

a"plug" horse stays a "plug", no matter how you dress it up. In metal, as in horses, quality is bred in.

## For THOROUGHBRED Performance-**Pick a Thoroughbred Metal**

PROVED that it has the endurance which some other kinds of metal are trying to attain today. Imitation "irons"... throwing together of various materials ... have failed to produce a metal as good as Reading when specific uses demand thoroughbred performance.

#### For Waste, Vent Lines, Down-Spouts

Waste, Vent Lines, and Down-Spouts of Reading Puddled Iron Pipe will outlive the building in which they are replaced. The alternating wet and dry conditions and the destructive atmospheric corrosion that mean swift death for ordinary ferrous metal have little effect on Reading Iron, due to the unique physical structure and chemical composition.

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Galvanized Standard Reading Puddled Iron Pipe assures generations of trouble-free service in most waters. In thousands of such installations, it has been proved that the life of Reading Pipe is from two to five times longer than that of ordinary pipe in practically every installation.

Fifty years ago, Reading Puddled Iron had Reading Puddled Iron is not a "cure-all." But its unique ability to resist a variety of destructive conditions puts it in a class by itself where those conditions exist. If you are buying metal for the uses shown on this page, you'll SAVE MONEY by insisting on Reading.

#### For Steam Return Lines

The severe corrosive conditions present in steam return lines call for Extra Strong Reading Puddled Iron Pipe. Reading Puddled Iron is a physical compound of practically pure iron base metal, containing hundreds of thousands of filaments of protective silicate. This unique composition gives double protection from rust.

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Reading Puddled Iron possesses the tough-ness and workability of the old-time iron, because it is made by essentially the same processes. Used for ornamental purposes, Reading Puddled Iron means lasting beauty. Available in various grades, depending on the fineness or intricacy of the finished work.

## HILADELPH READING IRON COMPANY Science and Invention Have Never Found a Satisfactory Substitute for Genuine Puddled Iron

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# PENCL POINTS Volume XIV September, 1933 Number 9

## The California Earthquake Recorded in Black and White A Notable Group of Drawings by Carl W. Heilborn

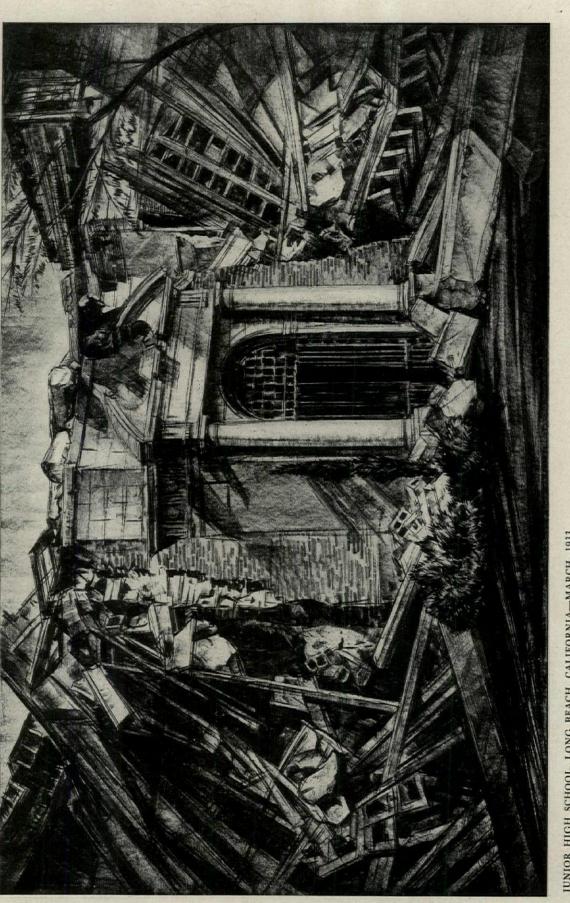
The six drawings reproduced herewith were selected from a group of twenty-six that were made on the scene of the California earthquake shortly after it occurred. The artist, Carl Westdahl Heilborn, is familiar to readers of PENCIL POINTS through an article in the June, 1932, issue as well as through other drawings reproduced subsequently. It just happened that he moved to Long Beach a few days before the earthquake and therefore had an opportunity to make this remarkable record.

The drawings were done mostly on cameo paper and measured approximately 12 inches by 18 inches. Some of them were made at night but in all of them there is an absence of strong light and strong cast shadow since Mr. Heilborn wanted to convey the feeling of disaster which pervaded the ruins in the gray and dim atmosphere that prevailed at the time.

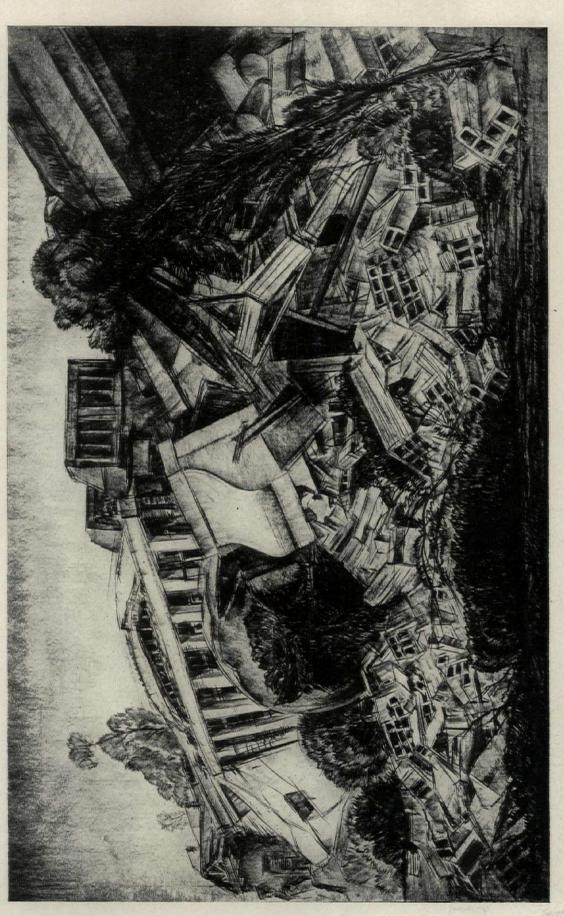
In addition to being a record of the great disaster these drawings are serious studies in black and white composition and some of them may later be developed into etchings or lithographs. They bring out, more dramatically than could any photograph, the devastation that was caused by the earthquake. Architects can get from them an idea as to the effect of the disturbance upon structures in different materials.



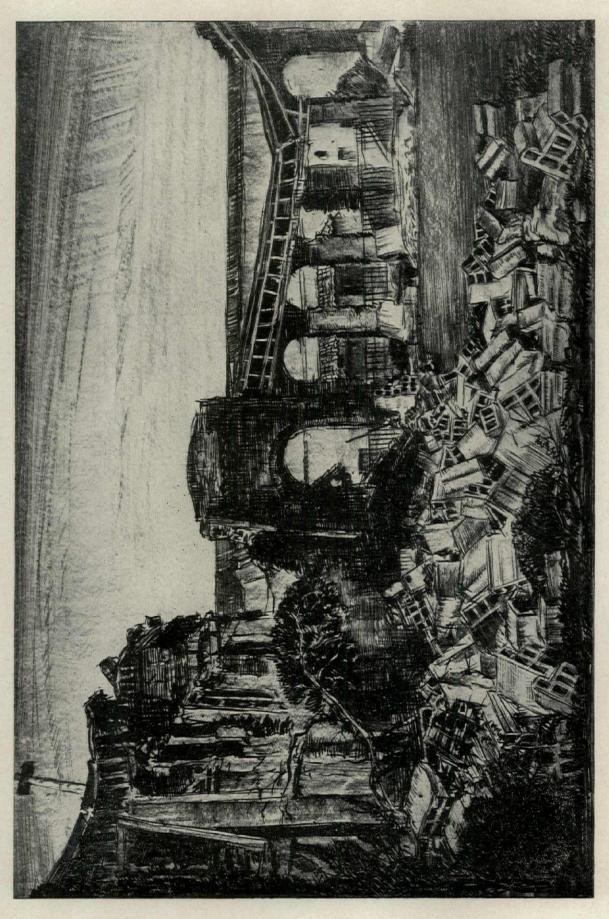
MASONIC TEMPLE, COMPTON-CONTE CRAYON DRAWING BY CARL WESTDAHL HEILBORN



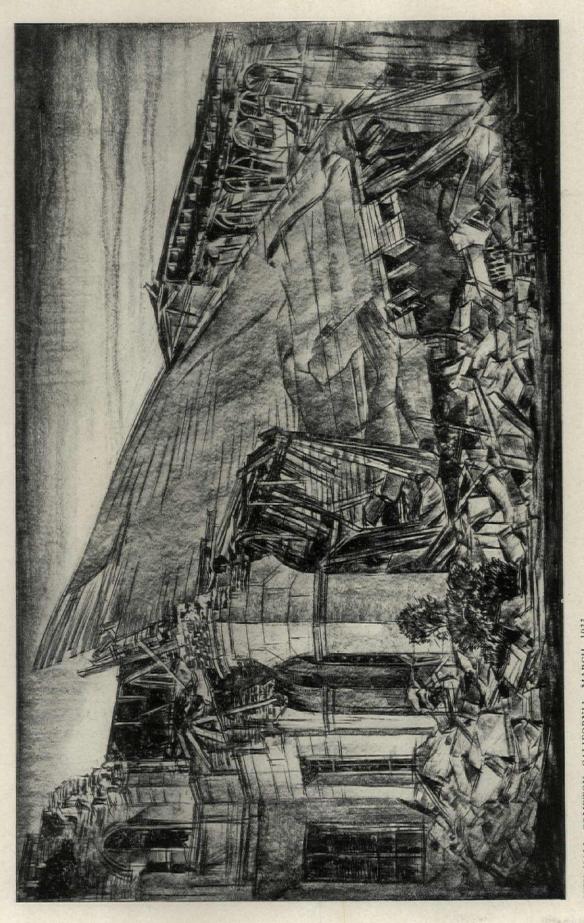
JUNIOR HIGH SCHOOL, LONG BEACH, CALIFORNIA-MARCH, 1933 CONTE CRAYON DRAWING BY CARL WESTDAHL HEILBORN



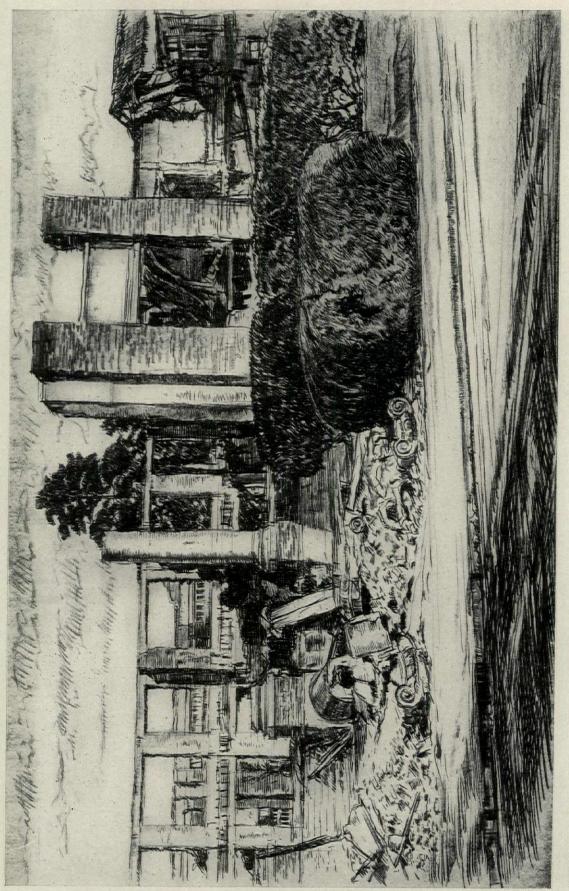
POLYTECHNIC HIGH SCHOOL, LONG BEACH, CALIFORINA-MARCH, 1933 CONTE CRAYON DRAWING BY CARL WESTBAHL HEILBORN



JUNIOR COLLEGE, COMPTON, CALIFORNIA-MARCH, 1933 CONTE CRAYON DRAWING BY CARL WESTDAHL HEILBORN



CITY HALL, COMPTON, CALIFORNIA-MARCH, 1933 CONTE CRAYON DRAWING BY CARL WESTDAHL HEILBORN



HIGH SCHOOL, HUNTINGTON PARK, CALIFORNIA-MARCH, 1933 CONTE CRAYON DRAWING BY CARL WESTDAHL HEILBORN

## Wrought Metalwork, 3–Gates (Part 2)

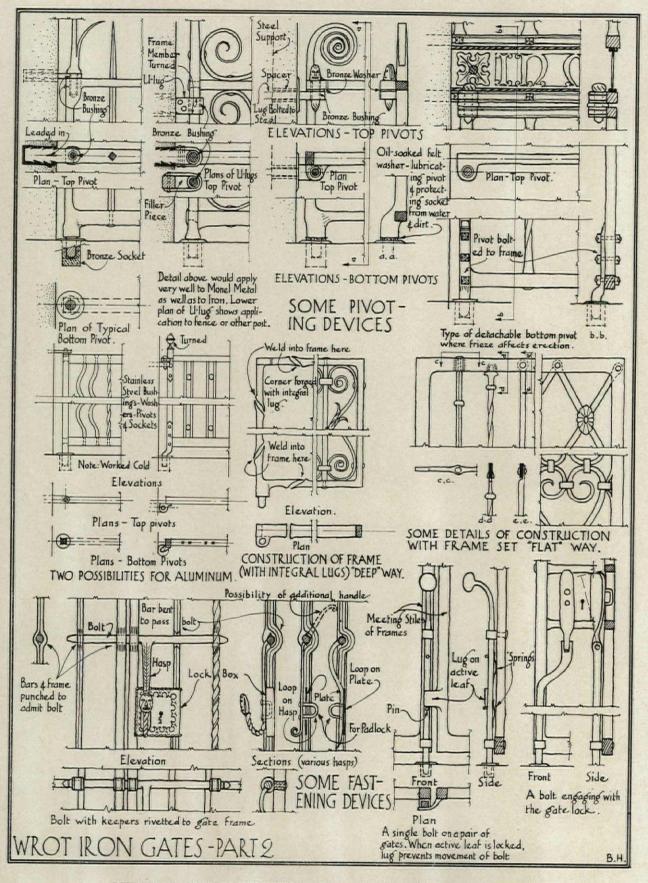
### By Bernard Heatherley

In making gates of any metal other than iron (ignoring here the process of casting) their frame members should be riveted or tenoned together. Monel metal, stainless steel, aluminum, etc., do not permit the craftsman's method of welding; even if one is inclined to accept a torch or electric weld as adequately safe, operations of the sort smack of the machine shop rather than the forge and will inevitably declare themselves. Here, as in all wrought metalwork, the consideration of what should be done -not what can be done-is of paramount importance. All of us have seen the violinist-contortionist who continues to play a tune while assuming all sorts of extravagantly impossible positions. If we like contortionists we wonder why the violin-played as it is then played-is allowed to spoil the act; and if we love music we wonder what is added to it when it is rendered under such difficulties as the striking of grotesque attitudes must impose. Similarly, if we are to enjoy the visual music of craftsmanship, our enjoyment will be based upon the solution of a problem by natural and beautiful means-not merely upon the conquest of intense and unnecessary difficulties. To assume that two problems involving two different metals may be met by using identical methods is to confess ignorance of the natures of both metals as well as a failure to analyze completely either problem. It is just as important to find out what new tools and methods are natural and logical for new materials as it is to recognize that old tools and methods are seldom improved upon for old materials.

Although the cross section of gate frame members may often be square-or near square-it is more likely that they will be definitely rectangular. Whether the long side of this rectangle shall be parallel to the general plane of the gate or set at right angles to it is a matter involving a number of considerations. The latter (which I shall call the "deep" way) is the more typical because where the filling is composed of bars and certain other more usual forms of ornament, assembly is thus made easy and economical and a greater rigidity is imparted to the gate. Setting the frame the deep way is not always the most pleasing in appearance, however, and may actually prevent the attainment of certain archæological effects. In early Latin work (especially the Italian) the frame was more generally set the "flat" way and thus better accommodated the ornament it enframed. The rectangular section, when set this way, is usually quite thin, but its width gives a fine appearance of strength in confining the pattern. When set the deep way, the narrow edge of the cross section is presented (although it would never become as thin as flat way sections do) and a perspective view is necessary before the full weight of the frame is apparent. A certain

"whip" is to be expected in a frame made the flat way, but-since a well-made gate will never become sprung -this whip is not to be objected to, although it might prove desirable to place fastening devices at more points than a stiffer frame would require. Setting a frame the flat way makes for a sense of lightness and is helpful where reveal depths are limited. If bars enter into the design of the frame filling, such a frame may be punched through-from edge to edge-and the bars shouldered and headed over as illustrated. Or they may be flattened at the ends and riveted to the flat side of the frame. Up to certain sizes of material and where a frame section is set the deep way, it is good practice to forge the corner and then weld it to the straight vertical and horizontal members of the frame. The making of a pivot or pivoting lug -integral with the corner-is done in the same way, being preferable to a pivot made separately and welded to the frame. The pivot is forged to its approximate diameter and then turned on the lathe to fit its socket exactly. It is interesting to note that early Spanish work very frequently has no framesespecially where gates were incorporated in rejas. Evidently the effect of continuity of spindles was desired and the outer spindles of the gates, on one side, form the pivots. Both outer spindles were riveted to top and bottom horizontal members. These were often double- 4", 5", or 6" apart-and covered by sheet iron, richly repoussé and pierced. As is proved by existing examples, this method can be worked out satisfactorily-although some such pieces show a decided sag. It is seldom that a gate frame cannot be designed to add decorative interest to a screen or railing and, except for occasional archæological reasons, a frame is always to be recommended.

However well made a gate frame may be, and however superlative the general design and workmanship, it will be little more than a source of annoyance unless it swings sweetly and consistently or if its fastenings prove inadequate to resist, when necessary, all normal attempts to open it. While gates are occasionally hung on hinges (when light in construction or when the floor may not be made to take a socket) this is the least desirable of swinging methods. The constant strain and leverage exerted by the gate are more than such supports are likely to withstand over long periods (remaining perfect in function) unless extraordinary provisions are made-and these provisions are apt to result in clumsiness. If hinges must be used, a wary eye should be exercised to detect the cheap practice of using stock butts-"fixed up." There are occasions when this can be done effectively and at a saving of money-but the buyer should know what he is buying and the benefits of the economy should go where they are due. The better method of

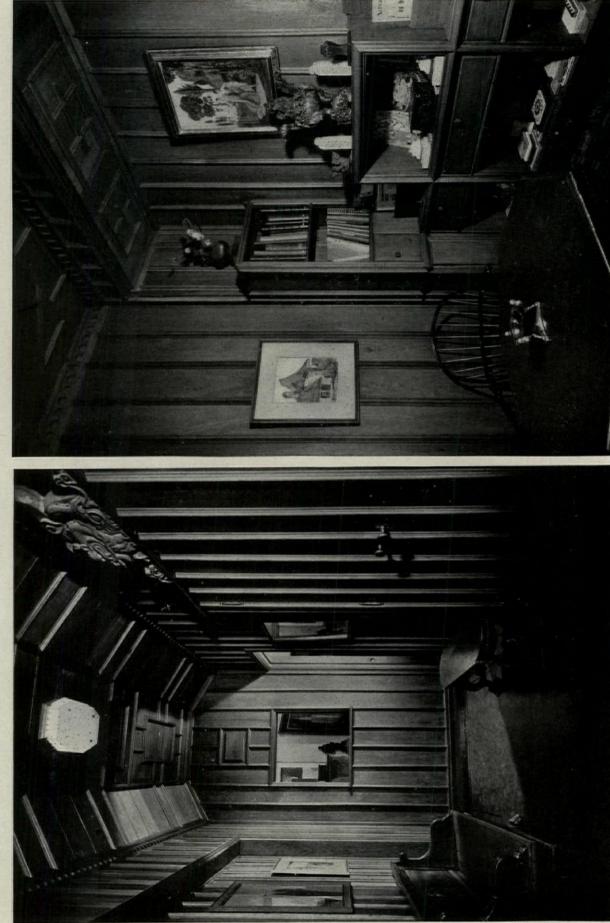


DETAILS OF GATE CONSTRUCTION-PREPARED BY BERNARD HEATHERLEY

swinging gates-obvious enough in most cases-is to pivot them, the lower pivot resting in a socket at the floor which thus carries the load of the gate. The conditions governing the design of pivots may vary in every job. Obstructions of one sort or another may require the pivot to be offset from the centre line of the gate-its natural place. There may be conditions at the head or the foot that would make the erection of a gate with an integral pivot impossibleas, for example, where a frieze and cresting stretch across the opening or where the lintel itself prevents lifting the gate high enough to insert the bottom pivot into its socket. A few of the more common and satisfactory methods of meeting these problems are shown on the accompanying plate. It is recognized that friction between iron and bronze is less wearing than friction between iron and iron. Therefore, the bottom socket should be made of a hard bronze and the top pin or pivot should revolve in a bronze bushing. Where aluminum is concerned we have something very scientific called electrolytic action (a corroding and disintegrating force) to consider, which action seems to be most violent when aluminum is juxtaposed with any member of the bronze family. So far, stainless steel seems to guarrel less with aluminum than any other metal and is to be recommended for sockets and other wearing surfaces in aluminum work. The system of making separate pivots and riveting or bolting them to the gate frame-as dictated sometimes by erection conditions-should also be considered in using a metal where the forging of an integral pivot and corner would be uneconomical or unnatural. The top pivot is not required to carry the weight of the gate but is to hold the pivoted side in a vertical position. While it may be in the form of a pivot on the gate or on the pintle secured to a jamb, the more typical problem is solved by forging a lug on the gate frame to coincide with a lug at the jamb, the holes in both lugs bronze bushed and a pin dropped through them. Where the center of the pivot coincides with the centre of the vertical side of the frame, a most satisfactory top pivot is made by turning a short length of this frame member itself to the desired diameter at a point near the top of the gate. A U-shaped lug is then passed about it and fastened to a lug in the wall-or other support. The turning of the frame member is done, of course, before the frame is welded or riveted together, and obviously could not be done on a frame set the flat way or whose smallest cross section dimension was less than the diameter required for the pivot. Like all parts of the metalworking craft, pivoting devices provide opportunities for decorative interest and many fine things can be done with them.

The fastening devices of gates have always provided play for the craftsman's ingenuity and there remain —in certain directions—limitless possibilities for this detail. While a single gate can be held by a lock alone, gates in pairs require some bolting arrangement in addition to their lock. The bolt may be used in a number of combinations and may be the simplest utilitarian piece or very elaborate and decorative. It may be employed vertically at the top of the frame or at the bottom or at both points-doubly or singlyoperated individually or collectively; or it may be used horizontally with a hasp-and in any of these uses may be secured by lock or padlock or pin or lug. The hasp may be made with a loop or keeper which passes into the lock and through which shoots the lockbolt to hold it firm. Or the hasp loop may pass through a slotted plate, a punched bar, or another loop-to receive a padlock. Sometimes the hasp is slotted and the padlock keeper is stationary. The bolt itself may slide through keepers riveted to the face of frame and bars. It may be desirable for economy or interest to pass the bolt through holes punched in the frame and bars, frankly bending back such bars as the bolt slides past but not through. While the vertical bolt must be protected against the possibility of operation by the wrong persons who might reach through the bars from the outside, the horizontal bolt is often provided with a handle in addition to the hasp to permit its operation from either side-after the lock has been released. The horizontal bolt locked in place is usually sufficient security for a pair of gates as well as for a single gateits length passes through several bars ensuring rigidity and absence of "play." In exterior work it has the advantage of eliminating sockets or keepers, let into the ground-as required for vertical bolts-which have been known to fill with dirt and ice. Vertical bolts are sometimes designed to engage with the lock so as to prevent unauthorized operation, but a very simple device-a lug on the active gate which (when the gates are closed) fits over the bolt on the inactive gate and prevents its withdrawal-is more economical and every bit as effective. Smooth movement of the gates is impossible unless the bolts are held clear of the ground. This is achieved usually by the employment of a flat spring (of non-corrosive metal for exterior work) between the bolt and the frame, or by turning the bolt so that one of its parts engages in a slot in the keeper. The latter is possible, of course, only when the bolt is round in section. There are numerous cases where quick convenient operation of the fastening is the important consideration-as in a garden gate which acts as a barrier merely against animals or children. The common latch and various types of spring catches prove adequate for such requirements.

The use of astragals on gates is an optional matter. Astragals are more fitting on the more refined and restrained types of work than on the freer, cruder types. They are apt to destroy that sense of openness or "looseness" so necessary to certain characters of inetalwork. The work of an astragal can be well and economically done by small plates used as stops and shielding a locklatch from interference. The device which holds a gate open may be extremely simple —a plain hook and eye—a counterweighted keeper or the same bolt which holds the gate closed. The bumpers which are sometimes required to protect adjacent walls against being struck by the gate as it is opened may easily be incorporated with the holdback.



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The wood wall and ceiling paneling and mouldings are of clear, selected, red gulf cypress, treated with an acid stain and wax finish; floors of linoleum-tan field and black border. TWO VIEWS IN THE OFFICES OF HARRY STERNFELD, ARCHITECT, PHILADELPHIA, PENNSYLVANIA

THE RECEPTION ROOM

Photos by J. Frank Copeland

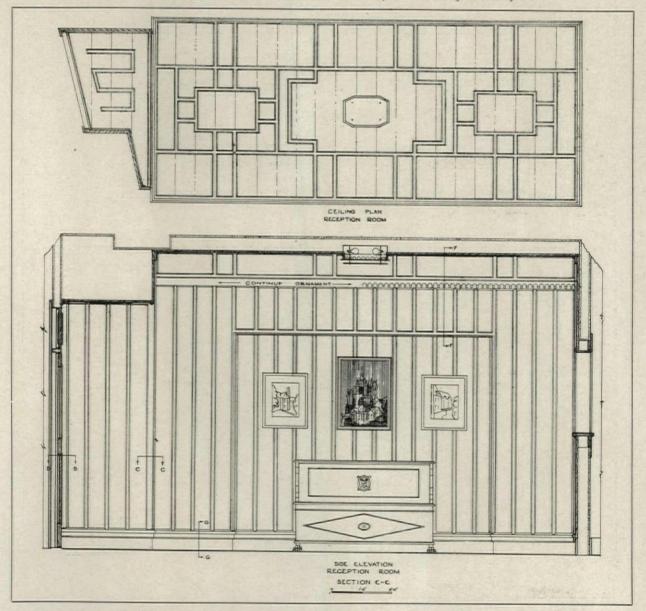
THE CONFERENCE ROOM

## An Unusual Suite of Architectural Offices

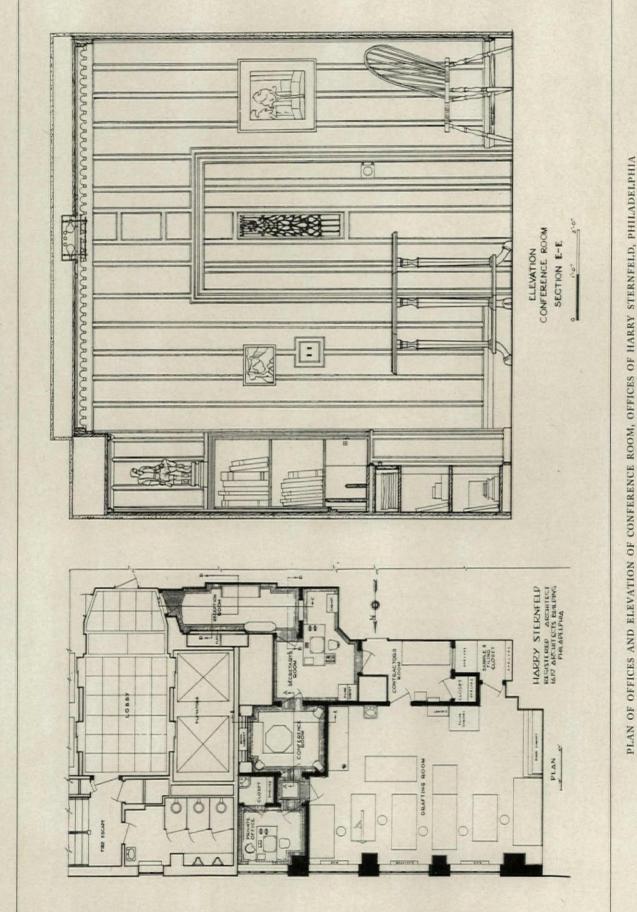
The attractive and thoughtfully planned offices of Harry Sternfeld, Philadelphia architect and former Paris Prize winner, have drawn much favorable comment from visitors and the accompanying photographs and drawings, which show them partially should be of interest to other architects. The plan of the offices shows the compact and convenient arrangement of the different rooms worked out to take best advantage of the available space. The arrangement permits transactions between the principal and clients, contractors, material men, and drafting force to take place readily and with no lost motion. Since the plan shown here was drawn it became necessary to have additional drafting space and an annex

to the drafting room was consequently added to the west. The additional space measures approximately 18 feet by 28 feet, and provides room for six more drafting tables and a reference table.

The woodwork of the reception room and the conference room is particularly interesting and Mr. Sternfeld has here achieved a rather rich effect with simple and inexpensive means. The arrangement of cupboards and shelves in the small conference room was carefully worked out to house an adequate working library and also to make effectively decorative disposition of a number of small works of art upon which the visitor's eye can focus pleasurably.



SIDE ELEVATION AND CEILING PLAN, RECEPTION ROOM, OFFICES OF HARRY STERNFELD, PHILADELPHIA

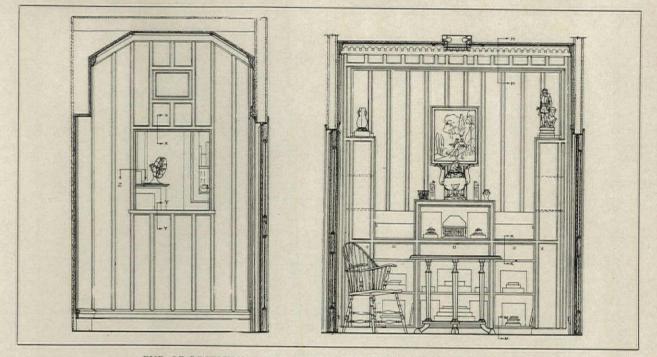


Since this plan was drawn, the drafting room has been nearly doubled in size by an extension to the west.

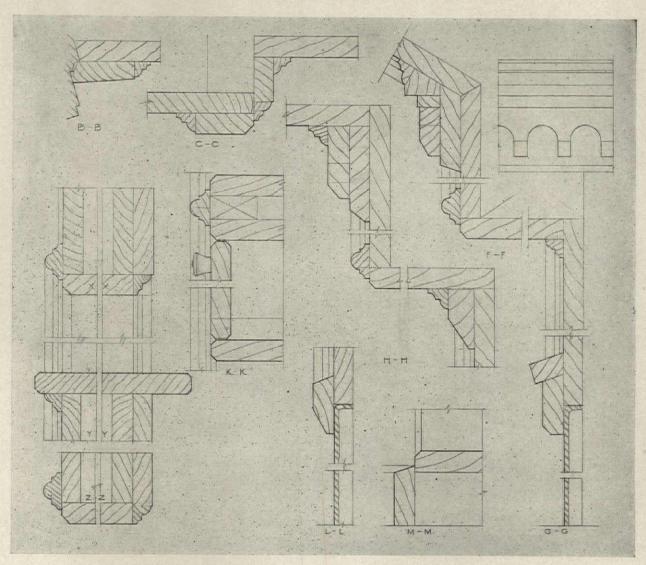
PENCIL POINTS FOR SEPTEMBER, 1933



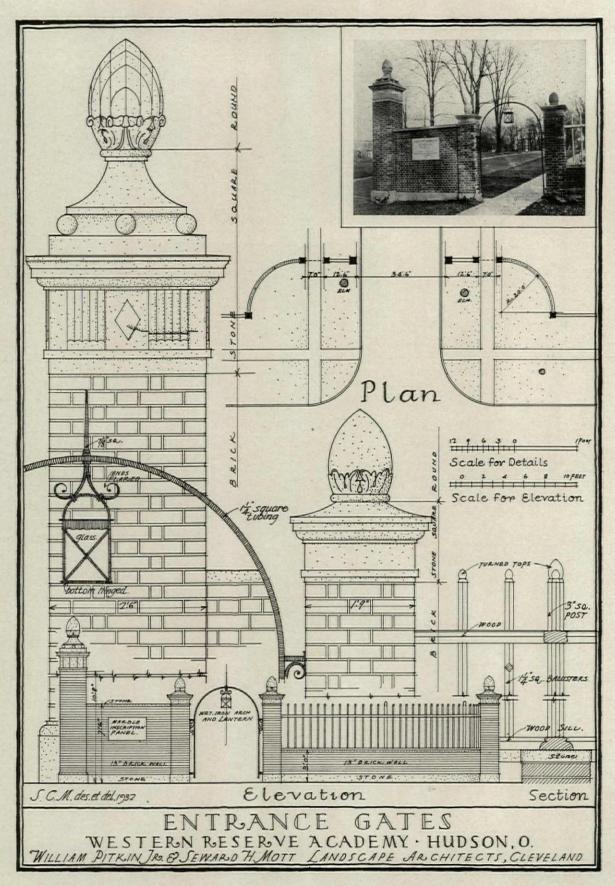
### AN UNUSUAL SUITE OF ARCHITECTURAL OFFICES



END OF RECEPTION ROOM AND CONFERENCE ROOM IN ELEVATION



DETAILS OF WOODWORK, OFFICES OF HARRY STERNFELD, PHILADELPHIA



DETAIL OF ENTRANCE GATE, BY PITKIN AND MOTT, LANDSCAPE ARCHITECTS

## Ripley's Recipes

By Hubert G. Ripley, F.A.I.A.

"Camphire, with spikenard,

Spikenard and saffron; calamus and cinnamon; with all trees of frankincense; myrrh and aloes, with all the chief spices:" S. O. S.

#### IV-Saffron

SAFFRON: — Var. Crocus Salivus or Cartwrightianus, a coloring material consisting of the dried stigmas and part of the style of the common yellow crocus. Yet not so common after all, for that particular species differs from the spring crocus in that it flowers in the fall, instead of being almost the first harbinger of the vernal Equinox, pushing up its tender little snout through the snow on the sheltered sunny patches near our mint bed.

Those who wish to raise saffron for the cuisine should plant the corms in the beginning of summer, in rows about six inches apart and three inches o. c., the soil being well tilled sandy loam. In foreign parts little children and beldames gather the stigmas in the early morning just after the flowers begin to open. Five pounds to the acre is considered a good yield for the first year. The second year it's not so good, two pounds instead of five, and after that the soil has to be re-tilled. Even so, the crop is worth while, for in 1878, when our "Chambers Encyclopedia" was published, the market was \$10.00 an ounce. This sweet smelling herb is mentioned in the Canticles, IV, 14, and by Homer, Hippocrates, and other Greeks as well. Chinese writers repeatedly refer to it, and Nero always ordered it sprinkled in his path when on his way to the Arena to officiate at an holocaust, or to recite a few Iambics.

The original saffron crocus came from Asia Minor where it grew wild under the walls of Troy and Cyzicus, which latter city Florus (L. Annæus Julius, the panegyrist of Hadrian, the Emperor-Architect) calls the "Rome of Asia." Cyzicus, it will be recalled, was founded on an island in the Propontis, and connected to the mainland with bridges, built by Alexander the Great. It had a magnificent temple, "the pillars thereof being four cubits thick and fifty cubits high, were each of one entire stone only; the whole fabric all of polished marble, every stone joined unto the other with a line of gold." The poet, Paul Silentiarius (VI cent.), describes the Mauritanian marble as having a gold or saffron hue, and it is authoritatively presumed that some of the columns from Cyzicus were placed by Anthemius of Tralles in the great church of Santa Sophia. Doubtless centuries of seepage from the saffron stigmas that grow so profusely in the near east, have had their effect on the marble quarries beneath the soil. (ibid.)

All, or most all the saffron used for cooking pur-

poses is now imported, for its cultivation in England, where it was introduced in 1339 by a pilgrim, has entirely ceased, they say; barley, malt, and cattle having proved more profitable. The history of this thurifurous herb reads like romance, and we regret that the exigencies of time and space preclude more extended comment. When used in cookery, saffron imparts an aromatic spicy flavor to certain dishes that is most titillating to the palate. Eddie, our favorite waiter (his full name is Edwardo Torino, and he knows more about most things than anybody else), described the preparation of a "risotto Milanese" once, that almost brought tears to one's eyes. We were late for lunch that day; most of the customers had left, so Eddie had leisure to talk. A few months previously, almost a year in fact, we had acquired a keg of white grape juice. The best advice obtainable had been followed, keeping it in the cellar in an even temperature of 60 to 65 degrees in a dark place, an empty ginger ale bottle up-ended in the bunghole to allow a little air to promote fermentation, and, at the same time, keep out dust and inquisitive mice; you all doubtless have had similar experiences. The "sauterne," or "white Burgundy," I've forgotten which the salesman called it, was coming along finely-an almost authentic flavor, and strong as the spear of Pallas Athene. We wanted something to go with it, to supplement its apparently admirable qualities, a dish that would act as a foil and, at the same time, supply the essential Vitamin G. The memory of a delicious little dinner on the terrace of a restaurant near the railroad station in Milan, while waiting for the train for Como, frequently comes to mind. The principal dish was rice, flavored with saffron, washed down with a bottle of Orvieto. It seemed just the right thing at the time, and we asked Eddie if he'd ever made a risotto, for Eddie is an authority in such matters. He had, and described the method in detail.

"Take an onion," he said, "and chop it up in small bits. Fry it in fresh butter until it's a golden color. Don't let it burn or brown and use plenty of butter. After it is well cooked, add a handful of rice for each person and sauté this in the hot butter until all the kernels are well covered, 'faire revenir,' as our Gallic friends would say. Use the Virginia rice, or "Italian" rice, so called; it's not so soft, has a better flavor, and doesn't mush up like the ordinary rice. Sprinkle with a little salt and pepper and add gradually, stirring all the while, a quantity of good stock, beef or chicken or veal. Liebig's extract of beef is even better, dissolved in boiling water, using sufficient to make a rich consommé, if you haven't enough stock. Test it from time to time by biting a kernel or two between the teeth to see if it's properly cooked. The Italians like it 'dente',' not soft like the Americans. When

just right, small bits of chicken or cut-up kidneys, or chicken livers, previously cooked, may also be added. Just before serving it up, stir in a 'pot de safran,' and have plenty of grated Parmesan cheese to go with the dish; for accompaniment a bottle of good old wine, 'et on verra merveilles,' as Savarin savs."

"Where do you buy saffron?" we asked him.

"At Baldini's on North Street," replied Eddie. "Isn't it awfully expensive?" we asked, thinking of the \$10.00 an ounce cost in 1878.

"Oh, no!" said Eddie, "two for a quarter, three for a quarter. Tiny little pots with just enough saffron in each to cover the bottom. It's very savoury and one pot is just right for four people."

After purchasing some saffron that very afternoon, we found it was even as Eddie had told us. The pots were white china, fashioned after a famous old model but miniatures, appropriate size for a tiny doll, or a charm for the watch fob. The contents of a hundred pots would not have weighed an ounce. Baldini sawed us off a chunk of Parmesan, and we bought Italian rice, salami, and Gorgonzola, and pickled mushrooms besides-lots of fascinating things.

The following Sunday we invited some friends in for supper and told them there was to be a try-out of a new dish. They all came, Gertrude and Joe, Ken and Gene, Ruth and Roy, and Dorothy and Fred, just a nice quiet little crowd. We told the girls to keep out of the kitchen for we had a man's job on our hands. While the ladies were occupied with their knitting and tatting battens, the kitchen was a scene of bustle and confusion. In the largest kettle the ménage afforded, the friture was started, putting in all the chicken stock on hand. Fortunately, as it turned out later, there was an extra supply of half a dozen large cans of R. and R. chicken consommé in case more stock was needed. While waiting for it to simmer, there was a round of dry Martinis to sort of break the ice, as it were. Next a bucket of rice, all there was, which must have been quite a lot, was added, and Joe was given a large wooden spoon and told to keep the mass well stirred, so the rice wouldn't stick to the bottom. Joe had to have another Martini to ward off a sinking spell, so we all joined him. Shortly, the rice, which did not seem tender as yet, began to swell and it was well the large kettle was used, for it soon became almost full. This made it hard to stir and Ken helped with our other wooden spoon while some more Martinis were shaken up. The mass in the kettle looked dry so a can of R. and R. was added, and then another, until gradually all six went in without making much impression. It was hard work opening so many cans and took quite a few Martinis to keep up our courage. For a while affairs looked desperate, but with the helpful assistance of several rounds of Martinis the dish finally began to take shape. We'd been in the kitchen a long, long while, and were beginning to feel somewhat overcome, what with so much sustained effort and all; it was the mental strain, anxiety lest the dish mightn't come out well, fully as much as the physical labor of stirring, shaking up cocktails, and opening cans, that told. Finally all

became conscious of an insistent pounding on the kitchen door by an irate and famished band of women demanding food. Hastily shaking up a double portion of Martinis, the door was unlocked just as the risotto was having its finishing touches added.

Somewhat mollified by the delicious odor of the saffron and the appearance of the dish itself, served on two great platters (Grandma Lowett's wedding china), added to which was a tray of cocktails with a cherry in the bottom of each (a maraschino cherry will soften the feminine heart wonderfully at times), the ladies gracefully accepted the situation.

The risotto with the white wine really was a great There were bounteous helpings for everysuccess. body and hardly enough left over for Mrs. Laughlin's Monday luncheon. (Mrs. L. used to do our laundering before the washing machine was acquired.)

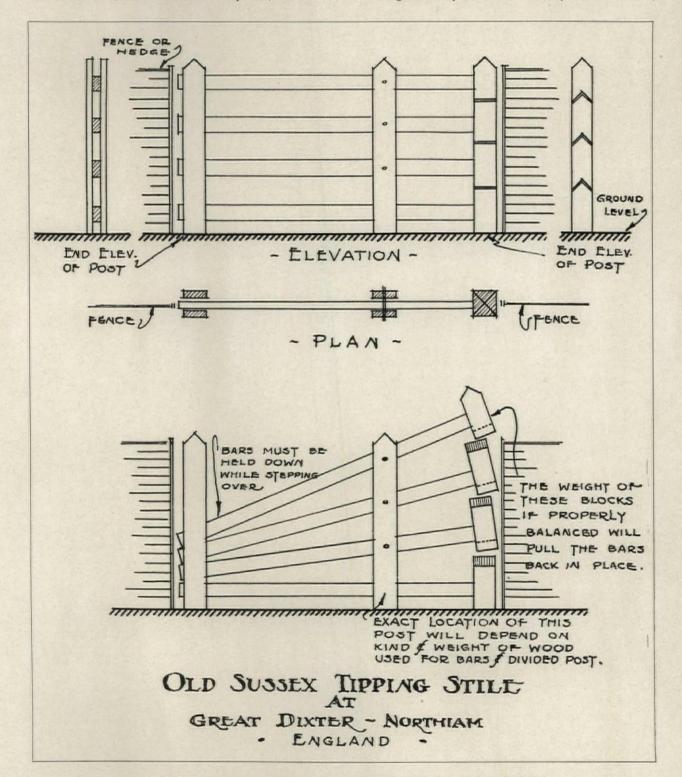
The next day when we told him about it, Eddie said, "You should have made the risotto before the company came, keeping it hot in a double boiler and adding the saffron just before going to the table. Italian rice is very hard and takes a long time when cooked slowly as it should be" which undoubtedly was a helpful suggestion.

Brillat-Savarin observes that nothing adds more to the enjoyment of polite conversation, than some little occupation, whatsoever it may be, particularly if it does not distract the attention too absorbedly. The making, during the "moment crepusculaire," of coffee or tea in the withdrawing room by the host or hostess, putting on the finishing touches to a bowl of punch, pouring out a tray of liqueurs, are familiar examples that will "jump to the eye." Speaking of punch, it may not be amiss to mention at this time a beverage that has received commendation in divers circles. Its réclame would be even greater, I'm sure, were its sterling qualities more generally known.

The Griswold Punch. Rub the outside peel of four large fresh lemons with one dozen lumps of sugar, one at a time, so as to extract somewhat the flavoring oils that nature has placed in the outer skin cells of the citrus fruit. This process should be followed in the making of all good punches. Cut the peel from four other lemons, each in one piece like a ring or spiral (as is done in making a "Horse's Neck"), and place the peels and sugar lumps in the bottom of the punch bowl. It's not a bad idea to rub the inside of the punch bowl with lemon and orange peel, the same principle as when one rubs a salad bowl with a clove of garlic before putting in the salad. Add the juice of one dozen sizeable Dominican limes; the juice of one can of Hawaiian pineapple-reserving the slices, which should be cut in about six sections each, for the final decoration; one medium size bottle of maraschino cherries, juice and all; and one large lump of ice, the equivalent in size of an eight-inch cube. Over this pour one bottle of Fokincks (I'm not sure about the spelling, but that's the way it's pronounced) Swedish Punch, and one gallon of Jamaica or Santa Cruz rum. Stir slowly, dipping the liquid in a ladle and pouring over the ice so as to chill thoroughly and blend the whole. Decorate with the pieces of the pineapple, and

with three or four large navel oranges sliced. When ready to serve, add twelve quart bottles of thoroughly chilled, sparkling, white grape juice. Mix this all together while your guests look on, place a goodly bunch of fresh young mint, the stems tied together, on top of the ice cake, and serve in glass cups. The above quantity is sufficient (within reason) for a party of twenty-five, and should last them about four hours.

Mr. Griswold, distinguished architect, connoisseur, and bon vivant, the inventor of this punch, tells me it is an old family recipe dating way back from July 1, 1919. I tried this recipe once at a meeting of the Men's Club, providing Scotch and soda for those who mightn't care for punch. The Scotch and soda went untasted, and while it was planned to bottle what remained of the punch for future use, there wasn't any left over. I harbor a candid suspicion, as that master stylist Edward Gibbon is wont to remark, that when the "Griswold Punch" is served, one may rest assured of the dignified acquiescence of the Lay Brethren.



OLD TIPPING STILE-MEASURED AND DRAWN BY CAROL H. LAWRENCE

## Figures and Finance for the Architect

### By Robert Lee Henry, C. P. A., L. L. B.

Editor's Note:—This is the fourth of a series of discussions by Mr. Henry, who is recognized as one of the foremost authorities on the financial phase of the architect's work. He will answer on this page hereafter, in addition to writing a regular monthly article, all questions where a Certified Public Accountant can be of assistance. Inquiries of this nature directed to Mr. Robert Lee Henry, PENCIL POINTS, 330 West 42nd Street, New York City, will receive prompt reply.

A number of PENCIL POINTS readers have begun a lengthy discussion regarding the answer to a question deemed of general interest printed on this page of the June, 1933, issue. For the benefit of those readers who did not read the June issue, the question and answer is reprinted here.

Question:—We have always been interested in the question of the proper method of applying overhead to the specific jobs. Granted that we have kept our overhead expenses down to what we now consider a minimum, what do you consider the best method of apportionment? To state our specific case briefly, we are equipped to handle a great deal more work than we have on hand and we are carrying some "old-timers" hoping for better days.

Answer:-In times like these you must be prepared to carry some of this overhead as part of your administrative expenses. You cannot expect the job cost account to absorb all of your overhead when you are carrying idle men. This type of situation is one of the best illustrations in

favor of the "time" basis of distributing overhead.

Briefly speaking, the time cards are added up and a distinction is made between productive time and nonproductive time. The total number of employment hours is divided into the total overhead and an hourly overhead rate is established. This hourly overhead rate is multiplied by the number of productive hours spent on each job and the job cost account is charged with the resultant amounts. The balance of overhead unabsorbed is charged against Administration Expenses.

To carry out this system it is necessary for principals to keep time-cards as well as draftsmen and others directly connected with productive work. Wherever possible, secretaries and clerical assistants should also keep timecards as thus will the calculation increase in accuracy.

In considering the proper answer to this question, it was not the intent of the writer to convey an impression that only this method of overhead distribution could be used. As a matter of personal opinion, the intent was to point out that present-day conditions in the architectural profession required that a portion of the unapplied expenses (Overhead) should be borne by the operating firm and that the firm should not expect the various jobs to carry the entire load.

As a matter of fact there are numerous methods by which an architectural firm may distribute its general overhead. Before deciding upon one of the methods the firm must distinctly come to a decision on the all-important question of Administrative Overhead.

The term "Administrative Overhead" is applied to that portion of general overhead which the firm itself bears and which is not applied against any specific job but simply acts as an offset against profits.

Either of the following methods may then be used:

1. From the time cards a calculation is made to determine the total number of hours spent on all jobs and also the total hours of lost time not chargeable to any job. If the firm is to absorb a portion of the overhead, working time and lost time are added together. If the firm desires that the various jobs shall absorb the entire overhead, only working time is considered. The resulting time, either working time or working time plus lost time is then divided into the amount of unapplied overhead to determine an hourly overhead rate. The next step is to charge each job with its share of overhead, i.e., the number of hours employed on the job times the hourly rate.

A schedule apportioning overhead in accordance with this method would appear as follows: A state of facts has been assumed wherein the total overhead cost for the month amounted to \$1,000; the total working time on all jobs 900 hours; the lost time 100 hours, and the firm is sharing in the overhead:

Total W	orking Hours		900
Total Lo	ost Time		100
Total	Employment	Hours	1000

Hourly overhead cost ( $$1,000 \div 1000$  hours) \$1 per hour.

	Total	Job No. 1	Job No. 2	Job No. 3	Office
Hours Rate (\$1.00)	1000	300	200	400	100
Portion of					
Overhead	\$1000	\$300	\$200	\$400	\$100

2. This method considers the use of payroll dollars spent on each job and on lost time rather than the number of hours.

Having determined the actual amount spent on each job and for lost time the overhead is distributed in accordance with the relationship to the amount of payroll. Assume a state of facts wherein: (1) The firm does not absorb any of the overhead. (2) The total monthly payroll on jobs amounted to \$1,500. (3) The monthly payroll for each job is set forth below. (4) The monthly overhead amounts to \$750.

The schedule apportioning the overhead would be drawn as follows:

Ove	erhead -	÷ Payroll =	= Payroll	overhead	rate
\$750 \$1500		50c			
		Pavroll	Rate	Share of	Overhead
Job No. 1		\$ 200	50c	\$	100
Job No. 2		1200	50c		600
Job No. 3		100	50c		50
		\$1500		\$	750

ing moving. He called on these people and estimated how much work it would be to pack all of the household goods, and made a price for the entire job. He has been more than ordinarily successful, and, at certain times when he is rushed, he employs other architectural men to assist him.

#### BUSINESS GETTING

Two other draftsmen, late last fall, collected all of the samples of Christmas cards printed by the various concerns specializing in that work. A real estate operator who had several vacant stores let them display their wares. Here they took orders for cards, and as soon as enough capital had been acquired, had the lights turned on. With the next money they earned they put in a small selection of toys. By the time the Christmas holidays had passed they had a foothold secure enough so that they were able to maintain their store, which is operating today with a more complete line of stationery and toys.

#### A CASE OF 3.2

Another draftsman, who had a natural ability for working in oil colors, took advantage of the return of the beer gardens and sold several proprietors the idea of decorating the walls of their establishments with murals of an imaginative character. From this beginning, he has branched out into the field of interior decoration and has planned the furniture arrangement and decoration of flower shops, beauty parlors, and private apartments.

#### RENDERING

The human quality of pride of possession was thought by a New York City designer to be an excellent point of attack. Armed with a camera he toured a well-to-do section of Long Island. Here he took detail photographs of the entrances to homes and, in some cases, of the entire house. These he had developed and printed, and from the prints he made pencil or pen-and-ink sketches of the doorways, or water color renderings of the entire house. He would then call during the evening at these homes and try to dispose of the sketches. If he was unable to sell the originals, he would suggest that Christmas cards be made from them. In this way he was able to sell the major portion of his work.

#### BABIES, JUST BABIES

Along the same lines as above, a draftsman who is adept with pastels called on similar homes in another section where he would secure from each parent a photograph of the baby of the family. He took these snap-shots home and made large sized portraits of the heads in pastels. These he was able to sell in practically all cases, and he soon learned that the average young mother and father had, among their acquaintances, other parents, who, liking the work, desired to have portraits made of *their* youngsters.

#### DESIGN SOURCES

One draftsman in a small New England city noticed, while walking down the main street of the town, that the windows of the smaller shops were poorly dressed. He was certain that he could do a much better job himself. Upon inquiry he learned that most of these shops could not afford a window trimmer, so he suggested that for a very nominal amount he would be glad to dress their windows once a week. He soon had a regular business established and, because of the friendship existing among shop owners, has been able to expand considerably.

#### TRAVEL

Travel has lured several of the members of the profession. One chap managed to see all of the Mediterranean ports by working on a cruise steamer. Another, with a wide knowledge of European travel, secured a position in the tour planning department of one of the larger travel agencies.

#### MYSTERY STORY

No listing of the misadventures of the draftsman, however superficial, would be complete without a mystery story. We take ours from New York, where one of the drafting fraternity answers an advertisement that called for a chauffeur to drive a private party to Chicago. He secured the position, and left immediately for the Windy City. His expenses were all paid, day by day, by the man who employed him. After spending several days in Chicago, his employer decided to return to New York. Upon arriving in a medium-sized city in Ohio, our hero was told to stop the car and wait. He waited and waited and waited. In fact, he waited so long that he could stand the inactivity no longer. So he put the car in gear and headed for New York alone. He drove the car until it ran out of gas, whereupon he left it on the road and hitch-hiked the balance of the way. Subsequent checking up on the address and name of the presumed car owner has been fruitless. He disappeared as completely as possible, and neither he nor the car has ever been heard from since.

#### PHILOSOPHY FOR RE-DESIGN FOR LIVING

Perhaps the best pair of sports of the lot are the young architect and his wife who were badly caught almost at the beginning of the depression. They talked the matter over, and decided that the best possible haven for them was in a wealthy home until conditions improved. They secured a berth as chauffeur-butler, and cook-maid in a home near New York. Although they are forced to get up at five in the morning and work until late at night, neither of them grumbles about it. They do their work in a spirit of fun .... and apparently it is agreeing with them.

#### MISCELLANEA

Even a few bits of the personal history of these young architects would bring to light many strange ways for highly trained technical men to be earning their livelihood. They have waited on tables at formal dinners; a couple of them built a house and raised enough vegetables to live on; one specializes in the grooming of fur coats; one gives art instruction; another paints furniture; and we find still another promoting public dances of a high calibre.

To the enterprising we wish good luck and a speedy return to their chosen profession. But all have not been so fortunate as to be able to keep their heads above water. Many have lived in an economic hell for the last three years, an economic hell that will leave a scar for the balance of their lives. Perhaps one of the most touching of these near-tragic scenes took place in a relief agency in a town in one of the Middle Atlantic States. The man entered—tattered, dirty, clothes in shreds.

"I want to borrow a suit for tomorrow, and a pair of shoes," he said.

"We can't lend clothing," he was told.

"But I've got to have a suit."

"You'll have to make an application in the regular way, and after investigation you will receive the proper clothing."

"I won't hurt it. I'll bring it back tomorrow," he said.

"Can't you wait for a few days?" he was asked.

"No," he replied, "I can't wait." The man was visibly under a tremendous emotional strain, and the agency man tried to get the story out of him.

"What is it you want it for?"

"Do I have to give reasons? Can't you just lend it to me?"

The relief worker shook his head, and the battered one continued, "Shortly after I got married, I lost my position. We lived for a year on the money I had saved. We had a little boy, and that took the rest of the money. My wife had to go back to her family to live. They had no use for me, and I couldn't stay there. I was constantly taunted for not being able to support my own family. I tried to get work, any kind of work, but it was no use. And I kept getting shabbier and shabbier, until . . . well, you see me now. I can't go to their house looking like this, and I've got to go tomorrow. You see, they're burying my baby then."

All of these incidents, from the ridiculous that seems almost a burlesque of real life to the tragic, have in common a strong strain of valor. Nearly all of the men to whom these and many more things have happened have showed a gallantry and a nobility of character that makes one proud to be associated with them. Many new viewpoints have been formulated; many new ideas in architecture are being weighed during the period of inactivity that is now rapidly drawing to a close. And to these men who have displayed such fortitude and ingenuity and balance we may well leave the future of architecture in this country.



"CITY HALL PARK"-FROM A LITHOGRAPH BY ALEXANDER Z. KRUSE

## The Twenty-Sixth Paris Prize

### By Lloyd Morgan

Editor's Note:—This year's Paris Prize was most unusual, in that the winners of the first three places were all pupils of one patron, Lloyd Morgan. In view of this circumstance we thought it would be interesting to our readers to present, with the winning designs, some comments by Mr. Morgan, whose record in preparing men for success in major student competitions during the past six or seven years has been so phenomenally consistent that he might fairly be considered an authority.

t may be well, right at the outset of this discussion to meet the criticisms of the Paris Prize competition expressed by some practicing architects by emphasizing the fact that it is strictly a student's projet. It is done in ten weeks-six weeks for study and four weeks en loge. The logists are the same men the day they finish as they were the day they started, except that they have done one more big projet and that the winner goes to Paris to continue his studies. While it is the most advanced plan problem given to American students it is hardly fair to judge the program or the resulting designs from exactly the standpoint of the experienced practitioner. Nevertheless, in the solutions of Paris Prize problems there are many points that can be studied with profit by practicing architects since the intensity with which the logists attack the solution of the plan compares favorably with the approach to a real job and great ingenuity is shown.

This year's program, written by Arthur Ware, shows a complete understanding of these facts and might in this respect set a precedent for future programs. He made it general, leaving something for the student to develop, and did not try to catch the student with any ambiguities or technicalities. Furthermore, the jury consisted of mature men who understood the true meaning of H. C. and did not look for the finals to be exact copies of the 36-hour sketch.

I was naturally gratified to find my three protegés successful in reaching the finals with three different partis which made the study much more interesting than if they had all struck upon the same parti. It was obvious at the beginning that, having three projets to criticize, some definite attack was necessary so the men were all started with the same amount of data. Trips to Philadelphia and Washington were made and information on the Mint and the Bureau of Engraving was collected and studied. Requirements for the other three units—Board Building, Auditorium, and Museum—were also studied in detail immediately.

Each *projet* was started with the Mint as it was required to occupy about one third the area of the lot. The other units grew out of their requirements and were not simply "blown up for a fake composition." The buildings connected together by necessity and were not so arranged for a picture or a trick.

My three men, having had thorough training in doing twenty-four-hour problems, were well prepared to handle their studies and could, after a severe criticism, get a new idea down quickly. As a result of this ability, each man had made several studies in plan before the entire working of the projet was decided.

On account of the limited time given, it was necessary to push the plans hard so that the men could all go *en loge* with studies at half the final scale—the detail first, the façade second, the plan third and the section last. This procedure eliminated a bad charette.

The Mint, naturally, had a different character than the other four units and they in themselves had their own individual expression. Inasmuch as the Mint had offices above, a smaller column spacing was used, resulting in a lighter poché. The other units, having larger spans, gave a heavier poché. I suggest that our critics on too heavy poché refer to American Competitions and study the use of furring as exemplified there. Look, for instance, at the New York Court House Competition, where, it seems to me, there is some pretty heavy poché in evidence. In considering this point, critics will do well to realize that these men in the Paris Prize have six weeks to study and four weeks to draw up their ideas whereas, in the usual American Competition, the practicing architect has six months to study and the winner two years to get his design on cloth-with plenty of furring.

In all of these *projets* the façades were the outgrowth of the plan and distinctly did not dictate to the plan—the section always guiding the *projet*, being internal.

As for the drawings themselves, the *loges* were bigger and therefore better this year, giving more room to handle the larger sizes called for. The increase in size of the drawings and their being placed on chassis was a great improvement. Any man really prepared could easily handle them, though, to hear some students talk, one might get the idea that they would like to submit their drawings on postage stamps and declaim their *projets* to a jury instead of using normalsized sheets which talk for themselves. In my opinion every change the Committee adopted this year helped to make the Paris Prize a better spirited exercise.

Some of the competitors, at the beginning, complained against the use of air brush, pastel, cut-outs, *Encre de Poncer*, etc., and these were barred. I had decided a year ago that if I had *logists* I would advise them to render in wash as simply as possible and without tricks so the restrictions had little effect on my men who were trained in all mediums of presentation. One student suggested, however, that next year each man be given one brush with one hair in it and a very

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PLAN OF WINNING DESIGN FOR "A NATIONAL BANKING BOARD," BY GEORGE FREI-NEW YORK UNIVERSITY, PUPIL OF LLOYD MORGAN COMPETITION FOR THE 26TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS

PENCIL POINTS FOR SEPTEMBER, 1933

small bottle of ground ink and that he be required to go to Sunday School each week.

Any man preparing for the Paris Prize should master the twenty-four-hour problem as do the French. In this way he learns not alone to handle his plan but gains the ability to make many studies on his finals. This is a great French idea—to make a new study after each criticism until the student has "arrived" and constitutes the true virtue of the twenty-fourhour.

Frei's success lies in the fact that from the very beginning of his training he was a real *student*. He was not in a hurry to get through with each problem but followed it carefully, step by step. He "niggered" at every possible opportunity and had worked on two former Paris Prizes. This experience, naturally, was a great asset.

Waldorf and Gnerre have also been trained along the same lines and have "niggered" on Paris Prizes. They were therefore well able to handle their *projets* which speak for them as real students.

A Grand Prix or a Paris Prize is not child's play and it may surprise you to learn that as much hard work, study, and effort is required here as in any competition in the so-called "practical" field. Any Grand Prix or Paris Prize can be pulled apart, but did you ever try to put one together?

In closing this part of the discussion, I want to give a few pertinent tips to men preparing themselves for the Paris Prize. (1) Work. (2) Analyze the "24hours" and do plenty of them; this means the study of plan. (3) Do plenty of "36-hours" which is just more plan. (4) Do not use the *Concours* plates of the French school to copy from—study them. M. Laloux, in criticizing his *Grand Prix* men, discouraged this but suggested that they study only things already built. (5) Render as simply as possible; this sounds easy but is not. (6) Do simple *poché* that means something not a mass of dots and dashes. (7) Use mosaic *if it means something*. (8) More thinking—fewer lines.

#### THE PROGRAM

The program for the 26th Paris Prize Competition called for the design of "A National Banking Board," a subject suggested by the serious banking and general financial crisis through which the country passed shortly before it was written. It was assumed by the committee that the National Government had come to realize the importance to the Nation of the "creation, at the earliest possible moment, of a National Board of Control of all Banks, Mortgage Companies, Stock and Commodity Exchanges, etc., throughout the country."

The assumption was made that the necessary legislation was passed, authorizing the establishment of a Board of 100 members, to meet at stated intervals, and an Executive Committee of 21 members to be in session at all times. Frequent conventions of bankers and other financiers were to be taken care of and a large establishment for the engraving of bonds together with a Mint and a Museum of Coins and Medals were to be included.

The site was given as facing a wide Avenue with less important avenues on the other three sides. It was to be

level, rectangular, and not to exceed 800 feet by 1200 feet. Either side of the lot could face the Avenue.

The composition was to include (1) The Board Building, (2) The Auditorium, (3) The Museum, and (4) The Mint and Engraving Works.

The Board Building was to be monumental and was to house the Chairman and Members of the Executive Committee—each one to have a suite of offices and facilities. It was also to include a living apartment for the Chairman, a small Auditorium for Board meetings to seat 150 persons, a Board Room to seat 25 with anterooms, single offices for the 79 members not on the Executive Committee, a Public Reception Room and Administration Offices of the Superintendent of Buildings, a Restaurant or Banquet Hall for the Board with accessories, and all other necessary dependencies.

The Auditorium for large conventions was to seat 3000 on the ground floor and 100 visitors in galleries; Stage to accommodate 200. In connection with the auditorium were to be 8 or 10 committee rooms to seat 50, two or three of them to seat 100, as well as all the usual dependencies. Circulation was to be very liberal with a large monumental entrance lobby and vestibule with stairs to a large Foyer. A Banquet Hall with all accessory services was also called for.

The Museum was to exhibit paper money, bonds, coins, etc., and could be on one or more floors. There were to be liberal dependencies for public use, a Curator's Suite, a small Lecture Hall, and, in the basement, a small Public Restaurant, Vaults, Guards' Quarters, etc.

The Mint and Engraving Works was to be dignified yet to express its practical use through its architectural treatment. Visitors' Balconies were to be provided for the various departments. Other requirements included Administrative Offices, Receiving and Shipping Departments, Storage Vaults, Employees' Rest Rooms and Lockers, Guards' Living Quarters, Employees' Inspection Rooms, Employees' Dining Room to seat 300, Garage for 20 armored cars, etc. The area to be covered by this plant was to be about one third of the property.

The Jury of Award consisted of: Joseph H. Freedlander, Chairman; Arthur Ware, Ely Jacques Kahn, Chester H. Aldrich, Louis Ayres, John W. Cross, Electus D. Litchfield, Henry Richardson Shepley, Egerton Swartwout.

An informal report on the judgment by Arthur Ware comments on the drawings submitted as being the best in many years. All of the eight *projets* in the finals showed careful study and were thoroughly well arrived.

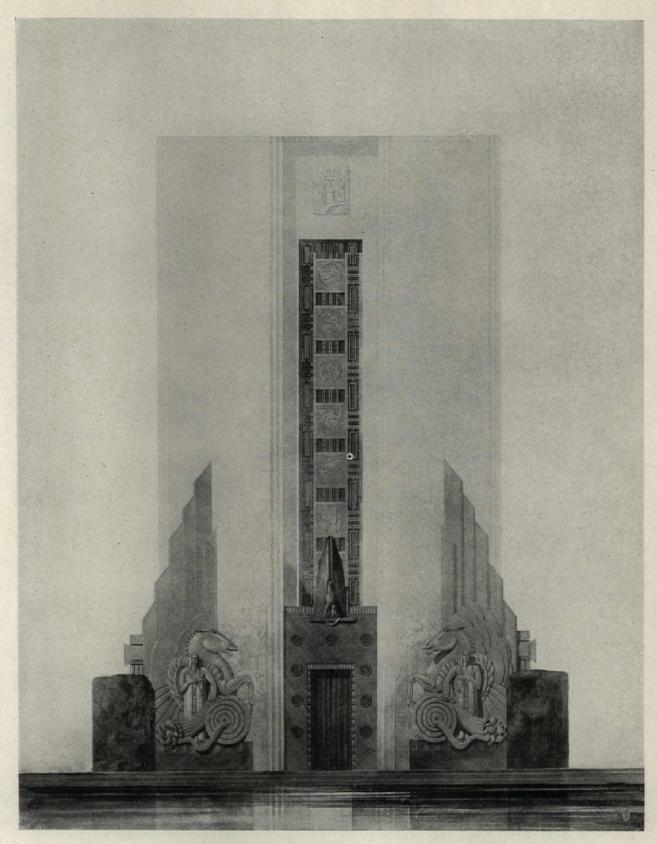
Of the winning design, which was chosen unanimously, Mr. Ware said, "This plan was an admirable solution of the program, the building for the Banking Board being placed on the principal axis, the Museum and Auditorium buildings flanking either side of the Court of Honor, with the Mint and Engraving Plant at the rear of the property, well expressed and occupying the proper area in relation to the entire plan. The plan read easily, the circulation was liberal and direct, all parts of the plan were carefully studied and the entire presentation of plans, elevation, section, and detail were equally well arrived."

In addition to complimenting the second and third prize designs the jury awarded Fourth place and First Medal to L. W. Smith of Princeton, Pupil of Jean Labatut and recommended that the students placed second, third, and fourth be given the additional scholarship, without the purse, which would admit them to the First Class of the Ecole des Beaux Arts.

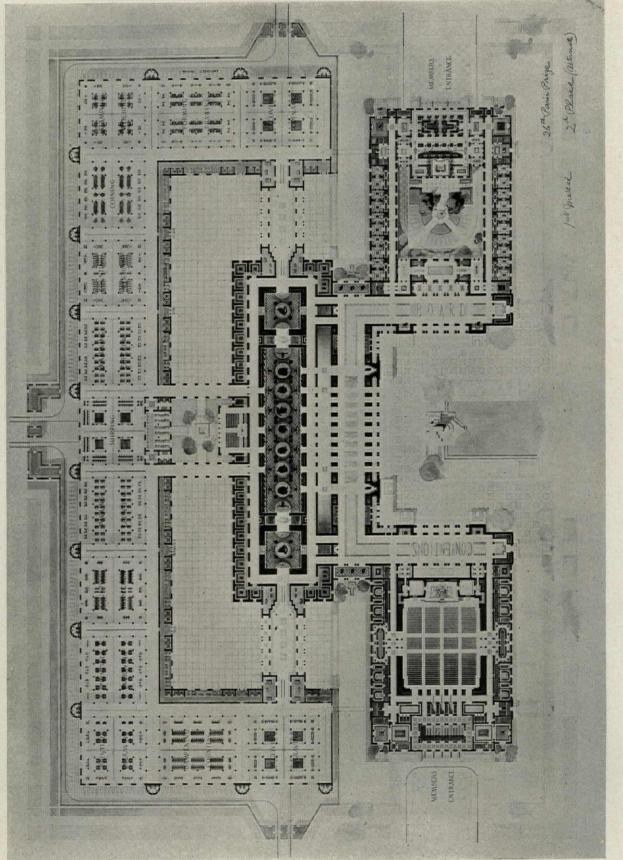
NATIONAL BANKING BOAR

ENTERED FROM NEW YORK UNIVERSITY, PUPIL OF LLOYD MORGAN IN THE COMPETITION FOR THE 26TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS ELEVATION AND SECTION, WINNING DESIGN FOR "A NATIONAL BANKING BOARD IN WASHINGTON," BY GEORGE FREI

### THE TWENTY-SIXTH PARIS PRIZE



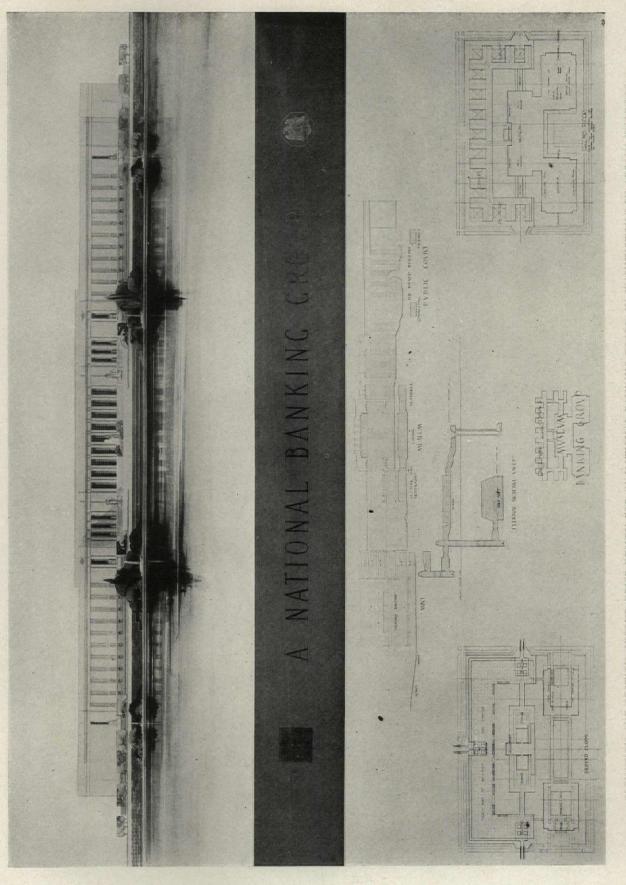
DETAIL, WINNING DESIGN FOR "A NATIONAL BANKING BOARD IN WASHINGTON," BY GEORGE FREI COMPETITION FOR THE 26TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS



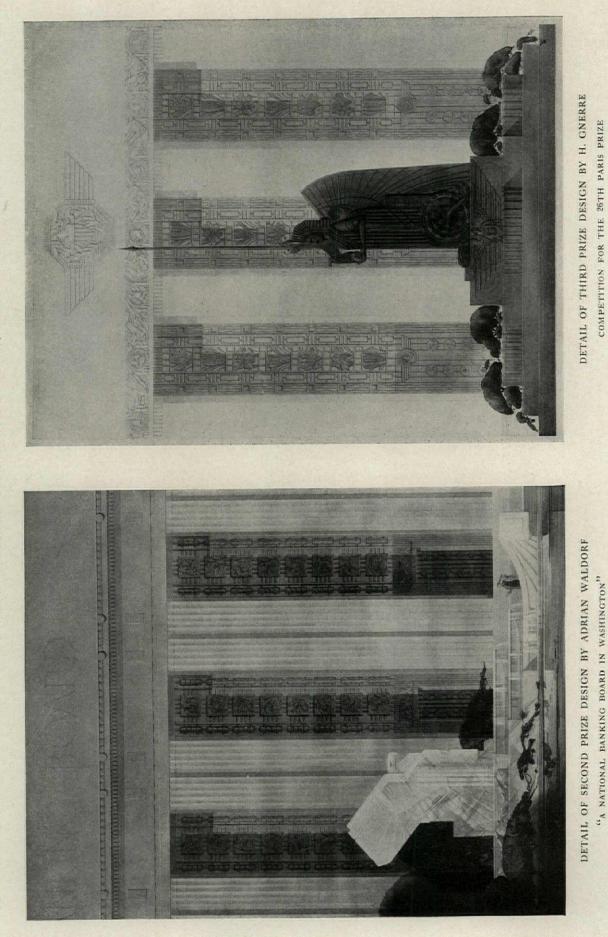
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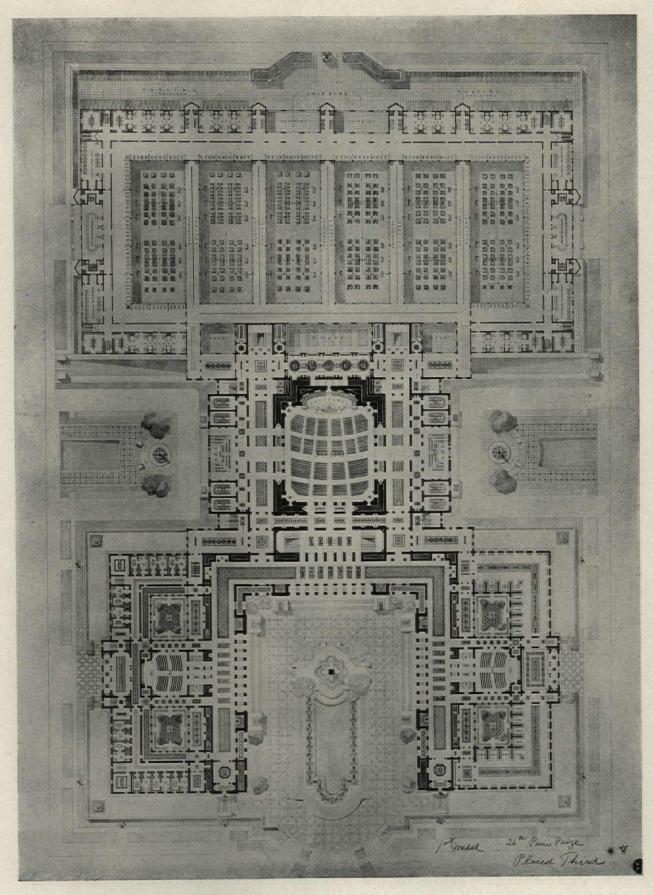
PENCIL POINTS FOR

PLAN, SECOND PRIZE DESIGN FOR "A NATIONAL BANKING BOARD," BY ADRIAN WALDORF-NEW YORK UNIVERSITY, PUPIL OF LLOYD MORGAN COMPETITION FOR THE 26TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS



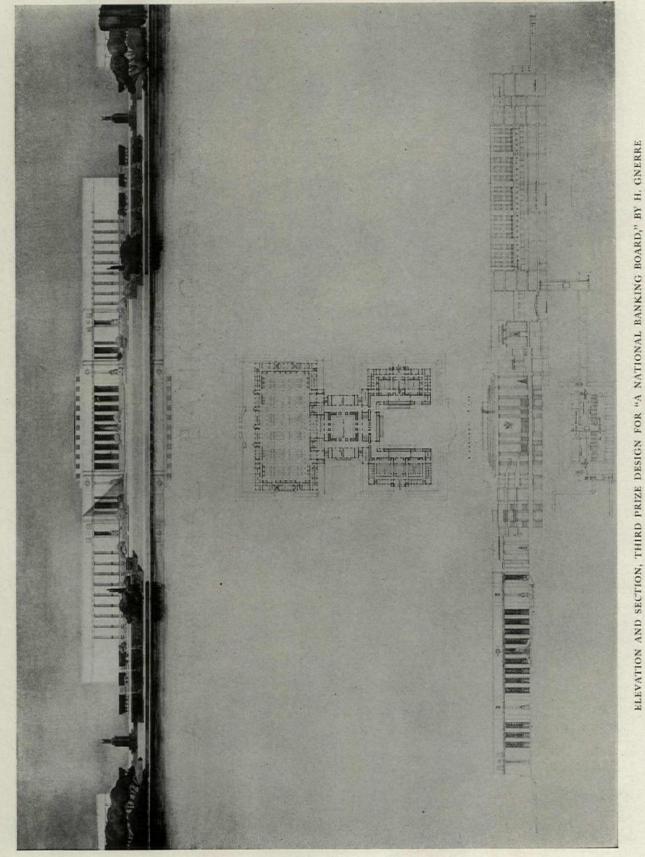
ELEVATION AND SECTION, SECOND PRIZE DESIGN FOR "A NATIONAL BANKING BOARD IN WASHINGTON," BY ADRIAN WALDORF





PLAN, THIRD PRIZE, "A NATIONAL BANKING BOARD," BY H. GNERRE-N.Y.A.C., PUPIL OF LLOYD MORGAN COMPETITION FOR THE 26TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS

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ENTERED FROM NEW YORK ARCHITECTURAL CLUB, PUPIL OF LLOYD MORGAN IN THE COMPETITION FOR THE 26TH PARIS PRIZE OF THE

SOCIETY OF BEAUX-ARTS ARCHITECTS

PENCIL POINTS FOR SEPTEMBER, 1933

## Dr. Eugene Gustave Steinhof

### A Forerunner in Architectural Education

### By Ellis F. Lawrence

The education of architects and artists has of late been receiving much attention and no little criticism. Educators are making concessions to the so-called modern movement. New experiments have been undertaken at home and abroad, and have caused much debate. The psychologist is coming more and more into the picture as he comes to understand the mysteries of personality. The Art world is looking for creative genius and truthful self-expression, rather than brilliant technique. A period of seeking for elemental essentials is here. Old methodology, challenged, is on the defensive.

Although the Bauhaus of Walter Gropius is closed by the Nazis, Frank Lloyd Wright throws down the gauntlet to the Beaux-Arts Institute in his newly organized Talliesin Fellowship.

Among the leaders in the new approach is Dr. Eugene Steinhof of Vienna, who has been lecturing and teaching in this country during the past year. It was the writer's privilege to be associated with Dr. Steinhof during the summer of 1932, in the Carnegie Art Center at the University of Oregon, conducted by the Committee on Education of the American Institute of Architects, from a grant made by the Carnegie Corporation. Therefore, what is written here comes from personal observations and contacts.

This all-too-short article is attempted in the belief that there are those with open minds who seek new paths for architectural education and who perhaps see danger in our highly competitive methods, a suppression of the creative urge in our super-courses in technique, a failure to humanize and socialize our training. If it interests such enough to make them wish to know and understand more of Dr. Steinhof's work, that what is sound in it may find its way into our system, then it will have served its purpose.

Dr. Steinhof, associate of Hoffman and Czech, came to America under the auspices of the Institute of International Education. Their literature tells us that he is an architect, sculptor, artist, stage designer, and educator. Educated at the University of Vienna, the Sorbonne in Paris, and the Academy of Arts in Vienna, he has been Director of the National School of Decorative Art in Vienna since 1923. His record is imposing. He served in 1926 as the Austrian member of the International Jury of the League of Nations at Geneva, which made the award in the competition for the plans of the Palace of Nations. That same year he organized the Exposition of French Modern Art in Vienna, for which he was made a Knight of the Legion of Honor.

He acted as official interpreter of the International Congress of the Theatre in Paris in 1928. The following year he spent much time in South America at the Universities of Montevideo, Buenos Aires, Cordoba, San Paolo, and the Academy of the Fine Arts of Rio de Janeiro, as a result of which he was made honorary pro-

fessor at the University of Montevideo and received many other honors.

A mong the books he has written, which should interest architects espe-



DR. EUGENE G. STEINHOF Pencil portrait by the author

architects especially, is "The Problem of Space in Architecture, Sculpture and Painting." He received the Gold Medal for Stage Decoration at the 1930 International at Barcelona. Much more could be written of the achievements of this versatile man, but more pertinent to this article are his philosophy of teaching and his personality.

He is a kindly, well-groomed man, with ready courtesy and much tolerance. He readily wins confidence and friends. He is positive, but tactful and wise. He is not controversial, but gives assurance of deep convictions. Widely traveled and a keen observer, he is a rare conversationalist. He is well informed and a deep student of men and world affairs. His is a ready wit. One of his gifts, if not the outstanding one, is an understanding of human nature and a respect for every individuality as the divine gift. It is this which makes him a conscientious teacher while his ripe knowledge and his profound humanity make him, also, a noteworthy and inspirational teacher.

One of the members of the staff at Oregon wrote, recently, the following:

"I cannot emphasize too greatly the impression which I received from Steinhof. I had the fortune to hear five of his lectures before I went in July. Now I can see that he has left his mark and something important and vital added to the attitude of drawing, modeling and the industrial arts. Certainly he was a stirring, warm, hu-man, clear-visioned intellect. I think his coming was timely. It was in many ways a delineation of modern creative art aims, dissociated from schools and isms, a philosophy of simplicity so simple that it was profoundand in many ways it confirmed and clarified aims and attitudes of past experience and set them in order and in light. I was able to trace creative impulses from my own childhood-things which I had vaguely understood, aversions, desires, obstacles. I was glad to come in contact with my childhood again, glad to return to a new naturalism and to see his antipathy for eclecticism in a society deserving to release and crystallize its own art impulses."

Yes, like so many simple truths, those elucidated by Steinhof are profound and basic. He makes articulate and understandable what many of the more progressive of our educators have been feeling. He carries one back into simple, childlike self-expression, untrammeled and unspoilt by too much knowledge and technical skill. He sees this creative urge as the basis of Art expression. Once he frees his student from inhibition and restraint, leads him to the fountain of eternal youth, experiences with him the joy of Art, then, and only then, does he stress technique or introduce historical knowledge. He reverses existing processes in education, which give technique and theory before application. If he values this gift of the creative urge most highly, he also recognizes that, depending on the artist's culture and skill and his ability to express clearly the essence of his own times, his work is shallow or deep, legible or illegible, plagiarism or real art.

Art to Dr. Steinhof "is no longer a question of taste alone. Art is the encounter; on the one hand, with a world philosophy; on the other, with the intellectual and material necessities of mankind—making use of that material by which the artist wishes to bring all this before our eyes and make it apparent to our senses. All the complexities of endowment which are necessary for that, go to the formation of the artist's talent. And these endowments are partly the will to create, partly the psychic qualities of the artist, partly his own individuality." To this individuality, he pays great attention. He sees its three component parts as "The Inner World, always modified by the Outer Wo.ld and by the Racial Mixture." It is interesting to know that he has a profound faith in the individuality of American youth.

He says, "We must know what we need, for that which has come down to us and lies before our eyes, is absolute confusion"; and again, "Therefore, it is necessary that those of us who feel called upon to pave the way to Art for our generation with enthusiasm, clarity and a firm hand, should not follow along lost trails, nor conceive of art as an individualistic dream. We must rather determine firmly and with clear intellect, what our creative artistic needs demand, needs which correspond with our times and with our generation."

This indicates pointedly that while the individual is the medium of art expression, he cannot be separated from the now and here, if Art of the time is to be vital.

He asks, "How do we attain our own styles?" and answers, "Not to confuse æsthetics with life; and to teach this. Not to confuse art instruction with Art, and to teach this. The starting point is the goal and the object itself and its organization by its space, its surface, and its color. The former æsthetic teaching traced the underlying principle of art from a technic to an idea. In contrast to this, the modern teaching develops: (1) from the object to its organization: (2) from the idea of the object to its representation in the material."

The above quotations are from an address made by Dr. Steinhof, called, "The History of Art and of Decoration in the Light of Psychology," given January 28th, 1932, to the New York Regional Art Council.

This does not adequately express the depth of Dr. Steinhof's ideals of Art, by any means, but it at least introduces us to it. His working philosophy, tied closely to psychology, develops unto a series of clarifying precepts. These will be brought out as his methodology is discussed.

To him, one of the "greatest evils" in our present system of education, is the way History of Art is taught. He does not believe in the historical, chronological, and ethnological approach for the artist. Rather should the modern artist ask of the artist of old—"What were you? What did you want to accomplish? What have you accomplished?" "It is this that will make one creative artists of all times; that will clarify the ways and means and mysteries of Art; that will create a proper sense of values."

In his own words, his aim in teaching history of art, is as follows:

- "1. It should show the relation of the philosophy of life, the world philosophy of a certain epoch, with the expression of its specific forms in art.
- It should show the connection of epoch with psyche; the interpretation of individuality, modified by epoch.
- 3. It should reveal the creative elements in the forms of art of the various epochs of art.
- 4. It should point out the connection between the different forms of art and the creative tools."

So he stimulates creative power and determines the imperishable "Constants of Truth," rather than stresses mere æsthetic appreciation or chronology. He blames the way Art History is now taught for the "open scandal of copying architectural styles of the past and present." He does not formalize the teaching of history, an occasional lecture perhaps, but rather it comes along the way. He applies history to existing problems, with discussions of material, of tools, and of results.

Copying nature, the model, or the cast is to him a dampening of the ardor of the designer, and creative selfexpression. When he uses a living model, it is a moving model. Faulty proportions, if they are truly interpretive, are to be preferred to academic correctness. Mood is more important than the reality. Nudity may be purity itself, or grossly vulgar in its realism. As to color, it is more a matter of the limitations of pigments than it is the color chart; more a question of space and surface, and more a question of warmth and coolness. Quality of line gives way to the meaning of line, as enclosing space. Building up surface as enclosing space is his form of modeling. Ornament is not "stuck on" to cover nakedness. Rather, it becomes the inspiring record of the souls of men. It is a matter of "personal rhythms," but never separated from the material employed. Technical knowledge is given to the student purposely, by practical means and practical suggestions only. It is a by-product of the method of experimentation, the doing of the thing, the building of the object. By association, that psychological gift develops an artistic faculty. "Everything that has been acquired by the method has become a personal experience; therefore, it remains deeply rooted in the student's mind." Steinhof's conception of the Art School (and what Art School is complete without Architecture) is based only on creative values. "It should have an artistic atmosphere which raises the level of the mediocre talent." He sees it as "center of the intellectual future of the nation."

In short, once objectives are fixed, then the problem is subjected to the standards of a fundamental psychological approach in teaching methods, rather than the onesided development of the student's talent alone. The artist developing in tune with his times becomes the functionalist, never the eclectic and the romanticist. It is personality which modern education should seek to discover and free.

Before going further into the application of his theories to the special field of architecture, it is well to mention two phases of his methodology which apply to all the plastic arts. Line must not be divorced from its primal purpose of defining space. The student, with powdered charcoal on tips of the forefingers of both left and right hands, draws simultaneously upward as the plant grows, making spontaneously a designed enclosed space. The reading of these student records, some interestingly akin to Oriental patterns, becomes to Dr. Steinhof an open book of traits, character, and ability. He is almost uncanny in the accuracy of his deductions. These drawings were, to him, documents which paved the way to an understanding of each individuality, its strength and its weakness. They divulged not only space and design sense, but showed positiveness or vacillation, frivolity or conservatism, sincerity or uncertainty. Following this are studies in black and white, and cut-outs.

Then comes the clay—used at first as enveloping surface of space, the building-up process, working from the inside to the outside. Hollow vases or vessels are made from the base upward (a method he applies also to the human figure). Here was presented the effect of light and shade with all its subtle gradations.

Certainly from many photographs of his students' work, it may be seen that marvelous results are secured. Two years of such creative work brings a startling development. Only the genius comes through our system with such unadulterated, uncontaminated artistry. We think we have done a good job if we get such results from him in four or five years. It is another proof of the wisdom of using the creative urge as the basic motivation of our art training and experimentation as the vehicle to which can be almost casually applied, technical and even cultural content.

To Dr. Steinhof, architecture cannot longer hide behind mere adaptation of the old to the new, because of new technic in traffic, lighting, manufacture of new building materials, and, above all, the new social philosophy and mode of living. Education must change accordingly. The student must find "the artistic emotion within himself; he must learn to visualize it without the verbal assistance of an intermediary."

Briefly, summarizing from Dr. Steinhof's "set-up" of an ideal school of Architecture, we find his basic premise and the steps in this educational process, about as follows:

Architecture becomes an art when its organization "is worked out in the sense of the practical, the intellectual, and the emotional requirements of life, as suggested by the constructive idea; material requirements are those which, by means of building, comply with the practical necessities of living. Intellectual requirements seek the expression of the cultural level. Emotional requirements are of all sorts; a feeling of comfort, pleasantness, etc. They progress to the artistic expression of an ideal, and finally reach the expression of a world philosophy."

Only from the combination of SPACE, COLOR and SURFACE can Architecture become an Art.

Space creates the "Wohngefuhl," the sense of habitation in our living rooms, for example. It springs from the internal. The architect must by "outward expression" record our actual space feeling.

Surface is "outward expression of plasticity." It is "the encounter of the building mass with the outer world." It is "the outward expression of the inner feeling of man."

"Color as an artistic means, enables the observer to experience space and represents the appearance of the building in light. If color is wrong, we obtain wrong space impressions."

"Space feeling" takes for granted knowledge of "space figuration." Both "can be acquired by exercises."

Every experiment, every exercise, is approached from "interior to exterior," from "inside to outside." Surface is no longer "casual design of decorated surface, but is the shell covering the global inner space of structure." As a first step, "the student is promoted to the rank of an artist or an architect. He becomes absorbed in architecture as an art and studies the technics of structure as a science." He observes Nature (crystals, etc.). He studies rooms. He sets up movable walls of light material and studies the effect, the feeling of proportion. Then comes the creative experience by way of transparent models of cellophane plates. He feels "stimulated," understands well what is expected of him, and "recognizes the goal as an attainable one."

"The student must be taught the architectural surface— (1) its appearance in light, (2) its general plastic movement, (3) its plastic ornamentation. The vase in clay is used for the first, not on the potter's wheel, but built up like a wall in architecture. The student sees with his own eyes "the correlation between the inner space and its outward plastic manifestation; its surface as the marvelous play of shades." He builds models of opaque cubes, harmonizing and arranging. He sketches his personal rhythms in relation to the materials and surfaces. He never copies, though he may study ornament of the past to secure an understanding of the creative relationship between epochs and form, and between idea and material. He learns the motions and rhythms which control and evolve ornamentation."

As to color, he "must not be introduced to the problem by copying Nature. Rather the stulent must acquire the knowledge of color as the artistic helpmate to create in unison with architectural space, depth in its various aspects." Contrasts and synchronisms are analyzed with color scales. Always the student specifically designates color, and no doubt material.

The student "enters deeply into the building purpose." He studies "the material, intellectual, and emotional requirements of life, modern living modes, of society, the collectivity, social organization, hotels, hospitals, etc." He has no stereotyped program, but prepares a narrative, if you please, "in minutest detail," of the daily life of those the structure is to accommodate, and "every movement and activity of that life." Here the student "should drop his pencil and commence to build." Without previous plan making, he expresses his conception by building the transparent model, "joining wall to wall, building cubes of space, joining space to space, room to room." He soon "learns that space and life are one. Turning the model upside down, he sees the plan," and the significance of that plan is then indeed a part of him forever. The mechanical representation of that plan comes after these models are revised and corrected.

Dr. Steinhof insists that these problems "be thought out comprehensively to the minutest technical and artistic detail. All lacunæ will thus be obviated." He calls it "freeing the young architect from the rubber eraser." The "stroke of the pencil" is no longer the starting point.

Construction is offered in the first step in the "form of empirical and practical consultation." The student "starts at once with the whole architectural problem. True architecture is in reality the fusion of idea with construction."

History of Art is offered as described above in this article.

Drawing objects created by Nature is of educational value only "if and when it leads to observation of the constructive organization of their objects and not in mere fixation of their pictorial impressions." Perspective is stressed, both lineal and parallel, to the end that spatial objects may be presented. Memory drawing is used as a quick method of developing the artistic faculty. The boldness of the modern approach calls for "more graphic presentation, showing the structure in its future realistic surroundings." The ideal method would be photography, which will be used more and more.

Intellectual and technical courses proceed parallel with the above. The first step takes a year and a half!

The second step, taking an additional two and a half years, amplifies the details of the first step with more complicated projects and more application of theory, the art by way of experimentation, the construction as a science. More penetrating studies of social units, obligations, and philosophy are resorted to.

To summarize these high spots, the method of Dr. Steinhof "induces the student to organize, as unity, the sense of architecture with the sense of the living building purpose," and by way of building "avoids the former educational lacunæ of mere drawing." It summons the student "always to create," and so his work interests him and he progresses rapidly. "Psychologically, two capacities are continuously trained; the capacity of figuration and that of association." Everything acquired "has become a personal experience and therefore remains deeply rooted in the student's mind." Creative values are of prime importance. Here is a challenge to the old system, enmeshed as it is in academic red tape, in grades, honors, honoraries, examinations, formalized classes; in theory without application; in the competitive urge as the motivating force, in place of the creative; in separating æsthetics and science and the intuition from the intellect.

Here is an analytical approach; no mechanization of that most stimulating of human attributes, self-expression; no superimposing of historic taste; no undue accentuation of the ego, as divorced from the collective group; no ignoring of the findings of the psychologists.

Here is a vision of the possible "attainment of the genuine artistic spirituality, the genuine technique, the fusion of spirit with material, the unison between art fundamentals and life functions." It is the method of a great teacher, which he has used successfully in developing the creative powers rapidly, without wasteful meanderings, and keeping them pure.

The method is interesting to the technician, but far more important to the layman is the clarifying philosophy of Dr. Steinhof, which is profound in its simplicity, and wise in its findings. Only upon such essential factors as he has crystallized can we hope to free our art education, that it may vitalize itself and find the secret of interpreting the life stream of today, without which no new style can evolve.

#### AN ANNOUNCEMENT BY THE B. A. I. D.

The Beaux-Arts Institute of Design announces with considerable satisfaction the fact that a course in design, under Professor Eugene G. Steinhof, will be started this fall. This course will be based on the extremely interesting work Professor Steinhof has already accomplished in the short course recently completed with the cooperation of New York University; likewise on similar work he has accomplished during the summer of 1932 at the University of Oregon where he was also in control of another course this summer. [The New York University course will be repeated this winter.]

Professor Steinhof's record in the Kunstgewerbe Schule, in Austria, his work with the French Government and with the South American Schools are evidences of his accomplishments in this capacity. Professor Steinhof is a sculptor, a painter, and an architect, and his instruction will give students an understanding of the principles of design not correlated to academic form nor historic precedent, but one based on the natural understanding of materials, their actual uses, and on the artistic individuality of the student. His philosophy on design can best be covered by the enthusiastic students who had the privilege of working with him and this opportunity which the Institute is enabled to offer will permit men and women to profit by an experience which may help them very much at a time when assistance in design and its relation to our life, in general, may help them to become more effective as artists in whichever field they choose to pursue their vocations.

During the coming year, the class in Architectural Ornament of the Department of Sculpture will be discontinued, inasmuch as this field will be included by Professor Steinhof.

For further information, the office of the Institute may be consulted, or through the Institute directly with Professor Steinhof.

> (Signed) B. W. MORRIS Chairman, Board of Trustees, B.A.I.D.