt. f_{1} 5s. net.

DECORATIVE FLOWER STUDIES for the use of Artists, Designers, Students and others. A series of 40 Coloured Plates, printed by hand by a stencil process in facsimile of the original drawings, accompanied by 350 Studies of Detail showing the Development of the Plant in successive stages. With Descriptive Notes. By J. FOORD.

A truty valuable and beautiful book. . . . The coloured plates are nearly all good they have a certain spaciousness of treatment that is full of delicacy and freedom; and we have o doubt at all that the book, considered as a whole, is a real gain to all who take delight in the decorative representation of flowers."—*The Studio*. "The author is duly recerify of the advice state and the state of the state o

"The author is duly regardful of the designer's wants, and supplements the coloured page by outline drawings of details likely to be of use to him."—*The Art Journal.*

Crown 8vo, cloth. 3s. 6d. net.

DECORATIVE BRUSHWORK AND ELEMENTARY DE-SIGN. A Manual for the Use of Teachers and Students. By HENRY CADNESS, Second Master of the Municipal School of Art, Manchester. Second Edition, revised and enlarged, with upwards of 450 Examples of Design.

SYNOPSIS OF CHAPTERS:-Materials.-Preparatory Work.-Methods of Expression.-Elementary Forms of Ornament.-Natural Forms.-Influences in Styles.-Application of Study.

"In fact, the very grammar and technique of design is cemented within the compass of this volume, which is likely to prove a powerful aid to those who propose to devote themselves to designing, an occupation in which there is a wide and ample field."—*The Queen.*

B. T. BATSFORD. PUBLISHER, 94, High Holborn, London.

* *

Folio, buckram, gilt. £5 5s. net.

OLD SILVERWORK, CHIEFLY ENGLISH, FROM THE XVth TO THE XVIIIth CENTURIES. A series of choice examples selected from the unique loan collection exhibited at St. James's Court, London, in aid of the funds of the Children's Hospital, supplemented by some further fine specimens from the collections of the Dukes of Devonshire and Rutland. Edited, with Historical and Descriptive Notes, by J. STARKIE GARDNER, F.S.A. Containing 121 beautiful collotype plates reproduced in the most effective manner.

The edition of this work is limited to 500 copies, of which upwards of 400 are already disposed of.

Folio, cloth, gilt. £1 16s. net.

ENGLISH INTERIOR WOODWORK of the XVI., XVII., and XVIII. Centuries. A series of 50 Plates of Drawings to scale and Sketches, chiefly of domestic work, illustrating a fine series of examples of Chimney Pieces, Panelling, Sides of Rooms, Staircases, Doors, Screens, &c., &c., with full practical details and descriptive text. By HENRY TANNER, A.R.I.B.A., Joint Author of "Some Architectural Works of Inigo Jones."

Large 8vo, cloth, gilt. 125. 6d. net.

THE DECORATION OF HOUSES. A Study of House Decoration during the Renaissance Period, with suggestions for the decorative treatment, furnishing, and arrangement of modern houses. By EDITH WHARTON and OGDEN CODMAN, Architect. With 56 full-page Photographic Plates of views of Rooms, Doors, Ceilings, Fireplaces, various pieces of Furniture, &c.

"The book is one which should be in the library of every man and woman of means, for its advice is characterised by so much common sense as well as by the best of taste."—*The Queen.*

Large folio, handsomely bound in old style. £1 105. net.

THE DECORATIVE WORK OF ROBERT AND JAMES ADAM. Being a Reproduction of all the Plates illustrating DECORATION and FURNITURE from their "WORKS IN ARCHITEC-TURE," published 1778—1812. Containing 30 large folio Plates (size, 19 inches by 14 inches) giving about 100 examples of Rooms, Ceilings, Chimney-pieces, Tables, Chairs, Vases, Lamps, Mirrors, Pier-glasses, Clocks, &c., &c., by these famous Eighteenth-century Designers.

This volume contains every plate of decorative value from the complete work, which now fetches \pounds 70, and therefore forms a complete key to the graceful style for which the Brothers Adam are so universally renowned.

Medium 8vo, cloth, gilt. 15s. net.

OLD CLOCKS AND WATCHES AND THEIR MAKERS. Being an Historical and Descriptive Account of the different Styles of Clocks and Watches of the Past in England and Abroad, to which is added a List of 10,000 Makers. By F. J. BRITTEN. Second edition, much enlarged, with 700 illustrations, mostly reproduced from photographs. 740 pages.

"It is a book which may be augmented in the future, but will scarcely be replaced, and which holds, in its way, a unique position in literature. . . To the collector and amateur it is indispensable."—Notes and Queries.

Small folio, cloth, gilt, old style. £,2 10s. net.

HEPPLEWHITE'S CABINET - MAKER AND UPHOL-STERER'S GUIDE; or, Repository of Designs for every article of Household Furniture in the newest and most approved taste. A complete facsimile reproduction of this rare work (published in 1794), containing nearly 300 charming Designs on 128 Plates.

Original copies when met with fetch from £17 to £18

"Hepplewhite's designs are characterised by admirable taste and perfect workmanship. . . . They are kept clear of the pitfalls which proved so fatal to the reputation of Chippendale, and not a few of them attain to a standard of refinement beyond which it seems hardly possible to go."—*The Calimet Maker.*

Folio, half-cloth, £3 15s. net, or bound in half-calf, £4 4s. net.

CHIPPENDALE'S THE GENTLEMAN AND CABINET MAKER'S DIRECTOR. A complete facsimile of the 3rd and best Edition of this rare and much esteemed work. Containing 200 Plates of Designs of Chairs, Sofas, Beds and Couches, Tables, Library Book-cases, Clock-cases, Stove Grates, Fire Screens, Pier Glasses, &c.

The third edition of Chippendale's work, originally published in 1762, contains forty more plates than either of the two previous editions.

Demy 4to, art vinen, gilt. £1 5s. net.

COLONIAL FURNITURE IN AMERICA. BY LUKE VINCENT LOCKWOOD. An Historical and Descriptive Handbook of the Old English and Dutch Furniture, chiefly of the 17th and 18th Centuries, introduced into America by the Colonists. With 300 Illustrations of Chests, Couches, Sofas, Tables. Chairs, Settees, Cupboards, Sideboards, Mirrors, Chests of Drawers, Bedsteads, Desks, &c.

An authoritative and richly illustrated hand-book, forming a trustworthy guide to the determination of style, date, and authenticity of specimens of furniture of this period.

Imperial 4to, in cloth portfolio, gilt. f, 1 8s.

DETAILS OF GOTHIC WOOD CARVING. Being a series of Drawings from original work of the XIVth and XVth Centuries. By FRANKLYN A. CRALLAN. Containing 34 Photolithographic Plates, two of which are double, illustrating some of the finest specimens of Gothic Wood Carving extant, With sections where necessary, and descriptive text.

"This admirable work is one of great interest and value. . . . Every variety of Gothic detail is here illustrated. Hitherto no full-sized details have been published, so that the present work will be invaluable to the wood carver, as the drawings possess all the strength and vigour of the original work.

FRENCH WOOD CARVINGS FROM THE NATIONAL MUSEUMS. A series of Examples printed in Collotype from Photographs specially taken from the Carvings direct. Edited by ELEANOR ROWE. Part I., Late 15th and Early 16th Century Examples; Part II., 16th Century Work; Part III., 17th and 18th Centuries. The 3 Series complete, each containing 18 large folio plates, with Descriptive Letterpress, folio, in portfolios, price 12s. each net; or handsomely half-bound in one volume, f_{2} 5s. net.

This invaluable collection . . . should be possessed by every carver, both professional and amateur. . . The plates are on so large a scale, and are so clearly produced, that they become equivalent, for the purposes of study, to the original works."—The Architect.

Demy 4to, half-bound, 10s. 6d.

ECCLESIASTICAL WOODWORK. A Series of Examples of Stalls, Screens, Book-Boards, Roofs, Pulpits, &c., illustrated on 21 beautifully engraved Copper Plates, from drawings by T. TALBOT BURY, Architect.

Folio, cloth, gilt. £,2 2s. net.

OLD OAK ENGLISH FURNITURE. A Series of Measured Drawings, with some examples of Architectural Woodwork, Plasterwork, Metalwork, Glazing, &c. By J. W. HURRELL, Containing 110 full-page Plates reproduced by Architect. photo-lithography.

For ingenuity and quaintness of design, richness of moulding, and profusion of ornament, the old oak furniture of England is probably unsurpassed by the contemporaneous work of any other country.

Crown 8vo, paper covers. 15.

WOOD CARVING FOR BEGINNERS. By HINTS ON ELEANOR ROWE. Fourth Edition, revised and enlarged, with numerous illustrations.

"The most useful and practical small book on wood carving we know of."—*The Builder*. "Full of sound directions and good suggestions."—*The Magazine of Art.*

Crown 8vo, paper covers. 15.

HINTS ON CHIP CARVING. (Class Teaching and other Northern Styles.) By ELEANOR ROWE. With 40 Illustrations. 'A capital manual of instruction in a craft that ought to be most popular."

Crown 8vo, paper covers. 1s. net.

THE ART OF BRASS REPOUSSÉ. A Manual of Practical Instruction for the Use of Amateurs. By GAWTHORP, Art Metal Worker to His Majesty. With a Prefatory Note by the Rt. Hon. the Countess AMHERST. Third edition, revised and enlarged, with 43 illustrations.

Imperial folio, buckram, gilt. £3 3s. net.

ENGLISH AND SCOTTISH WROUGHT IRONWORK. A Series of Examples of English Ironwork of the best period, with which is included most that now exists in Scotland. By BAILEY SCOTT MURPHY, Architect. Containing 80 fine Plates (size 21¹/₂ ins. by 14¹/₂ ins.), 68 reproduced from measured drawings, and 12 from photographs specially taken. With Descriptive Text.

"This volume stands alone as a unique collection of the best work in wrought iron done in Great Britain. It is replete with exact delineations and precise dimensions technically and thoroughly realised for the student and practical craftsman."—*The Building News*.

Demy 8vo, cloth. 6s.

A HANDBOOK OF ART SMITHING. By F. S. MEYER, Author of "A Handbook of Ornament." With an Introduction by J. STARKIE GARDNER. Containing 214 Illustrations.

"A most excellent manual, crowded with examples of ancient work. The Introduction is by Mr. Starkie Gardner, and students know what that name implies."-*The Studio*.

Large 8vo, art linen. 7s. 6d. net.

THE APPRECIATION OF PICTURES. An Historical and Critical Handbook of Ancient and Modern Art for the Artist, Student, and Connoisseur. By RUSSELL STURGIS, M.A. With 73 full-page Photographs after Famous Pictures.

"This book is so well founded in the study of the masters, old and new; so faithful to the true idea of the graphic arts, and so well written, that it could be read with interest and sympathy by anybody who loves paint."—*The Scotsman*.

Large 8vo, avt linen. 7s. 6d. net.

PICTORIAL COMPOSITION AND THE CRITICAL JUDGMENT OF PICTURES. A Handbook for Students and lovers of Art. By H. R. POORE. With about 150 Illustrations, chiefly reproduced from photographs, of celebrated pictures, including numerous elucidatory diagrams.

One of the best works of its kind. Of particular value to the artist, to the art student, and to all interested in understanding the merits of a picture. The book is, in fact, a liberal education in art.

B. T. BATSFORD, PUBLISHER, 94, High Holborn, London.

Saturday Review.

Large Imperial 8vo, cloth. 7s. 6d. net.

 ARCHITECTURĂL SKETCHING AND DRAWING IN PER-SPECTIVE. A Progressive Series of 36 Plates, illustrating the Drawing of Architectural Details, and Sketching to Scale; with Chapters on Various Perspective Methods. Figures, Foliage, &c. Based to some extent on R.'s Method of Perspective. By H. W. ROBERTS, Author of "R.'s Method." [In the Press.

Demy 8vo, cloth. 25. 6d. net.

THE PRINCIPLES OF ARCHITECTURAL PERSPECTIVE. Prepared for the Use of Students, &c., with chapters on Isometric Drawing and the Preparation of Finished Perspectives. By G. A. T. MIDDLETON, A.R.I.B.A. Illustrated with 51 Diagrams and 8 finished Drawings by various Architects.

Demy 4to, cloth, gilt. 8s. 6d. net.

ARCHITECTURAL DRAWING. A Text-book with special reference to artistic design. By R. PHENÉ SPIERS, F.S.A., Author of "The Orders of Architecture," &c. New edition, with 28 full-page and folding Plates.

Crown 8vo, art linen. 5s. 6d. net.

PEN DRAWING. AN ILLUSTRATED TREATISE. By CHARLES D. MAGINNIS, Instructor in Pen Drawing, Boston Architectural Club. With a special chapter on Architectural Drawing. Illustrated by 72 Reproductions of the Work of the principal Black-and-White Artists, Practical Diagrams, &c.

Large Imperial 8vo, cloth, gilt. 10s. net.

THE PRINCIPLES OF ARCHITECTURAL COMPOSITION. An attempt to Order and Phrase Ideas which have hitherto been only felt by the Instinctive Taste of Designers. By J. B. ROBINSON, Architect. With 300 Illustrations of Ancient and Modern Buildings in elucidation of the points dealt with.

Large Svo, cloth, gilt. 8s. 6d. net.

THE PRINCIPLES OF PLANNING. By PERCY L. MARKS, Architect. With Notes on the Essential Features and Requirements of Different Classes of Buildings. Illustrated by 150 Plans, mainly of important modern Buildings. Second Edition, revised and greatly enlarged.

"It will be found a suggestive and useful book on the subject."-The British Architect,

Square 8vo, cloth, gilt. 6s. net.

- FARM BUILDINGS: THEIR CONSTRUCTION AND ARRANGEMENT. By A. DUDLEY CLARKE, F.S.I. 3rd Edition, revised and much enlarged. With chapters on Cottages, Homesteads, Roofs, Sanitary Matters, &c. Containing 52 Plates, and many other Illustrations.
 - Adopted as the text-book by the Surveyors' Institution, Mr. Clarke's handbook is the best of its kind."—*The Surveyor*.

3 vols., large folio, strongly bound in buckram, gilt. £ 15 15s. net.

MODERN OPERA-HOUSES AND THEATRES. Examples of Playhouses recently erected in Europe. With Descriptive Accounts, a Treatise on Theatre Planning and Construction, and Supplements on Stage Machinery, Theatre Fires, and Protective Legislation. By EDWIN O. SACHS, Architect. Complete in Three Grand Folio Volumes, containing over 200 large Folio Plates, reproduced in the best manner by Photo-lithography, and some 600 Diagrams, interspersed in the 350 pages of Text.

"Mr. Sachs has given us a work which most usefully and adequately fills a gap in architectural literature."—*The British Architect.* "The undertaking surpasses anything of the kind ever attempted in this country."—*The*

"The undertaking surpasses anything of the kind ever attempted in this country."-The Building News.

Crown 4to, cloth, gilt. 5s. net.

THE ST. LOUIS EXHIBITION, 1904. An Illustrated Account of the Exhibition and its Buildings. By H. PHILLIPS FLETCHER, F.R.I.B.A. Containing 43 full-page and smaller Illustrations of plans, sections, elevations, and details of construction of the various buildings.

Square 8vo, cloth, gilt. 7s. 6d.

STABLE BUILDING AND STABLE FITTING. A Treatise on the Planning, Arrangement, Construction, and Drainage of Stables. By BYNG GIRAUD, Architect. With 56 Plates and numerous Illustrations.

2 vols., crown 8vo, cloth, gilt. 7s. 6d.

CONCRETE: ITS USE IN BUILDING. By THOS. POTTER. Second Edition, greatly enlarged, containing 500 pages of Text, and 100 Illustrations.

This work deals with walls, paving, roofs, floors, and other details of Concrete Construction, and fully describes the various methods for rendering buildings fire-proof.

2 vols., large 8vo, cloth, gilt. £1 5s. net.

FACTS ON FIRE PREVENTION. An enquiry into the Fire-Resisting Qualities of various Materials and Systems of Construction, conducted by the British Fire Prevention Committee. Edited by EDWIN O. SACHS, Architect, Author of "Modern Theatres." Containing Accounts of Tests of Floors, Ceilings, Partitions, Doors, Curtains, &c., with 100 full-page Plates, and many other Illustrations from Photographs and Drawings; also Plans of the Testing Chambers, Diagrams of Temperature, &c.

An important contribution to the science of fire-protective construction.

 B. T. BATSFORD, PUBLISHER,
 94, High Holborn, London.

Large Imperial 8vo, cloth, gilt. £,1 5s. net.

MODERN SCHOOL BUILDINGS, ELEMENTARY AND SECONDARY. A Treatise on the Planning, Arrangement, and Fitting of Day and Boarding Schools. With special chapters on the Treatment of Class-rooms, Lighting, Warming, Ventilation, and Sanitation. By FELIX CLAY, B.A., Architect. Second Edition, thoroughly revised and much enlarged, consisting of 560 pp., with 450 illustrations of plans, perspective views, constructive details, and fittings.

"Mr. Clay has produced a work of real and lasting value. It reflects great credit on his industry, ability, and judgment."—*The Builder*. "It gives the practising architect as well as the student that complete and full information upon most subjects connected with the planning and erecting of schools that he really needs. The volume is likely to be the standard work upon the subject for many a year to come."—*London Architectural Association Notes*. "An invaluable work of reference. Every type of secondary and elementary school is fully illustrated and adequately described."—*The School World*.

Imperial 8vo, cloth, gilt, 215. net.

RESIDENTIAL FLATS OF ALL CLASSES, INCLUDING ARTISANS' DWELLINGS. A Practical Treatise on their Planning and Arrangement, together with chapters on their History, Financial Matters, &c. By Sydney Perks, F.R.I.B.A., P.A.S.I. Containing 300 pages, with 226 Illustrations, including plans and views of important Examples by leading architects in England, the Continent, and America.

"The great monograph of the year (too5) was Mr. Perks' book on the planning of flats—a standard work of considerable importance."—*The Building News.* "Altogether it is a book which is not only unique in architectural literature, but is one o. which every page has a practical tendency. It can therefore be a source of profit to architects and to builders, as well as to speculators."—*The Architect.* "Each chapter is replete with accurate and careful information, and the several chapters successfully cover the whole subject. For the tenant, the owner, the builder, the book has a very special interest and value, and, since flat-life has evidently come to stay, Mr. Perks has done well to provide us with so complete, careful, and authoritative an account of its many done well to provide us with so complete, careful, and authoritative an account of its many sides."—The Standard.

Demy 8vo, cloth, gilt. 7s. 6d. net.

THE PLANNING AND FITTING-UP OF CHEMICAL AND PHYSICAL LABORATORIES. With Notes on the Ventilation, Warming, and Lighting of Schools. By T. H. RUSSELL, M.A. Illustrated by 36 Plans of Laboratories, Working Drawings, Sketches, and Diagrams of Fittings and other Details.

Imperial 4to, cloth, gilt. £1 15. net.

A BOOK OF COUNTRY HOUSES. Containing 62 Plates reproduced from Photographs and Drawings of Perspective Views and Plans of a variety of executed examples, ranging in size from a moderate-sized Suburban House to a fairly large By ERNEST NEWTON, Architect. Mansion.

The houses illustrated in this volume have been planned during the last ten years, and may be taken as representative of the English Country House of the present day. They offer much variety in their size, their sites, the character of the materials in which they are constructed, and their types of plan.

Large 8vo, art linen, gilt. Price 8s. 6d. net.

THE MODEL VILLAGE AND ITS COTTAGES: BOURN-VILLE. Illustrated by Fifty-seven Photographic and Line Plates of Plans, Views, and Details. By W. ALEXANDER HARVEY, Architect. With Notes on Economic Cottage Building, Garden Design, and various features.

Demy 4to, cloth, gilt. 10s. 6d. net.

HOMES FOR THE COUNTRY. A Collection of Designs and Examples of recently executed works. By R. A. BRIGGS, Architect, F.R.I.B.A., Soane Medallist. Containing 48 fullpage Plates of Exterior and Interior Views and Plans. With descriptive notes.

"Every example given is an illustration of very considerable skill. The plans are all excel-lent-well devised on economical yet convenient lines, well lit, comfortable, and with every little point thought out; while the elevations are pleasing without being extravagant. Such a book is admirable in its suggestiveness, and useful to all."—*The Architect's Magazine*.

Demy 4to, cloth, gilt. 12s. 6d.

BUNGALOWS AND COUNTRY RESIDENCES. A Series of

Designs and Examples of executed Works. By R. A. BRIGGS, F.R.I.B.A. 5th and enlarged Edition, containing 47 Photolithographic Plates, many of which are new to this edition. With descriptions, including the actual cost of those which have

been built, and the estimated cost of those not yet erected.

"Economy, convenience, and comfort in small country houses are important elements, and these have been studied with an artistic appreciation of effect and rural charm in Mr. Briggs' designs."—*The Building News.* "Those who desire grace and originality in their suburban dwellings might take many a valuable hint from this book."—*The Times.*

Royal 4to, cloth, gilt. 10s. 6d. net.

COTTAGE ARCHITECTURE, MODERN illustrated from Works of well-known Architects. Edited, with an Essay on Cottage Building, and descriptive notes on the subjects, by MAURICE B. ADAMS, F.R.I.B.A. Containing 50 plates of Perspective Views and Plans of the best types of country cottages.

"The cottages which Mr. Adams has selected would do credit to any estate in England."-The Architect. "An interesting record of some excellent cottage architecture of a good class."—The Builder.

Imperial 4to, cloth, gilt. £1 1s. net.

HOUSES FOR THE WORKING CLASSES.

Comprising 52 Typical and Improved Plans, with Elevations, Details, &c., and Descriptive Text, including Notes on the Treatment and Planning of Small Houses. By S. W. CRANFIELD and H. I. POTTER, AA.R.I.B.A. Second Edition, thoroughly revised, with many additional Plans.

This book deals with Cottages suitable for the Working Classes in Suburban and Rural Districts. The majority of the examples illustrated consist of two and three-storey dwellings, adapted to be built in pairs,

groups, or terraces, and vary in cost from $\pounds 160$ to $\pounds 650$. "The book meets a distinct want. The subject is not written round, but thoroughly threshed out."—*The Surveyor*.

Royal 4to, cloth, gilt. 7s. 6d. net.

MODERN HOUSING IN TOWN AND COUNTRY. Illustrated by examples of municipal and other schemes of Block Dwellings, Tenement Houses, Model Cottages and Villages, and the Garden City, together with Illustrations of the Cheap Cottages Exhibition. By JAMES CORNES. With many Plans and Views from Drawings and Photographs. Full Descriptive

Text and particulars of Cost, &c. "... The illustrations constitute the principal feature of the work. ... Mr. Cornes has compiled a book which cannot fail to prove useful, not only to the members of public bodies, but also to property-owners, architects, and builders, and the publisher has presented the work in an attractive form."—*The Builder*.

Large Imperial 8vo, cloth. 12s. 6d. net.

MODERN PRACTICAL JOINERY. A Treatise on the Practice of Joiner's Work by Hand and Machine. Containing a full Description of Hand-tools and their Uses, Workshop Practice, Fittings and Appliances, the Preparation of all kinds of House Joinery, Bank, Office, Church, Museum and Shop-fittings, Airtight Cases, and Shaped Work. With concise Treatises on Stair-building and Hand-railing, and a Glossary of Terms. By

GEORGE ELLIS. 380 pages, with 1,000 practical Illustrations. "In this excellent work the mature fruits of the first-hand practical experience of an exceptionally skiful and intelligent craftsman are given. It is a credit to the author's talent and industry, and is likely to remain an enduring monument to British craftsmanship. As a standard work it will doubless be adopted and esteemed by the architect, builder, and the aspiring work-mon "- *Ike Building Work*" man."-The Building World.

Large 8vo, cloth, gilt. 5s. net.

SCAFFOLDING: A Treatise on the Design and Erection of Scaffolds, Gantries, and Stagings, with an Account of the Appliances used in connection therewith, and a Chapter on the Legal Aspect of the Question. By A. G. H. THATCHER, With 146 Diagrams and 6 full-page plates. Surveyor.

"A really valuable little treatise."—*The Builder*. "The author has had a wide and varied experience of the subject, and his book is clearly written, and essentially practical."—*The Builder's Journal*.

Crown 8vo, cloth, gilt. 3s.

DANGEROUS STRUCTURES AND HOW TO DEAL WITH THEM. A Handbook for Practical Men. By George H. BLAGROVE, Author of "Shoring, and its Application," &c.

> Demy 4to, cloth. 18s. net.

PLASTERING-PLAIN AND DECORATIVE. A Practical Treatise on the Art and Craft of Plastering and Modelling. Including full descriptions of the various Tools, Materials, Processes, and Appliances employed, and important chapters on Concrete Work, both plain and re-inforced. By William MILLAR. With an Introduction by G. T. ROBINSON, F.S.A., treating of the History of Art, illustrated by numerous fine examples. Containing 600 pages of text, with 53 full-page Plates and 500 smaller Illustrations. Third Edition, revised and Enlarged.

Large crown 8vo, cloth, gilt. 10s. net.

BUILDING MATERIALS: THEIR NATURE, PROPERTIES, AND MANUFACTURE. A Text-book for Students. By G. A. T. MIDDLETON, Architect, A.R.I.B.A., Author of "Stresses and Thrusts," "Drainage," &c. Containing 450 pages of Text, with 200 Illustrations from specially prepared drawings, and 12 fullpage Photographic Plates.

This work contains a *résumé* of the latest and most reliable information on the subject, presented in a clear and concise way.

Crown 8vo, cloth, gilt. 3s.

BUILDING CONSTRUCTION AND DRAWING. A TEXT-BOOK ON THE PRINCIPLES AND PRACTICE OF CONSTRUCTION. By CHARLES F. MITCHELL, Lecturer on Building Construction at the Polytechnic Institute, London. FIRST STAGE OR ELE-MENTARY COURSE. 6th Edition (40th Thousand), revised and greatly enlarged. Containing 400 pages of Text, with 1,000 Illustrations, fully dimensioned.

"The book is a model of clearness and compression, well written and admirably illustrated, and ought to be in the hands of every student of building construction."—The Builder.

Crown 8vo, cloth, gilt. 5s. 6d.

BUILDING CONSTRUCTION. A TEXT-BOOK ON THE PRIN-CIPLES AND PRACTICE OF CONSTRUCTION. (ADVANCED AND HONOURS COURSES.) By CHARLES F. MITCHELL. For the use of Students preparing for the Examinations of the Science and Art Department, the Royal Institute of British Architects, the Surveyors' Institution, the City Guilds, &c., and for those engaged in building. Containing 620 pages of Text, with over 600 Illustrations, fully dimensioned. 4th Edition (19th Thousand), thoroughly revised and much enlarged.

"Mr. Mitchell's two books form unquestionably the best guide which any student can obtain at the present moment. In fact, so far as it is possible for anyone to compile a satisfactory treatise on building construction, Mr. Mitchell has performed the task as well as it can be performed."—*The Builder*.

Crown 8vo, cloth, gilt. 5s.

BRICKWORK AND MASONRY. A Practical Text-book for Students and those engaged in the Design and Execution of Structures in Brick and Stone. By CHARLES F. MITCHELL, assisted by GEORGE A. MITCHELL. Being a thoroughly revised and remodelled edition of the chapters on these subjects from the authors' "Elementary" and "Advanced Building Construction," with special additional chapters and new illustrations. 400 pp., with about 600 illustrations (fully dimensioned), including numerous full and double-page plates.

"Regarded in its entirety, this is a most valuable work. It is not a treatise, as the term is generally understood, but a compendium of useful information admirably collated and well illustrated, and as such has a distinct sphere of usefulness."—*The Builder*.

B. T. BATSFORD, PUBLISHER,

94, High Holborn, London.

BUILDING SPECIFICATIONS for the use of Architects, Surveyors, Builders, &c. Comprising the complete Specification of a large House, with Stables, Conservatory, &c.; also numerous Clauses relating to Special Classes of Buildings, and Practical Notes on all Trades and Sections. By JOHN LEANING, F.S.I., Author of "Quantity Surveying," &c. Containing 630 pages of Text, with 140 Illustrations. The most comprehensive, systematic, and practical treatise on the subject.

"A very valuable book on this subject, and one which must become a standard work in relation thereto. . . Mr. Leaning has thoroughly mastered his subject in all its intricacy of detail, and in dealing with it is clear, concise, and definite."—*The Architect*.

Large 8vo, cloth, gilt. 4s. 6d.

TREATISE ON SHORING AND UNDERPINNING, and generally dealing with dangerous Structures. By C. H. STOCK. Third Edition, revised and enlarged by F. R. FARROW, F.R.I.B.A. With 40 clear and practical Illustrations.

"Mr. Stock has supplied a manifest want in the literature of practical architecture and surveying, and there is no doubt his book will be of great practical use."—*The Builder.*

Crown 8vo, cloth, gilt. 4s. 6d. net.

STRESSES AND THRUSTS. A Text-book on their Determination in Constructional Work, with Examples of the Design of Girders and Roofs, for the use of Students. By G. A. T. MIDDLETON, A.R.I.B.A. Third Edition, thoroughly revised and much enlarged. With 170 illustrative Diagrams and Folding Plates.

"The student of building construction will find in this book all he ought to know as to the relation of stresses and thrusts to the work he may be engaged in. Foundations, chimneys, walls, roofs, steel joists, girders, stanchions, are all taken in detail, and the varying degrees of stress are calculated in a simple way, so that the merest tyro in mathematics will be able to appreciate and apply the principles laid down."—The Surveyor.

Crown 8vo, cloth, gilt. 3s. net.

THE ELEMENTARY PRINCIPLES OF GRAPHIC STATICS. Specially prepared for the Use of Students entering for the Examinations in Building Construction, Applied Mechanics, Machine Construction and Drawing, &c., of the Board of Education. By EDWARD HARDY, Teacher of Building Construction. Illustrated by 150 clear Diagrams.

Prof. Henry Adams, writing to the Author, says:--"You have treated the subject in a very clear and logical manner, and I shall certainly recommend the book to my elementary students as the best of its kind."

Small 8vo, cloth, gilt. 2s. 6d. net.

THE CONDUCT OF BUILDING WORK AND THE DUTIES OF A CLERK OF WORKS. A Handy Guide to the Superintendence of Building Operations. By J. LEANING, F.S.I. Second Edition, revised and enlarged.

"This most admirable little volume should be read by all those who have charge of building operations . . . In a concise form it deals with many of the important points arising during the erection of a building."—*The British Architect*.

Large crown 8vo, cloth, gilt. 7s. 6d. net.

HOW TO ESTIMATE : OR THE ANALYSIS OF BUILDERS' PRICES. A Complete Guide to the Practice of Estimating, and a Reference Book of the most reliable Building Prices. By JOHN T. REA, F.S.I., Surveyor, War Department. With typical examples in each trade, and a large amount of useful information for the guidance of Estimators, including thousands of prices. Second Edition, thoroughly revised and much enlarged.

"Here at last is a book that can be confidently recommended as a comprehensive, practical, trustworthy, cheap, and really modern book on estimating. The book is excellent in plan, thorough in execution, clear in exposition, and will be a boon alike to the raw student and to the experienced estimator. For the former it will be an invaluable instructor; for the latter a trustworthy remembrancer and an indispensable work of reference."—The Building Worlds.

Crown 8vo, cloth, gilt. 4s. 6d. net.

ESTIMATING. A Method of Pricing Builders' Quantities for Competitive Work, without the use of a Price Book. By GEORGE STEPHENSON. 4th Edition, the Prices carefully revised.

"Mr. Stephenson has succeeded in removing many of the difficulties in this branch of his profession, and anyone who has mastered this little book will be enabled to price a bill of quantities without recourse to his Laxton."—*The Building News.*

Crown 8vo, cloth, gilt. 3s. net.

REPAIRS: HOW TO MEASURE AND VALUE THEM. A Handbook for the use of Builders, Decorators, &c. By the Author of "Estimating." 4th Edition, revised to date.

"'Repairs' is a very serviceable handbook on the subject. The author proceeds, from the top floor downwards, to show how to value the items, by a method of framing the estimate in the measuring book. The *modus operandi* is simple and soon learnt."—*The Building News*.

Large crown 8vo, cloth, gilt. 5s. net.

GASFITTING. A Practical Handbook relating to the Distribution of Gas in Service Pipes, the Use of Coal Gas, and the best Means of Economising Gas from Main to Burner. By WALTER GRAFTON, F.C.S., Chemist at the Beckton Works of the Gas Light and Coke Co. With 143 Illustrations.

"The author is a recognised authority upon the subject of gas-lighting, and gas-fitters and others who intend to study gas-fitting in practical detail will find the book most serviceable."—*The Builder*.

Large 8vo, cloth, gilt. 4s. 6d. net.

THE DRAINAGE OF TOWN AND COUNTRY HOUSES. A Practical Account of Modern Sanitary Arrangements and Fittings. By G. A. T. MIDDLETON, A.R.I.B.A. With full particulars of the latest fittings and arrangements, and a special chapter on the Disposal of Sewage on a small scale, including an account of the Bacterial Method. Illustrated by 87 Diagrams and 6 Plates.

Thick royal 8vo, cloth, gilt. 125. 6d.

THE PLUMBER AND SANITARY HOUSES. A Practical Treatise on the Principles of Internal Plumbing Work; or the best means for effectually excluding Noxious Gases from our Houses. By S. STEVENS HELLYER. 6th Edition, revised and With 30 Plates, and 262 Woodcut Illustrations. enlarged.

"The best treatise existing on Practical Plumbing."—*The Builder*. "This work is an exhaustive treatise on the subject of House Sanitation, comprising all that relates to Drainage, Ventilation, and Water Supply within and appertaining to the house."—*The Journal of the Royal Institute of British Architects*.

Large thick 8vo, cloth, gilt. £1 125. net.

SANITARY ENGINEERING. A Compendium of the latest and most reliable information on Sanitary Science in all its branches. By Colonel E. C. S. MOORE, R.E., M.S.I. Second Edition, thoroughly revised and greatly enlarged. Containing 830 pp. of Text, with 860 Illustrations, including 92 large Folding Plates.

". A full and complete epitome of the latest practice in sanitary engineering. . . . As A BOOK OF REFERENCE IT IS SIMPLY INDISPENSABLE."—*The Public Health Engineer.* ". . We know of no single volume which contains such a mass of well-arranged information. It is encyclopzedic, and should take its place as the standard book on the wide and important subject with which it deals."—*The Surveyor.*

Large 8vo, cloth, gilt. 6s. net.

WATERWORKS DISTRIBUTION. A Practical Guide to the Laying Out of Systems of distributing Mains for the Supply of Water to Cities and Towns. By J. A. MCPHERSON, A.M.Inst. Fully illustrated by 122 Diagrams. C.E.

"The author has evidently a large practical experience of the subject on which he has written, and he has succeeded in compiling a book which is sure to take its place among the standard works on water supply."—*The Surveyor*.

Large 8vo, cloth. 3s. 6d. net.

TECHNICAL PLUMBING. A Handbook for Students and Practical Men. By S. BARLOW BENNETT, Lecturer on Sanitary Engineering to the Durham County Council. Second Edition, revised, with about 500 Illustrations.

Small pocket size, leather, 1s. 6d. net, or in celluloid case 2s. net.

CLARKE'S POCKET-BOOK OF TABLES AND MEMO-RANDA' FOR PLUMBERS, BUILDERS, SANITARY AND ELECTRICAL ENGINEERS, &c. By J. WRIGHT CLARKE, M.S.I. With a new Section of Electrical Memoranda and Formulæ. Entirely New and Revised Edition.

"It is obviously one of those things a tradesman should carry in his pocket as religiously as he does a foot rule."—*The Plumber and Decorator.* "The amount of information this excellent little work contains is marvellous."—*The* Sanitary Record.

Large 8vo, cloth, gilt. 5s. net.

PRACTICAL SCIENCE FOR PLUMBERS. By J. WRIGHT Treating of Physics, Metals, Hydraulics, Heat, CLARKE. Temperature, &c., and their application to the problems of practical work. With about 200 Illustrations.

Crown Svo, cloth, gilt. 3s. 6d. net.

PUMPS: THEIR PRINCIPLES AND CONSTRUCTION. A Series of Lectures delivered at the Regent Street Polytechnic, London. By J. WRIGHT CLARKE, Author of "Plumbing Practice." With 73 Illustrations. Second Edition, thoroughly revised, with all the Illustrations specially re-drawn.

Crown 8vo, cloth, gilt. 2s.

HYDRAULIC RAMS, THEIR PRINCIPLES AND CON-STRUCTION. By J. WRIGHT CLARKE, Author of "Pumps," "Plumbing Practice," &c. With results of Experiments carried out by the Author at the Regent Street Polytechnic and in various parts of the Country. Illustrated by 36 Diagrams.

Crown 8vo, cloth, gilt. 5s. net.

ARCHITECTURAL HYGIENE, or Sanitary Science as applied to Building. By BANISTER F. FLETCHER, F.R.I.B.A., F.S.I., and H. PHILLIPS FLETCHER, F.R.I.B.A., F.S.I. Second Edition, revised. With upwards of 300 Illustrations.

Royal 8vo, cloth, gilt. 15s. net.

CONDITIONS OF CONTRACT relating to Building Works. By FRANK W. MACEY, Architect. Revised, as to the strictly legal matter, by B. J. LEVERSON, Barrister-at-Law.

PROFESSOR BANISTER FLETCHER'S VALUABLE TEXT-BOOKS FOR ARCHITECTS AND SURVEYORS.

Arranged in Tabulated Form and fully indexed for ready reference.

Crown 8vo, cloth, gilt. 7s. 6d.

OUANTITIES. A Text-book explanatory of the Best Methods adopted in the Measurement and Valuation of Builders' Work. 7th Edition, revised throughout and much improved by H. PHILLIPS FLETCHER, F.R.I.B.A., F.S.I. With special chapters on Cubing, Priced Schedules, Grouping, the Law, &c., and a typical example of the complete Taking-off, Abstracting, and Billing in all Trades. Containing about 450 pages, with 10 folding Plates and 100 other Diagrams in the Text.

"A good treatise by a competent master of the subject."-The Building News.

[&]quot;It is no doubt the best work on the subject extant."—*The Builder*. "We compliment Mr. Phillips Fletcher on his revision, and on the accuracy of the book generally."—*The Surveyor*.

[&]quot;A safe, comprehensive, and concise text-book on an important technical subject. We imagine few surveyors' or architects' shelves will be without it."—*The British Architect.* "One of the most complete works upon the subject. Of great assistance to students."—*The*

Builder's Journal.

PROFESSOR BANISTER FLETCHER'S VALUABLE TEXT-BOOKS FOR ARCHITECTS AND SURVEYORS.

Arranged in Tabulated Form and fully indexed for ready reference.

THE NEW EDITIONS, REVISED AND BROUGHT UP TO DATE By BANISTER F. FLETCHER, F.R.I.B.A., F.S.I., and H. PHILLIPS FLETCHER, F.R.I.B.A., F.S.I., Barrister-at-Law.

Crown 8vo, uniformly bound in cloth, gilt. 6s. 6d. each.

LONDON BUILDING ACTS, 1894-1905. A Text-book on the Law relating to Building in the Metropolis. Containing the Acts in extenso, the By-laws and Regulations now in force, notes on the Acts, and reports of the principal cases. Third Edition, revised. Illustrated by 23 Coloured Plates. Including the full text of the Amendment Act of 1905, with a Note

explaining its effect on new and existing buildings. "IT IS THE LAW OF BUILDING FOR LONDON IN ONE VOLUME."- The Architect. "Illustrated by a series of invaluable coloured plates, showing clearly the meaning of the various clauses as regards construction."- The Surveyor.

DILAPIDATIONS. A Text-book on the Law and Practice. 6th Edition, thoroughly revised and enlarged, with the addition of all the most recent Acts and a large number of Legal Decisions. including a chapter on Fixtures.

"An excellent compendium on the law and practice on the subject."-The Builder.

LIGHT AND AIR. With Methods of Estimating Injuries, Reports of most recent Cases, &c. Illustrated by 27 Coloured Plates. 4th Edition, revised and enlarged, with an Appendix containing a résumé of the House of Lords' decision in the case of "Colls v. Home and Colonial Stores."

"By far the most complete and practical text-book we have seen. In it will be found the cream of all the legal definitions and decisions."—*The Building News.*

VALUATIONS AND COMPENSATIONS. A Text-book on the Practice of Valuing Property, and the Law of Compensation in relation thereto. Third Edition, revised and enlarged. With an Appendix of Forms of Precedents and an extensive series of Valuation Tables.

"Very useful to students preparing for the examination of the Surveyors' Institution."-

The Surveyor. "A complete guide to valuing land and houses for mortgage, renting, or investment, as well as for making valuations, when lands and houses are taken under compulsory powers by public bodies or companies. The tables contained in the Appendix are especially valuable, and there is an exhaustive index."—The Property Market Review.

Crown 8vo, cloth, gilt. 5s. 6d.

ARBITRATIONS. A Text-book for Arbitrators, Umpires, and all connected with Arbitrations, more especially Architects, Engineers, and Surveyors, in tabulated form, with the chief cases governing the same, and an Appendix of Forms, Statutes, Rules, &c. Third Edition, revised and largely re-written.

"Especially useful to young surveyors as a compendium of the knowledge which professional experience gives in more concrete form and with infinite variety of detail."—*The Surveyor*.

B. T. BATSFORD, Publisher, 94, High Holborn, London.

.....

i de la companya de la compa

.

.

.

•

.

a second s

and the second sec



SPECIAL 92-B 17032

THE GETTY CENTER LEDRARY

