An Illustrated Monthly JOURNAL for the DRAFTING ROOM Edited by RUSSELL F. WHITEHEAD

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PENCIL POINTS COLOR PLATES

WE HAVE BEEN having some interesting correspondence lately with a number of our readers located in various parts of the country on the subject of our color plates. The subjects for the next five months have been selected in accordance with the same general considerations which have guided us up to this point in choosing originals for reproduction.

Some of our good friends have suggested that we adhere more closely in this series to the accepted types of architectural renderings in various mediums, whereas others have requested us to reproduce sub-

jects of a more pictorial nature in which architectural considerations are of somewhat less importance than we have heretofore, in the main, insisted upon. Others have suggested that instead of publishing, as we have previously done, each color reproduction greatly reduced in size from the original rendering, we substitute the entire subject in black and white together with a small section in color at full size.

Many of our subscribers tell us that they are having the color plates framed, others are keeping the entire series in portfolio form to serve as suggestions in making their own renderings. If comparatively small sections of large renderings are shown in color at full size the series will lose much of its present pictorial value. But would there be compensating advantages to those more interested in technique than the broader considerations of composition, color, light and shade?

We can sit here and look out of the window and make a guess about such things but we would very much rather secure first hand information from those for whom the color plates are selected and published. We therefore sincerely trust that we may have your frank opinions of the color plates as so far published, together with suggestions for the future improvement of this feature of our work.

BIRCH LONG MEMORIAL

N MEMORY of Birch Burdette Long, it is pro-

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posed to make an annual award at the Exhibition of the Architectural League of New York for architectural illustrations of distinguished merit.

His many friends in the League feel that this proposal would properly recognize his contribution to his own art and his devotion through many years of service to the work of the League and its exhibitions.

To this end, his friends, whether or not they are members of the League, are invited to subscribe to a fund that should total at least \$1,500.00, the income of which amount would be devoted to this particular award under the jurisdiction of a committee to be appointed by the President of the League. Contributions of any amount will be welcomed and should be sent to Ely J. Kahn, *Chairman*, 215 West 57th Street, New York.

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FIRST PRIZE DESIGN, PLANS AND PERSPECTIVE SUBMITTED BY RICHARD F. KING, LOS ANGELES, CALIFORNIA

Volume VIII

May, 1927

Number 5

PENCIL POINTS FIRST ANNUAL ARCHITECTURAL COMPETITION

Judged at Hot Springs, Virginia, April 1st, 2nd and 3rd, 1927

REPORT OF THE JURY OF AWARD

Arthur I. Meigs, Chairman

"Yes, there is holy pleasure in thinc eye! The lovely Cottage in the guardian nook Hath stirred thee deeply; with its own dear brook, Its own small pasture, almost its own sky! But covet not the Abode;—forbcar to sigh, As many do, repining while they look; Intruders, who would tear from Nature's book This precious leaf, with harsh impiety. Think what the Home must be if it were thine, Even thine though few thy wants!—Roof, window, door, The very flowers are sacred to the Poor, The roses to the porch which they entwine; Yea, all, that now enchants thee, from the day On which it should be touched, would melt away."

THERE IS TOO LITTLE of the poetic in modern life, and, would there were more. Poetry and the poetic are two quite different things. Sometimes one thinks of poetry as rhyme, but there can be unpoetic rhymes and there can be poetic buildings. One is lucky if one can find a meagre stream of the poetic trickling through a suburban lot, fifty by one hundred and fifty feet, and surrounded by "neighboring houses of the usual heterogeneous kind existing in towns, small cities or the suburbs of large cities", but these conditions surround us all alike. They surround the holders of the competition; they surround the judges, and they surround the competitors, but still, one cannot help hoping and wishing that a little green shoot of the poetic would try to find its way, or would succeed in finding its way through the mass of opposition arrayed against us all.

Among the three hundred odd drawings submitted in this competition, there was altogether too little of the poetic, and, perhaps, rather than attempt to lay blame on any one particular head, we had best try to share it all alike, and in this way will the field be cleared somewhat for that which is to follow.

It is to be supposed that those most interested in reading this report will be the contestants themselves, and it is further supposed that these contestants, being sturdy fellows, are well armed to suffer the slings and arrows of outrageous fortune. That they will receive criticism with the smiles and fortitude which should be cultivated by all architects and that they will prefer to have their designs vigorously attacked rather than to accept in a reclining position honeyed words of praise for their achievements. The award of prizes and mentions is the most satisfactory form of praise which can be conferred by a jury on a contestant.

In Wordsworth's sonnet, quoted at the outset, and the name of which is "Admonition", it may be noted that he tells us rather what not to do than what to do. Wordsworth, himself, in writing the poem was performing the creative act, and all we architects. and in fact all creators, soon find out that the act of creation is followed rapidly by the act of criticism. Critics, as such, are poor creatures, and the contestants who bear the heat and burden of the day have much the best of it in the long run, if they continue to contest and create.

In this problem perhaps the man who drew the program drew it pretty fine. Certainly, a good deal was asked for. A lot such as this is not a large one, and yet the contestants are required to provide four bedrooms and two baths, plus a porch, a sleeping porch, garage, and all the rest of it that goes with modern life. The problem is hard; but then life is hard, too, and the braver the attack we make upon it, the better we will all come off.

In the sonnet Wordsworth mentions the Poor. Evidently, a man, who is going to live under the conditions as set forth, is poor, and the sooner we admit this,—that is to say the sooner the contestants admit it, the better. A house of this character should be stripped of all unnecessary details and fussiness. It should be as free as possible from pomposity. It should not attempt to blow itself up like the bull frog, but should look forth upon the world with an humble expression upon its countenance, and if it succeeds in this, it might, in the end, have another poet like Wordsworth come along and write a sonnet about it. "When love begins to sicken and decay, it useth an enforced ceremony. There are no tricks in plain and simple faith."

For reasons such as these, it ran uppermost in the minds of the jury to give preference to those designs which were frank, simple, honest and humble, and let it not be supposed that the jury considered any of the designs perfect, any more than it should

be supposed that any of the jury were perfect themselves. A great deal has been said and done on the subject of the small house upon the small lot, and sometimes it would almost appear that, after all our thought and attention, the old rows of houses were not quite so bad as they have been made out to be. As we are dealing with a lot fifty feet wide, it is obvious that the house must extend most of the way across that lot, and approach quite closely its two side lines. On a fifty foot lot a thirty foot house placed in the middle leaves only ten feet on either side. If, as is not unlikely, another house is similarly placed on each of the adjoining lots, the clear spaces between the houses would amount to twenty feet, and twenty feet is a small space, and a window which looks out to another window twenty feet away leaves much to be desired. If we cramp our house hard, or if we turn the long dimension of it the other way, we haven't bettered the situation very materially, since we are altogether too close to each other in the first place. On the other hand, if the long dimension of the house runs across the lot, the majority of the windows will obviously look out to the front and to the back. The side of the house towards its next door neighbor becomes lessened in importance, and the walls of the said side can have very few windows in them, or perhaps none at all. In short, following this idea, we approach a point where it would, perhaps, be wise to make the houses touch each other, and separate them by a party wall. By this time we have returned to the rows of houses, so much in disfavor at the present time, but really somewhat maligned. However, all this goes beyond the field of the present problem where the contestants were obliged to keep their houses off the side lines, and is introduced somewhat in the nature of an outcry against living so close together in the first place. In short, it begs the question, and is put in only to clarify the problem, and to point out its inherent difficulties.

Going back to the question of the Poor, some of the designs showed a complete failure to apprehend this aspect of the problem. One glance at the perspective, which, being the largest and most prominent, is naturally the first thing to catch a judge's eye, was sufficient, in some instances, to throw a design out, without further consideration. One house in particular (the contestant's name has escaped us, but he may recognize it from the description) looked more like an hotel than a seven room house. It had a two-story portico across its entire front, on which its beholder could almost visualize the guests of the hotel comfortably rocking themselves in a line of rocking chairs. Nothing mean about that design. May we suggest, for future competitions, that competitors seek to avoid falling into such pitfalls.

We are coming later on to a brief analysis of the designs, but it should be interesting to the contestants to know that this question of simplicity and directness stood out as of paramount importance in the judge's mind. It will again be interesting to note that of the four designs winning prizes, all present a detached garage. A garage is essentially an unlovely affair, but it has one strong characteristic, that only one side is peculiarly objectionable; the side containing the doors. The other three sides can be used as a screen or bolster to the rest of the design and, skilfully used, help rather than hinder the whole. Further, a garage placed half way back on the lot, rather than all the way back, is better, since it brings the working parts of the design into closer juxtaposition, and also obviates the loss of property in communication from the garage to the front street, which, in a problem of this kind, is fundamental from the garden standpoint. However, the design placed first did not have this arrangement, but, as we are about to point out, even this design had, in the opinion of the jurors, many faults, but won from causes about to be enumerated.

With this preamble on the general nature of the whole problem, we shall take up the designs, one by one, in the order in which they were placed, and, beginning with the winner of the first prize, we propose to criticize it even more severely than any of the others, the more to enhance the reasons why it received first place. To begin with, it has an inglenook. Strange to relate number two also has an ingle-nook; and we find a third ingle-nook in the first mention. Let it not be supposed from this that the jurors had a leaning towards ingle-nooks; quite the contrary. They would have preferred their absence. What does an ingle-nook achieve? An inaccessible fireplace, two uncomfortable fixed seats, and a permanent obstacle to good furnishing. This criticism is given with the hope that it may tend to abate the "ingle-nookish" tendency, but that, of course, is left to the judgment of future competitors, and future juries.

In the first-prize design three outstanding faults are apparent—first, the main staircase is sailing so close to the wind that there is barely room for a man's head to pass under the bathroom above. Perhaps the designer had in mind to put a jog in the floor of the bathroom under the washstand. We judges could not see what went on below the washstand, but we hope there was a jog there, for otherwise the designer would have been obliged to go up his own stairs on his own hands and knees.

Second, the hall on the second floor is too long for so small a house.

Third, and perhaps worst of all, is the arched porch. This porch is violently out of scale. Columns of about five feet high are unsatisfactory, and the design when built would have an uncomfortable corner bitten out of its lower story.

Why then, it may be asked, was this design placed first? It was placed first because it gives evidence, in spite of its faults, of a trend in a direction. The outside of the house looks like the inside of the house. The exterior expresses its plan. If we look at the second floor plan, the poché is a rectangle; and we find the same rectangle below, plus the wing or gable containing the stairs, kitchen and sleepingporch. The design has a consistent perpendicularity carried throughout its entirety. It seems to be unshamed of this perpendicularity, echoed by the detail of the boards running vertically on the front;

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by the distinct perpendicular quality of the single chimney and the front door; to say nothing of the lady who is coming out of it who is tall and willowy to a degree. (We should say at this point that, although the judges, according to programme, had agreed that "excellence of rendering, while desirable, should not have undue weight with the jury," yet the beauty and grace of this maiden were such that they had need of blinders in order to preserve their perfect balance.) Everything, however, is in keeping. Further, the design is woody in the extreme, and has a frankness and originality throughout which places it first.

One of the main objects of this competition is to attempt to teach men to design. Design is a difficult and large word, but Architecture is a three-dimensional subject. Architecture deals with cubic, both within and without. It is the arrangement and juxtaposition of cubic spaces placed about each other in such a manner that their relativity shall produce aesthetic emotion; and it seems as though this design were reaching out in that direction, which is the reason for its selection.

The "Breakfast Alcove" would have smelled as sweet had it been called by another name; but the Sleeping Porch—that most difficult of all tasks in the small house and one which perhaps would have been better eliminated from the problem—is admirably handled.

Coming to Number Two: It is of interest that this design came up from a lower place, in the judgment of the jurors, as the process of elimination and selection went forward. At one time it was below those considered for prizes and mentions, and Design Number Three was then occupying second position. The main reason governing this change was the question of a bedroom on the first floor. The winner of the Third Prize was lucky to do as well as he did, with one bedroom and bath on the first floor. By this arrangement he reduces his second floor to three bedrooms and a bath,-at which same bath the owner of the house gets the worst chance. The rooms have all been cleverly labeled as "Owner's," "Son's," and "Daughter's." But the design is silent about who occupies the room on the first floor with the private bath. This is a grave defect. A maid, if they had one, would have a bath all to herself, while the family suffered; and if the son were put down there, a private bath would be entirely too good for him. So that feature of the design is "not so good."

Coming back to Number Two, about which we are really talking, (but Number Two and Number Three are related in this regard) this design comes off with flying colors in getting one more bath than was asked for. By this arrangement the Gordian Knot is cut. Either a maid or guest can be housed on the first floor, and the owner is still as well off as in all the other designs. To speak colloquially, a competitor can "get away with murder" with a jury if he does it right. If he springs some brilliant idea that no one else has thought of, and which doesn't transgress the mandatory, he fullfils the real function of a competition, which is in search of ideas.

Number Three reached out for this idea and missed it, while Number Two, by the simple expedient of giving something that was not asked for, hit the mark.

This house, again, is thoroughly woody, and the chimney in the interior angle of the house is placed in a most satisfying location.

The blank space on the front of the house is restful and good. We again wish that the ingle-nook had been absent as it would have eliminated the disadvantages enumerated above, and decidedly improved the looks of the chimney by taking away from the "dropsical" effect at its base.

The apparent desire of the design to throw the living room into the hall cannot be considered as anything but unfortunate, since privacy is lost and frankness suffers.

The elimination of windows from the end wall of the main bed room to make space for the beds is admirable. It would perhaps have been better if the same elimination had taken place in the living room, thereby shutting out completely the next-door neighbor—the advantages of which have been treated above.

Number Three has already been attacked, and the considerations that gave it its place are its extreme simplicity and humility. It is clearly marked as a house of wood, and is conspicuous for its simplicity, directness and modesty on the front, while most of its author's sins have been confined to the rear.

Number Four is a very old story indeed. We have all seen such designs many, many times, including the jolly fence in front, with its attendant elm. The main trouble with this design is that there are not enough faults in it to get a jury excited.

We will conclude with a rapid survey of the designs receiving mentions.

The First Mention is, obviously, admirably presented, and without too many faults in its plan, but it suffers from an ingle-nook, and, in the opinion of the jurors, it is decidedly unfortunate to pass through the living room to get to the stairs and upper story. The exterior well expresses its interior, and it has the merit of directness, combined with a pleasant degree of good taste.

The Second Mention has a good exterior, but an unexciting plan which looks as though it were a cut down plan of a house about half again as big. The hall is a little pompous, and deep door jambs to the front door achieved by hollow piers that look like chimneys on the plan are not desirable. This is what we meant by "tricks" a little way back. Wood houses do not have deep jambs. Because one has admired deep jambs on a stone house is no reason for introducing them into a wooden one. And again, see how the deception breaks down, for one glance at any window makes us wonder why a window jamb should be light and a door jamb heavy.

The Third Mention has originality in its favor, but suffers violently from the fault noted in the First Mention, as in this case it is not only necessary to pass through the living-room from the front door to the stair-case, but one must also stumble over the furniture on the way, which would be presumably about the fireplace.

The Fourth Mention is pleasant to look at but is somewhat over-elaborate, and suffers from the fault of the long dimension running parallel to the long dimension of the lot, the disadvantages of which have been enumerated above.

The Fifth Mention has its garage attached. This places the bad smell too close under the owner's nose; but the oft-mentioned simplicity secured it a place.

Sixth Mention barely got "under the wire," and was known to the judges as the "tar baby," owing to the almost Nubian quality of its rendering.

In conclusion, we desire to make a few paternalistic remarks and to try to heal, if possible, some of the wounds which the competitors may consider themselves to have received.

It is well understood the pains that go with the designing of a house. We know how hard the various competitors have worked; how many hours of study they have put into it, and we commend both their energy and their achievements. More than three hundred enter the race and only ten are mentioned. All honor to winners and "also rans." Mr. Stokowski, the great conductor, became vexed at a recent Beethoven concert owing to the fact that one of the audience was seized by some affliction of phlegm in his throat, which caused the same member to make what Mr. Stokowski characterized as disturbing and disgusting noises. He delivered an impromptu lecture on the subject and explained that the orchestra was at great pains to produce tender music for the benefit of the audience. He likened the orchestra's producing of music to an artist painting a picture, and explained that the painter applied his colors to a blank canvas, and that the same thing existed in music; except that the musician deals with tone and places his tone upon a canvas of silence.

We all crave success. Success does not come to one stretched out on a marble slab and being rubbed down with soothing lotions. As blank canvas is to a painter; as silence is to the musician with his tone; so is opposition to success.

				Arteur I. Meigs, Chairman
				HARRIE T. LINDEBERG
Jury	of	Aw	ard -	Frank P. Meade
	•			HUBERT G. RIPLEY
				Ernest John Russell
	-	~		

Professional Adviser, RUSSELL F. WHITEHEAD

EXTRACT FROM THE PROGRAMME

PROBLEM: Mandatory. The design of an attractive all-year-round residence and a garage to be built of wood, not exceeding 28,000 cubic feet in contents, including garage. A maximum of convenience and utility is required at a minimum initial and upkeep expense. The house is to be lived in by a family of two adults and two children. The site is a rectangular lot with a frontage of fifty feet $(50^{\circ}-0^{\prime\prime})$ on the street and a depth of one hundred and fifty feet $(150^{\prime}-0^{\prime\prime})$. The grades are level. The street runs North and South. The house is to be self contained on its own lot. The neighboring houses are of the usual heterogeneous character of design existing in towns, small cities or the suburbs of the large cities. A local restriction provides that no building shall be erected nearer than thirty feet from the highway property line and that no building may be placed directly on either the north or the south lot line.

Seven principal rooms are required for use as a Living Room, Dining Room, Kitchen and four Bed Rooms. Two Baths and one two fixture Lavatory are to be provided. The necessary circulations must be included and there shall be at least one Closet for each Bed Room, also a Linen closet and a Coat closet. There is to be a Sleeping-porch and at least one Covered-porch. The garage is to accommodate one automobile. The garage may either be part of the house or be detached.

CONSIDERATIONS OF THE JURY OF AWARD:

1. Excellence and Ingenuity of Plans.

- 2. Architectural Merit of the Design, and Treatment of the Interior Woodwork and the fitness of both to express a wood-built house.
- 3. Practicability of Construction.
- NOTE—Due consideration will be given to the contestant who makes economical use of the standard lengths and widths of lumber.
- 4. Fitness of the design as a whole to meet the needs and spirit of the problem.

Excellence of Rendering, while desirable, will not have undue weight with the Jury, in comparison with their estimate of the Competitor's ability, if otherwise shown.

COMPUTATION OF CUBIC CONTENTS: Measurements to be taken from the outside of exterior walls and from the level of the cellar floor, or from the bottom of floor beams in any unexcavated portion, to a point at half the distance from the top of the wall plate to the top of the ridge for pitched roofs. Flat roofs to be figured to finish surface. Porches are to be figured at one half their total gross cubage, the height to be measured from the finished grade. Sleeping-porch, one story wings or bays shall be figured at their actual cubage. All cubage figures will be carefully checked before designs are submitted to the Jury.



FIRST PRIZE DESIGN, DETAIL SHEET SUBMITTED BY RICHARD F. KING, LOS ANGELES, CALIFORNIA

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SECOND PRIZE DESIGN, DETAIL SHEET SUBMITTED BY JOHN DONALD TUTTLE, NEW YORK, N. Y.

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SECOND PRIZE DESIGN, PLANS AND PERSPECTIVE SUBMITTED BY JOHN DONALD TUTTLE, NEW YORK, N. Y.

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SUBMITTED BY DANIEL NEILINGER AND HENRY M. BARONE, NEW YORK, N. Y.

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THIRD PRIZE DESIGN, PLANS AND PERSPECTIVE SUBMITTED BY DANIEL NEILINGER AND HENRY M. BARONE, NEW YORK, N. Y.

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FOURTH PRIZE DESIGN, DETAIL SHEET SUBMITTED BY OWEN LAU GOWMAN, NEW YORK, N. Y.

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PENCIL POINTS FIRST ANNUAL ARCHITECTURAL COMPETITION



FOURTH PRIZE DESIGN, PLANS AND PERSPECTIVE SUBMITTED BY OWEN LAU GOWMAN, NEW YORK, N. Y.

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FIRST MENTION, DETAIL SHEET SUBMITTED BY ELBERT J. RICHMOND, WATERBURY, CONNECTICUT PENCIL POINTS FIRST ANNUAL ARCHITECTURAL COMPETITION



FIRST MENTION, PLANS AND PERSPECTIVE SUBMITTED BY ELBERT J. RICHMOND, WATERBURY, CONNECTICUT

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SECOND MENTION, DETAIL SHEET SUBMITTED BY VERNE H. SIDNAM, DETROIT, MICHIGAN

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SECOND MENTION, PLANS AND PERSPECTIVE

SUBMITTED BY VERNE H. SIDNAM, DETROIT, MICHIGAN

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PENCIL POINTS FIRST ANNUAL ARCHITECTURAL COMPETITION



THIRD MENTION, PLANS AND PERSPECTIVE SUBMITTED BY NORTH AND SHELGREN, BUFFALO, NEW YORK

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FOURTH MENTION, DETAIL SHEET SUBMITTED BY CONSTANTIN A. PERTZOFF, CAMBRIDGE, MASSACHUSETTS

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FOURTH MENTION, PLANS AND PERSPECTIVE SUBMITTED BY CONSTANTIN A. PERTZOFF, CAMBRIDGE, MASSACHUSETTS

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FIFTH MENTION, DETAIL SHEET

SUBMITTED BY JOHN FLOYD YEWELL AND JOHN B. WAHLQUIST, YONKERS, N. Y.

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PENCIL POINTS FIRST ANNUAL ARCHITECTURAL COMPETITION



FIFTH MENTION, PLANS AND PERSPECTIVE SUBMITTED BY JOHN FLOYD YEWELL AND JOHN B. WAHLQUIST, YONKERS, N. Y.

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SIXTH MENTION, DETAIL SHEET SUBMITTED BY JOSEPH B. WATTERSON, NEW YORK, N. Y.

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SIXTH MENTION, PLANS AND PERSPECTIVE SUBMITTED BY JOSEPH B. WATTERSON, NEW YORK, N. Y.

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THE THREE-SHELL DOME OF THE INVALIDES, PARIS, FRANCE A further development of the dome as a means of covering a central type plan.

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THE RICKER MANUSCRIPT TRANSLATIONS, III

GUADET'S "ELEMENTS AND THEORY OF ARCHITECTURE," VOLUME III

By Thomas E. O'Donnell

I HE THIRD VOLUME of Guadet's work is given entirely to a study of the elements and theory of church architecture, and touches upon practically every phase of religious architecture that the designer is likely to meet. Guadet goes thoroughly and deeply into his subject in an endeavor to get at the vital meaning of each architectural element involved in religious architecture.

For the purpose of establishing the basic principles in religious architecture Guadet begins by a brief consideration of the most important religions and resulting religious architecture of the ancient peoples of the earth, particularly the Egyptians, Greeks and Romans. In these studies he searches for certain general principles which are more or less common in all the earliest temples and shows how they are applicable even to modern church types.

From these Guadet passes to a consideration of Christian religious architecture and its origins. He points out that in religious architecture, especially, one must first of all consider the history of its origin and development, in order to gain a full understanding of Christian church edifices and to design them intelligently.

He begins his study of the Christian church by a discussion of the origins of many of the elements involved in modern church buildings. He especially refers to borrowings from Roman architecture, for this had a great influence upon Christian architecture. The early Christian did not create a new architecture. Guadet lays down this rule: "In architecture there is no spontaneous generation. An art does not improvise itself but it is always connected to the past by deep and multiple roots. Evolution

is the law of all good architecture."

The Roman basilica furnished most of the important elements of the Christian church. Christianity was well developed before Christian architecture began. Not until after the Milan Decree in 313 A. D. did the early Christians worship openly in sufficient numbers to need a special type of They architecture. had been holding their meetings in the catacombs and in private houses, hence



BASILICA OF CONSTANTINE, ROME

A Cross Section of the Basilica showing how the Romans, at a very early date, had solved the vaulting problem, clerestory lighting and the buttressing of concentrated thrusts.

had no "architecture" of their own. Because of the natural antagonism between Christianity and the old Roman Pagan religion, it is reasonable to suppose that the Christians had no desire to use old Roman temples, even if available, or to model their churches after the scheme of any of these. The temples were also too small, for the Christian form of worship was congregational and large gathering places were needed.

There was, however, one type of Roman structure that met their purpose and that was available, namely, the Roman basilica. "These old basilicas," says Guadet, "were the first Christian churches" and this fact was largely responsible for fixing the main architectural features that have been common of most of the important churches of all time.

The old Basilicas of Julia, Ulpia, and Emilia are types that afford precedent for the simple open timber roof Christian basilicas. This was the type adopted by them in practically all of their early Christian churches in Rome and vicinity. These old basilicas contained the original elements of the later church; the nave, side aisles, apse, narthex, galleries, the clerestory system of lighting and the visible timber roof construction.

The Basilica of Constantine was the prototype for the later Christian churches, with vaulted roof construction. The simple visible timber roof type was the first to be used, for the early Christian builders were too poor to build the more expensive vaulted types, but at a later period these became dominant, and out of this type were developed the Romanesque and Gothic churches and cathedrals. There were, therefore, two original types of Roman Basilicas which served as starting points for the chief develop-

ments in Early Christian architecture.

In chapters four and five, Guadet gives a detailed analysis of churches with visible wooden roofs. In these he touches upon some of the best of the ancient examples; of the various architectural features involved; methods of construction; visible wooden roofs in the middle ages; disappearance of the galleries; the triforium; churches with visible roof framework in Italy; churches of Sicily;



THE DUOMO OR CATHEDRAL AT FLORENCE, ITALY

Showing the use of a two-shelled dome. Reinforcement at the base of the dome made it possible to eliminate the exterior buttresses.

Showing a dome of three major shells, the inner ones designed for desired interior.

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churches of Central Italy; churches with ceilings; and modern requirements.

Guadet gives the Basilica of S. Clement and S. Agnes as the two best preserved examples of Christian basilicas in Rome. Their plans are well defined and show all of the characteristic features on plan. A distinguishing feature of these early churches was the court preceding the edifices, with its fountain at the center, the narthexentrance vestibule or place of waiting-at the rear.

The use of visible timber roofs in France during the Mediaeval Period is also discussed. The original work at the Abby Church of Mont S. Michel is given as a typical example of the French work. In •this church is also to be seen one of the earliest examples of the triforium. The origin and development of this feature, the roofing of the side aisle, the disuse of the galleries, the arrangement of windows, the decoration of . the triforium and other interior features, the construction of trusses, tie beams, are all very carefully analyzed.

Churches with visible wooden roofs were used extensively in Italy, the idea carrying through the Romanesque into the Renaissance where the construction was slightly modified and a paneled ceiling used below the trusses.

Guadet considers the Cathedral of Monreale, in Sicily, "the most beautiful and monumental example of a church with a visible



DETAILS OF MONT SAINT MICHEL A typical example of open timber roof construction in France. The side aisles are vaulted.



SAINT-OUEN, ROUEN

Details of the vaulting and flying buttress system as used in Saint-Ouen. Showing how the vaults were protected by an outer wooden roof construction. framed roof." Here, as in the finer examples, the roof framing was painted.

Some very fine examples are also to be found in Central Italy, especially, the Cathedral of Orvieto and the Church of S. Miniato, at Florence.

Concerning the merits and demerits of the visible wooden roof types Guadet points out that it is cold or hot, depending upon the season, because its construction is thin, and because very large cooling or heating surfaces are exposed to the external temperature. Such churches are very difficult to heat in winter and are likely to be very hot in summer. They have one very great advantage over vaulted construction, and that is, economy of construction. At a relatively small cost large areas can be roofed. This is to be recommended rather than some false expedient, for, says Guadet, "Nothing is so lamentable as the church vaults in boards or plaster tiles seeking to imitate the faithful construction of our cathedrals. In all things, let us build churches that are truthful in construction."

Chapters six to fifteen, inclusive, are devoted to vaulted churches, and in these Guadet goes minutely into all phases of vaulted construction as applied to church architecture.

The vaulted church is the result of a long period of evolution and development in the construction of vaults, and its beginnings we trace



PLAN AND DETAIL OF THE ÉGLISE DE LA TRINITÉ, CAEN, FRANCE Showing the concealed buttressing over the side aisles.

to Roman architecture, especially the vaults in such structures as the Basilica of Constantine, and the domes of eastern churches.

In chapter six, Guadet reviews the types of vaulted churches generally adopted in the East, particularly at Constantinople. He discusses at some length the composition of churches with central domes; the Greek Cross plan; domes on pendentives; circular and polygonal compositions. "While Italy and, in general, the West reproduced the Roman basilica and long made it the type of its churches, the East or Greek Empire soon renounced that borrowed idea and built vaulted churches." There are thus two early types of vaulted construction that afforded the beginnings of vaulted Christian churches of later times,—the Latin basilica in the West and the Byzantine churches in the East.

S. Sophia, in Constantinople, is considered the finest example of a great church crowned by a dome. Guadet discusses this in every detail, pointing out its truthfulness in construction and shows how this has an extraordinary and satisfying grandeur of appearance. Also, the elements of the plan, the great piers, pendentives and dome, the hemi-domes, the manner of taking care of the thrusts, means of lighting, external expression and other important elements are carefully analyzed.

The application of domes, in a series, to churches, of central, basilican and other types of plan are also considered, and many examples cited. The small churches, as well as notable structures are examined and their chief attributes set forth. Guadet calls attention to this fact, not generally recognized, that the Eastern type of church with its central dome lends itself to an almost infinite number of schemes, of both plan and exterior, and has the advantage of not being as fixed in character as the basilica type.

The basilica type is generally considered to meet the natural requirements of the church program far better than the domical or central plan, Eastern type. For the average church ritual nothing meets the needs of both the clergy and the congregation so well as the long and uniform hall of the basilica with the apse at one end.

Most of the churches of the Middle Ages, especially of Europe, were developed from the old basilican plan, and differed only in the method of construction which, as time passed, became highly developed. The ancient basilican churches covered by open timber roofs had not been altogether satisfactory



PLAN AND SECTION OF NOTRE DAME DE PARIS An example of the highest development of the Gothic vaulting and buttressing system.

because of frequent fires which caused great destruction. The vaulted church was the solution sought. Vaults, when applied to the basilican plan brought up many serious structural problems, due to the side thrust of the vaults.

Guadet classifies vaulted basilican type churches into, (a) vaults with uniformly distributed thrusts; (b) vaults with concentrated thrusts. For each type he makes a complete analysis, of walls, piers, relation of side aisles to naves, of tunnel vaults with side aisles, of tunnel vaults without side aisles, difficulties of lighting, roofing of vaults, and arrangement of apses, and shows how each problem should be solved.

In chapters nine and ten, Guadet considers the types of vaulted churches that have concentrated thrusts and internal resistance. This discussion he arranges under the following headings: the pointed arch; reasons for its existence; plan of the church determined by the vaults; stability; stresses reciprocally neutralized; equilibrium; internal resistances; churches with side aisles; buttresses; semicylindrical vaults; origin of the internal flying buttress; and exceptional conditions of the vaults of naves. Each of these features is adequately explained by references to and illustrations of actual examples of well known edifices.

Chapter eleven is given over to a similar discussion of concentrated thrusts and external resistances, the discussion coming under the following headings: external buttresses and flying buttresses; the pointed cross vault; light vaults; independent arches; variety of possible combinations; and means of construction in the Middle Ages. In a following chapter the discussion is concerned with the manner in which thrusts are concentrated at points of external resistance. In this are considered: the different parts of vaults; subdivision of bays; rectangular bays; very high side aisles; low side aisles; triforium; glass windows; lighting; and lateral chapels.

In another chapter on concentrated thrusts, Guadet discusses a great variety of resistances, aside from the two main types, internal and external, that have just been reviewed. Among the features contributing to these various resistances are: the roofs or coverings over the masses of the vaults; wooden framework; thrusts of roofs neutralized; iron tierods of Italian vaults; function of the flying buttress; point of application of the resistance; removal of rainwater; double side aisles; and apses.

In chapter fourteen Guadet makes a special analysis of the vaulted churches to be found in Paris, especially, Notre Dame, S. Germain-des-Prés, S. Gervais, S. Leu, S. Eustache, and S. Etienne-du-Mont. These he treated in detail for, being located in the same city as his school, he advised his students to visit and study them.

In the several chapters which follow, a study is made of choirs, chapels, bell towers and porches, and are considered under the following headings: choirs with circular or polygonal apses; square apses; elevated choirs; choirs of Abbey churches; enclosures and stalls; rood screens; ambos and pulpits; chapels; crypts; detached bell towers; bell towers attached to churches; spires of stone or carpentry; wooden porches; vaulted porches; the ancient narthex; abutting porches; portals and façades, etc.

Chapter nineteen is devoted to churches of the Renaissance, especially those with domes. Guadet shows how the dome of ancient times was modified and adjusted to the churches of the new period. He uses a number of churches of the French Renaissance to illustrate this phase of church architecture. In a brief chapter he discusses non-Catholic religious edifices; mosques, Greek churches, Protestant churches and synagogues.

One chapter is given to a study of church decoration in which Guadet shows, in a very fine way, the proper relation of sculpture, painting, mosaic and stained glass to the architecture of the church. Another chapter is concerned with the accessories of the church: sacristies, treasuries, cloisters and parsonages.

In the closing chapter Guadet deals with the elements of monastic architecture under the headings: monasteries; abbeys; monastic habitations; teaching monasteries; hospitals; chapter halls; refectories; and dormitories. There is added an appendix on the general considerations in funereal architecture; commemorative and decorative monuments; military architecture; gardens; and public ways.

This volume is a vast store-house of material on religious architecture, carefully analyzed by one who was an eminent authority on the elements and theory of composition of the great religious structures of the world. For the architect and designer who desires to know the true character of the work of the past and the spirit in which the old builders worked, as a guide and inspiration for his own modern designs, he will find much food for thought in this third volume of Guadet's work.



LITHOGRAPH BY OTHO McCRACKIN

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THE VALUE OF INDICATION IN DESIGN STUDY

PART II

By David Varon, S.A.D.G.

(EDITOR'S NOTE:-This is a continuation of the discussion begun by Professor Varon in the April issue of PENCIL POINTS.)

 ${
m N}$ EVER DID ANYONE by sheer hard work alone become an artist, but no artist has ever become successful without hard and sustained effort. He who would achieve artistry will do well to use all the facilities and employ all the means of investigation and analysis at his command, though it will not be so much the number of things he has read or seen but how much he has thought about them that will help him. The architect of the Middle Ages created without the aid of the many books we have today to pore over. Being born an artist, however, he was blessed with ability to think about the things he saw, and he found in Nature a vast book waiting for anyone gifted with the power of reading from it. The power of observation which he employed has to be developed by one who would succeed in the study of architectural composition. The use of indication will aid in its development and the student should by all means acquire this splendid tool. Where, when, and how is this to be done?

It is to be done whenever a student is engaged upon any problem of design, no matter how small. As long as the prerequisites of a successful composition are not yet properly met he will not *draw* but will *sketch*, playing with his elements until he thinks the composition as a whole is satisfactory. Then he will proceed to develop his details more fully. It goes without saying that he cannot venture into the realm of composition without having previously acquired a vocabulary sufficient to carry him through the solution of the problem in hand. Furthermore, he must have learned to indicate each one of the elements, ornamental or purely architectural, that he may have to use.

He begins to learn his first lesson in indication when he starts to draw from the cast. He may have a love for what is ornamental and beautiful but, being inexperienced, will be so much engrossed in the charm of a rosette in a scroll, or a pretty mouth in a profile, that the relation of such details to the whole will escape him. He will be quite surprised when his kindly instructor smilingly shows him that the head he is drawing has no room left for a brain, and calls to his attention, furthermore, that the underlying shape of a human head is that of an egg. Next he will be shown that the proportions of the egg may change from one head to another. For example, there are, the brachycephalic type (in which the breadth of the skull is almost as much as its length), and the dolichocephalic (in which the skull is long and narrow). The student will be made to understand that unless he does justice to the proportions of the model, instead of working by formula, he will not succeed in getting the resemblance he is seeking. Coming more and more

to the individual, there may be many bumps this way or that from the main axis of the skull which go to make the character of the model as distinguished from that of any other individual. In proceeding thus from consideration of the general characteristics of all heads to the minor differences which determine individuality, the student will learn to see intelligently as well as to think logically.

Suppose now that our student has to sketch a figure at a comparatively small scale. He will find that an egg will do for the head and that accents at the proper places will suffice to give an impression not of *the* head but of *a* head, which answers the purpose in these circumstances. The same principle may be applied to the torso and to the several limbs. When the student has drawn every part with care as seen from different angles, and has observed what is universal and what is likely to vary, he can sketch profitably from life during very short sittings. He can rapidly indicate each part in its proper relationship to the whole and can keep his mind focused upon expressing perfect rest or apparent motion, as the case may be.

Now it is only a question of carrying the principle of this method of studying indication from the human figure, to the indication of architecture. The same process will have to be applied, if one is really serious and desirous of learning thoroughly. Τt begins with the drawing of as many elements of purely architectural character as possible at large scale so that details may be properly shown and gracefully rendered. Simplicity, however, is desirable and a word of warning should be inserted for those many students who think of technique rather than of showing what they see. These tackle their task with broomstick strokes, putting curves here and curves there and criss-cross lines where they are least expected, finishing up quite contented with themselves, even though their drawings in no way resemble the object. The better one draws at large scale the more quickly will he grasp the essentials of indication, for he will only have to move a few steps away from the picture in order to see that the impression changes with distance. Still farther away he will experience the blurring of details and the predominance of certain essential lines and masses. It is the representation of these lines and masses at small scale which forms the essence of indication.

A better appreciation of this point is to be gained by taking a walk on some beautiful hazy morning and observing some actual good bit of architecture under the peculiar morning light when a purplish tone prevails in the air and casts a delicate veil over all things. Under these conditions the secondary



Courtesy Wm. T. Comstock Co.

DRAWINGS BY DAVID VARON SHOWING APPLICATIONS OF INDICATION IN STUDYING BUILDINGS ON THE LEFT, A FREEHAND PERSPECTIVE STUDY OF A DESIGN IN PROGRESS; ON THE RIGHT, STUDIES OF THE PARIS OPÉRA

. [294] details of things seen at a distance will necessarily fade away, leaving the essential forms to count for themselves. Observing this, we begin to feel the underlying principles of architectural design. The most intricate compositions are reduced to simple A whole entablature richly adorned with forms. scrolls of profuse acanthus leaves may not show more than a broad shadow with perhaps here and there just the sensation of the spirals or some equally distant dots representing the rosettes which form the eyes of the scrolls. A spire richly decorated with crockets and tracery becomes a simple point against the sky. If our beginner were close to it and could see it in full daylight he might feel so enthusiastic about a single grimacing gargoyle that all the rest would dwindle to nothingness in his mind. A few hundred feet away he will see this object of his admiration become a mere dash in comparison to the mass of the spire itself. Still farther, and even the latter will in turn become merely a pleasant accent in the general skyline of the whole town. In order to become so, the outline of the structure must be a simple one. Hence we see the tops of buildings as pyramids, cones, ovoid domes crowned with little spires, and so on, each contributing its own definite spot of beauty to the distant skyline. It is thus that it becomes possible to sketch such accents very simply.

Having drawn and sketched hundreds of such details, not only in elevation but also—and mainly in perspective (the only means of expression accessible to the prospective client) it will be time for our student to turn to composing by himself, starting from simple programmes and going on to more complex. Here he must think in terms of planning where he will have to cope with new difficulties. He must study many good plans before he ventures to compose one.

We have all seen him, the enthusiastic and ambitious young man, full of the desire to store away useful information, going to the grandest books and tracing monumental plans as minutely as possible. This practice, permissible to a young beginner, is not to be encouraged in a more mature mind. To study a plan means first to understand it, to analyze it, to see how similar parts were grouped together, no matter what their respective names be. Proceeding analytically, we come to the point where a group of plan elements will all be called "service" for instance, and another "reception". These different parts must be easily accessible and connected through adequate circulation, well lighted through proper courts, and so on. Instead of the hundred names found in the data of the programme there will be only three or four items. Walls and partitions will be suppressed by imagination so that we shall have only surfaces to compare with one another, as in considering the question of proportion between the area of the court of honor and the area of the actual building.

Why trace a whole plan at $\frac{1}{8}$ " or $\frac{1}{4}$ " scale when a small sketch of its general proportions at 1/128" showing the areas of rooms and halls hatched, the circulations white—would do very well? If there are some points of particular interest it is so easy to *draw* them with care, even at a larger scale, if necessary, than the original drawing itself.

Why trace the same pier twenty times when the



INDICATION OF THE ORDERS AND A FEW EXPRESSIVE THOUGH SIMPLE SILHOUETTES

drawing of one will do: It is obvious that even one, well drawn free-hand, will do the future designer more good than a hundred traced. If he observes the essentials in drawing, any plan detail will serve him in indicating.

If we suppose that through this happy practice our friend has become familiar with various planunits such as arcades, colonnades, combinations of both, and so on, he will soon understand that to suggest these variations there is no need of carefully drawing them but merely of indicating them. Having done with the unnecessary details of drafting he will focus his attention on proportions and harmony; harmony by analogy and also by contrast. For instance he will note in the Palazzo Farnese that wherever there is occasion for crowds and ceremony the circulation broadens to respond to the need. The same applies to monumental stairways near the reception halls. A little training will enable the student to sketch the main proportions of such a palace from memory with a fair degree of accuracy. Soon

he will be able to do so for many other palaces and other buildings, whatever their purposes may be. It will take him but a very short while to sketch the E, U, L, H, X, and I plans, as well as their possible combinations, seeing to it that he becomes slave to no formula. The best way to avoid this fault is to study various successful competitions, taking into consideration their respective programmes. One thing his long practice at sketching will enable him to do is to see at a glance how well the dominant and subordinate parts are linked

together; how various successful competitors found different solutions without following formulas.

This all may sound like an article on planning, but it is really study of plan indication which will help us see these things. Studying through sketchingby indication-will help form habits of broad thinking. A whole programme, formulated in a few words, may mean a number of courts with buildings to plan around them or it may call for a compact plan with the various departments distributed on different floors. In making all these studies by indicated sketches the student will gradually reach the point where he can read the whole perspective on the very plan, and can see where the features are located and why. A most interesting study of this sort can be done on the competition for the Grand Prix de Rome by Jaussely in 1903. Observe each public building around his civic centre, and see how the features facing the public square are far more accentuated than those on the rear. Here, by the way, is one of the most intricate sorts of planning one may be called upon to do. It is part of cityplanning.

One can go to any Prix de Rome to see what elaborate compositions some programmes may call forth. Yet all the *logistes* are sure to start their work with thumb-nail sketches, being concerned with nothing more than the two or three main items of their programme—those that are bound to give their plan the desired individuality. Surely men of their calibre have spent many an hour reading, sketching, and meditating, which is another way for putting order in one's ideas. They surely have arrived at the point where a few symbols put in different order convey much. In fact they have learned to consider their plans as though they were seen from balloons when each big structure would appear as a mere dash or as a few dots, and order in the composition would be most apparent.

There is one danger that lurks in the path of the sketcher: it is that of becoming so fascinated by the trick of putting up a whole city with a few strokes of the pencil that he may lose the desire to develop his sketches. A busy employer may leave on the designer's board a little suggestion hurriedly made. This must be interpreted so that it corre-

sponds to the employer's desire as expressed by the sketch and so that it is also in thorough harmony with the style of architecture adopted. Therefore the process reverse to that of indicating must be practiced by our student if he is to derive for himself and for others all the benefit he may expect from his studies. This is why from the very beginning it was stated that the better one draws the more easily he will grasp the principles of indication. It is all very well to indicate a vase, a statue, or an ornament by

their essentials on a catchy sketch calculated to please the client, but one must be ready to do the reverse when the time comes. One cannot but smile when the untrained young man, passing from one scale to another, changes all his proportions entirely. Either the previous study was good and the main proportions ought to be maintained or else that study ought to be recommenced, for a small scale study is expected to establish the main proportions, not only in plan but also in a rapidly drawn elevation and section. Here it is relevant to say that in this respect indication can be justly called "architectural design short-hand." It would be altogether useless to dictate to a stenographer if the symbols were to be wrongly transcribed.

On the other side of the Atlantic one may overhear such conversations as this between students. "How about your *projet* Jacques?" "Well, I am beginning to render. How about you?" "Luckily I am still at 1/1000 scale. Expect next week to begin my 1/200." "You had better hurry up, Pierre, or you may get *en charrette.*" "Don't worry Jacques, my small sketches are so well indicated that I could get my final almost over night."



INDICATED SKETCH BY D. VARON

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PLATE XVII

VOLUME VIII

Number 5

The etching reproduced on the other side of this sheet will introduce to the readers of PENCIL POINTS the work of F. L. Griggs, an artist whose etchings are widely known in England. This plate was originally made in 1913, but in 1920 was changed and enriched to a considerable degree by small alterations and the substitution of the big ilex on the left, replacing a Gothic barn. Of the work of Mr. Griggs, Campbell Dodgson, Curator, Department of Prints and Drawings, British Mu-seum, says: "The most notable example in modern English etching of patient and persevering finish combined to a rare degree, with sustained inspiration, is the work of Mr. F. L. Griggs." One of the merits of Mr. Griggs' etchings is their perfect printing on old hand-made papers, grey, green, ivory or white-chosen with exquisite tact to enhance the merits of particular plates; and chosen also with a view to durability, the more perishable Japanese paper being rarely used. The size of the original of this plate is 47/8" by 7".

"PALACE FARM"

ETCHING BY FREDERICK LANDSEER GRIGGS

COLA Courtesy Arthur H. Harlow & Co.

PENCIL POINTS SERIES of COLOR PLATES

This drawing is a good example of the method of making color renderings on photostat enlargements of pencil perspectives. The perspective may be drawn at small scale and then photostated up to any size desired. The color is then applied either with colored pencils or with water colors, or both, as in this instance. This method eliminates the necessity for a large scale perspective layout and saves a great deal of drafting work. The original of this plate measured 22" x 14". The architects were Fellheimer and Wagner of New York, and the renderer J. Floyd Yewell.



RENDERING OF DESIGN FOR PASSENGER STATION AT YOUNGSTOWN, OHIO. FELLHEIMER AND WAGNER, ARCHITECTS By J. Floyd Yewell



WATER COLOR RENDERING, A CHURCH IN CONNECTICUT, BERTRAM GROSVENOR GOODHUE, ARCHITECT By James Perry Wilson

PENCIL POINTS SERIES of COLOR PLATES

This rendering was done on Whatman's rough pressed paper in pure transparent water color over an original layout in pencil. A reproduction in black and white was included in the book "Bertram Grosvenor Goodhue, Architect and Master of Many Arts" published after Mr. Goodhue's death by the press of The American Institute of Architects. The dimensions of the original were 29¼" x 21½".



WOOD BLOCK PRINT BY ROWLAND C. ELLIS OLD BARN AT RACCOON, INDIANA

PLATE XVIII

VOLUME VIII

Number 5

For this wood block print Mr. Ellis first made a pencil sketch of the subject and then cut the block from maple wood, end grain. The prints were made by Mr. Ellis on an etching press and printed on hand made Italian paper.

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DRAWING FOR ST. PAUL'S CATHEDRAL BY SIR CHRISTOPHER WREN STUDY FOR COMPLETE DESIGN MADE DURING EXECUTION

PLATE XIX

Volume VIII

Number 5

This plate is reproduced from Volume I of THE WREN SOCIETY, a book devoted to a selection of Sir Christopher Wren's drawings for St. Paul's Cathedral, now contained in the collection at All Souls College, Oxford. Included in this first volume are the prc-fire project, a complete set of the 'Warrant' Design, and various other drawings which serve to illustrate the gradual development of the Cathedral as finally carried out by Sir Christopher Wren in the course of thirty-five years' work. Other material relating to St. Paul's will be published by the Society in succeeding volumes. It is proposed to issue to the members of THE WREN SOCIETY an annual publication which will be either a portfolio of reproductions of Wren original drawings or a valume of hitherto unpublished records relating to his work. Such publications are supplied free to members of the Society and are not obtainable through ordinary trade channels. Subscription to the Society is one guinea. Any one interested is invited to write to H. Duncan Hendry, Hon. Secretary, The Wren-Society, 53, Doughty St., London W. C. 1.

THE DIMINISHING GLASS, II

A DEPARTMENT FOR THE STOIC AND THE EPICUREAN

"Sicut enim vinum sempere bibere, aut semper aquam"-Secundus Machabaeorum, 40

By Hubert G. Ripley

AT THE TIME OF THE World's Columbian Exposition the imaginative faculties of the artists gathered in Chicago were stimulated to an extraordinary degree. All day long the drafting rooms and studios seethed and pullulated with the creative urge. It was but natural that when a design for a great palace, a sculptured group, or a vast mural painting was matured, its creators felt the need to celebrate. The night was filled with song, and the

hop, entertainment halls and taverns appropriate for the celebration of the Dionysia.

One of the most interesting of these places, with doors on two streets and entrances* from the alley in addition, was Hanna and Hogg's. The place was in a way, not unlike the modern "antique" shop, save that sturdier and more substantial fare was to be had, and the "exhibits" were vastly more amusing and virile in character. In addition to beverages of



"BUILDING THE COLOSSUS OF RHODES", DRAWING BY HUBERT G. RIPLEY

The difficulties of this tremendous engineering feat were almost insupportable, yet Chares of Lindus overcame them all and completed the monument in only three Olympiads. When pursued by the relentless triremes of the Lacedemonians, the black galleys of Ialyssus flew for refuge to the inner port, from which safe coign of vantage the Rhodisians grinned defiance at their baffled pursuers. The scale of the monument is one foot equals 50,000 tons.

streets and alleys where the bright lights shone, flooded with roistering bands wrapped in Bacchic fury. At times groups from the various offices and studios would form "contacts" and it is believed that the first "contact men" date from this time, certainly the thorough kindergarten work of '93 did much to develop modern business methods, as applied to the Fine Arts. For the amusement of its burghers and visiting firemen, Chicago had provided as an act of gratitude for the giver of the grape and the a thousand varieties, including liquors and ratafias, Kaltschalen, bowls and punches, cordials, wines, ales, and beer, the house was noted for the artistry of its mixed drinks. Its sours and cocktails, cobblers and fizzes were famed from Detroit to Wolf Jaw. Even the blasé New Yorker might be found here, rubbing elbows with the soft-spoken Faro King in doeskin trousers and five gallon hat, from Leadville. It is

*These entrances were also used as exits.

true they stood somewhat apart from the traveling salesmen from Lansing, but all politely made space for a group from Karl Bitter's studio or Jenney and Mundie's office.

One of the specialities of the house was a drink. that we called for under the name of "knickerbein", (orthography uncertain,) that "Lord Roseberry" one of the Corymbifers, excelled in the making. He never would tell us the recipe for its concoction, saying that a cultured and highly developed sense of taste should enable us to analyze and name its component parts, just as Colonel Fullerton was able to

detect the presence of a leather headed carpet tack in a barrel of Bourbon.

The art treasures of Hanna and Hogg's, scattered through the half-dozen or so rooms that constituted the establishment, were many and varied. There was the famous double picture, (on a pivot), of the "Lighthouse by the Cliff", and the "Soldier Boy", depending on whether you regarded it horizontally or erect; "The Emir of Priapus presenting his credentials to the Sultan", "Diana and her Nymphs surprised by Acteon", "Susannah and the Elders", the "Old Barn Door", on which a dol-lar bill was pinned with a jack-knife, the shadows rendered with such life-like fidelity that at six paces, all seemed real, and many other objets d'art et d'artifice. The free lunch was recherché and substantial, a profusion of sand-

wiches, cold meats, hot sausages, cheeses, and relishes. For those who loved music and the lively arts, there was entertainment in plenty. In Fisher's garden on the North Side, built on a pier extending over the lake, one could listen to the strains of Der Fliegende Hallander, Tales from Vienna Woods, and Robert le Diable, the while consuming vast quantities of Pabst's "Milwaukee" and Tony Faust's "St. Louis". The most delicious and delicate brew made by Pabst came in pint bottles and had a blue ribbon around each little neck. Faust's beer was light colored, and, like champagne, especially palatable. Around eleven one ordered great plates of rye bread, swiss cheese, and Bismark herring, then more beer until the place closed.

Another resort on the North Side, favored by draftsmen and terra-cotta salesmen, was not unlike the modern "cabaret". In summer there were chairs and tables in the garden, but during winter the show was in a small hall. Regular meals were served, but the serious business of the place was beer-drinking and jollying the showgirls. It was similar to the Winter Garden in St. Louis. Josie Gregory used to sing "Teaching McFadden to Waltz" and "Patsy Branigan". Josie, who was inclined toward embonpoint and wore clothes that fitted as if she had been poured into them, had a positive personality and an emphatic delivery that kept the two songs going for over a year.

For the more seriousminded, there was the Chicago Opera House, with a company headed by Eddie Foy and Della Fox, that produced a new show every season, and very good shows they seemed to tired artists in need of relaxation.

While "to re-discover our contemporaries in an antique mirror may be a child's game", we cannot but feel that the same emotions were at work in the minds of the men who built the White City, as actuated the builders of Rhodes, twenty-three centuries earlier. It was all tremendously exciting, just as it must have been to Hippodamus assisted by the very able Committee on Public Improvements of the Dorian Institute of Architects.*

The island of Rhodes, the Poessa of "Cloud Cuckoo Land'', (also known by the several names of Ophiusa,

Stadia, Telchinis, Corymbia, Trinacria, Aethrea, Asteria, Atabyria, Oloessa, Marcia, and Pelagia,) lies in the Carpathian Sea about 20 miles south of Caria, where Cnidus looked down from her ivory tower in Doris. It is about 45 miles long and 20 miles in greatest width. There are mountains, some of them *One of the most recent archeological finds brought to light

Located in a quiet grove 'neath the shade of the old apple tree,

at the back of the Academy of Rhodes, the pool was a favorite meeting place of Pyramus and Thisbae. Hephastion was a beautiful youth, greatly beloved by Alexander, who, desolated at his untimely demise, commissioned Lysippos to erect this memorial.

"THE POOL OF HEPHASTION"

DRAWING BY HUBERT G. RIPLEY



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only last Fall by a band of intrepid enthusiasts sent over under the auspices of the Fullerton foundation, is a bronze under the auspices of the Fullerton foundation, is a bronze medal commemorating the founding of Pelagia, the nome by which the City was first known. Those who have been privileged to examine this gem speak of it as a work of great beauty. On the obverse,—alas, sadly worn,—is a Rhododen-dron Bush out of which the nymph Rhode peeps coyly; the reverse bears the swastika emblem of the three winged feet of Trinacria and barely decipherable, the words (in Attic characters, it need hardly be stated,)—POLIS-PEL-GIA, and the date, B. C. 408.

6000 feet in altitude, fertile valleys, sylvan streams, Pierean groves, marble quarries, olive trees, vinevards and well-watered corn lands. It was long an important, wealthy and independent state, and of all the Isles of Greece it possesses the most beautiful and most temperate climate. Rhodes was inhabited at a very early date, tradition asserts, by the Telchines, who migrated thither from Crete, but not until the immigration of the Dorians did its distinctive national character become fixed. This was before the Trojan war, for the Rhodians sent nine ships to Troy under the leadership of the Heracleid (Ch. vol. VIII, London 1878.) Tlepolemus. Lindus, Ialysus, and Camirus, were the three ancient cities, which sent out colonies to the mainland, and even to Italy and Spain, Lycia and Sicily.

In the 1st year of the 92nd Olympiad, the city of Rhodes was founded. Its site is admirable, and it rises in the form of an amphitheatre behind the two harbors. It is one of the earliest and most beautiful examples of city planning, the unity and harmony of its architecture being secured by the circumstance that the design of the whole was the work of one mind, Hippodamus of Miletus. He it was who first introduced order and regularity in the planning of cities, having made his reputation when Pericles commissioned him to re-plan Peiraeus and Thurii in Italy. Hippodamus was D. H. Burnham, R. M. Hunt, McKim, Mead and White, Peabody and Stearns, Julius Harder, Lou Mullgardt, Olmsted Brothers and Lockwood, Greene & Co., Inc., rolled up into one, as one might say. He laid out the city according to the laws of dynamic symmetry, girt it about with strong walls and fortified the two harbors.

The Rhodians resisted the siege of Demetrius Poliorcetes, (destroyer of cities,) for more than a year, and then out of the spoils of his siege train, contributed 300 talents for the erection of the Colossus. Not only was the city remarkable for the beauty of its architecture, but also for its paintings and sculptures, of which there were a vast number, from the colossal bronze statue of Helios, 105 feet in height, straddling the entrance to the port, and including one hundred other colossi, and some three thousand of normal size. They kept constantly add-ing to these for Pliny mentions 73,000 statues remaining in his time, by such artists as Lysippos, Bryaxis, Appolonios, Tauriskos, Aristonidas, Alkon and others, besides silver cups and shields chased by Akragus and Mys. Lysippos, for example, is said to have made 1500 pieces of statuary, all of such merit that any one alone would bring him fame, showing that the works of individual sculptors were too numerous to catalogue. Those bright yokels who poked fun at the numerous statuary that adorned the façades and balustrades of the White City would have been utterly confounded if set down in Rhodes.

Rhodes long enjoyed great prosperity and the arts were cultivated with assiduity. Intellectual activity manifested itself here long after it had declined in

The "Rhodes Travelling other parts of Greece. Scholarship" is possibly the oldest fellowship in architecture, even ante-dating the founding of the city. It is imagined that it was established by Ialysus, famous huntsman, reputed son of Apollo, who first colonized the island, sailing thither in the black triremes of Sarpedon's raiders. In the older cities, the mid-Minoan tendencies were very strong, and it was to counteract this habit of the earlier designers merely to repeat the hackneyed and threadbare forms of Gnossos, (forms in themselves appropriate to their native habitat, but hardly suitable to express the lusty young Dorian culture that was beginning to exercise such marked influence everywhere,) that the scholarship was founded by the executors of the Ialysus estate. In those days architects were not only engineers, but painters and sculptors as well, and Chares of Lindus, afterwards a disciple of Lysippos of Sicyon (the distinguished statuary previously alluded to whose works sold for their weight in gold in the time of Augustus.) was one of the later holders of the scholarship. His colossus of Helios was the result of his travels in Sicyonia. The sketch for this masterpiece was first shown at the annual banquet of the Dorian Society of Architects.

These meetings were held in the Academy, just below the temple of Dyonisos, usually late in Mapz and the evening of the third day was given over to feasting and harmony. After the pike and Copiac eels were cleared away and fresh kraters of Chian handed around by the rosy cheeked flute players, it was the custom for the Archon to call for the annual report of the traveling scholar. Lysippos of Sicyon, a commanding figure of a man, with closely cropped beard and hair slightly tinged with gray over the temples,-delegate from the Peloponnesus, arose, and in gracious Iambic verse, introduced his pupil Chares of Lindus. His brow bound with a chaplet of wild thyme and rhododendron flowers, his fine linen chiton and the graceful folds of his beige himation, revealing rather than hiding the swelling muscles of his splendid torso, proclaimed Chares every doron* a man. With a dramatic gesture, he swept aside the apple-green diploidion that covered the wax model (made from the comb of the honey bees of Hymettus) of his statue of Helios. A sudden hush fell over the assembly of distinguished artists. For several moments naught could be heard save in the distance, the cries of the huxters of the Agora. bawling out their wares, and the croaking of some of Aristophanes frogs that still remained in the pool of Hephastion. Then the entire gathering arose as one man and with cries of Evoi! and stormy, if somewhat incoherent, rounds of cheers, for they were for the most part perched uncertainly on their couches, proclaimed Chares master.

The gleaming wax of the model, (done at a scale of one dactylus equals one cubit,—about $\frac{1}{2}$ " to the foot—) seemed like living sinew in the flickering

^{*}The Greek doron equals 3.02183/4 inches.

light of the sputtering flares—the model was over four feet (nearly six spithame) high—for Chares had very cleverly inserted a sparkling ruby in each eye socket, and in the upraised right arm holding a tiny bronze torch, a little Greek fire smouldered.

It took twelve years to raise the statue, the engineering difficulties proving most vexing, but it stood astraddle the entrance to the port for eighty-eight years, until overthrown by an earthquake.* Even in ruin, the grandeur of its parts impressed Pliny enormously. It took a large man to clasp about its thumb, and the great cavernous interior was weighted with huge masses of masonry and intricate bracing.

*The Rhodians to this day do not admit the earthquake, alluding to the disaster as the "Great Fire" a misfortune which of course might overtake any city, especially in the turbulent times subsequent to Alexander's untimely demise.



DRAWING BY A. B. LE BOUTILLIER

Wine Krater found by the expedition sent out by the Fullerton Foundation for archaeological research in Cyrene. It is in almost perfect condition, and when filled with Cypress wine and circulated among the guests at Symposia, the lively agitation of the pearly drops of precious liquor it contained gave a sense of motion to the figures seen through this rosy medium. After a few rounds, one felt rosy all over.

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PERSPECTIVE OF PRIZE WINNING DESIGN BY EARL C. MORRIS

LE BRUN SCHOLARSHIP COMPETITION, 1927

REPORT OF THE JURY OF AWARD

 T_{HE} JURY OF AWARD begs to report that it has carefully studied the programme for the above competition and that it examined carefully into the merits of the various drawings submitted, upon the afternoon of Friday, March 18th, and the morning of Saturday, March 19th. The result of the deliberations and of several series of ballots was as follows:

- 1st
- 2nd
- Place and the Traveling Scholarship to Com-petitor No. 18, Earl C. Morris, 1633 York St., Denver, Colo., nominated by M. H. Hoyt. Place and 1st Mention to Competitor No. 12, W. Ray Winegar, 301 Capitol Theatre, Detroit, Michigan, nominated by E. V. Gamber. Place and 2nd Mention to Competitor No. 13, Emil W. Klee, 78 West 82nd Street, New York, nominated by John Mead Howells. Place and Amention to Competitor No. 25. 3rd
- Place and 3rd Mention to Competitor No. 25, Martin Beck, 104 Goodrich Street, Astoria, L. I., nominated by H. W. Corbett. 4th
- Place and 4th Mention to Competitor No. 1, Henry A. Cook, 101 Park Avenue, New York, nominated by C. A. Platt. 5th

The following were commended for the work presented by them: Maurice Gauthier, Brooklyn, N. Y.; Albert W. Butt, Jr., New York, N. Y.

There were 29 sets of drawings presented from the following geographical distribution: New York City 12, California 3, Philadelphia 3, Boston, Detroit, and Illinois each 2, Texas, West Virginia, New Hampshire, Kentucky, and Colorado, each 1.

The programme describing a Community Mausoleum seemed to inspire most of the Competitors with a desire to extend their imaginations beyond the limits called for by the problem. It has always seemed to be the intent of the donor of this scholarship that simple practical problems should be provided for the selections of a beneficiary and the Jury with this in mind distinctly rejected solutions that were apparently elaborated for competitive purposes.

The winning solution presented by Mr. Morris, in contrast with most of the others, is a simple and serious presentation of the problem. It indicates its purpose and would be most impressive if built. Certain minor requirements of the programme were overlooked but upon careful examination these were considered of minor consequence. The featured Monumental Entrance Hall provides easy and direct access to all parts of the building and allows of a unified, simple, and compact plan.

The solution of Mr. Winegar, awarded first mention, was also simple and dignified but furthermore it stressed a religious or ecclesiastical feeling that found favor with the Jury. Some question, however, arose as to the appearance of the building from other points of view than that shown in perspective.

The drawings of Mr. Klee, awarded second mention, were extraordinarily well presented and were full of imaginative quality. Though one of the most interesting solutions, the author ignored one very important feature of a mausoleum in locating a number of burial crypts below the entrance floor level, and therefore apparently, if not actually, below ground level.

Third mention was awarded to Mr. Beck on a very attractive solution both in mass and plan. Owing to the narrowness of the entrance court, the building would not have had the impressive appearance shown but from the particular point of view selected for the perspective.

The solution of Mr. Cook, awarded fourth mention, would probably make a most impressive building with certain modifications. The roundabout circulation through an apparently open colonnade as an approach to the Chapel was criticized by the Jury.

The solution presented by Mr. Gauthier was especially commended for his unusual facility in rendering and the imaginative quality of the architecture. The Jury, however, felt a lack of balance in presenting an obviously simple scheme with so much elaboration of fanciful architecture.

Mr. Butt was also especially commended and his solution indicates exceptional ability. An extremely high tower as a mausoleum was considered very inappropriate. In the mind of its author, the spectacular merits far outweighed any practical requirements as is evidenced by his striking presentation.

Very respectfully submitted, RICHARD H. DANA Egerton Swartwout Jury of Award { JULIAN CLARENCE LEVI **OTTO R. EGGERS,** Chairman

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ELEVATION AND SECTION OF PRIZE WINNING DESIGN BY EARL C. MORRIS

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LE BRUN SCHOLARSHIP COMPETITION FOR 1927

PLAN OF PRIZE WINNING DESIGN BY EARL C. MORRIS

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PLAN OF DESIGN BY W. RAY WINEGAR AWARDED SECOND PLACE AND FIRST MENTION

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LE BRUN SCHOLARSHIP COMPETITION FOR 1927

PERSPECTIVE



ELEVATION AND SECTION

DESIGN BY W. RAY WINEGAR AWARDED SECOND PLACE AND FIRST MENTION



PERSPECTIVE



SECTION

DESIGN BY EMIL W, KLEE AWARDED THIRD PLACE AND SECOND MENTION

LE BRUN SCHOLARSHIP COMPETITION FOR 1927



PLAN OF DESIGN BY EMIL W. KLEE AWARDED THIRD PLACE AND SECOND MENTION



ELEVATION



DESIGN BY MARTIN BECK AWARDED FOURTH PLACE AND THIRD MENTION

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PLAN OF DESIGN BY MARTIN BECK AWARDED FOURTH PLACE AND THIRD MENTION

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DESIGN AND LITHOGRAPHIC RENDERING BY BURT SULLIVAN, ATELIER HIRONS-MORGAN PRESENTED AS SOLUTION FOR A RECENT ANALYTIQUE GIVEN BY THE BEAUX-ARTS INSTITUTE OF DESIGN Size of original, 23½" x 32"

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T I F

H. R. H., THE PRINCE OF WALES,

H. K. H., 1 HE PRINCE OF WALES, Speaking on the occasion of the presentation of the Gold Medal of the R.I.B.A. to Ragnar Ostberg, shows his appre-ciation of the architect's problems: "If one were asked, 'What is the first essential for an architect's work?' one would probably offhand say, 'Bricks and mortar and a piece of ground to put them on.' But the answer is 'clients'. The architect differs from all other creative artists in one important thing; he cannot create until the community gives him a chance. A painter can until the community gives him a chance. A painter can paint a picture in the hope of selling it when finished; a musician, if worst comes to worst, can start playing on the chance of collecting an audience.

"But an architect cannot go out and build a townhall or hospital or even a cottage without a definite commission to do so; he can't even start building a pigsty till somebody says he wants to put a pig in it. For the work of an architect is not the production of drawings, but the erection of buildings, and if the country wants beautiful houses it must take the trouble to employ its best architects to design them."

WILLIAM E. SCHIRMER, Architect, of Oakland, Cal., and writer for the Tribune of that city, says a few words about California: "When James Bryce said of California, 'the finest Anglo-Saxon civilization yet developed,' he meant that Californians not only know how to live well but with their present intelligence and inclinations will continue to adjust changing condi-

"There is no more pleasing evidence of this to visitors from other communities than the rich variety of architec-tural style in California homes and the ever-present underlying attention to the fact that folks, California folks, are going to make real domestic use of those buildings; and furthermore intend them to show hospitality to guests."

"T-SQUARE", Architectural commentator on the staff of "The New Yorker", adds his voice to the current discussion of color in architecture: "We have our own doubts. If it comes at all, it will be

Artists and draftsmen are great fellows for slowly. slinging on the color when it is a mere matter of paper, paint and imagination. When it comes to spending the paint and imagination. When it comes to spending the hard-earned dollars of a hard-boiled client, well, that is something else again."

EDITORIAL

In the Hudson (N.Y.) Star introduces another thought into

the color symposium: "Anglo-Saxons, especially those in the more northern climes, are traditionally shy of color. If American men are anything near as self-conscious about brightly colored buildings as they are about clothes in prismatic shades, pink office buildings for tired business men are still a long way off. And yet the subject is a diverting one.

off. And yet the subject is a diverting one. "What could be more convenient than brown paint for Brown's house and a white house for Mr. White? Why not houses in colors in harmony with the temperaments and dispositions of the occupants, if only for the convenience and safety of book salesmen, insurance agents and wooers? In fact pastel shades for buildings suggest any number of practical uses."

F. W. FITZPATRICK, Architect, of Chicago, in a letter to The New York Times makes a shrewd observation anent the skyscraper question:

"Funny how the tall building can live through the attacks of the architects and out-of-town real estate men, but funnier still to note the alacrity with which any of those objecting architects will gobble a commission to build a seventy-storied giant, if they can possibly grab it."

ARTHUR BRISBANE,

World's highest salaried editor, furnishes a tip for employers of building labor by relating a story of olden times in one of his newspaper columns: "Where money is men will dig. It was proved in Italy,

before architects had learned how to make great domes like that on St. Peter's hold themselves up as they rose in the air. One dome was built and filled with earth to support it as it rose until the sides met at the top. Putting in the earth would be much less expensive than taking it out. So they mixed with the earth beneath the dome small coins of a When the dome was finished the population was told it could carry away the coin bearing dirt. The great dome stood empty."

HENRY HORNBOSTEL,

Architect, of Pittsburgh, speaking at the annual convention of the Michigan Society of Architects held in Detroit: "Community pride is the keynote of beauty and art, but

it takes time to educate people into it. A great deal of work must be done to develop this desire for a beautiful city in the minds of the workers as well as the well-to-do."

JOSEPH H. FREEDLANDER,

New York Architect, lays a plea for better buildings before the readers of "Building Investment and Maintenance": "Past experience has shown that buildings which may be

described as architectural freaks are costly to erect, and costly to maintain. Eventually, too, they are shunned by the more conservative tenants, who do not feel that their firm names should be associated with something odd, cheap

or ridiculous. The loss to owners is apparent. "Restraint, taste and charm in building, as in all other styles of material adapted to human needs, is the safest over a period of years. Extremes do not last. The owner who builds for permanent investment may well bear The this in mind.'

NORMAND MOHR,

Architect, of San Francisco presents his case as an "New York tries to take the credit for the 'setback' style

of architecture, but it rightfully belongs to San Francisco. Cass Gilbert and other well-known Eastern architects point to some of their plans and models that go back as far as ten years.

"I have plans that were made at least sixteen years ago,"

"I am willing to post a substantial forfeit, to be given to charity, for any architect who can successfully challenge my claim of being the first to apply the 'setback' idea to modern city buildings.

THEODORE J. MORGAN, Of Washington, D. C., discusses art before a group of architects assembled in Houston, Texas, and is reported as follows in the local "Post": "Artists are the greatest creators of art in the world. With a dollar's worth of raw material they produce thousands of dollars in value. France and Italy could pay their national debt with the products of perhaps four or their national debt with the products of perhaps four or five of their artists."

There is no excuse for ugliness, according to Mr. Morgan, who says that there is scarcely anything which can not be made more artistic or valuable through art.

"The desire of beauty is as much a part of us as a desire for a Deity. Art is for the masses. They require it, and it should not be exclusive. Instead of holding objects of art, especially paintings, in awe, people should instead be familiar with it."

Mr. Morgan thinks art should be marketed in such a manner that any one who desires it could own some of it.



EARL C. MORRIS

EARL C. MORRIS, the winner of the Le Brun Traveling Scholarship for 1927, was born in Denver, Colorado. He attended the engineering school of the University of Col-orado for one year, and then came east to Columbia Univer-Achilder of the Le Drug Schelerchie Marchine and the state of the legred of the second state of the legred state of

As holder of the Le Brun Scholarship Mr. Morris will be paid fourteen hundred dollars, to be used for a European trip of at least six months' duration. A report of the Jury and reproductions of the premiated designs will be found on pages 307-315.

GRAND RAPIDS CHAPTER A.I.A. A JOINT MEETING of the Grand Rapids Chapter of the American Institute of Architects and the Architectural Club of Grand Rapids was held on Thursday evening, March 31st. After a dinner at the Hotel Morton, the meeting adjourned to the new West Side Branch Library, where Librarian Samuel H. Ranck conducted the architects on a tour of the building. After a brief address by Mr. Ranck, the balance of the evening was spent in examining the exhibit of drawings and photographs of skyscraper architecture on view in the exhibit room of the library. This collection was made by Alfred C. Bossom, of New York, and the exhibit was secured for the library through the efforts of the local chapter of the institute.

The meeting was attended by thirty of the leading archi-tects, designers and draftsmen of the city, and both the exhibit and the library building itself proved of great inter-est to those attending. Robinson and Campau were the architects for the structure, and it embodies many ideas new in library design.

CINCINNATI ART ACADEMY SUMMER TERM AN EIGHT WEEKS' course beginning June 13th will be con-ducted by the Cincinnati Museum Association. The classes are organized to meet the needs of several kinds of stu-dents: those who seek near home an opportunity for out-door work, and those who wish to do special work in the studio. The out-door work will be in oil, water color or pastel. In the Academy itself drawing and painting classes will study the model, cast, or still-life according to the proficiency of the student.

proficiency of the student. For further information address J. H. Gest, *Director*, Art Academy of Cincinnati, Eden Park, Cincinnati, Ohio.

THE CINCINNATI ARCHITECTURAL SOCIETY

WITH THE END OF the winter season in sight, the Cincinnati Architectural Society finds itself in a better position, both morally and financially, than ever before in its history. The members are more numerous (and by that I mean paid up members) and the younger element is taking a keener interest than ever in the educational work. Many of them have taken the Beaux-Arts work as well as the regular problems, presented by the educational committee. The last problem to be completed was of unusual interest, inasmuch as it was in competition for the Anderson prize. masmuch as it was in competition for the Anderson prize. This is a cash prize of \$30.00, provided by the late Geo. M. Anderson, of the firm of Elzner and Anderson, and awarded annually for the best solution of a problem to be given by the educational committee. Seven men took the problem; two of the drawings were of such exceptional merit that the judges decided to split the prize fifty-fifty. The winners were C. E. McWethey, of Harry Hake's office, and W. Peeke, of Tietig and Lee. Now that spring is at hand the sketch class is showing

Now that spring is at hand the sketch class is showing signs of life and expects to be in the field very shortly. And speaking of spring, the first social event of the season (there were several very good ones) will take place on the twenty-first of May when the Society holds its annual picnic.

SAMUEL N. HANNAFORD, Publicity Chairman.

NEW YORK ARCHITECTURAL BASEBALL CLUB THE NEW YORK ARCHITECTURAL BASEBALL CLUB has organized for the season of 1927, and is desirous of booking games with any teams paying a suitable guarantee anywhere within a radius of one hundred miles from New York. Please address correspondence to M. L. J. Scheffer, *Manager*, 118 East 42nd Street, New York.

COLLABORATION COMPETITION

THE ASSOCIATION OF ALUMNI of the American Academy in Rome proposes, as a furthering of the Academy's aims, to issue problems in design which call for a relationship of Architecture, Painting and Sculpture.

In the present competition a prize of \$225.00 will be awarded to the team of Architect, Painter and Sculptor whose work is placed first, and honorable mention will be given at the discretion of the jury.

The competition of the jury. The competition is open to any group of students in Schools of Art, Ateliers or to anyone employed in offices or studios. The problem may be done under the supervision of a patron, but the designs must be the work of the competitors.

The competition closes midnight June 5th and drawings must be delivered or shipped to the American Academy in Rome, 101 Park Avenue, New York, by 10 o'clock A. M., June 6th.

A jury of three, an architect, painter and sculptor, will be selected from the following list: Architects: Charles A. Platt; William Mitchell Kendall; John Russell Pope; Thomas H. Ellett. Painters: Barry Faulkner; Ezra Winter; Eugene Savage. Sculptors: James E. Fraser;

A copy of the program and further information in regard to the competition may be had on application to the Associa-tion of the Alumni of the American Academy in Rome, 101 Park Avenue, New York.

ARCHITECTS AND ENGINEERS CLUB OF SACRAMENTO

THE CLUB HAS been very active in assisting in formulating the new building code for the City of Sacramento, which has just become an ordinance. There are standing active committees on Building Code, Program and Education, Entertainment and Membership. It is the policy of the Club to improve building standards,

assist in personal development of the members and promote

a feeling of fellowship among the Architects and Engineers. Luncheons are held at the Sacramento Hotel on the first and third Mondays of each month at which time the Pro-gram and Educational Committee endeavor to have instruc-tive talks or motion pictures pertaining to building construction construction.

The officers are: Arthur H. Memmler, *President*; Jens C. Petersen, *Vice-Pres.*; Earl L. Holman, *Secretary*, Harry W. DeHaven, *Treasurer*.

BEAUX-ARTS INSTITUTE OF DESIGN ANNOUNCES SCHOLARSHIP

Bruce Price Post Memorial Scholarship A SCHOLARSHIP OF THE value of \$500.00 to the Fontainebleau School of Fine Arts, France, is offered as a memorial to the late Bruce Price Post, Associate Member of the Beaux-Arts Institute of Design, who died February 25th, 1927.

Schedule of Competition: *Exercise en loge*, May 14th, 1927; *Rendu*, May 25th, 1927, at 10 A. M.; *Judgment*, May 31st, 1927, at 5 P. M.; *Exhibition*, June 1st to June 4th, 1927. The prize will be awarded to the best design on a special

ten day program which will be governed by the regulations for Class "A" in the circular of information, Department of Architecture. The following items are to be noted: of Architecture. The following items are to be noted: The jury will be especially invited by the Committee on Education; no problem to be held for local judgment; both Class "A" and Class "B" projet classifications of students registered on May 1st, 1927, may compete; the scholarship will not be awarded to any student who has previously won any other scholarship for foreign travel or study, or to any member of a school faculty; and the regulations of the French Government require students of the Fontainebleau School to be United States citizens of the white race; Class "A" awards will be given.

The winner of this scholarship must agree, within three days of the announcement of the award, to attend the three months' course, June 25th to September 25th, for architects at the Fontainebleau School of Fine Arts for American students, to make a written report to the Secretary of the Board of Trustees of the Beaux-Arts Institute of Design, and to loan all his drawings and sketches made during the three months, for an exhibition, if requested.

This scholarship does not cover passport expenses or fare to New York from competitor's home, or incidental expenses thereto. See Fontainebleau School of Fine Arts circular for details.

A first and second alternate will be selected by the jury to take the place of the winner in case he should be unable to go abroad at the time designated, June 18th.

Circulars of the Fontainebleau School of Fine Arts may be secured from the Fontainebleau School of Fine Arts, National Arts Club Studios, 119 East 19th Street, New York, N. Y.

AMERICAN INSTITUTE OF ARCHITECTS, COMMITTEE ON ALLIED ARTS

THE COMMITTEE ON ALLIED ARTS of the American Institute of Architects has been reorganized as the first step in a movement to bring about nationwide union of effort in the arts of design. Milton B. Medary, Jr., president of the Institute, explains that the purpose of the Committee is to guide the thought and activity of the Institute more specifically toward the interests of architecture as an art. "We wish to make it plain," he says, "that we are more interested in contributing to the great architecture of the world than in standardizing the bricks and mortar of which it must be built."

C. Grant LaFarge of New York is chairman of the new committee, which for the first time now includes as members representatives of other arts. Representing the Insti-

tute are the following architects: Paul P. Cret, Philadelphia; J. Monroe Hewlett, New York; George W. Kelham, San Francisco; Everett V. Meeks, Dean of the Yale School of Fine Arts; Sidney Lovell, Chicago.

Lovell, Chicago. Sculpture is represented by C. Paul Jennewein of New York, mural painting by Eugene F. Savage of New York, a fellow of the American Academy in Rome; landscape architecture by Ferruccio Vitale of New York, a trustee of the American Academy in Rome, and the craftsmen by Harry Wearne, president of the Arts-in-Trade Club of Harry Wea New York.

Working with this central committee from headquarters in New York will be committees from the Society of Mural Painters, the National Sculpture Society, the American Society of Landscape Artists, and the Arts-in-Trade Club, in addition to committees representing the Institute's fifty-seven chanters in all parts of the country. Committees have chapters in all parts of the country. Committees have already been organized by the New York, Boston, Cleve-land, Kentucky, and Indiana Chapters. The whole question will come before the sixtieth con-vention of the Institute, which will be held in Washington on May 11, 12 and 13

on May 11, 12 and 13.



RICHARD F. KING

RICHARD F. KING, the winner of PENCIL POINTS First Annual Architectural Competition, was born in Los Angeles California, in 1905. His architectural education commenced when he entered the office of Myron Hunt in February, 1922, where he remained until September 1923. In the fall of that year he entered the University of Southern California as a student in the architectural department. He completed his senior design work in June 1926, having finished four years work in three years.

During his course Mr. King was employed part-time in the offices of Myron Hunt, Architect, and A. E. Hanson-and Paul G. Thiene, Landscape Architects. Upon com-pletion of his college career he worked in the office of Weston and Weston, Architects, of Hollywood. At the present time he is in the office of Morgan Walls and Clements, Architects and Engineers, Los Angeles.

Mr. King will use the prize money to further his education by European study and travel.

THE NEW YORK ARCHITECTURAL CLUB Paris Prize Exhibition

THERE WILL BE exhibition of all the winning designs for the Paris Prize of the Society of Beaux-Arts Architects from the time of its inception to the present year.

This will be the first time that these drawings, comprising about twenty years' work, have been exhibited as a complete unit—and very likely, the *last* time, as the Beaux-Arts Society is considering distribution of the drawings to various schools and colleges. The exhibition will be conducted, in conjunction with the Beaux-Arts Society, by the New York Architectural Club, in its rooms at 118 East 42nd Street.

Owing to the large number of exhibits, it will be necessary to present the collection in two sections. The first section, to be shown from May 16, 1927 to June 1, 1927, will include the winning designs from the first competi-tion in 1904 up to the beginning of the World War. The second section, showing from June 6, 1927 to June 25, 1927, will include all the winning designs made since the ending

of the war. The exhibition is open to the public. All architectural men are cordially invited to take advantage of this important showing. Furthermore, it is hoped that the various architectural schools and colleges will advise their men to attend the exhibition.

DETROIT ARCHITECTURAL BOWLING LEAGUE ANOTHER SEASON HAS come to a very successful close and after our banquet on April 12th, we will forget bowling for a while and cheer the Tigers on to a pennant in 1927.

One sweetly solemn thought which will cheer us on blue Monday mornings for some time to come, is the result of our recent match with the New York boys. We were finally successful in arranging by telegraph a match with them and on April 1st took our customary two out of three games from them. It was a very interesting match even if we did not have the competition we expected, and we are in favor of making it as any use affair favor of making it an annual affair.

fiere are the scores:					
	New York				
M. Johnke	167	210	168	514	
C. Grosselflinger	163	205	194	562	
C. Ackerman	212	165	204	581	
H. Sasch	203	154	159	516	
J. King	190	133	147	470	
	·	<u> </u>			
	935	867	872	2674	
5	Detroit				
N. Krecke	190	162	177	529	
I. McGrath	179	179	178	536	
F. McCormick	154	167	238	559	
E. Kalsched	166	187	232	585	
E. Jolson	203	219	173	595	
-					
	892	919	998	2804	

The final standings of the league as a result of bowling on April 8th were as follows: 337

 McGrath, Dohmen & Page Louis Kamper Smith, Hinchman & Grylls Malcomson & Higginbotham Frank H. Nygren Donaldson & Meier Albert Kahn Weston & Ellington Janke, Venman & Krecke Van Leyen, Schilling & Keough High Ind. —1 game —Roof " 3 games—Jolson High Team—1 game —McG. D. & P. " 3 games—McG. D. & P. Leading 200 Scorer—Kalsched—21 High Scores on April 8th. 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Grece 207 Lindeman 215 Miehls Jolson 219-225 Krecke 243 French	235 228
Gaskin 213 Olson 201 Wall	211
Stegkamper231Toonder202LeasonManning227W. G. Miller213Arlund	
· • · · · · · · · · · · · · · · · · · ·	

COURSES IN HOSPITAL ADMINISTRATION COURSES IN HOSPITAL ADMINISTRATION THE COLLEGE OF HOSPITAL ADMINISTRATION of Marquette University is offering two interesting courses in Hospital Organization and Management during the summer of 1927. One is a two weeks' course, given from June 6th to June 17th, and the other is a six weeks' course, given from June 27th to August 6th. The courses are open to anyone inter-ested in Hospital work. For detailed programs address the College of Hospital Administration, Marquette University, Milwaukee Wis Milwaukee, Wis.

LINCOLN ARC WELDING PRIZES FOR 1927 THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS has accepted the custody of \$17,500, offered by The Lincoln Electric Company, of Cleveland, Ohio, to be awarded by the Society in a world-wide competition for the best three the Society in a world-wide competition for the best three papers disclosing advancement in the art of arc welding, presented under the rules of the competition. Three prizes will be awarded—\$10,000, \$5,000 and \$2,500—provided the papers are of sufficient importance and value to justify, in the opinion of judges appointed by the Society, the award-ing of such prizes. Induiries for further information should be addressed to The American Society of Mechanical Engi-neers, 29 West 39th St., New York.

UNIVERSITY OF MICHIGAN SUMMER COURSES THE COLLEGE OF ARCHITECTURE of the University of Michigan will again conduct classes in architectural design and outdoor drawing and painting during the coming summer. The classes will run from June 27 to August 19th. Further information may be had upon application to Professor Emil Lorch, University of Michigan, Ann Arbor, Michigan.

NEW YORK UNIVERSITY SUMMER SCHOOLS THE DEPARTMENT OF FINE ARTS of New York University will hold a summer session in London beginning July 9, 1927, and continuing for six weeks until August 19. This session will be devoted to the study of English art in many

of its phases. The fees are \$15.00 per course, plus \$5.00 for enrollment, making a minimum total of \$65.00. Each student is required to enroll for at least four courses. If desired, lodging, subsistence, steamship, and railway transportation (includ-ing six week-end trips) will be provided by the University for the total inclusive price of \$500.00. Professor E. R. Bossange will be in Paris this summer in

charge of the summer school Art courses.

Charge of the summer school Art courses. Of particular interest to draftsmen and architects will be the course in Design to be given by Professor Georges Gromort. This course will be limited to twelve members and is planned to give American students the benefit of the most important part of the instruction given by the Ecole des Beaux Arts which, under ordinary circumstances, could only be secured by entering the school and spending several years in Paris. The discussion of the problem, the methods of attack, how the solution or partie is determined, is acknowledged to be by far the most valuable part of the training offered by the *Ecole*. Professor Gromort will arrange his criticisms and lectures, which will be given in English, with that in view, and three problems will be discussed during the six weeks of the Summer School. Only students with at least one year of office work or technical school work will be admitted. Professor Bossange will have charge of two courses : one on the Architecture of Paris, and the other on French Interiors. Both of these courses include sketching and field work, as well as lectures, in English, at the Loure.

work, as well as lectures, in English, at the Louvre. The term will be from July 5th to August 21st. The tuition fee for each course is \$15.00; no enrollment will be accepted for less than four courses. The minimum cost per student will be \$425.00, this to include all traveling expenses and minterpressing Datis and the trailed for for the meridian and maintenance in Paris and the tuition fee for the required minimum number of courses.

For further information as to other courses and applica-tion for enrollment address *The Secretary*, Department of Fine Arts, New York University, Washington Square East, New York.

ALUMNI ASSOCIATION OF THE ECOLE

THE WORK OF ORGANIZING LaGrande Masse, the alumni association of the Ecole des Beaux Arts, which is to include all former students who attended the school for a year or more, is going forward, and many Americans are joining. Professor David Varon, who is helping this movement along, received from Whitney Warren the following letter which will be of interest to many of our readers:

Dear Mr. Varon:

I thank you for drawing my attention to LaGrande Masse of the Ecole. Find enclosed my check for five hundred francs which kindly forward to Paris and I sincerely hope that all the Anciens in this country will likewise join and thus help to perpetuate the traditions and solidarity of the great school to which they have had the good luck and honor of belonging.

Yours faithfully, (Signed) WHITNEY WARREN.

COMPETITION FOR RESIDENCE AND GARAGE WASHINGTON STATE CHAPTER OF the A. I. A. is sponsoring a competition for the uses of West Coast woods in home construction. The program calls for an all-year-round residence and garage to be built principally of wood. Prizes will be awarded as follows: 1st Prize, \$2,000; 2nd Prize, \$500:10 Morting and \$100 \$500; 10 Mentions, each, \$100.

Copies of the program and information concerning the woods included in the competition may be obtained from J. Lister Holmes, *Professional Adviser*, 1014 Alaska Bldg., Seattle, Wash.

COMPETITION FOR SHAKESPEARE THEATRE A COMPETITION FOR the Shakespeare National Memorial Theater, Stratford-Upon-Avon, has been announced. The Governors of the competition invite architects of the British Isles and America to submit designs. A copy of the program may be obtained by applying to Shakespeare Memorial Fund, Suite 500, 150 Nassau St., New York, N. Y. The competition closes June 15th.



WE WANT TO PUBLISH about three more books in the PENCIL POINTS' LIBRARY this year and suggestions from the wide awake readers of this department are solicited in the choice of material. Of course Mr. Guptill's book on *Pen Rendering* is in the works and will come out early in the fall; our book on Drafting Room Practice is well on its way, and, as its name implies, will cover those subjects most frequently requiring solution in the drafting-room. What should be next? What do you most need? What standard works could at this time be re-printed to advantage? Who would like to see Guadet translated into English? What else needs to be done?

Do not overlook the announcement appearing on page 261 of this issue of the fund being created under the auspices of the Architectural League of New York to keep green the memory of Birch Burdette Long. Every draftsman and every architect should have a part, no matter how small, in seeing this fund go over the top.

JACQUES CARLU, director of the Fontainebleau Art School and winner of the Grand Prix de Rome, will join the Painters', Decorators' and Paperhangers' Union. He is doing murals for a new hotel and a construction tie-up threatened because he was non-union.

YOUNG REIFF EATS CHECK Near Tragedy in East St. Louis, Ill.

THE FOLLOWING LETTER from Mrs. H. C. B. Reiff tells its own story. Moral: Cash your checks before the baby gets them.

PENCIL POINTS. New York, N. Y. Dear Sirs:

I am returning the check which you sent to my husband in payment for one of the prizes in your February magazine. Would you please send him a duplicate of it because the baby got it out of his pocketbook and mutilated it so badly that it can't be cashed. Am sorry to trouble you but accidents do happen in the best of arranged families. Thanking you, I am

Sincerely,

(Signed) Mrs. H. C. B. REIFF.

The prizes this	month go as follows:	
	1. E. M. SCHIWETZ	
	2. ROBERT C. FOULK	
	3. Adam M. Petrie	
Class	4. Elmer L. Sevringh	AUS



"Scene in Austin Texas"—Sketch by E. M. Schiwetz (PRIZE-Class One-April Competition)

PENCIL POINTS



A PLEA BY ROBERT C. FOULK (PRIZE-Class Two-April Competition)

PENCIL SKETCH BY RUTH GERTH Design for a Lighting Fixture.

HERE AND THERE AND THIS AND THAT



A STUDY OF VENETIAN CHIMNEY TOPS SKETCHED BY ZAY SMITH

Mr. Smith studied under Professor Valenti in Italy last summer. He is an instructor in the Department of Architecture, Agricultural and Mechanical College of Texas.

HEAT WITHOUT A FURNACE

By Elmer L. Sevringhaus

(PRIZE—Class Four—April Competition)

IN THIS DAY OF RISING costs of building and of maintaining a comfortable home, great encouragement has come from the study of the advertisements. One of the most surprising facts has been the assurance that a modern home may be built which can be well heated without the use of any furnace. The consequent freedom from the use of coal or even oil promises such economy that other luxuries may be added to the homes of those who are in the most modest circumstances. It is particularly fortunate that this possibility came to light before contracts were let for modern oil burner installation in a house soon to be built. Since the means of securng this delightful result are not self-evident to a number of the author's friends, perhaps it is not amiss to call the attention of other readers to the values they may be overlooking in the advertising pages.

to the values they and pages. The first requisite in building for such economical heating is to construct the walls of hollow tile blocks. The makers assure us of a "25% saving in heating cost". But there are other means equally effective. No less than four different manufacturers of insulation material for the walls agree that their products will save 25% to 33% of the fuel bill. Even the minimum figure is very gratifying. Of course, we are all aware of the loss of heat through the roof, but we can conserve fuel here also. Assurance is forthcoming that the use of a certain dipped shingle will "reduce fuel bills from 15% to 25%". But best of all, is the statement that a well-known valve to be used on steam radiators will "save one-third of the coal or oil you formerly used". This contrivance is the most remarkable mechanical installation in modern building because it not only returns its own first cost, but is better than a government bond in bringing in annual cash dividends. No one should build with any other heating system in mind than steam, if economy and earning power interest him. It seems a bit wasteful to install radiators and valves when the furnace will be unnecessary, but the eventual saving will more than compensate. There is also the decorative value of the radiators to make them desirable!

After these fundamentals have been provided for, it is possible to effect further savings in several smaller ways. We are told of plate glass, "it keeps heat inside the house". Then there is a certain nickel silver window sash which "effects a saving in fuel". It is common knowledge that storm windows and weather stripping will reduce drafts, and markedly lower the cost of heating a building. The makers realize that everyone knows this, and they do not even waste an advertising appropriation on the facts. There are, of course, certain parts of the house which cannot be surfaced with the hollow tile or shingles. But we need not despair, for an association of lumber manufacturers assures us that cedar finish from their forests "Will enable you to save many dollars in fuel during the winters". Now it is certain that no one of these advertisers would claim less than a five per cent. saving for his product. Perhaps they are sure of even greater economy. But assuming 5% reduction in fuel bills for each of these minor matters, we can estimate the saving in heating a modern home as follows:

Total Fuel Savings 123 per cent.

Now it will be obvious that using even the minimum claims of the manufacturers we have here a remarkable condition. We shall save more than the entire fuel bill. To bring these mathematical deductions down from the clouds, it should be explained that saving



PEN-AND-INK SKETCH BY ANTHONY MCGRATH

be explained that saving more than 100 per cent. means merely that the house will generate heat which must be removed to keep the occupants comfortable. For houses of moderate cost the means of

by choosing well the radio station and using the loud speaker so that all the family may be warmed by the current supply of "hot air" which never seems to fail.



Rendering by Lewis Gersh, House at Glen Head, L. I. Philip L. Goodwin, Architect.

removing this excess heat will doubtless be a system of ventilating ducts without even a motor-driven fan to carry off the overheated air. But with all thoroughgoing people a positive cooling device will be considered essential. It is probable that the most satisfactory method will be the installation in connection with the radiators of a brine circulation system cooled by an electrically operated iceless refrigeration machine. This will go far toward completing the electrification of the home.

No doubt readers with a scientific bent have already perceived that all these means which so effectively retain heat in winter will equally well serve to exclude it in summer. In fact, they may be so effective that there will be a positive chill to most summer evenings. But rather than encourage further coal strikes by installing furnaces for summer use, another source of heat is recommended. With the marvels of electricity still young, we may expect the radio broadcasting stations to supply radiant energy sufficient for the purpose. If the energy supply fails, it will still be possible to remove the chill from any but the hottest evening

THE SPECIFICATION DESK A Department for the Specification Writer CONDENSING THE SPECIFICATION

By Verne S. Swan

EDITOR'S NOTE: -- Mr. Swan is connected with the organization of Bagg and Newkirk, Architects, of Utica, N. Y. His observations which follow will surely be found of interest by all who write specifications.

By WAY OF AN INTRODUCTION to the following comments on the subject of Specifications, may I call attention to the numerous excellent articles on the subject which have appeared in this magazine and, as all who read this will doubtless observe, further say that they have been of material assistance to the

material assistance to me. By general agreement the object of a specification is to clarify and supplement the information contained on drawings, thus forming a complete statement from which estimates may be prepared and, with the help of more detailed drawings, the building may be later erected. The agreement is all so general that the usual hurried preparation of specifications immediately prior to the issuing of drawings to the contractors leaves much to be desired. In the usual office doing a commercial practice, however, the specification is corrected more in theory than in practice. Beyond these assumptions the opinions on the subject are legion with the differences being more marked by localities than by offices due to variations in trade practices, building codes, working agreements as to what shall be included in the work of each contractor, availability of certain materialsmany of which are of local determination—and perhaps in some cases the example of an outstanding office in the area. In starting a specification, therefore, one must consider not only the building concerned, but the locality in which it is to be erected. Other things being equal, it is natural that the more carefully local prac-tices are considered the lower will be the estimates. By this is meant not only the

tions which has taken place during the past few years, there is yet room for betterment in this connection. There are various organic formations possible, but whatever arrange-ment is decided upon it should be consistently used with preference given to the one having the widest use. The separation of the specification into parts, with each part complete in itself and

including all information re-

quired by the heading with the needed reference to the general and special condi-

tions, is the common method.

The subdivision may be determined by an analysis as to how the contracts will be subdivided when let by the

subdivided when let by the general contractor with each part covering a subcontract complete with reference to engaging crafts, and so forth. This subdivision may be further determined by

reference to the rulings of the Board of Jurisdictional Awards, and where such

rulings have not been gen-

erally accepted - as is the

case in the hanging of hol-

low metal doors-the mate-

low metal doors—the mate-rial and shop fabrication can be placed in one group and the field labor in an-other. The object of this isolation of field labor into a separate heading where

jurisdictional disputes may be expected is that it allows

their consideration to be

distinct from all other items,

and often times opens the way to a solution satisfac-

arrangement of the parts can

arrangement of the parts can be best determined by group-ing them as they will be re-quired during construction. This subdivision in itself should not only follow some logical form but all parts

The

tory to all concerned.



VERNE S. SWAN

information usually included under the heading of special conditions, but also provisions for variations typified by the following

The usual procedure in certain areas is to include the back plastering for tile work as a part of the work of the tile setter, whereas in other sections this is covered under the plastering contract. The assembling of such information in intelligent form requires that each specification be written for the specific building with only limited use of other speci-fications by way of a general check.

In spite of the improvement in arrangement of specifica-

should follow the same general arrangement within themselves. For example: by beginning with the needed reference to general items, fol-lowed by a paragraph covering the work included with specific mention of anything of a kindred nature which may be omitted from the contract, next placing the paragraphs specifying materials, then passing to the labor items, etc. The specification for a large building is necessarily

complex; so much so in fact that any elimination or condensation of matter is well worth the study required to bring it about. To this end one of the greatest aids is the increasing use of standards developed by the various trade bodies as well as those sponsored by departments of the na-

tional government. This does not mean a recommendation for the standardization of buildings but only as to the material itself, following which we reserve the right to avoid convention in its use in so far as desired. These standard specifications may be included by reference only or, if this does not seem wise, the pertinent parts may be copied. In this connection standard grading rules should also be used to a greater extent than is now the case, not only because of the simplification of work for all concerned, but also because the knowledge developed in the study of the materials required to formulate such grading rules has shown where each grade may be safely used without injury to the complete building, with the resulting economy. The first requisite to the proper use of such information is a complete knowledge of the building under consideration and the maximum avoidance of hackneyed clauses from other specifications. The above comments are primarily directed towards the development of as short a specification as possible if only for the reason that a short clear statement of what is wanted is more apt to be read and followed.

To develop further the simplification of specifications a large amount of written description can often times be eliminated by the use of schedules. That is, details such as variations of finish among different parts of the building may be tabulated directly on the drawings and supplemented in the specifications only by general paragraphs, covering labor and materials, or the schedule may be made a part of the specifications. An advantage in favor of placing this information on the drawings is that it definitely locates such items as the drawings are made, and thus avoids possible mistakes later.

A word may be said here against the duplication of information contained on the drawings in the specifications or vice versa; not only does this mean wasted effort but also it affords the opportunity for varying interpretations as to the true intent.

The use of blanket clauses without specifically giving detailed information in the attempt to avoid responsibility or with the object of transferring the responsibility to some one else is fortunately decreasing, but even so their use should be restricted to the minimum, if only for reasons of economy. The unknown or undetermined factor bulks large on the contractor's estimate sheet, and in the owner's interest, which is also that of the architect, the specification should definitely state what is wanted with the assumption of all responsibility that such action implies. Where it may be impossible definitely to state the requirements in de-tail the use of a contingent item of definite amount offers may be impossible definitely to state the requirements in de-tail the use of a contingent item of definite amount offers a way out of the difficulty; even if such an amount is ex-cessive the part not needed reverts to the owner whose inter-est is thus conserved. The proper preparation of a speci-fication covering the myriad details of a modern building requires that the information contained shall be not only definite, but also accurate and the attempt to place responsi-bility for such accuracy on the contractor is not in the interbility for such accuracy on the contractor is not in the interests either of good architecture or good business. This statement is not meant to imply that the architect should in any way assume the contractor's liabilities to the owner, but only that he assume, for the owner, responsibility that the information presented is reasonably definite and accurate.

To summarize: a specification should be as short as is consistent with completeness; clear without the use of complicated explanations which look expensive to the contractor; and accurate; prepared not only for the obtaining of esti-mates but also for the erection of the building, bearing in mind that it should tell where the material in question is to be used as well as how.

EFFECT OF METAL LATH UPON RADIO RECEPTION

TESTS WERE RECENTLY CONDUCTED by the Radio Service De-Metal Lath Mfrs., to determine the effect of Metal Lath upon the reception of radio signals, the results of which indicate that the metal lath has the effect of strengthening the radio frequency field. A tentative report of the test has been printed covering the test apparatus, operation, results and recommendations. A copy of the report may be obtained by writing The Associated Metal Lath Mfrs., 123 W. Madison St., Chicago, Ill.

"OR EQUAL" IN A SPECIFICATION By G. H. Wells

(EDITOR'S NOTE: Mr. Wells has sent us this brief account telling how he treats of the "or equal" in a specification. We shall be glad to hear from other of our readers who may have other ways of handling this part of a specification.)

THE REASONS FOR and against "or equal" have been discussed THE REASONS FOR and against "or equal have been discussed at length so that there is little more to be said. I have obtained the advantage of competition and secured direct selection when desirable with fairness to contractor and owner, by using a paragraph in the general conditions similar to the following:— "ALTERNATIVES:

"Many items are referred to by trade name and number. In some cases materials or goods of other makes would be suitable. Bidders are requested to base a straight bid on materials definitely specified;—also make alternative bid based upon the use of other materials of the same general description and quality, naming each alternative item and difference in price, conditional upon its substitution. Choice to rest with the owner."

In a final paragraph of some subdivisions, as of plumbing or painting, it is sometimes desirable to ask for alternative bids based upon substitutions there named,-also inviting other suggestions from the bidder. Of course the alterna-tives cannot be carried too far without causing objection, but in moderation, they are useful. Knowing in advance the comparative costs of different articles, a selection is made by owner or architect when the contract is let—at an adjusted price, and the "or equal" argument does not occur.

A LETTER FROM MR. TORRACO

The following letter was addressed to Wm. Leslie Welton, the author of the article published in the March issue of PENCIL POINTS in the series on "The Relationship Between the Architect and the Draftsman."

Dear Mr. Welton:

I have been a close reader of the various articles entitled "The Relationship between the Architect and the Drafts-man", and I want to take the occasion to extend to you my , and I want to take the occasion to extend to you my sincerest congratulations for the idealistic point of view which you expounded relative to the attitude of the architect

which you expounded relative to the attitude of the architect towards the younger man. It is most unfortunate, indeed, that architecture is prac-ticed by many men who have no moral or ethical scruples in their business contracts, who have no interest in the de-velopment of the younger men whom they employ and who regard themselves as "Gods on Pedestals" and all others as their inferiors and as their slaves to further enhance their economic revenues, with their eye upon the dollar sign as the main goal to be obtained. That the "great tonnage" of architecture is poor can not

That the "great tonnage" of architecture is poor can not be doubted, and that men who call themselves architects and are anything but architects should misdirect the paths of the younger men is, indeed, a curse to the architectural profession.

Men of your calibre and sentiments ought to start a rigid campaign to endeavor to "clean up the architectural pro-fession" and to get rid of those parasites in the profession who make it difficult for the properly trained, ethically minded, and morally responsible men of the profession to earn a decent livelihood.

There are too many, perhaps 95% of the men, who are beguiling the public by calling themselves architects. Personally, I am of the opinion that the architectural schools in America are not endeavoring to properly select the right calibre of men, and I also believe that many of the night schools are turning out too many square pegs for round holes. The night schools particularly, might be termed "factories" which are dumping the products without regard for the future consequences.

The cities are, therefore, over-run with the wrong type of men to pursue architecture as it was done in olden days.

It was very inspiring for me to read your article and I could not prevent myself from expressing this brief note to you.

I am,

Yours very truly,

(*Signed*) O. M. TORRACO. 460 Howard Ave., New Haven, Conn. March 3, 1927.



SERVICE DEPARTMENTS

THE MART. In this department we will print, free of charge, notices from readers (dealers excepted) having for sale, or desiring to purchase books, drawing instruments and other property pertaining directly to the profession or business in which most of us are engaged. Such notice will be inserted in one issue only, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed under this heading free of charge. Such notices should reach us before the fifteenth for insertion in the forthcoming issue.

In this department we shall undertake to answer to the best of our ability all ques-QUERIES AND ANSWERS. tions from our subscribers concerning the problems of the drafting room, broadly considered. Questions of design, con-struction, or anything else which may arise in the daily work of an architect or a draftsman, are solicited. Where such questions are of broad interest, the answers will be published in the paper. Others will be answered promptly by letter.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions. Such notices will also be posted on the job bulletin board at our main office, which is accessible to all. Those seeking positions are invited to call to inspect this bulletin board at any time between the hours of nine and five. Notices submitted for publication in this department must reach us before the fifteenth of each month if they are to be inserted in the next issue.

THE MART

COPIES OF PENCIL POINTS WANTED AND FOR SALE

Frank & Gaborc, 24 East 13th St., New York, want a copy of August 1926.

Wm. Cummings Richardson, 1259 Little Bldg., Boston,

Mass., wants a copy of November 1925. George Ramey, 791 Myrtle St., N. E., Atlanta, Ga., wants a copy of February 1926.

Ralph Heywood, Jefferson High School, Los Angeles, Calif., wants a copy of December 1923. Starrett & Van Vleck, 393 Seventh Ave., New York,

Att. Mr. McDonald, want copies of June, July, September, October and December 1920; January 1921; January and April 1922, and April 1925.

Kenneth Butler, 38 Shaw Ave., D. copy of January and February 1926. Dayton, Ohio, wants a

Charles E. Reeder, 1031 Leavenworth St., Manhattan, Kans., wants a copy of August 1926.

Esther M. McRuer, 80 West South St., Union, S. C., wants a copy of November 1925.

H. Clyne Austin, 2413 Reed Street, Erie, Pa., wants a copy of August 1926.

Milton E. Schliesser, 1309 South St., Murphysboro, Ill., has the following for sale at 35c a copy: January, February, March, April, July, August, September, October, November and December 1924; complete sets for 1925 and 1926; January and February 1927.

Thomas Liang, 314 Elgin Ave., Tientsin, China, would like to obtain a complete set for 1921 and 1922 and will pay \$3.00 per volume. These must be in good condition and can be bound or in single copies.

For sale: PENCIL POINTS Bound Volumes. One copy of ach for the following years: 1924 complete in one volume,
\$5.00; 1925 complete in two volumes, \$3.50 each, \$7.00;
1926 January to June only, one volume, \$3.50.
THE PENCIL POINTS PRESS, INC., 419 Fourth Ave., New York.

Trost and Trost, Architects, Two Republics Life Build-ing, El Paso, Texas, would like to obtain a second-hand copy of each of the following books: Modern Framed Structures, Johnson-Turneaure-Bryan, Volume III, Ninth Edition; Materials of Construction, Johnson-Withey-Aston-Turneaure, Fifth Edition; Journal Association Engineering Society, No. 5, Vol. 28. Please communicate direct with Trost and Trost at the above address? Trost and Trost at the above address.

Wanted: Architectural Forum, January and April 1926, November 1924, April 1917. Have for sale, Architectural Record, December 1925. Box No. AA care PENCIL POINTS.

PERSONALS

SLOAN & ROBERTSON, ARCHITECTS, have moved to the Graybar Building, 420 Lexington Ave., New York.

BRAINERD & LEEDS have dissolved their partnership by mutual consent, as of February 1, 1927. Mr. William H. mutual consent, as of February 1, 1927. Mr. William Fr. Brainerd has formed a new partnership with Mr. George Edw. Dorman, under the firm name of William H. Brainerd Associates, with offices at 89 Franklin St., Boston, Mass. JOHN C. RANDLE, ARCHITECT, has opened offices at 36 Mc-Phillips Place, Mobile, Ala., for the general practice of architecture, and would like to receive manufacturers' samples, prices, and data governing same.

DAVID KOSVICH has opened an office for the practice of architecture at 214 Peninsular Bldg., Jacksonville, Fla., and would like to receive manufacturers' samples and catalogues. EDWIN H. SILVERMAN AND ABRAHAM LEVY, ASSOCIATE ARCHITECTS, have moved to 313 So. Smedley Street, Philadelphia, Penna.

SAMUEL GILDENBERG has opened an office for the practice of architecture at 98 Ellison Street, Room 50, Paterson, J., and would like to receive manufacturers' samples N. and catalogues.

COLTON & KNECHT have moved to 724 Grand Rapids National Bank Bldg., Grand Rapids, Mich.

HARRY THEO. JOHNSON, 515 Beaumont St., St. Paul, Minn., is an architectural student and is maintaining an A. I. A. file and would appreciate manufacturers' samples and catalogues.

LLOYD E. MELLOR has opened an office for the practice of architecture in the Burchard Bldg., Harlingen, Texas, and would like to receive manufacturers' samples and catalogues. HAROLD SHIPLEY, 1940 West Franklin St., Baltimore, Md., is an architectural student and draftsman and would like to receive manufacturers' samples and catalogues.

ALBERT ELY IVES, has opened an office for the practice of architecture at 218 Delaware Trust Bldg., Wilmington, Del., and would like to receive manufacturers' samples and catalogues.

LLOYD OWNBEY, 544 Passaic St., Huntington Park, Calif., is an architectural student and would like to receive manufacturers' samples and catalogues.

SIMPSON & ROLSTON, INC., ARCHITECTS & ENGINEERS, have moved to 45 Walnut St., Newark, N. J.

HORACE W. PEASLEE, ARCHITECT, has moved to 1228 Con-

necticut Ave., Washington, D. C. SAMUEL LIPSON, 37 Oxford Street, Sydney, N. S. W., Australia, would like to receive manufacturers' samples and catalogues.

WILLIAM TEMPLETON JOHNSON, of San Diego, Cal., has been selected as architect for the United States government buildings at the International Exposition to be held in Seville, Spain, in 1927.

FREE EMPLOYMENT SERVICE

(Other items on Page 88 of the Advertising)

Very desirable desk room for rent in architect's office. Splendid location. For particulars call Vanderbilt 8579. Wanted: Capable man to handle our line of roofing ventilating apparatus (Ventilators). Excellent earning possibilities to one who can approach architects and engineers. Communicate with Mr. Howard Hitz, care W. F. Hirschman Co., 526 Sixth Ave., New York. Good all around man with College and Atelier training and

15 years' experience on all classes of work, design, detail, supervision, etc. Manager of office for seven years desires position or will consider partnership. New York City or vicinity. Box No. 223 care of Pencil Points.

Wanted: Young draftsman who has had some training in design and practical experience in an office. A good

in design and practical experience in an once. A good all around man who can assist with the work is desired. Splendid opportunity for the right man. Long Island office. Box 224 care of Pencil Points. M. I. T. man, New York registry, 21 years drafting and superintendence; qualified squad boss handling corre-spondence and contractors, wishes position in Grand Cen-tral Zone office leading to more than just drafting hoard tral Zone office leading to more than just drafting board service. Box No. 225 care of Pencil Points.

Junior draftsman wishes to connect with firm in New York City. One and a half years' experience, willing worker, references. Box No. 226 care of Pencil Points. Position Wanted: Architectural draftsman, college edu-

Position wanted: Architectural draftsman, congeted cation in architecture and fine arts and five years' practical experience. Box 227 care of Pencil Points. Young man, 21 years old, Technical School graduate, 2 years' drafting experience desires position with construc-tion company of building. Box 234 care of Pencil Points. Wanted: Senior architectural draftsman and designer with thorough knowledge of construction on Institution and Church work. Give full details as to experience, etc. Paul Monaghan, 1520 Locust St., Philadelphia, Pa.

Young married man wishes position in architect's office in New York City or New Jersey. Student of a prominent Technical Institution, 2 years' experience in architectural drafting and construction. Best references. John G. Seamanik, 750 Cortland Street, Perth Amboy, N. J.

Position wanted as draftsman by young man, 24 years old, High School training and graduate of complete course in architecture. Two and a half years' experience on apartment houses, hotels, schools, small houses, etc. Box 231 care of Pencil Points.

Wanted by a prominent Chicago manufacturer, two drafts-men with knowledge of design and lighting fixture experi-ence. Box 230 care of Pencil Points.

Junior architectural draftsman wishes to connect with good architectural office. Technical School graduate with three years' practical experience on apartment houses, banks, office and loft buildings. Neat and willing worker. Box 231 care of Pencil Points.

Position in a Detroit office wanted by a graduating student of an eastern architectural college. Young man is resi-dent of Detroit and seeks permanent position. Some experience in Detroit and South. References. Box 228 care of Pencil Points.

Wanted: Senior architectural draftsman for general work including specification writing and checking working drawings. Give full details as to experience, etc. Paul Monaghan, 1520 Locust St., Philadelphia, Pa.

Structural engineer, graduate C. E. 10 years' experience, 5 years' design of power houses and industrial buildings. Member A. S. C. E. Age 32. Executive ability. Box 235 care of Pencil Points.

Draftsman, 30 years old, 10 years' experience on apart-ment houses and office buildings, makes own sketches and elevations, can handle a job from beginning to end. Wishes to connect with position with some permanency. Salary \$70 per week. Box 236 care of Pencil Points.



PENCIL RENDERING BY MARTIN BECK-HOLY FAMILY ROMAN CATHOLIC CHURCH, BROOKLYN, NEW YORK W. Philip McGovern, Architect.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of PENCIL POINTS by the firm issuing them. When writing for these items please mention PENCIL POINTS.

Kelsey Health Heat.—Handsome brochure illustrating and describing fully the Kelsey Warm Air Generators for healthful and economical heat. Cutaway illustration of new Type R Kelsey Heater showing air passages, Kelsey Automatic Humidification, Hot Water Attach-ments, Chimney Hints. 19 pp. 9 x 12. Kelsey Heating Co., Syracuse, N. Y.

Co., Syracuse, N. I. Carnegie Beam Sections.—A.I.A. File No. 13. This valuable hand book just off the press gives profiles, properties and safe loads for a new series of structural steel beams and column sections. An extremely valuable book for all those interested in building construction. 170 pp. Handsome flexible binding. Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa.

Barnstead Automatic Water Stills.—Handbook just off the press contains a printed survey of Distilled Water use in laboratories, industrial houses, hospitals, and in fact for all purposes. Profusely illustrated, tables, price lists. 32 pp. 8½ x 11. Barnstead Still and Sterilizer Co., Inc., Lanesville Terrace, Forest Hills, Boston, Mass.

Cold Spring Granite.—Folder containing detail sheets of columns, pilasters and balusters, steps and terraces, piers, base courses, reveals, window sills and door sills, also typical details for a small bank building faced with Cold Spring Granite. Also contains color reproductions of Rainbow Granite, and color reproduction of the Amer-ican Insurance Building in Columbus, Ohio. Cold Spring Granite Co., Cold Spring, Minn.

Sanymetal Catalog No. 15.—Complete textbook with working drawings on metal partitions for toilets, showers, offices, factories, hospitals. Embodies many suggestions and innovations. The Sanymetal Products Co., 1712 Urbana Road, Cleveland, Ohio.

Introducing Orsco Aluminum Screens.—Pamphlet illustrating and describing rustless aluminum screens for all types of buildings. Orange Screen Co., Maplewood, N. J.
 The Stedman Floor.—Leaflet describing this flooring for the home, hospital, hotel, business office, etc. The Stedman Products Co., South Braintree, Mass.

Kitchen Maid.— Looseleaf catalog illustrating and describing various types of kitchen cabinets, dish closets, cupboards, refrigerators, broom closets, Pullmanooks, etc. Typical plans and layouts, with instructions for in-stalling dimension sheet blueprints, 8½ x 11. Wasmuth-Endicott Co., Andrews, Ind.

Minwax Flat Finish.—A. I. A. Classifications File No. 25-c-11. Color card and specifications with twelve panels in full colors covering flat finish for wood floors and trim. Minwax Co., 10 E. Huron St., Chicago, Ill.

"Doorways".—Interesting little monthly magazine, the April issue of which contains an interesting article en-titled "A Pictorial Revelation of the Beauty and Utility in Doorways of History". Many interesting illustrations and other data. 24 pp. 5 x 9. Richards-Wilcox Mfg. Co., Aurora, Ill.

Refrigeration by A. R. Stevenson, Jr.—A brief history of refrigeration as applied especially to its application in the home covering everything from natural ice to the latest type of modern equipment. 16 pp. Electric Refrig-eration Dept., General Electric Co., Hanna Bldg., Cleve-land, Ohio.

Chicago Faucets.—Catalog "D", A. I. A. File No. 29-h-5, illustrates and describes fully this type of fixture, suit-able for use in all types of buildings. Price lists, meas-urements, diagram showing construction, specifications. Also shows line of bubblers, glass fillers and ice water faucets, wall connection bubblers, bubbling cups and nozzles, as well as line of fixture trimmings. 40 pp. In attractive folder. Chicago Faucet Co., 2700 N. Crawford Ave, Chicago, Ill.

Ave., Chicago, III.
The Charm of Slate Floors and Walks.—Attractive booklet in sepia illustrating and describing slate floors, terraces and walks. Specifications. Also suggested patterns for floors, terraces and walks in slate. A. I. A. File No. 22-B-2. 8¼ x 11. The John D. Emack Co., 112 So. 16th St., Philadelphia, Pa.
Published by the same firm, "About Olde Stonesfield Flagging", "What Then is Thatchslate", "Graduated Olde Stonesfield Roofs".

The New Obround Condulets, Form 7.—Folder illustrat-ing and describing these condulets that can be used everywhere. Crouse-Hinds Co., Syracuse, N. Y. West Coast Hemlock.—Booklet containing interesting and valuable information about West Coast Hemlock and its uses. Fully illustrated. West Coast Lumber Bureau, 5562-G Stuart Bldg., Washington, D. C.

Krolite News.—Monthly publication on the subject of wood blocks for floors for industrial plants, bridges, and other floors built to withstand heavy duty. 8½ x 11. 12 pp. Jennison-Wright Co., Toledo, Ohio.

pp. Jennison-Wright Co., Foredo, Onto. Shapes of Clay.—Publication for architects. The Feb-ruary issue shows some beautiful and interesting studies in which Decorative Tile has played an important part. Interesting article on Decorative Tile. 8½ x 11. 16 pp. Gladding, McBean & Co., Los Angeles, Calif.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen. Vol. 8 No. 12 contains an interesting article on "Modeled Detail and Color" and is devoted to the activities of the Atlantic Terra Cotta Co. In Porto Rico and Florida. A. I. A. File No. 9. Many illustrations of colorful Spanish Design. Atlantic Terra Cotta Co., 19 West 44th St., New York, N. Y. They Hold in Any Wall.—Descriptive folder illustrating and describing Ankyra Anchor Bolts. Also contains full set of specifications worked out in conjunction with the A. I. A. Ankyra Mfg. Co., Wayne Junction, Philadel-phia, Fa. Publiched by the same firm "You Are Often Ut Against Thi-

Published by the same firm "You Are Often Up Against This Problem", "Why Go To Extra Trouble".

Published by the same firm "You Are Often Up Against This Problem", "Why Go To Extra Trouble".
 Wilson Rolling Steel Doors.—Catalog No. 35 fully describing and illustrating this type of door. A. I. A. File No. 16-d-13. Describes construction, methods of operation, elevations, details, of both Wilson Standard Doors and Underwriter Labeled Doors and Door Grooves. Instructions for ordering, dimensions. Illustrations of installations. 72 pp. 8½ x 11. J. G. Wilson Corp., 11 East 38th St., New York, N. Y. Published by the same firm, "Sectionfold and Rolling Partitions—Hygienic School Wardrobes". A.I.A. File No. 19-e61, 28-b33 and "Wilson Venetian Blinds and Aumings".
 Aluminum Paint.—Illustrated handbook covering subject thoroughly. Specifications for a variety of uses, 36 pp. Aluminum Company of America, "Wear-Ever" Building, New Kensington, Pa.
 Refrigerated Drinking Water for Mills, Factories, Shops, Hotels, Hospitals, Schools, Institutions, Public, Stores, Etc.—A. I. A. Classification 34-i-3. Catalog illustrating and describing various systems for refrigerated drinking water systems. Typical office building installation. Specifications, specime calculation, tables, etc. 7½ x 11. 52 pp. Armstrong Cork & Insulation Co., Pittsburgh, Pa.
 Published by the same firm "The Building Contractor's Book on Armstrong's Corkboard for the Insulation of Residential Buildings".

Buildings". Best Bros. Keene's Cement.—Booklet on the subject of this material containing much information, together with specifications covering all kinds of plastering, both plain and ornamental, artificial marble, etc. 24 pp. The Best Bros. Keene's Cement Co., 1040 West 2nd St., Medi-cine Lodge, Kansas.

Ga G Atlas Systems.—Booklet on the subject of pneu-matic systems for department stores, banks, hotels, office buildings, hospitals and industrial plants. Fully illus-trated and containing plans and specifications. A. I. A. File No. 35-h-21. 12 pp. 8½ x 11. G& G Atlas Systems, Inc., 535 West Broadway, New York, N. Y. Architects' Handbook on Metal Doors and Trim, Ele-vator Enclosures, Conduo-Base.—Handsomely illustrated handbook describing hollow metal doors, frames and trim. Underwriters' labeled doors and frames, elevator enclos-ures, adjustable steel partitions, telephone and coupon booths, wainscoting, combination and unit drawn door frames, dumbwaiter openings, cold rolled, drawn or pressed steel and bronze shapes. Also contains standard specifications, cross sections, plans, diagrams, full size sections, color cards of finishes, list of installations, etc. 8½ x 11. 108 pp. United Metal Products Co., Canton, Ohio. $8\frac{1}{2}$ Ohio.

8½ x 11. 108 pp. United Metal Products Co., Canton, Ohio.
 California Redwood, Its Uses, Appearance, Characteristics and Physical and Mechanical Properties.—Manual in loose-leaf form in substantial binder containing the most accurate, impartial and authentic information about all commercially important woods. Also laboratory tables, statistics, etc. A very interesting and valuable document. 8½ x 11. California Redwood Association, 24 California St., San Francisco, Calif.
 Von Duprin Self Releasing Fire Exit Devices.—A handbook on this subject. Illustrations of all types, sections and details. Complete instructions for specification and installation. Instructions for swinging doors. A very valuable book for every specification writer. 96 pp. 8½ x 11. Vonnegut Hardware Co., Indianapolis, Ind.
 Par-Lock Specifications.—Data bulletin listing 14 specifications on the uses of this material in connection with plastering on concrete surfaces, waterproofing, dampproofing, insulating, etc. Standard filing size, 8½ x 11. Vortex Mfg. Co., Cleveland, Ohio.
 Kliegl Theatrical Decorative and Spectacular Lighting.—Catalog "M" illustrates and lighting effects for stages, etc. Catalog includes stage equipment, exit signals, alsle and step lights, dimmers, switchboards and other special lighting apparatus. 128 pp. 7¼ x 10½. Kliegl Bros. Universal Electric Stage Lighting Co., Inc., 321 West 50th St., New York, N. Y.
 The Low Cost of Dignity and Beauty.—A publication

50th St., New York, N. Y. **The Low Cost of Dignity and Beauty.**—A publication on the subject of windows with special reference to the advantages of plate glass. Tables of comparative costs and other important data, together with a large number of attractive illustrations are included. Specifications and complete information for the drafting room. 36 pp. 8½ x 11. Plate Glass Mfrs. of America, 1st National Bank Building, Pittsburgh, Pa.

Rubber Tile.—Handsome brochure in color illustrating and describing rubber tile and specialties for flooring. Blue prints, color and pattern suggestions, installation specifications, interesting article on the care of rubber tile, many illustrations in color of notable installations. Beautifully bound in stiff cover. 34 pp. 8½ x 11. The Goodyear Tire & Rubber Co., Inc., Akron, Ohio. Kelvinator.—Folder containing complete information on electric refrigeration for dwellings. File No. 32 Standard Construction Classification. Plate showing typical Kelvinator installation, also contains illustrations of standard units for domestic installations, illustra-tions of cabinet Kelvinators, dry system working specifi-cations for the use of architects, typical apartment house multiple installation. Working specifications for the use of architects. Kelvinator, 2051 W. Fort St., Detroit, Mich.

tions of cabinet Kelvinators, dry system working specifications for the use of architects. Kylical apartment house multiple installation. Working specifications for the use of architects. Kelvinator, 2051 W. Fort St., Detroit, Mich.
 Supercedar Closet Lining.—A.I.A. File No. 35-n-2 folder containing description of this closet lining, blueprint plan for a typical Supercedar storage room in the attic or basement of the home, specification for an attic storage closet. Standard filing size. George C. Brown & Co., Memphis, Tenn.
 The Gorton Single Pipe Vapor System.—Folder illustrating and describing this vapor system, specimen for the Gorton System of Vapor Heat, A.I.A. File No. 30. Georton & Lidgerwood Co., 96 Liberty St., New York, N. Y.
 The Reol Lifetime Refrigerator.—Handsome booklet in color illustrating and describing this type of refrigerator especially designed for dwellings. Table of dimensions, also Specification Co. 16 pp. 3/2 x11. Reol Efficients for Store and Markets, 'Catalog No. 55, 'Orcole Refrigerator Co., Bublished by the same firm, ''Orcole Refrigerator Co., Spilay Cases,'' Catalog No. 55, ''Orcole Refrigerators for Commercial and Institutional Use,'' Catalog No. 95 and ''Orcole Refrigerators for Commercial and Institutional Use,'' Catalog No. 95 and ''Orcole Refrigerators for Cassifies metal lath by the different methods of anufacture and by the uses for which each is adapted. Definite recommendations are given for each use of lath as a plaster base and as form-work and reinforcement for play cases and as form-work and perplace. Is they see the standard of lath he may purchase. 16 pp. 3/2 x 11. The Macomober Steel Co., Canton, Ohio.
 Coret Fireplace Construction. Catalog No. 8, A.I.A. File No. 14 Illustrating and describing fireplace construction of a farbage sections and purpose of this catalog is to place usable information in the architect's hands regardices of the brand of lath he may purchase. 16 pp. 3/2 x 11. The Macomober Steel

esting little pamphlet in color telling how Kalamein Doors are made. Specification Data for Structural Uses—Tidewater Red Cypress (Coast Type).—Handbook containing helpful information in convenient form for architects. A.I.A. File No. 19. Discussion of qualities, grades, uses, and relation of grades to uses, together with information as to weight, strength, painting and finishing of this wood as used in building construction. Suggested specifica-tions for various uses of the wood. A valuable docu-ment for the architects and specification writer. $3\frac{1}{2} \times 11$. 25 pp. Louisiana Red Cypress Bureau, 507 Carondelet St., New Orleans, La. High Early Strength Concrete.—Interesting booklet on the uses of Alpha Cement for high early strength con-crete. Temperature chart. 10 pp. 6 x 9. Alpha Port-land Cement Co., Easton, Pa. Galloway Pottery.—Catalog No. 27, handsome book showing examples of Galloway pottery for gardens and interior, pots and pot stands, pedestals, jars, fountains, fountain figures, tables, bird fonts, bird baths, sun dials, gazing globes, well curbs, benches, fountain heads, wall fonts, ferneries, section boxes, saucers. Tables of heights and widths, price list. 9 x 12. 24 pp. Galloway Terra Cotta Co., Walnut and 32nd Sts., Philadelphia, Pa. Published by the same firm "Chimney Caps" together with table of sizes and price list.

Cabot's Creosote Stained Shingles.—New catalog A. I. A. File No. 19-d-1 containing full information and data on this type of shingle, profusely illustrated, tables of comparative costs, cost of roof construction including base, color plates showing blending of different shades, specifications. 16 pp. 8½ x 11. Samuel Cabot, Inc., Roston Mass Boston, Mass.

Herman Nelson Invisible Radiator.—Handsome Bro-chure in color illustrating and describing this type of radiator for living room, library, dining room, bedroom, bathroom, kitchen. Contains in separate pocket booklet of mechanical data. $8\frac{1}{2}$ x 11. Stiff cover. A very attractive and valuable addition to the architect's library. Herman Nelson Corp., Moline, Ill. Published by the same firm, "Univent Ventilation," A.I.A. File No. 30-d-1.

Do You Belong to The Never-Grow-Olds.—Attractive little booklet in color showing selections of Craftex finishes for a variety of uses. 19 pp. 5½ x 8¾. Also Craftex Specifications. Craftex Co., 37-39 Antwerp Street, Brighton Sta., Boston, Mass.

E. B. LEE WANTS DRAFTSMEN

EDWARD B. LEE, architect, Chamber of Commerce Building, Pittsburgh, requires the services of three good senior drafts-men on school work. Will consider applications from indi-viduals or from three men applying as a squad. Communi-cate direct with Mr. Lee giving experience and full details.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

Of PENCIL POINTS published monthly at Stamford, Connecticut, for April 1, 1927.

State of New York County of New York } ss.

County of New York) Before me, a Notary Public in and for the State and county aforesaid, personally appeared W. V. Montgomery, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the Corporation publishing Pencil Points and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit: form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Pencil Points Press, Inc., 419 Fourth Avenue, New York.

Editor, R. F. Whitehead, 150 East 61st Street, New York.

Managing Editor, None.

Business Manager, W. V. Montgomery, 419 Fourth Avenue, New York City

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Pencil Points Press, Inc., 419 Fourth Avenue, New York City. Ralph Reinhold, 419 Fourth Avenue, New York City. E. G. Nellis, 419 Fourth Avenue, New York City. Marion S. Carpenter, 920 Fifth Avenue, New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holder shold stock and securities in a capacity other than that of a bona fide owner; and this affant has no reason to believe that any other person, association, or other securities than as so stated by him.

by him.

5. That the average number of copies of each issue of this publi-cation sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

W. V. MONTGOMERY, Business Manager.

Sworn to and subscribed before me this seventh day of March, 1927. CURVILLE C. ROBINSON, Notary Public. My commission expires March 30, 1928.