

Wednesday, June 27, 1928

# HARD CASH

"HERE is little doubt in the mind of the educated man that something very drastic must be done, and done at once, to preserve the beauties of rural England; unfortunately, the ideas put forward are, many of them, more or less ineffectual for one reason or another. It is too often presumed that one way is to introduce legislation which shall, in some way, make it impossible to erect buildings which desecrate the countryside; it is, as often, forgotten that in default of any strict definitions (also by Act of Parliament) of the word "ugly" the course of the law will take many years to set up precedents which, at the best, can never be more than arbitrary.

The single really effective and lasting influence is the obvious one of education; and that is generally taken so much for granted that it is seldom mentioned.

In the course of the discussion arising out of Mr. Dawber's paper on "The Preservation of Rural England," which he read at Bath on Thursday, one or two interesting suggestions were made. One of these was that the R.I.B.A. and the C.P.R.E. should begin at once to institute a system of lectures in small towns and villages by local architects and others who understand the matter; slides should be shown of good and bad work. That is an idea which is very easily workable and which would involve only a trifling expenditure on however large a scale it were adopted. The difficulties which it presents are by no means insuperable, and are, at least, less formidable than those besetting most other schemes. What has to be realized in the immediate future is that by education alone can things be put right, and that any other means adopted are, in effect, merely scratching at the problem. Much care will be needed in the subject-matter of these lectures; hitherto the discussions and conclusions on the subject have been negative and amorphous; they have done little but set down a list of so many evils that the layman is naturally confused into thinking that nothing which he can do will be right. Let the public be given, plainly, a short list of general principles; let it know that a building well designed can adorn the landscape even in its newness; explain fundamentals such as the essential difference between urban and rural architecture and the aptness of local materials; in short, "get it interested," and that can be done most easily by lectures.

In the meanwhile it is perfectly obvious that education must take some considerable time to work its way, and something must be done at once. Professor Abercrombie made the suggestion that certain component parts of buildings which can be standardized should be recommended to the public; thus we should be assured, to some extent, of looking upon good windows and doors. This policy is not without its serious drawbacks, because man insists upon differing from his neighbour; but if several designs for doors and for windows were evolved upon a "unit system" it is possible that quite pleasant effects might be obtained by adhering to multiples of the same unit in each building, as was done, to some extent, in the work of the sixteenth to eighteenth centuries.

The C.P.R.E., like the R.I.B.A., pins considerable faith to its aim of trying to influence the man who has land to sell into a matter of self-denial for the public good; they hope to persuade him to introduce certain stipulations in the sale, by which the buyer shall be forbidden to erect buildings which are, to put it very broadly, out of keeping with their surroundings. Assume that this clause does actually eliminate, by its careful wording, any great chance of the perpetration of atrocities, and we immediately come up against a very serious interference which the buyer will not relish, and which will therefore tend to lower the price which he is prepared to pay; the consequent loss to the seller is not likely to influence him towards conforming with the request to stipulate any sort of effective control. The buyer also (who, for the sake of example, wishes his houses to be arranged and built in the cheapest way possible) does not believe the assurance that if he employs an architect he will save money; he is not even convinced that his own scheme is a bad one æsthetically, or that the architect will give him higher proportional returns on the additional money which he will have to spend. But if the argument of helping to defray the additional cost be advanced (even as a last result) he will be far more inclined to accept the assurances of his persuaders; he will then not only derive confidence in the sincerity of the convictions expressed to him, but will feel something of a public benefactor ! After the first experiment he will have learned that, from the purely business point of view, it is better not to "foul his own nest" by depreciating the neighbourhood which he wishes to develop.

Naturally, very considerable funds are necessary to pursue this course; but it has already been tried in the Midlands with satisfactory results, and we would suggest to the bodies concerned that they should consider very carefully the possibilities of adopting it, because there is as little doubt that it is the best way to go about it as that the money could be found if the case were put to the enthusiastic minority of the public.

# NEWS AND TOPICS

THE banquet at the Guildhall in Bath on Friday night was a fitting culmination to the wholly admirable days which had preceded it. The banqueting hall itself is a perfect place for a function of this sort; it has a richness of ornament and of form which disposes one to appreciate good things, while the music there is truly a complement to the dinner rather than that form of purgatory which one normally finds. In replying to the toast of "The City and Corporation of Bath," which Mr. Tapper proposed, the Mayor (Alderman Cedric Chivers) referred very modestly to the work of the Corporation in preserving Bath in its present state of high architectural quality. There must be a spell of some sort over the city, because there seems to be very little fixed programme of protection, and the need for it seldom arises; for some unknown reason Bath escaped the Victorian invasion to an extraordinary degree, and what buildings were put up in that period clung fairly aptly to the traditions of the district. This fortunate escape was due, perhaps, to the enormous boom in development which had marked the previous century. I have a feeling, however, that the last few years have in some ways surpassed the reputation of the Victorian era, and (to coin Professor Abercrombie's phrase) the " butchery of Bath stone " which marks some of the outer districts is wholly unworthy of the city. The cure is, of course, far to seek, but I feel sure that if this sort of thing is allowed to go on Bath will suffer considerably in its reputation.

Alderman Chivers has been for a very considerable time an invalid and, although he has occasionally spoken a few introductory words, he has at public meetings always called upon Madame Sarah Grand to speak for him. On this occasion, however, and for the first time, he spoke himself and surprised even the Mayoress, who later informed him that now that he had proved himself to be completely recovered she absolutely refused in future to act as a stop-gap. Everybody present was naturally extremely gratified to find the Mayor back in good health. Sir Fabian Ware, the head of the War Graves Commission, was to have proposed the principal toast of the evening, that of "The Royal Institute of British Architects and the Allied Associations," and it was very much regretted that he was unable to be present owing to a sudden illness. Sir Harry Hatt was called upon at the last minute to fill Sir Fabian's place, which he did with considerable aptitude. Mr. Fred E. Weatherly, K.C., was also a great success. He is, of course, one of the more skilful afterdinner speakers, and on this occasion broke into verse. I felt a certain amount of doubt myself as to whether he had not carefully prepared this in advance, but later he proved conclusively that it was quite impromptu.

# \* \*

The rat menaces the peace of the world. He destroys our food supplies and infects us with fatal diseases. And we should blame, not the rat, but ourselves, says Henri de Varigny, writing in *La Science Moderne*. We supply him with shelter and food, lacking which he would die out. All mankind, says Mr. de Varigny, is a huge association for feeding and housing the rat. "The rat must be deprived of a home, which is the business of the architect and builder; and of food, which is that of the sanitarian. Too often we seem to have organized ourselves into committees to see that the rat has plenty to eat, and to foster the economic loss and the disease for which we hold the rat responsible. We are wrong: the real culprits are the incompetents—those who are ignorant of public hygiene." Another problem for the architect ! He now is asked to build houses which are sun-traps, rainproof, bombproof, servantless, noiseproof, and ratproof.

Several times recently I have referred to the probable completion of the Church House in Westminster. Interesting figures were given last week by the Bishop of London at the annual meeting of the Corporation. It was pointed out that the value of the sites and buildings had shared in the general appreciation of Westminster property. Fortunately, they were in a strong financial position, and it was hoped that at no far distant date the original scheme for the complete building would be put in hand at a probable cost of £150,000. The architect has not yet been selected.

The accompanying little photograph, taken, I imagine, some time in the late sixties, shows a sight which might be anywhere but in London, but which was actually once visible to the camera (as we see) at Lambeth. Exactly where this timber wharf, with its curious old buildings in the background, was situated, I confess myself in ignorance. Nor is there any landmark visible by which one might identify the exact locality of the spot. The trees in the right-hand corner of the little picture indicate a rusticity now sadly to seek in this locality. They appear to be guarded by a low wall, and this may possibly have been



the remains of the river frontage of one of those riverside houses with their gardens, which have long since given place to more prosaic things. Should any of my readers possess the means of positively identifying the timberyard here shown it would be interesting if he, or she, would be willing to let me know. For even such a place as this is worth perpetuating, when every inch of ground in London is becoming changed through the course of years and the inevitable alterations that occur in a great and constantly increasing city.

The removal of the old Gate House at the Spaniards Inn has lately been advocated by the London and Home Counties Traffic Advisory Committee, and if this recommendation is acted upon, North London will lose one of its most familiar landmarks. There is no doubt that the situation of the little building, which intrudes into the roadway at a corner and at the summit of a hill, necessitates a very considerable slowing down of the traffic on the Spaniards Road, for its normal width is reduced to something less than half at this particular spot. Long streams of cars are often held up, and for foot passengers and children the corner is an ordeal. Strangely enough, the number of accidents has not been so great as might have been expected, and it would seem that the awkwardness of the restriction is so obvious to all users of the road that even the most reckless are forced to behave in a reasonable manner in negotiating the corner. It is not at all certain whether the increased facilities for speeding along the road that would be afforded by the removal of the Gate House will not add a new danger, and a curious old relic will have been destroyed unavailingly. It may be that the demolition of the Gate House would have to be followed by the demolition of the Spaniards Inn itself in the interests of safety, and before either is in any way altered it is to be hoped that the Traffic Advisory Committee will explore all possible alternative suggestions for dealing with the problem.

n.

n-

er

he

he

. 17

to

of,

ole

st-

at

ed

in

or-

it

ne

b-

en

ne,

ht

ce

lly

in

ce.

ht

he

ity

be

en

de

en

ers

er-

ıld

his

on

he

tly

\* \* \*

As I understand it, Mr. Terence Grey's main contention, in his recent constructive criticism of the new Shakespeare Memorial Theatre designs, is based on the theory that players and spectators, hitherto separated from each other by the frame of the proscenium, shall be more closely associated in a form of theatre wherein a certain proportion of the acting area is in the body of the auditorium and visible from three sides; and wherein the main body of the stage continues the semicircle of a Greek theatre to complete the form of a circus, half being auditorium, half stage. Only a theatre of this design is capable in his opinion of staging Shakespeare as the modern theatre should do it, with full justice to the varied and rapidly changing scene composition of the plays. While granting it to be a conception of theatre designing at once liberal and idealistic, it strikes me as being a sound and reasonable adjustment of the relations that should exist between players and audience in Shakespearian and certain other types of plays.

\* \*

Discussing the auditorium he maintains that it should be: 1: A one-tier house, and only two-tier under the compulsion of situation in crowded localities; 2: semicircular in form; 3: designed to rise in a parabolic curve; 4: stepped and not sloped anywhere. It is difficult to understand why the assessors of the Shakespeare Memorial Theatre should have required competitors to provide three tiers of seats on an unrestricted site and for a ridiculously small audience. Mr. Terence Grey's methods at the Festival Theatre in Cambridge have been criticized for reasons which I am unable to discuss here, and I speak only from a knowledge of what he writes, but that it is sense, and has a bearing on the Memorial Theatre in question, I have not a doubt.

#### \* \*

One of the rarest examples of Norman domestic architecture surviving in this country may be found on the steep hill going up to the Cathedral at Lincoln. On the left-hand side stands the well-known Jews' Court that dates from the twelfth century, and which is traditionally the scene of the crucifixion of a Christian boy by the Jews. This historic building that had been converted into tenements has been threatened with destruction, but I am glad to hear that it is now to be preserved and opened for public view. The insanitary dwellings near by are to be pulled down, but the Jews' House is fortunately not included in the demolition scheme that has been decided upon by the Lincoln City Council. This reprieve is all to the good. It is yet to be seen whether the interesting Church of St. Benedict's in the High Street of the same city will also be spared. I fear that following the report recently issued by the committee of inquiry, its chances of survival are slight.

\* \*

We are promised a complete grid of high-tension power transmission lines that shall cover these islands as with a net. We are also promised widespread industrial developments as a direct result, and, of course, proportionate prosperity. That will be very nice. But-and it is a very real question-what is this magic network going to cost us, not in money (that presumably is known and is of little general interest, anyway), but in amenity? What losses is this gain going to entail? All we know for certain is that they are going to be very heavy, inordinately heavier than they need be or have any right to be. That we know from samples here and there all over the country, but particularly in North Wales. To judge by these firstfruits, the Electricity Bill governing these enterprises is drafted as are all such Bills, and makes no provision for the preservation of amenities. Alternatively, if there are any such provisions, they are obviously quite futile. The North Wales power scheme, for example, has expended much ingenuity and a great deal of money in contriving its little ancillary buildings in such a fashion as to be almost ideally out of harmony with their surroundings. In the foothills of Snowdonia, against a background of grey, tumbled rocks and wind-blown oaks, you will find cocksure little concrete "residences" for local power scheme officials, monstrously roofed with pale pink tiles, and that in the midst of quarries producing the best slates in the worldmany of which quarries the company actually supplies with power.

\* \*

Could æsthetic impropriety go farther? The answer is, of course, "Yes-and it does," as witness the arbitrary harshness of the huge pipe-lines laid down the mountain sides with no attempt at decent camouflage by paint or planting or loose stone covering, and the transformer stations enclosed with saw-tooth corrugated sheets on which great ill-shaped letters spell out the undertaking's name. If from examples in Norway and Sweden, Germany and Switzerland one did not know what hydro-electric powerhouses could be like-and are like in those fortunate countries-one might accept our mediocrities with a shrug as necessary evils. That, it seems, is all one can do about the transmission lines themselves, even when these traverse the loveliest little valleys of Merioneth, destroying their scale and importing a sense of sophistication and "progress " of which they were till now so soothingly innocent. Clearly the electrification of England will not be accomplished without severe shocks to amenity, unless we proceed better than we have begun.

ASTRAGAL

### THE ARCHITECTS' JOURNAL for June 27, 1928

# BATH AND THE CONFERENCE

# SOME IMPRESSIONS

### [BY OUR REPRESENTATIVE]

It has been said before (and, because it is so purely true, it will be said again) that Bath is an atmosphere rather than a city; that is the foremost characteristic of the place. It is an atmosphere which derives from long practice in healing, and drowsy health is everywhere in its streets and in its architecture; it draws character from its position in the valley, and by its brimming voluptuously over on to its hillsides, and you catch glimpses which make you wonder whether the terraces have played truant from Edinburgh which they resemble; and above all, there is the atmosphere of the gentility of a past age—laced hats, velvet coats and flowered waistcoats, bowing and politeness, and even present day modes do not shake your faith.

Taken as a city of architecture, Bath has been flattered; as an atmosphere, justice has never been done. As a setting for such an affair as an architects' conference it is supreme; there is all the admirable work of the eighteenth century, by the Woods and others, to stand as a stimulant to the present day; then there is the inevitable mediocrity brought by plagiarism and senseless copying, and that is as valuable a lesson. But, unlike other cities, Bath suffers very little from the grotesque, at least in the centre of the town; there is a fine, strong tradition which has survived the past century in its main essentials, even though the subtleties and detail are wanting. The Victorian period has not, however, passed without leaving some shadow of its wings; in all Gay Street, The Circus, and Royal Crescent (the architectural soul of Bath) hardly a window remains intact; the Nineteenth-century Beast with its surprising want of taste and its devastating passion to be "up-to-date" ripped away the sashes with their small panes and installed (that is the only word) great vastnesses of plate glass, just enough to make us wonder how much we are missing.

The country round Bath, with its wealth of fine mansions, and towns and small villages, is some of the most interesting and beautiful in England; because it is a "stone country" it has a mellowness of tone, both in its buildings and in its landscapes, which is unknown in the "brick country"; but besides this it still maintains the strongest vernacular in design, and even the recent buildings seem to be drawn inevitably into sympathy. The reason for this is not far to seek. The stone in those parts is exceedingly beautiful, even when it is new, but it weathers so charmingly that a man must feel a knave not to give it the fullest opportunity; and the tones are best achieved by a more or less rigid following of traditional methods.

It was inevitable that this year's R.I.B.A. Conference should be a success, but the highest congratulations are nevertheless due to its organizers. From the informal reception on the Wednesday right up to the end of the proceedings everything was perfect; the general organization was remarkable for its efficiency and for the smoothness of its working, and for the foresight which became every moment more evident.

The various tours of the surrounding country were chosen with the utmost knowledge and discretion, so that difficulty arose in deciding which to miss; nobody had any but the highest praise for his own particular choice, and, listening to accounts by other people of their experiences, one began to wonder whether one had missed something after all, until personal recollections set matters right again.

The Corporation of Bath has a long record and reputation in the matter of entertaining its guests, and certainly it is deserving of it all. It takes an artist to make a civic reception tolerable, and that was where Bath succeeded; everything was done for the comfort of the visitors, and yet the entertainment had no trace of oppressiveness, but was the essence of hospitality.

There is, however, firm ground for disappointment, and the complaint lies against the architectural profession itself.

There were, at Bath, something over two hundred members of the profession, besides guests whom they brought with them, bringing the list up to three hundred.

Considering the importance of the two questions upon which papers were to be read ("Conditions of Contract" and "The Preservation of Rural England") this number was inexplicably small, and there were many names for which one looked without success in the lists; moreover, the gaps were not due only to the absence of architects from far afield, but to those in the immediate district. The annual conference banquet is surely a function which should have the support of every member of the R.I.B.A. who can arrange to be present, because the least hint of flagging enthusiasm amongst the members of a professional body must certainly instil, in the public mind, a similar lackadaisicalness which a world of propaganda will not efface.

Apart from this shortcoming the visit to Bath was, in the general opinion, the most successful in recent years.

Mr. Guy Dawber's paper on "The Preservation of Rural England" evoked comment, but the subject being one so direct, the remarks were chiefly concerned with making suggestions to the same ends.

Mr. W. E. Watson's paper on " Conditions of Contract " stimulated an extremely interesting discussion. Feeling would appear to run high against the proposed new form of contract, and almost every speaker strongly condemned its introduction. The chief point against the alteration is the fact that working methods vary so widely in certain parts of England and all over Scotland from those in operation in London, that any attempt at an alteration of this sort must inevitably lead to disorganization, if not direct opposition, among builders in the provinces. It is not definitely decided amongst architects themselves that there is any serious shortcoming in the existing form-no shortcoming, at least, which warrants a drastic alteration of this sort; and the defects in the old form, being well known, give less anxiety than those whose ultimate results are uncertain. The trend of the discussion made it abundantly clear that architects are extremely nervous about the possible change, and that many will definitely refuse to acknowledge it if it should finally take place. In short, the introduction of the new form, if it does no good to the individual architect, will at least start a frantic rush (hitherto conspicuously lacking) to join the Defence Union.

#### \* \*

On the following pages are extracts from the papers read at the conference.

902

\*

# THE PRESERVATION OF RURAL ENGLAND

# [BY E. GUY DAWBER]

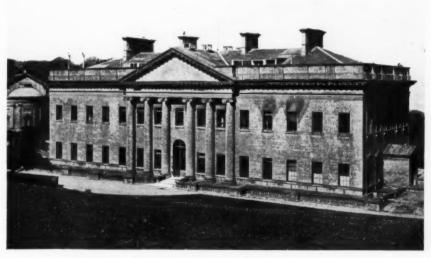
T seems singularly appropriate that I should discourse upon a city such as Bath, endowed with many fine buildings of great architectural merit and beauty, due in great measure to the artistic genius of the architect Wood ; for it is greatly attributable to these works that the City of Bath has attained such fame and prestige. The city is well known throughout the kingdom as an example of what well-ordered building and town planning, even on a restricted scale, can do; and emphasizes what so many people forget today-that architecture and building are not only the concern of the architect and builder, but of everybody; for beauty and fitness, whether in buildings or in life, form part of the modern social state, if we mean it to progress and develop. But such amenities mean much care in maintaining them, and attempts by individuals or bodies who, for commercial gain, would thoughtlessly sacrifice the whole beauty of a town or countryside must be checked.

No one will deny that it is necessary to open up the country and establish new industries or areas for residential purposes, but the methods usually adopted generally detract seriously from the value; and, if we hope to keep any parts of England as country pure and simple, we must devote all our energies to directing this flood of immigration into right channels, and to prevent it from dribbling all over the countryside, to try and stop the sporadic spread of towns and retain some portions of the land as actual country.

The authorities of Westchester County, near New York, have eliminated the system of building along the roadside by the erection of groups of dwellings off the arterial roads, and using a side road to connect each group with the main highway; a system long advocated here, but not to my knowledge carried out to any great extent. Not only has this preserved the beauty of the country, but also caused a great saving in public expenditure, for electric light, gas, water supply and drainage can be concentrated, and arrangements for policing have become considerably easier. Here in England precisely the opposite has been done, and builders continue to string out new houses along the frontage of our newest highways. Commerce and development need not necessarily mean a sacrifice of beauty and amenity, for new buildings, of course, there must be, but these should be properly placed, and, in addition, they should be seemly and appropriate in colour.

A nation is a work of art and a work wrought by time, and England possesses exquisite old towns and country villages-some of the most beautiful in the world, and the admiration of all who visit our shores; and it is no exaggeration to say that in fifty years' time, at the rate so-called improvements are being made, the destruction of all the beauty and charm with which our ancestors enhanced their towns and villages will be complete. Before the advent of machinery and industrialism building, even of the humblest type, possessed qualities and characteristics which placed it on an altogether higher plane than most of the building carried out in the last century, for we must remember that a great tradition of building permeated the whole country from north to south and east to west; nothing was shoddy, nothing seemed too trivial for good, sound, honest workmanship, as we see in the examples which remain today. And it is that tradition we are in danger of losing, for our countryside has been defaced and deformed by ugly, unsuitable buildings, which are nothing short of a national disgrace.

I feel that something must be done to raise architecture in this country to the position due to this august and venerable art, and to combat the ignorance and prejudice



The Mansion, Prior Park, Bath. By John Wood. The south side.

, and, ences, ething again. tation y it is recepevery-

t, and itself. memought

et the

as the

upon ract " umber es for eover, hitects The

which I.B.A. int of sional imilar Il not

as, in ors. on of being with

ract " eeling form mned ion is ertain se in ration if not It is that orm lterag well esults abunat the ase to

apers

short, to the herto

THE ARCHITECTS' JOURNAL for June 27, 1928



The Mansion, Prior Park, Bath. By John Wood. The north front.

that prevail even amongst people who are intelligent enough as far as other minor arts are concerned. It has been allowed to drift into obscurity behind the advancing tide of commercial progress and advertisement. Some means must be devised whereby architectural advice and guidance may become available, and if this advice is not made use of ugly and inappropriate buildings must be prevented from outraging the landscape. There must, in fact, be an improvement in the design of buildings by unofficial action and a control of ugly buildings by means of official powers, but if either course is adopted separately the result will be a failure, for it is useless to offer intending builders advice and guidance if they know they can reject it with impunity, or to expect improvement by merely exercising negative powers of rejecting designs when submitted to local authorities.

Although the majority of the new building, in country districts especially, is extremely bad, yet there is a very large amount of the most excellent and thoughtful work being done by architects—work that maintains the tradition of good, honest craftsmanship and simple design we always associate with the country—and I am confident in time public opinion will insist on a higher standard of building all round.

The Council for the Preservation of Rural England is endeavouring to explore means by which some of those unfortunate results may, we hope, be prevented. We have no desire to attempt any frustration of a natural and inevitable tendency, and all we want to do, all that need be done, is to try and get some system in the process and get order and decency out of chaos. There is without doubt the strongest need for some sort of supervision or control of buildings put up in the country, and this we feel can be done by means of advisory committees, consisting of architects, surveyors, representatives of local councils and men interested in such matters, whereby advice and guidance may become available. At present, as you know, local and district councils have no powers enabling them to control the design or materials of new buildings, so long as the plan, the heights of rooms, sanitation, and so on conform to certain regulations; anyone can erect whatever eyesore he wishes, under the Town Planning Acts. Where these are taken up and a regional plan adopted the model clause prepared by the Ministry of Health, relating to the control of elevations, etc., would automatically come into force, giving local authorities the power of rejecting unsuitable designs.

Under Mr. Chamberlain's 1926 Housing Act for the reconditioning of existing houses, advisory committees are being set up with the concurrence of the Ministry of Health, who will, we hope, be of the greatest service to local authorities when application is made for the Government subsidy, in advising them on the suitability of the proposals made and helping with suggestions. The architectural profession have most generously, through the R.I.B.A., offered their services gratuitously on these committees or panels—in much the same way as doctors have done at the public hospitals—and we hope if these panels work well their powers may be enlarged to enable them to deal with the design of all the buildings throughout the country.

The aim of the C.P.R.E. is to be helpful and constructive, and not merely critical and fault-finding; we want to help the public and arouse in them a pride in the country which we all love so dearly, and not to allow it to be submerged in a sea of utilitarianism, but to endeavour to preserve its attractiveness and make it more beautiful. To do this we want financial help-if you sympathize with the aim of the C.P.R.E., you may show it in a practical manner by sending donations, or, better still, becoming annual subscribers of one guinea. The work is increasing by leaps and bounds, and our secretary, Mr. Griffin, and his staff are quite unable to cope with the urgent requests for advice and assistance that reach them by every post. For my own part, I am convinced that in a few years' time the C.P.R.E. will have become a great power for good; but to enable this to be done it is up to all those who benefit by its activities to bear some of the cost.

# A WALK ROUND BATH

### [ BY MOWBRAY A. GREEN ]

UP to the beginning of the eighteenth century there had been little growth outside the old City of Bath. It still retained its walls in part, and its four gates. The latter are all gone with the exception of the East Gate. The city itself was small, about 400 yd. in diameter, and containing some thirty-seven acres. Some of the earliest work was Trim Street, begun in 1707; and Green Street, on the site of the old Bowling Green, in 1707.

Thomas Greenway and his sons did much building about this time. St. John's Court on the Sawclose, about 1720, was one of their chief works. Widcombe House was probably also built by Greenway in 1727.

At this time John Wood, then aged about twenty-three, came to Bath. Ralph Allen, the pioneer of letter-carrying by means of cross posts, soon employed him to alter and improve his house in North Parade Passage, or Lilliput Alley, as it was then called. He rebuilt the north front and added a wing. Wood had not entirely settled in Bath, and the details of this house indicate that he only gave the general design, leaving the local masons to carry out the details. Being unable to bring about his projects for rebuilding parts of the city within the walls, in 1729 he commenced a square outside the city on the north-west. This was the lowest portion of his great scheme which eventually embraced Queen Square, Gay Street, the Circus,

on-

ver

ere

del

to

me

ng

he

ees

of

to

rn-

he

hi-

he

m-

ve

els

to

he

ve.

elp

ch

ed

its

we

he

ng

of

ds,

ite

nd

vn

E.

ble

its



The Guildhall, Bath. By Thomas Baldwin.

and the Crescent. The square, which took its name from Queen Caroline, wife of George II, was finished in seven years. Wood's idea was that the north front should be as it were the chief façade of a palace, the east and west sides being subordinate to it. The last house in Gay Street on the east side is where the younger Wood lived in his later years.

In 1735 John Strahan built Rosewell House in Kingsmead Square for Thomas Rosewell, whose rebus, a rose and a well, is under the circular pediment at the top of the building. The house contains a good oak and mahogany staircase, and nearly all the rooms are panelled. Strahan also did other work in Kingsmead Square, Kingsmead Street, Avon Street, and Beaufort Buildings indeed, most of the groups of buildings lying outside the West Gate. Two of the best houses of this period are Nos. 6 and 7 Kingsmead Street, formerly the offices of the *Bath Journal*.

In Prior Park is John Wood's finest single work. The plan as at first designed had a central mansion with outlying stabling and other buildings beyond at each end, all connected up with colonnades. This, however, was much altered in execution. It was built for Ralph Allen, being begun about 1735 and finished about 1743. Wood's design shows flights of steps leading from each end of the portico to the gardens below, but they were probably never executed. The present sweeping flights were designed by Henry E. Goodridge for Bishop Baines about 1830-36. Internally many alterations have taken place since the great fire which occurred in 1836, but the little chapel in the mansion remains much as designed, and there are a few original details and enriched plasterwork in the east block of buildings. Palladian Bridge is built across the pools originally belonging to the Priory of Bath, from which the mansion takes its name. It was built in 1756 but the architect is not known, although it is almost identical with the one designed by Robert Morris for Wilton Park twenty years earlier.

A scheme to construct a free mineral water hospital for the poor of England was begun in 1723, and was supported by Beau Nash and many famous visitors to Bath. In 1737 a site was found at the north-east corner of Parsonage Lane, and the building was opened in 1742. Ralph Allen gave all the stone and lime required and Wood gave his plans and supervision free. In 1795 John Palmer added two wards on the north front.

In 1740 were begun the buildings in North and South Parades, Duke Street, and Pierrepont Street; they were completed in about eight years. On the Terrace Walk two houses of the period remain, both probably planned as shops. Adjoining the North Parade on the west is a fine group of houses once called Galloway's, but now North Parade, Buildings. These houses, which have been scarcely altered since they were originally built, are probably not Wood's work.

Gay Street was in course of erection between 1750 and 1760, and the Circus was begun in 1754. On May 23 of that year Wood died and left his work to be carried on by his son, John Wood the younger. In fifteen years the buildings were completed. The outstanding feature of the Circus is its division into only three parts, a group of buildings thus facing the spectator at each of the three entrances. At the further end of Brock Street stands the Royal Crescent, begun by the younger Wood in 1767 and finished about 1775.

The Assembly Rooms, begun in 1769 and finished in

D

three and a half years, were also the work of Wood. The chimneys are particularly good. The internal planning is a model for a public building. The five cut-glass chandeliers in the ball-room are original.

Alfred Street, also by Wood, was built about 1768. A house here, known as King Alfred's house, from his bust over the doorway, still has the original ironwork and extinguishers in which the link boys put out their torches.

Robert Adam prepared many designs for the Bathwick Estate of William Pulteney, afterwards Earl Pulteney, but the only work which can be definitely attributed to him is Pulteney Bridge, begun about 1770.

About 1765 there was a move on the part of the Corporation to replace the old town hall and market, which stood in the centre of the High Street, by new buildings, and Thomas Attwood prepared designs, and work was actually started in 1768. Many delays occurred, however, and the death of Attwood, who was killed by some falling timbers, put an end to the scheme. Shortly afterwards Thomas Baldwin produced a set of plans from which the present building was erected in 1775-8. One of Attwood's best works was the New Prison erected in 1772 at the lower end of Grove Street, which shows that he had carried on the manner of the elder Wood.

There can be little doubt that Adam's work had largely influenced Baldwin, whose design for the Guildhall façade is one of the finest things in the city. St. James's Church was rebuilt about 1768-9 from designs by Jelly and Palmer. It is in the Classic manner and the interior is of interest, especially the organ, which was built by Seed of Bristol in 1782. The tower was rebuilt by Manners and Gill in 1848. At the end of Pulteney Street stood what was originally the Sydney Hotel, built by C. Harcourt Masters in 1796, when the Sydney Gardens behind were also laid out by him. The building was altered by Sir Reginald Blomfield some years ago and is now the Holbourne of Menstrie Museum. The first pump-room of the eighteenth century was erected in 1704 and enlarged in 1751. In 1785 Baldwin built for the Corporation the colonnade which runs north from the pump-room and which closes the west end of the Abbey Yard.

The cost of the colonnade was 130 guineas and this included not only the design but the carrying out of the work by Baldwin, there being also a stipulation that this sum should not be exceeded. The west end of the pumproom was probably begun by Baldwin and finished by John Palmer, who also almost certainly added the attached portico on the north side. In May 1788 the King's Bath was begun by Baldwin.

A City Act obtained in 1789 included amongst other things the rebuilding of Bath Street, Cheap Street, and Union Street, all by Baldwin. Path Street was originally intended as a place for shopping, and the covered colonnade well expresses its purpose. Camden Crescent was begun about 1785, and later John Palmer built St. James's Square, Lansdown Crescent, All Saints' Chapel, and Kensington Chapel. The last has an interesting façade facing the London Road.

### CONTRACT

### [BY W. E. WATSON]

I HERE is abroad today in every walk of life a certain degree of incompetency, caused probably by the war period, when occupations were not normal and education did not advance. We find it in the building trades, and it cannot be denied it does exist in the profession of architecture, as witness the disfiguration of towns and countryside, though it must be said the governing bodies are endeavouring to remedy this state, and in another decade we shall probably be back to normal; still, for the moment, we are in the state where on the matter of contract revision the



No. 41 Gay Street, Bath.

parties do not quite fully see eye to eye. The architect is loth to part with his long-held authority in certain matters, and the builder says, and surely quite reasonably, "Tell me explicitly exactly what you want and then I can put down my price in the itemed schedule, and there will be no differences between us." The parties really are not so far apart as would at first sight appear. For instance, on the subject as to whether the 1909 form of contract should be revised, I think we are all agreed it is desirable it should be; and as to whether the parties are to be free to go to arbitration at any time during the contract period, some of us might prefer to retain the honourable traditions of earlier days, but we must march with the times; and after all, if an architect, as representing the employer, does not fear the arbitral tribunal when a job is completed, why should he fear it during the progress of the job, provided it does not impede progress. I venture to suggest that a good debate and award upon a matter at the earliest stage of a job would enhance the respect in which an architect should be held by the contractor, and cement the cordial relationship to a final estimation of each other as people who know their jobs from A to Z.

as

in

th

he

his

he

his

p-

by

ed

th

ler

nd

llv

de

un

re,

on

he

in

ar

on

it

-2-

le,

ır-

all

in

he

It is a general principle of English law that from every Court there is power of appeal until the matter reaches the House of Lords; that principle has stood the test of centuries, because justice is done. Why, then, upon a matter which affects his profit should an appeal be denied to a builder to some person skilled in the technicalities of the matter in dispute? And in this connection it must be remembered that the architect in the early stages of a contract is not strictly acting in a quasi-judicial capacity, but should be acting vigorously in his duty as agent of the employer to see that he gets not less than he bargained for, and this, if possible, at a rate showing a saving upon the contract sum. In such circumstances surely the contractor is not unreasonable in seeking for some court of appeal.

A complication may, however, arise, as the works progress, where the architect is acting in a quasi-judicial capacity, when he has to exercise his judgment fairly between the parties and not in his capacity as agent to the employer; in such case where resort is made to arbitration, will the employer be denied the services of the architect ashis most expert advocate on the ground that he has already decided the matter in a judicial capacity; or, alternatively, will the architect and the arbitrator be in a position of joint arbitrators as under the London Building Acts, and if so, can one act without the other? There are undoubtedly complications so far unexplored arising out of the arbitration clause, but so far, probably, all are agreed that the clause C referring to an appointment by a person of local standing might well be omitted.

In the proposed form of contract, provision is made for the deposit of retention moneys from the time they begin to accumulate at interest in favour of the contractor. This, as a matter of convenience, would be in the joint names of both parties, and the principle is one which commends itself to me for the important reason that it tends to bring down building costs. If a builder knows his money is on deposit or in trust securities he has a fund which comes reasonably into his finances, whereas a fund which is a mere outstanding debt he cannot deal with; and there have recently been cases where large retention sums have been denied to the builder by bankruptcy and other proceedings, resulting in a more or less total loss of some 10 per cent. of the contract sums. The architect may sympathize with the builder in such cases, but it cannot be denied that the builder is not in his business for philanthropic purposes, and he is entitled to his profit as are other merchants. On the other hand, the standard form of contract states that three months is to be the normal retention period, and this seems much too short a time to warrant a deposit in joint names, for it must be remembered the architect's liability is a continuing one under the Statute of Limitation for a period of six years. This, however, may be a debatable point ; but so far as I can gather the case law is fairly clear upon the matter, so it would seem to be only fair that while the builder is entitled to some considerable security for the payment of retention moneys, he should not be able to go from the works scot-free after a period of three months, and that with a retention of only 5 per cent. instead of 10 per cent. as in the 1909 form.

Since the war, particularly by the Ministry of Health contracts, it has been sometimes desirable to take into consideration when certifying the value of unfixed materials, and probably one of the most unsatisfactory features of the new contract form is the continuance of this pernicious principle. Unfixed materials generally are of no interest to the employer, they encumber the site, and do not improve by exposure. They lead to further complication, and it is surely within the province of a prudent contractor to place his order so that deliveries will be continuous as required, and at the contract price. think this clause is an objectionable one, and introduces a principle not in the employer's interest, because he may reasonably, be called upon to pay a very large proportion of costs and not be a whit nearer a completed building than a virgin site suggests.

One of the most difficult problems raised by the new form is that raised by clause 23 governing injuries to persons and property, where it is proposed to make the architect share a responsibility which does not lie within his particular province, and proceeds to an indemnification by the employer beyond a certain amount. The whole purpose of the new form, as I understand it, is to simplify procedure and make it more workable, and this particular clause would seem to promise more obscurity in practice than any other, because it conflicts with the traditional conception that the contractor is in full possession of the works till completion, and all that such a conception connotes.

The conference called in 1920 was formed for the purpose of discussing the 1909 form; the general principles of that document have emerged from the melting-pot in a hardly recognizable form, and so far only "where quantities form part of the contract." It is said that the changes are purposed in order to make the business of contracting less speculative by reducing the contingency amounts necessary under the 1909 form. So it is the duty of the architect towards the employer to encourage this and obtain a definite amount of work for a given price. To refrain from doing so means that builders are unable to carry out their obligations, and are under the necessity of endeavouring to avoid them; this tends to dispute and litigation, with the resultant extra expense to the employer and loss of time to the architect; therefore, if a form can be evolved which will make for a closer tendering, it is our duty to evolve one which, while eliminating not only the incompetent builder, will also exclude the architect who has not been properly trained.

There is a certain looseness of phrasing and obscurity of meaning in the draft of the proposed new form of contract, probably caused by the fact that it has been amended

# THE ARCHITECTS' JOURNAL for June 27, 1928

and re-amended so freely; but nevertheless it is a very important document, and I am of opinion we might be well advised to submit it to the Law Society, as representing employers generally, for comment upon its general terms and incidence of its phrasing. When it is remembered that this contract form covers some two hundred million pounds worth of work every year, the enormity of the problem before the Drafting Conference can well be imagined, and I am sure they have our sympathy and good wishes in their difficult task, and if they can evolve a document which will increase confidence between the parties they will have earned our lasting gratitude. It seems almost too much to hope that absolute finality will be possible, and the suggestion to set up a permanent committee with power to revise occasionally should commend the proposed document to all of us.

# THE FOUNDLING HOSPITAL SITE



It is of vital importance to London and its future University that the site of the Foundling Hospital should be saved and kept open. Some time ago we illustrated a scheme for the preservation of the hospital, but if a children's hospital appeals to the public as more suitable than a great national theatre and an overseas hostel, one can still be content. If, however, the hospital scheme involved only a partial salvation of the site, one feels that it would be better to acquiesce in the site being used as it is proposed, using the squares as green areas around which would be grouped the flats, conceived as a whole as an Adam or a Nash might have planned them. But it would be pitiable if we lost this perfect piece of town planning as well as the opportunity of an architecturally conceived area of flats. The design of the proposed flats, as shown, would not suggest that an attempt is being made to grasp such an opportunity and to produce a complete scheme for the whole 30 acres.



Above, the Foundling Hospital site, from a model. Below, the proposed new blocks of flats.

# MR. AMBROSE HEAL'S HOUSE

### [ BY E. MAXWELL FRY ]

<sup>1</sup>HIS charming addition to Mr. Ambrose Heal's house at Baylins, Beaconsfield, consists of a wing thrown out from the south-eastern corner of an older, rather rambling type of house, and contains a study on the ground floor, a bedroom on the first. Its materials are simple: good bricks and tiles; its plan is that of a rectangle with one side slightly bowed or splayed, and everything else that makes the addition interesting and charming is due to Mr. Edward Maufe's handling of these elementary forms.

ir Il Il

h ie to

h

d

h

if

as

a

ı,

p

r

It is a little difficult to place his very personal manner of designing, though I think I should know this building for his at once. The high-pitched roof, leaving a ridge longer than is usual in English work, reminds one of a French medieval gatehouse, and vaguely of Monmouth Bridge. At all events, its note is medieval and romantic, and so, too, are the tiny windows that still further accentuate the feeling that this is a tower. More insistently, but with greater subtlety, the bulging wall suggests strength and thickness, corroborated so ingeniously by the little niche carved out of the brickwork. The dominant impression, all suggestions of style and manner apart, will arise from the beauty of materials built into subtle shapes. For instance, the play of light on a wall is doubly beautiful when the wall is uneven in texture or is slightly modelled. The illustration shows, not as clearly perhaps as you may find it with the right sun, how the splayed wall makes one kind of shadow and the branches of the tree another direct and more clearly defined one. Considered from this angle, the wall is the better for having its few windows well skied.

I think I have discovered what makes the roof so successful. Unlike the broadly-swept roofs of traditional building, which rest like lids on the four walls, this roof slopes back from the gutter line without the faintest suggestion of an overlap, and with only the tiniest kick to the hip ends. It is thus a part of the general mass of the building, cut into the form of a peak, and its tiles seem to expose the texture of the solid block, in addition to being just plain, mellow tiles.

Glancing back, you will see, if my analysis bears any relation to the truth of the design, that this apparently simple building is compounded of various conscious arrangements of lines and form tending to produce the effect of stability and mass, and to express an outlook peculiar to the designer. The case for materials is clearly exhibited in the large areas of brickwork and tile, and when we examine the inside there is further evidence of this aspect of design.

The interiors are, to a certain extent, a collaboration. They could hardly be otherwise with such a client as Mr. Heal, whose convictions on the subject of furniture design,



Baylins, Beaconsfield. The new library. By Edward Maufe.



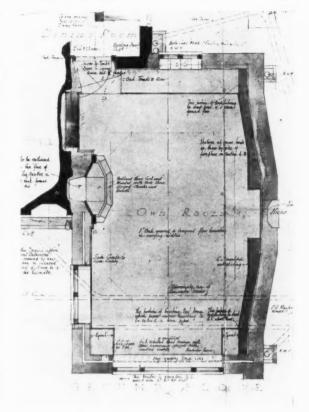
interior decoration and, one might nearly say, mode of living, have become the accepted taste of a wide class of intelligent people.

A "Healish" room is quite a definite conception. The term connotes simplicity, order, sanity, and a quiet beauty. It implies a sparing use of good, full colour and a wholehearted reliance on the beauties inherent in the texture of woods treated lightly or not at all. Here, then, are two rooms that we may accept as being very near the heart of the matter; as being, in fact, almost a confession of faith. Any observant visitor to the "Fourposter" in Tottenham Court Road will recognize the touch, and may realize, too, that it has something in common with the spirit of the building as a whole.

The interior is so simple, its furnishings restricted to so Spartan a degree of animal comforts, that I feel it necessary to stress not only the importance of the landscape framed by the windows, but the relation of colour to wall and floor area when curtains are drawn and lights lit.

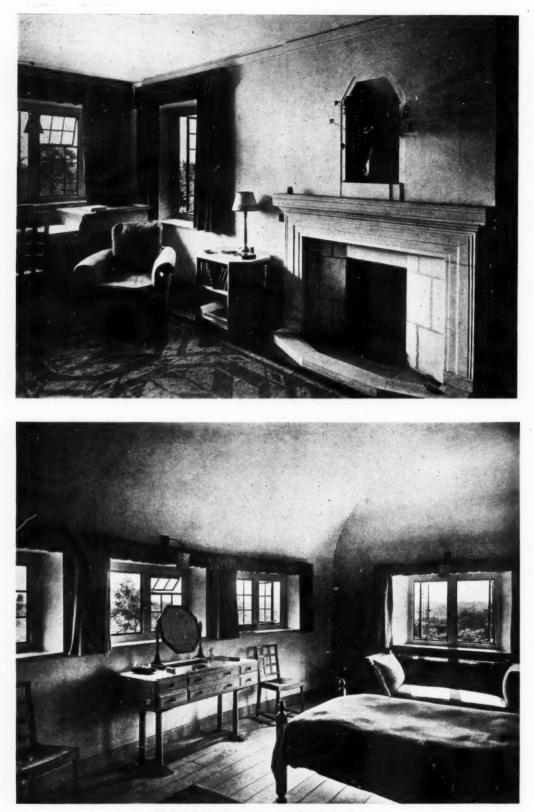
I confess to being more of Athens than Sparta, and yet there is an austere charm in this room that makes even large areas of bare boards possible by electric light. By daylight the sun streaming through will put everything right, making carpets seem stuffy and unnecessary, while over the ample surfaces of the low, coved ceilings reflected lights from lawns and trees in the garden below will mingle with the stronger colours of curtains and cushions.

It must be added that Mr. Ambrose Heal's contribution to the ensemble consists of carpets and the movable furniture of the study, and the bedroom furniture, all in limed oak.



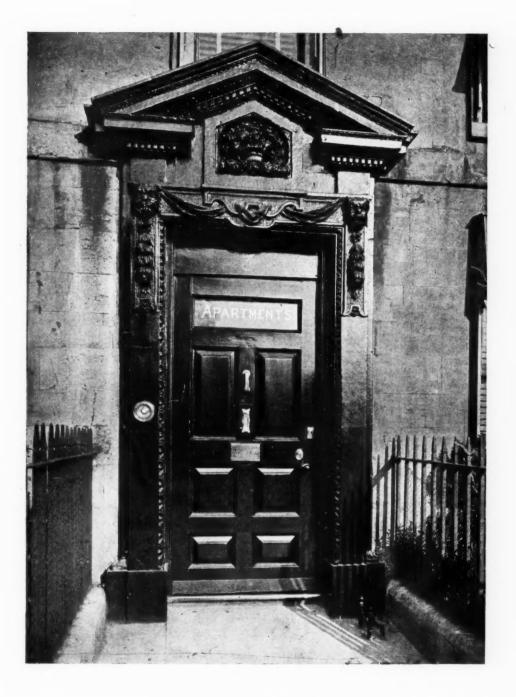


Baylins, Beaconsfield. Above, ground-floor plan. Below, the terrace wall at end of tennis court. By Edward Maufe.



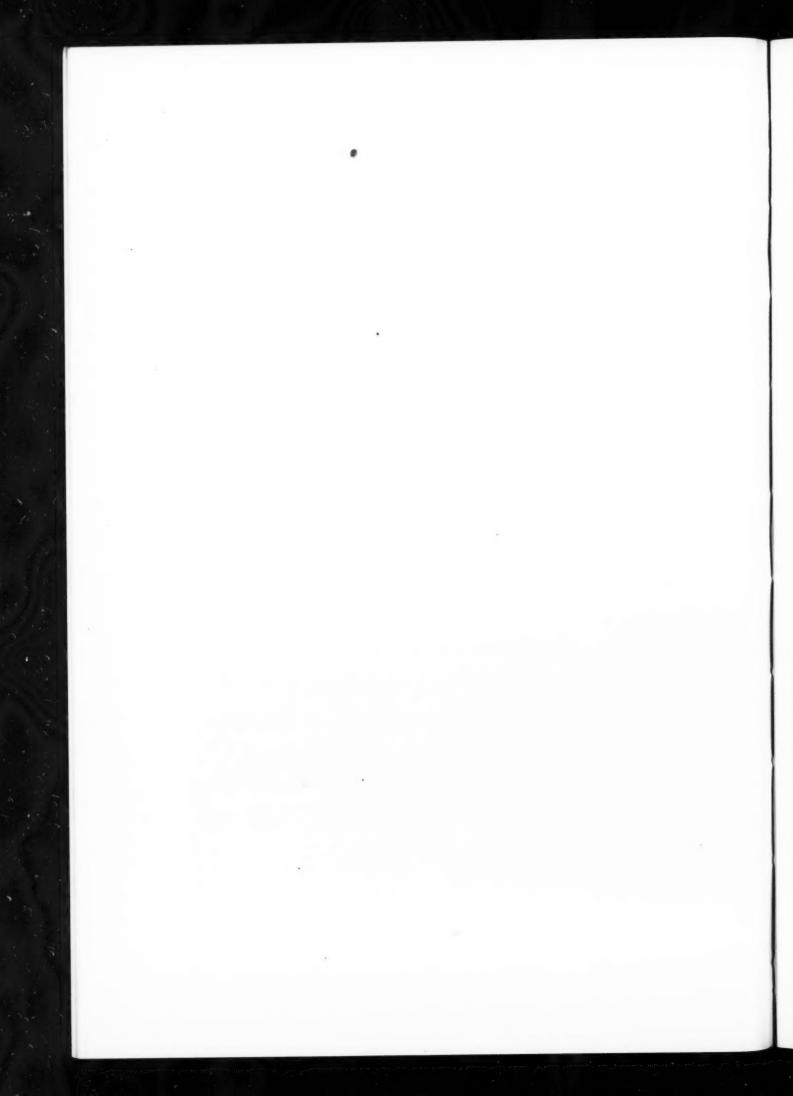
Baylins, Beaconsfield. Above, the fireplace in the new library. Below, a bedroom. By Edward Maufe.

THE ARCHITECTS' JOURNAL for June 27, 1928



# ENGLISH PRECEDENT

20 Coarse and clumsy though this doorway in Queen Square, Bath, certainly is, it possesses considerable dignity and virility. The carving is direct and vigorous; and if the door way bainted suitably, the whole would form a strong and satisfactory focal point. Attention may be directed to the finials of the iron railings, which are of better design than the later and more popular spearhad. John Wood, senior, was the architect.-[NATHANIEL LLOYD.]



# CARRERAS'S NEW TOBACCO FACTORY: iv

# [BY C. W. BOX]

In a previous article we drew attention to the special construction of the main chimneyshaft. We would draw further special attention to the method of jointing the fireclay lining with joggle joints and ribs riding on the concrete. This method of jointing allows for necessary expansion and contraction of the flue.

The actual panels of the roof are supported on beams constructed on a concrete system, and are formed of Kleine terra-cotta floor slabs covered with asphalt.

As mentioned in the last article, the windows of this particular work contribute quite largely to the construction at any rate on the main façades of the premises. In fact, a large proportion of the frontage to Hampstead Road is formed of windows supplied by Messrs. Henry Hope and Son, which are of unusually large dimensions, and in the construction and assembling of which much care, skill, and attention have been given. The windows are of steel construction in solid rolled sections from English mills. All the corners are welded solid with astragal joints formed on Messrs. Hope's patent locked bar principle. The construction also throughout is solid, i.e. there are no loose applied pieces of metal.

Special attention has been paid to the ventilators introduced. These are of double-weathered sections and hung on Messrs. Hope's patent bronze cup pivots, which make for ease and comfort when opening and closing. The ventilators which are situated below the transomes are hung on vertical pivots, and those above the transomes hang horizontally on pivots.

The main windows of this façade are continuous throughout four floors, and are 47 ft. high by 11 ft. 6 in. wide. The construction is generally very interesting, and it will be seen how sound is the method adopted when fixing the cast-iron panels to the main frames, also the great care which has been taken to retain thoroughly weatherproof construction when embodying the casement sections themselves with the main frames. The frames, which combine both cast-iron surrounds and mullions, are very simply treated in design, and harmonize well with the columns on each side.

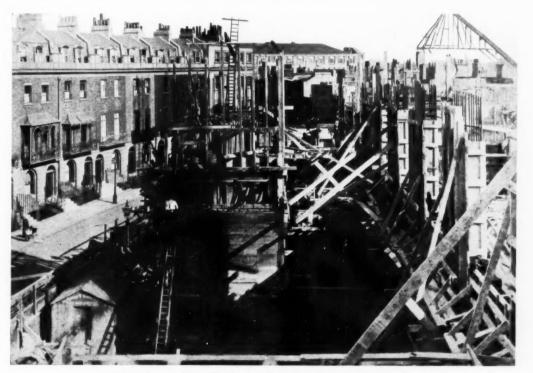
The windows are divided into plain squares to keep them in scale with the remainder of the building, and the size of these squares has been considered carefully in relation to this.

The glazing throughout is from the inside, which is particularly suitable in cases of buildings so large as the one in question, and obviates the necessity for erecting scaffolding when any reglazing is required. The glazing is secured with hardwood beads and, therefore, the amount of putty used is negligible.

The hardware fitted to the ventilators is of solid bronze. This has been designed from special models to harmonize with the Egyptian tendency of the scheme as a whole, and is polished and finished to a nut-brown tone. In fixing the frames, Messrs. Hope's special mastic cement has been used.

The windows which have been utilized on the inside areas and other parts of the premises have been supplied by the Crittall Manufacturing Co., Ltd.

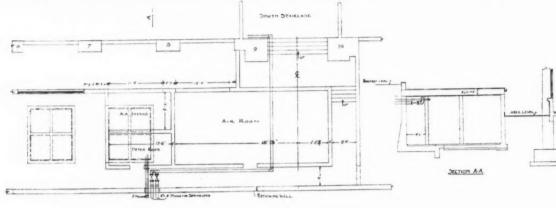
These windows are constructed throughout of universal sections of the office type, and guaranteed weatherproof, with the frames treated all over with a process of sand blasting to remove all scale, rust, and dust. The corners of all frames are welded by oxy-acetylene gas process. The inter-sections of all the glazing bars of these windows are formed with the Crittall

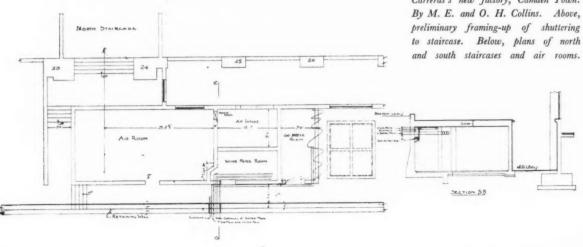


Carreras's new factory, Camden Town. By M. E. and O. H. Collins. The chimney in course of construction. Note shuttering and fireclay lining.

THE ARCHITECTS' JOURNAL for June 27, 1928

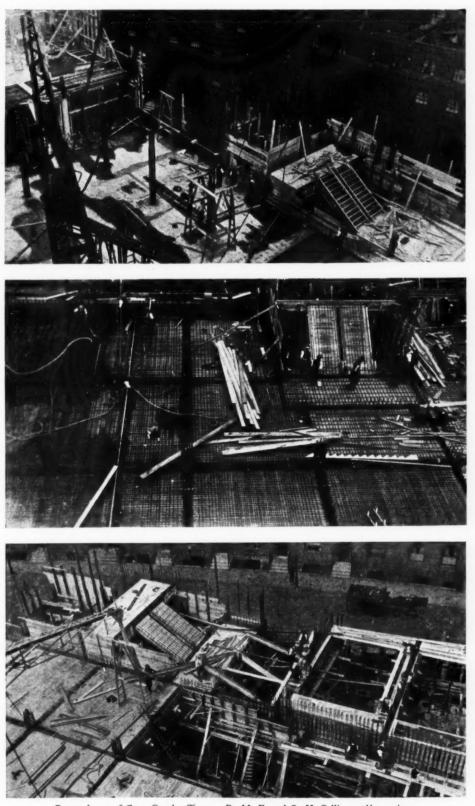






Carreras's new factory, Camden Town.

THE ARCHITECTS' JOURNAL for June 27, 1928



Carreras's new factory, Camden Town. By M. E. and O. H. Collins. Above, risers, strings, and landing of staircase, which is laid in situ. Centre, shuttering set up for stair flight. Below, staircase reinforcement before shuttering for risers is placed in position.

917

)

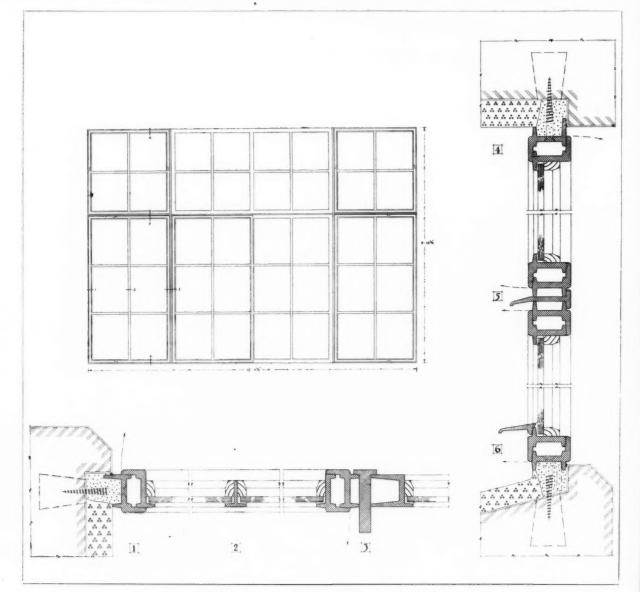
Fenestra locking device. The openings of all windows are so designed as to admit of the outside glass being cleaned from the inside of the building, and the glazing is also done from the inside and secured with hardwood glazing beads in the same manner as has been adopted in other parts of the building. All fittings are of solid bronze to design in keeping with the general style of architecture of the building.

The glass used throughout the premises for window glazing is of the usual type. Where required for fireproof purposes wired cast plate is used, and for other portions of the frontage clear plate glass. In the Welfare block certain windows have been glazed with Vita glass.

The ventilators above the transomes are fitted with special gear so as to allow of easily adjusted ventilation.

Before closing this article, it may not seem out of place to give some constructive particulars as to the manner in which the electrical equipment of these premises is being put into effect. This equipment will be one of the most thorough and up-to-date examples of such work in London. All the motors installed to drive the machinery will be totally enclosed in dust-proof casings. Screwed steel conduit will be used throughout, and will carry the cables leading from these machines back to the large switch controls in the basement. The general lighting lay-out has been left entirely in the hands of the engineers, Messrs. Marryat and Place; but the architects will deal personally with the various lighting effects specially designed to complete the board room and principal offices, and also the arrangement for the lighting of the loggia. The building is wired throughout with Henley Association Grade Cables.

The electrical supply is obtained direct from the busbars of the St. Pancras Borough Council Generating Station, where a special switch gear has been installed to deal with the load, and from here feeders have been run in duplicate to Mornington Crescent, where they enter a room of 120 ft. by 20 ft., devoted to the control of these main circuits and transformation from high tension to 415 volts three-phase low tension. The whole of the plant, transformers, circuit breakers and the control gear generally is in duplicate. From this room the current is being



Carreras's new factory, Camden Town. By M. E. and O. H. Collins. A window detail.

THE ARCHITECTS' JOURNAL for June 27, 1928



conducted by means of four aluminium busbars, each measuring 3 in. by  $1\frac{1}{8}$  in. to the circuit control room, which is a chamber measuring 110 ft. by 18 ft. There are in this room ten main switchboards, controlling the main circuits to the various sections of the building. Each of these switchboards is protected by 1,000 ampère oil-immersed circuit breakers, and each main circuit (of which there are 154) is controlled by a similar circuit breaker of less capacity.

nd he ng rs. lly ete nt ut of a nd on ed m ole ear ng

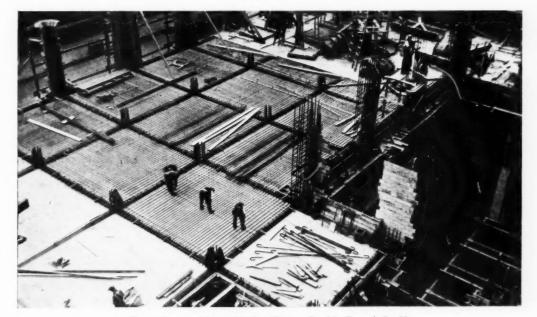
> The main instrument board, from which the condition of the installation can be gauged at any time, is situated on the second floor in the engineer's office, and connected by means of pilot wires to the busbars in the main switch room. The whole of the steel tubing and metal casings used in the installation are connected by means of heavy copper bars to an earth plate

buried outside the building under the pavement in Mornington Crescent.

Details of fittings and decorative work in connection with this trade will follow in a future article.

The illustrations provided with this article will largely augment its utility, in explaining the general construction of the premises; and in particular the illustrations showing the work in course of construction are of great interest.

[These remarks deal with details which may be termed definitely constructive, and when the building reaches its final stages of completion we shall proceed to discuss in future articles all finishings, and in particular deal with the coloured glass inlaid work, and the special types of flooring, heating, ventilation, etc., which Messrs. Carreras are installing.]



Carreras's new factory, Camden Town. By M. E. and O. H. Collins. Above, monolithic floor panels being filled with concrete. Below, crosslattice reinforcement of monolithic floor panels.

# LAW REPORTS

#### COMPENSATION FOR REPAIRS

#### Territorial Army Association of Devon v. Plymouth Corporation. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Shearman

This matter came before the Court as a special case for their decision as to which of two sums were payable by the defendants to the plaintiffs under the award of an arbitrator appointed under the Acquisition of Land (Assessment of Compensation) A&, 1919.

There was a dispute between the Corporation and the Devon County Council and the Devon Territorial Army Association. The Devon County Council owned and the Territorial Association leased land and buildings called Mutley Barracks. The barracks, years ago, were used by the militia and latterly by the local territorial engineers, but the building had become dilapidated. The Corporation, under their powers contained in an order of 1926, acquired the land and the buildings thereon for the purpose of making a street and giving employment to men out of work, and they gave the owners and leaseholders notice to treat. As the parties could not agree, the referee was appointed and an inquiry was held.

At that inquiry the Territorial Association claimed the cost of carrying out the repair of the buildings that was anticipated, before the land had been compulsorily acquired for the use of the Territorial force until the expiration of the lease of nineteen years, while the County Council, as freeholders, alleged that the land and buildings had a good market value for the purposes of trade. The Corporation, however, repudiated those claims, arguing that the land and buildings would not have been devoted to the purposes claimed, and that there was no general demand for such land and buildings so as to give them any extraordinary value. The arbitrator held that if the Corporation's contention was right, then the compensation payable was  $\pounds 1,710$ , while, on the other hand, the applicants were entitled to  $\pounds 2,475$ .

After hearing the arguments the Court came to the conclusion that the larger sum was payable by the Corporation, and they ordered accordingly.

#### PRIVATE STREETS WORKS ACT

### Knapper and others v. Wolstanton U.D.C. King's Bench Division. Before the Lord Chief Justice and Justices Avory and Shearman

The question at issue in this matter, raised by way of a case stated by the stipendiary magistrate of the Potteries, sitting at Tunstall as a court of summary jurisdiction, was as to the sums due, under an apportionment, by the Council, from frontagers at South Terrace, in respect of the sewering, channelling, and the making-up of the road.

Mr. Montgomery, K.C., stated that the Council in July 1926 resolved that South Terrace and six other streets in the area should be "made up," and that the expense incurred should be apportioned among the frontagers whose property abutted on the highways. This case concerned those living in South Terrace. The apportionments were made according to the degree of benefit accruing to the frontagers from the work done. The appellants objected to the apportionments made provisionally. The cost was £720, and each of the nineteen frontagers, with the exception of one whose share was £72, were charged £36. The Council decided that each of the frontagers received equal benefit, with the one exception, and that if any of them received any extra benefit it was so negligible as to be disregarded. The Council made no distinction between houses that were occupied as dwellings pure and simple and those in which the front rooms had been converted into shops. In fact, part of one house had been so converted after the respondent Council decided to do the work.

Appellants contended that the Council had failed properly to apply the principle of greater or lesser degree of benefit or at all, and had merely "counted heads," and although they did not make the frontage a basis of apportionment they were not entitled to disregard it altogether, because frontage was a necessary factor in the calculation of the degree of benefit, and that the Council should have taken into consideration the site value and the existing facilities of access in the street.

They also contended that the shops derived greater benefit from the user of the street than the private houses.

For the Council it was argued that the calculation of the degree of benefit was a question of fact, subject to the right of the owners to take exception before a court of summary jurisdiction; that the respondents, with their knowledge of the locality, gave full consideration to the question of the degree of benefit and came properly to the conclusion that it was impracticable in the circumstances, and that they were not bound to take cognizance of frontage or of capital value and that the apportionments were, in the circumstances, equitable.

The magistrate decided that the Council were right in their apportionments, and it was upon that decision that the appellants asked for a statement of the present special case.

The Court agreed with the decision arrived at.

The Lord Chief Justice said the question was whether the magistrate had come to a proper decision on the law. The Act of Parliament gave definite instructions how apportionments were to be based and said that if the urban authority chose they could resolve that instead of taking frontages into account they would make the apportionments according to the greater or lesser degree of benefit accruing to the owners of property abutting on the highway for the work done. In this case the Council resolved to adopt the latter basis and ignored the frontage, with the result that with the exception of one person all the owners of property were apportioned £36 each. The stipendiary magistrate came to the conclusion, when the objection came before him, that there were no materials before him that justified him deciding for the objectors. In other words, upon the evidence he saw no reason sufficient to justify him saying and holding that the urban authority had gone wrong in their method of calculating the apportionments. This was not an appeal on the merits, but a question whether the magistrate's decision was wrong on the evidence which he had heard. The appeal therefore failed. Justices Avory and Shearman agreed.

### DEVELOPMENT OF ESTATE: PRIVATE GARAGE POSITION Douthwaite and others v. Brewster. Chancery Division. Before Mr. Justice Maugham

This action raised an interesting point as to the rights of an owner of a house on an estate to place a garage in the position she chose in her garden. The estate is the Wooler Estate and Building Co., Ltd., of Newcastle, and they, with others, sought an injunction to restrain Miss Brewster, of the Crescent, Highfield, Chester-le-Street, from putting up a garage where she liked in her garden.

His lordship, after hearing the evidence, said he came to the conclusion that on the true construction of the provisions in her conveyance the erection of her garage was a breach of covenant, since she had not obtained the approval of the estate owners through their architect, Mr. Nicholson, to the plan showing the garage in its position, 6 ft. behind the implied building line. Mr. Nicholson suggested to her representatives at an interview on the site to put it 2 ft. farther back, but the building proceeded on the plan which had been provisionally approved by the local authority. The erection of a garage on a site not approved or not according to plans approved, because the site was not approved, was a breach of contract. Defendant was wrong in proceeding, notwithstanding the verbal and written requests of the plaintiffs. But no pecuniary damage had been done. The garage in this position would not injure the rest of the estate. He was not, however, prepared to encourage people to take the law into their own hands when there was a question of the true effect of a covenant. It would be depriving plaintiffs of all redress in such cases, except where damages were proved, if he followed Mr. Justice Astbury in Sharp and Harrison, 1922 (the Chancery), on the measure of the extent of damage. It would not be a costly matter to set back the garage, and he gave the plaintiffs a mandatory injunction, with costs. He granted a stay with a view to an appeal

# IN PARLIAMENT

### [ BY OUR SPECIAL REPRÉSENTATIVE ]

il

e

it

e

rs

le

1-

le

1-

of

n

ir

ts

e

A

re

d

d

er

n

d

lt

y

le

e

ie

n

y

s.

e

d

n

N

n

e

g

1-1,

er

e

er

t,

rs

le

r.

le

e

y .

g

a

t-

s. is

t,

ir

a

h

ce

le

er

y

#### Slum Clearance and Housing

The Bishop of Southwark, in the House of Lords last week, asked how many persons in the United Kingdom were now living under slum conditions; how many had been removed from such conditions since the armistice by slum clearance schemes; how many would be affected by schemes already approved by the Ministry of Health, but not yet carried into effect; and whether the Government had any proposals to hasten the abolition or the improvement of slum property? He said that the Government had been carrying out very faithfully their promise to build a large number of additional houses. Indeed, their success had large number of additional houses. But the more successful the Government been remarkable. had been in building new houses, the nearer they must come to the time when they must carry out the other part of their promise-the introduction of measures for the clearance of slum areas.

Viscount Gage, who replied for the Government, said that in the last year for which statistics were available, over 1,000,000 houses were inspected for defects, and 13,260 were found to be unfit for human habitation. A further 352,643, or 30 per cent. of the number inspected, were found to be unfit in certain minor respects. Those houses, however, were presumably capable of being made fit, and the local authorities had taken, or were taking, the necessary steps, by the issue of notices and other negotiations, to secure their repair. During each of the past few years remedial works had been carried out, and, as the result of action by local authorities in 1926, 600,000 houses were repaired and put into correct sanitary condition. In connection with schemes confirmed by the Minister of Health since the armistice, 6,600 new houses had been completed to replace houses which had been or were to be demolished and those would accommodate between 29,000 and 30,000 persons. Since the war 123 slum clearance schemes had been submitted, and 113 had been confirmed. In addition, there were twenty schemes which the Ministry of Health knew of as being considered by local authorities. The Ministry of Health had before them the whole of the programme connected with the rating and valuation scheme, which would take a great deal of Parliamentary time. The promise with regard to section 46 and with regard to reconditioning, which was made last year, still held good, but he could not give the dates on which those Bills would be brought in. It was of very little value to give pledges in the present congestion of Parliamentary business, but he asked the House to accept the very serious promise of the Minister to bring in those Bills as soon as the position gave him an opportunity to do so.

In the debate which followed, several noble lords criticized the inaction of the Government, and made suggestions. The Marquess of Salisbury, the leader of the House, said he hoped that efforts would be made to provide, not bad houses, but a smaller and cheaper kind of house more suitable to the working classes. The Government wanted the local authorities to act with much greater vigour. He thought it a good suggestion that some of the powers of the Town Planning Act might be extended to existing housing, so as to prevent overcrowding being increased by the conversion of dwellings into places of business. What the Government were really considering was whether they could not find a better way of providing a remedy than by vast schemes of slum clearance and rebuilding. They were expensive, and presented all sorts of obstacles. If they could only recondition the houses which were capable of being reconditioned, then a much easier and cheaper road would be found of achieving their end. That particular problem had been under the consideration of the Government for a great many months, but, like all legislative projects, it presented great difficulties of its own.

At question time in the House of Commons, Sir K. Wood informed Lady Astor that, up to March 31 last, the latest date for which figures were available, the number of properties demolished in pursuance of slum clearance schemes confirmed since 1919 in respect of areas in England and Wales was 4,841, out of 13,494 properties included in such schemes. Information as to the number of persons so far displaced by reason of these schemes was not available, but it was a requirement of the schemes that rehousing accommodation should be provided for 65,180 persons. Up to March 31 last, 6,164 new dwellings had been completed for this purpose, and a further number were in course of erection. Fifteen schemes had been fully completed, and others were nearing completion.

#### Charing Cross and Waterloo Bridges

Mr. Harris asked if any agreement had been arrived at between the parties concerned about the construction of the proposed new Charing Cross bridge; and if there was any limit of time to the offer of the Government to give financial assistance to the scheme ?

Colonel Ashley, the Minister of Transport, said that the question of the proposed new bridge was the subject of active negotiation, and he could not usefully say more at the present stage.

Mr. Harris then inquired if it was necessary to take a couple of years to decide this question when technical officials had come to an agreement; and was the Minister aware that, meanwhile, the temporary Waterloo Bridge was not improving by being maintained?

Colonel Ashley said he was aware of the position in regard to Waterloo Bridge, and Mr. Harris could rely upon his pushing on the negotiations as rapidly as possible.

# SOCIETIES AND INSTITUTIONS

#### R.I.B.A. Council Meeting

Following are notes from the minutes of the last meeting of the Council of the R.I.B.A.:

Libraries of Schools of Architecture. It was decided to renew for the year 1928 the grant of  $\pounds 50$  to the Board of Architectural Education for libraries of schools of architecture.

The late Sir Ebenezer Howard. Dr. Raymond Unwin, F.R.I.B.A., was appointed to represent the R.I.B.A. on the National Committee which is being convened by the Garden Cities and Town Planning Association to consider and make arrangements for a memorial to the late Sir Ebenezer Howard.

British Engineering Standards Association Sectional Committee on Cement. Mr. W. T. Benslyn, A.R.I.B.A., was appointed as R.I.B.A. representative on the above committee in place of Mr. T. P. Bennett, F.R.I.B.A., who was unable to continue to act in this capacity.

By-laws for Drainage and Sanitary Work in the City of London. On the recommendation of the Science Standing Committee it was decided to inform the City Corporation that the R.I.B.A. were of opinion that one set of by-laws for sanitary matters should be drawn up to apply to both the City and County of London, and to ask the City Corporation whether the new L.C.C. by-laws which were shortly to come before the Ministry of Health for approval could not be agreed as the by-laws for the city as well as for the county.

The Fellowship. The Council, by a unanimous vote, elected the following architects to the Fellowship under the powers defined in the Supplemental Charter of 1925:

#### Australia

Arthur Wm. Anderson (Sydney). C. W. Chambers (Sydney). H. W. Tompkins (Melbourne). L. Laybourne-Smith (Adelaide). Kingsley A. Henderson (Melbourne). G. J. Oakshott (Sydney). Howard Joseland (Sydney). E. Evan Smith, L.R.I.B.A. (Melbourne).

# R.I.B.A. Statutory Examination

At the R.I.B.A. statutory examination qualifying for candidature as district surveyor in London held recently, the following candida...s were awarded certificates of competency to perform the duties of district surveyors: Messrs. P. S. Dixon, A.R.I.B.A.; H. W. Humphry, A.R.I.B.A.; T. H. Nunn.

#### The South-Eastern Society of Architects

Owing to the energy, enthusiasm, and organizing powers of Mr. R. Goulburn Lovell, A.R.I.B.A., the establishment of a representative society of architects in alliance with the R.I.B.A. in Kent, Sussex, and Surrey has become an accomplished fact. Meetings have been held in Brighton, Canterbury, Guildford, and Tunbridge Wells, and it is certain from the enthusiasm aroused that the membership of the new society will reach a total of over five hundred. The most important work before the society will be to develop and control the beautifying of surroundings. The preservation of rural England will be controlled by voluntary panels of architects, whose usefulness will be further extended as advisory bodies of experts, to which the local authorities could refer such matters as architectural design and town planning. Arrangements have now been made for conferences and week-end visits to take place in July at Canterbury, Guildford, Brighton, and Tunbridge Wells. At each of these towns the proceedings will open with a chapter committee meeting-a: to consider the list of candidates and to elect members; b: to nominate representatives of the chapters to the council of the society; c: to consider names of those who may be invited to become honorary members; d: to deal with other business. A summary of the remainder of the programmes follows:

#### CANTERBURY

Friday, July 6. Professor Patrick Abercrombie, M.A., F.R.I.B.A., will give an address with plans and diagrams describing the townplanning schemes now being carried out on the Kent coalfields. Conducted stroll through the city.

Saturday, July 7. Conducted visits to the cathedral and precincts, St. Augustine's Abbey, St. Martin's (the mother church), The Grey Friars, etc. Charabanc visit to Sandwich and thence to the mining villages of Aylesham and Elvington. Dinner at the County Hotel, at which Lt.-Col. Page, c.M.G., will preside. Sunday, July 8. Charabanes ready for visits to Chilham,

Rye, Winchelsea, etc.

#### GUILDFORD

Friday, July 13. Dr. Williamson will give a talk on the history of Guildford. Conducted stroll through the town.

Saturday, July 14. Conducted visits to Archbishop Abbott's Hospital, the Castle Keep, the Museum, St. Mary's Church, etc. Luncheon at the Angel Hotel. Circular tour will be arranged by cars and charabancs to some of the following historic places: Sutton Place, Clandon Park, Loosley, Compton, including the Watts Memorial Chapel. Tea will be arranged for at Compton. Dinner at the Angel Hotel at which Col. Hardcastle will preside. Sunday, July 15. Provisionally arranged visit by cars and

charabancs to Waverley Abbey, Farnham Castle, etc.

#### BRIGHTON

Saturday, July 21. Visit conducted by Mr. Edwards, the borough surveyor, to the Brighton municipal estates at Moulscombe and Falmer. Mr. John Every will allow a visit to his collection of old Sussex ironwork. Mr. Every has invited the members of the conference to lunch, after which they will proceed to visit Shoreham, Lancing, Steyning, Amberley, and Arundel. Dinner at the Old Ship Hotel, at which Mr. A. R. C. Fenning will preside.

Sunday, July 22. Provisionally arranged visit by cars and charabancs to Dane Hill, Ardingly, Lindfield, etc.

#### TUNBRIDGE WELLS

Friday, July 27. An address dealing with the historic residences in the neighbourhood. Conducted stroll through the town.

Saturday, July 28. Cars and motor-coaches will visit the many local historical places during the day. Dinner at the Mount Ephraim Hotel, at which Mr. C. H. Strange will preside.

Sunday, July 29. A provisionally arranged visit to supplement Saturday's circular tour.

Those intending to be present at the different functions should communicate with the hon. secretary of the chapter.

Following is a list of the officers of the society: President, Henry Vaughan Lanchester, vice-president R.I.B.A.; honorary treasurer, William Henry Bidlake, M.A., F.R.I.B.A.; honorary auditor, Professor Patrick Abercrombie, M.A., F.R.I.B.A.; honorary secretary, Richard Goulburn Lovell, A.R.I.B.A.

#### Officers of the Chapters

Brighton District. Chairman, A. R. C. Fenning, F.R.I.B.A. (Eastbourne); hon. treasurer, E. Wallis Long, L.R.I.B.A. (Brighton); hon. auditor, John Saxon Snell, F.R.I.B.A. (Worthing).

Canterbury District. Chairman, Lt.-Col. Page, C.M.G. (Ramsgate); hon. treasurer, C. J. F. Martindale, A.R.I.B.A. (Sandwich); hon. auditor, J. L. Seaton Dahl, F.R.I.B.A. (Folkestone).

Guildford District. Chairman, Col. Hardcastle, F.R.I.B.A. (Woking); hon. treasurer, H. Reginald Poulter, F.R.I.B.A. (Camberley); hon. auditor, Edward Penfold, F.R.I.B.A. (Reigate).

Tunbridge Wells District. Chairman, C. H. Strange, F.R.I.B.A. (Tunbridge Wells); hon. treasurer, Cecil Burns (Tunbridge Wells); hon. auditor, Briant A. Poulter, F.R.I.B.A. (Upper Wallingham).

#### Hen. Secretaries

Brighton District. Kenneth E. Black, A.R.I.B.A., 10 Prince Albert Street, Brighton. Canterbury District. H. Campbell Ashenden, A.R.I.B.A., 29 St. Peter's Street, Canterbury. Guildford District. Annesley H. Brownrigg, F.R.I.B.A., 133 High Street, Guildford. Tunbridge Wells District. A. Gregor Grant, A.R.I.B.A., 7 London Road, Tunbridge Wells.

#### The Garden Cities and Town Planning Association

The next tour of the Association will be to the Irish Free State, from August 20 to 30, when visits will be paid to the cities of Dublin, Limerick, and Cork. The tour has been arranged with the corporation of each city, whose representatives will accompany the party on each series of visits. The tour will thus afford, under most favourable conditions, a unique opportunity of seeing Ireland and its varying municipal development. The week-end will be spent at Killarney, Ireland's most famous beauty spot. Full particulars of the tour can be obtained from the Secretary, Garden Cities and Town Planning Association, 3 Gray's Inn Place, W.C.I.

#### Building Operatives and Piecework

Mr. Thomas Barron, in delivering his presidential address at Norwich at the eleventh annual conference of the National Federation of Building Trade Operatives, made the following remarks with regard to piecework: "An insistent demand is being made on the part of many employers for an alteration in our present system of wage payment. Payment by results is being advanced by many as a panacea for all our troubles, and this demand in our industry is likely to be strengthened in the near future on account of circumstances of which we are cognizant. The system is gradually spreading throughout other industries, and, unfortunately, is not unknown in some sections of our own. We have in the past set our face steadfastly against this method of payment. Our older members have had painful experiences of its effects, and we believe, whatever may be said of its morality, that it is totally unsuited to our particular industry. We believe it would lead to a degradation of craftsmanship, of which we are all proud; we believe it would tend to a scamping of work to a still greater degree than even now obtains in sections of the speculative building trade; and, finally, we believe it is unscientific, uneconomic, and an unsound method of wage payment. If, however, we are to combat the attempt to introduce the method into the industry, we must be prepared to justify our present method of time payment; we must accept the responsibilities entailed therein, for we can only maintain payment on the time basis by demonstrating that it is more economic and that, taking workmanship and production together, our existing method reaches a high standard. We believe, judged by these standards, that we can claim with confidence that the efficient productivity of our industry is as high as in those industries where other methods of payment obtain."

#### A.A.S.T.A. Annual Meeting

r,

r,

e-

it-

S-

);

Α.

n-

Α.

ce

ell

rd

et,

nt,

te,

of

he

ny

ler

nd

be

ull

len

.1.

at

nal

ing

ng

our

ing

his

ear

nt.

ies.

vn.

lof

of

ity,

eve

are

o a

the

ific,

If.

hod

ent

ties

ime

ing

hod

rds,

vity

ther

The annual general meeting of the Association of Architects, Surveyors and Technical Assistants was held in London. Representatives from the Birmingham, Lincolnshire, Hampshire and Isle of Wight, Aberdeen, Metropolitan and Leicester and Northants branches attended. Mr. H. R. Surridge, president (Kettering), was in the chair. After the adoption of the annual report and balance sheet, the president delivered his address and made an appeal for united effort. He particularly appealed for support of the library which the Association has recently started. Reference was made to the working of the employment bureau, to the setting up of an employment committee, to the work of the tours department and the tour to take place in Normandy in the early part of August, to the work and needs of the benevolent fund, and to the healthy condition of the benefit fund section of the Association. In this case it was decided to increase the benefits from 10s. to 15s. per week, and further to make membership of such benefit section optional. It was resolved to refer the whole question of subscriptions to the Executive Council for early report and action. Several amendments to the rules were agreed upon. The annual dinner was afterwards held at the Holborn Restaurant. Mr. H. R. Surridge (president) and Mrs. Surridge (Kettering) received the guests, among whom were Messrs. J. A. Gotch, H. V. Lanchester, C. H. Bedells, H. M. Adamson, Major A. S. Hinkley, Mr. and Mrs. C. Sheppard and Mr. H. W. Chester.

# THE DESIGNER OF THE INTERIORS AT LYONS'S NEW CORNER HOUSE

We regret that owing to a misunderstanding as to his correct status in connection with the work done at the new Oxford Street Corner House, Mr. Oliver P. Bernard was not given due recognition in the illustrated article on this building published in THE ARCHITECTS' JOURNAL for May 30. Mr. Bernard was, in fact, solely responsible for the design of the interior decoration and lighting of the Corner House. We hope that this explanation will make Mr. Bernard's position as designer of the extremely interesting marble decorations perfectly clear.

### TRADE AND CRAFT

Following are particulars of the immediate demonstrations to be given in the motor travelling caravan with the working Ideal Cookanheat installation of the National Radiator Company, Limited: June 28, Pool Meadow, Coventry; June 29, Market Square, Northampton; July 3 to 5, Peterborough Agricultural Show, Peterborough.

The International Brick Company, Ltd., have issued the following notice: "The latest date for the handing in of Letters of Renunciation of both classes of shares was June 25, 1928, but for the convenience of shareholders this period has been extended to July 16, up to and including which date Letters of Renunciation duly signed will be accepted."

A contract for the maintenance of the Leaning Tower of Pisa with its present lean by means of strengthening the foundations, has been secured, against world-wide competition, by the Francois Cementation Company, of Doncaster. The firm, which has undertaken to do the work at nominal cost on account of the architectural and historic importance of the tower, holds the cementation contracts for St. Paul's Cathedral and the Mersey Tunnel shaft lining.

The installation of lighting and power required at the new extension of the Polytechnic, Regent Street, has been entrusted to Messrs. Francis Polden & Co., Ltd. This company has also been entrusted with the work at the Clarendon Restaurant, Hammersmith Broadway, both as regards the ordinary lighting of the restaurant and the special lighting scheme in the dance hall and masonic temple. They are also actively engaged on the large contract for the new boys' school at Bushey.

A leaflet has been issued by Messrs. Hope's Heating and Lighting, Ltd., to draw the attention of architects, engineers, and building owners to the advantages of using oil fuel for heating purposes. It is stated that Hope's quiet automatic oil burner can be applied to any type of heating plant-steam, hot water, or hot air-and is fully guaranteed. Among the advantages of oil firing set forth in the leaflet are the following: 1: comfortable warmth is maintained automatically; 2: the temperature required is set on the thermostat indicator, which is situated for convenience in a room most used, and the plant then works automatically without any attention; 3: the inside temperature will not vary more than 2 deg., notwithstanding changes outside; 4: fuel is only consumed when heat is required; 5: comfort and economy are obtained without the labour of stoking, without ashes, dust or dirt. The special thermometer or thermostat, which is fixed in a convenient place, electrically controls the whole installation. Once set at the desired temperature, it is stated that the plant works automatically and maintains an even temperature irrespective of outside changes.

On June 11 Messrs. W. H. Willcox & Co., Ltd., of Southwark, London, attained their jubilee, having completed fifty years of service to the engineering, agricultural, motor and allied trades. Mr. Walter Henry Willcox started business in 1878 with a small staff in Upper Thames Street, and some of the original employees are still in the service of the firm. He entered into partnership later with Mr. William Cordrey at 36 Southwark Street, with whom he built up a business the name of which has become a household word wherever engineers' stores, lubricants, hose, beltings, tools and sundries are used. Starting from a small warehouse, the premises of the firm now comprise no less than eight large buildings. Their offices, warehouses, pump works and shop are situated at 34 to 38 Southwark Street, and 32 Southwark Street houses the leather belting factory and export department. The firm have their oil and grease refineries and stores at Castle Street and Worcester Street, while the Jones-Willcox patent wirebound (non-rubber) hose is manufactured in their large factories at Canvey Street and Zoar Street, Southwark.

# NEW INVENTIONS

[The following particulars of new inventions are specially compiled for THE ARCHITECTS' JOURNAL, by permission of the Controller of H.M. Stationery Office, by our own patent expert. All inquiries concerning inventions, patents, and specifications should be addressed to the Editor, 9 Queen Anne's Gate, Westminster, S.W.I. For copies of the full specifications here enumerated readers should apply to the Patent Office, 25 Southampton Buildings, London, W.C.2. The price is 1s. each.]

### LATEST PATENT APPLICATIONS

- 8403. Davey, H. N. Self-closing door. March 20.
- 8815. Fletcher, S. Manufacture of concrete building-blocks. March 23.
- 8868. Hall, B. J. Apparatus for developing blue prints, &c. March 23.
- 8976. Kleinfeldt, E. H. Walls. March 24.
- 8761. Yila y Conte, J. Mechanical press for manufacture of bricks, etc. March 22.

#### SPECIFICATIONS PUBLISHED

- 287247. Corby, S. F., and Wasp, J. Partition walls.
- 263824. Solorzano, G. I. S. Manufacture of slabs or units for covering or facing ceilings, floors, walls, or the like.
- 281241. Rostock, R. Methods of impregnating and coating surfaces of concrete or like material.
- 281689. I. G. Farbenindustrie Akt.-Ges. Manufacture of acidproof cementing compositions.

#### ABSTRACT PUBLISHED

284925. Yvens, L., 91 Rue des Bayards, Liège, Belgium. Roofing.

#### WEEK'S BUILDING NEWS THE

Corporation has The EASTBOURNE approved plans of the Chatsworth estate for the development of the Southbourne area.

Mr. Jackson has prepared plans for the development of the Northiam estate, EAST-BOURNE.

Plans passed by the CHELTENHAM Corporation: Store sheds, Rutland Street, for Messrs. Sharpe and Fisher; alterations and additions to Sherborne House, Promenade Terrace, for Mr. F. W. Billings; additions to nurses' quarters, General Hospital, Sandford Road, for the governors; new road, off Moorend Park Road, for Mr. H. F. Hall; alterations and additions, 2-3 Promenade, for Gloucestershire Dairy Co.; houses, Gloucester Road, for Mr. A. E. Lane.

The MANCHESTER Corporation has obtained sanction to grant a further 500 housing subsidies.

Plans passed by the DUDLEY Corporation: Extensions, 102 and 103 Halesowen Road, Netherton, for Messrs. H. and T. Danks, Ltd.; house, Chapel Street, Netherton, for Mr. Wm. Jarvis; two houses, Quarry Road, Dudley Wood, for Mr. J. Griffiths; bungalow, Stourbridge Road, Hart's Hill, for Mr. J. C. Hill; two houses, St. John's Road, for Mr. J. R. Turner; offices, Dudley, for the Stourbridge Glazed Brick Company. \*

Plans passed by the NORTHAMPTON Cor-poration: Extensions, "Halfway House," Kingsthorpe Road, for Messrs. P. Phipps & Co., Ltd.; three garages and workshop, Wellingborough Road, for Mr. E. H. Tibbs; alterations and additions, 15 Abington Street, for Messrs. Phillips and Sons; alterations, 33 Gold Street, for Messrs. Jeffery, Sons & Co., Ltd.; four houses, and garages, The Vale, for Messrs. Lack and Revitt; shop, house, garage, workshop, and store, Birchfield Road, for Mr. P. H. Staughton; three houses and shops, Harborough Road, for Mr. J. Dunkley; two houses, The Drive, for Messrs. A. Glenn and Sons; four houses, The Drive, for Messrs. Walker and Perrett; seven houses, Freehold Street, for Mr. A. E. Thompson; alterations, "Plumbers' Arms," Sheep Street, for Messrs. P. Phipps & Co., Ltd.

The ROTHERHAM Corporation has passed plans submitted by Mr. P. J. S. Smith for new shop premises in College Street and Vicarage Lane.

The Kent Education Committee has purchased land for an extension to the Sussex Road Council School premises at TONBRIDGE and for playing accommodation.

The Kent Education Committee has purchased 71 acres at WEST MALLING for the erection of a central school. \*

The Kent Education Committee has purchased 4 acres in Lowfield district of DARTFORD for the erection of an elementary school.

The Kent Education Committee has acquired 5 acres of land for the extension of the secondary school site at Holcombe, CHATHAM. \*

Plans passed by the TOROUAY Corporation: Extensions, Conway Court, Warren Road, for Mr. A. L. J. D'Espiney; eight houses, Daison estate, for Messrs. Harris and Breyley; house, St. Katherine's estate, for Mr. J. Sumner; extensions to Hotel Metropole, Belgrave Road, for Mr. F. E. Hall; store, 53 Woodville Road, for Mr. E. G. Wills; forty-two houses, Shiphay, for Mr. A. Chippendale; thirty-nine houses, Mallock Road, Chelston, for the Devon Rosery Co.; extensions, Community Buildings, Cary Castle, for Miss Tatham; three bungalows, Beechfield Avenue, Barton Road, for Mr. H. W. Lloyd; six houses, Barnfield Road, Livermead, for the Gower Construction Co.

The PRESTWICH U.D.C. is to grant another fifty housing subsidies.

Plans passed by the GLOSSOP Corporation: House, Fauvel Road, for Mr. B. Goddard; alterations and extensions, High Street West, for the Glossop-dale New Industrial Co-operative Society, Ltd.

\* The BARKING TOWN U.D.C. is to borrow £100,000 for further housing advances.

The BARKING TOWN U.D.C. has directed the engineer to prepare plans and estimates for the construction of new decking to the Mill Pond bridges and a footpath on one side thereof; for the straightening of Highbridge Road at or near White Gates Bridge, and the construction of a new road from Highbridge Road to London Road.

Plans passed by the BARKING TOWN U.D.C.: Lavatories, Thames Works, Hertford Road, for Messrs. Sanders and Forster, Ltd.; garage and petrol station, Rippleside, for Mr. W. Thomas; canteen, Abbey Road, for Messrs. W. Warne & Co., Ltd.

\*

A swimming bath is to be constructed at the County School for Boys at GILLINGHAM.

The Essex Education Committee has obtained sanction for a loan of £,29,000 for the erection in Lymington Road of the ninth elementary school at BECONTREE.

The Board of Education has approved plans of the Notts Education Committee for the erection of a school for 388 infants at an estimated cost of £10,200 at HARWORTH BIRCOTES.

The Essex Education Committee is acquiring a site at Marshall's Park, ROMFORD, for the erection of an intermediate school.

Plans passed by the DOVER Corporation: Twelve houses, Whitfield Avenue and Old Park Road, for Mr. Caspall; house, Lewisham Road, for Mr. A. Wooldridge; shop, High Street, for Mr. J. B. Jones; two houses, Lower Road, River. for Mr. C. E. Beaufoy; house, Guthrie Gardens, River, for Mr. J. S. Ovenden.

The GLOSSOP Corporation are being asked to instruct the Highways Committee to produce plan, specification, and estimate of cost of a new concrete bridge to replace the existing Coronation Bridge.

\*

Plans passed by the ILFORD Corporation: Six houses, Hamilton Avenue, for Messrs. Ullyetts Estates Co.; nine houses, Rochester Gardens and The Drive, for Mr. A. P. Griggs; four houses, Woodford Avenue, for Mr. J. W. Lohden; extensions to enginehouse, Uphall Works, Uphall Road, for Messrs. Howards and Sons, Ltd.; six shops and houses, Clifton Parade, Ley Street, for Mr. P. Triplete; alterations, 218 High Road, for London Co-operative Society; sports pavilion, Woodford Spur, Woodford Avenue, for Mr. B. A. Campbell; six houses and garages, Exeter Gardens, for Mr. A. P. Griggs; alterations to Messrs. Ilford, Ltd., Roden Street, for Messrs. Hammond and Miles, Ltd.; roads and sewers, Castle Drive, Evanston Gardens, for Mr. S. Robinson; six houses, Christchurch Road, for Messrs. W. Longworth & Co.; eight bungalows, Gyllngdune Gardens, and Egerton Gardens, for Messrs. J. W. Moore and Son, Ltd.; eight houses, Merton Road, for Mr. R. Stroud; eight houses, Talbot Gardens, for Mr. G. H. Marshall.

The L.C.C. proposes to arrange for leasing a site on the Watling housing estate, HENDON, for the erection of a peoples' refreshment house.

The L.C.C. estimates budget for an expenditure for the next twelve months on housing of £6,000,000.

The PLYMOUTH Corporation has voted £108,205 for the crection of 267 houses at North Prospect.

Plans have been prepared by Messrs. Blake, Son and Williams for proposed shopping areas on the Mitchley Wood estate, COULSDON.

THE ARCHITECTS' JOURNAL for June 27, 1928

Plans passed by the WEYMOUTH Corporation: Two houses, Melcombe Avenue, for Messrs. S. Jackson and Sons; extensions, 95 Abbotsbury Road, for Messrs. Andrews and Andrews; house, Newstead Road, for Messrs. Theo. Conway, Ltd.; two houses, Cranford Avenue, for Messrs. S. Jackson and Sons; alterations to pavilion, Weymouth College, for Messrs. Crickmay and Son.

The TRURO Corporation Housing Committee has asked the city surveyor to submit draft plans showing the layout and type of house for the development of land on the west side of Hendra Road.

^

Plans passed by the SEDGLEY U.D.C.: Three houses, Coton Road, for Mr. Percy A. James; additions to offices, Deepdale Lane, for Messrs. Alfred Allen and Sons, Ltd.; two bungalows, Tudor Place, for Messrs. J. and J. Darby; rearrangement of extension to Alexandra Cinema Hall, for the licensee.

Plans passed by the CHELMSFORD Corporation: P.O. engineering stores, Friars Place, for Messrs. Holland and Day; alterations and additions, "The King's Arms" publichouse, Moulsham Street, for the Chelmsford Brewery, Ltd.; extension of works, New Street, for the Marconi Wireless Telegraph Co., Ltd.

The EAST HAM Corporation is considering the question of enlarging the isolation hospital.

2.0

Plans passed by the HASTINGS Corporation: Alterations, 66 High Street, for Messrs. Callow and Callow, architects; additions, 3 Fearon Road, for Mr. L. Towner, architect; workshop, 13 Red Lane, St. Leonards, for Mr. F. Bowcock, architect; house, Clinton Crescent, St. Leonards, for Mr. H. J. Richardson, architect; house, Priory Road, for Mr. J. Hunt, architect; eleven houses, Bulverhythe Road, St. Leonards, for Messrs. H. Ward and Son, architects; additions, Bexhill Road, St. Leonards, for Mr. H. M. Jeffery, architect; store and private wards, Buchanan Hospital, Springfield Road, St. Leonards, for Messrs. H. Ward and Son, architects; alterations, Devonshire Road, and 29 and 30 Station Road, for the British Legion, for Messrs. H. Ward and Son, architects; two houses, Red Lane, St. Leonards, for Mr. J. B. Bowcock, architect; alterations, 252 Old London Road, for Messrs. Callow and architects; bathrooms, Queen's Callow, Hotel, Harold Place, for Messrs. Callow and Callow, architects; shops, Robertson Street, for Messrs. Callow and Callow, architects.

An out-patients' department is to be erected in connection with the Birkenhead General Hospital, abutting on Beckwith Street and Prince Edward Street, BIRKEN- The COLCHESTER Corporation has obtained sanction to grant another fifty housing subsidies.

Plans passed by the BIRKENHEAD Corporation: Eight houses, Mona Street; machineshop, offices, and garage, on land in connection with the old industrial schools, abutting on Miriam Place, Corporation Road; chapel, Pensby Road; conversion of three houses into shops and houses, 221, 223, and 225 Lansdowne Road; extension, Metallic Valve Works, Sandford Street; three shops and seven houses, Hoylake Road and Gautby Road; alterations and extensions, 212 and 214 Grange Road.

Plans passed by the BOLTON Corporation: Two houses, Sharples Avenue, for Mr. W. H. Price; extension to tower, Peel Mills, Turton Street, for Messrs. Knowles, Ltd.; timber shed and timberdrying building, Bentinck Street, for Bolton Co-operative Cabinet Makers' Society; extension, 85 Blackburn Road, for Mr. Robert Woodcock; streets and levels, off Adrian Road and Cloister Street, for Mr. W. Andrew; four houses and shops, Rishton Lane, for Mr. T. P. Smith; thirteen houses, Chilham Street, for Mr. John S. Hughes; three houses, Hurst Street, for Mr. Maurice Welsh; two houses, off Green Lane and Lowther Street, for Mr. A. Barrett; four houses, Chorley Old Road, for Mr. Samuel Main; buildings, Radcliffe Road and Ashbourne Avenue, for Mr. James Russell; alterations and additions, Swan Hotel, Churchgate, for Messrs. Wilson's Brewery, Ltd.; reading-room, Old Hall Street North, for the Libraries Committee; alterations, Bridgeman Street, for Bradford Ward Labour Club; extensions, 120 Blackburn Road, for Mr. Thomas Relph; pavilion, Back Morris Green Lane, for Mr. J. Atkinson; two houses, Ashbourne Avenue, for Mr. James Russell; engine and pumphouse, Bridgeman Street, for the Anglo-American Oil Co.; stand, Burnden Park, for Bolton Wanderers' Football Club; petrol tank, Market Hall, Brook Street, for Messrs. George Munro & Co., Ltd.; eleven garages, Crescent Road, for Mr. J. R. Bell; twenty-five garages, Springfield, Bradford Street, for Messrs. Edwards Bros.

\*

The Board of Education has approved final plans for the proposed Roman Catholic Demonstration School at Endsleigh, HULL, for not more than 200 junior mixed and infants.

At a meeting of the HULL Corporation Housing Committee, the city architect submitted layout plans showing alternative methods of rehousing, and the following plans were approved: a: land, corner of Southcoates Lane and Hedon Road, 180 three-story tenement flats; b: land, corner of Madeley Street and Goulton Street, fifty-four three-story tenement flats; c: land, Barnsley Street, 325 three-story tenement flats. At a meeting of the HULL Corporation Housing Committee, the city architect reported that the latest date for commencement of subsidy houses to be erected by private enterprise was May 31, and he recommended that June 30 be the commencing date for the balance of the 2,400 houses sanctioned but not commenced. The suggestion was approved.

. . . .

Plans passed by the HULL Corporation: Eight houses, Claremont Avenue, for Mr. E. Mowforth; two houses, Dundee Street, for Mr. A. T. Lison; six houses, Boothferry Road, for Mr. G. Overton; five houses, Claremont Avenue, for Mr. W. Garbutt; ten houses, Belgrave Drive, for Mr. A. H. Evans; seven houses, Belgrave Drive, for Mr. A. Sash; seven houses, Parkfield Drive, for Messrs. J. H. Fenwick and Son, Ltd.; seven houses, Parkfield Drive, for Mr. S. H. Wrighton.

Plans passed by the SHEFFIELD Corporation: Four houses, Rupert Road, for Mr. W. A. Wright; four houses, Crawford Road, for Mr. Tom Leadbeater; six houses, Fox Hill Road, for Mr. G. L. Bradshaw; six houses, Bingham Park Crescent, for Messrs. Wm. Malthouse, Ltd.; four houses, Clarence Road, for Mr. Charles Bacon; six houses, Ansell Road, for Mr. J. Ramsden; ten houses, Rural Lane, for Mr. T. Barker; four houses, Montgomery and Rundle Roads, for Messrs. B. Hawley & Co.; four houses, Ecclesall Road, for Mr. A. Ramsay; fifty-eight houses, Wybourn Estate, for the Estate Committee of Sheffield Corporation.

The BIRKENHEAD Education Committee has selected a site for the erection of an elementary school in the south end of the borough.

The SHEFFIELD Corporation Parks Committee has agreed on a site at Whiteley Wood for the erection of a drinking fountain, in accordance with a plan and design prepared by Mr. J. R. Wigfull, architect, as a memorial to the late Mr. Thomas Boulsover, through whose invention the cutlery and silver trades derived so much benefit.

The BOLTON Corporation has agreed to the proposals of Messrs. Bradshaw, Gass and Hope, architects for the Bolton War Memorial, for the treatment of the Hall of Memory.

Plans passed by the LEAMINGTON Corporation: Pavilion, Tennis Club Ground, Mill Road, for Mr. H. Bishop; ten houses, Holt estate, off Cubbington Road, for Learnington Slum Clearance, Ltd.; alterations, 20 and 22 Victoria Terrace, for Messrs. Pattison & Co., Ltd.; extension and alteration, Eagle Foundry, for Messrs. S. Flavel & Co., Ltd.; four houses, Rugby Road, for Mr. W. B. Stowe; four houses, Cubbington Road, for Mr. A. W. Burn.

925

roved nittee fants o at

quir-

ORD,

ol.

tion: Old Lewshop, uses, ufoy;

Mr.

e to te of blace

tion:

essrs. ester . P. for gine-, for hops reet. High iety; lford Six , for essrs. essrs. and dens, nristth & dens, . W. erton uses. 11.

asing tate, ples'

s on

oted es at

essrs. oosed Vood

# RATES OF WAGES

	R	ATES OF WAGES	
I	п	I II	I II
A Addlestone S. Countles 16	1 21	ganshire & A Nec Monmouthshire A Nel Exeter S.W. Counties *1 5; 1 1; A Ner Exmouth S.W. Counties 1 4; 1 0; A Ner	s. d.         d. <thd.< th=""> <thd>d.         d.         <t< td=""></t<></thd></thd.<>
A Adlington N.W. Counties 1 7 A Airdrie Scotland *1 7 Cr. Aldeburgh E. Counties 1 3 A Altrincham N.W. Counties 1 7 B, Appleby N.W. Counties 1 4 A Ashton-un- N.W. Counties 1 7 1	1 0	FELIXSTOWE         E. Counties         1         5         1         1         A.         NOI           Filey          Yorks         1         6         1         1         A.         Noi           Filey          Yorks         1         6         1         1         A.         Noi           Filestwood.         N.W. Counties         1         7         1         2         A.         Noi           Folkestone         S. Counties         1         4         1         0         A.         Noi	$\begin{array}{cccc} \text{rthsmpton Mid. Counties} & 1 & 7 & 1 & 2 \\ \text{rth Staffs. Mid. Counties} & 1 & 7 & 1 & 2 \\ \text{rth Shields N.E. Coast} & 1 & 7 & 1 & 2 \\ \text{rwich} & & E. Counties & 1 & 6 & 1 \\ \text{tingham Mid. Counties} & 1 & 7 & 1 & 2 \\ \end{array}$
der-Lyne A <sub>3</sub> Atherstone Mid. Counties 16 B <sub>3</sub> Aylesbury. S. Counties 14	1 0	GATESHEAD N.E. Coast 1 71 1 22 B O/A	AKHAM Mid. Counties 1 5 1 1 ham N.W. Counties 1 7 1 2 westry Mid. Counties 1 6 1 1
B. Barnstaple S.W. Counties 1 5 N.W. Counties 1 71	1 01 1 22 1 22 1 01 1 22	Goole Yorkshire 1 64 1 2 A CAR Gosport S. Counties 1 54 1 14 Grantham Mid. Countles 1 6 1 14 A PA Gravesend S. Counties 1 7 1 24 C Pen	erborough Mid. Counties 1 6 1 1
B Bath S.W. Counties 1 4 B Bath S.W. Counties 1 5	1 24 1 0 1 1 1 24 1 1 1 24 1 1 2 1 1 1 1	HALIFAX. Yorkshire 171 124 A Pon Hanley Mid. Counties 171 124 A Pre- Harrogate Yorkshire 171 124 A Pre-	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Tweed A. Bewdley Mid. Counties 1 6 B. Bicester Mid. Counties 1 4 A. Birkenhead N.W. Counties *1 7 1 7	1 2 1 0 1 2	Hatrield E. Counties 1 4 1 0 A	PERRY N.W. Countles 1 71 1 2 FERRY S. Countles 1 6 1 11
Auckland A Blackburn N.W. Counties 1 71		Hertford E. Countles 1 5 1 1 B Rein Heysham N.W. Countles 1 7 1 2 A <sub>3</sub> Ret Howden N.E. Coast 1 7 1 2 A Rhe Huddersfield Yorkshire 1 7 1 2 V	gate S. Counties 1 51 1 13 ford Mid. Counties 1 6 1 15 ondda S. Wales & M. 1 71 1 23 falley
A Blyth . N.E. Coast 1 7 B <sub>3</sub> Bognor . S. Counties 1 4 A Bolton . N.W. Counties 1 7 A <sub>7</sub> Boston . Mid. Counties 1 6 B. Bournemouth S. Counties 1 5	$1 0 \\ 1 21 \\ 1 1 \\ 1 0$	The initial letter opposite each entry indi- cates the grade under the Ministry of A. Rus	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
A <sub>2</sub> Brentwood     E. Counties     1       A     Bridgend     S. Wales & M.     1       P <sub>2</sub> Bridgwater     S.W. Counties     1       A <sub>1</sub> Bridlington     Yorkshire     1       A     Bridghouse     Yorkshire     1       B     Brighouse     Yorkshire     1       B     Brighton     S. Counties     1		which the borough is assigned in the same schedule. Column I gives the rates for craftsmen; column II for labourers; the which a separate rate maintains is given the for craftsmen working at trades in the for the bit of the loss coloring scheme of the second a Sec	ALBANS E. Counties 1 6 1 1 Heiens N.W. Counties 1 7 1 22 Isbury S.W. Counties 1 4 1 0 rborough Yorkshire 1 7 1 24 inthorpe Mid. Counties 1 7 1 24 Meidd Vorkshire 1 7 1 24
As         Bromsgrove         Mid. Counties         1         64           O         Bromsard         Mid. Counties         1         34           A         Burshem         N.W. Counties         1         74           A         Burshem         Mid. Counties         1         74           A         Burshem         Mid. Counties         1         74           As         Burshem         Mid. Counties         1         74           Trent         Terest         1         64	1 2 111 1 2 1 2 1 2 1 2	may be obtained upon application in writing. A Ski A Sk	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
A Buxton N.W. Counties 1 7	1 21	Inswich       Counties     1     1     1     27     A     Sou       Ipswich       Counties     1     5 <sup>+</sup> 1     1     A     Sou       Isle of Wight     S. Counties     1     3     11     A     S.S       I     I     I     I     A     Stat       I     I     I     I     A     Stat	
A Cardiff S. Wales & M. 1 7 A Carlisle N.W. Counties 1 7	1 0 1 2 1 2 1 2 1 1	K BUCHTER Vorkehing 171 191 A Stol	ees ke-on- Mid. Countles 1 71 1 21
Best Carnaryon         N.W. Counties         1         4 <sup>1</sup> / <sub>2</sub> A1         Carnforth         N.W. Counties         1         7 <sup>1</sup> / <sub>2</sub> A         Castleford         Yorkshire         1         7 <sup>1</sup> / <sub>2</sub> B1         Chelmsford         S. Counties         1         5           B2         Chelmsford         E. Counties         1         5           B2         Chelmsford         E. Counties         1         5           B3         Cheltenham         S.W. Counties         1         6		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{ccccccc} \operatorname{rent} & & & \operatorname{S.W. Countlee} & 1 & 5\frac{1}{2} & 1 & 1\frac{1}{2} \\ \operatorname{iderland} & & \operatorname{N.E. Coast} & 1 & 7\frac{1}{2} & 1 & 2\frac{1}{2} \\ \operatorname{idlincote} & & \operatorname{Mid. Countles} & 1 & 7\frac{1}{2} & 1 & 2\frac{1}{2} \\ \operatorname{inden} & & \operatorname{S. Wales & M.} & 1 & 7\frac{1}{2} & 1 & 2\frac{1}{2} \\ \operatorname{indon} & & & \operatorname{S.W. Countles} & 1 & 5\frac{1}{2} & 1 & 1\frac{1}{2} \\ \end{array} $
A Chester . N.W. Counties 1 7 A Chesterfield Mid. Counties 1 7 B Chichester S. Counties 1 4 A Chorley . N.W. Counties 1 7 B Cirencester S. Counties 1 4 A Clitherce . N.W. Counties 1 7 A Clitherce . N.W. Counties 1 7 A Clitherce . Scotland 1 7 Heat Counties 1 7 Heat Clitherce N.W. Counties 1 7 Heat Clitherce		Leavington Mid. Counties 1 42 1 23 B, Tau Leavington Mid. Counties 1 65 1 2 A Tee Leeds Yorkshire 1 75 1 24 B Teig Leek Mid. Counties 1 75 1 24 A Tod Leicester Mid. Counties 1 75 1 24 A Tod Leigh N.W. Counties 1 75 1 24 A Tod	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
B Colchester E. Counties 1 5	1 1	Lincoln Mid Counties 1 6 1 1	Vells
$A_3$ Colwyn BayN.W. Countles16 $A$ ConsettN.E. Coast17 $A_3$ ConwayN.W. Countles16 $A$ CoventryMid. Countles17		Llandudno N.W. Counties 1 6 1 11 Llanelly S. Wales & M. 1 74 1 24	,
A       Coventry       Mid. Counties       1       7         A <sub>3</sub> Crewe       N.W. Counties       1       6         A <sub>3</sub> Cumberland		Long Eaton Mid. Counties 1 7 1 22 A, Wa	AKE- FIELD         Yorkshire         1         74         1         24           Jsall          Mid. Counties         1         7         1         24           rrington         N.W. Counties         1         7         1         24           grington         N.W. Counties         1         7         1         24           grington         N.W. Counties         1         7         1         24
A DARLINGTON N.E. Coast 1 71 A Darwen N.W. Counties 1 71		Luton E. Counties 16 111 A We	orough Mid. Counties 1 6 1 1
B. Deal S. Countles 14*	1 04	MACCLES- N.W. Counties 17 121 B Wei	tromwich
A Derby Mid. Counties 1 7 A Dewsbury Yorkshire 1 7 B Didcot S. Counties 1 5 A Doncaster Yorkshire 1 7	1 1 1 2 1 2 1 1 1 1 1 2	Maidstone S. Counties 1 54 1 11 A. Wh	dnes N.W. Counties 1 74 1 22
		Mansfield Mid. Counties 1 7 1 22 B <sub>9</sub> Wir Mansfield Mid. Counties 1 7 1 22 A <sub>3</sub> Wir Marste S. Counties 1 4 1 0 A <sub>3</sub> Wir	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
A.     Droitwich     Mid. Counties     1     6       A.     Dudley      Mid. Counties     1     7       A.     Dudley      Scotland     1     7       A.     Dudley      N.E.     Coast     1     7	1 21	Marthyr S. Wales & M. 1 7 1 2 4 As Wol Middles- N.E. Coast 1 7 1 2 4 As Wol brough Middlewich N.W. Counties 1 6 1 1 4 A. Wr	$\begin{array}{llllllllllllllllllllllllllllllllllll$
BOURNE	1 04	Monmouth S. Wales & M. 171 121 S. and E. Gla- morganshire B, Yee	ARMOUTH E. Counties 1 5 1 08 ovil S.W. Counties 1 4 1 09
		Morecambe N.W. Counties 1 7 1 21 A You for certain trades (usually Painters and Plasterers) vary	

The rates for each trade in any given area will be sent on request.

#### PRICES CURRENT

EXCAVATOR AND CONCRETOR EXCAVATOR, 18. 4d. per hour; LABOURER, 18. 4d. per hour; NAVYY, 18. 4d. per hour; TIMBERMAN, 18. 54d. per hour; SCAFFOLDER, 18. 5d. per hour; watCHMAN, 78. 6d. per shift.	BRICEWORK in stone lime mortar, Flettons or equal, perrod	HALF SAWING, per ft. sup. £0 1 0 Add to the foregoing prices, if in York stone, 35 per cent. Do. Mansfield, 12; per cent. Deduct for Bath, 33; per cent. Do. for Chilmark, 5 per cent.
*	rod.	SETTING 1 in. slate shelving in cement, per ft. sup
Broken brick or stone, 2 in., per yd. £0 11 6 Thames ballast, per yd. 0 11 0	DO. in raising on old walls, etc., add 121 per cent.	RUBBED round nosing to do., per ft.
Pit gravel, per yd 0 18 0	per rod. Do. in underpinning, add 20 per cent. per rod.	lin. 005 YORK STEPS, rubbed T. & R., ft. cub.
Pit sand, per yd 0 14 0	HALF-BRICK walls in stocks in cement	fixed 190
Screened ballast or gravel, add 10 per cent. per yd.	mortar (1-3). per ft. sup £0 1 0 BEDDING plates in cement mortar, per	YORK SILLS, W. & T., ft. cub. fixed . 1 13 0 ARTIFICIAL stone paving, 2 in. thick,
Clinker breeze etc prices according to locality.	ft.run 0 0 3	perft. sup 0 1 6
Porlland cement, per ton	BEDDING window or door frames, per	DO. 21 in. thick, perft. sup 0 1 9
Sacks charged extra at 1s. 9d. each and credited	ft. run LEAVING chases 21 in. deep for edges of	OT A TED AND THE DD
when returned at 1s. 6d. Transport hire per day :	concrete floors not exceeding 6 in.	SLATER AND TILER
Cart and horse \$1 3 0 Trailer . £0 15 0	thick, per ft. run 0 0 2 CUTTING do. in old walls in cement, per	SLATER, 1s. 9d. per hour; TILER, 1s. 9d. per
3-ton motor lorry 3 15 0 Steam roller 4 5 0 Steam lorry, 5-ton 4 0 0 Water cart 1 5 0	ft.run 0 0 4	hour; SCAFFOLDER, 1s. 5d. per hour; LABOURER, 1s. 4d. per hour.
Steam torry, Ston 4 0 0 mater curv 1 0 0	CUTTING, toothing and bonding new work to old (labour and materials),	N.BTiling is often executed as piecework.
EXCAVATING and throwing out in or-	per ft. sup 0 0 7	Slates, 1st quality, per 1,200:
dinary earth not exceeding 6 ft. deep, basis price, per yd. cube. 0 3 0	TERRA-COTTA flue pipes 9 in. diameter, jointed in fireclay, including all cut-	Portmadoc Ladies
Exceeding 6 ft., but under 12 ft., add 30 per	tings, perft.run 0 3 6	Countess
cent. In stiff clay, add 30 per cent.	DO. 14 ft. by 9 in. do., per ft. run . 0 6 0 FLAUNCHING chimney pots, each . 0 2 0	Old Delabole Med. Grey Med. Green
In underpinning, add 100 per cent.	CUTTING and pinning ends of timbers,	$24 \text{ in.} \times 12 \text{ in.}$ $\pounds 42 11 3$ $\pounds 45 1 0$
In rock, including blasting, add 225 per cent.	etcin cement 0 1 0 FACINGS fair, per ft. sup. extra 0 0 3	16 in. × 10 in. 20 18 0 22 4 9
If basketed out, add 80 per cent. to 150 per cent. Headings, including timbering, add 400 per cent.	FACINGS fair, per ft. sup. extra . 0 0 3 D0. picked stocks, per ft. sup. extra . 0 0 7	$14 \text{ in.} \times 8 \text{ in.}$ 12 1 0 12 16 3
RETURN, fill, and ram, ordinary earth,	DO. red rubbers gauged and set in	Green Randoms per lon
SPREAD and level, including wheeling,	putty, per ft. sup. extra 0 4 9 Do. in salt white or ivory glazed, per	Grey-green do., per ton 7 3 9 Green peggies, 12 in. 40 8 in. long, per ton 6 3 9 In 4-ton truck loads, delivered Nine Elms station. Cling load ner 10 6
per yd 0 1 6	ft. sup. extra 0 5 6	In 4-Ion truck loads, delivered Nine Elms station. Clips, lead, per lb
FILLING into carts and carting away to a shoot or deposit, per yd. cube . 0 10 6	TUCK pointing, per ft. sup. extra . 0 0 10 WEATHER pointing, do. do. 0 0 3	Clips, copper, per lb 0 2 0
TRIMMING earth to slopes, per yd. sup. 0 0 6	TILE creasing with cement fillet each	Nails, compo, per cwt 1 6 0 Nails, copper, per lb 0 1 10
HACKING up old grano. or similar paving, per yd. sup 0 1 3	side per ft. run . 0 0 6 GRANOLITHIC PAVING, 1 in., per yd.	Cement and sand, see "Excavalor," etc., above.
PLANKING to excavations, per ft. sup 0 0 5	sup 0 5 0	Hand-made tiles, per M £5 18 0 Machine-made tiles, per M 5 8 0
po. over 10 ft. deep, add for each 5 ft.	Do. 1 in., per yd. sup.         0	Westmorland slates, large, perton , 9 0 0
in depth, 30 per cent. Ir left in, add to above prices, per ft.	If coloured with red oxide, per yd.	DO. Peggies, perton 7 5 0
cube . 2 in ring, filled and 0 2 0 HARDCORE, 2 in ring, filled and	sup. 0 1 0 If finished with carborundum, per yd.	SLATING, 3 in. ap, compo nails, Portmadoc or
rammed, 4 in. thick, per yd. sup 0 2 1	sup 0 0 6	equal:
Do. 6 in. thick, per yd. sup 0 2 10	If in small quantities in finishing to steps, etc., per ft. sup 0 1 4	Ladies, per square
CEMENT CONCRETE, 4-2-1, per yd, cube 2 3 0	Jointing new grano, paving to old.	Duchess, per square 4 10 0
DO. 6-2-1. per yd. cube 1 18 0	Derft run 0 0 4	WESTMORLAND, in diminishing courses, per square 6 5 0
Do. in upper floors, add 15 per cent. Do. in reinforced-concrete work, add 20 per cent.	Extra for dishing grano, or cement paving around gullies, each . 0 1 6	CORNISH DO., Der square 6 3 0
bo. in underpinning, add 60 per cent.	BITUMINOUS DAMP COURSE, ex rolls,	Add, if vertical, per square approx 0 13 0
	per ft. sup 0 0 7 ASPHALT (MASTIC) DAMP COURSE, 1 iD.,	Add, if with copper nails, per square 0 2 6
BREEZE CONCRETE, per yd. cube 1 7 0 Do. in lintels, etc., per ft. cube 0 1 6	per yd. sup 0 8 0	Double course at eaves, per ft. approx. 0 1 0
CEMENT concrete 4 2-1 in lintels packed around reinforcement, per	DO. vertical, per yd. sup 0 11 0 SLATE DAMP COURSE, per ft. sup 0 0 10	SLATING with Old Delabole slates to a 3 in. lap with copper nails, at per square.
ft. cube 0 3 9	ASPHALT ROOFING (MASTIC) in two	Med. Grey Med. Green
FINE concrete benching to bottom of manholes, per ft. cube 0 2 6	thicknesses, 1 in., per yd 0 8 6 DO. SKIRTING, 6 in 0 0 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
FINISHING surface of concrete spade	BREEZE PARTITION BLOCKS, set in	16 in. × 10 in. 4 15 0 5 1 0
face, per yd. sup 0 0 9	cement, 1 1 in. per yd. sup 0 5 3 DO. DO. 3 in 0 6 6	14 in. × 8 in.         4 10 0         4 15 0           Green randoms         6 7 0
DRAINER	BREEZE fixing bricks, extra for each . 0 0 3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
LABOURER, 1s. 4d. per hour; TIMBERMAN, 1s. 51d. per hour; BRICKLAYER, 1s. 9d. per hour;	Lanananananananana	TILING, 4 in, gauge, every 4th course
18. 5 ± d. per hour; BRICKLAYER, 18. 9d. per hour; PLUMBER, 18. 9d. per hour; WATCHMAN, 7s. 6d.	2	nailed, in hand-made tiles, average
per shift.	S THE wages are the Union rates current S	DO., machine-made do., per square . 4 17 0
Stoneware pipes, tested quality, 4 in.,	in London at the time of publication.	Vertical Tiling, including pointing, add 18s. 0d. per square.
per ft	and are intended to cover delivery at	FIXING lead soakers, per dozen . £0 0 10
$p_0, 6 in. per fl 0 1 3$	S works, wharf, station, or yard as custom- S	STRIPPING old slates and stacking for
Cast-iron pipes, coated, 9 ft. lengths,	§ ary, but will vary according to quality §	re-use, and clearing away surplus and rubbish, per square 0 10 0
4 in., per yd. 0 5 6	and quantity. The measured prices are	LABOUR only in laying slates, but in-
DO. 6 in., per yd. Portland cement and sand, see "Excavalor" above.	based upon the foregoing, and include	cluding nails, per square 100 See "Sundries for Asbestos Tiling."
Leadwool per cwl	S usual builders' profits. Though every $S$ care has been taken in its compilation $S$	
Gaskin, per 10	it is impossible to guarantee the accuracy	CARPENTER AND JOINER
STONEWARE DRAINS, jointed in cement,	of the list, and readers are advised to have	CARPENTER, 1s. 9d. per hour ; JOINER, 1s. 9d-
tested pipes, 4 in., per ft 0 4 3 DO. 6 in., per ft 0 5 0	§ the figures confirmed by trade inquiry. §	per hour ; LABOURER, 1s. 4d. per hour.
DO. 9 In., per ft. 0 7 9 CAST-IRON DRAINS, jointed in lead,	lannanananananan	Timber, average prices at Docks, London Standard
CAST-IRON DRAINS, jointed in lead, 4 in., per ft.		Scandinavian, etc. (equal to 2nds);
4 in., per ft 0 8 0 Do. 6 in., per ft 0 10 0	MASON	7×3, perstd
Note These prices include digging concrete	MASON, 1s. 9d. per hour ; DO. fizer. 1s. 10d. per	Memel or Equal. Slightly less than foregoing.
bed and filling for normal depths, and are average prices.	hour; LABOURER, 1s. 4d. per hour; SCAFFOLDER, 1s. 5d. per hour.	Flooring, P.E., 1 in., per sq
Fittings in Stoneware and Iron according to	xo. ou. per nour.	Planed boards, 1 in. × 11 in., per std 30 0 0
type. See Trade Lists.	Portland Stone :	Wainscouldar, per it. sup. of 1 in.
BRICKLAYER	Whitbed, per ft. cube £0 4 6 Basebed, per ft. cube 0 4 7	Do. Cuba, per ft. sup. of 1 in 0 2 3
	Bath stone, per ft. cube Usual trade extras for large blocks.	DO., African, per fl. sup 0 1 0 Teak, per fl. sup. of 1 in 0 1 3
BRICKLAYER, 18. 9d. per hour; LABOURER, 18. 4d. per hour; SCAFFOLDER, 18. 5d. per hour.	York paving, av. 24 in., per vd. super , 0 6 6	Teak, per fl. sup. of 1 in.         0 1 3           Do., fl. cube         0 12 6
	Vork templates saym ner ft cube 0 6 0	*

II

8.11111111111111111111

1 11

1 2

1 21

1 12222

 $\begin{array}{c}
1 & 1 \\
1 & 1 \\
1 & 2 \\
1 & 2 \\
1 & 1 \\
\end{array}$ 

 $\begin{array}{c}
 1 & 0 \\
 1 & 0 \\
 1 & 0 \\
 1 & 2
 \end{array}$ 

	-94					
Midhurst white facing b	rick	s, per 1	м.	£5	0	0
London stocks. per M.				4	15	Ū
Flettons, per M.				3	0	0
Staffordshire blue, per M	ľ.			- 9	10	0
Firebricks, 21 in., per M	ι.			11	3	0
Glazed salt, white, and i	vory	stretch	ers.			
per M				24	10	0
DO. headers, per M.				24	0	0
Colours, extra, per M.				5	10	0
Seconds, less, per M.				1	0	0
Cement and sand, see "		avator"	abor	e.		
Lime, grey stone, per ton				2	17	0
Mixed lime mortar, per 1	Id.			1	6	0
Damp course, in rolls of	41 11	., per r	oll	0	2	6
Do. 9 in. per roll				0	4	9
DO. 14 in. per roll				0	7	6
DO. 18 in. per roll				0	9	6

Do. in cement do., per rod Do. in stocks, add 25 per cent. per rod. Do. in blues, add 100 per cent. per rod. Do. circular on plan, add 124 per cer Do. in backing to masonry, add 124 pr rod.	36	0	0
Do. in stocks, add 25 per cent. per rod. Do. in blues, add 100 per cent. per rod.			
Do. circular on plan, add 124 per cer	it. pe	r r	od.
rod. Do. in raising on old walls, etc., add 12			
DO. in underpinning, add 20 per cen HALF-BRICK walls in stocks in cement mortar (1-3), per ft. sup. BEDDING plates in cement mortar, per ft. run			
mortar (1-3), per ft. sup.	20	1	0
ft. run BEDDING window or door frames, per	0	0	3
LEADING Window or door frames, per ft. run LEAVING chases 21 in. deep for edges of concrete floors not exceeding 6 in. thick, per ft. run CUTTING do. in old walls in cement, per ft. run	0	0	
LEAVING chases 2 in. deep for edges of concrete floors not exceeding 6 in.			
thick, per ft. run	0	0	2
ft. run	0	0	4
Work to old (labour and materials),			
per ft. sup.	0	0	7
jointed in freelay, including all cut- tings, per ft. run . Do. 14 ft. by 9 in. do., per ft. run . FLAUNCHING chimney pots, each . CUTFING and pinning ends of timbers, etc. in cement	0	3	
Do. 14 ft. by 9 in. do., per ft. run	0	6	õ
FLAUNCHING chimney pots, each . CUTFING and pinning ends of timbers.	0	2	0
etc. in cement	0	1	03
Do. picked stocks, per ft. sup. extra	ŏ	0	7
etc. in cement etc. in cement ACINGS fair, perft. sup.extra DO. picked stocks, per ft. sup.extra DO. picked stocks, per ft. sup.extra DO. in sail white or ivory glazed, per ft. sup.extra	0	4	9
Do. in salt white or ivory glazed, per	0	5	6
ft. sup. extra FUCK pointing, per ft. sup. extra	ŏ	Ő	10
UCK pointing, per ft. sup. extra WEATHER pointing, do. do. TLE creasing with cement fillet each	0	0	3
Blue per lu, run	0	0	6
sup.	0	5	0
DO. 1 in., per yd. sup.	0	67	0
MANOLITHIC PAVING, 1 in., per yd. sup. Do. 1 i in., per yd. sup. Do. 2 in., per yd. sup. If coloured with red oxide, per yd. sup. If finished with carborundum, per yd.	0	1	0
If finished with carborundum, per yd.		-	
sup. If in small quantities in finishing to	0	0	6
sup. If in small quantities in finishing to steps, etc., per ft. sup. Jointing new grano, paving to old,	0	1	4
per ft. run	0	0	4
per ft. run . Extra for dishing grano, or cement paving around gullies, each	0	1	6
	0	0	7
per It. sup			
per yd. sup. DO. vertical, per yd. sup.	0 1	8	0
ASPHALT ROOFING (MASTIC) in two	0	0	10
thicknesses, 1 in., per yd.	0	8	6
BREEZE PARTITION BLOCKS, set in	0	0	11
cement, 1 in. per yd. sup. DO. DO. 3 in. BREEZE fixing bricks, extra for each	0	56	36
BREEZE fixing bricks, extra for each .	ŏ	ŏ	3
anananananan	60	20	25
THE wages are the Union rates of			Š
in London at the time of public			õ
The prices are for good quality ma	teria		õ
and are intended to cover delive works, wharf, station, or yard as cu			8
ary, but will vary according to o	ualit	v	0000
and quantity. The measured pric	es ar	10	š
and quantity. The measured pric based upon the foregoing, and is usual builders' profits. Though care has been taken in its comp	nelud	.0	000
			š
It is impossible to guarantee the acc	curac	У	ŝ
of the list, and readers are advised to the figures confirmed by trade in			õ
			õ.
	0.0		
MASON			
MASON, 1s. 9d. per hour; DO. fizer. 1s our; LABOURER, 1s. 4d. per hour; BCA s. 5d. per hour.	, 10d	DE	er R,
* Portland Stone :	0.0		

	*					
Portland Stone :						
Whitbed, per ft. cube				£0	- 4	6
Basebed, per ft. cube				0	- 4	7
Bath stone, per ft. cube				0	- 3	0
Usual trade extras for						
York paving, av. 24 in.,	pery	d. sup	er .	0	- 6	6
York templates sawn, pe	rft.c	ube		0	- 6	9
Slate shelves, rubbed, 1 i	n., pe	r ft. su	p.	0	2	6
Cement and sand, see	"Exc	avalo	r," el	c., ab	ove	
	*					
HOISTING and setting	ston	e ner	ft.			
cube		of box		20	2	2
DO. for every 10 ft. at	ove S	30 ft.	add 1	5 per	CE	nt.
PLAIN face Portland ba				20	2	8
Do. circular, per ft. sur			co gra	õ	ā	ŏ
SUNK FACE, per ft. sup.				ŏ	3	ğ
Do. circular, per ft. sur				ŏ	4	10
JOINTS, arch, per ft. sup				ŏ	2	6
Do. sunk, per ft. sup.				ŏ	2	7
DO. DO. circular, per ft.	sup.			ŏ	Ā	6
CIRCULAR-CIRCULAR WO		rft. s	un.	ĭ	2	ŏ
PLAIN MOULDING, stra					-	
of girth, per ft. run	igno,	POL IN	ACT	0	1	
Do. circular, do., per ft	run		•	ŏ	÷.	â
aver our our dit i doss por ro	* * ****					- 18

Add to the foregoing prices, if in	York	sto	ne,
35 per cent. Do. Mansfield, 12 ; per cent. Deduct for Bath, 33 per cent. Do. for Chilmark, 5 per cent.			
Deduct for Bath, 33} per cent.			
SETTING 1 in. slate shelving in cement,			
perft.sup.	£O	0	6
RUBBED round nosing to do., per ft. lin. YORK STEPS, rubbed T. & R., ft. cub.	0	0	6
fixed	1	9 13	0
YORK SILLS, W. & T., ft. cub. fixed ARTIFICIAL stone paving, 2 in. thick, per ft. sup.	0	1	6
DO. 21 in. thick, per ft. sup	0	1	9
SLATER AND TILE	R		
SLATER, 1s. 9d. per hour ; TILER,	18. 90	1.	per
hour; SCAFFOLDER, 1s. 5d. per hour; 1s. 4d. per hour. N.B.—Tiling is often executed as ple	LABO	UNI	116.9
N.BTiling is often executed as ple	ceworl	κ.	
States, 1st quality, per 1,200:			
Portmadoc Ladies	£14	0	0
Countess	27 32	ŏ	ŏ
Old Delabole Med. Grey	Med.	Gr	ion
24 in. × 12 in. <b>£42</b> 11 3 20 in. × 10 in. 31 4 3	£45 33	10	0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	22	4	9
14 in. × 8 in. 12 1 0	12	16	3
Green Randoms per lon	87	33	9
Grey green do., per ton Grey green do., per ton Green peggies, 12 in to 8 in. long, per to In 4-ton truck loads, delivered Nine E Clips, lead, per b.	m é	9	Ö.
In 4-ton truck loads, delivered Nine E	lms s	atio	m.
Clips, lead, per lb.	£0 0	2	6
Naila compo per cud	i	6	ŏ
Naus, copper, per lb.	0		10
Cement and sand, see "Excavalor," e	£5 €5	ove. 18	0
Machine-made tiles, per M.	.5	8	ŏ
Hand made tiles, per M. Machine-made tiles, per M. Westmorland slates, large, per lon	9	0	0
Do. Peggies, per ton , , .	7	5	0
SLATING, 3 in. ap, compo nails, Po	rtmad	00	07
equal:		00	0.
Ladies, per square	24	0	0
Duchess, per square	£4 4	0 5 10	000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses	£4 4 4	10	0
Duchess, per square Duchess, per square WESTMORLAND, in diminishing courses per square	£4 4 4	5 10 5	ö
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square	£4 4 4 6 6	10	0
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square Add, if vertical, per square approx. Add, if with copper nails, per square	£4 4 6 6	5 10 5 13	000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square . Add, if vertical, per square approx. Add, if with copper nalls, per square approx.	£4 4 6 6 0	5 10 5 3 13 2	000 000 8
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square . Add, if vertical, per square approx. Add, if vertical, per square approx. Double course at cares, per ft. approx. Statuw, with OUL Delabole slates to	£4 4 6 6	5 10 5 13 13 2 1	000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square . Add, if vertical, per square approx. Add, if vertical, per square approx. Double course at cares, per ft. approx. Statuw, with OUL Delabole slates to	£4 4 6 6 0 0 0 8 3 11	5 10 5 13 13 2 1 1 2 1	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square a Add, if vertical, per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square to	£4 4 6 6 0 0 a 3 in Med.	5 10 5 13 13 2 1 1 2 1	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Med. Grey 24 in. × 12 in. 5 0 0	24 4 6 6 0 0 0 0 0 8 3 11 Med. 6 5 5	5 10 5 13 13 2 1 1 2 1 1 2 1 1 1 1 1 1 1 1 1 1	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Med. Grey 24 in. × 12 in. 5 0 0	24 4 6 6 0 0 0 a 3 in Med. ( 25 5	5 10 5 13 2 1 1 3 13 2 1 1 3 13 13 13 13 13 13 13 13 13 13 13	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Belabole slates to with copper nails, at per square. Wed. Grey 24 in. × 12 in. \$5 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0	£4 4 6 6 0 0 a 3 in Med. 5 5 5	5 10 5 13 2 1 3 13 2 1 3 13 2 1 1 5 10 10 5 10 5 10 5 10 5 10 10 5 10 10 5 10 10 10 10 10 10 10 10 10 10 10 10 10	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square 24 in. × 12 in. & 25 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms	24 4 6 6 0 0 a 3 in 85 5 5 4 5	5 10 5 313 21 13 21 10 15 7 9	000000 400 000 000
Councess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square 24 in. × 12 in. & 5 0 0 26 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greep-green do. Green readoms	24 4 6 6 0 0 a 3 in 85 5 5 4 5	5 10 5 3 13 2 1 13 2 1 1 3 13 2 1 1 3 13 2 1 1 3 13 2 1 10 5 7	00000 400 000
Councess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square 24 in. × 12 in. & 5 0 0 26 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greep-green do. Green readoms	24 4 6 6 0 0 a 3 in 85 5 5 4 5	5 10 5 313 21 13 21 10 15 7 9	000000 400 000 000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Green peggies, 12 in. to 8 in. long TILING, in. square, every 4th course nailed, in hand-made tiles, average per square.	£4 4 6 6 0 0 a 3 in Med. 6 5 5 5 5 5 5 5 5 5 5 5	5 10 5 3 13 2 1 2 1 3 13 2 1 3 13 2 1 1 3 13 2 1 10 5 13 2 1 13 2 1 10 5 13 2 1 10 5 13 2 1 10 5 13 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0000003 408 000 00
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 25 0 0 20 in. × 10 ln. 5 5 0 16 in. × 10 ln. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greep-green do. Green regizes, 12 in. to 8 in. long TILING, 4 in. gauge, every 4th course nailed, in hand made tiles, average per square. Do., machine-made do., per square.	24 4 6 6 0 0 a 3 in Med. 5 5 4 5 4 1	5 10 5 3 13 2 1 2 1 3 13 2 1 3 13 2 1 1 3 13 2 1 10 5 13 2 1 13 2 1 10 5 13 2 1 10 5 13 2 10 10 10 10 10 10 10 10 10 10 10 10 10	0000 60 p m 0000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Med. Grey 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 16 in. × 10 in. 4 10 0 Green randoms Greep green do. Green pergree, 12 in. to 8 in. long TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square.	24 4 6 6 0 0 a 3 in Med. 5 5 4 5 4 1	5 10 5 3 13 2 1 2 1 3 13 2 1 3 13 2 1 1 3 13 2 1 10 5 13 2 1 13 2 1 10 5 13 2 1 10 5 13 2 10 10 10 10 10 10 10 10 10 10 10 10 10	0 0000003 408 000 00
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Med. Grey 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 16 in. × 10 in. 4 10 0 Green randoms Greep green do. Green pergree, 12 in. to 8 in. long TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square.	24 4 6 6 0 0 a 3 in Med. 5 5 4 5 4 1	5 10 5 313 2 1 3 13 2 1 10 10 10 10 10 10 10 10 10 7 9 10 10 7 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0000 60 p m 0000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. With copper nails, at per square. 24 in. × 12 in. & 5 & 0 26 in. × 10 in. & 1 & 0 16 in. × 10 in. & 4 & 0 16 in. × 10 in. & 4 & 0 16 in. × 10 in. & 4 & 0 Green randoms Green pergeles, 12 in. to 8 in. long TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square. Vertical Tiling, including pointing, a per square. FIXING lead soakers, per dozen STRIPPING old slates and stacking for	24 4 6 6 0 0 a 3 in Med. 0 25 5 5 4 4 5 4 4 5 4 1 8 6 0 0 0 0 25 5 5 4 1 8 6 0 0 0 0 2 5 5 5 5 4 5 1 1 8 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 10 5 313 2 1 3 13 2 1 10 10 10 10 10 10 10 10 10 7 9 10 10 7 9 10 10 10 10 10 10 10 10 10 10 10 10 10	0000 80 0000 0000 0000 0000 0000 0000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if with copper nails, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greey green do. Green peggies, 12 in. to 8 in. long TILING, in. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square. Vertical Tiling, including pointing, a per square. FIXING lead soakers, per dozen STRIPFING old slates and stacking for re-use, and clearing away amplus	24 4 6 6 0 0 a 3 in Med. 0 25 5 5 4 4 5 4 4 5 4 1 8 6 0 0 0 0 25 5 5 4 1 8 6 0 0 0 0 2 5 5 5 5 4 5 1 1 8 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 10 5 13 2 13 2 13 2 13 2 13 2 13 2 13 2 13 2 13 2 13 2 13 2 13 2 10 13 2 10 13 2 10 10 10 10 10 10 10 10 10 10	0000 80 0000 0000 0000 0000 0000 0000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greey green do. Green peggies, 12 in. to 8 in. long TILING, 4 in. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square . Vertical Tiling, including pointing, a per square. FIXING lead soakers, per dozen STRIPFING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	24 4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 10 5 13 21 13 21 13 21 13 21 13 21 15 7 9 17 6 17 8.0 0 11 15 7 9 10 15 15 15 15 15 15 15 15 15 15	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greey green do. Gree green do. Green pergeice, 12 in. to 8 in. long TILING, i n. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square . Vertical Tiling, including pointing, a per square. STRIPFING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	24 4 6 0 0 a 3 11 Med. ( 25 5 5 4 5 4 4 5 4 1 4 1 8 5 4 1 8 5 4 1 8 5 4 1 8 5 4 1 8 5 4 1 8 5 8 5 8 5 8 5 8 5 8 8 8 8 8 8 8 8 8	5 10 5 3 13 2 1 3 1 3	00 000 80p 8000000 00d.
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Wed. Grey 24 in. × 12 in. £5 0 0 20 in. × 10 in. £5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Grey-green do Grey-green do Grey-green do Do. machine-made diles, average per square. Do., machine-made do., per square - per square. STRIPFING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	24 4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 10 5 13 21 13 21 13 21 13 21 13 21 15 7 9 17 6 17 8.0 0 11 15 7 9 10 15 15 15 15 15 15 15 15 15 15	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. Wed. Grey 24 in. × 12 in. 0 20 in. × 10 in. 5 0 0 16 in. × 10 in. 16 in. × 10 in. 16 in. × 10 in. 16 in. × 10 in. 16 in. × 10 in. 17 in. Green randoms TILING, in. Gree, green do. C. machine-made tiles, average per square. Do. machine-made do., per square. Vertical Tiling, including pointing, a per square. FIXING lead soakers, per dozen STRIPFING old slates and stacking for re-use, and clearing away surplus and rubish, per square LABOUR only in laying slates, but in- cluding nails, per square See "Sundries for Asbestos Tilling."	24 4 6 0 0 0 0 0 0 3 1 Med. ( 25 5 5 4 1 5 4 1 4 1	5 10 5 313 21 13 21 10 10 10 10 10 10 10 10 10 1	00000000000000000000000000000000000000
Countess, per square Duchess, per square WESTMORLAND, in diminishing courses per square CORNISH DO., per square approx. Add, if vertical, per square approx. Double course at eaves, per ft. approx. Double course at eaves, per ft. approx. SLATING with Old Delabole slates to with copper nails, at per square. 24 in. × 12 in. 45 0 0 20 in. × 10 in. 5 5 0 16 in. × 10 in. 4 15 0 14 in. × 8 in. 4 10 0 Green randoms Greey green do. Gree green do. Green pergeice, 12 in. to 8 in. long TILING, i n. gauge, every 4th course nailed, in hand-made tiles, average per square. Do., machine-made do., per square . Vertical Tiling, including pointing, a per square. STRIPFING old slates and stacking for re-use, and clearing away surplus and rubbish, per square	24 4 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 10 5 3 13 2 1 1 3 13 2 1 1 3 13 2 1 1 3 13 2 1 1 3 13 2 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	00000000000000000000000000000000000000

CARPENTER, 1s. 9d. per hour ; JOINER, 1s. 9d. per hour ; LABOURER, 1s. 4d. per hour. Timber, average prices al Docks, London Slandard Scandinarian, etc. (equal to 2nds); TA3, per std. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Floring, P.E., 1 in., per sq. Named or Equal. Slightly less than foregoing. Named in floors, roots, etc., per flore fl. sub. of 1 in. Named in floors, roots, etc., per flore flore flore on flore on flore Named in floors, roots, etc., per flore flore flore on flore on flore Named in floors, roots, etc., per flore flore on flore on flore on flore Named in floors, roots, etc., per flore flore on flore on flore on flore Named in floors, roots, etc., per flore flore on flore on flore on flore Named in floors, roots, etc., per flore flore on flore on flore on flore Named in floors, roots, etc., per flore flore on flore on flore on flore Named in flore on flore on flore on flore Named in flore on flore on flore Named in flore on flore on flore on flore Named in flore on flore on flore Named in flore on flore on flore on flo continued overleaf.

PLUMBER

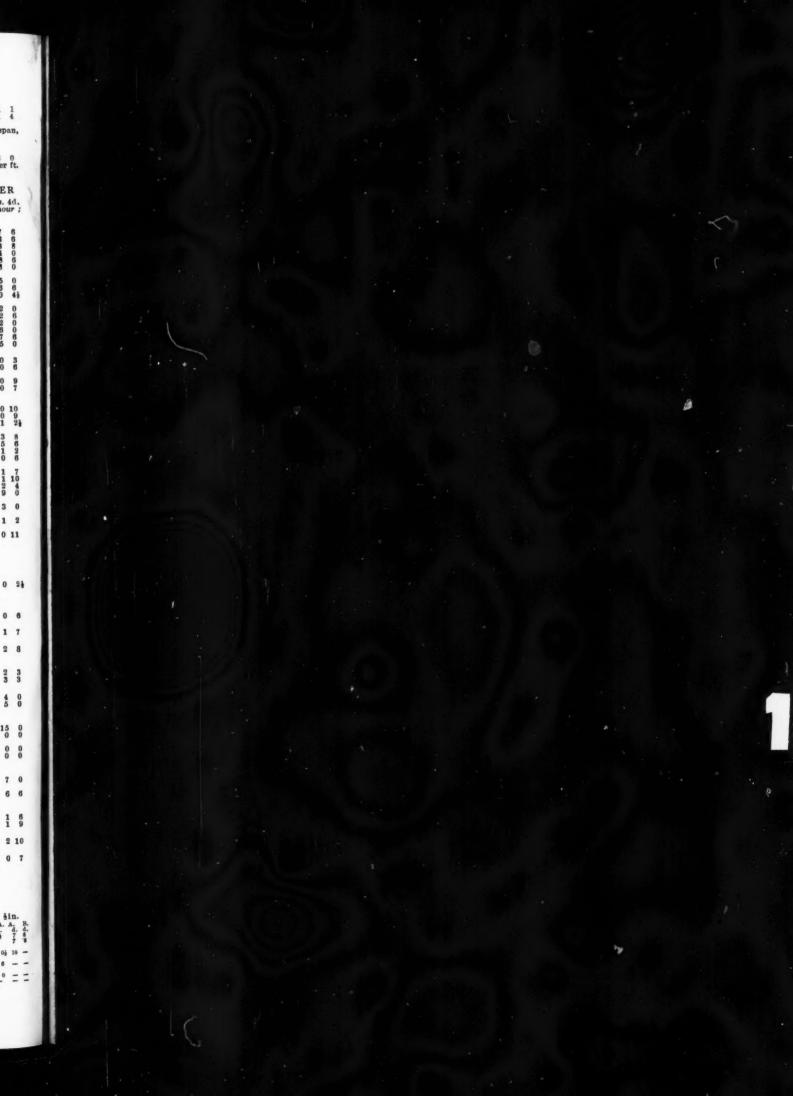
928			TH	E
CARPENTER AND JOINER:	cont	inua	ed.	
SHUTTERING to face of concrete, per			0	1
BO. in narrow widths to beams, etc.,	£1	10	6	L
per ft. sup. Use and waste of timbers, allow 25 pe			of	-
above prices. SLATE BATTENING, per sq.	<b>£</b> 0	12	6	
SLATE BATTENING, per sq. DEAL boarding to flats, 1 in. thick and firrings to falls, per square STOUT feather-edged tilting fillet to	2	10	0	CS
ouvos, por run	0	0	6	c
FEATHER-edged springer to trimmer arches, per ft. run	0	0	4	ħ
STOUT herringbone strutting (joists measured in), per ft. run	0	0	6	n
SOUND boarding, 1 in. thick and fillets nailed to sides of joists (joists				G
measured over), per square . RUBEROID or similar quality roofing,	2	0	0	
one ply, per yd. sup. Do., two-ply, per yd. sup. Do., three-ply, per yd. sup. ToNUUED and grooved flooring, 11 in.	0	22	36	N
Do., three-ply, per yd. sup. TONUUED and grooved flooring, 11 in.	0	3	0	L
thick, laid complete with splayed	2	5	0	
headings, per square DEAL skirting torus, moulded 11 in. thick, including grounds and back-				I
TONGUED and mitred angles to do.	0	10	06	
WOOD block flooring standard blocks				7
Deal 1 in. thick, per yd. sup Do. 1 i in. thick, per yd. sup Maple 1 i in. thick, per yd. sup DEAL moulded sashes, 1 i in. with moulded bars in small squares, per	0	$10 \\ 12$	0	
Maple 11 in. thick, per yd. sup. DEAL moulded sashes, 11 in. with	0	15	0	E
	0	2	6	c
DO. 21n. do., per ft. sup. DEAL cased frames, oak sills and 2 in. moulded sashes, brass-faced pulleys and incompetition of the super ft.	0	2	9	~
moulded sashes, brass-faced pulleys and iron weights, per ft, sup.	0	4	6	c
and iron weights, per ft. sup MOULDED horns, extra each DOORS, 4-panel square both sides, 11 in.	0	Õ	3	-
thick, per ft. sup. Do. moulded both sides per ft. sup.	0	22	69	0
Do. 2 in. thick, square both sides, per ft. sup.	0	2	9	
DO. moulded both sides, per ft. sup.	Ö	3	ō	1
Do. in 3 panels, moulded both sides, upper panel with diminished stiles with moulded bars for glass, per ft.				
sup.	3 ti	3	6	
DEAL frames, 4 in. × 3 in., rebated and	20	15	. 0	
Add for extra labours, per ft. run . STAIRCASE work :	0	0	ĭ	
DEAL treads 14 in. and risers 1 in.				1
tongued and grooved including fir carriages, per ft. sup. DEAL wall strings, 1 in. thick, moui-	0	2	6	2
ded, per ft. run . If ramped, per ft. run	0	25	6	1
BHORT ramps, extra each ENDS of treads and risers housed to	õ	57	6	1
strings, each	0	1	0	-
<ul> <li>in. deal inopetick handrall fixed to brackets, per ft. run</li> <li>in. × 3 in. oak fully moulded bandrall, per ft. run</li> </ul>	0	1	6	1
	0	5	6	1
1; in. square deal bar balusters, framed in, per ft. run . FITTINGS :	0	0	6	
SHELVES and bearers, 1 in., cross-	0	1	6	1
tongued, per ft. sup. 11 in. beaded cupboard fronts, moul- ded and square per ft. sup.	0		9	1
ded and square, per ft. sup. TEAK grooved draining boards, 11 in. thick and bedding, per ft. sup.	0		6	1
IRONMONGERY: Fixing only (including providing		-		
BCTEWS):				
Hinges to sashes, per pair Do. to doors, per pair Barrel bolts, 9 in., iron, each	0		27	
Barrel bolts, 9 in., iron, each	0	1	00	1
Sash fasteners, each Rim locks, each	0	1	9	
Mortice locks, each	0		0	1
SMITH				
	per	ho	ur ;	1
BMITH, weekly rate equals 1s. 9 <sup>1</sup> / <sub>2</sub> d. MATE, do. 1s. 4d. per hour; ERECTO per hour; FITTER, 1s. 9 <sup>1</sup> / <sub>2</sub> d. per hour;	R, 1 LAB	S. S	ER,	
1s. 4d. per hour.				

		*				
Mild Steel in Bril	ish si	andar	d sect	ions.		
per ton .					£12	10
Sheet Steel :						
Flat sheets, black	, per	ton			17	0
DO., galvd., per t				•	19	0
Corrugated sheets,					18	10
Driving screws, go	alvd.,	per g	T8.		. 0	1
Washers, galvd., 1	per g	rs			0	1
Bolts and nuts p	er cw	l. and	up		1	18
		*				
MILD STEEL in th	11880	s, etc.	, erec	eted.		
per ton .					25	10
DO., in small s	ectio	ns as	reinfo	Pree-		
ment, per ton					16	10
DO., in compour					17	0
DO., in bar or ro	d rei	aforce	ment,	, per		
ton					20	0
WROT-IRON in o				etc.,		
including build					2	0
DO., in light rai	lings	and	balus	ters,		
_ per owt					2	5
FIXING only corr	ugat	ed she	eting	, in-		
cluding washers	s and	drivit	ng ser	ews,		
per yd					0	- 2

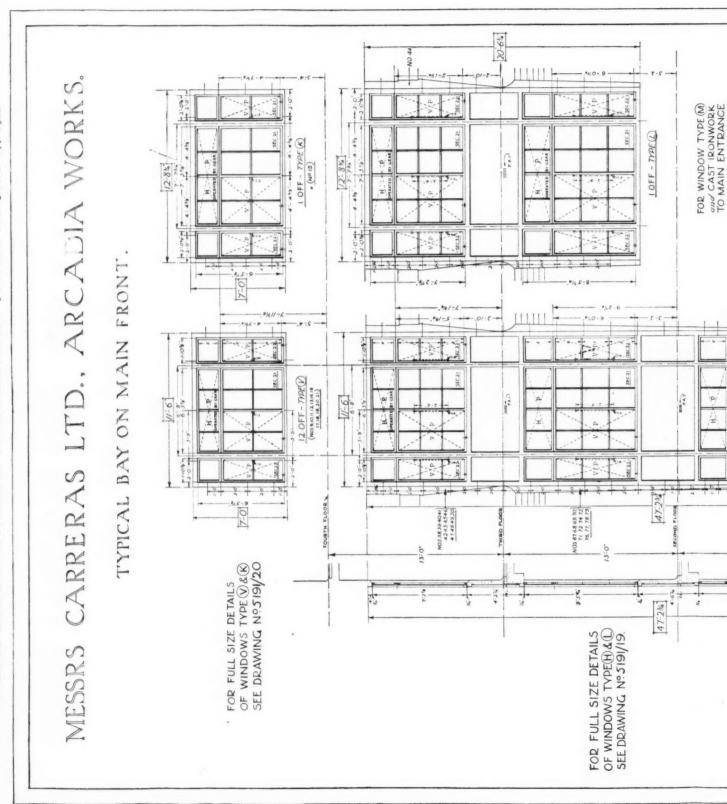
~		I LOMDIN				
	0	PLUMBER, 1s. 9 d. per hour ; MATE 1s. 4 d. per hour.	OR	LAB	DUR	ER,
	6	Lead, milled sheet, per cut.	•	£1 1	9 10	0
	of	DO. drawn pipes, per cwl. DO. soil pipe, per cwl.	•	1	12	0
	6			10	01	03
	0	Solder, plumber's, per lb.	•	0	11	39
	6	Do, scrap, per col. Copper, sheet, per lb. Solder, plumber's, per lb. Do, fine, per lb. Cast-iron sipes, etc.: L.C.C. soil, 3 in., per yd.	•	0	4	0
	4	Do. 4 in. per yd R.W.P., 21 in., per yd	*	0	4	91
	6	R.W.P., 21 in., per yd.	•	0	22	27
	•	Do. 4 in., per yd.	•	0	3	61
	0	Do. 3 in., per yd. Do. 4 in., per yd. Gutter, 4 in. H.R., per yd. Do. 4 in. O.G., per yd.	•	0	1	10
	3	MILLED LEAD and labour in gutte	-			
	6	flashings, etc. per cwt		3	2	6
	0	LEAD PIPE, fixed, including runni joints, bends, and tacks, in., per	ng ft.	0	2	0
	0	joints, bends, and tacks, j in., per Do. 1 in., per ft.	•	0	23	3
	•	Do. 1 in., per ft. Do. 1 in., per ft. LEAD WASTE Or soil, fixed as about complete, 21 in., per ft.	•	ŏ	4	ŏ
	0	complete, 21 in., per ft.	re,	0	6	0
	6	DO. 3 in., per ft		0	79	09
	0	WIPED soldered joint, 1 in., each	:	0	2	6
	0	DO. 1 in., each	•	0	33	28
	0	BRASS screw-down stop cock and to soldered joints, in., each	70	0	11	0
	6	Do. in., each		ŏ	13	6
	9	CAST-IRON rainwater pipe, joint in red lead, 21 in., per ft. run. DO. 3 in., per ft. run	ea.	0	1	7
		DO. 3 in., per ft. run	•	0	22	10
	63	DO. 4 in., per ft. run CAST-IRON H.R. GUTTER, fixed, w	lth		~	
		all clips, etc., 4 in., per ft po. O.G., 4 in., per ft	*	0	22	3
	6 9	CAST-IRON SOIL FIFE, HXCU W	ith ,			
	-	4 in., per ft.		0	4	6
	9	Fixing only:	٠	0	3	6
		W.C. PANS and all joints, P. or and including joints to water wa	8.,			
		prevenuera, each , ,		2	5	0
	6	BATHS, with all joints . LAVATORY BASINS only, with	ali	1	3	6
	0	joints, on brackets, each .		1	10	0
	ĭ	PLASTERER				
		PLASTERER, 1s. 9 d. per hour (pla London only); LABOURER, 1s. 4d. 1	18 a	llow	ance	s in
	6	*	PCT 1			-
	6	Chalk lime, per lon Hair, per cwt	:	£2 2	17	0
	ŏ	Hair, per cwt. Sand and cement see "Excavalor, Lime putty per cut	" e	€0., 0	ibov 2	
	6	Lime putty, per cwt. Hair mortar, per yd.		1	7	0
	0	Sawn laths, per bdl.	•	10	14 2	05
	6	Keene's cement, ner ton		5	15	0
	6	Sirapile, per lon DO. fine, per lon Plaster, per ton	•	33	18	0
	6		•	33	0 12 12	06
	0	DO. fine, per lon		53	12	0
	6	DO. Ane, per ton		ŏ	õ	4
	9	LATHING with sawn laths, per yd.		0	1	7
		METAL LATHING, DEF YO.		Ŏ	2	3
	6	FLOATING in Cement and Sand, 1 to for tiling or woodblock.	n.,			
		per yd. Do. vertical, per yd.	•	0	20	47
		RENDER, on brickwork, 1 to 3, per RENDER in Portland and set in f	yd.	ŏ	22	Ż
	7	stuff, per vd.		0	3	3
	0	RENDER, float, and set, trowell per yd.	ed,	0	2	9
	9	RENDER and set in Sirapite, per	yd.	0	04 04 04	55
t	0	EXTRA, if on but not including la	th-			
		EXTRA, if on ceilings, per yd.	•	0		55
		per yd. RENDER and set in Sirapite, per Do. In Thistle plaster, per yd. ExTRA, if on but not including la Ing, any of foregoing, per yd. ExTRA, if on ceilings, per yd. ANGLES, rounded Keene's on Pd. Land, per ft. lin.	ort-	0		6
	$\frac{d}{d}$	PLAIN CORNICES, in plaster, per in	nch			•
u	ER,	girth, including dubbing out, e per ft. lin.		0	0	3
		WHITE glazed tiling set in Portla and jointed in Parian, per y	ind			
		Irom		1	11	6
	0	FIBROUS PLASTER SLABS, per yd.	*	0	1	10
1	0	GLAZIER				
5	0	GLAZIER, 1s. 8.1. per hour.				
	10	Glass: 4ths in crates: Clear, 21 oz.		£0	0	44
\$	Õ	DO. 26 02.	•	0	0	5
		Polished plate, British 1 in., up	to to	0		71
)	0	2 ft. sup per ft Do. 4 ft. sup.	:	0	2	3
1	0	DO. 6 fl. sup		0	20	6
1	0	2 <i>ft. sup.</i> . <i>per ft.</i>	•	0	3	13
1	0	DO. 05 ft. sup	•	0		5 10
)	0	DO. 45 <i>ft. sup.</i> ,, DO. 65 <i>ft. sup.</i> ,, DO. 100 <i>ft. sup.</i> ,, <i>Rough plate</i> , <i>sta in.</i> , <i>per ft.</i> DO. 4 <i>in. per ft.</i> <i>Linseed oil putty</i> , <i>per cut.</i>	•	Ő	0	61
	0	Linseed oil putty, per cut.	•	0		01
		GLAZING in putty, clear sheet, 21	07.	0	0	11
2	0	Do. 26 oz.		ŏ		0

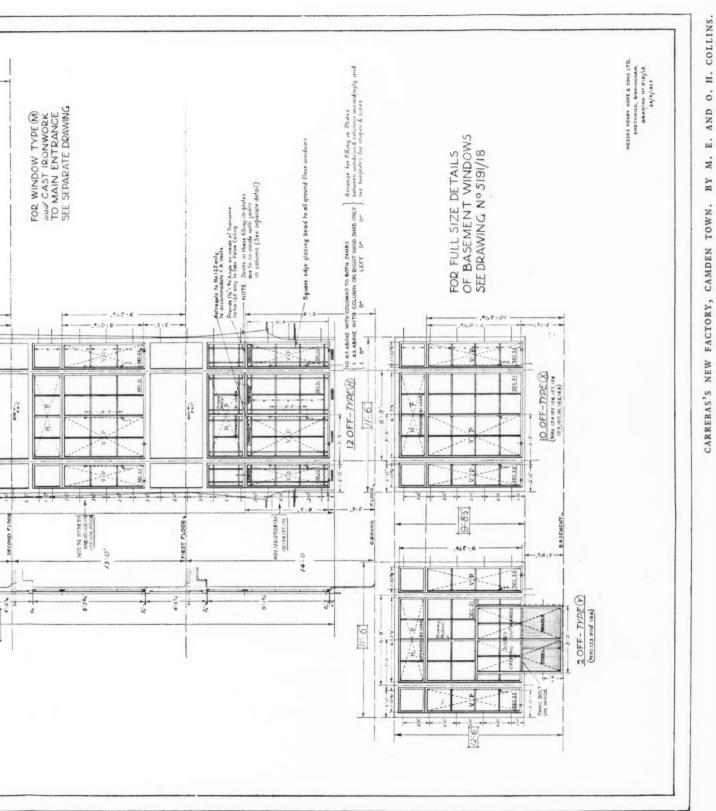
	GLAZING in beads, 21 oz., per ft. DO. 26 oz., per ft. Small sizes slightly less (under 3 ft. su Patent glazing in rough plate, no 1s. 6d. to 2s. per ft.	20 0 p.).	1 1	1 4 an,	
	LEAD LIGHTS, plain, med. sqs. 21 oz. usual domestic sizes, fixed, per ft. sup. and up Glazing only, polished plate 64d. to according to size.	£0 8d.	3 per	o ft.	
	PAINTER AND PAPERHA				1
	PAINTER, 18. 8d. per hour; LABOUR per hour; FRENCH POLISHER, 1s. 9d. PAPERHANGER, 1s. 8d. per hour.	ER, per	18. ho	4d. ur ;	
	Genuine while lead, per cwt Linseed oil, raw, per gall	£2 0	7	6	
	Linseed oil, raw, per gall. DO., boiled, per gall. Turpentine, per gall.	000	348	8	
	Liquid driers, per gall. Knotting, per gall.	0	18	6	
	Distemper, weahable, in ordinary col- ours, per cwt., and up Double size, per firkin	20	5	0	
	Single gold leaf (transferable), per	0	Ō	41	
	Varnish, copal, per gall. and up	0	12	0	
	DO., flat, per gall. DO., paper, per gall. French polish, per gall.	100	16 17	006	
	Ready mixed paints, per gall. and up	ŏ	15	ŏ	
	LIME WHITING, per yd. sup. WASH, stop, and whiten, per yd. sup. Do., and 2 costs listemper with pro-	0	0	36	
	prietary distemper, per vd. sup.	0	0	9	
	KNOT, stop, and prime, per yd. sup PLAIN PAINTING, including mouldings, and on plaster or joinery. 1st cost	0	0	7	
	and on plaster or joinery, 1st coat, per yd. sup. Do., subsequent coats, per yd. sup.	0	0	10 9	
	BRUSH-GRAIN, and 2 coats varnish,	0	1	21	
	FIGURED DO., DO., per yd. sup.	000	351	8	
	FRENCH POLISHING, per ft. sup. WAX POLISHING, per ft. sup. STRIPPING old paper and preparing,	ŏ	Ō	6	
		00	11	10	
	Parting Faper, ordinary, per piece. Do., fine, per piece, and upwards. Varnishing Paper, 1 coat, per piece Canvas, strained and fixed, per yd.	0	29	4	
	VARNISHING, hard oak, 1st coat, yd.	0	3	0	
9	sup. Do., each subsequent coat, per yd.	0	1	2	
	sup	0	0	11	
	SUNDRIES				
	Fibre or wood pulp boardings, accord- ing to quality and quantity. The measured work price is on the same basis per ft. sup.	20	0	21	
	FIBRE BOARDINGS, including cutting and waste, fixed on, but not in- cluding studs or grounds per ft. sup from 3d. to				
	sup	0	0	6	
	Plaster board, per yd. sup from	0	1	7	
	PLASTER BOARD, fixed as last, per yd. sup from	0	2	8	
	Asbestos sheeting, 32 in., grey flat, per	0	2	3	
	DO., corrugated, per yd. sup	0	3	3	
	Asbestos sheeting, fixed as last, flat, per yd. sup. Do., corrugated, per yd. sup.	00	45	0	
	Assestors alating or tiling on, but not including battens, or boards, plain "diamond" per square, grey				
	Do., red	23	15	0	
	Asbestos cement slates or tiles, 5 in. punched per M. grey	16 18	0	0	
	ASBESTOS COMPOSITION FLOORING:				
	Assessors Composition FLOORING: Laid in two coats, average \$ in. thick, in plain colour, per yd. sup. Do., \$ in. thick, suitable for domestic	0		0	
	work, unponsited, per yd	0	6	6	
	Metal casements for wood frames, domestic sizes, per ft. sup.	0		6	
	HANGING only metal casement in, but	0		10	
	not including wood frames, each . BUILDING in metal casement frames,				
ż	per ft. sup.	0	0	7	
ł	Waterproofing compounds for cement. Add about 75 per cent. to 100 per cent. to the cost of cement used.				
	PLYWOOD, per ft. sup.		11	_	

	LTIMOOD,	her .	LOSS	ray										
Thickness		Ain.			tin.			g in.			1			
	Qualities	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	AA.	A.	B.	
	Birch	6 84	8	3	5	4	8	7	6	-	81	77	-	
	Gaboon Mahogany	4	8	8	64	51	4	95	74	-	1 0	10	-	
	Figured Oak 1 side	84	7	_	10	-	-	-	_	-	1.6	-	-	
	Plain Oak 1 side			-	74	7	-	93	-	-	1 0	-	-	



WORKING DRAWINGS SUPPLEMENT TO THE ARCHITECTS' JOURNAL FOR JUNE 27, 1928





.

[See also article on page 915.] DETAILS OF WINDOWS ON MAIN FRONT.