

# THE DRAFTSMAN'S PRESENT-DAY OPPORTUNITY

I T IS easy to look back six months or a year and see very clearly where we have made mistakes, or have failed to make the most of opportunities that were present at that time. It is not always so easy to size up the situation existing at any given moment and do, right then, those things which will contribute most to our future well-being and prosperity.

The entire building industry of the United States is extremely active and prosperous. Architects' offices in most sections are handling a large volume of work; employment is at the highest point we have ever known it to be at the best average wages. No competent draftsman today need be out of employment.

It is human nature, nothing more or less, to take the future for granted when the present is highly satisfactory. Without in the least sounding a note either of pessimism or warning, we would bring it home to the drafting fraternity generally that things may not always be quite so rushed and rosy as they are at the moment, and suggest to each man to take a little peek ahead and adopt a definite program calculated to improve his position with respect to the profession of which he is a factor and insure to himself, so far as may be possible, continued satisfactory employment.

The one true answer is constant self-improvement. We do not mean by this that every man, even in the practice of architecture, gets just exactly what is coming to him. In some cases this is lucky. But taking it by and large, the man who is really delivering the goods has much less to worry about than the other fellow when work slackens up a little bit and somebody is being laid off. Many architects' organizations are being expanded to take care of the jobs offering. This process, we believe, will be continued for at least a year-maybe longer. When associates are being taken into firms the principals very naturally offer the first opportunities to the men whom they regard as indispensable, the men they could not afford to lose. We are sometimes told that in certain offices promotion is not made according to merit, but that "pull" is the deciding factor. But we also notice that the man who is advanced usually has something which justifies his choice for greater responsibility. He may not be a better draftsman than his fellows; but maybe he shows sound judgment, is successful in his contacts with clients and contractors, has an agreeable personality, is a good executive, is reliable and dependable and lives within his means. Another man who feels that he has been discriminated against when the promotions are handed out may be a better draftsman than the one who is preferred but may fall down in one or more of the other qualifications, all of which have a bearing on the matter.

The great present-day opportunity of the draftsman, as we see it, is three-fold, or rather branches three ways, and these should all be carefully studied with the circumstances, qualifications and ambitions of each individual mind. Some men contemplate opening offices of their own and to such, if they are qualified, we recommend that now is the time to consider this move. Others may have as their ultimate goal an association or partnership with the firm with which they are now connected. To them we recommend the most careful application to their work, never missing an opportunity to advance the interests of their firm in every possible way. Still others of the drafting room force who, because they are not good business getters or executives, may never consider it advisable or possible to start for themselves should, nevertheless, take full advantage of the present opportunity to develop their talents so that they may become increasingly valuable to their present employers or to someone We notice a tendency on the part of many else. men to let down in the matter of study in good times. No man who takes himself seriously can afford to do this. And no man can go far in our profession, or in any other, unless he does take himself seriously. The architectural magazines, all of them, should be carefully read and read regularly. The few hours each month necessary to digest these publications carefully should be laid aside as a primary duty. Good books, which can be found either in the architect's library or in the Public Library, should be studied. It is a mistake for any ambitious man to permit himself to get into a rut. Possibly his present duties are more or less circumscribed. If that is the case, and in these days of specialization it is frequently the case, a man should make an extra effort to keep up with those branches with which he does not come in contact as a part of his job, but a full knowledge of which is so essential in equipping an individual to grasp a larger opportunity, which may be offered to him tomorrow or three months hence.

Maybe this sounds like a sermon, and maybe it is, but if so it is a sermon taken from the book of experience. We have been watching the things of which we are writing for a good many years. We have seen successes and failures—and those in between. Success, in a majority of cases, comes to the clear-thinking man who analyzes his problem, sizes up his abilities and limitations and strives for a definite goal.



Water Color Drawing by Edward H. Bennett. Roman Forum— Temple of Antoninus and Faustina.

# MASTER DRAFTSMEN, XIV

#### EDWARD H. BENNETT

R DWARD H. BENNETT was born in a country where the English language is spoken and, being burdened with an English private school and technical college training, was brought into these United States and became a citizen before the "quota" was invented or the language of the Port of New York had gone so far towards becoming that recorded as having been inflicted, originally,

upon the workers on the Tower of Babel. Under the examinations now held in those tongues, he might still have been a "furriner." Whether the circumstance was fortunate for him, or only for those of our citizens who welcome into this country every trained mind and energetic worker with artistic capabilities, would seem to be answered by his distinguished success as a consulting architect specializing in city planning.

His father had intended that young Bennett should become a rancher and took him to California; but his own inclinations led him to take up drawing at night and spend a great deal of time sketching in water-colors around San Francisco Bay. He worked for some time in architects' offices in the metropolis of the coast, and fell in with a coterie of young students who met at the home of Mr. Bernard R. Maybeck, a Beaux-Arts trained archiBritish Architects. He received a medal in the competition for this scholarship. He made also a number of color renderings of enamels, mosaics, etc., in competition for the Owen Jones scholarship of the R. I. B. A., which he won in 1901.

In the late 90's, Mr. Bennett became convinced that he had devoted too much time to water coloring and practically abandoned that work, as well as



Edward H. Bennett.

tect (whose admirable work, by the way, is not as well known as it should be), who instructed an informal class at his home in Berkeley, and whose influence caused young Bennett to decide to aim for a Paris training.

Bennett went to Paris about 1895, passed the examinations for entrance to the Ecole des Beaux-Arts and followed its courses until 1902, when he received the diploma of the French Government.

During the period of the course at the Ecole, he spent some time in England in architects' offices, made a number of tours in France and in Italy, and finally a trip to Greece and Turkey. The drawings of the porches of Chartres Cathedral, reproduced on page 50, were prepared partly for the archaeological course in the Ecole des Beaux Arts and partly for the Pugin scholarship of the Royal Institute of

sel in a young man's course of study and that an architect's study in color should be pointed not toward the pictorial, but in the direction of decoration and decorative values of building materials and the production of fine effects. It would be better, he thinks, to record this information mostly in rendered drawings. His observations are parallel with those of other men, who, having made a remarkable success of a given kind of work, feel that they might bet-ter have employed their time at something else. It was his water color sketching that led him to the study of the decorative value of color and to a great deal of his early success as a student.

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When he returned to

the United States, he worked for a time for Mr. George B. Post, being put up hospitably by Joseph Howland Hunt. Warm ties were formed in New York and the as-sociations made in the office of Colonel Post and his sons, William and Otis, were left regretfully to join the powerful Burnham in Chicago. This came about largely by contact formed with Peirce Anderson, an intimate friend during the days at the Ecole, who had become designer with D. H. Burnham.

Bennett was first employed to take charge of the Burnham design in the West Point competition, after which he returned to New York, only to be again invited to Chicago to study the playground parks for the South Park system in Chicago with Mr. Burnham. He then became assistant to Mr. Burnham on the plan for the City of San Francisco (Continued on Page 49)



Water Color Drawing by Edward H. Bennett. Chartres Cathedral-North Portal.



Water Color Drawing by Edward H. Bennett. Chartres Cathedral— Royal, or West, Portal (Center Door).



Drawing by Edward H. Bennett. Chartres Cathedral-Detail of the Royal, or West, Portal.



Water Color Drawing by Edward H. Bennett. Chartres Cathedral— Detail of Royal, or West, Portal.



Drawing by Edward H. Bennett. Chartres Cathedral— Detail of Royal, or West, Portal.



Drawing by Edward H. Bennett. Chartres Cathedral, Detail of Royal Portal.

#### (Continued from Page 43)

and finally, as associate with Mr. Burnham, on the plan of Chicago in 1906-1908. Since the completion of the great plan for Chicago, Mr. Bennett has devoted his time to the practice of city planning and has developed plans for many of the larger cities of the United States, and one, at least, (Ottawa) in Canada. They have all been designed on definitely architectural city planning lines, with the conviction that the great force and influence of the Burnham-McKim-Olmsted plan of Washington and the plans of San Francisco and Chicago lay in their architectural composition and design. A conviction founded on incontestible fact, and, it may be added, understood by the layman only through the effective presentation of the architects' ideas by means of their especial conventions, rendered plans and perspectives. By such means the American public has come rapidly to the understanding of city planning as the legitimate field of the designer with an architectural, rather than an engineering, training. The essential difference in the fitness of the professions, lies in the fact that architects are trained to plan in a broad, general, and monumental sense, while engineering training is rather in the details of the services of the plan.

The branch of architectural work known as "city planning," but including in its details any grouping of structures and open places (parks, boulevards, arrangement of streets, etc.) on lines of beauty with due consideration of physical, social and economic conditions, is now engaging the principal attention of many of the more advanced and best-trained architects throughout the world.

The attendance at the recent National Conference on City Planning included a hardly less distinguished body of planners than the convention of the American Institute of Architects. That the gatherings were held in New York at the same time doubtless added to the attractiveness of each. At the exhibitions of the Architectural League of New York and of the T-Square Club of Philadelphia an un-

usual number of city improvement plans were shown, while the architectural character and interest of the designs made many problems in city development clear to laymen to whom all engineering designs are "Greek". The exhibits of maps produced by aerial photography produced surprise in many amateurs by reason of their remarkable resemblance to the Beaux-Arts type of rendered plans. A comparison of a French drawing made in accordance with the conventions of the Ecole could be distinguished only by close examination from an aerial photograph of the same group of buildings. By means of the photo-graph public interest has been drawn to the meanings of the conventions of architectural drawings of plans: just as the ordinary snap-shot has made known to the general public the difference between the "English" and "Colonial" styles of residential architecture. It has not gone far yet, in either direction, but the roots have taken hold and the plants will flourish. The field of opportunity for the architect of ideas to





Drawing by Edward H. Bennett. Detail of Chartres Cathedral.



Plan of West Porch.



Plan of North Porch. Drawings by Edward H. Bennett. Chartres Cathedral.

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Water Color Drawing by Edward H. Bennett. Dome of Val de Grâce Church.



Water Color Rendering by Edward H. Bennett.

Sketch by Edward H. Bennett. Detail, Chartres Cathedral.



Water Color Renderings by Edward H. Bennett. Enamel Plaques.

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Entrance to Cathedral at Pisa. Water Color Drawings by Edward H. Bennett.



Sketch of Section for Projet, "Theatre in a Palace," Ecole des Beaux Arts.





"A Royal Box," Twelve-hour Esquisse, Ecole des Beaux Arts.

r Esquisse, Sketch Plan for Projet, "Theatre in a Palace," ts. Ecole des Beaux Arts. Drawings by Edward H. Bennett.

#### (Continued from Page 49)

utilize all that he has of imagination, training and skill in the presentation and production of those ideas has broadened again into another field of its own estate—so long held at such great cost to the public by the city and state "engineers." Yet observations and records prove that wherever a city has developed in the beautiful, orderly and efficient senses it has been due to architectural planning.

It is, perhaps, doubly interesting that a leader in such planning should have commenced his training as a water-colorist and gone on from that stage to a student of decoration before finally directing his attention to the planning which involves "heavy engineering".

Upon the point this observation brings up—the question of whether engineering or artistic training best fits a man for the big problems in life—I am reminded of the assertions made by the late Sir William Van Horne (builder and former president and chairman of the Canadian Pacific) in discussing the building of a great pulp and paper plant and railway. He said that he "would rather have one Stanford White than a dozen such chief engineers as *so-and-so*, because the artist sees any part of the earth's surface as a plane with a bump in it that is easy to get around or through, while the engineer sees bumps in every vacant lot that are insurmountable difficulties to him."

Mr. Bennett has been consultant on city planning to the Chicago Plan Commission since 1909, involving direction of design of the public improvements projected and carried to execution. These include: the Michigan Avenue project, architectural approaches and bridge, bridge houses, and abutments; South Water Street double level river embankment project; Ogden Avenue; and the great Railway Terminal projects that concern the city development; and numerous bridges, also the entire Lake Front project.

He planned military training camps of Camp Grant, Rockford, Ill., and Camp Knox, Stithton, Ky., after the entry of the United States into the World War. He also organized and is a member of the firm of Bennett, Parsons and Frost, city planners, Chicago.

FRANCIS S. SWALES.



Drawing by Edward H. Bennett. Entrance to Orangerie, Twelve-hour Esquisse, Ecole des Beaux Arts.

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#### PLATE XXIX



LITHOGRAPH BY JOHN RICHARD ROWE PROVINS.

On the other side of this sheet is reproduced one of many interesting lithographs made by John Richard Rowe as a result of his travels abroad. This, like the lithographs by Mr. Rowe which have been published in PENCIL POINTS from time to time during the past year or so, shows an excellent technique and an unusually good appreciation of the character of the architectural subject rendered. Mr. Rowe has been a student at the Ecole des Beaux Arts in Paris, in the Atelier Gromort and in the Atelier Laloux. He exhibited in the Autumn Salon in Paris, 1922, and at various art galleries in this country, including the Toledo Art Gallery and the Albright Art Gallery in Buffalo.

#### PLATE XXX



PASTEL BY TROY KINNEY "THE WARRIOR DANCE," LAURENT NOVIKOFF.

An action study that is of great value to the student in addition to being a good picture is the pastel, "The Warrior Dance," reproduced on the other side of this sheet. Here, Laurent Novikoff, the famous Russian dancer, is shown in a movement of one of the barbaric dances that form so important a feature of the work of the Ballet Russe. The action has been recorded with remarkable skill. This is due very largely to Mr. Kinney's practice of making many rapid sketches of a single subject in progressive stages of the movement so that when he draws a pastel or makes an etching his knowledge of the complete movement enables him to give an extraordinary degree of life to the action. It is interesting to note that in making this kind of a sketch Mr. Kinney frequently sits among the audience and draws on a small pad of paper lighted with a little electric flash light shaded by his hand.



DRAWING BY WALTER B. CHAMBERS MT. ST. MICHEL.

The sketch reproduced on the other side of this sheet is one of the large number of sketches made by Walter B. Chambers on one of his early trips to Europe. It shows an unusual delicacy of treatment and command of technique. Other sketches by Mr. Chambers have appeared in earlier issues of PENCIL POINTS and we have been so fortunate as to secure several others which will appear in future issues.

PLATE XXXII



DRAWING BY OTTO F. LANGMANN THE OELRICHS HOUSE, NEW YORK.

The drawing of the Oelrichs House, Fifth Avenue, New York, by Otto F. Langmann, reproduced on the other side of this sheet, has an unusually attractive tonal quality due to the fact that it is drawn on a Chinese paper of silky fibrous texture and rich buff color. The work in soft velvety black pencil strokes has an ease and freedom in keeping with the character of the paper.

# A Six Room Suburban House

REPORT OF THE JURY OF AWARD OF THE NINTH ANNUAL COMPETITION CONDUCTED BY THE WHITE PINE SERIES OF ARCHITECTURAL MONOGRAPHS

#### RUSSELL F. WHITEHEAD, PROFESSIONAL ADVISER

Judged at Yama Farms, Napanoch, New York, June 13, 14 and 15, 1925.

PROBLEM: Mandatory. The design of a useful, substantial and attractive six-room suburban house, not over 24,000 cubic feet in size, to be built of wood. The site is a rectangular lot with a frontage on the highway of fifty feet (50 ft.) and a depth of one hundred and fifty feet (150 ft.) with level grades. The highway runs east and west. It is assumed that the adjacent lots are of similar dimensions and that the local restriction provides that no house shall be erected nearer than 30 feet from the highway property line and that no building may be placed directly on either the east or west lot line.

The house is for a small family in moderate circumstances where the expenditure of every dollar is to be most carefully considered, and is to be administered without servants. It shall contain a living room, dining room, kitchen, two-fixture lavatory, three bedrooms, one bathroom, entrance into hall, vestibule or living room and a separate service entry. There shall be one closet for each bedroom, a linen closet and a coat closet. No bedroom can be smaller than 90 square feet in area. A cellar is required. If design provides space for room in attic, stairway shall be shown. The design shall provide one open fire place and a porch or porches. The architectural style is optional, originality and variation of treatment from the traditional, which is sound architecture and shows a proper regard for the qualities of a wood-built house will be welcomed. The designer may select any section of the United States for the location of the house. The territory chosen shall be plainly marked on the drawings.

Due consideration should be given to the lengths and widths of lumber used for floor joists, studs and siding with a realization of those points where the price increases out of due proportion with the increased length and width required. A similar knowledge in regard to standard sizes of doors, windows and glass areas.

COMPUTATION OF CUBIC CONTENTS: Measurements must be taken from the outside face of exterior walls and from the level of the cellar floor in all parts excavated or from the bottom of floor beams in any unexcavated por-tion to the average height of all roofs. "Average" shall mean a point at half the distance from the top of the wall plate to the top of the ridge. Open porches are to be figured at one-fourth their total gross cubage if they project beyond the main bearing walls, the height to be measured from the finished grade. One-story wings or bays or enclosed sleeping porches two stories high shall be figured at their actual cubage, measure-ments taken as stated above.

All cubage figures will be carefully checked by a representative of Mr. Whitehead before designs are submitted to the Jury. Designs exceeding 24,000 cubic feet will not be considered.

THE nearly three hundred drawings received in *The White Pane Series* Competition for a Six Room Suburban House presented a number of interesting and somewhat unusual problems to the members comprising the Jury of Award, when they met to judge the competition on June 13, 14 and 15, 1925, at the invitation of the Professional Adviser.

In the first place, the Jury felt that the increase in the amount of the awards offered for this competition rendered it especially desirable that the most careful consideration be given, not only to the designs submitted, but also to the requirements of the competition program, and the extent to which the competitors had studied and perfected their designs in accordance with a fair interpretation of these requirements,—and especially in their undertaking to select the first prize of \$1,000 did the Jury painstakingly analyze the best of the designs submitted in their endeavor fairly to award this considerable prize. As usual in any competition of this sort, it was not diffi-

cult to reduce the competitors from about 150 to practically a third of that number. These 50 or more plans then received more careful scrutiny,-and, after some consideration, about half were again eliminated, and the major part of the Jury's time thereafter was taken up with a consideration of those that remained. It should in all fairness be stated, however, that before making the final awards, the Jury several times went over the plans that had been previously discarded; the entire group was looked over a second time and a few designs taken out for more careful study and analysis with those that had received previously most serious consideration; while the group of approximately 50 just referred to, was gone through not once but several times by the Jury as a whole, and several other times by individuals of the jury in an endeavor to discover any meritorious plans that might perhaps have been overlooked.

Even after the Jury had winnowed out the best dozen or fifteen designs, from among which they were fairly well assured they would award not only the prizes but most of the mention designs, the next larger group of 25 or more designs was again gone through, and one or two drawings taken from it to receive final consideration by the Jury in the selection of the prize and honorable mention designs.

When first the competition group was studied, the Jury endeavored to meet upon a tentative set of prize designs; in the endeavor not only to establish a standard of gradation, based upon the solutions brought forth by this competition, but also to assist themselves in arriving at a common agreement in regard to the best type of solution of the problem set by the program. A considerable variety of opinion within the Jury immediately developed.

As it happened, one or two of the Jury at first felt that this competition had not brought forth any one design that was obviously superior to all of its competitors. In a number of cases it was possible unanimously to agree that a certain competitor had achieved an unusually successful and compact plan, or another had developed an undoubtedly interesting and workable elevation; but it did not at first appear that any of the designs which attracted attention, either from superior plan arrangement or architectural treatment, had been completely developed by the competitor to a point where, from both points of view, his design was undoubted-In some both both both of view, his design was thisded-ly of the first place. At one period of the discussion it al-most began to appear that the Jury felt disinclined to award any one design the first prize; while at the same time it be-came apparent that, with a first prize design once accepted by them, the second, third and fourth prizes might easily be agreed upon.

The result of this threatened impasse was to send the Jury once more to a study of the entire group of plans submitted, and cause them to make-for their own consideration in awarding judgment—a new and stricter analysis of the competition program. The result of that analysis brought out, as it seemed to the Jury, inevitably and logically a first prize design; upon which they shortly came to unanimous agreement, and which they hope all those who have made a careful study of the competition programwhether or not they finally submitted drawings-will, after mature consideration, also be willing to accept as best worthy of that position.

To summarize, the program stipulates that consideration be given to the following points, in the order named : First, excellence and ingenuity of the plan; second, the architectural merit of the design and its fitness in expressing the material-wood-of which the house was to be built; third, the practicability of its construction; and fourth, the ap-propriateness of the design to the given site. Of these four the first two are obviously of major im-

portance. The appropriateness of the design to the site was evidently a consideration not thoroughly understood by most of the designers,-and at first sight may not appear of great importance to the result. If the reader of the program interpretated this merely to refer to the natural requirements of the site, it had not much importance; because the lot was there described as level, without any markedly unusual physical characteristics, and all the competitors were allowed by the program to select between the alternatives of facing the house upon either the south or north side of the It was interesting to note that by far the greater street. majority chose to face their house to the north rather than to the south. The important, and perhaps not at first obvious, meaning of this stipulation, was contained in the human factor which had chosen to develop this naturally rolling and nearly level plot into lots so narrow in width as 50 feet each,—and this was the stipulation which a great many of the competitors failed to take into consideration. It was also, as it happened that factor which was most important in the selection of the design awarded the first prize!

So far as practicability of constructions was concerned, most of the competitors met this requirement by showing, in some small section of the detail portion of their dwelling design, a delineation of the manner in which the structure and ornament were sectioned and put together-using the customary widths and sizes common in the building trade, in the employment of wood. But back of this simple requirement there was also another factor which many of the contestants failed fully in realizing; and this, too, was a factor of some importance in the final critical analysis of these house designs. There were certain of the designs, for instance, where wood quoins had been employed,-without seri-New England colonial precedent—that these details were, because of their stone derivation, of doubtful desirability in a house required to be designed for and built of wood. It must at the least be acknowledged that they introduced an element of certain and unnecessary expense which it was indicated by the program it was desirable to avoid whenever possible.

A number of the other designs also could not be successfully carried out without the introduction of expensive and sometimes undesirable elements,—such as the use of a large deck in the roof. Others required the employment of elaborate pilasters or columns, or in some other particular perhaps demanded considerable expenditure along the line of expensive detail, which—while acceptable, and found in a greater majority of our later colonial work—would today nevertheless impose a considerable expense in the matter of labor, and perhaps unusual thickness of material,—whereas these factors were not of any great economic importance, under the conditions existing at the time the original models from which these houses were designed had been built. There exists in Wiscasset, for instance, a beautiful colonial staircase that, according to local legend, required one thousand working days for its construction,—which, with labor obtainable—as it then was—at the rate of a dollar a day, would place such an element of design upon an entirely different basis than today, when such skilled labor as it would now require would cost nearer ten to twelve dollars the day !

Even for the consideration of the plans upon the first two points stipulated in the program, however, it became necessary for the Jury to establish for its own guidance a quite definite understanding of the factors controlling the problem. They might be briefly enumerated as follows :--while the program allows two alternatives, either the northern or southern frontage for the house, in a solution of the problem; the Jury unanimously agreed that a house with a northern frontage should be given preference—for the reason that a house built within 30 feet of a street, which might, in the uncertain development of our American communities, easily become a main travelled thoroughfare, a set back of only 30 feet was not sufficient to give to the occupants of the house any privacy; or, indeed, any important use of the front 30 feet of the lot area. This meant that the portion of land at the back of the house would become of greater useable value to the actual occupants of such a dwelling; and consequently it would follow that the development of this property itself should be carefully thought out with regard to the details of arrangement of the plan; and the additional fact that the rear of the house would enjoy the southern frontage, with its valuable winter sunlight, re-quired that every endeavor be made by the designer working on this alternative arrangement to take full advantage of this point in the disposition of his window fenestration; as this rear, or southern facade, would naturally become the living side of the house.

It was further agreed that, where the program had so expressly set the limitations of such a very narrow lot as part of the competition schedule, it was unfair not to maintain this requirement while judging at least the design to be selected as the "best" solution of the problem. It is a fact, of course, that a great many of the competitors chose to forget this important detail,—or perhaps merely assumed that the owner of the house would naturally become the purchaser of two lots rather than one; or that, because of his neighbor's not building, he would enjoy the benefit of their property,—but if such had been the intention in establishing the requirements of the program, would not the competitors have been dealing with the problem of a corner lot rather than an inside lot in the block? A corner lot would also be more expensive, and very probably outside the financial resources of a prospective house owner who is forced to limit his desires to the least expensive type of dwelling that was indicated as being in mind throughout this entire program. Consequently, he would probably also be unable to indulge in the comparative luxury of purchasing two lots, if it would be possible for him to obtain a convenient and possible livable dwelling upon a single lot!

sible livable dwelling upon a single lot! Therefore the Jury forced themselves to regard the limitation to the 50 foot lot as of prime importance in selecting the best solution of the problem they were considering. Following out this line of reasoning it next became obvious that, with similar types of buildings on the two neighboring lots; a plan of only 30 feet in width, making no more use than was absolutely essential of the two east and west elevations—practically only for air or sunshine—would make a more convenient and comfortable dwelling than a house crowding closer upon the lot lines,—and therefore closer to the next neighboring dwellings—and depending to any great extent upon the outlook upon either side. For instance, even a 30 foot house, placed upon a 50 foot lot, would be no more than 20 feet away from its neighbors

For instance, even a 30 foot house, placed upon a 50 foot lot, would be no more than 20 feet away from its neighbors upon both sides. This 10 foot set-back from the lot line is, as a matter of fact, often a provision of the town building law in many communities. Even if the builder of a house was allowed to put his structure within 5 feet of his side lot line, it is probable he would keep the dwelling toward the eastern part of his lot in order to secure greater space and outlook along the west,—and it is probable that his neighbors would then also follow that same procedure. Thus the houses would again be separated by no more than 20 feet—providing they were all of but 30 foot width. If the builders, however, took advantage of this 5 foot side restriction to increase the width of their structure to the 40 foot wide dwelling that was thus allowable, their neighbors would probably do likewise; and in that event *all* the occupants would be suffering from the results of narrowing the space between the houses to a total of only ten feet,—which would are lowellers in the privileges of sunlight and outlook for all dwellers in the community.

This line of reasoning brings us inevitably to the conclusion that the house depending least upon side outlook; most self-contained upon its own lot, must inevitably in the long run remain the most satisfactory type of dwelling in a closely built-up rural or suburban community of the type we are forced to consider. Even if, at the time his house is built, adjoining lots were undeveloped,—and the owner was thus led to make use of this portion of his neighbors property; or depended upon it for important outlook, light or air, he would but find himself additionally handicapped when, in the course of development of any growing American community, these adjoining lots came to be built upon and he would therefore necessarily lose his former privileges. A porch at the side of the dwelling, for instance, might have its air and outlook entirely cut off, whereas a porch faced at the rear and limited to the middle portion of the house would be in a position to be the least affected. The planting along the lot lines-which was the type of develop-ment indicated in most of the drawings submitted-would also tend to concentrate the owner's outlook on the south or morth—as the case may be. Merely in the normal enjoy-ment of the major portion of his lot, with this accompany-ing sunlight, he would come most to depend upon the rear or southern part of his property; leaving the street frontage, with its possible undesirable noise and dust, and decreased sun exposure in winter-the less occupied or less used portion of his property.

After some argument, the judges came to entire agreement upon this as the best type of solution for the problem; and set themselves to find, from among the designs submitted, that one which best took advantage of the limitations thus prescribed. By this means did they finally come to unanimous agreement upon the drawings to be awarded the first prize; and any other analysis of the plans, along the lines indicated, they believe would substantiate their judgment in making this their selection. To give as much of advantage as was possible to that group of the competitors who faced their houses to the south upon the street, the second prize was given to a design utilizing this alternative orientation.

Before coming down to a consideration of the drawings in detail, however, it is perhaps desirable to make certain general criticisms upon the drawings as a whole. While many—in fact, most—of the designs, maintained a high standard of excellence (the present competition being, in the opinion of those who have had the opportunity of keeping track of these competitions for several years, a marked advance in general upon previous efforts) it nevertheless soon developed that a marked lack of originality in design was in evidence in the drawings that the Jury were considering. Many of the competitors had adopted, as the basis of their designs, commonplace or conventional solutions whereas it was the intention of those connected with these competitions to endeavor to obtain a higher standard of design than it is usual to find in the ordinary type of American suburban or rural development.

Many of the contestants had looked no higher than the average type of house they could find about them. Others had gone back to the colonial cottage for the inspiration of their architectural expression of the plan; and again, in this group, a lack of real understanding of the originals of our colonial architecture developed; and the designers of this type seemed mostly to obtain a commonplace conventionality of classical expression. It was indeed noticeable of this small house competition,-far more than is usually the case -that many designs, afterwards discovered as having been submitted by western or middle western contestants. had been based quite closely upon the study of the later architecture of our eastern colonies,—and in fact, no indication of any local regional grading of the designs was to be discovered by the Jurors. Doubtless this was because of the re-quired use of the material, in many instances,—but certainly duffed use of the material, in many instances,—but certainly it is possible to find solutions of the wooden dwelling, de-veloped from other types of wood construction than those chosen by most of these competitors! Indeed, our own earliest types of dwelling in this country were themselves immediately derived from a quite different style of English cottage of the Tudor period—usually entitled "half timber" construction.

The Jury soon found themselves entirely in agreement upon a factor which has unfortunately, in the past too often influenced the results of competitions, in this country as well as abroad. Whereas, in the preliminary sorting of the designs, it was inevitable that one should be immediately attracted by a pleasingly composed and cleverly drawn perspective; yet it was found, in the closer study of the designs that was later undertaken, that these well presented exteriors had a constant tendency to move down the list in their placing; either through some real weakness of plan development, or as a closer study of the elevation brought out a better appreciation of the true merit of the house-design itself, quite aside from the engagingly appealing quality of the perspective's scenic background in which the house had been located by the competitor—often at a total disregard of the narrow limitations required by the 50 foot lot stipulated in the program.

The Jurors were also unanimous in agreement that archi-tecture is a process of constructional building, not a mere matter of draftsmanship or cleverness in drawing; and it was their endeavor to judge of the appearance of these houses entirely upon the basis of how they would show up if built in wood, along the lines proposed by the contestants in any group of American suburban or more rurally located dwellings. An appealing perspective composition, therefore, often largely depending upon a beautiful tree or a slow growing garden development, confusing the true value of the exterior as an architectural design, was rather inclined to arouse the Jurists' suspicion that the house was perhaps and in the estimation of the competitor himself, it had required such doubtful adjuncts in order to interest either the Jury or its future owner in the proposition! Consequently the Jury were all the more inevitably thrown back upon the careful analysis and study of the plan, and its required elevations, for the final grading and the proper architectural standard that the design was to hold in their estimation. It might again be said that far too many of the competitors avoided giving the proper amount of study to their plans, and consequently failed to perfect them in details of greater or less importance; and it might also be stated that the greater majority of the exteriors, as presented in the per-spective, appeared to greater advantage than they actually would, when realized in construction upon a lot in some American suburb or village community. On the other hand, it is fair to say that in several instances, based upon the judgment of the elevations rather than the accompanying perspective, that the house would appear to even better advantage than it had been within the ability of the competitor to indicate in his perspective.

It might be of interest also to add, that the drawings grouped themselves into two major classifications; first, of over-large projects, in which case the designer was often put to considerable labor to justify his design, or in some cases that the houses were so extremely modest as probably to fail of appeal to the majority of the American public; who are, after all, too inclined when purchasing a house, to demand something that appears to be more expensive and pretentious than it actually is-a matter rendered considerably difficult to anyone limiting himself, in perfecting his design, strictly to the requirements of the 50 foot lot. It is also interesting to note that, of the twelve designs which have received mention or place, eight could be classified as belonging to the informal rather than the balanced classical composition. This was not true of the majority of the plans submitted; but a result of the demand on the part of the Jury for maintaining as high a standard of interest and imagination as possible in judging the competition, and therefore-in cases where other points were felt to be sufficiently equal-preferring the unconventional to the conventional solution.

Others of the competitors, who had gone to some extra effort to obtain an interesting composition; had so broken up the sub-division and the general lines of the building, as to obtain no one harmonious composition, but rather a grouping of several details of such nearly equal importance as to cause them to compete with one another. Simplicity in treatment was also regarded by the Jury as to be desired in a solution of the competition, particularly when the designer was able to produce this effect of simplicity by the lack of expensive detail requiring special mill work or labor in its construction,—and instead secured results by a straightforward use of easily available and inexpensive sizes and shapes of his material.

It was, in several cases conceded that designs which otherwise might be classed as overpretentious or too expensive to construct would, if savings such as were indicated above had been held in mind by the designer, have come well within the limitations established by the competition,—because of the resulting interest and architectural success secured in these simpler plans by the good judgment thus exercised by the competitor.

As a rule, it was discovered that the sketches made of the interiors were not as good, either in presentation or in design, as the exteriors. Oftentimes the competitors had endeavored to obtain interesting interiors by entirely ignoring the element of expense, and including complicated and costly arrangements of paneling in the execution of their interior design. Incidently, it was interesting to note how prevalent was the use of the earlier type of upright paneling, without cross stiles, in these interior designs,—and how generally fortunate the struggling owners of these houses were in having inherited expensive ship models!

The Jury was interested and pleased to observe that a true appreciation of the best uses of the required material, wood, was generally prevalent among the contestants. It was also noticeable that a considerable number of the contestants had a true understanding of, and had given much study to, the practical requirements of the arrangement of a kitchen for convenience and economic use in the small house, where the wife of the owner would be expected to do most of the housework herself.

To come now to the more detailed consideration of the designs themselves. The one finally placed first, No. 88, selected on the basis already stated at length, seemed to the Jury in many ways to be the nearly ideal solution of a house required to be placed upon a very narrow lot,—altho it was also subject to criticism in one or two minor particulars which some further study of the plan could largely eliminate. The entire northern exposure of the house is insulated from the living portion by hallway, staircase, bathroom, lavatory and closets. This brings, upon the first floor, a possible criticism in the small alcove on the north side of the living room,—so small as to be of doubtful value in obtaining outlook upon the street, or privacy or isolation for the possible student (in fact, the bookcases placed in this alcove might probably better be used as decorations on the walls of the living room); but it is obvious that some further study might bring the living room actually out upon the street frontage of the house—if that was the desire and intention of the competitor,—or rearrange the lavatory so as to use part of this space and possibly thus obtain a larger hall and entrance. Many of the lavatories shown in other plans were, by the way, so small as to be absolutely unavailable for the purpose for which they were intended. This same criticism is also true of some of the service entrys. The one on this plan is minimum in size, but is nevertheless sufficient to protect the opening of the outside door into the house, and provide space for the refrigerator at a position convenient to the kitchen. The kitchen itself is perhaps too closely related both to hall and dining room; although the Jury never finally settled among themselves as to whether or not it was desirable in a small house still to maintain a pantry or china closet to be used as a passageway between kitchen and dining room! In those cases where a dining alcove is placed immediately out of the kitchen for instance, this separation has obvious customary advantages. Too close a relation of kitchen to the front door has also known disadvantages.

The porch in this plan does not depend upon side outlook, nor is it so large as to cut off southern sun from either dining or living room. The dining room is so placed as to get the eastern sun, the living room such western sun as is available upon so small a plot plan. The width of the house, 29 feet 6 inches, in undoubtedly the minimum possible in a problem of this sort, with the conditions such as we have already established. The second floor is well arranged, and the upper rooms are as large as could be expected in a plan of this sort; while the simplicity of its arrangement and compactness both make for low cost in building,—a matter that is further established by the simplicity of detail shown by the designer in his exterior.

Possibly the circular windows are unnecessary in the design. They serve merely to provide light in closets, a mat-ter of doubtful practical value, although in such a climate as Baltimore they would be very desirable for obtaining a through draught. It might perhaps also have been better, with so important a group as three windows that appear over the entrance, to have lighted the second story bath from the side of the front gable and given all the window space to the hall-which would have avoided the practical defect that, in the evening, at least, the facade of the house would look unbalanced from the fact that then two of the windows of the group would be lighted, while one of the three would generally remain dark. The plot plan could be criticized from the fact that the drying yard—indicated in the extreme rear of the lot-is at a location very remote from the house; and finally, the interior chosen for illustration by the competitor hardly seems in its development to justify the importance he appears to have placed upon it. The designer is to be commended for the fact that he has not depended upon treillage or planting for the appearance of his house, although his perspective is interestingly and well rendered and presented. He also has the good judgment to make his gable toward the street of less importance in height and treatment than the prevailing roof line running east and west.

The design placed second, No. 58, is an example of the solution where southern frontage upon the street has been adopted by the competitor. It contains much to commend it, but was at the same time regarded by some of the Jury as being a decidedly less acceptable solution of the narrow lot requirements of the program. It depends in large part upon the fact that adjoining property remains unbuilt upon, for its value to those living within the dwelling, and in fact the competitor indicates that he himself approaches the house from this point of view by the location from which he has presented his perspective—one impossible if the house on the lot at the east of his dwelling had been built! It is, however, an ingenious and clever solution of the development of the narrow lot by the placing of the narrowest possible house upon it.

The designer is probably to be criticized for not availing himself to the full of the advantages of the southern exposure which he has selected. He blocks the south end of his living room—which is practically his only street outlook by placing his fireplace entirely across that end of the room. In doing this he prevents any door or French window opening directly upon the street porch,—and the latter itself is of somewhat dubious value, as it would certainly provide no privacy to those using it, if the street was an important one, or the location of the house was in a suburb near any large city. It is true that the exterior treatment given this solution indicates more of the village or country type, as the one that was in the mind of the competitor. The arrangement of the kitchen, rear entry, and the service portion of the plan is very good, especially the convenience of access to the cellar stairs. The toilet is too small. Upon the second floor the author again fails to obtain for the occupant of the intermediate bedroom the south outlook to which he is entitled. The staircase coming directly from the living room is not to be considered as a wholly desirable arrangement by the Jury; nor is the staircase carried up between walls generally attractive. Nevertheless, accepting the disadvantages of the latter, the staircase opens from the nearest possible point in relation to the entry.

The designer, in the judgment of the Jury, has made the most of the artistic possibilities latent in his plan. His design is simple, unpretentious, well composed, small in scale, homelike and attractive,—and both the sides presented in his perspective and the west side shown in his elevation, are pleasingly and simply presented. He has also produced by simple means a pleasing suggestion of his living room, with atmosphere and homelikeness both apparent. His elimination of all expensive detail requiring special millings or labor, would tend to counteract the somewhat greater-and therefore, more costly-amount of exterior wall surface presented by his solution of the problem. However, the square plan is not always the least expensive to build. The long and narrow plan possesses inherent advantages of short joists length and low roof span, to compensate for its economic disadvantages in length. Both the exterior and interior of this design possess an unusual amount of architectural interest that is harmonious with the plan,—once the long and narrow house is accepted as a plausible solution of the problem of the narrow lot. It nevertheless remains a design that would normally be better suited to a more rural development, with wider lots, or to a village rather than a suburban site.

The design given third place, No. 117, would have been placed higher if the Jury had not felt that the facade was lacking in originality and architectural interest. There is also a question whether the provincial type of house having the early overhang of the second story, would be likely to possess as elaborate a type of cornice as indicated in this The plan is nevertheless the best from among the design. number that adopted a similar outline for their solution. It is altogether too wide for the lot, however, running to 35 feet outside the chimney, in width. It is economical to construct, so far as the plan arrangement is concerned; and simple and convenient in the disposition of the room, par-ticularly on the first floor. The kitchen is an unusually good working space, with a pleasant breakfast nook to the north. While the kitchen does not open directly into the front hall, it is convenient to the cellar stairs and lavatory. It does not have sufficient separation from the dining room; and the plumbing, as planned, would require two stacks, an element of some additional expense in a small house plan. The porch would be only 6 feet away from the west lot line, which is too close for proper privacy for the inhabitants. The interior perspective shows a simple and interestingly presented room.

The fourth design, No. 126, is acknowledged one of the most competent. It presents a small cottage, with a well arranged kitchen upon the north, and dining room and living room across the south side. The plumbing is not well arranged; as three stacks would be required,—far too expensive a disposition for such a small house as this. The kitchen, also, is not sufficiently separated from the dining room, and again the western end of the porch comes immediately upon the side lot line. Both exterior and interior perspective are adequately but simply drawn. The entrance doorway is perhaps almost too modest for even so modest a cottage as this, and it is more than questionable whether it is desirable to divide a 50 foot lot in two with a fence, as has been shown in the perspective and plot plan. Other than the plumbing, this design would undoubtedly make an attractive cottage house and one that would be inexpensive to build.

The eight mention designs again presented to the Jury a problem that caused considerable discussion,—and they were only selected after painstaking thought and consideration of all possible contestants for this honor. A large part of the drawings submitted in the competition were again gone over by the Jury, a number of plans were drawn out and compared in connection with those first tentatively set aside to receive mention. After making one or two changes, the Jury came unanimously to the conclusion that they had made what was, in their judgment, the best selection from the material that was available. They did not attempt to place these designs in any order of excellence; feeling that, as all were to be given an equal honorarium, any such attempt would be invidious and unnecessary under the circumstances.

invidious and unnecessary under the circumstances. The design shown in No. 129, at several times in the discussion, was considered for a higher position; but the close study and analysis of plan and elevations (disregarding the engaging character of the perspective, which portrays such a house on a country or village site of considerably larger area than the lot described ;--and as it might appear after twenty or twenty-five years of occupancy), convinced the Jury that it was not, on its merits, as good as the designs that were finally given preference. The plan has a toilet evidently entirely for family use, as it is entered from the inside of the house only through the kitchen. The living room is rather narrow for its length, the staircase opens from it, and the entire length of the room has to be traversed in crossing from the entrance vestibule. The second story plan confesses its weakness by the corners of two rooms cut off at the north; and while the bath room is unusually large and commodious, the exterior of the house-as shown in the two elevations-is not as well nor as simply composed as many of the other contestants. It seemed to the judges a somewhat forced and trickily devised scheme, while the interior perspective shows an altogether incorrect pitch to the staircase, and the generally illiterate arrangement of panels over the fireplace, which produces a center stile. The width of the house, including the porch, is 38 feet; and the driveway has been placed upon the side near the entrance. There could only possibly be 5 feet from the edge of the porch to the adjoining lot line,-therefore a considerable amount of the overgrown garden shown in the perspective (so essential to the appearance of the house from this point of view) would actually be growing upon the neighbor's property! The beauty of the rendering is accepted without remark, other than the comment that it is obviously not as well adapted to the necessary reduction as some of the simpler perspectives.

No. 78 is another design where the clever emphasis of its good points in the perspective is calculated to blind one, at first sight, to the defects that develop in its architectural treatment, when one turns to the study of the elevation. The plan is well arranged, although, as the house faces to the south, only one room upon each floor has windows opening from that exposure. The kitchen is unusually well separated from the dining room and hall, by the convenient arrangement of pantry, refrigerator, entry and passage to the front door and cellar stairs, which are compounded in this plan within the one area. The plumbing is also unfortunately separated, three stacks again being required in its installation: while a considerable amount of space is wasted by extending the staircase so far to the east as was done, in order to work out the roof scheme shown in the exterior. Attention also should be called to the discrepancy between the treatment of the hipped gable toward the street, and the extended roof ridge on the gable to the north. In this planas in many others-provision is not made for a convenient laundry yard; possibly on the basis that a small family would normally send the laundry out; allowable enough, and possibly the custom where there are no small children, when a certain amount of laundry work is both necessary and desirable in the house,—but, even with the childless married couple in view, a certain amount of light washing is always conveniently to be done in the house, and little, if any, provision for permitting this appears in most of the plans shown in the competition.

No. 90 shows a nice and simple plan, with the practical inconvenience of a deck on top of the roof, a kitchen that shares the difficulties of the inside type of kitchen of the prize winning design, and a toilet on the first floor altogether too small for practical use. The arrangement of the plumbing requires two soil stacks, and a certain amount of space to be wasted in the hall on both stories. The house faces north and is placed by the designer in the center of his lot. While evidently he has striven to avoid a conventional arrangement in the street facade, it is doubtful if he has in exchange succeeded in obtaining anything that is either very original or strikingly successful in result. No. 66 is to be commended for an effort to avoid a con-

No. 66 is to be commended for an effort to avoid a conventional elevation. In referring to earlier colonial precedent for his idea and treatment of overhang, the competitor has nevertheless succeeded in striking out a novel arrangement, despite the deck shown on his elevations (which could probably be eliminated by further study without injury to the appearance of his design). The house substantially conforms to the economical attainments of the square plan; being 29 feet 6 inches wide and 27 feet deep. In carrying the overhang entirely around the building—an element, by the way, of additional expense, particularly in some localities where a "balloon frame" type of construction is usually employed,—it seems to suggest its derivation from the "block house" or "garrison house" still to be found in some old New England communities. The kitchen is convenient, contains a small breakfast alcove, and is separated from the front door,—but it has the awkward form of a staircase carried up between walls. The plan is complicated somewhat by the arrangement of the plumbing—although it could probably all be gotten into two stacks—and by the division of the chimney support into two piers and the provisions otherwise made to carry it arbitrarily to the point in which it was desirable for it to appear upon the front elevation. In the opinion of some of the judges, the eight sided window used as a central feature upon the second story was not wholly successful.

No. 98 was a design, which was the cause of considerable discussion during the process of the competition judgment. Undoubtedly one of the most interesting in its exterior expression, harking back to well-known precedent in New England; and one of the few providing a convenient and well enclosed service yard,—it was nevertheless felt to be a necessarily expensive type of arrangement to build,which finally prevented its being placed for a prize in this competition-despite the undoubted superior interest of the house, and the cleverness of the plan, which provides an unusually good kitchen, well separated from the dining room—if a somewhat relatively long distance from the front door. The rear entry, with relation to kitchen and cellar stairs, and supplying wood for the living room fire-place, is exceptionally well placed. The plumbing is so separated so as to require two large size stacks, and the "garage porch" is placed too near the street for privacy, and has necessarily to be estimated as a porch in regard to the cubic contents, as provided in the limitations of the program. The bedroom over it is at a considerable distance from the bath, and the roof is so very broken as to be necessarily rather expensive to build. Nevertheless, the house presents—next to the second prize design—what is undoubtedly the most in-teresting and "different" solution obtained in this competition, and the treatment of the interiors indicated would produce rooms of atmosphere, and allow for taste and individuality in furnishing and decoration. Both exterior and interior perspectives are somewhat sketchily, and possibly incorrectly, rendered,-and only an adoption of a small glass-size-6 x 8 inches; for each; historically accurate, by the way-keeps the house in scale with its dimensions.

No. 52 is a similar type of plan to the one given third prize. In the judgment of the Jury it was not as successfully worked out,—although the kitchen is perhaps better separated from both dining room and hall. The second story hall wastes a certain amount of space, however; and there is very little opportunity to get connection between kitchen range and chimney, which in some sections of the country would be required,—and is therefore somewhat of a disadvantage. The interior is simple and well suggested, the exterior endeavors to emphasize the length and lowness of the house by the frieze treatment shown. The front door detail treatment shows a striving for "something different," that is entirely adaptable to construction in wood, without perhaps very much improving upon established colonial precedent! The house would not be an inexpensive one to build, however, on account of the number of details called for by this design, and the amount of unnecessary and additional lattice work shown upon the lot.

No. 99 is an interesting and simple design. The plan is somewhat different from any other given place or mention by the Jury. The breakfast porch may be treated as either an indoor or an outdoor room, apparently; and while the entrance detail shown is a bit wide and crude in composition, and the interior sketch of the fireplace not very well thought out nor developed,—the designer has, nevertheless, obtained a pleasing grouping on the exterior,—by a simple expedient which apparently did not occur to any other competitor. It gives the house a pleasingly informal character, makes a more artistic composition and apparently does not detract from the workability of the plan.

No. 39 was another design that caused much discussion among the Jury. It was believed to be an entirely logical development of a house fronting north upon the street, but one or two members felt that the kitchen was thrown too far forward from the main house for appearance,—while it is nevertheless well arranged for use, well separated from dining room and hall and, although it necessitates a second stack in the plumbing, this stack need be only a 2 inch one.

(Continued on page 96)



FIRST PRIZE DESIGN Submitted by Owen Lau Gowman, New York, New York.



FIRST PRIZE DESIGN, Detail Sheet. Submitted by Owen Lau Gowman, New York, New York.



SECOND PRIZE DESIGN Submitted by Arthur W. Coote, New York, New York.



SECOND PRIZE DESIGN, Detail Sheet. Submitted by Arthur W. Coote, New York, New York.

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THIRD PRIZE DESIGN Submitted by Amedeo Leone and H. A. Surman, Detroit, Michigan.



THIRD PRIZE DESIGN, Detail Sheet. Submitted by Amedeo Leone and H. A. Surman, Detroit, Michigan.



FOURTH PRIZE DESIGN


FOURTH PRIZE DESIGN, Detail Sheet.



MENTION, Design No. 129. Submitted by Richard M. Powers and Theodore T. Jordan, Boston, Massachusetts.



MENTION, Design No. 129, Detail Sheet. Submitted by Richard M. Powers and Theodore T. Jordan, Boston, Massachusetts.

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MENTION, Design No. 98. Submitted by William Stephen Boice, Yonkers, New York.



MENTION, Design No. 98, Detail Sheet. Submitted by William Stephen Boice, Yonkers, New York.



MENTION, Design No. 78. Submitted by Elliott L. Chisling and Allmon Fordyce, New York, New York.



MENTION, Design No. 78, Detail Sheet. Submitted by Elliott L. Chisling and Allmon Fordyce, New York, New York.



MENTION, Design No. 39. Submitted by Sherburne J. Watts, Dorchester, Massachusetts.



MENTION, Design No. 39, Detail Sheet. Submitted by Sherburne J. Watts, Dorchester, Massachusetts.

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MENTION, Design No. 66. Submitted by J. Douglas Lorenz and Wirt C. Rowland, Detroit, Michigan.



MENTION, Design No. 66, Detail Sheet. Submitted by J. Douglas Lorenz and Wirt C. Rowland, Detroit, Michigan.





MENTION, Design No. 90. Submitted by William Platt and Henry A. Cook, New York, New York.



MENTION, Design No. 90, Detail Sheet. Submitted by William Platt and Henry A. Cook, New York, New York.



MENTION, Design No. 52. Submitted by Charles W. Cleary and James N. Holden, Boston, Massachusetts.



MENTION, Design No. 52, Detail Sheet. Submitted by Charles W. Cleary and James N. Holden, Boston, Massachusetts.

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MENTION, Design No. 99. Submitted by Walter J. Thies, Dayton, Ohio.

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MENTION, Design No. 99, Detail Sheet. Submitted by Walter J. Thies, Dayton, Ohio.

#### Published Monthly by

### THE PENCIL POINTS PRESS, Inc. Publication Office-Stamford, Conn.

Editorial and Advertising Offices - 19 East 24th Street, New York

RALPH REINHOLD, President F. W. ROBINSON, Treasurer EDWARD G. NELLIS, Vice President and Scretary CLUTE, Editor W. V. MONTGOMERY, Business Manager

EUGENE CLUTE, Editor E. CLEAVER, Associate Editor RAY D. FINEL, Advertising Manager

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#### THE AMERICAN ACADEMY IN ROME

F ROM a letter recently received by C. Grant La Farge,  $\Gamma$  Secretary of the American Academy in Rome, from Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we quote the following:

"About 175 works were shown at the annual spring ex-About 1/5 works were shown at the annual spring ex-hibition, which was inaugurated on the morning of the 16th of May in the presence of the King of Italy, the American Ambassador and the members of the Academy. In the afternoon the exhibition was opened to the public and a program of the works of Randall Thompson and Winter Watts was given in the dining room of the main wilding. About three hundred energy attended the same ounging. About three hundred guests attended the con-cert, which comprised a suite for piano and five odes of Horace for mixed chorus, by Randall Thompson; two Hawaiian songs, by Watts, were sung by Luigi Nardi. The Choir of San Salvatore in Lauro gave the odes of Horace under Thompson's direction. About three hundred guests attended the conbuilding.

Horace under Thompson's direction. "The distinguishing feature of the show was the display of one of Mr. Blashfield's executed mosaics, laid out on the Common Room floor. Lascari, who has this work in charge, showed portraits and figure compositions. "We were unfortunate in being able to show only re-productions of Frank Schwarz's Anticoli triptych. The deformation of the formation the second

draftsmanship and disposition of the figures in the com-position, as indicated in the photographs of the executed work and preliminary studies, attracted considerable attention.

'Floegel, senior painter, had a group of stained glass "Floegel, senior painter, had a group of stained glass studies, frescoes, copies and studies of decorative details. Both sculptors, Stevens and Meyer, displayed busts, fig-ures and small sculptures. Stevens had ten etchings not ap-pearing on our catalogue. Antonio Di Filippo, visiting stu-dent in sculpture, contributed eight works. "Norman T. Newton, landscape architect, showed among other drawings and sketches, three very fine ren-derings of his study of the Villa Medici in Florence. "We were fortunate in receiving the news of the col-laborative prize award in time to announce the winners

laborative prize award in time to announce the winners to the public at the beginning of the exhibition. Messrs. Marceau, Bradford and Camden, architect, painter and sculptor, had the prize design, a memorial chapel. Mar-ceau has twice been a member of a winning collaborative

team. "Paul Simpson, visiting student on the Le Brun scholar-ship, contributed fifty water colors and pencil sketches of unusual charm and Frederick Woodbridge, another visit-ing architect, showed five drawings of the restoration of a commercial building at Ostia and a restoration of a tri-umphal arch at Antiochi, Pisidia.

"Floegel, senior painter, is finishing the third-year com-position, making further studies of stained glass, and he

recently requested permission of the Vatican authorities to study the frescoes in the Sistina Chapel in order to make a careful examination of the technical treatment of

the compositions of the frieze. "Stevens, senior sculptor, is having his standing figure, called Alba, cast in bronze. He has recently moved much of his work into storage space at the Academy to permit himself to move about more freely while finishing his group and relief. and relief.

"Newton, landscape architect, and Bradford, painter, are in Florence. Deam, architect, and Finley, painter, are traveling together in Spain. Douglas is busy with his res-toration of the Temple of Dougga. Camden, sculptor, has his relief, a detail of his collaborative problem, in the process of "laying up."

#### 18TH PARIS PRIZE AWARDED.

THE 18th Paris Prize of the Society of Beaux-Arts Architects has been awarded to Percival Goodman, pupil of George A. Licht and Jacques Carlu. The prize consists of \$3,000 which enables the winner to study for two and one half years at the *Ecole des Beaux Arts* in Paris. Noel L. Flint, student at Armour Institute of Technology, was Placed Second and Charles H. Dorn-busch, Student at Princeton University and Columbia was Placed Third. These three men were awarded First Medals and \$100 puscn, Student at Princeton University and Columbia was Placed Third. These three men were awarded First Medals and \$100. Second Medals were awarded to C. E. Landefeld, student at Carnegie Institute of Tech-nology, and J. Gambaro, student at Atelier Hirons and Princeton University. They also received \$100. The program called for "A Summer Capitol for the United States." An exhibition of the drawing was held at the program called for "A Summer Capitol for the United States." An exhibition of the drawings was held at the Beaux-Arts Institute of Design, 126 East 75th Street, New York, from July 15th to July 25th. The Jury con-sisted of: Philip Allain Cusachs, Howard Greenley, John Mead Howells, William B. Ittner, C. Grant LaFarge, J. Lovell Little, Benjamin H. Marshall, H. Oothout Mil-liken, James Gamble Rogers, Henry R. Sedgwick and Whitney Warren Whitney Warren.

#### THE NEW YORK ARCHITECTURAL CLUB, INC. Architectural Bowling League Division

THE Architectural Bowling League of New York has fittingly brought to a close the eighteenth year **I** has fittingly brought to a close the eighteenth year of its existence on Monday evening, June 8th, with a dinner in honor of the Officers and the Executive Committee of the league for the past year, 'midst the quaint Old World atmosphere of the Hotel Brevoort, on the borders of our famous Bohemian "Village."

The festal gathering was engineered (or should profes-sional loyalty compel us to say "architectured"?) by the masterly hand of Mr. M. L. J. Scheffer, our pinch hitter, and veteran of the league, as well as many a hard fought battle of gastronomical superintendence.

Following a general report on the league's standing in its business, financial and other activities, the President of the league, Mr. E. L. Capel, after thanking his fellow offi-cers, the Executive Committee and, through them, the entire league for their staunch support during the past year, offi-cially declared the termination in office of the 1924-25 officers and committee.

The election machinery was immediately set in motion, and the following were elected for 1925-26:

#### Officers

E. L. Capel	President
E. J. Burke	Vice-President
R. G. Hienerwald	2nd Vice-President
J. A. Finegan	
H. Sasch	
A. F. Bernhard	. Financial Secretary

#### Executive Committee

E. L. Capel	N. T. Valentine
E. J. Burke	G. A. Flanagan
R. G. Hienerwald	Charles Hess
J. A. Finegan	E. D. Thomas
H. N. Sasch	E. Weck
A. F. Bernhard	C. L. Elliott
G. R. Paradies	C. J. Jordan
H. G. Poll	P. Lynch, Membership Com.
D. Campbell-Put	licity Committee

The Architectural Bowling League has decided to bowl on Joseph Thum's White Elephant alleys the coming season, and arrangements have been made for the use of 11 alleys every Thursday night, beginning the latter part of September or the first part of October, and continuing until the end of the bowling season next May. All friends of the league and club, as well as fellow draftsmen, who are not members of either, are hereby cordially invited to drop in and visit with us on these nights (and that includes the other 75% as well. Bring her along by all means.).

At this writing the following offices have made requests for participation in the coming tournaments:

Cass Gilbert Donn Barber Alfred C. Bossom McKenzie, Voorhees & Gmelin Warren & Wetmore McKim, Mead & White James Gamble Rogers Thomas W. Lamb Guilbert & Betelle Starrett & Van Vleck Schwartz & Gross	Andrew J. Thomas Kohn & Butler Peabody, Wilson & Brown J. E. R. Carpenter York & Sawyer Schultz & Weaver Holmes & Winslow Shape, Bready & Peterkin W. L. Stoddart Benjamin W. Morris John Russell Pope
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With business details and congratulations in the background, the gathering advanced upon the refreshments provided for the occasion. All present enjoyed themselves unrestrainedly, with the assistance of the very able talent engaged for the ceremonies, for the balance of the evening.

It was noted that the main topic of discussion was the new ARCHITECTURAL CLUB, and since we must remember that the league is really the parent of the club, it is not surprising in the least that the league assumes the proverbial protecting attitude of the father for his natural offspring, and true to form with all good paters it waxes enthusiastic in its pride for, and the future glory of the CLUB, which is showing such surprising energy and growing by leaps and bounds. THE CLUB IS HERE, AND THE CLUB WILL STAY. Hence the enthusiasm. But more about that in the next issue. Besides, we are encroaching on other domains.

HENRY SASCH, Secretary.

#### JUDGES FOR ORNAMENTAL IRON COMPETITION

T HE competition for designs of ornamental iron work, as announced on another page of this issue, will be judged by the following jury: Dwight James Baum, New York; W. M. Buchroeder, Richmond, Va.; Frank H. Quinby, New York; C. Weiler, New York; and Samuel Yellin, Philadelphia.



Atelier of the Architectural Sketch Club of Chicago.



#### PERCIVAL GOODMAN

**P** ERCIVAL GOODMAN, winner of the Eighteenth Paris Prize, was born in New York and received his early education under private tutelage. His architectural training began in the office of his uncle, Mr. Benj. W. Levitan, Architect, New York, under whom Mr. Goodman worked for a number of years. He was later employed in the office of John B. Peterkin. During this time he attended the Fontainebleau School of Fine Arts for American Students where he received instruction from M. Jacques Carlu. Mr. Goodman feels that he owes much to Mr. Geo. A. Licht, in whose atelier he has worked, M. Jacques Carlu, Mr. John Peterkin and Mr. David Varon. Mr. Goodman will sail for Paris shortly where he is planning to enter the Atelier Pontremoli.

#### THE ARCHITECTURAL SKETCH CLUB OF CHICAGO

T HE Architectural Sketch Club of Chicago realized its long cherished dream when its new home at 1801 So. Prairie Avenue was officially opened with a great housewarming party. Some seventy-five members and guests turned out in response to the invitations sent out by fellow members, Mr. Robert L. Minkus and Mr. Paul J. McGrath. A reproduction of the announcement sent out is published on page 96.

The party started off with a royal dinner set out by Mr. Sayles, our resident manager. Following the dinner the guidance of the future welfare of the Club was entrusted into the hands of Mr. Robert L. Dando, who will officiate as president and who will be ably assisted by a very capable line-up of fellow-officers and directors.

Among those present was Mr. Ted Hoffmeister, who early in the evening showed great indications of publicly addressing the assembly. As the youthful evening aged Mr. Hoffmeister's urge greatly increased, with the result that finally he did arise and address the assembled mob in a very informal and humorous vein. Ted is the holder of the Foreign Traveling Scholarship of 1925 and he discussed his plans for his trip abroad. After the applause following Ted's address had subsided, the party adjourned to the Atelier where the balance of the evening's program was enjoyed. The committee had some sterling entertainment scheduled in the forms of some "femmes trés charmant," who did very well in furthering along the aging of the evening and who helped discover quite a few of our members who are very adept in tripping the light fantastic.



Announcement sent out by the Architectural Sketch Club of Chicago.

All these events helped immensely to infuse our new home with a warm glow and we hope that it may stay warm for many a year to come. A photo of our Atelier is published on page 95.

Following is a list of the personnel of the new régime under whose guidance the Architectural Sketch Club of Chicago will be for the next year.

President, Robert E. Dando Vice-President, George M. Nedved Secretary, Edmond J. Ryan Treasurer, Gerald A. Bradbury

Directors Active 2 years, Pierre Blouke Active 1 year, Clarence W. Farrier Associate 1 year, William F. Thomsen Active 2 years, Rudolph Nedved Active 1 year, Paul J. McGrath Associate 1 year, Charles H. Sierks

As a final adieu to the old quarters of the Club, the Program Committee staged the 1925 scholarship competi-tion *en loge* in the old quarters, on April 26th, and it cer-tainly was a busy and industrious place.

There were nine competitors very energetically pushing the pencils and slinging ink on the final day.

The subject of the competition this year was "An Air Line Station," which was to be designed to accommodate the future mode of transportation which will be by aeroplane.

Messrs. Rupinski, Ryan, Nicolai, Hoffmeister, Ahlson, Dando, Fuhrer, Schweiker and Walden all submitted final drawings.

An innovation in the program this year was the require-ment that all "calques" were to be brought into the Club quarters and all final drawings completed in the Atelier en

loge. The competition was open to all members and non-mem-bers in the City of Chicago. The judgment of the final drawings took place on May

2nd, at the Art Institute of Chicago. The jury was composed of Mr. Raymond Hood, Chair-man, Mr. Edward Bennett, Mr. Shaw and Mr. Hall. After two hours of very careful and serious consideration the jury made the following awards:

Mr. Ted Hoffmeister—1st prize Mr. Fred Ahlson—1st Mention Placed 2nd Mr. Eugene Fuhrer—1st Mention Placed 3rd Mr. Edward Rupenski—1st Mention Mr. E. Nicolai—2nd Mention

The winner, Mr. Hoffmeister, is now completing his itin-erary and more complete information as to his plans will be announced later.

'HE building plans for the Sesquicentennial Inter-T HE building plans for the Sesqueentennar fine. national Exposition are being made by John Moliter, City Architect of Philadelphia. The exposition will be held in Philadelphia in 1926 to celebrate the 150th an-niversary of American Independence.

#### A SIX ROOM SUBURBAN HOUSE (Continued from page 69)

Possibly the worst criticism could be in regard to running the roof lines so low along the south side as to largely cut off the benefit of southern exposure in the two bed rooms. There is also, of course, no view obtainable toward the front of the house from the living room; and the hall wastes more space than is desirable. Nevertheless, it remains an interesting composition,-and, granting the premises adopted in judging the first prize design, a perfectly logical solution for this type of lot; the entire width of the house being but 28 feet over all.

In conclusion, the judges would regard the present competition as being unusually successful in the results that it has brought out,-and believe that those who were responsible for inaugurating the contest should feel well repaid for the unusually high character achieved by the contestants' drawings, as a whole. If anything is lacking, it was in the somewhat monotonous use that was made of conventional or "usual" colonial precedent in the exterior designs of these six-room dwellings. More original treatments; and ones based on less limited precedent, would have been welcomed. If, in the event of another competition being undertaken, it would be possible to so frame the program as to encourage the contestants to undertake to devise more original treatments,—or to force them to less well established and less formal models for their designs, it would perhaps produce a more interesting and original group of houses. Nevertheless, the judges, in finally reviewing the results of their ef-forts, could not but feel that the competition had resulted in producing an interesting and varied assortment of designs; and that, whether or not all the contestants or readers of this report may agree entirely with the selections made, they cannot help but acknowledge that the twelve houses selected finally by the Jury are, without doubt, practicable and "build-able" designs, any one of which, if erected in appropriate surroundings, would do credit to the judgment and taste of its owner and occupants.

The members of the Jury also hope, that all students of this competition will agree with them in the belief that they have conscientiously studied the entire problem with open minds, allowing themselves to be attracted and interested by any practicable and promising solution,—and that they have been able to escape from falling an easy prey to the engaging and insinuatingly attractive perspective, that so often fools the spectator on first glance-and has been even known, upon occasion, to be equally successful in fool-ing the competition Jury!

In this case the members of the Jury were all agreed that it was the buildable house that they wanted to discover and encourage, with practicability of plan, and originality of de-sign, if possible; but they were unanimous in the belief that the architectural solution, rather than the pictorial presenta-tion, was the one to be sought out and encouraged; that tion, was the one to be sought out and encouraged; that architecture was more a matter of understanding of struc-tural requirements and materials, along with a certain amount of knowledge of the alphabets and formulae of styles, than a mere matter of draftsmanship; and so it was along that way they endeavored to find and bring forward an ideal solution of the "six-room house problem," knowing that so much of the future health and happiness of the race depends upon the discovery and use of such happy "ideals," once they may be discovered and brought to a wide acceptance and general appreciation by the larger part of the American public!

#### Respectfully submitted,

Jury of Award	ſ	FRANK CHOUTEAU BROWN,
		Chairman.
	3	LAURENCE HALL FOWLER
		LEON N. GILLETTE
		CARL A. ZIEGLER
	C	

#### CORRECTING A MISTAKE

THE American Face Brick Association keenly regrets THE American Face Blick Association accurate pub-lished in the July issue of this paper. West Va

St. Paul's M. E. Church, South, Clarksburg, West Va. was designed by Mr. C. H. Snider, architect, Fairmont, West Va., to whom credit should have been given.



#### N. J. SAPIENZA

N. J. SAPIENZA, winner of one of the special Stu-dent Scholarships at Massachusetts Institute of Technology for 1925-26, was born in New York City, July 1, 1903. He obtained his early education at a paro-chial school and graduated from the New York Eve-ning High School in 1920. He then attended Cooper Union for several years, completing the course in 1924. Since then he has been doing *Beaux-Arts* work in the Atelier Hirons, receiving several mentions and one first mention placed during the past year.

mention placed during the past year. Mr. Sapienza is at present in the office of W. P. McCarthy & F. E. Kelly, A.I.A., of New York and Philadelphia, to whom he is indebted for their encourage-ment in continuing his *Beaux-Art* work and competing for the M.I.T. prize. He also feels that he has received a great deal of help and inspiration from his associations in the Atalian Hirrore. in the Atelier Hirons.

#### THE IDEAL CELLAR COMPETITION

THE IDEAL CELLAR COMPETITION **E** VERY architect or draftsman is invited to enter this Ideal Cellar Competition which is being conducted by *The Architectural Forum* for the American Radiator Com-pany. The prizes are as follows: Grand Prize: \$1,000 First Prize: Class A, \$500; Class B, \$500 Second Prize: Class A, \$500; Class B, \$300 Third Prize: Class A, \$200; Class B, \$300 Fourth Prize: Class A, \$100; Class B, \$100 10 Mentions: Class A (each), \$50; Class B (each), \$50 The competition closes at 12 o'clock noon, August 25th, 1925. For complete information write to the American Radiator Company, 40 West 40th St., New York City.

#### COMPETITION FOR GARAGE DESIGNS

T HE Steel Trade Extension Committee, as announced more fully on another page of this issue, is offering prizes aggregating \$1,000 for designs submitted on or before October 20th, 1925, in accordance with the terms of the program prepared by the professional advisor, Edward B. Lee, Architect, 1210 Chamber of Commerce Pilde Ditteburgh Pa Entry blanks for the competition, Bldg., Pittsburgh, Pa. Entry blanks for the competition, copy of program and complete information may be secured from Mr. Lee.

## ARCHITECTURAL DESIGNER WANTED

THE California State Civil Service Communication hold an examination for the position of Architectural 'HE California State Civil Service Commission will Designer, Bureau of Architecture, State Department of Public Works, San Francisco. The salary for this posi-tion ranges from \$285 to \$350 a month.

The examination is open to all American citizens in good physical condition between twenty-one and sixtyone years of age.

Applicants must have graduated with a degree from an institution of recognized standing with major work in architecture, and must have had not less than five years of general architectural experience, of which at least one of general architectural experience, of which at least one year shall have been in the direction or performance of important architectural work. They must also possess supervisory or administrative ability or a high degree of technical skill. In the absence of such a degree at least four years of additional general architectural ex-perience will be required. The completion of each full year of such course shall be considered the equivalent of one year of such additional experience.

The duties of this position are under general admin-istrative and technical direction to exercise independ-ent architectural judgment and assume responsibilities in studies and computations necessary for the preparation of designs and estimates; to design and plan important buildings and groups of institutional buildings, etc.

Application blanks and complete information may be obtained from the State Civil Service Commission, Room 331, Forum Bldg., Sacramento, Cal.



Design by N. J. Sapienza, which was awarded one of the special Student Scholarships at M. I. T.



Sketches by Herbert Kates.

#### COMMENTS ON "SUBSTITUTION."

To the Editor of PENCIL POINTS.

Dear Sir :-

In connection with your article on "Substitution" in the July issue, the entire discussion apparently hinges around the words "or equal." Personally, the writer is a believer in the elimination of these words in specifications. I believe they were originally inserted purely in the interest of keeping down the cost of a building. It served two purposes, in a way, one to allow the contractor to use his discretion in furnishing something he might consider equal and also allowing a concern to bid on their product if they consider it equal to the one specified. The contractor would, naturally, take the lowest he could find and the concern furnishing would quote the lowest, but in this day of competition, why not eliminate these words "or equal?" They are causing a great deal of trouble.

According to a recent legal decision published in one of the architectural publications, an owner refused to pay the contractor because he maintained a substitution of materials had been made. The architect approved the substitution on the strength of the words "or equal," the substitution on the strength of the words "or equal," but the court upheld the owner. Now, if the words "or equal" are in there even though an architect does approve a substitution, he has got to safe-guard him-self and secure the approval of the owner in writing, according to this decision.

The contractors today are certainly keen after business and the proper selection of contractors assures a good bid. I believe there is a closer harmony between the architect and the contractors today so that if a con-tractor finds that a certain concern is jacking-up their price because they were specified outright, I believe the architect would welcome such information and a suggestion of a substitution by the contractor at the time of his bidding. The merits of the substitution can be looked into by the Architect, but it would be to the interest of the contractor to make note of the above.

You suggest also, a closer supervision by the architect and more firmness on his part to insist that the materials specified go into the building. This certainly is true. To this I would add that some of this firm-ness should be exercised so as to discourage some of these "or equal determined salesmen" who walk into the office and all but persuade you that the building will fall down with the material specified and their's is the only thing that will save it.

As to the architect selecting his own contractor, this As to the architect selecting his own contractor, this is most satisfactory and architects dream of the day when they can do this. Still, we all have to realize that the owner is the man spending the money, therefore, he has the right to say who he wants to build just as much as he has to select his architect. I am frank to say that even though the owner may insist upon a contractor whom an architect may know has a reputation that is not the best, there is no excuse for the architect to use such information for lefting the contractor get away with such information for letting the contractor get away with something and then blaming the owner. The owner is paying the architect for protection, regardless of who builds the building and it is up to the architect to see that he gets what is specified.

There is another side that can be of assistance and which some concerns are adopting and that is, that the manufacturer, instead of trying to pick out places wherein he is not specified and trying to convince those people they haven't the best product, he should select the speci-fications wherein he is specified and see that the con-tractor, who is awarded the job, purchases his material, notifying the architect in such a case. I am sure an architect would appreciate such a service.

The practice today is almost becoming unbearable, due The practice today is almost becoming unbearable, due to the keen competition. If you specify a certain ma-terial, regardless of whether the words "or equal" are used or not, you have one after the other coming into the office with all kinds of products. Some of these are real good salesmen and can almost make an architect feel that he has made a horrible mistake by specifying anything but the material they represent. As a tip to others, I make it a practice of never approving a manu-facturer's article through one of his representatives. I have found a great many of these salesmen do not stay with a concern and sometimes are not very constay with a concern and sometimes are not very con-scientious about what they guarantee. Therefore, we always refer them to the contractor, having the contractor make requests for a substitution, stating why. A great many

times a contractor has had experience with the material and if he hasn't, he, as well as the architect, can investigate the matter further.

Yours very truly,

Aaron G. Alexander.

Editor. Dear Sir:

Specifications requiring certain materials or equal are absolutely logical and good business where the words "or equal" are properly used. It is foolish for an architect to sit tight and allow no substitutions where the excellence of the work is not affected. The number of substitutions possible to make on a building is not great in any case and with ordinary supervision, unauthorized substitutions, so far as my experience goes, are few. Requests for substitutions are frequent, but these come not so much from contractors as from salesmen in various lines who naturally wish to dispose of their goods.

Complaint is made that materials specified are not always used one the work. This complaint is valid only in part. Where the specification concerns materials such as Portland cement, lead and oil paint and the like, which may be specified by name, the manufacturer should

Which may be specified by name, the manuacturer shound not depend wholly upon the fact that his particular man-ufacture is specified, but see to it that he sells the job. My experience is that contractors prefer to work ac-cording to specifications, where little or no difference obtains between them and what might be substituted. Where substitutions are of advantage to them a request is forthcoming and year seldom do they attempt to subis forthcoming and very seldom do they attempt to sub-stitute without approval, taking the risk of rejection of work into account.

The most common source of trouble is not substitution of materials, but of subcontractors. Here price rules the selection and incompetent workmen and unreliable subcontractors combine to spoil perfectly good materials. If it were possible to require a statement in bids of subcontractors proposed, an architect would have a bet-"or equal" would have a meaning and substitution should not be permitted without notice. Hoping these few words will find you enjoying the

same summer weather as here, I am

Very truly yours,

(Sgd.) Arthur Peabody, State Architect, Madison, Wisconsin.

The Pencil Points Press, Inc., New York, N. Y.

Gentlemen :-

The writer has with much interest read your editorial in the July issue of PENCIL POINTS entitled "Substitution". It, undoubtedly, presents to your readers, in a practical way, a subject that must be of unusual importance.

Certainly, it is interesting to the manufacturer of quality material used in the building industry, and, certainly, it should be of interest to the architect as well as the client.

Definiteness in all matters pertaining to building con-struction brings the most satisfaction. If the architect, at the very beginning, sells his ability and his integrity to the client, then, this ability and this integrity become a part of the plan, a part of the specifi-

cations, a part of the construction work, and, lastly, a part of the building itself. If the architect lacks definiteness in deciding upon the

If the architect lacks denniteness in declang upon the material to be used, it makes a vacillating client, and in-troduces discussions regarding what and how and when, and this ends in an unsatisfactory job. Procrastination, the thief of time, in a building operation

where there are gathered together an architect and a client and numerous building trades, becomes also the thief of money, because it largely increases the number of hours that all parties concerned must give to the operation in This item alone, undoubtedly, would more than question.

pay for a competent clerk of the works. The chief difficulty then, is to find a way to reimburse the architect for the time that he must take to see that the material determined upon and specified is actually used

in the building. That the architect should be adequately paid, for complete Supervision, goes without question. That adequate supervision would in the end be beneficial

to the client, financially and otherwise, and to the industry in general, we also believe is unquestioned.

(Continued on page 113)



Restoration of the Great Pyramid at Tikal, by Alfred C. Bossom.



Pyramid at Tikal, Guatamala.



Thirty-five Story Building after Primitive American Motives, Alfred C. Bossom, Architect. Mr. Bossom shows in this design an application to present-day conditions of his study of the Great Pyramid at Tikal, shown on the opposite page.



Drawing by A. L. Kundzin. Greek Pageant Given by the Arts Club, Washington, D. C.

#### THE MAKING OF A MODEL OF THE PARTHENON FOR A PAGEANT

THE very artistic Greek pageant given at the Bal Böheme of the Arts Club of Washington featured Ictinus' and his fellow craftsmen's submission of a model of the Parthenon to Pericles for his approval. The representation was carried out by means of a large model of that historic building and the architect and his assistants, the slave porters, and attendant soldiers were represented by members of the Washington Chapter of the American Institute of Architects and the architectural students of George Washington University. The model was made solely for this occasion and its construction may prove of interest to the general reader and furnish information to those having similar problems.

The restriction as to weight and limitations of transportation demanded considerable study. As the ball room was large and the procession of some length, the actual size of the model had to be considerable. It had to be carried some distance on the shoulders of the slaves of the evening, and had to be light in weight. As it was a most temporary performance, its cost in material and la-bor had to be light. The cheapest, strongest, and most available material was beaver board, but the problem of the columns, the most prominent characteristic of the design, was most difficult. To have them turned in wood or cast in plaster would have increased the weight so rapid handling would have been impossible. much that Paper mailing tubes were decided upon as the proper material. How to give the necessary entasis and secure the columns was the next problem. It was finally solved by cutting a V-shaped slot down the greater part of one side of the tube columns. By inserting the top in a pattern, to insure all of the top diameters being the same, the spring of the cardboard formed the entasis, and the two sides were then secured by gummed paper. The capitals were cast in plaster with bottom lugs the size of the top diameters and slipped in place when the model was assembled. The type and size of column having been determined by the material at hand—the size of the mailing tube determin-ing the module,—drawings for the building were laid out with the aid of "Buhlman." The total length of the building was six feet, the supporting box some ten feet long.

As the elevators of the ball room limited the sizes of the parts, it was finally planned to prepare the model in four sections; first the box, or podium, on which the paper structure rested (this was made in two parts as the total length was ten feet); second, the stylobate and steps in a single piece, with wood circular blocks for securing the bases of the columns, glued in place; third, the cella constructed entact and extended up to the roof forming the chief structural or supporting member; fourth, the entablature, pediments and roof made in a single unit and the plaster capitals secured to this piece. This was a mistake, they should have been secured to the card board column shaft. The cross braces of the roof were let down into the walls of the cella, but the final assembling was handicapped by the roof having been glued on. It should have been omitted during construction and secured only after the model was completely assembled.

The box or base mentioned was made in two parts, of compo board, as illustrated in the sketch on the opposite page, and was spliced together at the ball room. On this rested the stylobate constructed of the same material. The steps, however, were made of wood strips cut to the proper size. On this stylobate were drawn all the necessary axes and construction lines and of these it was found there could not be too many. This drawing of construction lines and axes was carried out in the entablature, both face and soffit, carried up through the frieze and on the roof surfaces which facilitated the assembling and were of value up to the moment of painting. The cross braces of the roof were let down into the cella walls as mentioned, but failed to be fastened *laterally*, on account of inaccessability, a warning which the final result warrants being given here.

The columns and cella and all parts not easily accessible were painted in the studio and a single light coat given the remainder, and the final coats "on the job," for experience proves nothing can be moved without finger marks or chafing scars. The base was painted a grey tone (with a flat quick-drying wall paint), the columns graded up from grey to buff and the entablature and roof a warm ivery tint. The plaster capitals were left white. The model

was carried upon a stand with short legs. To this stand was secured the carrying handles 16 feet long, spliced in the middle, and was attractively draped with Pompeiian red fabric with green garlands hung between each bearer position. The legs were simply toenailed to the handling bars and cross braced. After the model was finally assembled, it was lifted to the carrying stand and on the slippery dancing floor the stand skidded and the finished model dropped three feet. This tore out practically all of the glued base blocks. A few minutes' work. however, brought all the displaced parts in place, but the roof being se-cured prevented the cross bracing being again securely fastened to the cella walls, so after the jar, the entire weight of the roof came upon the columns.

The night of the pageant came. The bearers carefully lifted the model to their shoulders, the procession formed, the pageant moved. The presentation ceremonies were over; the bearers and the model passed into the anteroom. One side was lowered too quickly, and so struck the floor heavily. Slowly the model collapsed and the wreck was a more complete one than the historic explosion made of the original building. Tremendous applause marked the desire for an encore, but the ruined model forbade it. So this brief description serves both as an example and a warning.

-William Partridge.

Right-Finished Column with Cap.





Columns for the Model of the Parthenon Constructed from Mailing Tubes

#### THE PENCIL GUILD

THE members of the office of J. Williams Beal, Sons, of Boston, have recently formed The Pencil Guild, an organization to be devoted to the furtherance of their professional and social interests. The activities of The Guild will include visits to work under construction and completed jobs in order to profit by a comparison of the inspection of building material plants to study the best uses of materials. On the social side there are planned monthly luncheons to be addressed by speakers of prominence, and occasional excursions in which wives and friends will participate.

Enthusiasm for the future runs high, especially as the organization's brief existence already counts a highly successful banquet at the Boston Architectural Club and an all day outing which included visiting several buildings and a lobster dinner to mark the transition to an afternoon of ball-playing, swimming, and dancing. Plans are already completed for a lively initiation of new members and a trip to New Hampshire. Something always in the offing is the scheme of things.

Officers elected are as follows: President, Lloyd M. Hendrick, Jr.; Vice-President, Victor R. Provost; Secretary-Treasurer, F. Leslie Ford. Social activities will be in charge of a committee consisting of Thomas F. Bundy, John A. Bigelow and Charles W. Jones. The professional phases of the Guild's work will be cared for by a committee composed of William E. Thompson, Jr., Frederick C. Rau, and Robert T. Gidley.

Victor Pedrotti has returned to New York and taken up his residence at 136 MacDougal Street. Since decorating "The Mill", the interior of which was shown in the January issue of this magazine, Mr. Pedrotti has carried out interesting decorative treatments at 236 West 56th Street, and at the "Club Inspiration". Mr. Pedrotti's spirited decorations are executed with freedom and ease and are highly effective.



Construction of Compo Board Model of the Parthenon used in the Pageant given by the Arts Club, Washington, D. C.



HERE we are again, back on the old treadmill! The members of the Pittsburgh Architectural Club strutted their stuff in grand style in our July issue and so far as we can judge, from reports already in hand, everybody who is not on his way to Florida is planning to move to Pittsburgh, now that it has been made clear to all and sundry that all the days are sunny and that the stories of Pittsburgh weather are no more true than the accounts of strange doings in Winsted, Conn. But the other Clubs have fallen down, down, down. We thought to get out of our summer stent by inviting someone else to do the work. It didn't work! !—So once more we have marshalled our paste pot, our scissors and our secretary so that this famed forum of fun may not fade entirely ere succor arrives.

We have oiled up our spy-glass and are scanning the horizon anxiously for the next victim. Wouldn't you think that the Architectural Club of Los Angeles, or Chicago or St. Louis, or somewhere or anywhere else, would jump at this chance to get four pages of nice white space in PENCIL POINTS to do with according to their whims? The answer is, we would. Every club and atelier has the talent to produce tour resounding and melodious pages of sketches, verse, summer foolishness or what not! Write your own ticket and compound your own ingredients in such fashion as pleases you best. Surely all the enterprise and pep is not confined to Pittsburgh, enterprising and peppy as those fellows surely are, and have proved themselves to be. Remember, we make all the engravings. Just send in your rough material (not too rough) and we will do the rest. **R** UDOLPH J. NEDVED recently gave a very interesting illustrated talk before the Architectural Sketch Club of Chicago on his travels in Europe. He exhibited, in addition to his lantern slides, about 50 sketches and rubbings of some of the high spots of his trip. Judging from the very high quality of these, Mr. Nedved's spare time must have been very energetically employed.

must have been very energetically employed. Mr. Nedved won the Foreign Traveling Scholarship of 1924. While in London he decided to join forces with a fellow student of architecture, with the result that now there is a Mrs. Nedved—Mrs. Elizabeth Kimball Nedved, one of whose water colors is reproduced on page 107.

R. W. R., Sir —Add events leading to tragedy,—this persistent parade of synthetic ellipses. Why not such a circle? Both are similar, for given the major and minor axes, the line of circumference for an ellipse can not vary; neither the circle,—the radius of which is its comprehensive description. Substitution of linked or annealed various arcs can never satisfy the normal eye, and why deal them? Strange to say most of these aberrations spring from "Ingineers", hard baked for accuracy we would think. Thus the circle is ever the control, and the ellipse is always so governed. In hope of random assault on arches as perpetrated by some of our greats in "perspective", here is the same truth for proper construction of the semi-circular; any other variety we shall be happy to illustrate in outline. Doping out a way of drawing an ellipse instrumentally with compasses is a sport for an asylum for the semi-conscious. However, there is an elaborate apparatus on the market, which we think does the trick.

Gregory Parable, A.I.A.



This diagram, sent to us by Gregory Parable, is explained above.



Water Color Sketch by E. W. Drury, New York, Fountain in Taormina, Sicily.

Mr. Luis Canedo Gerard, Apartado No. 4 Bis, Mexico City, Mexico, is anxious to secure a copy of the Novem-ber 1924 issue of PENCIL POINTS to complete his files.

WE BEG TO ANNOUNCE

THE RENAISSANCE

99 44/100 % IMPURE

BASKET PARTIES WELCOME

Tuesday, June 30th, 6:30=

COMMITTEE B., L. & M., R. O. C. K. B. V. D. P. E., O. U. C. F

Entertainment Par Excellence! Dancing, Singing and other anno Frivolous and Funny, Rapid, Rio

The Foll Luther T. Mayo Foreman & Clark DON'T MISS THIS! E

NO RESTRAINT TO YOUR BEHAVIOR

POLICE AMBULANCE IN ATTENDANCE

110<sup>1</sup>/<sub>2</sub> SO. SPRING STREET (Down in the Cellar)

TRY TO GET IN-THEN TRY TO GET OUT EVERYBODY WELCOME!

By a Man who has wrecked many Arc Distinguished Greate

Bring Your Friends-This is not Restricted to Club Ma

RAVISHING HARUM BEAUTIES Dancing Women, Singing Women, Wild Women, Etc., Etc., Etc., There Will Also Be: NO BUSINESS! NO SPEECHES! NO READING OF MINUTES! NO REFERENCE TO ARCHITECTURE OR ALLIED SUBJECTS: (We had Garnsey Shaughaied to Europe to make this Promise Safe)

A 3 HOUR TALK O

Mr. Herman Lewis Bodmer, 3675 Park Boulevard. San Diego, Cal., has for sale the following copies of Pencil Points: 1922— Sept., Oct., Nov., Dec.; 1923—Complete; 1924—Complete; 1925—Jan., Feb., May & June.

#### COLUMBIA UNIVERSITY EXTENSION ATELIER.

 $\Gamma^{
m HE}_{
m Atelier}$  members of the Columbia University Extension Atelier met with the Electrical Engineering students of Columbia and held their annual dinner at Castle Inn.

This was the first attempt at Columbia University to bring the students of architecture into closer contact with the students of the various building trades. This gather-ing of about eighty offered a splendid opportunity for the future architects and engineers to discuss liberally their mutual problems. Greater interest was added by the presence and talks of Mr. J. V. Van Pelt, our critic, and Professors Curry, Hehre and Balmford. A very attractive program was drawn up by Mr. Edward Hurley. It is hoped that the future dinners may have representa-

tives from more branches of the building trades so that the discussions may be more general and of even greater value.

RAYMOND P. HUGHES, Secretary, Columbia University Extension Atelier.



Atelicr and Electrical Engineering Students Dinner.

Los Angeles Architectural Club.

GARNSEY'S GONE TO EUROPE, HOORAY, HOORAY! THE TREASURY'S FULL OF MONEY, NOW WE CAN PLAY!

WE GET lots of amusing things in the mail and here is one from Samuel N. Hannaford of Cincinnati, Ohio, accompanying a renewal subscription. When a man writes a poem as well as a check we feel distinctly complimented.

To Tommy Dolan:

The hand of time stays not for man It passes all too soon. And I just realized the fact That soon it will be June.

But now I find I have some time To do a do or two, And while I'm making out some checks I'll mail one out to you

So that my subscription may run Along some more And monthly be delivered Promptly at my door. A ND this is anonymous! To R. W. R. Rah! Rah! Five years cracking Here and There and This and That

#### That Letter

"What is the Answer?? The draftsman, over forty Is itchey, sore distressed, He wonders what will happen To him, with all the rest, And yet he dares not scratch them Or chase his fleas away. Now when we're bit, we catch them, And crack without delay. Chorus (muchly) Now, when we're bit, etc.

Ah! dear Faust, I knew thee well. MEPHISTO, Act 1.



PENCIL POINTS:

I am enclosing a copy of a drawing by Mr. John J. Wade. The drawing was submitted in an humerous competition to select an architect to remodel a building for the local atelier.

This occurred about two years ago but the original came to life only a few days ago and I am sure that its humor can be appreciated just as well now as then.

The building was called the Rectagon and at a later date the atelier assumed the same name. It is a live organization and I can promise you that you will hear much more of it in the near future.

We would be more than pleased to see this drawing reproduced in PENCIL POINTS and hope you can find space for it. Very truly yours,

W. Newell Reynolds, Sous-Massier, Atelier "RECTAGON," Buffalo, N. Y.



Rendering by Joseph McCoy. Municipal Auditorium, Minneapolis. Croft and Boerner, Architects and Engineers.



Water Color by Elizabeth Kimball Nedved, Chicago, Ill.

"Corpus Christi." Etching by Lee Fuller, Los Angeles, Cal.

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Doorway and Window Details. This is one of the plates from Part II of "Good Practice in Construction," by Philip G. Knobloch, now in course of preparation by the Publishers of PENCIL POINTS.

# THE SPECIFICATION DESK

# A Department for Specification Writers

#### SPECIFICATIONS BY W. W. BEACH PART X

#### SPECIFICATIONS FOR EXCAVATING AND GRADING

I N the June and July issues were set forth the General Conditions and Supplementary General Conditions inci-dental to the construction of a "Consolidated District" school house. The following specifications will be found separated into Divisions in such manner that a general contract can be entered into for the entire work or one of the divisions removed from same and let independently.

Now follows:

#### DIVISION B. EXCAVATING.

NOTE. The Contract and General Conditions of these Specifications, including the Supplementary General Conditions, govern all parts of the work and are parts of and apply in full force to these specifications for Excavating. The Contractor shall refer thereto as forming integral parts of his Contract.

ART. 1. SCOPE OF WORK.

(A) THE ITEMS Under this Division include:

1. REMOVALS.

2. STRIPPING

3. EXCAVATING.

4. PUMPING.

5. SHORING.

6. BACK-FILLING.

7. GRADING.

8. SURPLUS MATERIAL, Disposition of.

9. TRANS-PLANTING.

(B) OMISSIONS. Final grading and dressing of top sol, together with solding, seeding and planting, will be included in Division Z, Landscaping.

#### ART. 2. REMOVALS.

(A) BUILDINGS at present on the site, including two residences and a garage, shall be taken off the premises or razed by the Contractor and all parts of same shall become his property, to be removed from the premises at his ex-pense, except that the Owner will first take away all portable furniture, and lighting fixtures.

(B) ALL TREES AND MINOR STRUCTURES, in-cluding stumps, roots, walks, paving, fences, foundations, walls, cisterns, cesspools and privy vaults, shall be removed, if any are found within the area to be excavated.

(C) EXISTING BASEMENTS and wells, cisterns and cesspools, if any extend below the level of the bottom of the excavation, shall be filled in with clean earth or sand, thoroughly puddled and tamped solid; but, if such previous excavations occur under new foundations, the Contractor shall notify the Architect and follow his instructions.

#### ART 3. STRIPPING.

(A) THE TOP SOIL, if of black earth, shall be re-moved to a depth of 8" over the building site and for a space 20'0" wide all around the building, or to property line, if less distant than 20'0". All black soil shall be piled on premises where directed. Wherever the present grade is bicker than the new finished oracle at the building the is higher than the new finished grade at the building, the depth of stripping shall be extended to 8" below required finished grade which shall slope 1'0" in 20'0", unless otherwise indicated.

#### ART. 4. EXCAVATING.

ART. 4. EXCAVATING. (A) IN GENERAL. The Contractor shall excavate the site of the building (leaving 2'0" space beyond it on all sides) as required for basements, walls, footings, piers, areas, pits, etc. to depths shown on drawings. Trenches for footings of walls, piers, etc. shall have bottoms of full width. If carried deeper than required, trenches shall have excess depth filled with same concrete as specified for foot-ings, without extra charge. In no case may filling under foundations be done with earth or sand. Bottoms of all excavations shall be left level free from rubbish and reaexcavations shall be left level, free from rubbish, and reasonably smooth.

(B) INSPECTION AND SOIL TEST. No concrete for footings may be poured until the Superintendent has had opportunity to examine the surfaces to be covered. He may then order the concreting to proceed, or may order the surfaces to be placed in better condition, or may order a test of the bearing capacity of the soil made by the Con-tractor at the expense of the Owner, after which the bottom of the trench shall again be prepared at directed depth and submitted for inspection as before.

#### ART. 5. PROTECTION.

(A) BOXING TREES. All trees and shrubbery endan-gered by operations under this contract shall be carefully and adequately boxed with good planking.

(B) PUMPING. Trenches and all other portions of the work shall be kept free from standing water by pumping or other adequate means. Inlets to sewers, properly strained, may be used for such drainage as soon as available. (C) SHORING. The Contractor shall provide all sheathing, shoring and bracing required to maintain earth walls of excavations or for the protection of streets, alleys or adjacent premises.

#### ART. 6. FILLING.

(A) BACK-FILL. No foundation walls may be cov-ered by back-fill until the Superintendent has had oppor-tunity to examine them and to determine whether or not sub-surface drainage is to be installed. All back-fill shall be of earth or other approved material from this excava-tion, placed in 8" layers, well tamped and settled with water. (B) OVER DRAINS. A sub-surface drainage system is not part of this original contract. If required, the fill over same shall consist of clean, broken stone or gravel 4" to 3" dia. Joints shall first be covered with pieces of galv. iron or broken tile and care shall be taken, in placing the fill, to prevent injury or displacement to same or to the tile.

(C) UNDER FLOORS AND WALKS, any necessary filling shall be done to bring sub-surface to proper plane to receive cinders and well compacted and left level and free from rubbish. No frozen material may be used nor filling done during freezing weather. If the surface thus pro-vided be not approved or if other areas on which cinders or concrete are to be placed be adjudged unfit, the rejected material shall be removed to such depth as directed and the area refilled as above provided. If the rejected material is original soil or fill of old standing, the Contractor will be given an extra order covering extra work as provided in Art. 13 of Div. A.

#### ART. 7. GRADING.

AROUND BUILDING. The Contractor shall (A) grade evenly around the building to lines given on plans up to a height 8" below finished grade lines, for a distance of 20'0" all around, using only approved material from this excavation for the purpose. Any deficiency in grading material as well as final fill will be supplied and placed under Div. Z.

(B) DISPOSITION OF EXCAVATING MATERIAL. All material from the excavation and all waste and rubbish from graded surfaces and from building operations remaining after back-filling and grading are completed shall, as directed by the Architect, be distributed about the premises or removed from the site.

#### ART. 8. TRANSPLANTING.

(A) CERTAIN TREES AND SHRUBS on site, as indicated on plot plan, shall be properly removed, cared for and re-planted on premises by experienced men, where directed, and later properly tended until in safe growing condition.

#### DIVISION C. CONCRETE WORK.

(Author's Note:-In Part II, Div. C is "Foundations and Masonry" and Div. D is "Concrete, Plain and Reinforced, other than Foundations." Such separation of concrete work is desirable in many instances because, if one wishes to let an independent contract for slab work, it is still well to combine the Excavating, Masonry and Foundations in a single contract. For this typical school building specifica-

tion, however, we will assume the concrete combined with the other masonry and in a general contract. This will avoid duplicating the concrete specifications.)

NOTE: (Here is repeated the note immediately preceding Art. 1 of Div. B.)

ART. 1. SCOPE OF WORK.

(A) THE ITEMS under this Division include:

ALL CONCRETE FOUNDATIONS, including (1)reinforcement of same.

(2) ALL CINDER FILL under concrete floors.

(3)ALL CONCRETE FLOORS in main building and boiler house.

(4)ALL CONCRETE TRENCHES and covers of same, if of concrete.

(5) ALL CONCRETE STEPS AND STAIR SLABS.

(6)ALL CONCRETE AND TILE ROOF SLABS.

(7)ALL CONCRETE FLOOR FINISH AND BASE.

ALL CONCRETE PLATFORMS at entrances. (8)(9)

SUCH OTHER WORK as is herein set forth.

OMISSIONS. Exterior walks and drives will be (B) included in Div. Z.

#### ART. 2. GENERAL DESCRIPTION.

Note:Under the headings of this Article, there is given for cenvenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following specifications

beginning with Art. 3. (A) CONCRETE FOOTINGS shall be provided under all walls, piers and columns of main building and boiler house and under boiler stack; reinforced, where so indicated. (B) CONCRETE FOUNDATION WALLS shall be provided extending from footings to bottom of cut stone base course; also concrete dwarf-walls in basement as shown.

(C) WATERPROOFING. Exterior walls below grade shall be waterproofed on the outside. All walls below grade shall be rendered impervious by the admixture of 8% of hydrated lime or other approved integral waterproofing added to the concrete in accordance with Maker's directions. (D) FLOORS AND PLATFORMS resting on earth

(E) TRENCHES shall have concrete floors and walls, rabbeted for covers as detailed. Covers shall be of reinforced concrete where so indicated. (F) COLUMNS shall be of reinforced concrete as de-

tailed.

REINFORCED CONCRETE LINTELS shall be (G) provided for all openings in concrete and brick walls, except (H) REINFORCED CONCRETE SLABS shall be pro-

vided for all floors other than those resting on earth.

(I) ALL ROOF SLABS shall be of reinforced concrete as shown and detailed. Certain of these shall have tile as shown and detailed. cores where called for.

(J) REINFORCED CONCRETE STAIRS shall be provided in boiler room and in main entrances. (K) FLOOR FINISH. Finished troweled surface of

cement mortar shall be provided for all floors except where terrazzo or wood is specified. (L) CONCRETE BASE shall be provided in connection

with all concrete-finished floors in all plastered rooms.

#### MATERIALS

## ART. 3. CEMENT AND LIME.

(A) ALL CEMENT shall be fresh Portland, of approved brand, capable of meeting the test requirements, and delivered in original cloth bags bearing the brand and name of the Maker.

(B) A TESTING ENGINEER, or a reputable testing laboratory, selected by the Architect, shall be employed by the Contractor who shall include in his contract price a sum equivalent to \$-- per 1000 bags to pay for such testing

(C) TESTING. All cement shall be tested before using. All tests shall conform to the latest standard specifications of the American Society for Testing Materials and reports of same made in duplicate to the Architect. No cement may be used until proven by such tests to comply with said specifications. The Contractor shall therefore submit his first samples from local stock immediately after signing contract and the Architect reserves the right to release for use any cement after reports on the 7-day test, together

with tests for which insoluble residue, loss of ignition and chemical analysis reports have been submitted and found The 28-day tests shall be made in these as satisfactory. in other cases and reports filed as above called for. Architect may also, for the purpose of expediting construction, release for use cement in storage which is certified by the appointed testing-engineer for laboratory.

(D) SAMPLING. For purpose of testing, one sample shall be taken from each 60 bags at random and properly tagged. Failure of any one of the samples to comply with the requirements will be, if so judged by the Architect, sufficient cause for rejection of the car-lot or bin from which such sample was taken.

(E) NON-STAINING CEMENT shall be white Portland of a brand approved by the Architect and guaranteed not (F) CEMENT STORAGE. Cement in damaged, damp

or caked bags will be wholly rejected. All cement shall be properly stacked in water- and weather-proof sheds with floors 12" above ground. Each shipment shall be labeled for identification. Cement from warehouse shall be tagged to indicate satisfactory test. Cement delivered from ware-house without test-tags will be rejected.

(G) LIME shall be approved mill-hydrate or fresh woodburned in large lumps. No air-slaked lime may be used. Lime shall meet all requirements of the standard specifications of the American Society for Testing Materials. Hydrated lime shall be delivered in original packages bearing the brand and name of the Maker and shall be stored as specified in preceding paragraph.

#### ART. 4. AGGREGATES.

(A) SAND shall be "torpedo" or equal, composed of clean, hard, strong, durable, uncoated grains and shall be free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam or other deleterious substances. It shall range evenly in size from fine to coarse, none passing a No. 100 seive and none remaining on a No. 10 seive.

(B) CRUSHED STONE AND GRAVEL shall be clean, hard, strong, durable and uncoated, free from injurious amounts of soft, friable, thin, elongated or laminated pieces, alkali, organic or other deleterious matter. It shall range evenly in size from fine to coarse. For plain or mass concrete, it shall pass a 2" ring and be retained on a 3/8" ring; for reinforced work, it shall pass a 3/4" ring and be retained on a 3/8" ring.

(C) CINDERS shall be fine, clean, soft and free from an undue amount of unburned coal. Cinders from gas-plants or other objectionable source will not be accepted.

(D) WATER shall be fresh, clean and free from salt, earth, dirt and sewage.

(E) FLOOR FINISH MATERIALS shall be as required to produce the surface specified and of color selected.

(F) SAMPLES of all sand, crushed stone, gravel and floor finish material shall be submitted to the Architect and none may be used without his approval. Such approval before delivery shall not operate to prevent subsequent rejection of such materials as are not up to specification.

ART. 5. REINFORCEMENT AND BUILT-IN MEM-BERS.

(A) ALL REINFORCING BARS AND RODS shall be re-rolled rail or new billet stock in rounds or squares meeting all requirements of the American Society for Testing Materials. Bars shall be deformed, of full length required

(B) CHAIRS of approved pattern shall be used where called for or where necessary to retain reinforcing members in proper position.

(C) STEEL WIRE FABRIC shall be triangular mesh of catalog description shown on drawings or equal cross-(D) BEAM CLIPS AND INSERTS for various uses

shall be provided where called for and of approved material, make and pattern.

(E) ANCHORS for floor strips shall be galv. bent clips of approved make and design, to properly fit the wood strips. (F) IN GENERAL, all reinforcing material and inserts (G) SHOP DRAWINGS. The Architect's drawings show the disposition of reinforcing members and their size, arrangement and typical details. The Contractor shall develop these into complete setting diagrams and shall

prepare details and schedules showing each structural and reinforcing member in exact position and spacing, exact location of all openings, framing and special reinforcements, spacing and design of stirrups and the bending and length of bars, all in accordance with Art. 4 of the General Condi-tions. These details and schedules shall be submitted in ample time to be checked and to permit corrected drawings to be in the hands of Superintendent well in advance of time for preceding with the work.

Mr. Beach's reply to Mr. Gowen's letter, published last month, commenting upon the "General Conditions" presented in June.

I WAS very glad indeed to learn, from Mr. Gowen's letter in the July number, that a capable architect had taken sufficient interest in my "General Conditions" to offer so detailed a criticism. He may be assured that I greatly appreciate the interest manifest as well as the constructive value of the suggestions offered. May I be permitted to reply to them in detail?

In the first place, it must be borne in mind that I am trying for a standardization that will be sufficiently acceptable to a majority of architects to be adjudged more universally usable than others now in vogue. This pre-supposes an approximate ideal—but it also means that there will be some to whom these general clauses will not commend themselves.

Like Mr. Gowen, I do not favor the majority of archi-tect's alibis and I have attempted to omit all such that would tend to cause a bidder to add a little "to play safe". Hence, I don't think I have hidden away any joker in these clauses whereby the architect can force a contractor to pay for the former's errors, or attempt to do so.

Referring to Mr. Gowen's letter categorically:

1. Yes, the editorial discussion of Art. 2 should have to dispose of the variable matter of Art. 2 should have to dispose of the variable matter of Art. 1 before pro-ceeding to detailed consideration of those invariable por-tions which it is assumed should be standardized and printed in any office.

2. Experience has taught me that it is necessary for 2. Experience has taught me that it is necessary for an architect to protect himself by just this clause (Par. F of Art. 2). I will cite two instances: A company had installed a new brick yard and was offering common brick below their competitors' rates. Their brick was alleged to be inferior and I was asked to inspect it at the yard before the contractor would buy it. The brick I saw were all right but the brick delivered were not. I have had similar experience with gravel and cement similar experience with gravel and cement.

Perfection in an architect's superintendence is no more possible than in any other phase of the service he renders. If he can get the owner to employ a clerk-of-the-works, he can, of course, better his supervision but it is obvious that the quantity of supervision needed varies as the size of the work. A job may be too small to stand the ex-pense of even a single clerk or too large for one man to handle in that capacity. Our "conditions" must meet all other conditions.

other conditions. One of these is that, because an architect or superin-tendent or clerk fails to see a thing one day, it does not follow that he may not reject it the next. Another is that "passing" work shall not mean accepting it. The architect has the same right to have it assumed that he is supervising to the best of his ability that the contrac-tor has that he is living up to his contract. Wherefore, if the architect discovers something improper a day or a week after it should have been observed, who shall suffer, the man who did it, the man who is paid to watch him or the man who is paying? Why not the first of these? And here is the other case in point: An addition to a schoolhouse was not considered large enough to warrant the employment of a clerk and it was near enough to my office so I could visit it twice a day. On a morning visit they were just starting footings at a corner (in the old

office so I could visit it twice a day. On a morning visit they were just starting footings at a corner (in the old days when we used spread brick on solid ground). I checked measurements and found all o.k. It was a rush job with masons plentiful and they were crowding the trench diggers. When I visited the job again at noon, I found the footings all in and partly covered on the two lowest sides and started on the remaining side. I did not dis-cover, until the walls were well advanced that the spot where they started was the only place on the low side where where they started was the only place on the low side where the footings had been carried down to within a foot of the proper depth. Should I have kept still or acknowledged

my oversight and made the contractor reimburse the owner for the saving? I did the latter.

3. The addition to Par. D of Art. 3 of the clause "However, upon request, the architect will assist in de-limiting the divisions of work" would place him in position of assisting contractors in drawing their sub-contracts. hardly think the average architect cares to do this or that the contractor wishes him to. Of course, one cannot escape being drawn into disputes on the subject but they are to be avoided rather than invited.

4. Mr. Gowen and I seem to agree here, except as to 4. Mr. Gowen and I seem to agree here, except as to manner of expression. If I knew how to force contractors to get advance rulings on all matters which they consider insufficiently explicit, I would surely incorporate it. But, when one is constantly dealing with new bidders on a con-siderable building processing to imple early be due

siderable building program, it simply can't be done. 5. Yes, a clause should be inserted, as Mr. Gowen suggests, obligating the owner, through the architect, to furnish all necessary information in ample time to avoid

furnish all necessary information in ample time to avoid hindrance to carrying out the progress schedule. 6. I find nothing in Par. C of Art. 4 (which I think Mr. Gowen intended in place of "B") excusing the archi-tect from responsibility for his acts, except that the second word "such" was accidentally omitted from the last sen-tence: "The Architect's approval, in such instance, does not make him or the Owner responsible for errors in *such* documents nor for any other unauthorized deviation from documents nor for any other unauthorized deviation from the terms of the contract." It was probably this omission which invited criticism.

which invited criticism. 7. Mr. Gowen's compliment is appreciated. 8, 9. This is the only part of Mr. Gowen's letter wherein we really disagree. Perhaps such difference of opinion would be lessened if I had introduced definitions differentiating between an architect's orders and his in-structions to contractors. If, as Mr. Gowen states, every-one knows that architects cannot be counted upon to be sufficiently business-like to put their orders in writing, then they are entitled to the oft-repeated criticism on that score score.

In that case, it might be well for them to remedy that defect in their practice. It has been my practice (and that of my superintendents also) to carry memo-books contain-ing carbon sheets so that orders can be written on the spot, if advisable, and duplicates sent to office file. As a matter of fact, the two paragraphs (D of Art. 5 and C of Art (c) are paragraphs (b) of Art. 5

As a matter of fact, the two paragraphs (D of Art. 5 and C of Art. 6) are perfectly consistent, both as to the issuance of written orders by the architect or of oral in-structions by the architect or his superintendent. Under the head of "Instructions", for which the specifications do not demand writing, would come such items as:

Request to crowd a certain bit of work in readiness for others.

Suggestion that certain undesirable mechanic be fired. Suggestion that certain material be brought on ground faster.

Demand that certain materials be unloaded with greater care.

Warning that certain features must be better protected. Request that some individual be on the job at a certain time.

Suggestion that certain work be held back until architect or owner can be consulted. Etc. etc., almost ad infinitum.

In fact, it is because there are so many of these things to be said and done and because the line between those which do not require record and those which do is so hard to draw, that one can easily fall into the habit of not keeping notes enough. It is a dangerous habit be-cause, without a note to the contractor or, at least, a memo of the more important things, his remembrance or that of his foreman, is not likely to correspond with that of the architect or his representative. Therefore, on all properly conducted operations, the contractor *must* have writ-ten orders for everything which is of sufficient import to

make a matter of record. If architects (some architects) insist upon being un-businesslike, it is no reason for one writing General Con-

ditions accordingly. 10. It would be well if contractors could submit lists of their sub-contractors with their bids, but there is a very excellent class of contractors who do not take sub-contractors' figures until after their contracts are closed when they have more time to get sub-bids and profit accordingly. do not subscribe to the statement that "Such a situation always means a skimping job, for the contractor naturally

makes up somehow the difference between the figures of the approved and rejected subs". It is too severe an ar-raignment of the whole fabric of contracting and archi-tectural supervision. I believe there are contractors who tectural supervision. I believe there are contractors who attempt no such thing and also architects on whom they couldn't put it over, if they tried. This is the weakest part of Mr. Gowen's letter and I'm sorry he said it. 11. Mr. Gowen is right here. Par. D of Art. 11 would be improved by being divided into two sentences. 12. The subject matter of this criticism as well as that in Item 14 is fully available.

in Item 14 is fully covered in Item 2. Whether the work be "faulty" or "inferior" makes little difference. No architect is omniscient and he can frequently serve the Whether the work owner's interests better by accepting imperfect work than

owner's interests better by accepting imperfect work than by having it torn down. For instance, I once found that a partition wall in a large stock yards building was  $12\frac{1}{2}$ " thick when the con-tract called for 13". The contractor had saved a large quantity of mortar by having his longitudinal joints laid almost tight. The work had gone so far that I called in the company's manager and we decided that they would lose more by having the wall taken down than by allow-ing it to remain, so the contractor was assessed an agreed amount and the wall remains. I can't see where the archi-tect lost either dignity or self-respect. I could cite sever-al like cases, more especially in out-of-town work visited once a week.

But kindly present my compliments to Mr. Gowen and convey to him my thanks for his discussion of the subject. If architects did a little of this more often, I think we'd all be better off.

Sincerely yours, W. W. BEACH.

#### 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.

**Structural Slate.**—A series of 13 documents covering in the most approved fashion all the information re-quired by the architect, specification writer and drafts-man concerning the material and its uses. Complete specifications, hundreds of drawings; a useful addition to every architectural library. Standard filing size. Structural Slate Co., Pen Argyle, Pa.

Lupton's Casements-Catalog No. C-122.—Illustrating and describing line of casements of copper-steel. Numer-ous detail drawings, specifications and complete infor-mation. 81/5 x11. David Lupton's Sons Co., 2227 E. Alle-gheny Ave., Philadelphia, Pa. -Illustrating

Published by the same firm, Lupton's Steel Equipment, Catalog D. Showing line of shelving and other steel accessories including lockers and partitions for factories, stores and offices.

**Drawing Materials and Instruments, 3rd Edition.**—A complete catalog covering everything required in the drafting room with much valuable information to the draftsman. Bound in cloth. 380 pp. 6 x 9. B. K. Elliott Co., 126 6th St., Pittsburgh, Pa.

Co., 126 6th St., Fittsburgh, Pa. Lighting Fixtures, A. I. A. File 31F23.—A handsome portfolio showing complete line of exterior and interior lighting fixtures done in photogravure on one side of the sheet only. About 100 pages are included. The same ma-terial is presented in a bound volume for those prefer-ring it. In case bound book is desired ask for Catalog No. 15. 81/x 11. Edwin F. Guth Company, 2623 Wash-ington Ave., St. Louis, Mo.

Waterproofing-Dampproofing Specifications.—Book "A" of this series of six books, which will eventually cover the Truscon line. Portfolio form, standard filing size. AIA File No. 25C2. The series is designed with the re-quirements of the architect uppermost in mind. Truscon Laboratories, Detroit, Mich.

Lumber and its Utilization.—Details of heavy timber mill construction AIA File No. 19B4. A series of draw-ings in portfolio form covering the subject. 8½ x 11. National Lumber Mfrs. Assn., Washington, D. C.

National Lumber Mfrs. Assn., Washington, D. C.
Roofing and Siding Specifications.—A. I. A. File No.
12-C. Details of roof construction and other valuable drawings, specifications and technical data. Standard filing size. American Rolling Mill Co., Middletown, Ohio.
Atlantic Terra Cotta, Vol. 7 No. 2.—Is on the use of color in the 17th century architecture of Mexico. One full page color plate and much other interesting material, including text by Leon V. Solon, Atlantic Terra Cotta Co., 350 Madison Ave., New York City.

Arc-Welding Building, AIA Classification 13-d.—Tech-nical bulletin describing entirely new method of building construction whereby the frame is welded instead of be-ing riveted or bolted, comparison of costs and complete data. Westinghouse Electric & Manufacturing Co., East data. Westingh Pittsburgh, Pa.

The Gospel of Fresh Air.—9th Edition. Covers subject of ventilation and ventilators for all types of buildings. Much specification information and technical data. 36 pp.  $8\frac{1}{2}$  x 11. The Swartwout Co., Cleveland, Ohio.

Electric Refrigeration for Residential Apartments.— New publication dealing completely with this subject with information for the architect and specification writ-er. Drawings, specifications, etc. 60 pp.  $8\frac{1}{2} \ge 11$ . Delco Light Co., Dayton, Ohio.

Utica Imperial Boilers.—A new catalog covering boil-ers and radiation. Much useful information including blue prints of layouts, ratings, capacities, etc. 8½ x 11. 36 pp. Utica Heater Co., Utica, N. Y.

**Celotex Specifications, AIA File No. 37-A-1.**—Detail drawings and complete instructions for the use of Celo-tex as an interior and exterior finish, also for sound deadening and insulation. Standard filing size. The Celo-tex Co., 645 No. Michigan Ave., Chicago, Ill.

Hauserman Partitions.—Portfolio of loose-leaf sheets covering hollow steel standard unit partitions, together with details, elevations and specifications. Standard fil-ing size. E. F. Hauserman, Cleveland, Ohio.

**Creolite News.**—Volume 12 No. 3, shows perspective of the new Detroit Free Press Building, together with li-lustrations and data on the subject of floors built to withstand heavy duty. The Jennison-Wright Co., Toledo, Ohio.

**Rawplugs.**—Data sheet with detail drawings on the abject of Rawplug system of anchorage. Specifications, IA File 27-A-41. Rawplug Co., 66 West Broadway, New subject AIA F York.

A. C. E. Steam Trap, Catalog "A."—Describes this spec-ialty with its application in modern buildings. W. B. Con-ner, Inc., 223 West 33rd Street, New York City.

Gas Fired Steam Radiators.—Manual for those inter-ested in this type of equipment with complete data, drawings, etc. A. H. Wolff Gas Radiator Co., 376 Lafay-ette St., New York.

Austral Windows:—AIA File 27-C-1, Catalog No. 26, il-lustrating complete line with detail drawings, specifica-tions, weather strip details, etc. 48 pp. 8½ x 11. Austral Window Co., 101 Park Avenue, New York.

The Moving Finger Writes.—Brochure on the subject of hydrated lime as used in modern building work. Pro-fusely illustrated. 48 pp. 8½ x 11. National Lime As-sociation, Chicago, III.

**Everything for the Fireplace.**—Portfolio with illustra-tions of fireplaces and fireplace fixtures and accessories, including the Glow-Hot electric grate, a new feature. Standard filing size,  $8^{1/2}$  x 11. Colonial Fireplace Co., 4603 Roosevelt Road, Chicago, Ill.

Type F-18 Electric Dumbwaiter.—Data sheet illustrat-ing and describing this item of equipment. Detail draw-ings showing installation. Warner Elevator Mfg. Co., Cleveland, Ohio.

Aqua-Silk, the New Waterproof Shower Curtain.— Booklet with color samples describing this new material for the well appointed bathroom. Crane Co., Chicago, Ill.

Knife Switches and Accessories.—Catalog No. 25 showing this line completely. 32 pp. 8 x 11. Frank Adam Electric Co., St. Louis, Mo.

**Brass Pipe for Water Service.**—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors.  $8\frac{1}{2}$  x 11. 32 pp. The American Brass Co., Waterbury, Conn.

Ankyra.—Booklet showing application of this type of anchor in building construction. Sectional drawings showing details of application. 32 pp. Ankyra Mfg. Co., 148 Berkley St., Philadelphia, Pa.

**Basic Specification for Tile Work.**—A most valuable document for all architects, draftsmen and specification writers covering the entire question of setting and laying tile of all kinds. Complete and detailed specifications; ample space for memoranda. 40 pp. 8 x 11. Associated Tile Mfrs, Beaver Falls, Pa.

Architects' and Engineers' Built-up Roofing Reference Series, Vol. 1.—Flat roof specifications. A valuable document for every architect, draftsman and specifica-tion writer with 16 full page blue prints, specifications and descriptive text.  $8\frac{1}{2} \times 11$ . The Barrett Co., 40 Rec-tor St., New York City.

**Plastering Specifications.**—Specification folder covering standard forms for various kinds of work, arranged for the convenience of the specification writer. Standard filing size. Best Bros. Keene's Cement Co., Medicine Lodge, Kansas.

Wall and Ceiling Handbook.—Data on wall and ceiling construction for the residence. 16 pp.  $5\frac{1}{2} \ge 7\frac{1}{4}$ . Bostwick Steel Lath Co., Niles, Ohio.

Cabot's Insulating Quilt.—Catalog with detail draw-ings covering subject of heat insulation in modern build-ings. Standard filing size. Samuel Cabot, Inc., 141 Milk ings. Standard fi St., Boston, Mass.

Ingres.—Attractive little booklet published as a tribute to the memory of Jeane Auguste Dominique Ingres, the great French artist. Photogravure illustrations of not-able drawings. Canson & Montgolfier, 461 8th Ave., New York City.

Win-Dor Casement Window Operators.—Catalog No. 5 describing modern casement hardware, sectional draw-ings and standard half size details. 14 pp. 8½ x 11. The Casement Hardware Co., 235 Pelouze Bldg., Chicago, III. Quality Centrifugal Pumps.—Specification folder, loose-leaf, containing complete data on all types of pumps for building use, diagrams, layouts, etc. 9 x 12. Chicago Pump Co., 2320 Wolfram St., Chicago, III. The Cutler Mail Chute.—Illustrated hooklet describing

The Cutler Mail Chute.—Illustrated booklet describing this type of equipment for mailing letters from the upper stories of buildings. 12 pp. 7 x 10. The Cutler Mail Chute Co., Rochester, New York.

Dahlstrom Conduo Base.—Covers subject of electric wiring distribution in the modern building. Full size details covering all applications. Specifications. 8½ x 11. Dahlstrom Metallic Door Co., Jamestown, N. Y.

Metal and Glass Products.—Illustrated data sheet show-ing variety of glass construction and other items of in-terest to the architect. Standard filing size. Wm. A. Daunt Co., 110 East 42nd St., New York.

Modern Mosaic and Terrazzo Floors, Publication A.— Brochure with 34 full page color plates showing various patterns of floors suitable for various types of buildings. Drawings showing construction, schedule of costs, speci-fications and complete data on the subject. 60 pp. 8½ x 11. Cloth binding. L. Del Turco & Bros., Inc., Harri-son, N. J.

**Drawing Materials.**—General Catalog No. 11 covering everything required in the drafting-room with list prices. Fully indexed, cloth bound, 400 pp. 6 x 9. Eu-gene Dietzgen Co., 166 West Monroe St., Chicago, Ill.

Theatrical Lighting Equipment and Effects.—Catalog and handbook covering line of specialties, technical data on the subject, tables and specification data. 76 pp. 6 x 9. Display Stage Lighting Co., Inc., 344 West 44th St., New York City. Display Sta York City.

The Dunham Handbook No. 214.—Covers subject of radiation and all other matters pertaining to the modern heating plant. Sectional drawings and typical layouts. Much engineering data. Handy pocket size. 144 pp. C. A. Dunham Co., 230 E. Ohio St., Chicago, Ill.

Equipment and Supplies for Architects, Engineers and Draftsmen.—Complete illustrated catalog showing full line of everything required in the drafting room. 130 pp. 6 x 9. Electro Sun Co., 161 Washington St., New pp. 6 x 9. York City.

Published by the same firm, Drafting Room Furniture. Illus-trated catalog showing wood and metal furniture, drawings, tables and other specialties required in the modern drafting room. 40 pp. 6 x 9.

Olde Stonesfield Roofs.—Brochure with color plates il-lustrating artistic roofs and walks. Eighteen subjects. 5½ x 6½. The John D. Emack Co., 112 South 16th St., Philadelphia, Pa.

Bathroom Accessories, AIA File No. 23.—Handsome and useful document setting forth for the architect and specification writer complete line of accessories for the modern bathroom, together with color plates showing different treatments of wall surfaces; layouts, detail drawings to scale, instructions for installing fixtures and complete specifications. 36 pp. 8½ x 11. The Fairfacts Co., 234 West 14th St., New York City.

Co., 234 west 14th St., New York City. Lighting Service for Banks and Insurance Companies.— Catalog No. 425. Illustrates the type of equipment re-quired in these buildings. Diagrams showing layouts and installation of fixed and portable lighting units. Much technical data on modern lighting. 32 pp.  $8\frac{1}{2}\times$ 11. I. P. Frink Inc., 24th Street & 11th Avenue, New York City.

Temperature Regulation.—Technical bulletin on sub-ject of temperature regulation under all conditions. Com-plete technical data, charts, etc. 16 pp. 8½ x 11. The Fulton Co., Knoxville, Tenn.

United Storage Floors.—A new booklet on the subject of the modern garage with a special arrangement of floor space, illustrated with six pages of diagrams and other useful data. Standard filing size, 8½ x 11. Garage Ex-perts Assn., Louisville, Ky.

**Examples of Work in Georgia Marble.**—Loose-leaf portfolio containing 36 full page plates of exterior and interior details on heavy plate paper. Georgia Marble Co., Tate, Ga.

**Grinnell Adjustable Pipe Hangers.**—Catalog No. 3 Handbook on the subject of adjustable hangers for all types of service. Complete engineering and specification data. Handy pocket size. 4 x 9. Grinnell Co., Provi-dence, R. I.

The Pergola Album No. 30.—Illustrating many types of pergolas in their settings. Very useful to those interested in country houses and grounds. 8 x 11. Hartmann-San-ders Co., Elston & Webster Aves., Chicago, Ill.

ders Co., Elston & Webster Aves., Chicago, III. **Casement and Transom Hardware.**—Leaflet describing "Whitco" Specialties as applied to casement sash, either wood, hollow metal or kalamein. H. E. Holbrook Co., Mass. Trust Bldg., Boston, Mass. **International Casements.**—Attractive booklet on sub-ject of windows for homes of distinction and charm. Il-lustrations of excellent English and American domestic architecture, drawings and photographs, interiors and exteriors. 24 pp. 8 x 10. International Casement Co., Jamestown, N. Y.

Jenkins Valves.—Four convenient handbooks classified according to types of buildings. The series covers hotels, apartment houses, clubs, auditoriums, theatres, industrial plants, office and loft buildings, banks and stores, public buildings, schools, churches and community houses. Jenkins Bros., 80 White St., New York City.

The Regulation of Temperature and Humidity.—Com-plete catalog, handbook and specification guide, showing in detail the entire line of Johnson Temperature Control-ling Devices for all types of buildings. 64 pp. 8½ x 11. Johnson Service Co., Milwaukee, Wis.

**The Kernerator.**—Covers disposal of rubbish and other waste in the residence and apartment building. 40 pp.  $6 \ge 9$ . The Kerner Incinerator Co., 1003 Chestnut St., Milwaukee, Wis.

Published by the same firm. The Sanitary Disposal of Waste in hospitals, also Blue Print with complete instructions as to lay-outs for all types of buildings.

#### PERSONALS

FRANCIS R. WRAGG, ARCHITECT, has severed his connection with The Hubbell & Benes Co., and is now associated with John H. Graham & Co., 1610 Euclid Avenue, Cleveland, Ohio.

HUDSON & MUNSELL, ARCHITECTS, have removed their of-fices to 631 Petroleum Securities Building, Los Angeles, Calif.

CRAMER & WISE, ARCHITECTS and ENGINEERS, are succeed-ing the firm of Cramer, Bartlett and Wise, at the same location, 124 West Fourth St., Room 567, Los Angeles, Calif

HARRY SIMS BENT, ARCHITECT, has opened an office at 2410 West Seventh St., Los Angeles, Calif.

W. RAY OBERLIN AND J. FRANK NEWLON have formed the firm of Oberlin & Newlon, Architects, 66½-68½ North Diamond St., Mansfield, Ohio.

WILLIAM N. BOWMAN COMPANY, ARCHITECTS AND ENGI-NEERS, has removed its offices to 612-619 Insurance Bldg., 14th and Champa Streets, Denver, Col.

HENRY OOTHOUT MILLIKEN, ARCHITECT, has removed his offices to 154 East 61st St., New York, N. Y.

ARTHUR L. ACKER, ARCHITECT, has removed his office to 629 Petroleum Securities Building, Los Angeles, Cal.

SAMUEL BIDERMAN, formerly with Lang and Witchell, has opened an office for the practice of architecture at 927 Athletic Club Bldg., Dallas, Texas.

W. M. SOMERVELL and J. L. PUTNAM, ARCHITECTS, have removed their office to 904-905 Commercial Exchange Building, Eighth and Olive Streets, Los Angeles, California. RALPH C. FLEWELLING, ARCHITECT, has opened his new office at 1218 Taft Bldg., Hollywood, Cal.

ROBERT L. HARRIS, ARCHITECT, has removed his offices to 516 North Charles Street, Baltimore, Md.

CLARENCE W. HUNT, winner of the Le Brun Traveling Scholarship for 1925, sailed on June 16th for England. He will also visit France, Spain and Italy.

WM. C. LAURITZEN, ARCHITECT, has removed his office to 690 Eighth Avenue, New York, where A. W. WEBSTER, ARCHITECT, will be associated with him.

MUNROE WALKER COPPER, JR., ARCHITECT, has removed his office to 4500 Euclid Avenue, Cleveland, Ohio.

OLLIVIER VINOUR, ARCHITECT, has opened an office in the Scher Building, Palm Beach, Florida.

#### COMMENTS ON "SUBSTITUTION" (Continued from page 99)

If the client reposes full confidence in the integrity and in the ability of his architect, then it should not be diffi-cult for the architect to sell this item full supervision, to his client.

Dur suggestion, based on the foregoing would mean, therefore, a complete study and grasp of the building to be constructed on the part of the architect and the owner, and then, ample provision for the cost of a clerk of the works. With this as a basis, the work would proceed more promptly, and, undoubtedly, at less actual cost. After all, much that is stated in this letter is found in your article, which is the subject of this letter. Very truly yours.

Very truly yours, THE FAIRFACTS CO. INC.

(Signed) S. D. Baker.

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#### (Other items on page 124)

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Assistant Professor of Architectural Design. Must hold master's degree in Architecture from approved college or have had equivalent European training. Address, stating age, salary and record: Frederic Child Biggin, Head Professor of Architecture, Alabama Polytechnic Institute, Auburn, Alabama.

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Young man would like tracing to do at home. Has had four and a half years experience, two years for technical illustrator, one year, mechanical detailer and tracer. Box No. 105 care Pencil Points.

Young man, seventeen years old, would like a position in architect's office—no experience. Salary no consideration. Box 106 care Pencil Points.

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# HOW TO SKETCH EVERGREEN FOLIAGE

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There are two general methods of treating foliage. One employs light and shade effects and imposes the problem of so designing the lighted and shaded areas as to define the structure of the tree as well as to create a pleasing pattern. The other method practically ignores light and shade. It relies upon the decorative value of the tree shapes.

Cedars are valuable in landscape effects because of

their decorative silhouettes. It is natural, therefore, to render them in this manner. When placed against a dark background, however, they must be light in tone and rendered in light and shade as in the lower drawing on this page.

Try building up the tree masses with stroke groupings like these shown. Combine broad strokes with thin, sharp lines for evergreen character.

This is No. 5 of a series of Pencil Lessons prepared by Ernest W. Watson. Write to us if you wish proofs of Lessons 1, 2, 3 and 4, additional proofs of this page, and proofs of lessons which are to come. Write, too, for Free Samples of Dixon's *Eldorado* and Dixon's *"Best" Colored* Pencils. DIXON—PENCILS, Dept. 167-J, Jersey City, N. J.

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