

AS WE SEE IT

SINCE the day, now nearly four years ago, when the first issue of Pencil Points was published, we have been in close and intimate touch with architectural draftsmen, either personally or by correspondence, in all parts of the United States. In gathering material for publication in Pencil Points and in many other ways we have also had much to do with practicing architects, having been favored with the subscriptions of over 4,000 of these men.

Almost from the beginning of our work we became aware of certain feelings and conditions having to do with what we will call the human relations existing in the practice of architecture. Of course, this element is present and is important in every business and profession. The relations of employer and employee have occupied a great deal of thought and much space in the public prints in all lines of American activities, so it is not to be wondered at that, occupying the peculiar position we do with respect to the architectural profession, many matters in which these relations are involved should have been brought to our notice.

Especially since we started our employment bureau, designed to function as a national clearing house for architects desiring to employ men and for men seeking positions in architects' offices, certain definite complaints have come to us which may be summarized somewhat as follows: Not a few architects complain that their employees are more interested in watching the clock than in doing the necessary work of the office, that the elements of enthusiasm and interest in the employer's problems and the general welfare of the job are sometimes sadly lacking. Draftsmen complain of unsatisfactory working conditions, and inadequate compensation, the necessity for frequent changes, lack of due notice of termination of employment—being told on Thursday that they are through on Saturday, etc.

The architect's office is not exactly like any other type of organization and presents its own peculiar problems from its standpoint which we are here considering. In the very nature of things the volume of work in any given office fluctuates. Taken as a whole these fluctuations are probably greater than with any other equally important group in the United States accomplishing a similar volume of work. If an architect has finished a big job and has nothing on the boards to take its place he

naturally cuts down his force accordingly. In most offices fair and due notice is given, but in some this is not the case. Whenever summary dismissal occurs there is a feeling of injustice and soreness with frequent failure on the part of those dismissed to consider the standpoint of the employer whose plans perhaps have suddenly been changed and may be entirely beyond his control. A better and more sympathetic understanding of the problems and difficulties involved would frequently remove the feeling of distrust which all too often is engendered. Architects, by taking their associates into their confidence and indeed into their business family, so to speak, might greatly minimize the unfortunate results which so frequently occur when such an understanding does not exist.

The practice of architecture which, as several of our contributors in this issue have pointed out, is a practical combination of an art and a business, holds great possibilities for the cultivation of reciprocal trust and loyalty as between employers and those who work for a salary. In no branch of endeavor can a group of finer men be found. both architects and draftsmen, men of artistic tendencies with an appreciation of and love for what we will call the finer things of life. These men have feelings which are correspondingly sensitive and it is easy to irritate those feelings to the great detriment and loss of all concerned. Some draftsmen have felt and said that the only way for them to get their rights, financially and otherwise, is to form a union and deal with their employers on a union We are absolutely opposed to any such idea for what seem to us two most excellent reasons. First, it is not necessary and second it would not work. To place the relations of architect and draftsman on any such basis would immediately kill many of the finer things existing today in architects' offices throughout the land. To our mind nothing finer exists than the friendly, cordial and satisfactory relations to be found in hundreds of offices with which we are acquainted. Perfect trust exists not only as between employer and employee but also harmony and good will as between the various employees responsible for different parts of the work of the office. We recently, in one day, had talks with two draftsmen during which the conditions existing in two offices of about equal size in the same city were discussed. In the first the changes

in personnel are infrequent. The firm never does an enormous amount of work, but the fluctuations in volume are below the average. The men are made to feel that they are colleagues of the members of the firm and that their success is intimately bound up with the success of the organization as a whole. The members of the firm are wide-awake and friendly. They say "Hello" when they come in in the morning and they say "Good night, Bill" when they leave at night. You couldn't pry a man out of that organization with a crowbar. The problem of the human relations has been solved in that office. The other picture is quite different. The firm, employing about the same number of men, apparently makes it a point not to know the names of the men in the drafting room, or at least not to use them. The whole office is run on a cold and impersonal basis. They watch the clock in that office and changes in personnel are frequent. In this case the question of human relations is apparently neglected or subordinated to other considerations and everybody involved loses because such a situation exists. The men get into sloppy habits and, if they stay there long enough, deteriorate. The boss is losing. if he only knew it, one of the most valuable assets any employer can have, the enthusiastic loyalty of those who are on his payroll.

We say that most architects intend to treat their men right and do so, and that most draftsmen intend to give their employers a square deal and do it. All the fuss and ferment and kicking comes from a comparatively small minority of the architects and draftsmen and while this can probably never be entirely eradicated, we believe that it can be still further reduced.

We have not overlooked the fact that friction and misunderstandings are not confined to the relations of the architect and the draftsman, but occur not infrequently between members of the staff. Cases of this kind have come to our attention from time to time. Some draftsmen complain that the man who checks their work for errors antagonizes and irritates them unnecessarily by the manner in which he calls attention to their mistakes, and they feel that a more considerate, tactful manner would serve the purpose better. The other side of this picture was shown to us by a man who lamented that the men whose work he checks hate him without any just cause that he can discover. Some draftsmen complain that their progress is blocked by some man over them who is afraid that they may take his job, and so it goes. Though such instances do not change the fact that in general the relations of members of the architect's staff to each other are harmonious, friction where it occurs is unquestionably very harmful and should be done away with. Where the relations between the architect and his staff are of the best there is, naturally, little likelihood of serious friction between members of the staff, but where it exists it is a matter for correction on the part of the architect as well as that of the men directly involved.

One matter we wish to record here which we believe to be of the utmost significance. We have called upon many architects from all parts of the Country for material for our pages. We have asked for documents which are frequently considered of a private nature by the architects owning them. In no case has permission to publish anything we asked for ever been withheld from us. Architects have recognized the fact that the work we are doing tends to improve standards of draftsmanship and they have, without exception, come forward to give us all possible help in our educational work. We have found a general and keen interest on the part of architects in the development of the younger men of the profession, both draftsmen and students. Prominent men have given of their time without compensation to contribute to our symposium issues, of which this is one, and there has everywhere been shown a cordial spirit of helpfulness and co-operation which has not only been gratifying to us, but has come by way of added evidence, if such were needed, that the draftsmen have no better friends than the rank and file of the architectural profession. This only serves to confirm us in our opinion, as expressed above, that conditions in our profession are good and that in the few respects in which they are not entirely satisfactory they can and will be speedily improved and adjusted.

Another significant development has taken place and bids fair to go still further. We refer to the formation and enlargement of architectural clubs embracing in their memberships both architects and architectural draftsmen. We are strong for the further development of this idea and recommend it for earnest consideration wherever there is a possible nucleus for such an organization. The younger men and the older men get together at the meetings away from the stress of the business day, to the great benefit of both. The juniors can and do learn much from such informal contact and a spirit of good fellowship and understanding is developed which is shown in hundreds of little ways and which tends to remove causes for unrest and dissatisfaction. In those cities where flourishing clubs of this kind are in existence conditions are measurably better than elsewhere and they are improving all the time.

In the following pages will be found letters and informal articles from a number of men, each stating his own point of view toward the matter under discussion. It is hoped that the readers of Pencil Points who can throw additional light on this subject by writing something of a constructive nature will let us hear from them. Our pages are wide open to to all who desire temperately to discuss the question of human relations. We say temperately because a violent and bitter statement serves no good purpose. A few architects apparently think no draftsmen are any good and a few draftsmen apparently regard all architects as their natural enemies. Both are wrong. Personal experiences pointing out possible improvements are welcome and will be given space in our next issue.

THE HUMAN ELEMENT IN THE ARCHITECT'S ORGANIZATION

A Symposium

From Albert Kahn

Y OUR letter of February 14th dealing with the subject of "The Human Element in the Architect's Organization" leads me to recall the words of John Ruskin, written more than fifty years ago, which embody the principles adopted by the modern manufacturer in the management of his plant.

"Because the production and obtaining of any commodity involves necessarily the agency of many lives and hands, the manufacturer becomes in the course of his business the master and governor of large masses of men in a more direct, though less confessed, way than a military officer; so that on him falls in a great part the responsibility for the kind of life they lead: and it becomes his duty not only to be always considering how to produce what he sells in the best and cheapest form, but how to make the various employments involved in the production or transference of it, most beneficial to the men employed."

These words are a justification for the welfare work we see all around us today, the object of which is to develop in the employee a spirit of common interest in all that is good for the business, and also to impress upon him the fact that he is not working

for an organization without a soul.

If welfare work is justified in industry it is equally justified, though it be of a different character, in a profession such as architecture. That of the former is concerned with methods of improving the economic status of the worker; his physical, intellectual and social condition. That of the latter is concerned with methods which develop an atmosphere of brightness, cheerfulness, and contentment in the organization as a whole.

Architecture involves the production of that which proves not only of utilitarian, but also of aesthetic value; and things beautiful are most easily produced under agreeable and pleasing circumstances. The best work is the result of enthusiasm, and the enthusiastic worker is the joy and bulwark of the wise

employer.

In general we find but little difficulty in developing the desired atmosphere in our organization. We strive to be a large, happy family wherein each one, from the office boy to the chief designer, is encouraged to feel the importance of his position; to assume responsibilities commensurate with his position; and to take a common interest in the ac-

tivities of the firm. Constructive criticism, no matter by whom offered, is always welcome and carefully acted upon. No individual member of our staff is given credit for any work which emanates from this office. We pride ourselves on being able to say that our work is, at all times, the result of the combined efforts of many. We aim at that spirit of general co-ordination which is essential in every

successful undertaking.

Much of the human element in our organization is derived from our social evenings, our dances, masquerade balls, and Christmas festivities; our athletic clubs—base ball, hand ball and bowling. So far as our outside staff of field superintendents is concerned, we greatly benefit by the periodical stagsmoker, an event which is first given up to a discussion of the various problems that present themselves and methods of their solution, followed by a dinner and an evening's entertainment.

We work and we play together. And with it all we constantly keep before our eyes the main principle of our firm, to give the client just a little more

than he expects to receive.

"Oh, the little more and how much it is, The little less and what worlds away.'

From Mauran, Russell & Crowell, Architects, St. Louis

THE Human Element is as essential in the Architect's organization as it is in the Architect himself. Architecture is more than a professionit is an Art. It is creative; has a soul. No architect's office was ever successfully maintained unless there was in it some real human being. The Architect's contact with clients is personal in the extreme; his problems those which enter importantly into the lives of human beings.

However, it is necessary to determine where the "human element" should cease in order that its weaker sister, "human nature" may not come in and result in a laxity and inefficiency in the organization. A modern architectural organization must appeal to both the business man and the home builder. There must be an atmosphere of artistic

efficiency.

Three essentials there are to the successful creation of a Human Element in any organization: respect, responsibility and reciprocity.

If the heads of the organization, by virtue of their high professional standards and splendid accomplishments, command the respect of their employees, the employees will soon fall heir to these standards and will take pride in maintaining them.

Very few there are who do not react to responsibility. The old adage of the position ennobling the man is perhaps trite, but true. No matter how menial the task, if it is dignified by a feeling of responsibility in its performance, it takes on a new light. For instance, every applicant for the position at the switchboard in our outer office, is interviewed in a most serious and dignified manner, and the fact that it is the first contact an outsider has with the entire organization is brought firmly to her attention, and the responsibility which lies with her in making that contact courteous, satisfactory and efficient is emphasized. Immediately an importance is attached to the position, a pride results in its performance, and a pleasure.

And last, but not least, reciprocity—that keynote of modern industrial relations, often called co-operation, which is most successfully obtained through a Human Element in the organization; not a human element which is evidenced in annual company dinners, or special occasions when everyone tries painfully to "get together," but rather a day by day, and in every way, sort of Human Element growing out

mutual interest and esteem.

There come, in the history of every architectural career, the great drives when one must go over the top. At these times a service is required of employees which cannot be bought; draftsmen's "time" which cannot be figured in dollars and cents, and had there not been a Human Element in the organization, there would be no loyalty in meeting the

emergency.

Not long ago, the Federal Reserve Bank job was launched from this office in all the fury which so often accompanies Governmental operations. It was a Herculean task and for successful fulfillment required the labor of the man familiar with the job, fresh reinforcements being in the nature of a hindrance rather than a help. Every man put his shoulder to the wheel—there were no positions the best draftsman gladly assorted blue prints. When one man's own task was done, he was not through, but rendered assistance to another's not yet complete. And by such concentrated effort, the seemingly impossible was accomplished. the job was over-the firm gave a delightful luncheon at a beautiful hotel, where everyone "got together" and sort of patted each other on the back. It was a service gladly given and not "sold"; a service earned by the firm on account of the absolute esteem and respect in which it was held by the employees.

There is one more very important phase of the Architect's office in which the Human Element is valuable, and that is the contact with the contractors and material men. If these men always leave the office with a feeling of having been treated considerately and fairly, they will never fail to give

the Architect their best, when the time comes for him to need their services.

Architecture is, perhaps, not a lucrative profession but it holds great wealth for those who sincerely wish to "serve" the profession to which they have dedicated their lives, and for "those" there must be the Human Element in the Architect's Organization.

From Bertram Grosvenor Goodhue, New York

I HAVE received a request from you for an expression of opinion as to the "human element in the architect's organization." I am not quite clear in my mind as to just what is meant by this phrase. At any rate, I have no knowledge of, and no dealings with, any inhuman element, though your very question would seem to suggest that there were offices in which the inhuman element predominated—which

may very well be true.

My mail is made up about as follows: Advertisements destined for, and promptly received by, the waste paper basket—85%; requests for information of all sorts and kinds, of which yours is one—10%. The disposition to see these follow the first lot is strong, but often cannot be humored. Some of them indeed come from Washington, where, I take it, they have as close a personal record of everybody in America as the Finance Minister in Moscow has of his flock. There remains 5% bone fide correspondence, and of this 5%, once in a while, there is one from a client and a new commission comes in—the saving leaven in the whole lot. Feeling better, I now go on to answer your question.

The practice of architecture is always, first and foremost, a profession, which means that the architect does not "go after" work. What would you think of a lawyer, or a doctor, who tried to increase his clientele or number of patients by getting them away from other practitioners? Yet the belief that this is tolerable behavior is strongly held in certain quarters, and seems to be constantly increasing. The "human element" begins right here, If you mean the treatment accorded I think. those who aid and abet me, then let me say that, whatever is in store for humanity after death, the belief of this office, which we try to carry out in practice, is, as I think I have said before in your columns, that everybody is entitled to life, liberty and—not the pursuit of happiness—but the actual possession of happiness itself as far as this can be provided. To this end, I have no time clock. In fact on the rare occasions when I, myself, keep office hours, have found that some trifling advantage of the absence of this useful instrument, so beloved by the efficiency experts, has been taken. Nevertheless, the men do fill out time sheets, and though being largely of the artistic temperament and somewhat irregular as to the hours they keep, do keep them, for the thirty-nine hours of the working week are all on their time sheets. It is the custom in many offices to specialize the men. That is again great from the standpoint of the efficiency expert, and is the practice in vogue of every large factory. The temptation is strong to practice it here; but it doesn't seem just, that because a man does a thing well he should do that and nothing else even though he does it in less time and with more profit to his employer. Certainly routine of any kind is not conducive to happiness, and certainly a variety of interests and pursuits is.

It is not evident whether there is anything else that requires an answer, and what I have written will not, I fear, be regarded as an answer to much of anything. I had almost forgotten to state that there is a filing system and a clerical force here, very much more capable organizations in this direction, the young men and women who compose it here are about as satisfactory as could be expected. To be sure, we often have an awful time finding some drawing that has got into the wrong file, in which case we speak harshly to the filing clerk; and once a in while an office boy puts the wrong letter into an envelope, but humanity is frail and I am sure that if I were out in the system trying to file drawings and mail letters instead of sitting here idling and writing letters to you, I should do even worse.

From M. Nirdlinger of Nirdlinger & Marlier, Architects, Pittsburgh, Pa.

REPLYING to your favor of the 14th instant, asking us to discuss "The Human Element" in the architect's organization, will confess every time I think of this problem I get it from a different angle.

To begin with, to obtain a satisfactory result both sides must be evenly matched as to sincerity and let us say honest endeavor. We must disregard the draftsman and architect that are liabilities, and in doing so reduce our number to about 75 per cent. Many a sincere architect has been discouraged from trying to build up an organization with employees of poor caliber, and on the other hand, many an employee has lost opportunity by sticking with the architect of poor caliber. We must, therefore, allow both sides to judge the material with which they surround themselves, and eliminating the undesirables, offer the following ten commandments for the employee and employer, beginning with the employee's commandments:

(1) Honor thine employer and work to his, which are thine, interests, and which will surely result in a fitting reward.

- (2) Be guided in thy work by the lamp of truth.
 - (3) Keep holy thine employer's trust in thee.
- (4) Obey, but remember thou, a pen must be pushed and a pencil must be lead.
 - (5) Thou shalt not kill "time."
 - (6) Thou shalt not commit errors.
- (7) Thou shalt not expect or demand more than thy worth.

(8) Thou shalt not put false words or figures on thy drawings.

(9) Thou shalt not unjustly criticize thy neighbor's work.

(10) Thou shalt not crib from thy neighbor even though he be a poor fish with one scale.

Then for the architect and employer offer the following:

(1) Thou shalt enter and depart without "knocking."

(2) Thou shalt work hard six days and leave the rest for Sabbath, but fail not to get thy job.

(3) Again get thy job and keep thy force always busy as Satan finds work for idle hands, and remember thee thine own profits.

(4) Honor thine office boy, the junior and senior draftsmen; make their interests thine. Think back to thine own days of youth with all youth's ambitions. Then watch salaries and in justice advance the boys without their call. Never wait.

(5) Do not kill youth's chances. Be honest with thine employees. Laying them off on short notice is not being honest with them. A sacrifice for them will pay thee.

(6) Accept thy "bulls" as thine own "bulls." "Bulls" in the drafting room to be diplomatically treated. Always distinguish the "goat" even if thou art the "goat."

(7) Do not steal or put temptation before thy neighbor's employees; remember thy neighbor has been patiently developing them to bring them where they are.

(8) Bear not false witness to thy neighbor's work.

(9) Good or bad, try to benefit from thy neighbor's work. Remember that nearly all of us do both good and bad work.

(10) Honor and give credit always but collect thine own dues.

From Aymar Embury II, Architect, New York

Y OUR letter asking me to write you an informal letter for publication on the human element in the architect's office arrived this morning. I am glad to send my opinion for your symposium.

In the first place, the problem of a little organization such as mine is very different from that in a large one. The architect is in very close touch with his drafting room and wants friends in it, so that nobody works for me very long that I do not think of as a friend, and as I find that the best team work is to be gotten out of an organization of friends no one stays in the office who is not liked by the other people in it. Everybody has his own way of managing, but I further believe that this is the best way of getting good results. In the first place, half a person's waking time is spent where he works and it is certainly desirable to make that time as happy as any labor can be, and people work better under these conditions.

The second thing that I believe necessary to a good organization is a thorough understanding of his status by the employee. Everybody in this office knows that they are employed because their work brings me a profit and if it doesn't bring me a profit they will not continue to be employed. They also understand that I do not wish any sentiment of loyalty to their employer to stand in the way of their advancement. If a man has a chance to get out for himself, I want him to do it, or if he can make a change to an office where he has a bigger opportunity and better salary I want him to do that; and this purely businesslike view of the situation is not incompatible with a thoroughly friendly spirit as long as he is in the office.

I like the men and women that work for me and I think they like me. They all work hard. all know all about my business and in consequence they know that the money I am making does not bear too great a proportion to that which they are making, and the result is that we get out the work with as little friction as I have seen in any office and as rapidly as it can be done well. A big office could not be run on these lines. A small office can.

From James S. Angus Mercer, State Department of Architecture, Albany.

IN REGARD to "The Human Element in the Architect's Organization" I would say broadly early education is the crux, implying (1) fitness and (2) means to gain a knowledge of architecture. These essentials may be embraced under a system of apprenticeship, say three months probation, then if guardian, pupil and architect are agreed, a legal indenture specifying obligations of each party, years of service, duties, salary, etc., each performing his part in its due fulfillment. In the interim, attend evening art and science classes for science, lectures, advanced line, freehand, cast and life studies. At the expiration of pupilage term go to college, or travel for sketching, measuring and plotting reputable good Modern or Old Buildings, or parts of them, return and enter best possible office for general practice and more practical office work.

This outline would create this so much to be desired co-operative or "community of interest" spirit, exemplifying it beyond words and an inspiration for

the best in architecture.

You can picture the effectiveness of an office "team" co-elaborating on some serious project also the obverse of one working as we do to-day with men untravelled and untutored thoroughly in the fundamentals as a preliminary in their early training, especially if the chiefs are in the latter catagory.

Unfortunately the "dollar" is the desideratum with too many, not the love of the beautiful in forms, mouldings, ornament, and detail. To copy well as an exercise is one of the best tests of patience during pupilage, also to apply good examples in a new project are habits to be carefully cultivated, the spirit of compromise, keeping an open mind to learn, encouragement with a word of commendation

or reproof when deserved without temper, permit and encourage discussion or criticism with client, committee, a commission on any project under study in your care, inspection of buildings under construction, occasional conferences with staff on serious business, cultivation of the social side in every way possible for good fellowship sake.

Other matters would surely develop as time goes on and if some such system were followed would redound to the general good of any organization,

is my humble belief and experience.

By Alfred C. Bossom, Architect, New York.

OUR letter regarding "The Human Element in the Architect's Oragnization" reminds me of a condition I encountered while acting for one of the very largest banks here. Every morning they had an executive committee meeting at which all of the Officers sat in with the President for about fifteen minutes to discuss the problems. The President referring to this situation said he would rather handle a team of prima donnas, as the human element entered into the situation so strongly. Several of the officers of the bank when speaking of these daily meetings asked each other in a jocular vein where they had been bitten that day, was it the leg or the arm?

In other words, the human element is unquestionably vital in any activity where mentality is essential. The handling of an architectural force in my experience is not an easy matter, for all the different temperaments which go through the entire human gamut in outward demonstration practically all have the underlying sentimental control which makes the use of kid gloves indispensable.

Also, an architectural office is at times frightfully busy and rushed, and at other times comparatively idle, again making it imperative that during slack times the general spirit of the office must be maintained and not allow demoralization that is often liable to creep in and hamper results seriously when the unfortunate, but apparently inevitable rush comes.

To get this result we have endeavored to so subdivide and team our work that all the way down the line there is no acrimonious antagonism, but friendly competition, so that without hurting feelings each man feels that he is being particularly observed, that the efforts he makes will not be wasted. Also, we make a very decided effort to definitely reward conscientious effort in no matter which department of the office it may occur.

Of course, in the handling of large banks, office buildings or hotels, such as we do, the amount of detailed work involved is tremendous at times, and it is by this form of team play that we are able to get it out without falling back on the somewhat mechanical methods which have taken the joy out of life for so many architectural draftsmen.

Architecture is almost the reverse of a great many other activities in so many of which it is usual to have the job and then find the man for it, whereas, in an architect's office it is getting your man and then putting him into the niche where he can do greatest justice to himself, and the Human Element in Architecture is that which gives life to art.

By Thomas Hastings, New York

THE architect is related to his work, or should be, very much as the painter and sculptor are related to their work. The man who merely directs his work without working himself never progresses and it is just as inexcusable for an architect to carry on his work in that way as it would be for a painter to employ others to do his painting for him. The most important thing for an architect in his personal relation to his men, is that he himself should be a draftsman and continuously and always draw, not only studies, but scale drawings and even working drawings at a large scale. It is only in this way that he can hope to progress and only so can the public expect to find any relation between his successes and his failures. No man in art ever arrives at the highest level every time, but anyone who understands and appreciates the direction of his work sees the relation of his failures to his successes, and I always have felt that I can tell from the work of an architect whether he himself has been the controlling influence by being a draftsman or whether his work is entirely dependent upon the staff and character of the men at different times in his employ.

A man's T-square and triangle and his pencil point are the instruments of his art, they are to the architect what the brush and the chisel are to the painter and the sculptor. As soon as a man loses his facility of expression he loses his capacity to design properly and to solve practical problems. There is a great temptation, with a large organization and much work to do, to delegate it all to clever draftsmen. Of course no man with much practice can do it all and, in my opinion, more credit should be given to the men who assist than usually obtains.

The personality of the architect should always show itself in his work even through his draftsmen, and the latter should feel that they are working with him and not merely for him. The relation of an architect to his draftsmen can in this way only be happy and successful and only so can he count himself among the living artists of his time. For the proof of this statement one need only inquire as to the methods of working of the architects whose names are recorded in the history of art.

Regarding the men of an architect's organization in their relations to one another, I feel it of very great importance that the stronger man should have control of a few others less able, they to help him and he to direct them. It is the old principle of apprenticeship which applies in an architect's office, as it did in the past. A draftsman learns best from his superiors by working together in the most friendly way, with free and open discussion encouraged by the architect himself. Draftsmen are

not usually allowed to come enough in personal contact with each other and to talk things over and to criticize each other's work. "Every man for himself" is a bad law in an architect's office. The practical man should be consulted and the artist should advise the practical man, in a spirit of co-operation, otherwise the problem will not be properly solved.

False dignity often prevents proper contact. There should be no "boss" in an architect's office, not even the architect himself. The spirit of companionship and proper relationship should be encouraged to its fullest extent. However, even though this relationship may exist to its fullest extent, the architect should show absolute control of the direction of his work; his personality should dominate and be clearly evident in his work when it comes before the public.

From Harry D. Payne, of the Office of Wm. B. Ittner, St. Louis, Mo.

ightarrow M . B. ITTNER has taken the position in the Institute and before the profession at large that it is one of the important functions of the present generation of Architects to give to the Nation a new generation of Architects competent to lead in the future development of American Architecture and capable of dealing with its many intricacies. this end, the office of Wm. B. Ittner has always welcomed the boy who desired to enter as an apprentice as well as the young graduate anxious to perfect his practical knowledge. To such it stands as an office of opportunity. The so called "plan factory" methods do not prevail, each man being given an opportunity to develop in all the branches of an Architect's work: sketches, working drawings, detailing and even in the preparation of models for carved and cast work. The men are not limited in the scope of their endeavors, but each assignment of work must be efficiently executed. The men of more mature experience in the work are the coaches for the novice.

There is no real occasion for friction or jealousy between the men since each one realizes the strong points of the others, assists in the elimination of weaknesses and then all combine in earnest effort to produce successful designs. I do not mean to imply that the structural and mechanical engineers do not occasionally trample on the toes of the architectural men, but that is in the day's work. This leads to the point that the development in the same office of all the varying phases of a complete building project is a considerable factor in the creation and education of a dexterous, capable Architect.

It is Mr. Ittner's belief that the system of making each man realize his importance as a factor in the completed design has tended toward the successful conclusion of many commissions.

During the past year an insurance policy has been taken out for each man, the benefits accruing therefrom being made payable to a beneficiary designated by him. This protection has been extended to superintendents at the various projects throughout

the country.

To sum up the foregoing, the effort has been to develop the capabilities of each man and in so doing, to serve the best interests of the client and of Architecture.

From J. E. Wood, Capt. Corps of Engineers, U. S. Army, Assistant to Engineer Commissioner, Washington, D. C.

M Y OBSERVATION is that the personality of an office is dependant upon that of the dominating figure thereof. The office which has two outstanding figures of strength seldom continues in partnership unless each dominates definite phases of the organization's activities. Many strong firms composed of brilliant personnel have dissolved

through contesting personalities.

As members of an organization must be complementary one to the other, so must the entire office operate. In a large office one finds every type of personality, disposition and ability. Some must be driven and others must be led. The successful office has at its head a man who secures the maximum results either through the strength of his own personality or through the thorough understanding of his subordinates.

From Lawrence & Hoford, Architects, Portland, Oregon

A RCHITECTURE, as well as Democracy, is an undertaking of a co-operative nature. While society has come to recognize the so-called architect as responsible for his building, it cannot be overlooked that, in reality, the result is made possible by a large number of men, co-operating. This conception of the problem carries the architect's obligation beyond his own immediate organization into the ranks of the contractors and craftsmen, and is too apt to engender a minimizing of his obligation to his own force.

In fairness, it has always seemed to the writer, that the architects' organization should recognize the leaders in the organization by publishing their names on firm letter-heads, etc. A system of profit sharing amplifies the spirit of fair play and confidence essential to real co-operation. Conferences between the force and members of the firm are always helpful—where free discussion of office methods and results of office undertakings are entered into.

It seems to the writer that the danger of the office is specialization and that, as an antidote to this, the designers should be given an opportunity to visit the work in construction and that the superintendent and engineer should be early brought in touch with

the design work.

An architect, with a real vision of his great profession, should give personal attention to the progress of his men. He too seldom realizes that the men in his employ, who are to be the future architects of his community, are permanently influenced by his own standards of ethics, design and construction.

No city should be without its architectural club,

which the practicing architects of the community should support freely with their money, their time and their interest.

The modern architect, if he is to survive the dangers which threaten his profession, must learn the lesson of co-operation. He must realize the functions and the rights of all the elements in the building industry. He should lead in reforms, but he has too long played the role of dictator. His isolation has been especially marked in his failure to fraternize with the craftsmen who erect his buildings, and who of all the men in the industry, can be most useful in carrying out his standards of construction and of design.

Strong as these obligations are, they are, however, not comparable in the last analysis, with the obligation of the architect to his own draftsmen.

From Electus D. Litchfield, & Rogers, Architects, New York

IT HAS always been my theory that the most successful results in architecture are only obtained by the whole office acting as one man, with each individual in his particular sphere, from the conception of the work to its completion, doing his utmost to make each element of the design and construction absolutely its best possible. In an organization guided by this principle, there is bound to be difference of opinion and at times friction; which after all is perhaps not unhealthy, for it is only when the principle is not appreciated that hard feelings develop. The individual who is not broad enough to appreciate the principle is only a hindrance in an active architectural organization.

From Albert Kelsey, Architect, Philadelphia.

RESPONDING to your letter, I would say that my office is so small that it is easy to maintain the human element while working out all problems that I may have to solve. But I might say, in looking back over a period of between twentyfive and thirty years, that this office has been a happy home for the few draftsmen I have employed, and it is a source of great satisfaction to me that so many of them have succeeded after leaving. I attribute this happy state of affairs to the close personal relations existing between us and to the fact that I have always encouraged draftsmen to join the T-Square Club and to strive to take the course at the University of Pennsylvania. With the result that they have felt their future depended somewhat upon following my advice, and feeling so have worked with me with unusual loyalty and spirit.

Another point which is not as far away from the subject as might be supposed, might be dwelt upon with advantage to the profession, and that is that the best architecture is always produced by the most generous architects and those least afraid of each other. In support of this, let me call attention to the little group of architects that broke away from

the old order of things some thirty years ago here in Philadelphia, and at length made the local Chapter of the Institute of some importance. In those days the meetings used to be held in different architects' offices and it is my sincere belief that the greatest benefit derived from attendance came through prowling about through another architect's drafting room and through learning his ways and methods

Now, while your excellent journal is published almost exclusively in the interest of draftsmen, most of them nevertheless look forward to the time when they may be taken into the firm or start out for themselves. Therefore, it is my belief that to get the most out of a man you must show him that you are sincerely interested in his future and always anxious to lend him a helping hand.

From John Mead Howells, Architect, New York TEAR I may have nothing that will sound

I original to contribute to your symposium.

Through my connection with Diplomés Society and with the Society of Beaux-Arts Architects I have been particularly interested in seeing young designers, especially many who could not even go to college, sent abroad or led directly into professional offices. Many, of course, are in offices already and combine their work there with the Beaux-Arts work.

It is interesting to see a man of this type, a few years later, pass out of the drafting room arm in arm with some practical specification-writing friend, and start in his own practice.

It is an uncomfortable fact that some of these men sometimes find they cannot sustain an office through the lack, I suppose, of a wide and influential enough acquaintance in the town where they start. If they can bridge over this period by winning a competition or two they usually get a footbold

From D. Everett Waid, Architect, New York

IN ANSWER to your question I would say that the human element is as important in the office as in the home. The largest portion of each person's time and energy is expended in the hours devoted to work. If the relationship during that time is not human in the highest sense it means that life is a failure.

I like to think of an architect's organization as his office family. If he does not take some active interest in the personal welfare and ambitions of each member he is not living up to his duty. On the other hand if they are not concerned about the work turned out by the office, beyond its function as a salary producer, they are only machines and are missing the meaning of real loyalty to self and to each other.

Perhaps other architects can confess failure in as large degree as do I. But, too, we may think we know a few things which we ought to try to do. Give us credit at least for good intentions. One of these is a financial dividend (not a "bonus") vary-

ing with the success of the year's business and based in some fair way on earnings, length of service and interest in the office and fellow employees.

Another matter in which the architect may wisely take an interest in disability and life insurance for

each one of his organization.

The obligation which perhaps rests most strongly on every practising architect and the one which he most often fails to discharge is that of giving every potential practitioner in his office an all around experience instead of keeping him in a rut. The Board of Registration could quote many instances of brilliant young graduates in architecture who have been three years in subsequent office work and still remain totally ignorant of many qualifications essential for them to possess in the independent practice of architecture.

From Lionel Moses, New York City

A LITTLE incident in which the writer once figured seems to embody so well a number of essentials of the problem of the human element in the architect's organization, as to be worth relating, though it is not directly in the field of architectural practice.

A long time ago—let us say twenty years more or less—the writer was charged with the duty of obtaining, at very short notice, a zinc plate of a drawing so that a hundred prints could be made for distribution within forty-eight hours.

It was natural that he should go to the largest and best concern he knew to obtain quick results; but a telephone message brought the reply that they were too busy and that a firm whose name was given

might do the job.

The "too busy" firm gave up business about a year ago, publishing the fact that the class of trade which they sought did not afford sufficient support for them to carry on. The little concern then on the third and fourth floors of a converted house in Union Square is now the proud possessor of an establishment of considerable size and, from all ap-

pearances, is very successful. We may forget the firm which has gone out of business. There is no moral to adorn our tale so far as it is concerned. They probably cashed in and paid a hundred cents on the dollar and the name of the firm's founder will always remain in the annals of printing. It is the other firm that is of interest because of the memorable experience attached to it. The writer after obtaining the address of the little concern, with his rather large drawing under his arm, jumped into a hansom and in a few minutes was dropped at the entrance of the Union Square establishment. On entering a door two flights up, he was greeted by a man somewhat younger than middle age who, without any pre-liminaries asked the question, "What can we do for you?" (I learned later that he was the boss helping out the office boy.) On hearing what was needed he simply said, "Go upstairs and tell Tommy." Upstairs was a busy place with four young men bustling about, doing things. "Where's "Where's

Tommy," said the visitor. Tommy was under the focusing cloth of a camera. His head popped out; he called one of the other boys to "finish focusing that camera"; and said, "What can we do for you? That was the second time the same words had been spoken within three minutes. Both times the idea was conveyed that "do" was the central and guiding thought. "We" and "do" are a wonder words. "Can you do so and so?" (to Tommy).

Then ensued as pretty Then ensued as pretty a piece of team work as a Yale football team could While the drawing was being unwrapped one of the boys pulled forward the board on which the drawing was to be tacked. Another dragged a camera (not the one that Tommy had been using) into position and by the time it had been focused, a plate holder was handed the protographer (Tommy) and the exposure was made.

After seeing negatives developed the writer left with the drawing, having arranged that the zinc plate would be delivered at nine o'clock next day. It was, even though Tommy and a helper had to work overtime to produce the result. The finished prints were made the following day and sent to their destination. Why they were wanted on that day the writer never, by the way, learned. But anyway, the job was done, thanks to Tommy and his side partners.

On returning to the office at 5:15, having been away for an hour or so, there were found to be notices of two telephone calls on the writer's desk, but the operator had in one case gotten the name so incorrectly as to make it impossible to identify the caller and in the other case the name could have been any one of a dozen persons known to the office. There was no telephone number of either slip. The operator had left and was probably on the 5:15 for "Nutclair" to attend to the first duty of a commuter which, as everyone knows, is to rake and coal the furnace.

All of which reminds one of the "message to Garcia," part of this story being similar and the remainder so different.

And in passing one might recommend this little tale to every architect, for his library. (The booklet is in all the public libraries.)

Co-operation should start at the outside office. It should end with the boss. It often ends before it reaches any where near him and cases have been known where it ends just at him even when, in rare cases, it gets to him.

Schemes and plans of running an office "efficiently" generally become top heavy. An office cannot run automatically, but co-operation can be made automatic if, among other things the pervading spirit is one founded on a tolerance of the "different" personality which is inherent in the other fellow, and due regard taken of his (and one's own) abilities and short comings. Tolerance engenders sympathy for and from another (bosses please take notice). It is more than mere studied politeness.

Co-operation rests on willingness at any time to

help the other fellow. If you are willing to help him he will be willing to help you. Both need it sometime or other. Be willing to give help all the time and you'll get help at the time you need it most. If you are not too busy to attend to business (even if it is the other fellow's) neither will he be too busy when you need him. If you are temperamental keep it for your work. Don't use it up on your co-laborer (bosses please take notice).

And so one could go on indefinitely composing and quoting adages, some of which might sometimes be taken to heart and acted upon.

All the same in proportion to the number of times the above few adages (and some others which everyone can bring to mind) are acted upon just so often will successful co-operation result and co-operation is like mortar in the wall (the modern wall, not the Parthenon and similar). Anyway, "What can we do for you?" will help some if we really mean it.

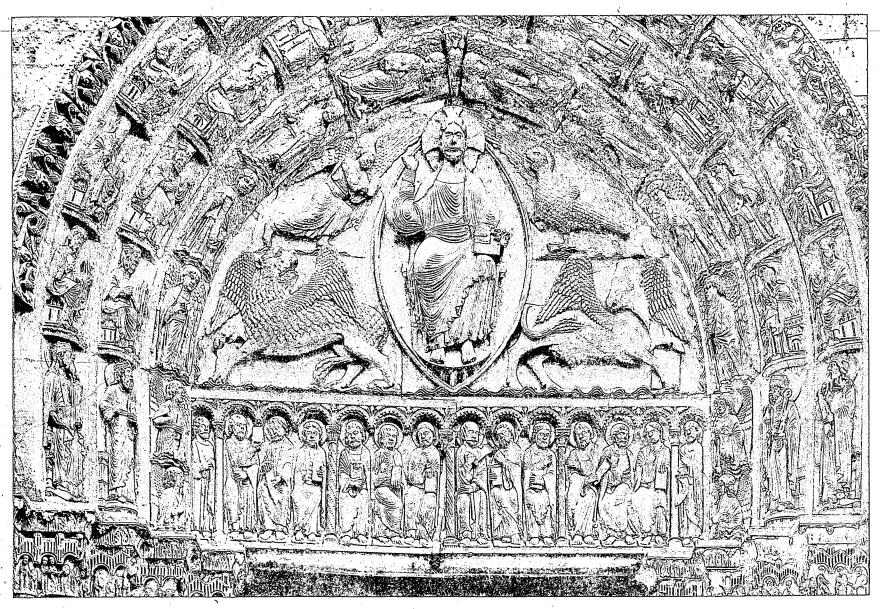
From Smith & Walker, Architects, Boston, Mass.

IN THIS office, which is a small one, employing only a few draftsmen, "the human element in the architect's organization" has not been a serious problem, particularly since both members of the firm are not so far removed from the draftsman's point of view as to render them out of sympathy with the problems of the employee.

In general, we have tried to make it clear to our men that we consider their interests ours, just as we expect them to consider our interests theirs: that we do not propose to "hire and fire," but that a position with us is reasonably permanent if services are loyally given, and that increases of salary will be given voluntarily by us always when they are honestly earned and appropriate.

We are glad to help our men with their outside problems, encourage them to undertake work on the side, insofar as it does not interfere with office time, and when they have gone as far as they can with us, do our utmost to place them in offices where the opportunities are greater and more remunerative. We have always been glad to have them use our office facilities and equipment outside of hours for the working out of student problems, competitions and outside work.

It is evident to us that the better type of architectural draftsman is recruited from a very special class of men, usually of a sensitive and refined sort, and in general we feel certain that such men must be given the consideration commensurate with the services they are expected to render. A time clock system is obviously unsuited to the conditions prevailing in an architectural office of modern tendencies, and there is no doubt in our minds but that the best results are obtainable through honest co-operation and the sympathetic handling of each individual whose work has a definite bearing on the output of the firm he serves.



CHARTRES CATHEDRAL. DETAIL OF PORTAL. FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

Some of the beautiful detail of Chartres Cathedral is well shown in the plate reproduced on the other side of this sheet from "Selected Monuments of French Gothic Architecture," to be issued shortly by the publishers of this journal. This photograph and other plates in this collection are from the archives of the French Commission of Historic Monuments.

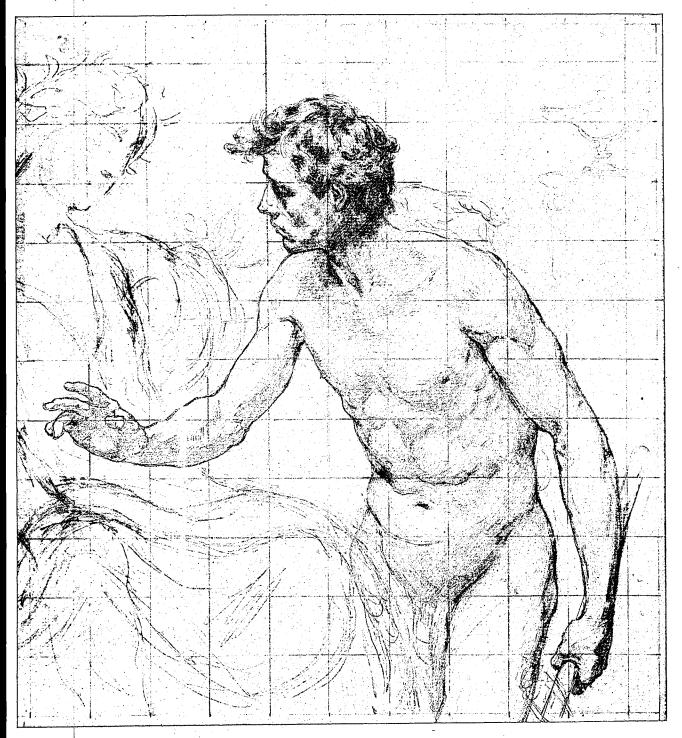
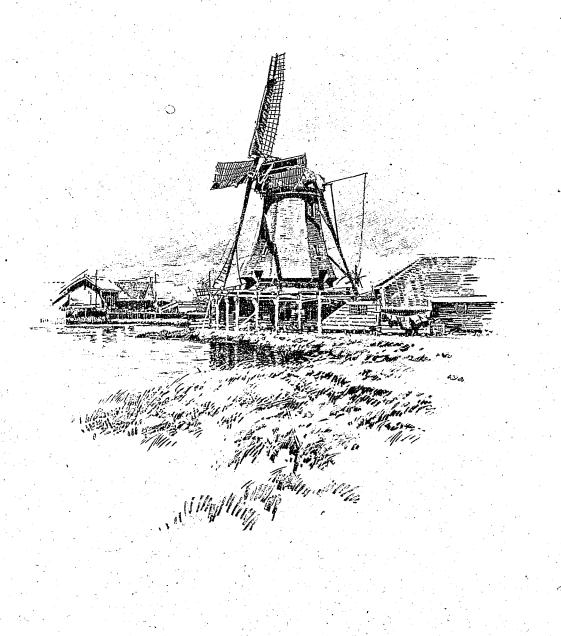


FIGURE DRAWING BY KENYON COX

One of the many remarkably fine figure drawings made by the late Kenyon Cox as studies for his mural paintings is reproduced on the other side of this sheet. This drawing and other drawings by this artist that have been shown in this journal from time to time were loaned for the purpose by Mrs. Cox.



Courtesy of G. Dewey Swan.

PENCIL SKETCH BY F. E. GETTY

Through the courtesy of G. Dewey Swan, of Boston, who loaned us the original drawing, we reproduce on the other side of this sheet an unusually pleasing pencil drawing by F. E. Getty. It is excellent in technique and in pictorial quality.

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PLATE XVI

OLD ITALIAN DRAWING IN RED CHALK

On the other side of this sheet is reproduced an old Italian figure drawing from the collection of John Mead Howells. The name of the artist is not known. The drawing was acquired by Mr. Howells on one of his visits to Italy and is of unusual interest because of the skill and delicacy of touch shown in the technique and the excellence of the rendering of anatomy. It will be noted that all tones are composed of hatching of lines that are clear and fine.

MASTER DRAFTSMEN, PART I

STANFORD WHITE

1853-1906

URRENT reputation of living artists and that of those of the past generation—bound up so much as it is with fashion and somewhat obscured or exaggerated by the conventional cant and eulogies which always follow upon the death of recent luminaries—causes any attempt at judg-

ment upon the work of the men about us or those we have known to go little further than individual opinion. Each of us has his own opinion, more or less definite, of all the people about us, and of their work and doings. Such opinion in ninety-nine out of a hundred cases improves as we know more intimately the man and his workprovided we have not in our imaginations deified the being to the point of disillusionment. Until the personality of a man has passed beyond the memory of every living human being anything approaching permanent reputation as to his works—anything that may find its way into the histories of art to be written for future generations is in the meltingpot. Mixed with his reputation as an artist there is always a

quantity of gossip, anecdote and matter of human interest that is inseparable for the time being. There could be no point in trying to separate it. Should we find half the interest in the work of Benvenuto Cellini, beautiful as we must all recognize it to be, without having read his fascinating autobiography. The contents of the "melting-pot" may be stirred—more or less clarification may result from slight additions to its content—that is about all. The more we know of the human qualities of an artist the more we are likely to find ourselves in sympathy with his aspirations. The commentator may point to things interesting to himself, or which

he has observed as interesting to the men about him and thinks for such reasons, that they may be found interesting to others.

The trite proverb that "A good artist is always a good fellow," which has come down from at least Thackeray's time, I have heard repeated by men of

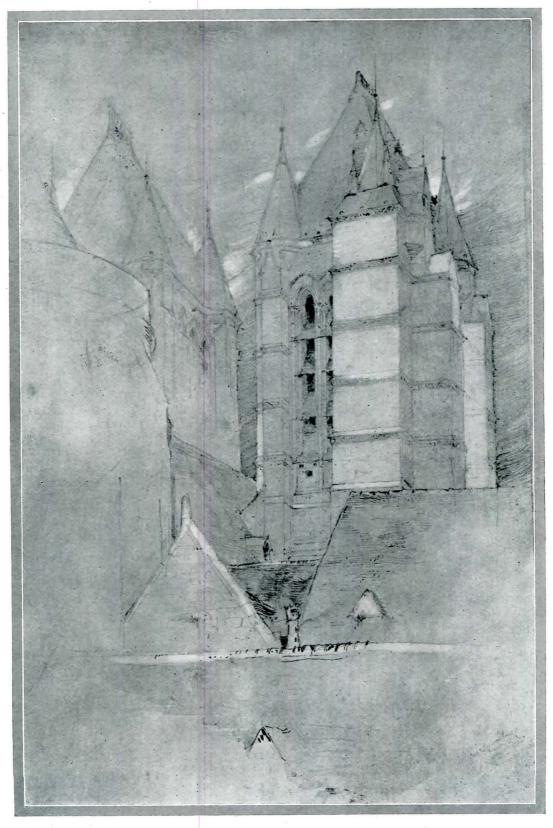
such exceptional opportunities for observation as Frank Millet and Sir William Horne. In each case hope that it might be so, may have fathered the expression (so far as my estimation goes the hope might well be gratified, for I found them both good artists and good fellows)—but which of us with even a moderately wide acquaintance among the recognized artists of our time fails to note that many lack the essential qualities of good fellowship in being a compound of conceit, vanity and narrow-Fortunately, ness. however, such "exceptions prove the rule," and from the great many to whom, in my opinion it applies in the most favorable sense, have been drawn the subjects of these essays on "Master Draftsmen."



Stanford White

Sir William was speaking of Stanford White when he repeated the proverb quoted above; and in describing the making of plans for the building of the Mount Royal Club, at Montreal, branched off into stories about White, the man and the artist, soon forgot "the plans" and told of White's lively personality and interest in pictures, jewelry, rugs, lamps, books and their covers, etc. and said, "It didn't matter what we discussed or whether it was art or the draft-gear of a freight train, fishing or canoeing, he soon took the lead in the conversation. In his enthusiasm his voice rose like a bag-pipe."

Of my personal observation, one or two anecdotes



Sketch by Stanford White. Cathedral Tower, Noyon.

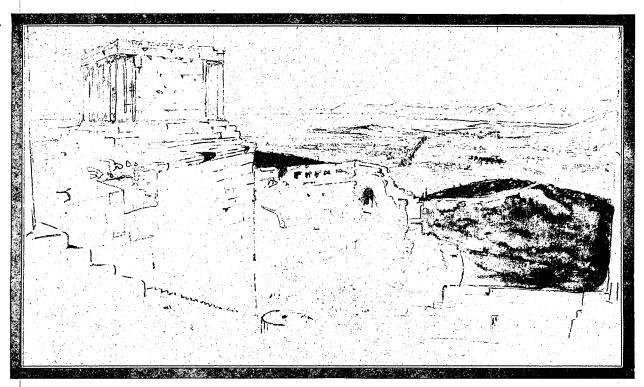
may help in the sketch of the man. He came one day during lunch hour to a decorator's office in New York, where I was employed as a young draftsman, to see a detail drawing that had been made by Thomas Johnson, while the latter was out at lunch. Somehow his large energetic figure, dominating, intense personality, seemed to fill the whole office. "Beautiful!" he exclaimed, "fine as the Parthenon!" Then, after a second, taking up a piece of tracing paper: "Dammit, if it isn't, we'll make it so." He sketched rapidly some alterations to the mouldings and ornament, composed the sketch and detail, crushed the tracing in his hand, dropped it on the floor, said—looking at the original detail:—"Fine! Just as it is," and abruptly rushed off. When Johnson came in, he picked up the ball of crushed tracing paper, did his own comparing, said, "Better," and altered the detail to agree with Mr. White's sketch. "It is a way he has," said "Tom," later in the day.

I have another impression of him when, during a meeting of the Detroit Museum of Art, called to consider a proposed memorial to be built to commemorate the bi-centennial of the founding of Detroit, he was standing on the platform being introduced by the late Mayor Maybury to a sizable audience, including several architects. The Mayor was enthusiastic about Mr. White (he had been with him all day, and I've never even heard of anybody who was not infected with Mr. White's high-powered enthusiasm in half that time). "Mr. White," he said, "is the architect who designed all the buildings at the Chicago World's Fair." Something must have suddenly bitten

White's moustache, on both sides, for both hands shot to his moustache and brushed it outwards. Wrinkles appeared at the sides of his eyes, and St. Gaudens' description of him as a "red-head" applied for a minute or two from the top of his collar, up. "But he never even peeped!" laughed George D. Mason, who sat next to me. He was "back on the job" in an instant and gravely described the proposals shown by the drawings.

It was the Mayor, however—not he—who described the design as "a Greek Doric column: the largest in the world": which drew from Louis Sullivan the humorous, somewhat caustic comment, "They asked their architect to think of a memorial and he thought of 'a Greek Doric Column: the largest in the world." It is as if I were to ask you to think of an orange and you thought of a sausage—the largest in the world." I imagine that if Mr. Sullivan had been around when Mr. White read that comment he would have learned the point to a saying that "Stanford White didn't have a red head for nothing."

His force and enthusiasm carried forward the impetus that Richardson had given, and Hunt had done so much to develop, in making architecture a part of American civilization. So much so that at the time he passed away it seemed to the writer that what was said of him and his work left no credit to his associates and assistants; yet of whom I had known him to speak as though he felt he would be nothing without them. Once, when I wrote an article in a London paper in which I quoted as nearly as I could recall—and correctly as far as I was informed—a statement that Mr. McKim had made to me to the



Sketch by Stanford White. Temple of Wingless Victory from the Acropolis, Athens.

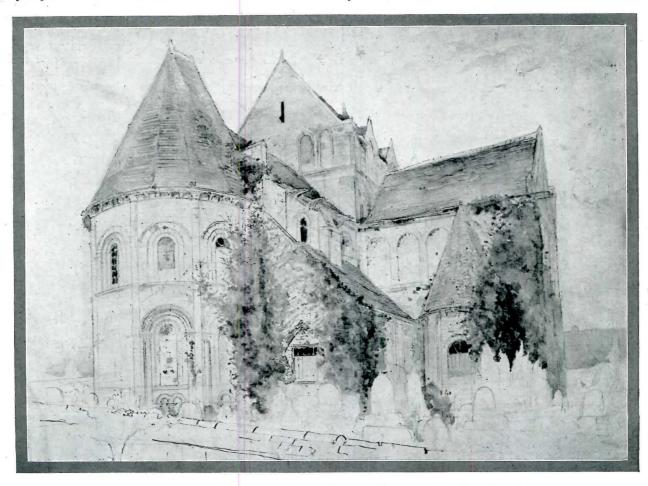
effect that some of the men in the office had done as much or more, in developing the judgment of himself and White as ever they had that of their assistants, mentioning among others Cass Gilbert. I received a letter from Mr. Gilbert positively denying the statement and giving his version thus:-"The truth is we were just young fellows working under Stanford White. He was the leader of us all and we looked up to him and admired him, as man and artist, more than I can tell you. It am sure I had no influence upon him whatsoever and I do not think any of the others did either; and lovalty, and truth compel me to say so." When loyalty, and truth compel me to say so.' I assured Mr. Gilbert of my authority for my statement, he said: "Oh, that was just Mr. McKim's nice way of saying things; for I have heard him too speak in glowing terms of the ideas of his partners and of the 'young fellows' who worked under him—and I did not fail to understand that the tribute to assistants was, at least partly due-as with Mr. McKim-to generosity.

A short time ago Mr. Cass Gilbert told the following story, to a group of architects including Mr. Welles Bosworth and Mr. Lawrence White, of an incident that occurred in the office of Messrs. McKim, Mead and White many years ago when Joseph Morrell Wells was a member of that firm:

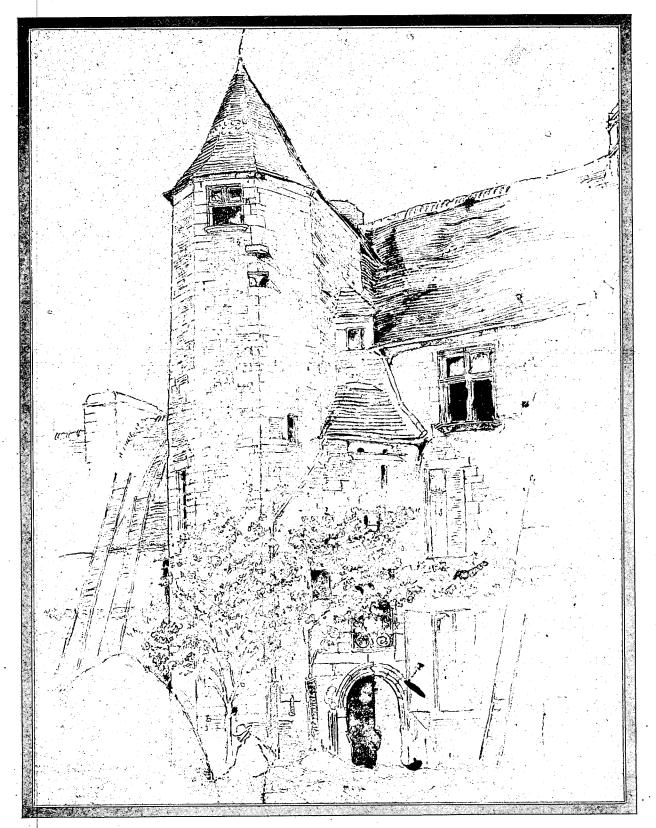
"Stanford White came rushing into the office with a picture of a small French church in his hand. 'Look here! Mr. Wells,' he exclaimed, 'look, here's something as fine as the Parthenon—in a way.' Mr. Wells looked. 'Yes, White,' he replied, 'fried eggs are as fine as the Parthenon—in a way.'"

Mr. White's career as a brilliant architect and one of the original association of artists in the great firm of McKim, Mead and White is too well known and appreciated and fresh in the memory of even the youngest of his confrères to require any mention of it here. A delightful collection of correspondence between him and Augustus Saint Gaudens, presented by Homer Saint Gaudens, was published in Volume XXX of the "Architectural Record." Mr. Royal Cortissoz in his book, "American Artists," includes an enthusiastic chapter about him and his work, in which he states: "The best tribute that can be paid to Stanford White is recognition of the influence of his artistic standard upon New York and upon the whole country."

But the most charming record, tribute, and reflection of the sunny light he cast about him is found in the book of "Sketches and Designs with an Outline of His Career, by his son Lawrence Grant White," published in 1920. Mr. Lawrence White says of his father: "On rare occasions when he di-



Sketch by Stanford White. French Romanesque Church.



Sketch by Stanford White. Manoir Saint Marie Aux Anglais.

gressed from architecture he seemed to rejoice in the freedom from the limitations imposed by stone and mortar and to turn with a light heart to the making of beautiful drawings and designs. He applied his genius to widely varied problems and has rightly been called the greatest designer America

has ever produced."

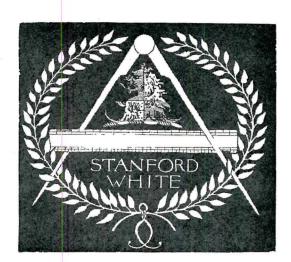
In the latter part of the last sentence some readers will perceive a naïveté to be expected of a perfectly natural, altogether human being, writing from a filial point of view. A view that might be expected, too, from the younger artist who has lived all his life in the lumens shed by the elder. Allowance might be readily made for possibly less enthusiasm coming from a hardened habitué of the studios and art museums of Europe and America, one somewhat older and whose personal impressions of Stanford White have been received like the flashes from a lighthouse by one on a ship at sea.

But the position of the present writer is like that of a certain "junior counsel" in an important legal case of which an old judge told the following story: "His 'leader' was making a long speech stating the grounds of appeal and stopped to examine

Note. Stanford White's book plate is reproduced below at exact size. It was in solid color and printed in red. his brief. The judge happened to glance at the junior, who promptly said, 'I agree.' The leader looked at him severely; proceeded to talk another five minutes and sat down with an air of finality. As he did so, the junior again spoke up: 'I still agree.'"

Mr. Lawrence White states that, early in his career, Stanford White acquired "a keen observation and a sure touch." The studies—they are more than sketches-reproduced herewith, were made in that early period. No process of reproduction can adequately express the fine sense of color or the extreme delicacy of touch displayed in the originals: but the architectural sense of structure, composition of the drawing, indication of texture of material, refined feeling for detail and general excellence of technique will be sufficient to demonstrate that Stanford White was a master draftsman. And a study of the many executed works in architecture and the decorative arts produced from directions given by his pencil will go far to demonstrate the assertion that he "has rightly been called the greatest designer that America has ever produced.

Francis S. Swales



"MOSAICS" IN ACTUAL BUILDINGS

BY JOHN F. HARBESON

In this article Mr. Harbeson continues the discussion of the study of architectural design with special reference to the program of the Beaux-Arts Institute of Design. The articles of this series are intended to assist students in the ateliers and schools where the B. A. I. D. program is followed.—Ed.

FTER doing a number of Beaux Arts projets, and using "Mosaic" on plans to explain the parti, and to help in making the composition in two dimensions what these plans must be to make a convincing presentation, it is well worth while to take for a little while a vacation from the atelier viewpoint to see the use that has been made of mosaic in the buildings of the past, and what use is being made of it in present day buildings. Such an excursion will not only be diverting and interesting, but will give a broader background from which to work again at atelier mosaic, a better understanding of the real truths that underlie this convention, and it will also enlarge one's vocabulary of forms that may be used in this way, and give new ideas as to how all of the

forms may be used.

While doing this research work we must bear in mind that "mosaic" as used on plans is a convention, and that while we use floor pattern here, and a ceiling there, in some places we will use arrangements that are purely conventional and are not taken from actual building, such as the half-circle frequently put at openings to carry the "white" in and express the idea of an opening through which one may enter, and such as the lines connecting each pair of trees when two rows of trees form a vista. So, when we look up historical examples of mosaic it is not with the idea of making our plan mosaic fit into historical or practical clothing, but to give new elements that we may fit into our conventions, for greater variety and interest. As explained before, the primary use of mosaic in a projet is to help explain the scheme; a showing of only such patterns as would be suitable for building into floor or ceiling would frequently defeat this purpose. A projet is not—should not be—either a working drawing or a "measured drawing," as we use this term to mean a statement of executed work.

There was probably some thought spent on floor patterns almost as soon as man painted or chiselled decoration on the walls of his buildings. By the time Greek culture was in the ascendant these pavement forms were already intricate and costly in some

of the temples.

The Parthenon had, very probably, a simple floor of marble slabs (Fig. 1), but these were slabs of Pentelic marble—rich in quality, even in color, fine in grain, and were no doubt fitted together with that remarkable exactness and precision that characterizes the stone work of the wall and columns.

In the Greek colonies, where marbles of such fineness were not to be had, the floors were made of smaller bits of stone and marble, arranged in patterned forms, such as that of the temple at Selinonte shown in Fig. 2. In some cases these patterns were exceedingly elaborate as in the Temple of Jupiter Olympus at Olympia (Fig. 3) where parts

of the floor are lace-like in character. In both of these examples it is well to note the great variety of patterns used, some quite geometrical, others not at all so. Of course, these are "restorations" of the plans of these temples, but they are based on existing fragments and on coins and other documents of

the period.

Roman art was an extension of the Greek culture, and the same pavement forms were used, a little stiffer in composition. The richness of the various pavements of the circular pavilion at Hadrian's villa (Fig. 4) is lost in reproduction. Much of the effect was obtained by pieces of marble of many different colors which was exquisitely shown in this clever drawing, but are here, of course, simply different kinds of gray. The pavements of the Women's Baths at Hadrian's Villa (Fig. 5) have more of the freer forms found in the Greek examples, but these, too, were carried out in an infinite variety of color. If we turn for a moment to the winning plan of the 1923 LeBrun Scholarship Competition (Page 53, Pencil Points for May, 1923) we see how some of these forms have been used in a recent presentation.

The early Christians used floors based on the same principle (Fig. 6), but in these the pieces were larger. The designs were usually geometrical, but in great variety; frequently there was no attempt to make opposite sides of a floor identical in design. This example, The Church of S. Clemente at Rome, shows how columns from a number of old Roman temples were incorporated in one design—sometimes with a cap or base a few sizes too large, or with a plinth to bring a column up to the height of the others. It is almost certain that the stones used in these patterned floors were filched from the pagan buildings in the same way.

In the Renaissance this tradition was revived, but the floors were designed with more thought to the floor as a whole—with a border and a field, and with ornaments at important places in the field. In the Church of the Miracoli at Venice (Fig. 7) a strip down the center of the floor, the path that the processions followed, was treated like a rug, a custom that has been followed in many of our modern churches—at the Chapel of the Intercession in New

York City for example.

In the gallery of the Braccio Nuovo at the Vatican there were set into the floor of large marble slabs complete classic Roman pavements of the type made of small pieces of marble (Fig. 8), just as Roman bas-reliefs were set into the walls. The floor incorporates some of the exhibits.

These are only a few examples of the many kinds of floors that have been built. Even a casual search through the usual documents will show many more and of great variety. One or two other examples

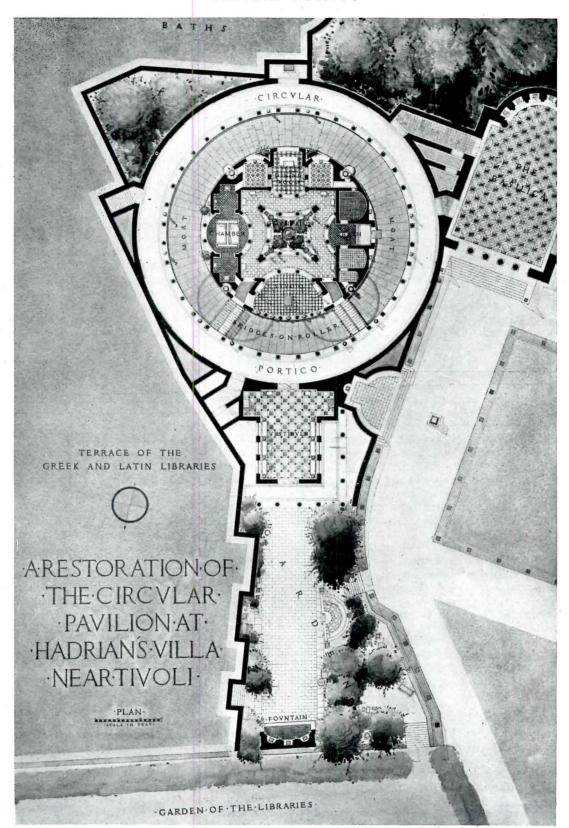


Figure 4. A Restoration of Circular Pavilion at Hadrian's Villa, near Tivoli, by P. T. Shutz, Fellow in Architecture, American Academy in Rome, 1915-18.

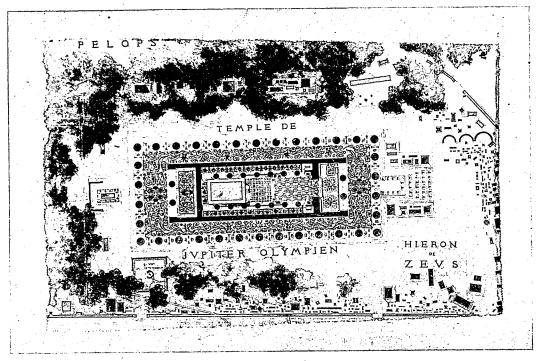


Figure 3. Plan of Jupiter Olympus at Olympia, as Restored by Laloux, 1883, French Academy at Rome. From "Monuments Antiques."

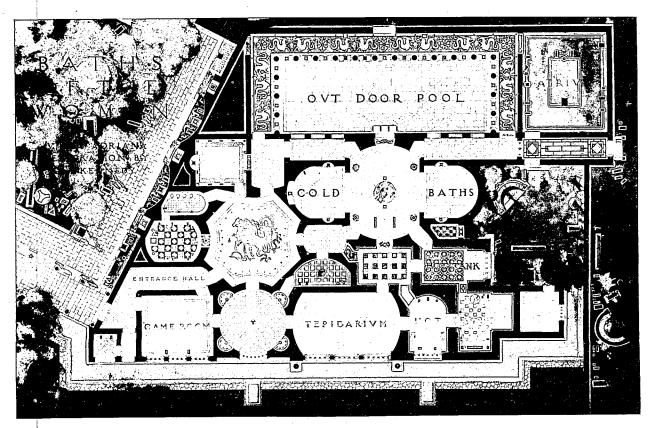


Figure 5. Plan of Women's Baths, Hadrian's Villa, as Restored by R. N. Kennedy, Fellow in Architecture, American Academy in Rome, 1916-19.

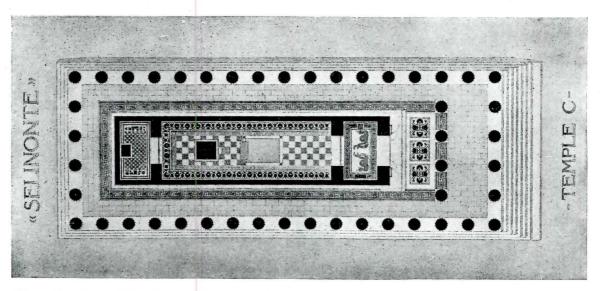


Figure 2. Plan of Temple at Selinonte as Restored by Hulot, 1904, French Academy at Rome. From "Monuments Antiques."

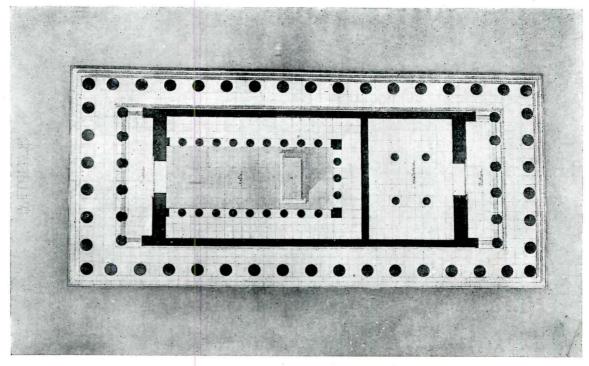


Figure 1. Plan of the Parthenon as Restored by Paccard, 1845, French Academy at Rome.

From "Monuments Antiques."



Figure 6. Church of S. Clemente, Rome 9th Century.



Figure 8. Braccio Nuovo Gallery, Vatican Museum, Rome.



Figure 7. S. Maria dei Miracoli, Venice. Early Renaissance.

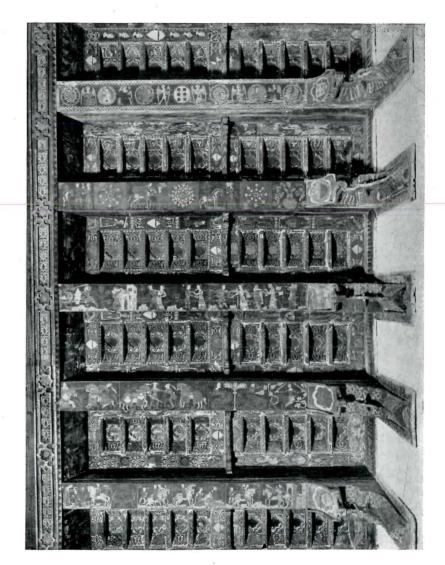


Figure 9. Ceiling, Chiaramonte Palace at Palermo, 14th Century.

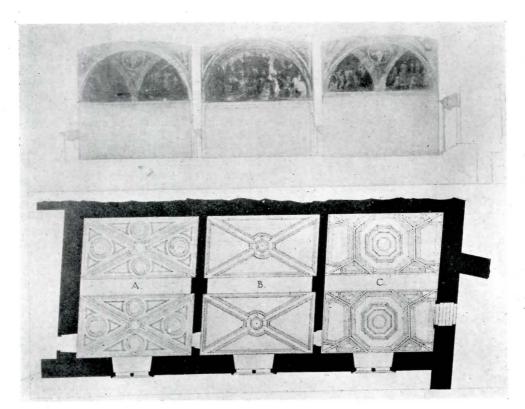


Figure 10. The Borgia Apartments at the Vatican, Rome. From "D'Espouy."

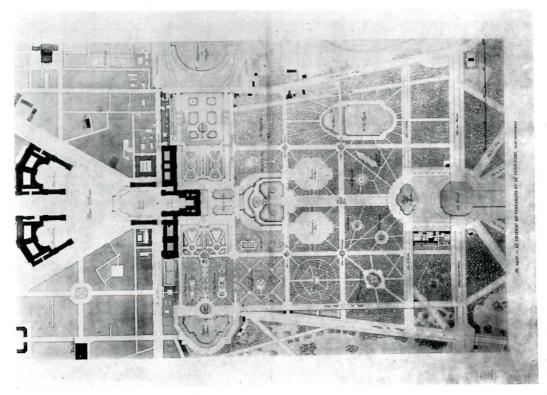


Figure 12. The Park and Château at Versailles from Gromort, "Choix des Grandes Plans Executées."

may be mentioned that would repay the effort of hunting for them; the pavement of Siena Cathedral, with its inlaid allegorical subjects; that of St. Peter's at Rome, with the coats-of-arms of the Papal

DAFONTE ARCH PCALIARI VERONESE P

Figure 11. Ceiling in the Ducal Palace, Venice. From "D'Espouy."

families; and the paving about Napoleon's tomb in the Invalides at Paris, etc., etc.

Then, too, there are ceiling patterns to study. The early roofs were of wood, and the early ceilings were simply the undersides of the roof construction, or of the floor construction—simple in its lines. These elemental surfaces were sometimes decorated with all manner of painting and striping as at the Château Blois. In the Chiaramonte Palace a Palermo (Fig. 9), is a richer one of the same kind, every square inch covered with painted embellishment. A ceiling of this type is very frequently used on a plan to indicate a dining room, or a club lounge.

The Romans had used vaults of various kinds; the the Renaissance builders used vaults of the same kinds. These were decorated sometimes by coffers only, as at the Pantheon, sometimes with elaborately designed patterns-partly modelled and partly only painted, as in the Loggia of the Villa Madama, by which the great hall of the Cunard Building in New York was inspired, and the loges of Raphael at the Vatican. An interesting example of this kind of ceiling is shown in Fig. 10, the Borgia Apartments at the Vatican, where the vaults are warped over irregular surfaces, decorated with raised mouldings, and have paintings in the panels so formed. The

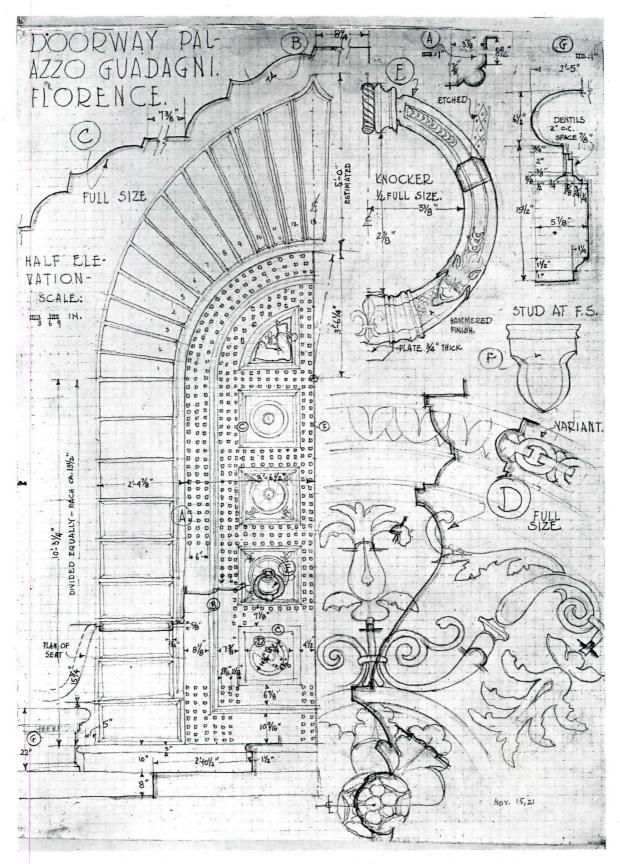
paintings in this case were by Raphael. Sometimes flat ceilings were decorated in the same way, as the one shown in Fig. 11 from the Ducal Palace at Venice, for which Veronese made the inset This is rich and elaborate, but still formal. Later, during the French Renaissance, the ceilings of the great Salles de Fête, flattened vaults of plaster were ornate with decoration—sometimes patterned and geometrical, sometimes containing human figures or mythical gods, but all well modelled and well composed. The most elaborate of these, which are at the same time some of the best, are in the Palace of Versailles. It took a royal purse to pay for the profusion of exquisite workmanship that went to make up some of these ceilings. Today it is only in public buildings that designs of this kind can be attempted, and unfortunately there are few workmen who can in these times approach the stand-

The journeys through the documents should not stop at ceilings and floors, however. Furniture, layouts of machinery in a mill, the top views of ships, locomotives, automobiles, all have their uses. One of the new sources of study is the aeroplane photograph which can give many suggestions in the study of large plans and their entourage.

ards of those days.

The plan of the park of the Palace at Versailles, Fig. 12, a "measured drawing" showing that which exists-will give many hints as to the furnishing of the entourage, the use of the little points and accents that help so much to give life to a plan. Some of these may be trees, some lamp-posts, some statuary; they all can be used in "composing" that conventional drawing, the plan. (See Fig. 171, aeroplane photograph of a part of this garden, Pencil Points for October, 1922).

De Neufforge, Blondel, Percier and Fontaine, (Continued on Page 80)



Doorway, Palazzo Guadagni, Florence. Measured by J. K. Smith and Ernest A. Grunsfeld, Jr. Drawn by Ernest A. Grunsfeld, Jr.

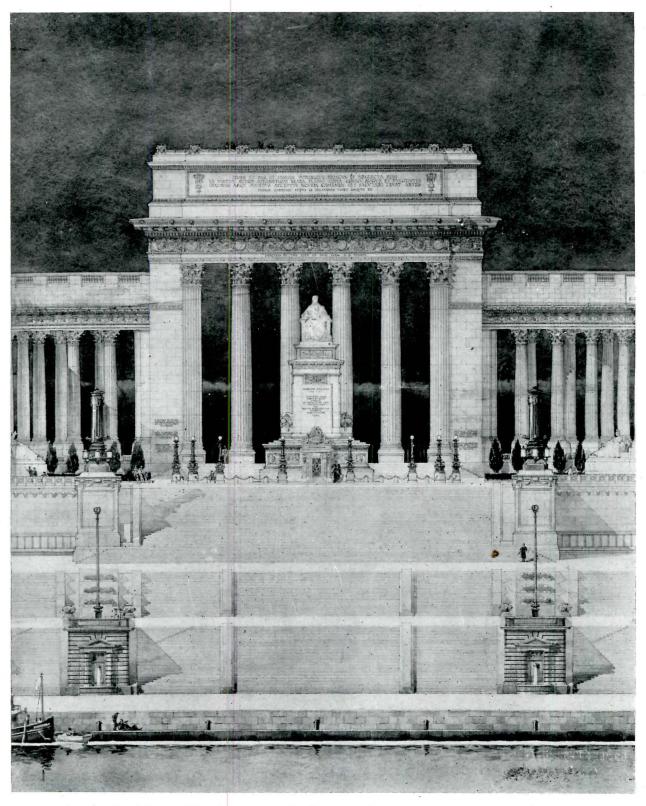


Figure 48. Detail of Competition Design for the Hudson—Fulton Memorial submitted by Albert Kelsey and Paul P. Cret. Rendered by Paul P. Cret.



Figure 46. Competition Design submitted by Albert Kelsey and Paul P. Cret, Hudson—Fulton Memorial Competition.

THE TECHNIQUE OF RENDERING, PART VII

BY FRANCIS S. SWALES

In the serial article of which this is the seventh installment Mr. Swales explains practical methods of rendering. These methods, though based on what may be regarded as standard practice include variants that have been found effective in actual work. In preparing this article Mr. Swales has drawn freely upon the fund of experience he has gained in his architectural work.—Ed.

HE plan (Figure 45 of the design for a Museum of Art and Archæology, submitted by Mr. Paul Cret for the Chenavard Prize at Paris, is an example of a technique that is far removed from that usual in American work. All the exactness and "neatness" characteristic of our renderings of plans gives way to a treatment approximately a free water-color sketch. It is very knowing of method; but the method is well concealed under glowing translucent color—in which Mr. Cret excels—and the line work is all but lost in the soft modelling of the planes and contours. The plan in this case seems to have been made to "match" the elevation. It is simply a big water-color sketch composition depending on the rendering for its definition.

In his drawings for the Hudson-Fulton Memorial (Figures 46, 47 and 48) a very striking academic method has been firmly adhered to throughout the presentation of the design proper, the only freedom allowed being at the water's edge and in the foliage at the ends of the drawing, beyond the achitectural parts. The line work of the architecture appearing against the dark background is vigorously—almost harshly—drawn; while the work upon the foreground terraces, steps, etc., is kept soft with a lighter shade of ink and a wider line. In the few lower steps in the lowest flight the lines have been widened

to give the effect of narrow washes representing the risers. Texture of the building surfaces, and the "greys" of the design, are given by the most careful Texture of the building surfaces, and the and painstaking drawing of jointing, ornament and other detail. The free standing parts of the composition, general mass, the columns and statue showing against the dark sky and the pedestals, etc., in the middle foreground and the pavilions in the advanced foreground, are all silhouetted with a line heavier than that used elsewhere. The silhouette line is darkest-almost black-around the most distant features and becomes lighter, giving less contrast, as the planes of the parts advance. A few light washes are used to key up the planes of the terraces and buildings and light transparent shadows are cast upon the buildings and colonnades. Reflected shades are indicated on the left hand, curved portion of the colonnade. The principal rendering is confined to the accessories—the bulkhead wall, waterfront stairs, ships, trees, which surround the design but do not become essential parts of it. The drawing which is about four feet high by six feet long is rendered in ivory black warmed with raw sienna. The uneven settling of the mixture as well as its warmth and richness of tone gives a strong The texture vibrant quality to the total effect. to the retaining walls is given by going over the

whole surface with a pen and drawing in each piece of the random stonework (Figure 47). The drawing of the trees, the ships and indications of steam and other signs of activity and the free rendering of the ripples in the water give just the touches necessary to relieve the rigidity of purely conventional expression and apprize us of the artist, as well as the skilled technician, at work.

The quality of texture may be given to a drawing rendered with flat washes by drawing over it with a charcoal, carbon or lithographer's pencil, and large or detail drawings can be effectively presented that way (Figure 45). It is a very easy way when a good free-hand technique has been developed by the draftsman. Such technique consists of a line almost uniform in width and of a characteristic length; and a regular spacing, or width of the "white line" between. Such drawing for purposes of modelling is the same in technical character as the more customary wash drawing—the same conventions and "tricks" are employed to bring out the relief of the foreground and nearer planes and to set back the more distant parts or planes. Only the principal masses need be rendered in wash and those only for

the purpose of giving body. All of the graded effects of light and shade are taken care of in the texture; but a different method of applying the technical principles of modelling a drawing comes into play. Instead of a number of thin graded washes and the employment of settling pigments, rough surfaced papers to give a luminous effect to the whole of a shadow, it is given by direct drawing of masses of lines, which in the total effect become planes. Gradation is effected by either grading the lines from dark at one end of a mass to light at the other -a difference of pressure on the pencil; or by spacing the lines further apart; or by cross-hatching at one end more than elsewhere and dropping out part of the hatching as one goes along; or, of course, by combining the different methods. As one adopts the methods using a point to obtain lines, by which in mass, a plane is expressed, one passes from the technique of the painter to that of the draftsman and the engraver; and many of the conventions used in the line-work of the drawing prepared for wash rendering undergo considerable modification in hand-ling. Rendering to express texture is mainly used (Continued on Page 80)

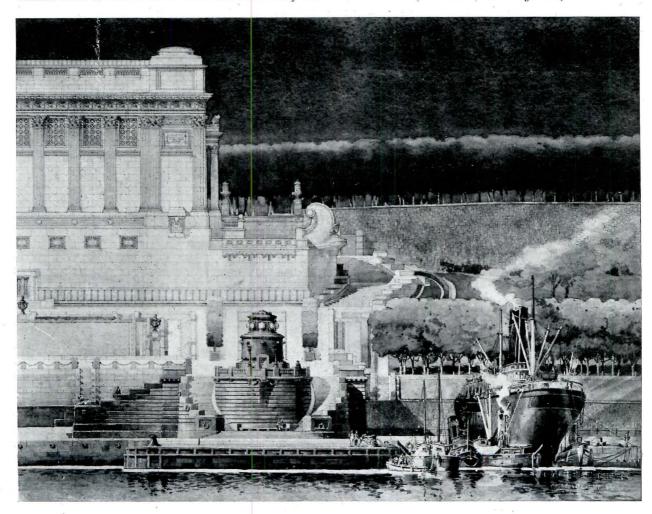


Figure 47. Detail of Design submitted by Paul P. Cret and Albert Kelsey for Hudson—Fulton Memorial.

Competition.



Figure 45. Design by Paul P. Cret for "A Museum of Art and Archaeology," Chenavard Competition, Ecole des Beaux Arts.

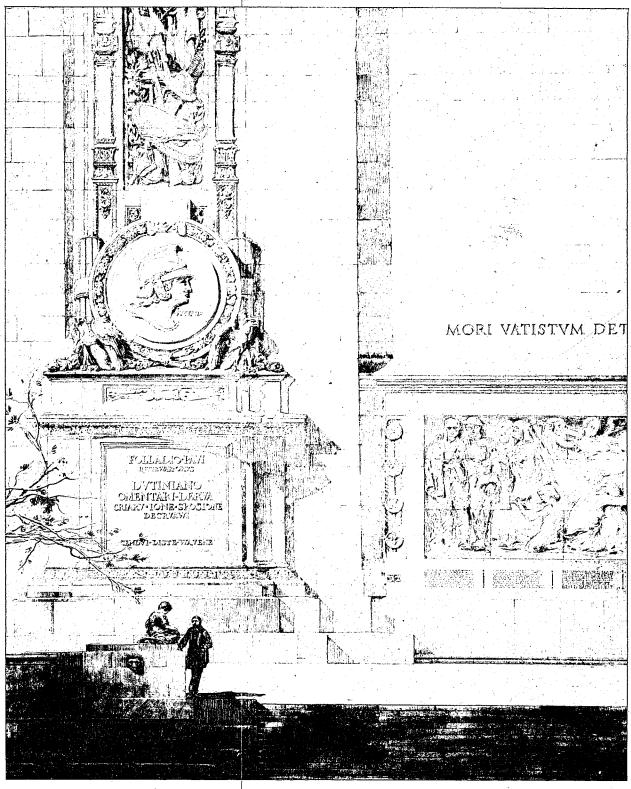


Figure 49. Detail of Design by Paul P. Cret and Zantzinger, Borie and Medary, Competition for Kansas City War Memorial.

Published Monthly by

THE PENCIL POINTS PRESS, Inc.

Publication Office-Stamford, Conn.

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

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

RAY D. FINEL, Advertising Manager

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Subscription rates per annum, payable in advance; to The United States of America and Possessions, Argentina, Bolivia, Brazill Columbia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras (Republic), Mexico, Nicaragua, Panama, Paraguay, Peru, El Salvador, Spain and Colonies (Balearic Islands, Canary Islands and Spanish possessions on the north coast of Africa), and Uruguay, \$2.00. Single copies, 25 cents. Canadian Subscription, \$2.50. Foreign countries not mentioned above but in the Postal Union, \$3.00. Payment for foreign subscription should be made by International Money Order or American Express Money Order drawn in terms of United States Funds.

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CARNEGIE ARCHITECTURAL SOCIETY PITTSBURGH, PA.

THE Carnegie Architectural Society, student organ-I lization at the Carnegie Institute of Technology, again takes the privilege, kindly extended by Pencil Points, of reviewing their activities for the past several months and announcing the results of the election of officers, held recently.

omcers, neig recently.

Mr. C. A. Lundquist and Mr. J. S. Douglass were reelected to the offices of President and Treasurer respectively.

Mr. A. K. Goehring was elected Vice-President and Mr. D. C. Doig, Secretary. Two new names were also elected to membership; Mr. P. Hoffer Sload and J. Donald Mauricana.

Donald Mawhinney.

Of special interest, not only to the members but to the department as a whole, was the week of Jan. 13, which carried out, according to the policy of the organization both their educational and social endeavors. On the evennot their educational and social endeavors. On the evening of Jan. 15th, Mr. Steen, prominent Pittsburgh architect, addressed members and guests at the house which is located on the Campus. His talk, which was related from his own experiences in the practice of Architecture, was especially interesting and contained excellent advice from a student's viewpoint.

On Jan. 18th, a Smoker was held at the house with members of the Department as guests. Despite the conflict with another Campus activity on that night a large turnout was present to enjoy the varied program of Music, Stunts and Surprises which had been arranged for the occasion in addition to the customary smokes and the loccasion in addition to the customary smokes and eats. During the same week an inspection tour of the Carnegie Steel Mills at Braddock, Pa., was conducted by the organization. This trip proved very interesting, not to mention the educational value. Another attractive meeting was held on Feb. 28th. Mr. Albert Naser, graduate of the University of Michigan, was a guest and gave

brief talk. Extensive plans have been made for future activities of architectural interest as well as in social respects. During the latter part of March, two very able speakers will de-liver addresses at the house. The annual banquet will be held during the coming month, while the departmental Smoker, sponsored by the organization will be held on March 29th.

At every other meeting sketches are presented by members, a prize being offered for the best submitted. Two re-

cent subjects which were exceptionally popular were of

cent subjects which were exceptionally popular were of the C. A. S. house and sketches of some examples in the French Renaissance. The prize-winning sketch of the house competition is to appear on the C. A. S. page of the "Thistle", annual publication at Carnegie Tech.

One of the members, Mr. J. E. Tillotson, has been receiving congratulations for his splendid showing in the Beaux Arts competitions having received First Mention Placed in the last two "B" Plan Projets. Mr. J. N. Franklin, alumnus, who is taking a Graduate course, has also been honored by election to Tau Sigma Delta, the highest architectural honorary at Carnegie Tech.

A request is again made through Pencil Points that

A request is again made through Pencil Points that all alumni, with whom C. A. S. has been unable to communicate, send in their present addresses. Inquiries in regard to courses from prospective students of architecture are welcomed by the Society. Literature will be mailed upon request

mailed upon request.

CHARLES MOORE AWARDED S. A. D. G. MEDAL

HE Medal of Honor of the Société des Architects Diplômés par le Gouvernement, which is given from time to time to laymen for distinguished service in the advancement of Art and Architecture, has been awarded this year to Mr. Charles Moore, who, as is well known this year to Mr. Charles Moore, who, as is well known to all architects, has been for many years chairman of the National Fine Arts Commission in Washington, the only body in our National government which occupies itself with Art. The presentation of this medal took place at a dinner given by the S. A. D. G. at the Metropolitan Club in New York on Saturday evening, March first, at which addresses were made by His Excellency, the French Ambassador, M. Jusserand, Mr. Royal Cortissoz, Mr. Moore, Dr. John H. Finley, of the New York "Times" and Mr. Chester H. Aldrich, of Delano & Aldrich, president of the American Group of this society. Among those present were: Messrs. Cass Gilbert, Thomas Hastings, John Russell Pope, William M. Kendall, Louis C. Ayers, Harvey W. Corbett, H. V. B. Magonigle, Charles A. Harvey W. Corbett, H. V. B. Magonigle, Charles A. Platt, Siddons Mowbray, James A. Fraser, Frederic A.

Platt, Siddons Mowbray, James A. Fraser, Frederic A. Delano, Edwin H. Denby, Herbert Adams, Thomas Adams, Donn Barber, John M. Howells, Benjamin W. Morris, and John Van Pelt.

The medal given by the Society to the School of Architecture having the best record of accomplishment for the year was awarded to Yale University School of Fine Arts at a meeting held on March third at the University. Addresses were made by Mr. Aldrich who versity. Addresses were made by Mr. Aldrich, who presented the medal, and by President James R. Angell

of Yale University.

THUMB TACK CLUB OF MIAMI

THE character of the Thumb Tack Club of Miami, Florida is exceptional in that its membership is composed almost entirely of student draftsmen. This club, which was organized two years ago in connection with the work of the Department of Architecture of Miami High School meets on alternate Bridge overings. High School, meets on alternate Friday evenings. The programs are varied and interesting. Topical discussions of architectural subjects are held at different times, and trips to buildings under construction have also been under-

In connection with the Thumb Tack Club is a Saturday Sketch Club, the members of which go on sketching parties at frequent intervals. With the abundance of parties at frequent intervals. With the abundance of Spanish Architecture in the vicinity of Miami, it is not difficult to find suitable subjects to sketch. In fact, one cannot go two blocks anywhere in the city without wanting to graph a partie and slates.

ing to grab a pencil and sketch.

At present a series of lectures are being given by prominent architects under the auspices of the Miami Architectural Club. The Club was particularly fortunate in obtaining the consent of Mr. H. J. Besgetoorian, of the Miami Architectural Club, to deliver the first of these lectures. Mr. Besgetoorian chose for his ubject, "Beaux

Arts Training and Its Influence on Modern Architecture." In well chosen words Mr. Besgetoorian summed up the development of American architecture and the influence which Beaux Arts training had had upon American arch-

Arrangements have been made for lectures by other prominent architects in the near future.

EXTENSION ATELIER OF COLUMBIA UNIVERSITY

SATURDAY evening, March 8th, the Extension Atelier of Columbia University held its annual dinner at the Roma Restaurant. Many of the old members were back, and nearly fifty pencil pushers sat down to the melee. While a terpiscordian was tickling the keys, the courses were interspersed with songs suited to the occasion. The real atelier spirit prevailed, and soon even the most sedate were playing with dolls toys and dog houses, the favors were playing with dolls toys and dog houses, the ravors that were given out. After the demi-tasse and cigars were served, the Massier, Mr. Merrell G. Maybeck, introduced Prof. William A. Boring, Director of the School of Architecture. He compared our present advantages with those under which he worked in Paris., Mr. J. V. Van Pelt was then introduced and made a few general remarks relevant to the practice of the profession. He was followed by Mr. Harvey W. Corbett, who told a stock of stories of relations with clients, and gave some practical advice out of his own experience. Mr. A. E. Flanagan was next called upon and responded with some of his quiet humor. Then followed Mr. Symonds, with a "selection from Shakespeare," and a turn or two at the piano. All of the members were called upon for a story of which Mr. Tyler's literary gems easily took first rank. After a short business se sion, the assembly dispersed and went

ATELIER CUNNINGHAM, WASHINGTON, D. C.

"THERE you are" as Roxie says over the radio, having obtained a publication of our historic beginning in 1 obtained a publication of our historic beginning in "Pencil Points" we are on our road (full of roals) "Pencil Points" we are on our road (full of rocks) to fame. Not having received any more first mentions placed

since our last writing it would seem that our road is nothing but rocks, not to mention "X's."

We have at least taken one step forward, in addition to a few backward one's, and that is the enlargement of our quarters. In order to meet the demand of the charetteers we have taken the adjoining room (heat and light furnished and the roof hasn't leaked yet.) Now in addition to taking this room we have opened a Department of Interior Decoration under which a few of the members will do the interior problems of the B A. I. D. The others will do their interior decorating at the armchair lunch across the street.

Major Cunningham will continue to donate his services to the Atelier in both branches in which he is an expert.

SELAH.

"MOSAICS" IN ACTUAL BUILDING (Continued from Page 72)

in their plans showing garden forms will give many other hints as to the handling of entourage. The pattern in the paying of the forecourt of St. Peter's at Rome (Fig. 155, Pencil Points for May, 1922) shows how much actual value there is in a few lines of mosaic even in

such a large space.

Supplement this kind of research by a study of the best of modern buildings. A trip to New York for this purpose—or to a lesser extent to Boston, Chicago, Philadelphia, Washington, Detroit or San Francisco—could be a liberal education in itself. Failing this opportunity, a voyage can be made through the current architectural magazines, where material, good, bad and indifferent, is to be found in profusion.

LEWIS COLT ALBRO

EWIS COLT ALBRO, architect, died at his home in New York, March 1. Mr. Albro was born in Paris, France, February 6, 1876. His parents were Mary Colt and Lewis K. Albro, of Pittsfield, Massachusetts. His boyhood and early youth were spent in Pittsfield

until in 1893 he came to New York to enter the offices of McKim, Mead and White. It was there, working under the guidance of Mr. McKim that he developed the talent that made him afterwards one of the best known au-

thorities on domestic architecture of his time.

During his stay of thirteen years with McKim, Mead and White, he was entrusted with many important works, being put in full charge of the building of several of the Carnegie Libraries, the palatial Mitchell residence at Wading River, and the city residence of Charles Dana Gibson. He worked with Mr. McKim on the Columbia University Library and became temporarily associated with the firm when he built the Stickler Memorial, Orange Free

Library, at Orange, New Jersey.

In 1906 he severed his relations with McKim, Mead and White and formed a partnership with Harrie T. Lindeberg. This new firm achieved a high reputation very quickly, and when by mutual consent they parted in 1913 to practice independently, Mr. Albro's name was well known in the architectural world.

For ten years his work was marked by a versatility and keen appreciation of color, mass and design that won for him the distinction of being placed among the most notable architects who have made domestic architecture

their specialty.

Among some of his later important works that attracted wide attention may be mentioned the residence and estate of George Arents, Jr., at Rye, New York, the Italian villa of John L. Bushnell at Springfield, Ohio, the group of English farm buildings at Cold-Springs-on-the-Hudson, (now the estate of Dr. Ernest Fahnestock) and the formal but charming Jerome Mendleson residence at Albany, N. Y. He is survived by his wife, who was Miss Mary Pace of Richmond, Virginia.

THE TECHNIQUE OF RENDERING, PART VII (Continued from page 76)

for detail drawings; and in foregrounds and foliage of elevations drawn to a large scale. Occasionally it is done on large elevations drawn to a scale as small as onesixteenth of an inch to the foot-but that requires the use of a very fine pencil-point or fine pen and once undertaken means that the combined methods of academic washrendering and of the pen and ink draftsman, or of the etcher, must be carried throughout the entire set of drawings in order to preserve the consistency of effect.

A combination of wash rendering in clear, transparent tones, with a texture given with pen and ink, is one of the most effective methods developed by American delineators. The drawings of the Kansas City Peace Memorial constitute a particularly interesting example of such technique. (These will be reproduced in the next installment of this article.)

PERSONALS

HERBERT B. BEADLER, ARCHITECT, has removed his offices to 813 Ulmer Building, Cleveland, Ohio.

ROBERT B. CRIDLAND, LANDSCAPE ARCHITECT, has removed his offices to 306 South Smedley Street, Philadelphia, Pa. WILLIAM R. FRAMPTON and H. L. BOWERS have been taken into the firm of Richard M. Bates, Jr. The firm will be known as Bates, Frampton & Bowers, Architects, 412-414 Eleventh Street, Huntington, W. Va.

WILLIAM E. SPINK, ARCHITECT, has opened an office at 511 Canal-Commercial Building, New Orleans, La.

FELIX A. BURTON, RICHARD ARNOLD FISHER, CHARLES LEWIS PITKIN, DANA SOMES, FREDERICK W. WEAD announce the removal of their offices to The Thorndike Building, 234-240 Boylston Street, Boston, Mass.

and THERE and THIS and THAT HERE

Conducted by RWR

POETRY is scarce this month. Must be the recent cold snap has put a crimp in the poetry business, but Comrade Bert MacDonald saves the day by shooting "The Pest" under our door just as we are going to press. If he hadn't come across in the nick of time we would have had to write a poem ourselves, so all the readers of this column have had a narrow and lucky escape.

THE PEST

Did you ever meet that "Please loan me" pest? He says, "Please loan me this or please loan me that," And picks on the boss as well as the rest, Till lately we've talked of passing the hat, So the pest in some tools could invest.

Say! You oughta see that "Please loan me" pest—He bums my eraser and Henry's T-square And gets all his thumb tacks by silent request, Or borrows my scale when I'm not aware. Gosh! I detest that "Please loan me" pest!

Surely you've met a please loan me pest, A guy that won't buy a thing of his own. Even his vest is a father's bequest, And he won't even pay for his calls on the 'phone. He sure is a pest; who wouldn't protest?

I guess every office has some kinda pest, There's the poor sullen crab with a face full of gloom, But he can't come abreast of that "Please loan me" pest, Whose fingers have clutched everything in the room, So I guess we won't rest till the pest has gone west.

E VIDENTLY Mr. Ernest Olaf of Kansas City thinks this column is too serious and needs snapping up a little. Perhaps he is right. Mr. Olaf has the floor.

IT WAS ENOUGH A Drafting Room Conversation By ERNEST OLAF

DRAFTING room conversations are of a varied nature. They range from the most earnest discussions of structural intricacies through all the phases of engineering and design and sincere expressions upon the mystical meanings of Architecture to the most irrelevant of badinage, amounting to most extraordinary battles of wit.

An example of such repartee occurred in an office the day after the completion of the drawings for a rush job. This particular morning the architect (hereinafter often called "the Boss") had arrived quietly without disturbing the office force, who were already at their respective tasks. He was pouring studiously over his work at the moment when the usual sounds from the drafting room were broken into by a slow, soft drawl, which attracted his attention.

"Darned if I don't feel like the mule this morning,"

"What mule?" came the question in another voice.

"What mule?" came the question in another voice.

"Ain't you heard about that mule yet? Well, and I think, too, that the Boss feels like the colored man in the story about Missouri's roads." As the speaker finished, the drawl seemed to fade as if it were pressed out; as if one was leaning heavily with his abdomen against a

drafting board.
"Tell it," two voices urged in unison.

"Tell it," two voices urged in unison.

Then, starting as if the drawler were relieving the abminal pressure, the voice was heard to say, "A passerby, dominal pressure, the voice was heard to say, working his way with difficulty along a road, espied a hat out in the middle of the mud bobbing up and down. That being a strange occurrence, he stopped and investigated. He found a negro, who was having a hard time keeping his nose above the mud and water.

"'Hey, Nigger! You're in a bad fix out there, ain't you?' he cried.

"'Wahl, boss, I'se ain't braggin' none, but I'se ain't in no whar nigh as bad a fix as dis heah mule I'se ridin'."

Laughter followed, and the architect did not fail to catch the point for he too smiled. Then he asked himself if he really had ridden the drafting people too hard, but his mental question remained unanswered for a young voice broke into the waning laughter.

"If it wasn't for us, the Boss would have a hard time, wouldn't he?

"Yes, and we too! We'd be left high and dry, without any jobs." The tone of the reply was sharp, but gradually softened as the speaker continued, "You remind me of what happened at our house the other evening. The wife had asked me to hang a picture. So the step ladder was brought and preparations made when of a sudden. was brought and preparations made, when of a sudden, my wife, who was in the adjoining room, heard a terrific racket. Startled she yelled at our son, 'Bob, run and see if papa fell,' and in he came, took one look, and shouted back, 'Not yet. He's hanging to the picture mold."

Smiles probably made the circle, but no audible evidence of amusement followed.

The architect made as if to get up but thought better of it. He had no more than settled back in his chair when he heard, "I got one on the Boss, the other day while you were all out to lunch. One of these fresh salesmen waltzed in, right up to the Boss, and beamed at him and said, 'You're going to have a snap very soon, are you not?' I could just feel the Boss bristle. 'You won't



Sketch made in Lima, Peru, by Mr. Paul Studer, New York.

have to use a comb and brush long, will you? All you'll

need is a dust rag.'"
"Men! Men!" the lady's voice rang protestingly. "You men! You're just like eggs; you're either rotten, or you're just hard boiled."

rotten, or you're just hard boiled."

This precipitated an avalanche of conversational disturbance until one of the young men, getting too strong in his efforts at reprisal, met up with, "What? What are you thinking of?" from the lady.

And his reply of "Nothing," was answered in a quick flash of female elation, "Oh do take your mind off yourself."

"Peace! Peace!"

"Peace! Peace!"

"You know that the emblem of peace is the olive branch.

We'll choose for the emblem of war, the orange blossom."

"Tra la, tra la la la, I'd hate to get well of the wrong

disease."
"Cut it out, or as the poet says it, you'll get yours in the neck."

Then the first voice was heard to drawl, "Vain things. Inen the first voice was heard to drawl, "Vain things. It matters not much about what you chew the rag. Vanity, all is vanity." A tone of dignity crept into the drawl, "Man is but a worm of the dust, he wriggles about a while and finally," as the drawler progressed he must have pressed his abdomen against the drafting board for he grunted the final words, "finally, some chicken gets him"

It was enough. The architect got up, found his coat and hat and quietly made his exit.

MR. MATHEW H. TARDY, Anchor Bldg., Roanoke, West Va., wishes to secure a copy of Pencil Points for June, 1922. Mr. Sylvan Schnaittacher, 233 Post St., San Francisco, Calif., needs a copy of May, 1921. Mr. Louis Cohen, 15 Lane St., Patterson, N. J., wants a copy of February, 1923, and Mr. Everett S. Cofrane, care of Adden & Parker, architects, Boston, Mass., wants a complete set of Pencil Points up to January of this year.

MR. A. CORRUBIA of Corrubia & Henderson, architects, Arcade Bldg., St. Louis, Mo., has extra copies of Pencil Points. Two copies of June 1920 and one each of October 1920 and December 1920. He would like to archange and these states. like to exchange any two of these numbers for one copy of May 1922.

 $W_{
m a\ copy\ of\ Pencil Points}$ to complete his file. Here is the evidence.

Gentlemen: In the last issue of Pencil Points I notice that Prof. H. M. King of North Dakota Agricultural College would H. M. King of North Dakota Agricultural College would like to secure a copy of Pencil Points for February, 1922. Under separate cover, I a mailing him a copy of that month's issue. I hope, however, it will not be like a little incident in the life of Mrs. Davidson's father who was a professor for thirty years. One time he lost his umbrella so he placed a notice on the blackboard in his classroom that he would like to have it returned. The next day there were forty umbrellas left in his room, ranging in size from a baby's parasol to a large yellow and white wagon umbrella. I hope Prof. King will not receive forty issues of Pencil Points for February, 1922. It is also interesting to me and a coincidence that this

It is also interesting to me and a coincidence that this professor's initials and last name were almost identical with those of my father-in-law, H. M. Kingery.

Yours truly,

MARION DAVIDSON.

HERE is a letter from Mr. F. Graham Williams which explains itself. Here also are the rules for the Second Annual Golf Tournament for Architects and Draftsmen to be held at Atlanta, Ga.

We are enclosing herewith a folder which will explain the Golf Tournament for Architects of the Southeast which will be held May 9, 1924, at the East Lake Country Club, Atlanta, Georgia, and we will be glad for you to give this publicity for the Architects of the Southeast,

as it will be impossible for us to reach each individual Architect.

In other words, we will be glad for you to extend an invitation to all the Architects and Architectural Draftsmen to be with us on that day, whether they get a direct notice from us or not.

The Southeastern Architects' Golf Championship Cup All practicing Architects, or members of any of the A.I.A. Chapters are eligible to compete for this cup. (No entrance fee.)

Eighteen holes, medal play; (U. S. G. A. Rules) less your home club handicap (of not more than 30), adjusted to a par 72 course, will determine the winner.

The big, permanent cup is to be held for one year by the winner (with his name engraved thereon).

The miniature of the big cup is to be the permanent brocketty of the suinner.

property of the winner.

The Atlanta Architects' Championship Cup All practicing Atlanta Architects, or members of the A.I.A. Chapters are eligible to compete for this cup. (No entrance fee.)

Eighteen holes, medal play; (U. S. G. A. Rules) less your handicap will determine the winner.

The big, permanent cup is to be held for one year by the winner (with his name engraved thereon).

The miniature of the big cup is to be the permanent

property of the winner. The Southeastern Architectural Draftsmen Cup

All architectural draftsmen are eligible to compete for this cup. (No entrance fee.)

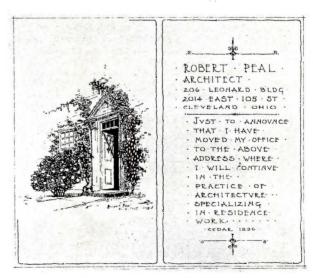
Eighteen holes, medal play; (U. S. G. A. Rules) less your handicap will determine the winner.

The Architects of the City of Atlanta, and the draftsmen of the South, who do not have a club handicap MUST send in to the Handicap Committee THREE SIGNED SCORE CARDS showing their average game, and they will be given their handicap.

In case of a tie it shall be played off immediately (1, 3, 6 or 9 holes).

The Putting Contest is for all who DO NOT PLAY GOLF, and will be held on the practice putting green at 5:30 P. M.

SPECIAL NOTE: The Barbecue is for ALL AR-CHITECTS AND DRAFTSMEN, whether they play Golf or not, and will be at 6 P. M.



Attractive Announcement Card sent out by Mr. Robert Peal, Cleveland, O.

"HANDICAP COMMITTEE"

Mr. W. J. Chase, 140 Peachtree St., Atlanta, Ga.; Mr. F. D. Burge, 101 Marietta St., Atlanta, Ga.; Mr. W. C. Powell, Candler Bldg., Atlanta, Ga.; Mr. Jas. D. Beacham, Bruce Bldg., Greenville, S. C.; Mr. A. F. Comer, 23 Abercorn St., Savannah, Ga.; Mr. Willis Irvin, Lamar Bldg., Augusta, Ga.

UNFAIR COMPETITION

Ethyl: Have you noticed how the men of all ages flock around Sally lately?

Methyl: Yes, and I've found out why. She swiped a bottle of rare old Bourbon from her dad and is using it as her perfume!

A ND our recently established drafting room registry seems to have functioned successfully in at least one case as explained in the subjoined letter. We have already been able in many cases to perform similar services and all we ask is that every architectural draftsman, specification writer and superintendent in the United States will register with us for the benefit of all concerned. You never can tell when someone may desire to locate you and we offer this service to the profession without expense of any kind. We have made gratifying progress in building up our list but it is still far from complete. If you have not received a registry card it is due to no intentional discrimination on our part and we shall be glad to furnish forms on request.

"Permit me to make a rather tardy acknowledgement of a recent favor obtained through the columns of your Publication Pencil Points.

I refer to an item appearing in the November 1923 issue, Page 57, wherein you gave space to my request to help locate a former acquaintance and draftsman on the Pacific

The item had escaped my notice at first glance, but was very forcibly called to my attention on December 19th by receipt of a letter from the gentleman in question, and whose address I shall give here for your possible future reference, Cyril F. Broad, 608 De la Vista Ave., Santa Barbara, California, at present connected with office of Soule, Murphy and Hastings, Architects, of the same city. Your recently inaugurated system of registration for draftsmen was the source of my inspiration in re-newing

my search for this particular man, and I wish to express my very grateful appreciation to you for providing the means of bringing about a re-union between Mr. Broad and myself, after a seeming hopeless separation of several years following the world war which engulfed most of us. Again thanking you, I beg to remain,

Very truly yours, J. WILLIAM KERN, 2 Rolf Apts., Wheeling, W. Va.

FROM a letter received by C. Grant LaFarge, Secretary of the American Academy in Rome, from Frank P. Fairbanks, Acting Director, we quote the following: "On the 1st of February, Director Stevens left Rome for

his long deferred visit to Egypt.
"Since the completion of the collaborative problem, the first concern has been to photograph the models and drawings for our future records, and to ship the work to New York. The individual programs of each have also been forwarded to the New York office. The individual programs of each team Stadium entrance. Hafner, senior architect; Stevens, second year sculptor, and Bradford, first year painter, worked out this scheme. The senior sculptor, Amateis, with the second year painter, Floegel, and the first year parelited. Dear undertook a garden motif to serve as a architect, Deam, undertook a garden motif to serve as a setting for a piece of scultpure. Senior painter Schwarz prescribed the treatment of a Casino at a Health Resort.

Marcean, second year architect, and Meyer, first year sculptor, collaborated on this project.

"After the collaborative problem, a number of men felt the need of change, and started south, taking with them as travelling companions visiting architects and classical students. Hafner, architect, and Rogers, classical fellow; Deam, architect; Meyer, sculptor, with Olsen and Simpson, visiting architects; Watts, composer, Rebert, classical fellow and Cary, visiting classicist, composed the groups that travelled.

"The remaining men in residence are all occupied in completing their required works, and are progressing satisfactorily.

"Professor Lamond offers the following translation of a notice of Leo Sowerby's Quintet:

Monday, February 18th, 1924. Paris. Comoedia At the last Seance of the S. M. I. (Société Musicale Independante) an American composer presented an extremely interesting work. The Quintet for wind instru-

ments by Mr. Leo Sowerby is of solid structure, very modern in concention. It is proof of its author's very sure command of technique and also of his essentially musical qualities. It produced a strong impression.

"Early in the month the fellows invited Mr. Blashfield to lunch with them and on the 16th of the month he sailed from Naples for New York after a much briefer stay in Rome than we had hoped for.

"We have received three contributions to our library One of 100 Dollars from Col. and Mrs. George B. McClellan, one of 50 Dollars from Mr. James Speyer, and 500 Lire from Mr. H. H. Wrenn, a visiting architect.

"Some excellent photographs have arrived from the New York Office of some recent works of the former fellow in painting, Eugene F. Savage. They prove a splendid incentive to the fellows here, and are very much appreciated in general.

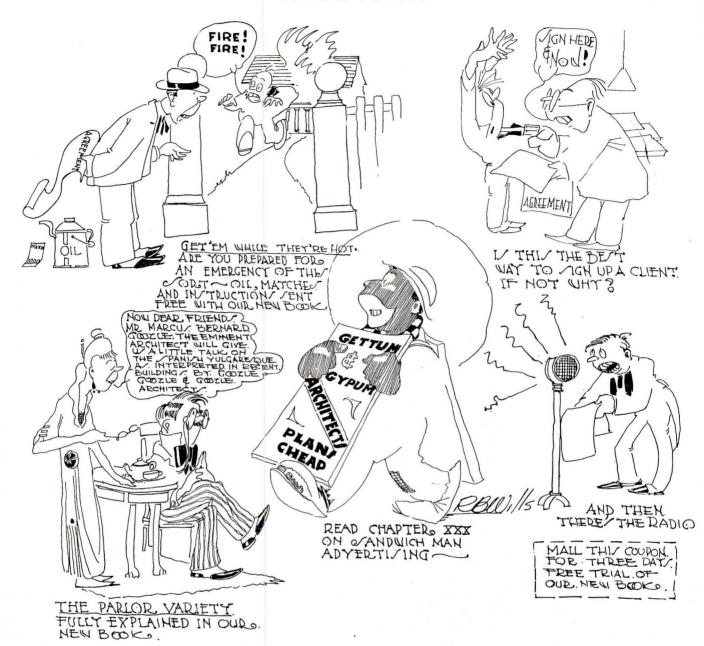
"The water supply for the entire city of Rome has been seriously interrupted this month by the breaking of one of the main supply pipes to the city, six kilometers beyond Tivoli. For seven days the main building was without its central heating, and all water for every purpose had to be carried into the building by hand.

"The Villas Aurelia, Bellacci and Chiaraviglio did not begin to receive Acqua Marcia from the main pipe for 10 days. The interruption of the Acqua Marcia supply for a day or two is not uncommon for us and with our reserve tanks we are not greatly inconvenienced at such times. But we have a large quantity of Acqua Paolo that constantly runs away that belongs to us, which we are unable to use for our gardens that bake and dry up in the summer, because we lack funds for putting into use a well with pumping system at the Villa Aurelia.

"We are glad to report real progress in the matter of procuring the use of the small house now occupied as a trattoria on the new land at the rear and side of the Academy. Our Counsel, Mr. Del Frate, informs us that the Court has denied to the present occupants a renewal of the lease and has ordered the tenants to leave the premises by August 31st, 1924. That a ruling has been made in favor of the Academy is considered auspicious for our obtaining control, at no very distant time, of what still contributes a source of annoyance to the users of our library.

Very sincerely yours, FRANK P. FAIRBANKS, Acting Director.

WE REQUIRE for our New York Office the services of a man with first-class selling ability and acquaintance with the more important architects to undertake and intensively push the sale of a high-class solid steel window frame, possessing many advantages and sound talking points. In applying give full details of experience, age, salary desired, etc. A good opening for an energetic, practical man. Box 711, care of Pencil Points.



Mr. R. B. Wills' Quaint Idea for an Advertisement Annuoncing a Book to be Entitled "Practical Hints on Landing the Job."

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XVII

By Otto Gaertner

In this series of notes Mr. Otto Gaertner, A.I.A., Associate Member American Society of Civil Engineers, is treating of a number of the minor matters of construction that are troublesome unless the architect happens to have met a similar problem previously—matters of a more or less special nature.—Ed.

Garages (Continued)—If the fixed or wall connector is not on a switchboard or charging panel, care should be taken that the wall part cannot accidently come in contact with anything. The switchboards or charging panels, at or upon which spark producing switches, connectors or other devices occur, must be kept high enough so that the spark producing devices are at least four feet above the floor, except when such devices or panels are enclosed in vapor proof enclosures. If the switchboards and panels are placed in a separate room or enclosure where dangerous vapors cannot occur they may be put at any height.

The above also applies to cut-outs, switches, key sockets, receptacles, motors and dynamos, which should also be placed at least four feet above the floor, unless of course they are a part of a vehicle. Motors may be kept down lower if they are of the fully enclosed type. If the motors are high up but are not of the fully enclosed type, they should be covered with wire screens over openings at the commutator ends, such screens being of not less than number fourteen mesh.

Portable lights should have keyless sockets of metal-sheathed porcelain or moulded composition and should be provided with handles and strong wire guards with a hook at the top. These electrical installation suggestions are especially adaptable to garages and in addition the general requirements of the various electrical codes and the rules and regulations of the Insurance Exchanges, Fire Underwriter and City Ordinances must be complied with. These requirements permit ample leeway as to cost but in electrical work it is not economical to choose the cheapest in the end. If possible the equipment should be chosen for its strength, wearing quality, safety to those who use it and fitness for the purpose which it is to fulfill. At present there are numerous enclosed types of switches, panel boards, meter boards, etc., which not only exclude dust and dampness but which also prevent accidental contact with live parts and the nuisance of being out of order due to being tampered with by those who are not supposed to meddle with or have access to them.

Without specific cases to dicuss it is impossible to go into the equipment as there are so many requirements likely to be met and no two buildings have the same problems. A machine shop may be connected with the garage. It may require individual motors for the lathes, presses, drills, etc., or the machinery may be equipped with pulleys and belting and be operated by a single motor. The latter may be more economical if all the machinery is to be used at the same time. Likewise current must be supplied for motors to run air compressors, pumps, elevators, etc., of various capacities.

The different types of garage buildings also present different problems in illumination, depending upon the uses to which they or their subdivision are to be put. Machine rooms are treated differently from the show rooms, offices, storage rooms, etc. In the machine rooms individual illumination may be provided for the machines or only general illumination. Generally of the two a combination is most effective. Offices, salesrooms and

general utility spaces present only the ordinary lighting problems. In large garage rooms, repair shops, paint shops, wash rooms, battery rooms, and such spaces, special conditions occur. The fixtures in the battery room should be vapor proof and they should have all metal parts painted with an acid fume proof to prevent corrosion. In the wash rooms the fixtures should be waterproof.

The question as to the number, size, and type of fixtures must be left to the engineer in charge as the colors of the walls and ccilings, the ceiling heights, the elevation at which the most intensive light is needed, and other items must be considered. By means of a foot-candle meter the amount of illumination obtained by various spacings, types of fixtures and their distances above the floors may be obtained and the most effective arrangement selected. Many garage owners insist on painting the wall dark with perhaps black wainscots to about four feet above the floors so as to hide as much grime and grease a possible. It is admitted that oily and greasy hands, exhausts from running motors and numerous other garage conditions play havoc with light colored walls; but the darker the walls, the larger the cost of the proper illumination. The dark walls absorb a large amount of light and have little reflecting qualities. No doubt it would be much better to save on the cost of illumination and increase the cost of maintenance by additional cleaning or an occasional repainting of the walls and ceiling.

A light room has a more cheerful effect on workmen and makes them more efficient and induces them to keep the premises in a cleaner and more sanitary condition as well as being a help to their morale and eyesight. As an example of this one might take the motor of an automobile or a piece of machinery in the machine room. If it were painted a light warm gray instead of black, it would help to reflect light instead of absorbing it, would present a more cheerful appearance to the workman and he would wipe off surplus grease and dirt and put forth at least a little effort to keep it clean. In addition, the paint will lengthen the life of the machine. The cases of the machine and the work rooms are similar.

Of course, the walls and ceilings will get soiled and lose a lot their reflecting qualities. Also different paints have different reflecting qualities. While reflection is wanted, too much in the wrong place will produce a glare causing eye strain and be undesirable. For the illumination we are more concerned in the reflection from the ceiling than in that from the walls, and more in that from the upper than that from the lower walls. It is, therefore, best to have the ceilings lighter than the walls, and as light as possible, pure white being preferable. But not only the color but also the finish of the paint is important. A glossy surface may give too much reflection so that a flat, eggshell, or matt finish is esential and one having sufficient paint or thickness to prevent dark surfaces underneath from showing through and absorbing the light. Where decorative effects are mandatory the loss of light due to dark colors must be made up by increased lighting capacity.

The lasting quality of the finish and the possibility of cleaning it must also be thought of. There is comparatively little choice between any good white paints when they are fresh, but after they have been exposed for some time there is a great difference. It has been found that white lead and oil has a coefficient of reflection of eighty-three per cent when new but only twenty-five per cent when exposed for one year. In the same way lithopone paint showed eighty-six per cent and eighty per cent calcimine eighty-two per cent and seventy-five per cent, magnesia bearing flat enamel eighty-five per cent and eighty-two per cent and gloss enamel eighty-three percent, and eighty-three per cent.

(To Be Continued)

PUBLICATIONS OF INTEREST TO THE SPECIFI-CATION WRITER.

Any publication mentioned under this heading will be sent free, unless otherwise noted, upon request, to readers of Pencil Points by the firm issuing the publication.
When writing for any of these items please mention PENCIL POINTS.

Specifications for Metal Lath Construction.—17 specifications covering all classes of work. 7 full page plates of construction details approved by the Associated Metal Lath Mfrs. and American Specification Institute. 16 pp. 81/2 x 11. Associated Metal Lath Mfrs., 123 West

of construction details approved by the Associated Metal Lath Mfrs. and American Specification Institute. 16 pp. 8½ x 11. Associated Metal Lath Mfrs., 123 West Madison St., Chicago, Ill.

Mapaz Hand Book No. I.—Neat little pocket size memorandum and note book, leather bound, containing data on painting and paint materials, and much other material interesting to architects and draftsmen, including a chapter on lace stencils, color formulas, etc. New Jersey Zinc Co., 160 Front Street, New York City.

Built-Up Roofing for Modern School Buildings.—A. I. A. standard classification 12B14. Booklet covering subject illustrated by 50 examples of modern school structures of various types and sizes. Specifications and other useful data. 36 pp. 8 x 11. Philip Carey Co., Lockland, Cincinnati, Ohio.

Published by the same firm. Specifications for Built-up Roofing. Eight specifications covering different problems with detail drawings covering flashings, etc. 24 pp. 8 x 11. Pipe and Boiler Coverings. Catalog No. 1362, showing application of asbestos and magnesia products for insulating purposes. Specifications, much technical data, diagrams and tables. 70 pp. 6 x 9.

Air-Leve Fire Doors—Eolder describing, new type of

asbestos and magnessa products for insulating purposes. Specifications, much technical data, diagrams and tables. 70 pp. 6x9.

Air-kore Fire Doors.—Folder describing new type of door with details of construction and test made by Underwriters Laboratory. J. G. Wilson Corp., 11 East 36th St., New York City.

Putting More bight Into Basements.—Folder describing steel basement window. Tables of sizes, detail drawings. The Bogert & Carlough Co., Patterson, N. J.

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

For Roofs of Lasting Beauty.—Folder in colors showing Mohawk Rustic Colonial and Standard Shingles. Methods of Construction. Mohawk Asbestos Slate Company, Inc., Utica, N. Y.

Specification for Acid Fume Exhaust Fans.—A. I. A. File No. 30-d-1. Specifications for both alternating current and direct current, table of data on exhaust fans. The Duriron Co., Inc., Dayton, Ohio.

Webster From the Air—Attractive booklet illustrated with a series of aerial photographs. Data on Webster engineering service as applied to modern heating. 32 pp. 9 x 12. Warren Webster & Co., Camden, N. J.

Published by the same firm, Bulletin T26 describing the Webster Boiler-Return Trap. Typical layout showing uses of this device, diagrams and technical data.

Whale-Bone-Ite Sent.—Catalog E describing and showing construction of this modern accessory for the well appointed building. 16 pp. 9 x 12. The Brunswick-Balke-Collender Co., 623 So. Wabash Ave., Chicago, Ill.

Handbook and Price List.—Covers wrought iron pipe and tubing for various uses, photographs, tables and much useful data. 48 pp. 5 x 7. Reading Iron Co., Reading, P.

Fireplace Suggestions.—Illustrated catalog showing designs of many fireplaces and a variety of equipment

much useful data. 48 pp. 5 x 7. Reading Iron Co., Reading, P.

Fireplace Suggestions.—Illustrated catalog showing designs of many fireplaces and a variety of equipment for the modern fireplace. 16 pp. 8½ x 11. Colonial Fireplace Co., 4603 Roosevelt Road, Chicago, Ill.

Anti-Slip Trea's.—Bulletins describing Carborundum, Bronzalum and Feralun treads. Text on stair and side walk hazards. American Abrasive Metals Co., 50 Church St., New York City.

Ideal Arcola Hot Water Heating Boiler.—Booklet describing this type of equipment for hotels, small houses, flats, stores, schools, etc. Complete layouts, sectional drawings and all necessary data. 24 pp. 6 x 9. American Radiator Co., Dept. T95, 1803 Elmwood Ave., Buffalo, N. Y.

Specifications and Working Details—Covers

falo, N. Y.

Specifications and Working Details.—Covers stucco, stucco base, plaster base and insulating base. Instructions for mixing and applying, details, drawings and specifications. 8 full page plates. 20 pp. 8 x 11. The Bishopric Mfg. Co., 110 Este Ave., Cincinnati, Ohio.

Win-Dor Casement Window Operators.—Catalog No. 9 describing modern casement hardware, sectional drawings and standard half size details. 14 pp. 8½ x 11. The Casement Hardware Co., 235 Pelouze Bldg., Chicago, III.

Ill.

Celotex Specifications.—Loose-leaf folder with large sample of material. Complete specifications for all uses, details of construction covering exterior finishing for frame buildings, sheathing for brick veneer buildings, roof insulation and a variety of other uses. 8½ x 11. The Celotex Co., 645 No. Michigan Ave., Chicago, Ill.

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, N. Y.

The Donley Book of Fireplaces.—Illustrated brochure showing drawings and photographs of many attractive fireplaces. Large sheet showing drawings of construction. 16 pp. 9 x 12. The Donley Brothers Co., 13933 Miles Ave., Cleveland, Ohio.

The Dunham Handbook No. 114.—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., Fisher Bldg., Chicago, Ill.

Martins Finishes.—Booklet on refinishing old varnished floors, painted floors and oiled floors. Also new work. Martin Varnish Co., 2520 Quarry St., Chicago, Ill.

The Regulation of Temperature and Humidity.—Hand-book covering the subject with descriptions of necessary apparatus. 64 pp. 8½ x 11. Milwaukee, Wis.

Store Front Construction.—Full size details show awneer construction. 16 x 20. Kawneer Mfg. Kawneer construction. Niles, Mich.

Architectural Varnishes, Stains, Fillers and Enamels.—
Specification for all classes of work. Recommendations for standard and unusual finishes. 20 pp. 8½ x 11. Standard Varnish Works, 445 Fourth Ave., New York City.

Mortar Colors.—Data sheet with 12 panels in color showing mortar joints in combination with brick of various colors and textures. Also much useful information on the coloring of stucco. 8½ x 11. Clinton Metallic Paint Co., Clinton, N. Y.

The Operation of Boilers.—Booklet showing construction and operation of various types of Kewanee Boilers. Diagrams, tables, etc. 24 pp. 6 x 9. Kewanee Boiler Co., Kewanee, Ill.

Poles Worthy of the Stars and Stripes.—Cutalog covering the subject of flag poles for various uses. Diagrams showing best method of amplying to buildings. etc. 4 x 9. 32 pp. The Pole & Tube Works, Inc., Ave. D and Marray St., Newark, N. J.

Mahogany in Colonial Days.—Attractive folder showing many old Colonial types. Also the "Home Beautiful" "Chippendale and Mahogany," and "Sheraton and Mahogany." The Mahogany Association, Inc., 1133 Broadway New York Mahogany." The way, New York.

Present Day Schools.—Illustrated brochure covering the application of terra cotta to modern school buildings. 32 pp. 8½ x 11. National Terra Cotta Society, 19 West 44th St., New York City.

Better Banks.—Illustrated brochure treating of modern ank buildings, large and small. 32 pp. 8½ x 11. ational Terra Cotta Society, 19 West 44th St., New bank by National York City.

Color in Architecture.—Brochure illustrated in color and with numerous engravings in sepia, on the basic principles of the application of color in available mediums. 8½ x 11. 38 pp. National Terra Cotta Society, 19 West 44th St., New York City.

Marble Portfolio.—Loose-leaf portfolio showing 40 different varieties of marble in their natural colors. Color plates 6 x 8. A copy of this portfolio handsomely bound in leather will be sent only to architects applying for it on their own letterhead. Tompkins—Kiel Marble Co., 505 Fifth Ave., New York City.

Swimming Pool Sanitation.—Special bulletin covering this subject with diagrams and illustrations of typical pools. 8 pp. 8½ x 11. The R. U. V. Co., 383 Madison Ave., New York City.

Ave., New York City.

Non-Cracking Terrazzo Flooring.—Data sheet showing improved method of laying floors of this type introducing new factor in floor design. Diagrams and full information. Sty x 11. L. Del Turco & Bros., Harrison, N. J.

Hotel, Club and Institution Installations.—Attractive illustrated booklet devoted to the complete furnishing of hotels, clubs and similar buildings. Many full page enravings. 6 x 9 in. 32 pp. Albert Pick & Co., 208 W. Randolph St., Chicago, Ill.

Published by the same firm, "School Cafeterias," covering subjects of cafeteria planning and equipment and "Kitchens" a practical book dealing with the layout and complete equipment of various types of kitchens.

Sheet Metal Building Succialities—Catalog showing

Sheet Metal Building Specialties.—Catalog showing complete line of range boilers, pantry sinks, drain boards. gasoline storage tanks, etc. 32 pp. 5½ x 8½ in. John Trageser Steam Copper Works, 447 W. 26th St., John Trag New York.

Improved Mechanisms in Builders' Hardware.—Complete catalog showing detail drawings, and instructions for installing mechanical builders' hardware such as casement hinges, casement operators, hinges and pivots, and overhead door checks. Catalog is 6 x 9. 58 pp. The Oscar C. Rixson Co., 1210 Architects Bldg., New York City.

The Control of Lighting in Theatres.—Attractive book-let illustrated in color covering modern theatre lighting. Specifications, tables and much useful engineering data, 32 pp. 8½ x 11 in. Frank Adam Electric Co., St. Louis, Mo.

Also published by the same firm Bulletin No. 29, describing full line of standardized panel boards. 16 pp. 8½ x 11.