

SYSTEM?

OW much or how little system there should be in an architect's office is a matter upon which there is a wide divergence of opinion. What do you think about it? By way of starting the discussion of the subject we present in this issue descriptions of the methods of handling the work in many offices in different parts of the country. In these contributions the architect or a member of his organization tells how the office is run. Some of these men believe in rather elaborate systems, others have very simple methods of con-ducting the work of the office. In a number of cases the contributors to this symposium have sent sets of their office forms. Many of these are reproduced in these pages and this opportunity to study the forms used in other offices should prove helpful, for an exchange of ideas is always good.

We want letters from architects, office managers and draftsmen on the subject of "Office and Drafting Room Practice." If you are a member of an organization where what is sometimes called the "factory" system is in force won't you write to PENCIL POINTS telling just how it works, from your point of view? If you dislike it let us know why. If it makes things move smoothly and the conditions are generally more satisfactory than in a less elaborately organized office let us know about it. If you see loss of time and effort in your office through duplication of work, delays or other results of the lack of a proper organization write about it.

If you are an architect and have worked out a system of handling the work that you believe may be helpful to others, won't you describe it to PENCIL POINTS?

PENCIL POINTS does not believe in system for system's sake; we agree heartily with all who protest against turning an architect's office into a factory, but all must admit that the proper handling of the work requires some method and that it is important for each office to have the method best suited to its needs.

Organization carried too far may easily result in the production of uninspired architecture. But isn't it equally true that when an architect burdens himself with office detail beyond a certain point he is unable to do his best work because of the drain on his energy and the demands upon his time that are made by matters that might well be attended to by others? Then, too, the architect with a small organization is limiting his production.

Though there are some architects who limit the amount of work they do as a matter of choice, it is probable that most men are willing and ready to take all the work they can get and to expand their organizations to take care of it.

All architects who appreciate the importance of making the work move smoothly, rapidly and with due economy from start to finish will find something of interest in the first-hand descriptions of office methods and the collection of office forms printed in this issue.

While system carried to the extreme can make an once a very unpleasant place to work in, an orderly way of conducting the work contributes to the comfort of every one. In many cases if the office were better organized there would be less "driving," and less friction, work would be turned out better and faster with less effort all around.

This is a subject that vitally concerns the draftsman as well as the architect. It is also a matter that concerns the contractors and the men who supply materials and equipment, for some, at least, of the delay and friction incident to building operations are traceable to the imperfect way in which the architect's office functions. We should like to hear what contractors and materials men have to say about the way architects conduct their offices. It may prove enlightening.

There is another angle of this subject that it is well to keep in mind, namely, the more successful an architect is in the conduct of his practice the better salaries he is able to pay to the members of his organization and the more steady employment he is able to offer. As we have pointed out before, the draftsman shares, in a considerable measure, the fortunes of the architect. Better office and drafting room methods benefit every member of the organization.

There is another point that we wish to touch upon. It is this. Why not endeavor to put as much of the atelier spirit as possible into every architect's office, to have all work together very much in the way that *patron*, *ancien* and *nouveau* work together in the atelier? Of course there is now much of this spirit in many offices, but a conscious recognition of the desirability of it would increase its effectiveness. And, always, there must be some system, be it ever so simple, for the handling of the work.

We hope that the publication of this issue will lead to a discussion of "Office and Drafting Room Practice" in following issues that will be as helpful as the discussion of "Specification Writing" that was started in our issue of last January and continued in following issues. You are invited to write an informal letter on any angle of this subject. Let us hear from you.

OFFICE AND DRAFTING ROOM PRACTICE

A Symposium

By Robert Maurice Trimble, Architect, Pittsburgh, Pa.

IN an article of this character distinction should be made between the average small office in which the principal handles most of the business, and the larger office where the great amount of business makes such practice impossible, and makes it necessary to apportion some of the different duties to the associates.

In my office, which is in the first class, I conduct most of the conferences with the clients. In the preliminary conferences the character of the building is discussed, its use and type, the site, and the contemplated expenditure. After the first consultation a visit to the site is necessary to ascertain its characteristics, its physical conditions, drainage, compass points, etc.; all of which features have an important bearing on the plan, as well as on the design of the proposed building. If the client is wise he will consult his architect before purchasing the site and be guided by his advice in its selection.

The next step after the selection of the site is the preparation of the preliminary studies, which are made roughly to a small scale; in the preparation of these studies every possible development of the scheme is tried until the one which seems to best meet the requirements is evolved. The sketches are then worked up to a $\frac{1}{16}$ or $\frac{1}{8}$ scale depending upon the size of the building, and include all floor plans which are considered necessary to properly convey the scheme to the Owner; they also include the elevations or a perspective, and occasionally sections, although in my office we rarely submit sections with preliminary sketches. We generally prepare sketches in pencil and render them in water color, or with colored crayons. Sometimes in the smaller operations, and usually in the larger ones, the sketches are made in ink and more or less elaborately rendered, depending upon the amount of time at our disposal.

When the sketches are completed another conference is held with the Owner in which they are explained to him, the cost is discussed, and the Architect makes an appropriate estimate, based on the price per cubic foot which seems applicable to the building under consideration. Sometimes the sketches are submitted to one or more Contractors for an approximate estimate. If the sketches do not meet the requirements of the Owner as a whole or in part, they are restudied and revised until they are satisfactory. If the scheme as proposed is too costly the Owner decides upon what he is willing to sacrifice and the sketches are revised to reduce the cost.

After a satisfactory scheme has been decided upon, the working drawings are begun to an eighth or quarter inch scale, depending upon the size of the building. Although we often feel that we have secured the best possible solution of the problem when the sketches are completed, we continue our studies during the preparation of the working drawings and make improvements in arrangement and detail wherever possible, making changes to such an extent that in the finished working drawings the final scheme, both as to plan and elevation, differs quite radically from the original one. The working drawings should contain all information necessary to allow the Contractors to submit intelligent bids; and should be illustrated by scale drawings and sections of the more important or complicated parts. No set of working drawings is complete which does not fully set forth the intention of the Architect as to the quantity and quality of the materials required for each portion of the building.

The specifications are intended to supplement the drawings, and to inform the Contractors as to the materials to be used and the method of installing them. This question was so exhaustively covered in the special "Specification Number" of PENCIL POINTS that it does not seem to be necessary to enter at this time into further explanation of their preparation.

I have never been able to find a method of producing working drawings quickly i. e. working drawings which are properly studied, which contain all necessary information, and which are really worthy to be called complete instruments of service. Of course we finish them up sometimes in pencil on linen and tracing paper and this saves time, but we never seem to be able to turn them out as quickly as do some of the offices we hear about. This in spite of the fact that we often start the working drawings in pencil upon the paper or linen on which they are to be finished and eliminate the labor of tracing.

After the plans and specifications are completed they are blue printed and issued to the different Contractors for bids; from four to ten contractors are usually asked to bid and to each is given a set of prints, and from one to two weeks is allowed for the preparation of the bids, as I believe it better to crowd the Contractors a little and to keep all of the bidders on their toes, than to allow too much time; the results are usually better, in interest as well as in price.

When satisfactory bids have been received (what a joy these days) we prepare the different contracts, generally using the A. I. A. forms. Then the operation begins and with it our troubles. One of the most important duties of the Architect is the work of supervision. have often said that the work of the Architect as evidenced by his plans may be perfection itself, but that through the employment of incompetent Contractors, and on account of the lack of proper supervision the building may be so badly botched in execution as to be a bitter disappointment to both Owner and Architect. We may think and believe that we are not responsible for perfect execution but if we are not responsible, who is? The Owner certainly looks to us to see that his building is erected in accordance with the plans and specifications, and without vexatious delays, so it is up to us to see that this is done, and to charge enough for our services to allow us to do it.

The proper method is to have a Clerk of the Works constantly on the large jobs, and to have frequent visits, of the principal or a superintendent, made to the smaller ones. The office should keep in constant touch with every job. I reiterate that the greatest fault to be found with the average Architect, and the one which causes most of the trouble between him and his client, is that of improper supervision.

The best way to have a job move smoothly and quickly is to see that the Contractor is not delayed by being obliged to wait for drawings, details, and necessary information, or because sub-contracts have not been awarded soon enough. Most Contractors are willing and anxious to push the work; many Architects are responsible for their inability to do so.

The scale and full size details are usually made during the erection of the building, and these should be made before they are needed if the work is to progress with any degree of rapidity. In some offices scale and full size details are made with the working drawings. This is an excellent method in many ways as it shows the Contractor exactly what is required, and permits the Architect to push the Contractor to the limit after the contract is awarded and robs him of his usual excuse for delays, "Waiting for details."

After the award of the contract the number of conferences between the Architect and Client depends largely upon the client; some like to keep in constant touch with the Architect, to visit the building with him, and to drop into the

office to look over the detail drawings; others feel that, with the award of the contract within the price limit, their troubles are over and they can trust the Architect to have the work properly done and to see that the building is completed on time.

The above is necessarily a brief resume of the work of the Architect, as one with even a brief experience in practice could write volumes on any of the different phases outlined above; he could tell of the trials and tribulations, and heartburnings on the one side, and on the other, of the joy of accomplishment, of seeing the product of hard labor materialize into concrete form, and of the pleasure of watching the building of his dreams grow and grow until it develops, in his own mind at least, into the noblest structure ever erected.

By Aaron G. Alexander, of the office of Hobart Upjohn, Architect, New York

T HE Architects who desire to make a success of their work can be divided into two classes. First, the Architect who is perfectly satisfied to do a small amount of work, thereby never intending to have a large organization. Second, the one who dreams of having the largest practice, necessitating a large organization. It is of the latter that I wish to write, as the former can maintain his office without surrounding himself with a large force.

I think in starting off I am safe in saying that the Architectural profession has come, owing to competition and the gradual increase of size and number of jobs handled by the modern Architect today, to a point where the Architect must combine "business" with his profession. It is not only a profession and an art but he must also look at the business side of the profession to satisfy his clientele.

There is always the fact contrary to the belief of the general public, that the average Architect does not retire rich. I mean in the same light as the lawyer, doctor, etc., who is purely a professional man. I think the answer lies in the fact that the Architect has kept his business more of a profession and therefore is not a business man in spite of the fact that his work has increased. Because of this increase, the modern Architect should surround himself with a business organization. The average Architect is not a business man and to do the best work, that is, designing and planning monuments to his name, he should not have to worry about the business end of the game. When his clientele becomes of a size where he is able to maintain a drafting force of ten draftsmen, he is getting to the point where he is carrying on more work than he himself can handle and still retain his health.

First of all he should secure a business manager who has the ability to take off his shoulders the running of the office, such as

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outlining drawings to be made on certain jobs, writing the specifications, issuing orders, drawing up contracts, issuing certificates, etc., leaving the Architect free to devote his entire time to having his work reflect his personality, because that is why the clientele selects a certain Architect, and his work should portray that expression. The Architect's duties then become the interviewing of clients, the securing of work, outlining the preliminary designs and planning and turning over to the manager what his ideas are for such a building, and the manager, taking these in turn and after study turns them over to the Chief Draughtsman who draws the plans.

In some offices the work is so large that it is sometimes essential to secure the services of a specification writer who thereby relieves the office manager of the necessity of meeting salesmen, and who keeps the data in the proper files and who can write the specification quickly and economically, but in the average small office the work is not generally so rushed that the office manager cannot take care of this. Beside the duties outlined for the Architect, he should be left free also, to inspect the work from time to This point I wish to emphasize, as the time. lack of supervision of the Architect is justly criticised by the client and a great many Architects turn over this supervision to someone else and do not give the proper thought to carrying out his original ideas. I don't mean by this that he should not turn over a certain amount to someone else for supervision, but he should visit the job occasionally so that the client feels that he has his own as well as the client's interests at heart.

If the organization grows to such a size, which I might safely say it should under such a procedure as I have outlined above, the manager should be given the authority to secure additional service if he finds it physically impossible to complete all his duties. If he needs an assistant in the office or an outside man to keep in touch and report progress of work; working in conjunction with the Architect or specification writer, he should secure this additional help as the case may be.

Now taking a commission on the above mentioned outline in a small office. The Architect interviews the clients, secures his ideas and makes a small, preliminary rough sketch of what he desires. The office manager, after looking it over, places this in the hands of the Chief Draughtsman, of course, first discussing the entire procedure with the Architect, and the work is started with the best draughtsman for that class of work. In other words, if this commission happens to be a building in a certain period or of a different type such as a Hospital, Library, Church, Residence, etc., there is generally, in the office, certain draughtsmen who are conversant with the different periods better than they are with others and it should be the duty of the office manager to see that the organization contains draughtsmen who are more efficient in certain types so that when the time arises he will have a man who can do this work. Of course, this is not necessary where the Architect specializes only in one type of work, such as schools, for instance, in that case his organization should be made up only of school experts.

When the plans have advanced to a certain stage, the modern office should take advantage of all the different agencies that are now existing for the advertising of bids and the securing of data on different products. I feel sure that there are a great many Architects today who do not realize what a vast amount of help can be obtained through these agencies. Then the question of specifications comes along and this is written and the agencies who handle the materials can be referred to and will be found of great help. Then the plans are issued to an in-vited list of general contractors. In this connec-tion I believe that it is no more than fair that the old procedure of not letting the contractor know who he is bidding against should be overruled and the names of the contractors should be given some one of the numerous trade papers, as I feel it is a distinct advantage to the Owner that these names be published. I say this because the Architect, lots of times, specifies a product outright because he has used it for years and it has always been satisfactory, but owing to the vast amount of competition there is on the market, a competitive concern may have a product that will answer the requirements of the Architect equally well at a cost that may allow the Architect to carry on the project, and I therefore feel that it is not advisable to specify outright any one particular item. Of course, the Architect should always have the power to pass on whether this material equals the specifications.

The office manager receives the bids and a meeting is called with the client, and these are turned over to the Architect who presents them to the client and upon receiving the Owner's approval on one of these, the Architect turns this contract over to the office manager to draw up the proper contract forms for signatures. The work is then started and building laid out under the supervision first of the Architect, as he should be on the site and see that the building is properly placed. After that such questions as to whether the excavation is proper, etc., can be handled by the manager or his assistant, but the Architect is from this point on relieved of the general carrying on of the contract with the exception of his occasional visit to the site as spoken of herein, leaving him free to secure additional work.

In securing additional work, I should like to take this opportunity of saying just a word as to the general feeling of the Architectural profession against what is termed as advertising. It is generally considered unethical to advertise and there is no denying that old saying that a satisfied customer is your best advertiser, but the writer feels that there is still a big field to be open to an Architect if the proper sort of advertising were carried out.

Pick up any one of the Sunday real estate supplements and what greets the eye? Two or three handsome buildings shown in architects' sketches and under them are titles that this is a new building to be erected at such and such a corner and generally nothing said about the Architect, but plenty about the Owner and the real estate dealer who closed the contract and if a contractor has been selected he is also mentioned. Why is this? My answer to that is that the Architect is left out simply because he does not advertise and therefore is not taken note of by the papers. Now if the Architect today were more in the habit of writing articles on the buildings he has erected, giving data, that is bound to be of interest to the General Public and giving these to the newspapers to be used as news, he would receive more recognition by the papers. Again, I feel that the Architect today is in the habit of advertising too much in the wrong sort of papers. The Architect has always before him the various architectural magazines and he has only to call the publishers of these papers and submit photographs of buildings that he has built and when these appear, he buys several of them and sends them to his I trust the readers will not misfriends. understand me, as I am not stating this in criticism as there is, of course, a certain amount of good advertising in this, but instead of just advertising in these periodicals, if for instance, he specialized in school work, why shouldn't he be willing to pay a small amount to have a nicely gotten up advertising copy of his work repro-duced in a school journal. If he does banks, why shouldn't he publish in a periodical that reaches the different banks throughout the country, and as said above, pay for such advertising.

There is today a certain class of advertising that is adopted by some Architects which is not to the best advantage of the Architect and is contrary to the idea that the Architect wants to keep his work a profession. I speak of the advertising of a concern who has furnished an Architect with a certain type of material, and the manufacturer of that material secures from the Architect a photograph of the building completed and publishes in some journal throughout the country, along with a large photograph of their drawing of the product that they are ad-The Architect has no control over vertising. this advertisement and it may be good copy and it may be bad. The main object of advertising is to keep the name of the product you are selling or the service you are giving, before the General Public's eye and the advertising in an architectural magazine which does, on the average, not get before the eyes of the General Public, usually results in only criticism by fellow members in his profession of that particular building. Therefore, I say that there is a large field through which the Architect can build up his business if the proper sort of copy is written so that the name of the Architect is kept before, and becomes known to the General Public.

Summing up, it seems to the writer that the average Architect should do his work in the same old way, but take advantage of the new methods that are available due to the natural progress of time, as time waits for no one.

By Arthur McArthur, General Manager for Albert C. Martin, Architect, Los Angeles, Cal.

S OME DATA in connection with the plan of our office organization are given below.

The Architect:—The architect of today, to better serve his clients, surrounds himself with an organization of individuals particularly qualified in each department and, in order that he may be free to give his attention to any one phase or the other as problems arise, he places the direct responsibility for the unification and direction of the whole in the hands of a General Manager—yes, and for the further reason that he must be able to absent himself at any time without a gap in the smooth procedure, so that he may assume that most important of all responsibilities—keeping the client happy.

The General Manager:-Here is the clearing house through which all the wishes of the client are transmitted to the various departments through to the finished product. The architect gives all his instructions to him and it is his responsibility to see that the ball does not fall between the fielders. Memoranda are written to department heads on a form pad which has a carbon copy retained and placed into a file a sufficient time ahead so that it will "bob up" again to see that it has been attended to. He endeavors to personally have all conferences with clients, particularly during the formation of the scheme—but the person whose department is affected in the matter in hand is always present at this conference, thus getting him into the spirit of the problem and getting the client the best advice. Copies of all conference reports are made on a form for the purpose and sent to the client and to all department heads concerned.

No information is given to an individual in a department without the knowledge of his chief.

Twice a week he submits to the Architect a resume of the vital points on each job in whatever stage it may be.

The Chief Designer:—For each preliminary sketch he receives a work sheet on a printed form, stating the nature of project, the owner, by whom the information was given, and by whom received, and the details of the requirements. All preliminaries, whether of a building involving ornamental design, or an industrial proposition, go through this department.

As the design is developed into working drawings, he makes it his business to see that his ideas are properly developed, and inspects shop



Diagram of Office Organization Illustrating the Contribution by Arthur McArthur of the Office of Albert C. Martin, Architect, Los Angeles. (See page 29.)

drawings and models of work involving design.

The Chief Draftsman (Architectural):—Under this man is a job captain who is responsible for the completion of the drawings and for the men under him. He is to co-operate with the structural, mechanical and specification departments.

Each job has a work book in which is placed the work sheet and all subsequent memos, conference reports, notes, measurements, etc.

This department is responsible for the files of all drawings and the ordering and issuing of prints in any department, and records are kept of these, as well as the receipt and return of all shop drawings. Shop drawings are checked by the job captain or the engineering department to which it relates.

Before a job is started, a schedule is made of all drawings that will be required and as they are drawn and traced a check is made so that a glance at this sheet will indicate the progress of the job.

The job captain keeps a memo pad for notes of special conditions to refer to the specification department.

Chief Engineer (Structural):—All engineering is handled in the office and all work is fully detailed and scheduled so there is no guess work.

This department consults with the preliminary department as to spacing of columns and other structural features, so as to insure an economical design —and to avoid changes when working plans are started.

Mechanical Engineer:—Here again we control this portion of the design under our own wing so that its provisions are anticipated early enough to not disrupt a design after it has matured.

This man also visits the job during its erection to give the outside department the benefit of his technical knowledge in making sure that the proper installation is assured.

Specifications:—We regard specifications as an important document with a definite purpose, and not a necessary evil which must in the eleventh hour be rushed through to accompany the plans "to the satisfaction of the architect."

An effort is made to avoid duplication of information on plans and specifications; the plans to show disposition of materials and the specifications to define quality.

This man has the interviewing of material salesmen, and in order to conserve his time, the time of receiving these men is limited to a definite hour each day. They are a part of the architect's education and they must be heard—but they can take his entire time if he will allow it.

A salesman who tells his story briefly and keeps his cigars in his pocket makes good progress with us.

Contracting Agent:—Here is a busy man who assumes a variety of duties and we scarcely know what his official title should be, but he is so busy that he doesn't care.

His chief responsibility is the taking of bids and the preparation of the material upon which the contract is drawn.

In order that he may intelligently answer the

questions that the contractors may raise during the course of bidding, he does the checking of the plans and specifications—and let it be emphasized that no plan and specification form the basis for a contract until they have been checked. In order that there be no delay, this is done while the job is being figured, and any revisions or adjustments are taken care of at the time the contract is drawn.

He has the issuing of all orders for changes after work is under construction. These orders and all contracts are signed either by the architect or the general manager.

He has also the relations with the various building departments under whose jurisdiction the work is built. In addition to submitting the final drawings for permit, he also submits the preliminary sketches before working plans are started, thus making sure that no radical changes will be required after the plans are finished.

Business Manager:—This department, slighted by many offices, is a well organized and definite cog in our machinery. Here all mail and deliveries are received and stamped with a form which bears the initials of all department heads. It is all referred to the general manager who passes it on, checking the initials of all department heads who are affected thereby—and noting the one who will finally dispose of it by marking with a stamp "dictate reply" or "note and return."

All replies again pass over the desk of the General Manager and all letters that are sent to file are either marked for permanent filing or dated ahead when they should again receive attention and placed in the "suspense file," from which they automatically "bob up" at the proper time and can be forgotten in the interim.

This department prepares the legal document from the material supplied by our contracting agent and sees to its signing.

Here is handled all office accounting, statements of financial conditions, issuing of certificates for payment to contractors after they are approved by the Chief Superintendent.

Here is the contact with the outside, both in person and by phone, and we stress the importance of a courteous reception and the assurance that all receive satisfaction and if the party on whom they are calling is out, to endeavor to have them taken care of by another member of the staff.

The General Superintendent:—The last link in our service to the client is superintendence, and we make it a real service and not a mechanical visitation to fulfill the contract.

Daily progress reports are made by the Superintendent on the job to his chief who in turn submits a semiweekly progress report to the General Manager, showing the high spots.

We feel this department is the eyes of the office and the fellow who finds our faults, and it is his business to apprise us of errors in plans and specifications, and we put it in the "don't book" so that we will not repeat the same error on the next job.

The draftsman sees things in terms of lines and the specification man listens to the tales of sales-

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Forms Illustrating Contribution on Page 29 by Arthur McArthur of the Office of Albert C. Martin, Los Angeles.

men, but this man sees results and keeps us awake.

Co-operation:—This is the big point that we strive for and we do all possible to encourage a "pull together." At the beginning of each day, the chief draftsman and chief engineer meet with the general manager for a few minutes to discuss what was "killed" yesterday and what is on for today. Twice a week they bring a written memo of the conditions of all jobs on the boards.

Every two weeks is held a general "directors' meeting" of all department heads where ideas for the improvement of the organization are discussed, and where each may tell the other fellow where he can better co-operate with him.

Publicity:—We consider a satisfied client our best advertiser and this point is stressed throughout the entire organization—a beautiful picture means nothing if it is executed with a leaky roof or a damp basement, or finished two months too late.

In short, we are making an earnest effort to disprove the accusation that the architect is an impractical dreamer and a painter of pictures; still retaining, however, a practical expression of the beautiful picture.

By W. S. Parker, of the Office of R. Clipston Sturgis, Architect, Boston, Mass.

THE following forms are used in our office: (A) Blue card to accompany drawings sent out. (B) White card as office record of above until blue card is returned receipted. (C) Time sheet used for recording the time of each draftsman for each week. (D) Application for payment. (E) Weekly report of progress of work for use by clerk of the works. (F) Order form for changes in the contract. (G) Sheet for entering final details of each order, to which are affixed the various original estimates bearing on the order as finally drawn. (H) Form of certificate and attached stub. (I) Monthly statement to cover office charges to client. (J) Card for recording preliminary estimates. (K) Card for recording the original and final contract costs. (L) Card for recording the original and final figures on commissions and incidentals.

Perhaps the following brief explanation of the use of these forms in some cases may be of interest:

Exhibit (A). We find the blue card sent out with drawings, with a one cent stamp attached, and in almost every case actually returned by the Owner or the Contractor receipted, a very valuable record, especially when any question arises as to whether or not documents have been received at the proper time.

(B) Necessary as a temporary office record.

(C) Time is kept by a stenographer who gets each day from each draftsman a record of time spent and the job involved. The form refers to the number of a drawing. This subdivision of the time we do not now keep, as it involved more expense than the record was worth.

(D) Application for payment is sent in quantity to the contractors and used by them in duplicate when we so desire, and in such cases the duplicate copy is sent to the owner with the certificate for payment, so that he has the full details in front of him. It should be noted that the first column, entitled "Classification of Contract to Date" must be complete to date including all orders issued up to the time of the application. The second column indicates the value of work done to the date of the application, and the right hand column, being a copy of the second column in the previous monthly statement, gives a ready comparison to show actual progress in each item.

(E) Clerk of the works' report blank is selfexplanatory.

(F) Order Form. We believe the summary at the bottom of the order, giving the amount of the original contract, total additions and total deductions, and the contract to date, is an essential feature of any order form, as it confirms the total amount of the contract to date on each order and makes it unnecessary for the owner to refer to other documents for this information.

(G) This record of the order we find of great use in later reference to orders. Frequently a number of more or less complicated letters and estimates are involved in an order as finally determined. This sheet permits a clean summary of the order to be made for ready reference, and the appended documents give the actual confirmation.

(H) Certificate form-self-explanatory.

(I) Monthly Statement. This is based upon the practice of this office, which almost entirely does its work under the method of a fixed fee plus costs, and in some cases with a guaranteed outside limit for certain items.

(J), (K) and (L) are self-explanatory.

By Harold B. Brady, Architect, Elizabeth, N. J.

 \mathbf{T}^{HE} articles recently published in PENCIL POINTS concerning the relationship between draftsmen and employers, have been read with a great deal of interest and I feel that there is need that serious thought be given this question by all parties concerned.

The question of *efficiency* has been discussed from all viewpoints for a number of years back, but from personal observation and experience, I feel that a great many fellow architects have, in quest of efficiency, become blind to the fact that so-called efficiency without proper co-operation usually proves in the end very costly.

We will have to admit that in order to obtain the best results, we have to depend to a certain extent on each individual member of our organization giving us the best services possible for that particular work. In order to accomplish this, each individual must, of course, be governed by two very essential factors: First—he must be interested in the work he has to do and, second—he must feel that his efforts are being appreciated and that he is all the time working up to greater things. When this appreciation is not shown, the organization naturally becomes a machine and the quality of the work produced naturally lacks that individuality and feeling for which we are striving.

With the above ideas in mind, I have built up my organization and the results have borne out my

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Form "B" Forms Used in the Office of R. Clipston Sturgis, Boston, Mass.

Please Sign, Date and Mail.

Sign

34

Dated



R. CLIPSTON STURGIS, ARCHITECT - - 120 Boylston St., Boston Mass. Application for Payment.





Contractors.

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Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.

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Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.

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Forms "J", "K" and "L". Size of Cards 4 in. $x \in in$. Forms Used in the Office of R. Clipston Sturgis, Architect, Boston, Mass.

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theories to the highest degree. In selecting men to fill any vacancies which occur, I endeavor first to select men who are fully qualified and competent to fill a position, after which the matter of salary is adjusted, which is perfectly satisfactory to both sides. This tends to make the men perfectly satisfied with their working conditions and, therefore, anxious to make good. The result has been that at all times I find the men taking the greatest interest in their work and I can always depend on having work turned out promptly, even though it necessitates working overtime in special cases.

Regarding periods of depression which sometimes occur, I find that the law of averages always prevails, as the men who can ease up in their work once in awhile are always prepared to work doubly hard when rush period is on and I find this much more economical than to lay off my force and be obliged to break in a new force for the new work that comes in.

Summing up the situation in a few words, I feel that I have obtained the greatest efficiency possible, as this plan is most congenial and satisfactory both to my men and to myself.

By McKim, Mead and White, Architects, New York City.

UR office is run on a very simple plan. To begin with, we have no head draftsman. Each man is directly responsible for his own work, under the supervision of the members of the firm. The jobs are apportioned by common consent among the five members of the firm, who in turn allot the work to one of the several senior draftsmen, who makes all the preliminary sketches, etc., under the direct supervision of one of the firm members. Our senior draftsmen are usually employed with more than one job, as all of our drawings are completely worked up in the drafting room. The mechanical and structural engineering is sometimes done outside the office in consultation with our own engineers. The heating, ventilating and lighting are usually done by the consulting engineers. Also, we very often employ a special artist to make the final renderings, although these are usually made in the office. When all the drawings are complete in the office. they are turned over to the specification department, and after this they are ready to submit to the contractors. The work is given over to several firms for estimating and plenty of time is allowed the contractors to study the drawings' in order that the final estimate may be carefully worked out by the date set for submission of all bids. We believe that this is important in securing the best results as when the contractor is hurried he is very apt to submit a considerably higher estimate to cover future contingencies. The bids are submitted in sealed envelopes, opened by the members of the firm, and the contract let to the lowest bidder. Usually the general contractor takes care of all the sub-contractors, but in some instances we let the sub-contracts to other firms and this, of course, necessitates another con-The work as a general rule goes on more tract.

smoothly when there is one general contractor overseeing all the sub-contractors.

We use two general contract forms; one our own and the other the regular American Institute of Architects form. All additions or deductions to these contracts are authorized in writing. We also use a short form contract for jobs of less than \$1,000.00 and for any additions to previous work,



TIME TICKET

Time Ticket Used by McKim, Mead & White, New York. Size 4¹/₂ x 9¹/₂ in.

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Size 8 in. x 10½ in.



Forms Used in the Office of McKim, Mead & White, Architects, New York.







Forms Used in the Office of McKim, Mead & White, Architects, New York.

in which case the short contract is added to the original and is subject to the same terms.

We have triplicate forms for our drawing receipts; two forms are sent out with the drawings one to be retained for the files of the person to whom the drawings are delivered and the other to be signed and returned to us for our records. When the signed receipt is returned to us, the third sheet, which we have kept, is destroyed and the signed form filed. These forms are practically the same for both the working drawings and the shop drawings.

We have one general superintendent who oversees the construction. He has under him one or more assistant superintendents, who attend to certain jobs under the direct supervision of the general superintendent. If a job is not too large one of the senior draftsmen sometimes acts as superintendent.

In general, all the work may be divided into four classes: (a) the preliminary sketches, perspectives, renderings, etc.,—all the drawings that are made before authorization to go ahead with the job is received, (b) all the working drawings prepared for contractors' estimates, (c) the full size and miscellaneous details and (d) the checking and supervision.

The plans and sketches for each job are kept in steel drawers and the full size details are kept in a separate rack and catalogued in pigeon holes. When the job is completed the drawings are taken out of these drawers and tabulated and rolled together and put in a general filing room kept for this purpose.

By Charles H. Bauer, of the firm of Guilbert & Betelle, Architects, Newark, N. J.

THIS office conducts a general practice of architecture along the lines of commercial structures, such as schools, hotels, office buildings, banks, hospitals, etc. While the greater portion of our work consists of schools, we are organized to handle any type of building that is generally designed by architects.

We are now operating under three general divisions and each of these divisions is presided over by a member of the firm. These divisions are first the business department, second the design division, and third the supervision division. We find that this arrangement works very well and takes care of the fundamentals of our architectural practice, and all other divisions are secondary, and have been grouped under one of the above heads.

The business end of the office is under the control of Mr. Betelle, who is the guiding spirit in all three divisions. It is to him we look for the final analysis and settlement of the larger problems.

The business end of our office takes care of the following work:

The important work of obtaining new business and of interviewing clients so as to keep the organization going.

The necessary writing of business letters, and the handling of the problem of subdividing the office work among the various heads of departments.

Making out certificates of payment in consultation with the supervision department. The accounting division of this department has been developed to a point where we know our cost of production, not merely at the end of the job, but we are able to check up as the work progresses. This department has arranged a card system pertaining to costs of buildings and their cubiture, so that we can make a very close estimate on the probable cost of new work.

The business department also takes care of the signing and filing of all contracts, and arranges for such matters as bonds and insurance.

The design division consists of a member of the firm, who has control of all matters of design, and the general operation of the drafting room from the preliminary sketches to the time of making the final details. We have approximately thirty draftsmen who do the real work of the office. They are not arranged into any particular groups, except that we try to balance the office by having them divided into designers, senior draftsmen and junior drafts-The senior draftsmen generally make the men. preliminary sketches and as far as possible we try to see that they follow this by making the working drawings, and very often the details of the same job. Due to the fact that our jobs are not all million dollar jobs, it is not always easy to arrange this so that it works as smoothly as we would like, but as far as possible we try to keep the same men on the job to its completion.

We have no special tricks in our drafting room that would be new to the general practice. We do not believe in making one man specialize to such an extent that he becomes unbalanced, but we try as far as possible to give everyone in the drafting room a chance to make sketches, working drawings and full size details, and very often we have the draftsmen check the specifications so that a man will become developed in all respects. This, we believe, is not only a help to our office, but also is giving general training to the men themselves.

Allied with the design division, we have the three following subdivisions: specifications, mechanical equipment, and structural design.

After our specifications have been written, they are, as a rule, checked in detail by the draftsman in charge of the job. We find that he is the person best fitted to pick up the minute details, which saves us endless trouble.

In our mechanical equipment division we have three men, one who supervises the department generally, and writes the specifications for the heating, plumbing and electric work. One of his assistants specializes in heating and the other in plumbing and electric work. We find this department is of great assistance, and until it was established we did not realize how valuable it would be to have this department actually in our office organization. We find that it not only helps to produce the drawings more quickly, but more accurately as well, because information can be obtained with the least possible trouble and delay.

Our structural design division consists of three men who give all the necessary data and also help in many ways with the details. This department, also, like the mechanical equipment department, has proven to be of great value by being actually within our organization.

The supervision department is under the direction of another member of the firm, who has three assistants besides the necessary help from time to time on special work.

The work of this department consists in seeing that the buildings are properly constructed in accordance with the plans and specifications, and this department checks all payments relating to building contracts so that the business department is prepared to issue certificates for payments. Samples of materials are approved by this department, consulting with the design and specification divisions.

This department not only takes care of the above work but is also a great help in attending school board meetings and representing the office, as men in this department frequently come in contact with the clients.

The men of the department are selected because of their experience in building, rather than drafting. They speak the language of the builder, and get better results than an office trained man.

By W. F. Anderson, of the Office of Grosvenor Atterbury, Architect, New York City.

 \mathbf{T}^{HE} man who has succeeded in his chosen profession, no matter in what line, is to be congratulated; and he usually is, provided that his ultimate standing in the community be attained by honorable means.

Each and every one of us has a personal definition of the word "Success." To me it means the attainment of a reasonable share of this world's goods, in so far as I may do so without sacrificing my own self respect or the esteem of my friends in this profession, and to gain the respect of the new client as well as maintaining friendly relations with the old.

Every architect has his own formula for the attainment of the successful practice which he hopes to establish, but I venture to state that in all of them the word "Service" has a large part. To show a few methods by which the service may be best rendered and the client be pleased is the purpose of this paper. In the days of our forefathers the relations between the architect and his client were usually simple, direct and personal but, with the transformation in business methods, architectural practice has changed. No well informed client now expects that his architect will personally perform or oversee the many details entering into the completed building. He does, however, believe that he has the right to expect that the services, for which he pays, shall be rendered in the most efficient manner possible. To accomplish this requires unfailing co-operation on the part of all employees to this one end.

Here may I quote from John Drier on "The Secret of Success"—" "The secret of success' is not a secret, nor is it something new. Nor is it something hard to secure. To become more successful, become more efficient. Do the little things better. Regard yourself as a maker and seller of service, and ever bend your thought and your energies toward the improvement of your products."

To render service in an efficient manner need not require an elaborate system of "red tape," but it does require that co-operation previously mentioned and such methods of keeping records and bookkeeping as the size of the practice justifies.

In this office printed forms are used, largely in the interest of time saving, but I would emphasize the value of making a written memorandum of all conferences with the client and instructions to the contractor. Such papers will often be of inestimable value.

Whether you elect to use printed forms to be filled out by hand or typewritten, or to have the entire record typewritten, the following will be found very useful in any office. In the latter case, however, the form used should always be the same.

1. Job Record Card. To show the owner's name, date of entry in office, classification of work (city or country), location, names of Outside Professional Assistants employed, names of contractors and their sub-contractors, total of contract price, total of cost to office, total fee, date of completion. Many other items of general record value may be added if size of card per-

Office of GROSVENOR ATTERBURY, ARCHITECT, 139 EAST 53rd ST. TELEPHONE, Nos. Plaza 5668 and 5669

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NEW YORK,

CONTRACT FOR

OWNER......LOCATION OF WORK

То.....

In connection with the above mentioned work and with reference to the drawings, specifications and agreements for its execution by you I wish to notify you of the following, to which you will please give your immediate attention.

Heading of Form Used in the Office of Grosvenor Atterbury, Architect, New York.

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h the owner is liable.	On behalf of the owner above mentioned, and relative to work on his premises, described and located as above, I hereby order the following labor and material to be supplied and work executed by you, as contractor, as provided for under the terms of your contract, dated and excepting it be specifically mentioned to the contrary, in full accordance with the conditions thereof; said work, labor, material and all apparatus necessary for its proper execution to be supplied by you for cost and a compensation of %, thereon notification of the commencement of such work to be given to me or to the superintendent on the work, and vouchers and bills to be submitted therefor all as provided in the General Clauses of the specifications forming a part of the above mentioned contract, and	done under this Specia daily memoranda durin
which	especially that entitled "Extra Work under Special Orders" namely:	al O
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Form Used in the Office of Grosvenor Atterbury, Architect, New York City.

Printed on Pink Paper.

Office of GROSVENOR ATTERBURY, ARCHITECT 139 EAST 53rd STREET

ACCEPTANCE NEW YORK,

CONTRACT FOR

OWNED	LOCATION	OF	WORK
OWNER	LUCATION	Or	WURK

То

This is to notify you that authorized, on behalf of the owner above mentioned, and relative to work on his premises, located as above, to accept

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Signe

Specification forming a part thereof.

FORM D-APRIL 1923-1000

Signed , Architect

Form Used in the Office of Grosvenor Atterbury, Architect, New York City.

OFFICE OF GROSVENOR ATTERBURY,	CASH ALLOWANCE	ORDER	NEW	YORK,192
ARCHITECT, 139 EAST 53rd STREET.	No	CONTRACT	FOR	
OWNER	LOCAT	ION OF WOR	K	
То				

THIS is to notify you, relative to the work above described, of the following order hereby given by me, as provided for under the clauses in the specification for the above described work which require you, as contractor, to provide certain cash allowances that may be expended at the discretion and by the direction of the Architect.

NOTE—Contractors will please note that cash allowance orders do not change the total of the contract price, and are valid only within the limits of the cash allowances provided for under the original contract, or as increased by virtue of credits obtained by changes or omissions in the work and transferred to the cash allowance account. NOTE—Cash allowances as provided in the specifications are net, not being subject to any builders' commissions for their manipulation, such commission or compensation being covered elsewhere in the contract price. On receipt of this order you will please check your own accounts and notify me immediately if they do not correspond with the following Statement:

STATEMENT

Total of all cash allowances provided under original contract			•		\$
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tracts and last previous cash allowance order No		•	•		
Amount of addition to, or deduction from, this balance made by this order, as above	•				
Leaving unexpended balance, subject to future order, or if unexpended, to be credited to	owne	er's ac	count	t	
Signed					
					Architect.

This card should be kept up to date. mits. 2 Extra Order Forms. If the Standard Contract Forms recommended by the A. I. A. are used, at least three different forms will be required:

"Acceptance"-for lump sum price; a.

"Special Order"-for day's work perform-Ь.

ance; c. "Cash Allowance"—for handling of those

The filing system is facilitated by using a different color for each form.

Other forms may be found useful, viz :---

For telephone messages; for conferences with clients, and for Office Memorandum. The full value of such forms will not, however, be realized unless used consistently and properly filed. Whether on printed forms, typed or hand written, different colored papers aid in immediate identification.

No architect ever lost the respect of his client by being businesslike and, therefore, let us start our first work in that manner.

Have a blank Record Card at hand for reference and obtain the necessary data, as to ownership of property, who will sign contracts, preference, if any, as to expert consultants, should they be necessary, and have a distinct understanding as to who shall pay for their services. Also agree with your client as to your own fee and the services you agree to render. At the conclusion of the interview reduce your notes to compact form, have them typewritten in duplicate, send one copy to the client, asking his agreement thereto, and file the carbon. If in proper form, this will, in many cases, serve as a contract for service. As the size of your practice in-creases you may find it advisable to have a printed schedule of charges which may be used to advantage, unless you prefer to accept and use all the Standard Documents of the A. I. A.

As the preliminary studies develop and the conferences with the client multiply you will find increased needs of the memorandum forms, particularly when the principal holds the conference with the client, passing the results on to the drafting room and other departments, if any. The time spent in making notes is more than compensated in the time saved elsewhere, not to mention misunderstandings.

Beginning at this point make at least three copies of all memoranda of conferences. Send one to the owner, asking for his approval or written dissent from any of the items: one to the drafting room and the third to files, noting date of transmission to owner. When the memorandum covers items affecting specifications it may be advisable to have a fourth copy for that department.

Preliminary drawings are usually made at a scale of 1/8-inch to the foot and should be sufficiently explicit to enable a junior draftsman to develop them into working drawings easily. Whether the architect himself or a subordinate

should be responsible for the design will depend upon the size of the organization, but in so far as the architect elects to make the decision as to the design just so far should he be prepared to make it promptly and definitely. In the former case he should make the studies until satisfied with the result before handing them over to his assistant. This avoids wasted drafting time.

When the drawings are being prepared for estimate and contract the outside experts, Structural and Mechanical Engineers, should be called in to advise in their respective fields. Thus the plans may be completed without many of the changes which otherwise are certain to arise. It is advisable to furnish each with prints of the unfinished plans so that their own plans may be prepared simultaneously with the architectural drawings. At the same time the specifications should be started so that the specification writer may have the opportunity to check the plans and ask all his questions. Don't hesitate to ask the client to make the decisions on matters of personal preference. Before the building, particularlv if it be a home, is finished he will have a great deal to say. Forestall this all you can. Have the questions prepared in condensed form, arranged in logical order and submit them in writing. Explain why this is done and ask him to give his answers in writing. In nearly every case the client will feel flattered at being thus consulted.

Two questions always arise at this point:

(a) Whether to prepare the estimating and working plans in pencil on paper, or, (b) in ink on tracing linen.

In the former case it is presumed that the drawings will be advanced only as far as is necessary to get bids and award a contract. Then comes a period of hectic activity to trace and figure the drawings, check construction and, in brief, make the working drawings. If the architect could always feel even reasonably sure that the work would progress to the contract stage. then the latter method would certainly expedite the building. A builder who is obliged to wait from two to three weeks after signing a contract before he receives his full sailing orders may lose his first enthusiasm before the excavation is finished.

The drawings must be supplemented by the specifications and if the latter are started early in the proceedings they can be finished on time. In my opinion no specification should even be typed, much less issued, until the man in charge of the job (in the drafting room) has had an opportunity to check the manuscript and to reconcile any discrepancies or omissions in these two equally important parts of the contract. It is not expediting but demoralizing to be obliged to issue "bulletins" of "interpretations" or "addenda" to the bidders while they are estimating. Take advantage of this period to have the finished specifications read over with the plans at hand, to pick up any inaccuracies.

Drafting Room methods open up a subject capable of much discussion, and about which every architect has his own fully developed ideas. It is too vast to be discussed in detail. May I, however, suggest the following:

a. Do all the studying of design on the working drawings and see that the specifications are explicit, i. e., give the sizes of finished woodwork, whether built up or solid, the sizes of plaster cornices, whether plain run or ornamented, and other matters in like manner, instead of saying "as detailed." Then your details become what is intended under the usual contract, viz.—true enlargements for constructional purposes. Also much argument with the builder may be avoided.

b. Make as many details as possible quarter full size, using full size only for moulding contours and ornamental work.

c. When you have arrived at a good practicable detail for any fixed purpose, a window or door frame for instance, stick to it until you learn of something better. Many times such a detail need be merely traced and issued under the new job title. Look over the general run of details in your files and you will be surprised to find how many are so nearly alike that if they had been actual duplicates the finished appearance of the work would have been equally good.

d. Make all details on tracing paper, or linen for the smaller "stock details," and issue in blueprint form.

e. So far as it can consistently be done, require "shop drawings" to be submitted in duplicate. Have them corrected until satisfactory, then return one copy approved, keeping the other in your file. This will relieve the drafting room and at the same time put the responsibility for much technical information where it belongs, viz. on the manufacturer.

The suggestions above outlined can be carried out in practice in any architect's office where the employees consist of a stenographer, who is supposed to answer the telephone, an office boy and two, or perhaps only one, draftsmen. sumes that the architect himself does part of the designing and exercises oversight of the bookkeeping. On hand it may be expanded at will to apply to a much larger body of employees.

The subjects of office organization, preparation of contracts, field supervision and bookkeeping, as related to building contracts would, in themselves, furnish material for a lengthy paper.

The form of organization of the office force will depend so much upon the number employed that it is difficult to make recommendations in specific form. Good business sense will, of course provide for the proper training of assistants so that they may in time of need assume the duties of their superiors. In the last analysis, however, it will generally be found that it is the architect himself who must be the driving force and that on his ability or habit of giving the final decision promptly and stimulating his employees, will rest the burden of the successful practice. The others may be condensed by use of the Standard Forms of the A. I. A. to cover the contracts; by the architect himself doing all the superintending to cover the next; and the stenographer doing the bookkeeping to cover the last; or they may each be elaborated upon and expanded to provide work for a much larger number of employees. In even the smallest offices, however, there is, in my judgment, only one safe rule to follow in these branches of the work, viz.—make all decisions, all orders to contractor and all reports in writing, so that the record may be kept clear.

"Some are born great, some achieve greatness and some have greatness thrust upon them."

Most of us will be obliged to achieve by our own efforts all the greatness that we may possess. Therefore, as a stimulus to that end, I would close with two quotations which have always been of personal help.

"Get your happiness out of your work or you will never know what real happiness is," and "Blessed is the man who has found his work."

By Edward I. Shire, Architect, New York City.

I N LOOKING over my memoranda concerning office practice I find that, though most of the items are similar to those generally used, there are a few that may be of general interest.

There is nothing more important than simple follow-up systems in an architect's office. Among others, I have three which I call "Letter Follow-up," "Office Follow-up," and "Building Follow-up." I enclose herewith copies of these slips.

The "Letter Follow-up" slips are filled out from letters as they are being filed and no letter requiring an answer or containing an item requiring attention is filed without this follow-up slip which is also filed according to date as follows: A filing drawer contains three sets of cards numbered from one to thirty-one, which represent the dates for three con-secutive months. Assume a "Letter Follow-up" should have an answer a week from today, the follow-up slip would be filed in front of the card dated December 7th. Each day these card files are consulted to see whether there are any slips that should be followed up, whether "Letter," "Building" or "Office" slips. Each slip, therefore, comes automatically to the stenographer's attention on the date that investigation should be made to see whether the item in question has been attended to. If not, the matter can be followed up immediately or the slip may be replaced in the file for some later date if further time is considered advisable. Each day the current numbered card is placed in the back of all of the cards, thereby keeping the current date as the first card in this file and always keeping cards for three months in advance.

The purpose of the "Building Superintendence" slips is evident from the slip itself and the "Office Follow-up" is for general items requiring attention in the office whether relating to jobs or anything requiring attention in the office.

Herewith are copies of time sheets which I find

in' LETTER FOLLOW UP un Bros. Date of this reminder // 22 Job Jones Letter to Joh Dates of letters /0 Subject of letter Scale installed Inswer due 11/7/22

Letter Follow Up. Size 41/4 in. x 6 in.

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Office Work Follow Up. White Paper. Size $4\frac{1}{4}$ in. x 6 in. Forms Used in the Office of Edward I. Shire, Architect, New York.

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Building Superintendence Follow Up. Size 41/4 in. x 6 in.

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Time Record, White Card, Size 5 in. x 8 in.

Forms Used in the Office of Edward I. Shire, Architect, New York.

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Summary of Time Record, White Card, Size 5 in. x 8 in. Forms Used in the Office of Edward I. Shire, Architect, New York.

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Long Distance Telephone Cost Record, Buff Card, Size 5 in. x 8 in. Forms Used in the Office of Edward I. Shire, Architect, New York.

better for my own purpose than any of the standard sheets that can be purchased. The daily time record sheets are individual for each employee. These are transferred weekly to the white time card, using a different card for each job and at the end of three months, a summary of the totals on each white time card is transferred to the blue summary card, the totals on this summary being used by the bookkeeper in calculating the office costs of the jobs.

For practical purposes, it has been found advisable to use forty hours for a week for each employee, though only thirty-eight hours is usually accounted for. Any difference between the actual hours accounted for and forty is charged to general time. Such differences also include holidays, vacations and the like. The forty-hour division simplifies the hourly calculation. In cases, however, where the actual cost is used in charging fees rather than a percentage system the two hours unaccounted for each week, or practically 5%, is added to the employee's time to give the exact cost on that particular job.

I enclose also copies of the cards showing the monthly costs on each job for blue prints and long distance telephone calls, this data being obtained from the bills. As with the time costs, a summary for three months is used by the bookkeeper.

The forms enclosed are made on the "Ditto" machine formerly known as the Commercial Duplicator. I find this machine of considerable value for various purposes, including the duplicating of most of my specifications. One great advantage of such duplicating over the typewritten specifications is that when one copy is corrected, there is no fear that some of the duplicates may accidently not be similarly corrected.

By Carrère & Hastings, Shreve, Lamb & Blake, Architects, New York.

P RELIMINARY sketches are made either by a member of the firm or by some one immediately under the firm's direction, and the interviews with clients, investigations, etc., are handled in the same way. After approval of the first sketches the work is turned over to a captain-there is no head draftsman. The work is then divided up among different squad bosses, or among men working for them, and all in turn are under the direct supervision of the members of the firm who allocate certain work amongst themselves. This system goes right through the job. All the men, draftsmen, squad bosses, superintendent, specification man, everybody who has to do with the execution is directly responsible to the firm member who has that particular work in charge.

The engineering department is carried on along the same principles—heating, plumbing, electricity, elevators, are all done in the office, the engineers being in constant touch with the squad captains.

As far as time keeping goes, the men have a certain leeway in their working time. Each man is supposed to put in eight hours work each day. If he falls behind in one day's work he is allowed a certain length of time in which to make this up, working before or after hours, or Saturday afternoons. Every two or three days the time each man spends on a certain piece of work is taken and charged to that work. This record is kept and forms part of the basis of calculation of the cost of each piece of work.

This method of handling the work is explained more fully in the following:

OUTLINE OF ARCHITECTURAL SERVICES

I. DESIGN—1. Architectural

A. *Plan Arrangement.*—This is determined by one of the firm members in charge of design, after the program of requirements has been formulated in consultation with the owners or their representatives. Various schemes are made and illustrated by comparative studies and diagrams to fix the best arrangement of the various parts of the building elevators, stairs, toilets, etc., areas and cubes being taken for each scheme, and compared, always with the end in view of achieving not only economy and practicability in construction and operation but also of solving the practical problem in such a way that the building when completed will present a pleasing and harmonious appearance.

B. *Elevations*—The elevations which are commenced as soon as the general lines of the plan are determined upon are studied, first at a small scale to determine the general masses of the building which, since the Zoning Regulations went into effect, have become so important, then at a larger size and greater detail until the final scheme has been decided. During the course of the work, perspective sketches from various points of views are made in order that the building may be studied from different angles, and sometimes models are made at small scale to assist in this work.

The designs and drawings for the foundation and the steel work are, in the case of our larger buildings, done by consulting engineers or by the organization which executes the work in consultation with us and under our supervision. All their designs and drawings are checked over and approved by us. Drawings for concrete, masonry and other structural features are made in our office.

Mechanical—Designs for this branch of the work are done by our own engineers and are worked up in conjunction with the architectural drawings. Comprised in this are the drawings for plumbing, heating, ventilating, electric work, elevators, etc.

II. ADMINISTRATION

1. *Estimates*—The taking of estimates and placing of contracts are all done by our office through the general contractor or builder and in consultation with him and the owners.

2. Auditing and Accounting—The system of bookkeeping devised for us by our auditor, consists of a double entry system using voucher records for disbursements. It has three general subdivisions, as follows: 1. Contract accounts between the client and the contractor. Applications for payments to



Forms Used in the Office of Carrère & Hastings, Shreve, Lamb & Blake, Architects, New York. Direct Time Record, 153/4 in. high by 165/8 in. wide, printed on both sides, yellow paper. At bottom of Direct Time Record Sheet, totals in two columns at left and under recapitulation, totals for month. Daily Time Report, 10½ in. x 17 in., white paper, one side.

the contractor are re-checked and approved after preliminary checking by the field superintendent and certificates issued and recorded. Vouchers for all requisitions are kept on file for the inspection of the client. 2. Office accounts with clients, which is a regular accounting of the business of the firm, recording all cash receipts and disbursements and all bills issued to clients. 3. Cost accounting, which consists in charging to each piece of work the direct salaries of the draftsmen and superintendents employed upon it, plus its proportion of overhead cost (rent, light, salaries of clerical force, drawing accounts of members of the firm, etc.). A daily record is kept of the time spent by each draftsman on each piece of work which is summarized monthly and overhead costs for that period are calculated on that basis. In this way, the actual costs on each piece of work can be readily determined. The books are audited by a certified public accountant every three months.

3. Clerical.—This comprises—1. Secretaries and The incoming mail is here disstenographers. tributed to the various men in charge, copies of letters made, etc. 2. Letter file room. Correspondence is filed separately under the same work number as appears on the plans and is further subdivided into various classes, such as letters to and from clients, those dealing with stone-work, with steel, with plumbing, etc. 3. Plan file room. Here are kept all original drawings and plans filed in sliding racks and card indexed. All orders for blue prints which are made in triplicate by the "squad captains" are here tabulated and recorded and sent to the printer. This department also has charge of all supplies and of the issuing of drawing materials to the draftsmen. Record is kept of the location of the drawings and photographs of all completed work. 4. Librarian, who has charge of the architectural books and photographs, rebinding and repairs. These books and photographs are card indexed and recorded.

III. SUPERINTENDENCE

1. Field—A superintendent is assigned to each piece of work and it is his duty to pass on all materials delivered to the site, to have general supervision of the operation, and to insure coordination and cooperation between the work done in the office and at the building. He also audits and checks the various pay-rolls, requisitions, certificates of payment before approval. These superintendents are members of our own staff and are men who have been with us for a long time.

2. Office—Shop drawings are submitted to us in duplicate and are checked and corrected by the draftsmen and checkers directly in charge of the drawings from which they were made, which insures complete familiarity with the work. If there are any corrections, the sub-contractor must resubmit his shop drawings for final approval.

The criticism and approval of models and samples is always done personally by one of the members of the firm in charge of the work.

Detail designs of various parts of the building are made at three-quarter inch scale and at full size. The shop drawings of the sub-contractors are made from these and they are therefore a very important part of the work. The drawings of these details are made either by or under the direct supervision of one of the firm.



Form Used in the Office of Carrère & Hastings, Shreve, Lamb & Blake. Architects, New York. Daily Time Ticket.



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Time Report, Size $5\frac{1}{2}$ in. x $8\frac{1}{2}$ in. Forms Used in the Office of D. H. Burnham & Co., Architects, Chicago, Ill.

the Office of D. H. Burnham & Co., Ar

By Frederick W. Garber of the firm of Garber & Woodward, Architects, Cincinnati, O.

GOOD architecture and the making of profit are the aims of this office as, no doubt, of all other offices. All our work is divided into two groups. Work done by Mr. Woodward and work done by myself. That again is given directly to one of three men in the office. This method would indicate that we have no head draftsman, which is true. We have three head draftsmen.

As an example. Assume that one of the members of the firm has charge of a certain piece of work. He begins it and ends it. It is turned over to one of these three men in the office and he is made directly responsible to the principal. These three men have a financial interest in our firm. As soon as possible he is brought into conference with the client and eventually relieves the principal of a good deal of this work.

On any work handled by me, my word is final and the man in the office who has charge of it will have the last word in so far as the drafting room is concerned. He might use one or both of the other men who hold similar positions, but his authority is final. He follows the work through sketches, working drawings, details and full sizes. Most of the contact with superintendent is through him.

On questions of policy and things of that sort Mr. Woodward or myself is called in. The three men in the drafting room agree as to who shall help them and which draftsman shall be used for the work. Their intimate connection with them relieves us of a good deal of burden and you may be assured that they pick out the most capable men for doing specific kinds of work.

We are in constant touch with these men and they never permit details or full sizes to leave the office until we have gone over them after they are blocked out.

Mr. Woodward and myself each have a secretary who carries on the reports, makes out estimates, attends to correspondence and things of that sort which begin with the superintendent and come up through the same channel only in the reverse direction from the drawings. For quite a number of years we have made a statement to each and every one of our clients, each month, of the actual condition of their work. We find that this keeps the client continually posted and there is never any discussion as to cost.

One day each week is devoted to Building Committee meetings at which the clients, members of the firm and one of the three men attend. These meetings simplify and expedite the work and keep the client in close touch with his project.

Our method is so simple that it is hard to understand why anyone would be particularly impressed. But we can say that it does work and works well and that we are never out of touch with our work which is the great stumbling block to doing good and successful work.

By M. Nirdlinger, of the Firm of Nirdlinger & Marlier, Architects, Pittsburgh, Pa.

R EGARDING our office methods of handling the various building operations, would state our first procedure is to obtain complete data regarding the building site, after which we have our first real conference with the client. Preliminary drawings are then prepared, blue print or white print copies being submitted client from time to time with all notations, changes, etc., noted on the prints which we keep for our records. This method is carried on until the completed drawings and specifications are ready for the taking of estimates. If it is found necessary to make revisions which do not materially change drawings and specifications after estimates have been submitted we make up an addenda to specifications and obtain additional estimates. The addenda becoming part of the contract permits us to make necessary notations on drawings after estimates are received. If the changes are very complicated we, of course, revise drawings before taking new estimates. After contract is once let, all instructions sent contractors, including all extras. credits, changes no charge, etc., are made up with three carbon copies in addition to original, the original being sent to contractor, one copy to client, one copy for drafting room record, and one copy for filing. We have found this method most important as it eliminates all misunderstandings at the close of the operation.

We have found it of great help to present each client with a filing case of similar divisions to our office forms, so their records check with ours. The forms used are as follows: Contracts, Extras, Disputed extras, Credits, Disputed credits, Certificates for clients, Payments on account, Changes no charge, Instructions sent contractors, Written complaints account of slow progress, Written complaints account of bad work and material, Written complaints, general, Written complaints for back charge, Notices, three days and others, Disputed items, Unfinished and unaccepted items, Architect to Contractor, Contractor to Architect, Archiect to Subcontractors, Subcontractors to Architect, Changes ordered by Owner, Client to Architect, Architect to Client, Estimates for changes, etc., refused, Refused estimates, Architect to agents account of materials, Receipts for drawings, Miscellaneous.

By the above system all orders from client to contractor pass through this office, contractor obtaining written orders from this office for all changes. This feature eliminates carelessness on the part of the Architect, Contractor and Owner, as the verbal agreements that are a common practice always cause disagreements later on.

Regarding drafting room operation, we have separate files for all sketches, and ¼-inch drawings, details are all numbered, listed, and filed according to their numbers. Receipts are obtained from Clients and Contractors for all drawings issued. Head draftsman has his filing case for each operation, he makes records of all changes from outer office correspondence, these records being used in making up all details, revised drawings, etc. Upon completion of the operation correspondence, scale drawings, sketches, and details are catalogued and filed, making immediate reference possible at any time.

PENCIL POINTS

CONTRACTOR'S PROPOSAL 19 PERKINS, FELLOWS & HAMILTON, ARCHITECTS 814 TOWER COURT, CHICAGO. Gentlemen : CONTRACTOR'S HAN Hereby Proposes To Execute The Work For The ____ Building For__ Owner ___in accordance with your Drawings and Specification We enclose herein our certified check for \$____ as a guarantee of good faith Principal Proposal_ Alternate Proposal No. 1 \$ Alternate Proposal No. 2 \$ Supplementary Proposal "A"_ \$ Supplementary Proposal "B"_ Supplementary Proposal "C". Supplementary Proposal "D"_ Signed ____ Contracto

Unless otherwise stated all proposals are open to acceptance within 10 days from date thereof. All proposals for contracts on Public Buildings must be accompanied by certified check for three per cent of the principal proposal.

Form Used in the Office of Perkins, Fellows & Hamilton, Architects, Chicago. Ill. Size 8½ in. x 11 in.

By John V. Van Pelt, Architect, New York City.

 ${
m A}_{
m RCHITECTURAL}$ offices are usually run on one or the other of two different plans. Under one of these plans the same man works up up the early sketches, has charge of the working drawings, details, possibly the specifications and even the superintendance of the job all the way through. Under the other plan there is a sketch division, working drawing division, detailing division, etc., a special specification writer and special outside superintendents. There has been much complaint of the second system among draftsmen on the ground that they individually become mere cogs in a large machine and never learn anything outside of the monotonous routine of the special work alloted them.

My own office is run on the first system. I believe it is better because there is less likelihood that different branches of the organization will fail to interweave and that there is more probability that the initial intention in the design will eventually find expression in the construction. Those who believe in the second system, sometimes called the "factory system" claim that the first method is more costly to the architect. I do not believe this.

Distinctive features in my own office are that I perform a large amount of work on each building myself, making the original design, usually laying out the most important quarter-scale plan, writing

the specifications and superintending the construction. Thus I have intimate knowledge of what is being done. I handle a fairly large amount of work the majority of which is institutional, tuberculosis sanatoria, schools and churches taking first place. The Gennadion. which Mr. Thompson and I are now building in Athens by day's labor, is primarily monumental.

The disadvantages of the system that I follow are twofold; if there are faults in the plans or construction, or if the design be bad, it is entirely my fault. Moreover, to practice architecture in this way means that I have a long and strenuous working day.

The point that is not covered in my organization is a member of the firm whose special activity would be largely social, meeting and securing new clients, etc. Futhermore, every office needs an advertising manager, and that I lack. My work comes almost entirely through earlier executed work, a necessarily slow process. However, this has resulted in a steady and increasing volume. My charges are made on either the percentage basis or a time basis. Clients pay for all prints. In calculating the cost of a building for a percentage charge, no deduction is made for omission from contracts for which the drawings and specifications have been prepared. but extras are added in computing this cost. A monthly statement is prepared in the office and the overhead is calculated in proportion to the drafting hours that have been recorded daily during the month. Each drafting hour has added to it an overhead which varies from seventyfive cents to a dollar and a quarter, as the volume of work in the office changes.

Time cards are filed for each day's work on each job so that each card has noted upon it the number of hours of each draftsman employed on the job, any extra expenses, travelling expenses, etc., and notes which eventually make a diary of the job.

I have found this system of the greatest value and believe that it is unusual. My office very seldom enters competitions.

ESTIMATORS INQUIRY

PERKINS, FELLOWS & HAMILTON ARCHITECTS

Chicago_____19

building

Gentlemen:

In reference to your drawings and specifications for_____

for for we request the following information.

Form Used in the Office of Perkins, Fellows & Hamilton, Architect, Chicago, Ill.

PERKINS, FELLOWS	& HAMILTON, ARCHITECTS
814 TOWER	COURT, CHICAGO

GENTLEMEN:-

YOUR CERTIFICATE IS REQUESTED CALLING FOR PAYMENT OF \$______ON ACCOUNT OF CONTRACT FOR ON_______BUILDING FOR

AT THE FOLLOWING IS A COMPLETE SCHEDULE SHOWING THE ESTIMATED VALUE OF THE VARIOUS BRANCHES OF THE WORK IN PRESENT AND COMPLETE CONDITION WITH AFFIDAVIT ON REVERSE HEREOF:

BRANCHES OF WORK	ESTIMATED COST	AMOUNT COMPLETED
Liability Insurance	ŝ	\$
Construction Plant		
Excavating		
Filling and Grading		
Concrete Walks and Drives		
Concrete Footings and Walls		
Concrete Floors on Ground		
Common Brick work		
Face Brick work		
Reinforced Concrete		
Reinforcing Steel		
Stenatural Iron and Steel		
Asphitestural Iron		-
Hellem Tile work		
Control Plank Pretitions		
Gypsum block Fartitions	and the second s	
Tur Cotto		
Concilia Contra		
Granite		
Damp Prooning		
Cleaning and Pointing		-
Rough Carpentry		
Mill work		
Calking		
Hardware		
Lathing and Plastering		
Painting		
Glazing		
Sheet Metal work		
Composition Roofing		
Slate Roofing		
Tile Roofing		
Tile Floors and Walls		
Marble work		
Structural Slate work		
Prismatic Lights		-
Terrazzo work		-
TOTAL	\$	S
Approved :		

Superintendent.

State of,		19
being duly sworn, on his oath deposes and says that he is	and the second second second second	
the contractor for the		
for the building erected for		owner
on the premises described as follows, to-wit :		
All the bills incurred by affiant for labor and material fu are fully paid land discharged	rnished by any and all parties	upon said building
All the bills incurred by affiant for labor and material fu are fully paid land discharged	rnished by any and all parties	upon said building
All the bills incurred by affiant for labor and material fu are fully paid land discharged	rnished by any and all parties g froma	upon said building payment
All the bills incurred by affiant for labor and material fu are fully paid and discharged	rnished by any and all parties g from	upon said building payment Cents
All the bills incurred by affiant for labor and material fu are fully paid land discharged	rnished by any and all parties g from aDollars and il or both.	upon said building paymen Cente
All the bills incurred by affiant for labor and material fu are fully paid land discharged	rnished by any and all parties g from g fromDollars and ul or both.	upon snið buildinc payment Cents

Form Used in the Office of the Perkins, Fellows & Hamilton, Architects, Chicago, Ill. Face and Reverse of Contractor's Application for Payment.

Contra

It is my belief that work in the office is improved by a pervading atmosphere somewhat akin to that of the studio. Instead of a time clock to be punched when the men come in and a docking of their time, I have always allowed considerable liberty in that respect. Draftsmen are paid by the hour instead of by the week and this is made clear and taken into consideration when they enter the office and their salary is determined. It means that they do not receive pay during vacations and receive special overtime at a higher rate only when asked to come at a sacrifice. I believe that the practice of discharging draftsmen without previous adequate warning is unfair and vicious. I like musically inclined draftsmen, although I find that they will not let me sing in the drafting room.

By Peter B. Sheridan, Architect, Hazelton, Pa.

S PEAKING from the viewpoint of the smaller office, we believe that it is a big advantage for the small office to have an association of two men. One (A) handling the soliciting, superintendence and specifications, while the other (B) has charge of the drafting, office management and trade interviews. This division of responsibility will work out fairly for both men. It is practically impossible for one man to manage all thoroughly and it is a rare thing to find a draftsman who will assume responsibility and take the personal interest in the firm's business that an associate will.

Assuming that we have a building, A having solicited this work and closed the contracts (we use the A.I.A. contracts, having found our client and his lawyer more in sympathy with this form than any original one that we could devise among ourselves). Next an interview is arranged so that Bwill meet the client and become familiar with the requirements. Following this, A and B will discuss the problem in detail and various schemes are tried until some definite solution is obtained. The client being satisfied with the final solution, B assumes full charge of the job, further discussions of the project occurring as the work progresses. Any draftsmen that are required will be under B's supervision. At the same time A is writing the specifications, working in parallel with B, this method helping to avoid errors of omission and mistakes on both the drawings and specifications. Upon completion they check each other's work.

We might add that a small office should never consent to drop below the recognized percentage fee. Judging by the present cost of a well studied and drawn set of plans, it would be impossible to spend the required amount of time on the study of the problem if the fee were cut. It is only natural that the finished work will suffer by this cheapening procedure.

If an association of this type is to be successful each man must be capable of holding up his end of the work and each must have absolute faith and confidence in the other.

By Rankin Kellogg & Crane, Architects, Philadelphia, Pa.

N reply to your request we would say that our practice has not seemed to lend itself to the use of stereotyped forms. Our work has been so varied and has been so largely for government, state, county and municipal or related boards where certain prescribed forms have been obligatory that we have found it more advantageous to handle each job along its own particular lines. The fact also that our work has generally consisted of a comparatively small number of large operations, rather than a large number of smaller projects that could be handled in a routine way, has not encouraged the use of forms. Meetings with clients or committees are always made a matter of record by an account of the proceedings as understood by us and prepared as soon after the conferences as possible. Copies are sent to the clients or committees and we are governed accordingly unless notified to the contrary. It is difficult to see how any form could be devised to cover records of this kind and yet we regard them as of primary importance. The same is true of superintendents' and inspectors' reports. The projects we have had in hand have varied so that if any special forms seem desirable they are prepared for each operation

We enclose herewith a copy of our certificate form and our form for special order. In the latter the circumstances and conditions of each particular order are set forth in considerable detail and the copy going to the contractor as well as the copy retained by ourselves is signed by the owner unless the exigency of the case prevents.

By J. W. Dolliver, Architect, San Francisco, California.

I N my practice of Architecture I have selected a type of practice which I might class as personal, in contrast with a large office which carries on an organization practice. My method is fraught with the same impediments as others where the practice is either a feast or a famine, but strange to say, the more the rush the better the system is kept up. Every morning this is attended to in transit to the office, as I am a commuter. Briefly outlined the system is as follows:

Record of Practice:—I have a Lefax filing pocket book arranged with daily calendar, addresses, $\frac{1}{8}''$ sectional ruled pages and alphabetical index where all notes are dated and lettered fom the date of meeting with the client right through superintendence. Journal ruled pages keep the accounts of contracts and payments. Page for Contractors and Sub-contrac-

(Continued on Page 68a)

PENCIL POINTS

VOL. V, No. 1



DETAIL OF PORTAL, ROUEN CATHEDRAL FROM "SELECTED MONUMENTS OF FRENCH GOTHIC ARCHITECTURE"

The delightful character of the sculptured detail, both in the figures and in the architectural ornament, is well shown in the photograph reproduced on the other side of this page. This is one of the plates in "Selected Monuments of French Gothic Architecture" which is being brought out by the publishers of PENCIL POINTS.



FROM SARRE'S "DENKMAELER PERSISCHER BAUKUNST."

PERSIAN FAIENCE

PENCIL POINTS

VOL. V, No. I

The faience of Persia is especially worthy of study because it embodies principles which can be applied in the designing of polychrome decoration in other styles. Its beauty always attracts, even though the style is limited in its usefulness in present day practice in this country. Sarré's book, from which the plate on the other side of this sheet is reproduced, contains a rich store of this material.

PENCIL POINTS

VOL. V, No. 1

PLATE III



Courtesy of The Randolph Collections

ETCHING BY JOHN TAYLOR ARMS, "THE TWINS"

The etching by John Taylor Arms, which is reproduced on the other side of this sheet, is one of the most interesting of the many etchings in his "gable series." The light and shade on the various surfaces and the texture of the materials have been well studied and well rendered, making a very pleasing presentation of an interesting architectural subject as well as an etching that is especially good from a pictorial standpoint.

PENCIL POINTS

PLATE IV

VOL. V, No. 1



PENCIL SKETCH BY WM. P. SPRATLING

The pencil sketch reproduced on the other side of this sheet is one of those made by William P. Spratling on his sketching trip in Europe during the past summer. It is especially worthy of study from the standpoint of technique, for it very successfully renders the richness and tenderness of the old stonework and does this in a masterly way.

THE SKETCH PROBLEM, PART II

The First Preliminary Competition for the Paris Prize

BY JOHN F. HARBESON

In this article Mr. Harbeson treats the sketch problem in the same manner in which he has discussed other problems in the pages of this journal under the general heading "The Study of Architectural Design."

THE first preliminary competition is different from the regular sketch problem in one important particular—only five are placed. It is not enough to make a good sketch—it must be one of the five best, and as the competition is keen this sometimes results in an exceedingly high standard. And just as in sprinting, if you seriously intend to win a race in a meet, you will go into regular training to develop your muscles and your control over them, and to increase your "wind," so that by the date set for the race you are absolutely "in condition;" so, too, it is possible to train for the Paris Prize Preliminary.

This can be done by taking a problem each week, for a number of weeks-programs of former preliminary competitions may be used. Most of these have been published in the architectural magazines and may be found in the reference libraries. Take the problem in every respectexcept one-as if you were taking the Preliminary itself; work "en loge"-that is, use no documents, no criticism, no help. The exception mentioned above is as to the time. It might not be possible to take a number of such problems in the time usually alloted to a Paris Prize Preliminary, if the whole number of hours had to be spent consecutively, without undermining one's health to such an extent as to jeopardize the chances for success in the event itself.

This would apply more particularly to the Second Peliminary, a forty-eight hour problem: it is even more necessary to "train" for the "second prelim," and training by means of a number of similar problems is of even greater value in this case. But even one forty-eight hour sketch problem is a severe strain on one's stamina because of the intense nervous effort required, to say nothing of the loss of sleep and lack of regularity in eating; a series of such efforts would be ruinous to the stoutest constitution. A glance at some of the successful problems in these competitions, of which Fig. 19 is an example (by D. M. Kirkpatrick, winner of Paris Prize 1912) will show that to draw as many individual lines as are shown, necessitates a high average of lines per minute, in the time left after the parti has been found and studied, and the arrangement of the masses, of the axes, and the character of the representation have been decided upon.

For these training problems it is sufficient to use the proper number of hours, and not to use them consecutively—to divide this number into shorter periods so that the usual habits of life are not disorganized and nervous vitality is not dissipated.

If you can get some one else to go through this training with you, there will be an added benefit for both in development: the more the better.

After each such trial get what criticism you can on your effort—from the Patron, from men who have had the Beaux Arts training, and especially from "Logists" in a previous Paris Prize competition, who, therefore, have had some success in preliminary competitions. Look, then, at the published solutions of these former programs: incidentally you should not look at these solutions before making the esquisse—that is, if you expect to get any real value from the effort.

With such a method of training you will be astonished at the improvement in your own work after taking ten or twelve problems of this kind.

And when you come then—after this training—to take the preliminary competition itself, make use of this training as much as possible. Stick to the technique, the medium, you have found greatest success in using; watch the disposal of your time so that the preliminaries (the finding of a parti, the study of the composition of the sheet, the blocking out of the masses of your solution) will not eat too much into the time necessary for the presentation.

time necessary for the presentation. And in this final effort—the "Preliminary Competition" itself—you must drive yourself hard, use every pound of "steam" you have to get the best that is in you "across." This is no time to pamper yourself, to hang back from a supreme effort: rest tomorrow—eat tomorrow —play tomorrow. Today get the d— thing done, and get it done well, just as well as you are capable of doing a thing of this kind.

And if you miss it, if you do not "place," do not forget that there is another competition a year later, and start in at once to get ready for it, to "go in training" so that the results will be different in that competition.

It is interesting to examine the problems which have been "placed" in a Paris Prize Competition. That, shown in Fig. 14, also by D. M. Kirkpatrick, shows the value of directness, especially in the plan. Everything is "nailed out;" there is no indecision anywhere. In any good sketch you see evidence of the attitude that, once the design has been decided upon, there is never again any hesitancy about design

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Figure 19. Design by D. M. Kirkpatrick for "The Court of Honor of an Exposition." Second Preliminary Competition, Paris Prize, 1912.



Figure 14. Design by D. M. Kirkpatrick for a Water-gate in a Park. First Preliminary, Paris Prize Competition, 1912.



Figure 17. Design by M. Albert Ferran, Pupil of M. Laloux, for "Le Pavillon Central d'un Palais de l'Institut." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.



Figure 18. Design by M. Courrèges, Pupil of M. Bernier for "Le Pavillon Central d'un Palais de l'Institut." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.



Figure 20. Design by M. Azéma, Pupil of M. Redon, for "Un Monument à la Source d'un Fleuve." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.



Figure 21. Design by M. Astorg, Pupil of M. Bernier, for "Un Monument à la Source d'un Fleuve." First Preliminary Competition, Prix de Rome, Ecole des Beaux Arts.



Figure 16. Design by Louis C. Rosenberg for "A Church Façade." First Preliminary, Paris Prize Competition, 1920.



Figure 15. Design by Russell S. Simpson for "A Church Façade." First Preliminary, Paris Prize Competition, 1920.



Figure 23. Design by M. Chaurés, Pupil of M. Pascal, for "Une Ecole Professionelle d'Apprentis dans Une Grande Ville." Twenty-four hour sketch problem. Ecole des Beaux Arts.



Figure 22. Design by M. Tournon, Pupil of MM. Sellier de Gisors and Bernier, for "Une Ecole Professionelle d'Apprentis dans Une Grande Ville." Twenty-four hour sketch problem. Ecole des Beaux Arts.

or parti; they are accepted as good, and presented as directly and forcefully as possible. In this case (Fig. 14) center lines and snap lines are partly responsible for this feeling of directness, and the use of T-square and triangle is much in evidence. Figure 8 (December PENCIL POINTS) is very similar in draftsmanship and indication. Both of these are decidedly deserving of the name "Sketch."

Quite different is Figure 7 (December PENCIL POINTS), which, although a successful preliminary first entry, looks much like a finished drawing, the lines are so carefully indicated, the profiles and intersections of lines so neatly drawn. But this was a simpler problem, and the parti chosen was a simple solution for this program. This made it possible to spend more time on the presentation, which has been very effectively done and with a great deal of cleverness, even though at first glance it seems quite simple.

Half way between these as to care of draftsmanship, but equally effective as to the success of its presentation are two of the successful drawings in the first preliminary competition of 1920, a "Church Façade," Figures 15 and 16.

It is interesting to compare these with two rather similar French examples submitted in the First Preliminary Competition for the Prix de Rome at the Ecole des Beaux Arts, Figures 17 and 18, for a "Central Pavilion for a Building for the Institute." Each of these is more decidedly a sketch problem than the American examples.

Éven more distinctly partaking of the sketch problem idea are two other first preliminary drawings at the Ecole, for "Un Monument à la Source d'un Fleuve," Figures 20 and 21. And yet how much these differ from each other! The latter is full of hard lines—the T-square and triangle are very much in evidence, with freehand used only for ornament within or against hard lines. In the former there is little evidence of the T-square and triangle—only a few big axis lines have been laid out mechanically, while everywhere are free-hand lines. Yet each is equally successful in expressing a solution of the program; each was chosen to enter the second preliminary competition.

It is interesting to note that there may be the same variation in good plan sketch problems. Figures 22 and 23 were solutions for "Ecole Professionelle d'Apprentis dans Une Grande Ville," a twenty-four hour sketch problem. That by Chaurés (Fig. 23) is mechanical in its technique (though not in its final appearance), most of the lines have been drawn with T-square and triangle, even much of the smaller indication was done mechanically, and this assemblage of mechanical lines is then dressed up with free-hand work. Tournon's solution (Fig. 22) shows a use of Tsquare and triangle for only the first layout of the lines—the final presentation is apparently all free-hand. And both of these problems were good; both of them were premiated. This only goes to show that there is no one way of doing a sketch problem, no set formula; and that each man as he "arrives" adds his own personal touches to the different kinds of good presentation, even though he may have used ideas from one person here, from another there. In fact, the more he gets from many different men, the more apt is his own work to be personal, as being not too much like any one of them.

But in any case, whatever medium you use, whatever style you develop, you must present a clear "picture" of your idea. The time is short and your efforts should be focused on the presentation of the one idea.

SCHOLARSHIP COMPETITION IN INTERIOR DECORATION AND FURNISHING

A COMPETITION for American artists, enabling the winner to study in the Paris ateliers of the New York School of Fine and Applied Arts, is announced by Frank Alvah Parsons and a committee of judges which includes society leaders, architects, and decorators.

The scholarship, of \$500, providing transportation to and from France, and one year's tuition, is offered to stimulate interest in interior decoration and architecture among the American people, and will be awarded to the American student of art and decoration who submits the best decorating and furnishing scheme for a five-room apartment.

The committee of judges includes: Mrs. Seymour L. Cromwell, Elsie Cobb Wilson, decorator; Mrs. Charles H. Sabin, Mrs. Alice Duer Miller, author; Miss Mary Kernochan, Francis Lenygon, decorator; William Delano, architect; Richardson Wright, editor; and Chamberlin Dodds, decorator.

The scholarship is offered by E. A. MacDougall, president of the Queensboro Corporation of New York, as a fitting stimulus to further the relation between art and the building industry. It will be known as the Jackson Heights Garden Apartment Scholarship.

The competition closes January 31, 1924. Plans should be presented to the secretary, J. Mitchel Thorsen, 9 East 46th Street, New York City.

THE SMALL HOME

THE November issue of *The Small Home*, published monthly by The Architects' Small House Service Bureau of the United States, Inc., at Minneapolis, Minn., contains, in addition to illustrations and descriptions of several small houses, a number of interesting articles, among which are the following: "Do Women Make Final Decisions on a Home?" by Maurice I. Flagg; "Demonstrating Building Conditions," describing and illustrating one of the three small demonstration homes completed recently by the Northwestern Division of the Bureau for the *Minneapolis Journal*; and "Sentiment vs. Smoke," on how to design fireplaces that will not smoke.

(Continued from Page 52h)

tors' addresses and telephone numbers and pages for office expense and time. My own time sheet for the month is at the back with various buildings noted with hours per day on each. This method keeps all data in compact form easily referred to.

Preliminary Drawings:—These are kept, also all notes until work is entirely paid for. It is sometimes interesting in court or to a client who thinks your charge exorbitant.

Working drawings are laid flat in drawer until most prints are taken from them, then folded in a vertical file and divided into general drawings and full size details and numbered, and the name of drawing with number noted on outside of envelope. Office copy of specifications filed in the working drawing folder and written so it may be blueprinted.

In writing specifications on work where a specialist is not employed a member of the trade is called in to go over and advise as to up-to-date practice. For contracts and general conditions A. I. A. documents are used. A section in a vertical file contains one folder with contracts, one for letters and others for construction data, sub-contracts, etc.

At the end of the year these files are cleaned out and tied up together and filed away from the working part of the office.

By Alfred C. Bossom, Architect, New York City.

 \mathbf{T}^{HE} office organization that we have worked out over a period of many years has reduced itself down to a very simple form. Starting with myself, and of course I make it my business to enter into the activities of all of the office, we divide our activities into two main heads. One, the production of the drawings in the office under our head draftsman, Mr. Frederick J. Hartwig, and the other the preparation of specifications, the awarding of contracts, and supervision of all the work on the outside under our Office Manager, Mr. Arthur Zimm. We all three keep fully conversant with the work going on in the office, although our activities do not overlap, and we each have associated with us another member of the staff, so that in the event of any of us being absent, our individual activities continue without interruption.

Under the head draftsman there are immediately two assistants, Mr. Emil Capel and Mr. Anthony J. DePace, who have charge of the drafting room. It is their duty to receive the instructions and to see that same are carried out, to follow the work through in its various branches, to take up with others when clients' desires are known, or obtain any other information that may be required, and to see that it is given to the various persons working upon the drawings. They are also in possession of schedules giving the time when various drawings or information are needed on the jobs, and it is up to them to see that this is obtained. They also work in conjunction with Mr. Zimm, the Office Manager, under whose direction all specifications are prepared.

When instructions are given to draftsmen in

charge of any particular building, one of these two assistants is always present, so as to have a duplicate system in all cases to prevent delays due to absence or illness. This generally covers the handling of the production of the drawings.

As regards the construction of the work in the field, the Office Manager's assistants keep him informed at all times as to the condition of the work both on the buildings and on the drawings, daily reports being received from every job, which one of these assistants examines and takes to all directly interested.

For all internal communications in the office we have very frequent conferences, relying more upon these than upon written instructions, although we keep written records of all matters of importance in the hands of all the interested parties.

In relation to the jobs themselves, we carry on quite a voluminous correspondence, perhaps larger than is necessary, but we have found that the more detailed information we have of the actual condition of the work on the building and from the factories where it is being fabricated, the condition of accounts, payments between the contractor and subcontractor, and data of that sort, the less trouble we have in giving our clients information which, in our judgment, they should always have, the easier the work runs. In a great many cases we send copies of all letters relating to matters between our office and the contractors to our clients for their record. And one of our rules from which we never deviate is, that there shall be no secrets from the clients, and if there are any awakenings to be had I insist that they come from my office before they shall arrive from any other source.

This of course is a very brief outline of our form of handling our work, but we have endeavored wherever possible to eliminate red tape, and get right to the heart of the situation; for an architect's function in my opinion is to use every legitimate method to carry out his clients' requirements in the most artistic and practical manner, and to do this in the most expedient and economical way.

When the drawings are nearing completion the preparation of specifications commences and at the same time the person responsible for the procurement of bids is notified as to the branches of work that are to be covered and is given the approximate dates when the drawings will be ready for blue printing. The bidding lists are then made up and inquiries are made of prospective bidders as to whether they wish to submit proposals, and when the drawings finally are completed the solicitation of bids is commenced at once.

At this stage of the work the drawings are not entirely complete as to dimensions or as to studies of ornament, interior decorations, or details of various points where several materials meet in a complicated manner. Nothing more is done on the drawings while the bids are being taken until after the contracts are awarded. The drawings then are checked over, the basis of contracts is definitely determined and the final completion of dimensions is made. Upon the

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Size $5\frac{1}{2}$ in. x $8\frac{1}{2}$ in. White Paper.

Size 5 in. x 8 in. Gray Paper.

Form Used in the Office of the Perkins, Fellows & Hamilton, Architects. Chicago, Ill.

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INTERVIEWER		DATE	19

Cards, Size 3 in. x 5 in.

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APPROVED BY		DATE

Forms Used in the Office of Perkins, Fellows & Hamilton, Chicago, Ill.

completion of the drawings for contract issues, the preparation of scale and full size details is commenced under a predetermined schedule. This schedule is drawn up to allow the greatest amount of time necessary for the production of the more intricate full size and scale drawings, yet allowing for release of these drawings to the interested contactors in time to commence their work so that delivery dates stipulated in the contract will be met.

Where ornament is to be modeled the design department looks after the production of models and makes sure that they are ready for shipment to contractors' shops in sufficient time to release the work to the job.

The superintendent is placed on the work immediately after the award of contracts. He receives a copy of the contract documents and as full size and scale details are released to the contractors a copy is sent to him.

The control of shop drawings is had through rules of procedure that have been formulated to insure the delivery of these drawings at proper times. At the inception of the work a schedule of dawings that are to be furnished to the contractor in addition to the contract drawings is given him and he is asked to state what shop dawings he will prepare, or he is asked to make definite request for shop drawings to be prepared by our office. We indicate dates when the contractor may expect drawings from the office and we ask that he set dates for the submission of his drawings. The following up of release of our details and of the delivery of contractors' shop drawings is handled by one person who is in charge also of the file of drawings and other matters relating to records having to do with the drawings. In this way a continuous flow of work is maintained from and between all sources and the interchange of requirements is effected without a great deal of difficulty.

It is the concensus in the office that the smooth operation and the almost total absence of errors is due entirely to the well-nigh perfect scheme of organization and the almost absolute lack of friction between departments. When a mistake does occur it seems more prominent because there are so few in the course of a year.

Perhaps one reason why the work of the organization is accomplished so successfully lies in the fact that it occupies its own building, built for its particular purpose and with the idea in mind that the departmentalization would be more effectively carried out if placed and given facilities that are only possible in a building built for its specific use. The most important physical aspect of the office is the great amount of light and ventilation and the general feeling of having sufficient room to perform all of the functions necessary. There are no conditions in the office that produce onerous working conditions.

By Gardner C. Coughlin, Supervising Architect with Weary & Alford Company, Chicago, Ill. HE organization of the Weary and Alford Company is divided into departments handling specialized phases of the work. The procurement of new business is taken care of by certain members of the firm, and the preparation of preliminary sketches, the design, the construction drawings and the engineering equipment, solicitation of bids, award of contracts, and the supervision of construction all are handled by separate departments each under the charge of an individual who is capable of directing these activities in a harmonious way and in complete co-operation with all other departments.

Upon the completion of the preliminary sketches and their acceptance by the client, they are turned over to the design department for some elaboration, more particularly in the fixing of column centers as controlled by the exterior or the interior design. The plans are restudied to make sure they are correct for the needs of the client and then are turned over to the drafting room for production.

The drafting room is operated under the squad system under the general charge of a supervisor and each squad boss is responsible to the organization for the production of a particular set of drawings.

Simultaneously with the beginning of construction drawings, the structural, mechanical and electrical engineers commence their preliminary layout work and from then on each department contributes its quota to the ultimate goal.

We have found that this departmentalization scheme is the only scheme under which the production of drawings and the smooth working of the organization can be accomplished effectively. The heads of the various departments work in complete co-operation and when a sense of inharmony enters into any of the work a meeting of the various department heads is held and each one is expected to speak his mind without reservation, and whatever difficulties have arisen are very quickly adjusted.

ACKNOWLEDGMENT

W E WISH to thank all who have contributed to this symposium in the interest of better Office and Drafting Room Practice and to invite a further discus-sion of the subject in the pages of this journal. We wish to say that the contributions have been presented here in approximately the order in which we received them and without thought of precedence in any other way. If you have not contributed to this symposium, please

let us hear from you.-EDITOR.

PENCIL POINTS

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THE AMERICAN ACADEMY IN ROME

FROM a letter recently received by C. Grant La Farge, **F** Secretary of the American Academy in Rome, from Gorham P. Stevens, Director, we quote the following items of news:

"Professors Manship and Faulkner have arrived and are at work upon the Ward-Thrasher Memorial. Profes-sor Manship hopes to have his portion ready for the stone cutter before long, and, while the sculpture is being blocked out, he plans to go to Egypt, and, upon his re-turn from that country, he intends to put the finishing touches on the monument himself.

Sculptor Amateis has a life sized figure of a female bather on exhibition at the international exhibition now open in Rome.

"Visiting Architect Clay, in collaboration with Dr. Esther Van Deman, a Visitor at the School of Classical Studies, is making an interesting restoration of the region between the Regia and the arch of Titus.

"The King and Queen of Spain visited the Spanish Academy when they were in Rome last month, and this notwithstanding the fact that they had but five days for Rome, Bologna and Naples. The King spoke with every one of the Spanish students and saw his work. One of his remarks was to the effect that Spain depended upon the Prix de Rome men to make Spanish art respected. Art is considered so important in France, Italy and Spain, that the highest officials in these countries do what they can to encourage their talented young men. Would it not be well for America to follow suit? "Mr. John Gray of Rome has made a contribution of

five hundred lire to the library.

"There is a movement on foot among the property owners on the Via Giacomo Medici-the street between the Main Building and the city of Rome—to close that street where it crosses the tram line which runs in front of the Main Building. If this can be done, it will be an important step toward peace and quiet around the Main Building.

"Two of the properties between the Main Building and the city of Rome are again for sale. Oh for sufficient money to buy them!

"We have had one distinguished visitor in the President of the University of California.

"The Thanksgiving Dinner was an unqualified success. This is the first time the men have arranged every detail themselves: it was the jolliest dinner we have had in the twelve years I have been connected with the Academy. Sixty-eight at table."

From a letter written to Mr. La Farge by Frank P. Fairbanks, Professor in Charge, School of Fine Arts, we

quote the following: "This month we have started the annual shipment of the men's work to New York. There were thirty-three subjects comprising nine pieces of sculpture by Gaetano Cecere, nine drawings and renderings by J. K. Smith, six drawings of villas and gardens and a scale model by Ralph E. Griswold, and eight paintings and frescoes by Carlo Ciampaglia. The shipment is expected to arrive in New York in ample time for the annual exhibition of the Archi-"There has been a conference of the Fine Arts faculty

and senior fellows to discuss the details of procedure for the collaboration competition for the year. "The Architects Hafner, Deam and Newton are in resi-

dence, while Marceau has gone to Florence to obtain material for his studies of the Pozzi Chapel on the Palazzo Palmieri. Hafner is painting his copy of the model of Michelangelo's dome of St. Peter's, while Deam and Newton are both engaged on their first year envois. Newton has obtained all his measurements and other data for his record of the Villa Chigi, while Deam has laid out several drawings for his restoration of the Temple of Fortuna.

"Of the Sculptors, Amateis is working on a new figure and a portrait, having finished his Renaissance relief in marble. Stevens is travelling in France and England after having cast his figure of America and making studies of animal life in the zoo behind the Villa Borghese. Meyer has his first year figure cast in the plaster ready to develop in that material. He has other interesting projects under way. "Of the painters, Schwarz is working on his principal

figure composition, is making water colors and etchings. Floegel has been preparing a new group of cartoons for fresco, and is now travelling in northern Italy. Brad-ford is away making a tour north to Florence and Venice visiting the Umbrian and Tuscan hill towns.

"Isadore Richmond, on a Rotch Scholarship in Archi-tecture from Boston has just arrived in Rome and is starting to lay out the first of his numerous envois."

FREE EMPLOYMENT SERVICE FOR READERS OF PENCIL POINTS

(Other Items on Page 76)

Wanted: High class draftsmen experienced in fine residence work and design. Permanent positions for capable men. Roy Teldon Price, M.A.I.A., Beverly Hill, Los Angeles, Cal.

Architectural Draftsman Wanted: One who is neat, accurate and thoroughly capable of making working draw-ings from sketches. Mostly banks and commercial buildings. In reply kindly give full information as to training, experience and class of work, also state age, married or single and salary. Tilghman Moyer Co., 824 Hamil-ton St., Allentown, Pa.

Wanted: One or two draftsmen, senior or good junior; men who are neat tracers and can make good lettering and who are capable of laying out work under supervision. Can offer good working conditions, and will pay salary according to ability. Residence, school, church and commercial work. C. Gilbert Humphreys, Architect, Winston-Salem. N. C.

Young Lady wishes position as Secretary to architect. Thoroughly familiar with all duties of an architect's office. Can assume generally the responsibility of an architectural commission. Best references furnished. Box R. P. Care of PENCIL POINTS .-



Details of Construction—United States Treasury Annex, Washington, D. C., Cass Gilbert, Architect.



Details of Construction—United States Treasury Annex. Washington, D. C., Cass Gilbert, Architect. (See upper part of drawing on opposite page.)

THUMB TACK CLUB OF DETROIT

O^N the evening of November 13, the Thumb Tack Club of Detroit held a very enthusiastic smoker and get together in which thirty-five draftsmen participated. The meeting took place in the assembly room of the Arts and Crafts Studio, where refreshments were served and an entertainment was provided. The Third Annual Architectural Exhibition was dis-

The Third Annual Architectural Exhibition was discussed and the various committees gave reports of the progress which had been made. This exhibition is given annually under the auspices of the Thumb Tack Club and compares very favorably with that given in other larger cities. Exhibits have been received from most of the other larger eastern offices—as well as from Cleveland, Chicago, Columbus and other mid-western and western cities; and combined with the local material, this year's showing promises to surpass the efforts of former years. The annual exhibition has become an established event and is looked forward to with great interest by all those interested in architecture. This years' exhibition will be held in the galleries of the Detroit Institute of Arts from December 10th to 23rd inclusive. In connection with the Exhibition, a Year Book will be published as usual and may be obtained after December 10th by writing to R. W. Tempest, 324 McKerchey Bldg, Detroit, Mich. The book will be $8\frac{1}{2} \propto 11$ inches in size with stiff board covers, will contain 80 plates printed on dull coated paper and will sell for \$1.50.

Work of such well known architects as Day & Klauder, Wilson Eyre & McIlvaine, Holabird & Roche, Richard E. Schmidt, Garden & Martin, Benjamin Wistar Morris, Alfred Bossom, Miller & Reeves, Mellor, Meigs & Howe, as well as work of local architects, comprises the illustrations.

At this meeting definite steps were taken to re-establish the Atelier and eighteen candidates signified their intention of enrolling in the Beaux Arts classes. Many men who were unable to be present are known to be interested in Beaux Arts work and it is expected that at least twenty-five men will be taking Beaux Arts problems this winter.

The Thumb Tack Club was organized some four years ago and was an outgrowth of the Detroit Architectural Atelier, which was broken up by the War. The Club as originally organized included engineers, architects and men interested in the allied arts and started out with much enthusiasm. We maintained expensive club rooms for about a year and a half until the Club was so far in debt and interest in it had dwindled, until there were but few interested. The Board of Directors decided to put on an Architectural Exhibition. This exhibition proved to be very much a success both financially and as an educational feature. The exhibition we are holding this year will be the third and will be held at the Detroit Institute of Arts on December 10th to 22nd, 1923.

Mr. John B. Jewell is president of the Club and is a member of the firm of Halpin & Jewell, 1024 Hammond Building. Mr. R. W. Tempest of the office of George D. Mason & Co., Inc., is chairman of the Exhibition Committee for this year.

The Club as now operated, is strictly an architectural club with associated members of men interested in the allied arts. The membership is small and confined to those who are really interested in the Club. An Atelier has been formed to do Beaux Arts work and in all probability you will hear from us later. We have not, as yet, I believe, selected a Patron.

T HE Henry Gillette Woodman Scholarship for 1923 has been awarded to Mr. Gerald Kenneth Geerlings, who received the Bachelor's degree in 1921 and the Master's degree in 1922 from the Department of Architecture of the University of Pennsylvania.

who received the bachelot's degree in 1921 and the Master's degree in 1922 from the Department of Architecture of the University of Pennsylvania. Henry Gillette Woodman Scholarship was founded by the bequest under the will of George B. Woodman deceased, in memory of his son, to provide for the payment of expenses or toward the expense of one year's travel in Europe of a student or graduate of the Architectural Department of the University of Pennsylvania. This Scholarship is open to any holder of a degree who completes at the University of Pennsylvania the requirements of either of its degrees in Architecture (B. Arch. or M. Arch.).

ALPHA RHO CHI

THE Ninth Annual Convention of Alpha Rho Chi will be held at the Curtis Hotel, Minneapolis, Minn., January 2-3, 1924. It promises to be one of the best attended and most interesting conventions of several years.

The Mnesicles committee has arranged a formal dinner-dance for Wednesday evening, January 2, at the Curtis Hotel, where the visiting delegates will make their headquarters. This will make a welcome relaxation between the two days of strenuous business. The traditional stag banquet will take place the evening of January 3.

THE CHICAGO ATELIER

THE invitation reproduced on this page brought out a gang of about eighty to initiate the new quarters of the Chicago Atelier.

Talks by Mr. Andre Rebori, Mr. Edmund S. Campbell, stunts by members, a five minute competitive sketch by all present, the "crit" of sketches by Mr. Rebori, together with food, drink and fellowship made the occasion enjoyable and well worth while.

The Chicago Atelier was organized last month for the main purpose of developing architectural design. This will be accomplished by the participation in competition work.

The organization is fortunate in having Mr. Campbell, as its patron. Also many prominent architects and men of affairs as associate members.

Membership is open to all. From the young man who has had neither practical or technical training, to the architect or draftsman who has had all the advantages. The essential qualifications are the desire for improvement, and lots of genuine good fellowship.

Anyone interested in the purpose of the Chicago Atelier is cordially invited to come to 605 Athenaeum Building.



Above is shown the cleverly drawn design for a recent get-to-gether of the Chicago Atelier.



Alfred C. Bossom

ALFRED C. BOSSOM ELECTED A FELLOW OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

LFRED C. BOSSOM, of New York City, has been elected a Fellow of the Royal Institute of British Architects, an honor which has been conferred upon only ten architects in the past fifteen years. Under the constitution of the R. I. B. A., such an election must be unanimous on the part of the Council.

unanimous on the part of the Council. The list of men upon whom this honor has been con-ferred includes the following: Giles Gilbert Scott, R. A., the architect of Liverpool Cathedral; the late Frank Darling of Toronto, Royal Gold Medallist; Raymond Unwin, the famous Town Planner; Ralph Knott, the architect of the London County Council Hall, and General Sir Charles Rosenthall, K. C. M. G., the dis-tinguished Australian soldier who is now President of the New South Wales Institute of Architects. Mr. Bossom is known as an architect of large build-ings and has given particular attention to the needs of

ings, and has given particular attention to the needs of banking institutions. During his various European travels he has made a special study of banks, including many of the world's most famous institutions, and his training both in finance and engineering as well as in architecture equipped Mr. Bossom especially well for the designing of the many large commercial buildings and bank buildings of which he is the architect. Mr. Bossom is an Englishman by birth and was a

student of several important British schools of architecture where he won many medals for his work.

Mr. Bossom's keen interest in professional education has been shown by his establishment recently of the Travelling Scholarship in England which bears his name. From the fund he created for this purpose medals are awarded to students of the leading British archi-tectural schools who submit the best designs for com-mercial buildings. A certain number of these prize medallists are to come to the United States each year to study American commercial architecture for six months, their expenses being paid from this fund. The competheir expenses being paid from this fund. The compe-titions for these studentships are held under the supervision of the Royal Institute of British Architects. The students, upon their arrival in the United States, will be under the supervision of the Architectural League of New York, of which Mr. Bossom is an officer, as well as Chairman of the English division of its Committee on Foreign Relations.

This recognition which has come to Mr. Bossom is one more indication of the constantly increasing friendship between the architects of Great Britain and o America and of the growth of understanding and com munity of interest among the English-speaking peoples as well as a recognition of the importance of LIr. Bossom's work.

CINCINNATI ARCHITECTURAL SOCIETY

SHORTLY after the World War the Cincinnati Archi-**S** tectural Society, which had been disbanded for the duration of the war period, was reorganized by a small number of enthusiastic men who were determined to build up in Cincinnati an Architectural Society that would be of real credit to the profession and we believe that they have fully succeeded in every way. Our membership up to the present time has reached 135 in number and among them are many of the leading architects of the city and also a number of the professors of the local University, and if we may rely upon the program that the Membership Committee has mapped out for themselves we will have at least a total of 160 members by the close of this season.

Permanent quarters have been secured by the Society through a lease covering a period of years with the Cincinnati Art Club in their newly acquired four story building at 327 East Third St., both clubs using various rooms throughout the entire building on different nights in order that their activities may not interfere with each other. On the first Monday night of each month the regular meeting is held and is always preceded by a splendid dinner which is served in the banquet hall and followed by a talk by the speaker of the evening on some architectural subject of interest. These meetings are well attended by the members and we have no trouble in getting a large turnout irrespective of whatever else may be going on on that particular night.

At our December meeting a most interesting talk was given by Professor Cecil Baker, professor of architecture at the University of Cincinnati, on the advantages of the co-operative course in architecture as now being used in this college. While this is an entirely new idea in an architectural course, we cannot help but feel that sooner or later many of our leading colleges will be adopting this idea for the many advantages it offers.

Our Educational Committee is on the job and working hard, and classes have been resumed for this year's work in Clay Modeling, Design and Life Class. Problems in Design include Archaeology, Plan and Analytique given by the Beaux Arts Institute and quite a number of draw-ings were sent in to New York on the first problem, a much larger number of the men, however, have taken the Esquisse for the second problem and it appears that they are going to make a very good showing. The History and to make a very good showing. The History and Engineering classes have been held up temporarily because of the remodeling of the rooms to be used for this purpose, but these subjects will undoubtedly start immediately after the Holidays.

For the year 1924 the following officers have been elected: H. Henthorn, President; Wylie Bloodgood, Treasurer; Conrad J. Rohr, Secretary.

HE annual meeting of the American Society of

Heating and Ventilating Engineers will be held at the Hotel Pennsylvania, New York, January 22nd to 25th. Full particulars may be obtained from Mr. C. W. Orbett, Secretary of the American Society of Heating and Ventilating Engineers, 29 West 39th Street, New York.

HERE and THERE and THIS and THAT

Conducted by RWR

WELL, here we go! We have never conducted a department before nor done much of anything else for that matter, but knowing as we do that we are addressing one of the most intelligent audiences in America, if not in the world, we are entering upon our task with every assurance that brilliant stuff for this section of PENCIL POINTS will come to us in such volume that soon all we will have to do will be to swing a big letter opener and arrange the material so it will look nice on the page.

So that there may be no misunderstanding regarding the scope of this department let us restate the proposition in our own words:—Contributions may range all the way from funny to very serious, stopping at all the way stations. They may be about architecture or about anything; they may be in prose or verse, in pencil, ink or wash; they may be of any length from a half a line to a page (if good). Sketches are welcome, caricatures anything clever or interesting. This gives every reader of PENCL POINTS a chance to flap his wings and bust into song or whatever he likes to bust into.

HERE'S where we pass the buck to our faithful contributors. Anonymous sends us a poem and we print it as is:

THE FIFTY-SEVEN LAMPS OF ARCHITECTURE

When I decided to build me a house I felt just a little afraid That plan and design were not quite in my line So I sought Architectural aid And I said: Show me, pray, something most recherche For I'm weary of hanging my hat In an early Victorian Pre-Montessorian, Plain two-by-fourean flat.

The Architect puffed at his period pipe As he sat in his Renaissance chair, And he gave me a smile in the pure Gothic style, Though he spoke with a Romanesque air, Said he: If your taste is not wholly debased, The best you are certain to find, Is the later Colonial, Pseudo Baronial G. Washingtonial kind.

I thanked him politely and paid him his fee, But sundry acquaintances cried, "That stuff you should shun for it hasn't been done Since Benjamin Harrison died." And they took me direct to a new Architect Who argued with logic compelling For a Quasi Delsartean, Post Bona Partean, Wholly Beaux-Artean dwelling.

My downfall had started; I groped in a maze, Of traces, transitions and trends, And I labored anew over prints that With the aid of my numerous friends. But I don't knit my brow about building plans now, For all my money is spent, And my home's an Arcadian Second-Crusadean Pink-Lemonadean **Tent**.

Get busy, poets!

WALTER B. BROWN of Dayton, Ohio, sends the following letter and we do not know how to answer it. What is the best way of filing and taking care of this valuable reference material? Won't some of you who have devised satisfactory systems help Mr. Brown and at the same time other readers of PENCIL POINTS who are similarly perplexed?

"As a subscriber and admirer of PENCIL POINTS, I am taking the liberty to ask a question which may at the same time suggest a topic for an editorial or discussion in the magazine. Have you any suggestions for a good practical filing system of plates and articles cut from the magazines? Work is a little slack at the office and I am utilizing the time by tearing the magazines apart and saving all worth-while plates and articles. It occurred to me this subject may be important and interesting enough to architects and draftsmen who take the magazines in their homes to be discussed in your magazine. I thank you for any suggestion you may be able to give and would appreciate an early reply. I wish PENCIL POINTS a very successful year in 1924."

 $A^{\rm N}_{\rm Seiden,\ 175\ 5th}$ Avenue, New York, and we print his letter in full:

"Most draftsmen are interested in details. May I suggest that you have in each issue of your PENCIL POINTS one sheet given over to nothing but details. Ordinary and everyday construction details are sorely in need of by most of us. There may be a sequel to the details drawn and described by Mr. Knobloch in his 'Good Practice in Construction.' I have in mind such details as

1-saw tooth skylights (good Construction of)

2-built up doors; transoms, etc.

3—window seat and radiator enclosure, etc., etc., etc. Many things I can't just think of now, but that come up every little while and make you wonder just what makes up for good construction. I am a two-year subscriber, thank you!"

Suggestions are in order for other details to be made a part of this series. What would you like to see included to round out the work started in Mr. Knobloch's book and carried still further in the October issue of PENCIL POINTS? Tell us what you want and we will try to get it to you.

N OW we come to the question of a sketch competition. We did not conduct one in 1923, but have heard from so many of our readers expressing great interest in such a competition that we have decided to resume in 1924. Definite announcement will be made later, but we would like to get an expression of opinion from you as to the feasibility of adding a new feature to this event. The suggestion has been made not only that prizes be given to the winners of the competition, but also that the sketches submitted be placed on exhibition and sale immediately after the drawings are judged. Many people are greatly interested in sketches and would purchase them at a moderate price. Would those submitting sketches in the competition agree to sell them? Would such a feature tend to detract from the main purpose of the competition, which is to stimulate an interest in sketching? Or would it tend to stimulate an interest in the entire event and produce a more interesting competition with reasonable financial rewards as a possibility to those entering it? Expressions of opinion are invited.

DOES anyone know the address of Mr. C. Arromall Markhart? If so we would appreciate receiving it at this office.

We would also like to receive the correct addresses of the following:-

A. R. Forester, Salina, Kansas, H. L. McNabb, Los Angeles, Cal., J. Riedel, Santa Barbara, Cal., H. E. Villa, New York City, N. H. Caldwell, Hollidayburg, Pa., E. R. Becker, Weehawken, N. J. and G. W. Barrett, Athens, Ga.

Mr. Charles Morse Stotz, Pittsburgh, Pa., sends a little sketch of some old houses in his home town. like it and here it is.



Sketch by Charles Morse Stotz.

Come on you sketchers and let us see your stuff! We want to publish each month a sketch from someone whose work has never before appeared on the printed page.

The following letter and answer may be of interest to those desiring to study architecture by means of correspondence courses :-

"I should like to take a correspondence course in architectural drafting, and would like your ad-vice as to where I can best get this. How does this course offered by the International Correspondence Schools compare with like courses offered by the extension departments of Columbia University? Hoping that you can give me, as a subscriber, this favor, I am

(signed) JOHN S. BLANDING.

"Replying to your letter of November 27th we wish to say that both the Home Studies Courses given by Columbia University Extension and the International Correspondence Schools courses in architectural drafting are very good. The De-partment of Architecture at Columbia, of course, ranks very high among the architectural colleges in the country, but we suggest that you write to the International Correspondence Schools head-quarters at Scranton, Pa., and also to Columbia for their descriptive literature of the courses which you wish to take. We believe that you will get very good instruction from whichever one of these schools you elect. Trusting that we may hear from you and the progress you are making in your new work, we are,

Yours very truly, PENCIL POINTS."

ARCHITECTURAL BOWLING LEAGUE OF NEW YORK

A^T THE recent meeting of the Architectural Bowling League of New York, Weggerman of McKenzie, Voorhees & Gmelin's office bowled the highest score of the evening, carrying off the Christmas prize—score 192. Baker of J. Gamble Roger's office scored next highest winning the New Year's prize—score 177. A feature of the evening of December 18th was the fine playing of the team from Warren & Wetmore's office.

We missed Lyman and Smith who were on the sick list that evening. Hope for the speedy recovery of the absentees is expressed.

The surprise of the evening was the winning of their three games by Warren & Wetmore's, J. Gamble Rogers' and Alfred C. Bossom's offices.

Johnke of Dwight Robinson's office holds the high individual score of 212.

Ackerman of McKenzie, Voorhees & Gmelin holds the high individual average of 1605%. McKenzie, Voorhees & Gmelin's office holds high team score of 809. The Club contributed \$25 to the New York American

Christmas Fund.

It was decided at the last meeting of the League to hold a two-man team tournament as well as the threeman and five-man tournaments.

Captain Paradies of McKenzie, Voorhees & Gmelin's office is counting on winning the championship and his team is now leading the league.

Standing of the Teams, Dec. 18, 1923

		Played	Won	Lost
1	McKenzie, Voorhees & Gmelin	. 16	14	2
2	Warren & Wetmore	. 14	12	2
3	Alfred C. Bossom	. 14	10	4
4	Dwight Robinson	14	10	4
5	James Gamble Rogers	. 14	7	7
6	Cass Gilbert	. 16	9	7
7	Thos. W. Lamb	. 16	9	7
8	W. L. Stoddart	14	7	7
9	McKim, Mead & White	. 16	5	11
0	Sommerfield & Steckler	14	3	11
1	Benjamin W. Morris	. 16	3	13
2	Donn Barber	16	0	16

The officers of the League are: E. L. Capel, President; H. A. Poll, Vice President; N. T. Valentine, Secretary; P. M. Lynch, Treasurer.

WANTED : Architect or architectural engineer as Chief W and Assistant Chief of the newly created Bureau of Buildings of the Milwaukee School Board. Salary from Buildings of the Milwaukee School Board. Salary from \$6,000 to \$9,000 for the first position, \$4,000 to \$6,000 for the assistant. Candidates must be thirty years of age and besides their training must have had at least five years' practical experience in the designing and construction of large buildings. Apply at once and not later than March 1st, to the City Civil Service Commission, City Hall, Milwaukee.

 $R^{\,{\rm EMEMBER}}$ a ten dollar bill will be sent each month for the most meritorious contribution for this department. Send your material early. If you are afraid your stuff is too late for February send it in just the same and if it fails to catch one issue it may turn up in the next one. And don't be bashful.

THE SPECIFICATION DESK

A Department for Specification Writers

MISCELLANEOUS ITEMS OF CONSTRUCTION PART XIV.

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)—The weight of an automobile is not unitormally distributed as is the weight of merchandise placed on a freight elevator since it has only four points of contact with the surface on which it rests and for this reason more than the usual factor of safety must be allowed. The elevator car should be supported by means of a steel sling and it should be enclosed either with solid wood and preferably steel to a height of five and one-half to six feet or with wood or metal openwork. except where it must remain entirely open for loading and unloading. If the enclosure is of openwork, the openings should not be more than one inch wide. Such parts of the grille as come opposite the counterweights should be covered to a height of six feet or more with a wire mesh of not lighter than number sixteen gauge wire having not over one-half inch openings if the clearance between the enclosure and the counterweights is less than two inches.

The counterweights are mentioned, but any other structural part of, or projections in, the shaft are equally dangerous if the grille openings are too large. Also it would be well to protect against danger from this source by placing the mesh or decreasing the grille openings wherever the counterweights and projections come within as much as four or five inches. If the crosshead of the car is less than six feet, the car enclosure should extend to it.

In place of the enclosure being made of the material mentioned above, it may be made entirely of wire mesh. In that case, however, the wire should be at least number eight gauge or flat ribbon of equal strength may be substituted. The openings of the mesh should be small enough to reject a one and one-half inch diameter ball.

The top of the elevator should also be covered with a solid cover or one of the mesh just mentioned, but it should be strong enough to resist a load of one hundred and fifty pounds suddenly applied at any point. The car should also be supplied with gates that will guard the full opening when they are closed, except that they need not exceed the usual height of six fect. There are times when material of unusual length must be taken to upper floors to be used for repairs et cetera. Then it is well to have a section of the elevator top hinged to open so that they may project above the car.

While the car enclosure as described is suitable for a freight elevator and for one for taking automobiles from floor to floor such an elevator may at times serve as a passenger elevator if the building does not warrant a separate one being installed. If the building comes under the jurisdiction of building codes any rules and regulations covering passenger elevators must also be complied with. For instance, an emergency exit must be provided in the top of the car, such opening being at least sixteen inches in its least dimension and containing not less than four hundred square inches. If there is more than one elevator in the shaft a side opening in each car may also be required. All elevators should have gates on their platforms

All elevators should have gates on their platforms to close the loading entrance if the utmost safety is required. In any case however the doorways of the shaft shall be provided with door or gates, preferably solid doors of fireproof design. If grilles or wire mesh is used it should have wired glass behind it on the shaft side and if the wired glass is omitted the grilles or mesh should be small enough to reject a ball two inches in diameter. In territories where doors or gates are mandatory, some precaution should be taken against persons stepping through a shaftway opening and into the shaft. A chain or bar stretched across the opening about 12 inches back from the edge of the shaft will do but a low gate sliding either up or sideways would be better. A gate sliding upward can be moved by hand or it

A gate sliding upward can be moved by hand or it may be arranged to work automatically with the car. This type of gate may be of openwork or solid and should be at least three and one-half feet high. If this gate is semi or fully automatic it should move in guides but such a gate is not recommended for cars travelling over seventy-five feet per minute. A locking device should be provided to prevent the opening of the gate when the car platform is not at or very near the landing or floor of the opening into the hoistway where the gate occurs. All gates and doors should be strong enough to resist a sudden pressure of seventy-five pounds applied at any point without being permanently deformed and without being sprung from their guides.

Sometimes an elevator may be provided with sliding doors or gates, one leaf sliding behind the other so that only one need be moved for passenger service and if it is desirable to use the car for automobiles or freight, first the one is slid behind the other and then both are swung outward together. In such a case an arm fastened to the second door acts as a track and guide for the sliding door, the arm extending beyond the former which is hinged to the jamb of the doorway. In addition the sliding door should be provided at the bottom with a bolt acting as a stop and guide by travelling in a grove in the saddle of the doorway. Also the hinged door should be provided in the bolts top and bottom to hold it rigidly to the head and sill of the doorway except when the bolts are released in order to swing the door open together with the sliding door behind it.

Collapsible gates are not recommended unless made and protected in such a way as to guard against accidents due to shear. Hoisting doors and gates may be semiautomatic or fully automatic as mentioned for one of the types mentioned above. By semi-automatic we mean that the door or gate may be manually opened but directly or indirectly closed by the motion of the car. Fully automatic doors or gates are those which are both opened and closed by the motion of the car, either directly or indirectly. Some gates and doors are independently operated, that is they are opened and closed manually or by power which is not furnished by the motion of the car.

The shaftway doors are sometimes provided with interlock devices primarily to prevent the movement of the car unless all hoisting doors are closed and locked and to prevent the opening of any door unless the elevator car is standing at rest opposite that door. A number of other conditions can be taken care of by this device according to the way it is made and installed. It is generally inoperative however, and should be so, when the emergency release is used.

A. I. A. CONVENTION

T HE fifty-seventh annual convention of the American Institute of Architects will be held in Washington, D. C., in May 1924. Though it was announced some time ago that the convention would be held in New York this year it was thought best to change this plan and to hold the fifty-eighth convention in New York in 1925.

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 Dust Problems and Their Solution.—Presents basic idea of dust engineering covering subject of air filtration, standard specifications and other useful data, diagrams, etc. 48 pp. 8½ x 11. Midwest Air Filters, Inc., 100 East 45th St., New York.
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 Brass Pipe for Water Service.—Bulletin B-1 monograph on the subject, typical layouts and valuable engineering data for architects, engineers and contractors. 8½ x 11. 32 pp. The American Brass Co., Waterbury, Conn.
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The Gospel of Fresh Air.—7th edition. Treatise on the subject of modern ventilation covering various types of buildings. Profusely illustrated and containing much useful data. The Swartwout Co., Cleveland, Ohio. Published by the same firm Swartwout Model Buildings. Illustrated booklet describing type of portable building suitable for garages, filling stations and many other temporary and permanent uses. 32 pp. 8 x 11.
Theatrical Lighting Equipment and Effects.—Catalog and handbook covering configurates. And specification data. 76 pp. 6 x 9. Display Stage Lighting Co., Inc., 344 West 44th St., New York City.
Nonpareil Corkboard Insulation.—Handbook on the subject covering could storage, warehouses and a large variety of buildings where insulation is important. Drawings, diagrams and much engineering data. 150 pp. 6 x 9. Armstrong Cork and Insulation Co., Pittsburgh, Pa.

variety of buildings where insulation is important. Drawings, diagrams and much engineering data. 150 pp. 6 x 9. Armstrong Cork and Insulation Co., Pittsburgh, Pa.
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 Atlantic Terra Cotta.—Monthly publication for architects and draftsmen. Recently issued numbers deal with Terra Cotta Frieze, 15th Century, profusely illustrated with photographs and the Renaissance Architecture of Terra Cotta featuring several beautiful examples of old Italian work. Atlantic Terra Cotta Co., 350 Madison Ave., New York.
 Kenney Curtinless Showers.—Loose-leaf specification portfolio showing various models completely. Photographs, roughing-in measurements, sections and specifications. 8½ x 11. The Kenney-Cutting Products Corp., 507 5th Ave., New York.
 G. & G. Telescopic Hoists.—Complete specification data covering subject of equipment for ash removal. 8½ x 11.
 At pp. Gillis & Geognegan, 537 W. Broadway, New York.
 Artist and Drawing Material Catalog.—Complete catalog of everything required in the drafting room, fully described, illustrated and priced. 350 pp. F. Weber Co., Dept. P. P., 1220 Buttonwood St., Philadelphia, Pa.
 Saving Home Construction Costs.—Technical booklet on this important subject. Long-Bell Lumber Co., R. A. Long Eldg., Kansas City, Mo.
 Refrigerating Manual—Handbook on refrigerators containing specification data for hotels, clubs, institutions and residences. Jewett Refrigerator Co., 147
 Chandler St., Buffalo, N. Y.
 Published by the same frm, Refrigeration and Health, also and complete data.
 Weatherstrip Details.—Blueprint booklet showing complete line of window and door details covering openings of all types; sections and much practical information. 8½ x 11. The Diamond Metal Weatherstrip Co., Columbod, St. 11. The Dia

swinging doors. 16 pp. 8½ x 11. Elevator Supplies
Co., Inc., 1515 Willow Ave., Hoboken, N. J.
Published by the same firm, Crowell Pneumatic Door Operator, technical bulletin of value to all interested in elevator door equipment. 16 pp. 8½ x 11.
Marbleloid Universal Flooring,—Illustrated brochure showing many typical installations with data sheets covering hospitals and schools. 32 pp. 7 x 10. The Marbleloid Co., 447 8th Ave., New York.
Basic Specification for Tile Work.—A most valuable document for all architects, draftsmen and specification writers covering the entire question of setting and laying file of all kinds. Complete and detailed specifications for all types of work under all conditions; ample space for memoranda. 40 pp. 8 x 11. Associated Tile Mfrs., Beaver Falls, Pa.
Instruction Sheet.—Details of standing seam horse head zinc roofing. New Jersey Zinc Co., 160 Front St., 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.
Andersen Window Frames.—Illustrated booklet with drawings covering design and construction of window frames. 24 pp. 8 x 11. Andersen Lumber Co., Bayport, Minn.

drawings covering design and construction of window frames. 24 pp. 8 x 11. Andersen Lumber Co., Bayport, Minn. Quality Centrifugal Pumps.—Specification folder, loose-leaf, containing complete data on all types of pumps for building use, diagrams, layouts, etc. 9 x 12. Chicago Pump Co., 2320 Wolfram St., Chicago, Ill. Doors for the Home and for the Public Library.—Two special builetins covering modern metal equipment for these two classes of buildings. Entrances, elevator en-closures, stairs, halls and fire exits, corridor and com-municating doors and doors for special uses are con-sidered. Specifications and diagrams showing construc-tion and suggestions for ordering. 8½ x 11. 16 pp. Dahlstrom Metallic Door Co., Jamestown, N. Y. Craftsmanship in Wrought Iron.—Handsomely illus-trated brochure with full page plans in sepia showing examples of wrought iron craftsmanship. 24 pp. 8 x 11. Ferro Studio, Inc., 228 East 150th St., New York Citv. Column Handbook.—Valuable data on steel and con-crete construction, diagrams, tables of strength, speci-fications, detail construction drawings, tables of safe loads, etc. Handy pocket size, 80 pn. Leatherette bind-ing. Lally Column Co., 334 Calyer St., Brooklyn, N. Y. Southern Pine Manual of Standard Wood Construction. —Useful book containing hundreds of tables and other useful data covering all types of wood construction. Handsome binding: 186 pp. 4½ x 7. Price \$1.50 per copy. Southern Pine Assn., New Orleans, La. Data Sheet on Refrigeration.—Folder with drawings and samples showing application of waterproof cushion gasket to refrigerator doors in place of weatherstrips, on buildings and for a variety of other uses. 8½ x 11. E. J. Wirfs, 134 South 17th St., St. Louis, Mo.

ADDRESSES WANTED

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WORK OF THE FONTAINEBLEAU SCHOOL OF FINE ARTS

THE first session of the Fontainebleau School of Fine Arts held during the past summer in the Palace of Fontainebleau marked the successful beginning of an educational effort that is of great significance, for it has as its basis the idea of training American students in the most favorable environment, actually in one of the greatest and most interesting monuments of French architecture and in daily contact with French architects, painters and sculptors from whom they derive inspiration and cultural development as well as instruction.

A wing of the palace had been completely renovated and converted into vast ateliers for architects and painters. The regular classes began on June 25 with eightyfive students enrolled. The Yale School of Fine Arts sent two scholarship students in architecture; the Maryland institute, two in painting; the National Academy of Design showed its confidence in sending the winner of the Mooney Travelling Scholarship—a young• man who afterward gained the 1923 Prix de Rome—and many leading art schools were represented in the student body.

The school was placed under the directorship of M. Victor Laloux. The resident director was M. Jacques Carlu, Premier Grand Prix de Rome, who very ably conducted his work. M. Broy, Prix de Rome, and Architectin-chief of the Palace of Fontainebleau, seconded M. Carlu in instructing the students of architecture. Forty students were enrolled in the department of architecture.

Since the number of students cannot be increased, it is hoped that next year only those best fitted to benefit from the work may form the student body. This can be facilitated by the creation of scholarships (\$500 each) endowed by art schools, colleges, architectural clubs and ateliers and awarded to the best students.

PERSONALS

R. C. ARCHER, JR., ARCHITECT, has removed his offices to 1759 U Street, N. W., Washington, D. C.

HowARD T. YATES has opened an office for the practice of architecture and engineering at 411-412 Dillaye Bldg., Syracuse, N. Y.

SAMUEL LEWIS MALKIND and MARTYN N. WEINSTEIN, ARCHITECTS, have removed their offices to the Chanin Building, 105 Court Street, Brooklyn, N. Y.

BERNARD HERZBRUN has removed his offices to 135 West 42nd Street, New York, where he will practice interior decoration as well as architecture.

The architectural firms of FOLSOM & STANTON and JOHN GRAHAM, JR., have combined under the name of Folsom, Stanton and Graham with offices at 10 South 18th Street, Philadelphia, Pa.

B. H. WHINSTON and H. HURWITZ have formed a copartnership for the practice of architecture with offices at 41 West 33rd Street, New York.

HENRY H. GUTTERSON, ARCHITECT, has removed his offices to 526 Powell Street, San Francisco, Cal.

L. L. ROBERTSON and L. R. PATTERSON, ARCHITECTS, have opened an office at 310-311 Calumet Building, Miami, Fla.

THE GARGOYLE CLUB

T HE monthly meeting of the Gargoyle Club, held at the Hotel Astor, New York, December 18, was presided over by Mr. A. J. Rahm. It is the custom of the Club to hold a dinner at alternate monthly meetings and for the members to take turns in presiding on these occasions. Mr. William Wilson gave an interesting talk illustrated with lantern slides made from pictures he took in Japan, showing buildings before and after the earthquake. Mr. Wilson, who is a structural engineer and has spent three years in Japan, discussed the effects of the earthquake on various types of construction.

The Club has issued a very attractive calendar for the new year, showing a design in pen-and-ink.



Class in Architecture at the Fontainebleau School.