

PENCIL POINTS

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Number 2

A DRAFTSMAN DRAWS FOR PLEASURE

THE PASTELS OF HARRY V. K. HENDERSON

By Rayne Adams

"The great source of æsthetic appeal is and should be nature, which is always sincere, always shows for what it is without deception and ornament The emotion that arises from the contemplation of a landscape, of a sunset, of a stretch of blue sea, or even the blue dome of the sky itself, is absolutely pure, sane, neither too depressing, nor too immoderately gay. In the presence of nature one's æsthetic sensibilities become the means of refreshing and resting one instead of fatiguing one—nature smiles but never grimaces; and its smile penetrates the soul as the sunlight penetrates the eye; and if nature has its moods of sadness, they contain a touch of the infinite which enlarges the heart. The immensity of nature and of the all-enveloping heavens becomes, for those who feel it, a constant source of a certain stoical serenity."—GUYAU.

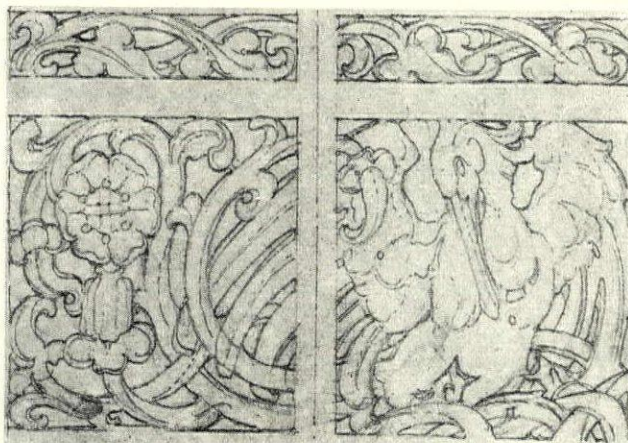
TO THOSE TO WHOM self expression in the graphic arts comes as an irrepressible desire it will not be difficult to appreciate significance of Guyau's plea. Unhappily, we live in a world filled with staves and fences which are, so often, high enough to shut out from us the sight of the stars and sky. If our modern life has brought us freedom in many ways it has also linked us to inhibitions quite as definite. In our urban aggregations we have lost sight of the fact that, fundamentally, our life,—if it were free,—would not be related only to manufactured or artificial things, but with the raw material of the out-of-doors world,—with trees and clouds and stars. Yet,—and especially in our larger cities,—how many draftsmen interested in the graphic arts find time to give themselves to self-expression outside the routine office design:—the making of elevations, details, renderings, and perspectives,—all, commonly, conforming to the more or less hide-bound canons of accepted practice? Such a designer may use in his renderings and presentation drawings, as accessory to his architecture, natural forms or elements such as vegetation, water, clouds, and earth,—but there are few indeed who do not present us with what may instantly be recognized as *architectural trees, architectural water, architectural*

clouds. Why? For the obvious reason that correctly to portray nature one needs a certain close association with her that he may learn the subtle structure of her forms and of their infinite variety under the ever changing play of light and shade. Living and working in the larger cities makes it only

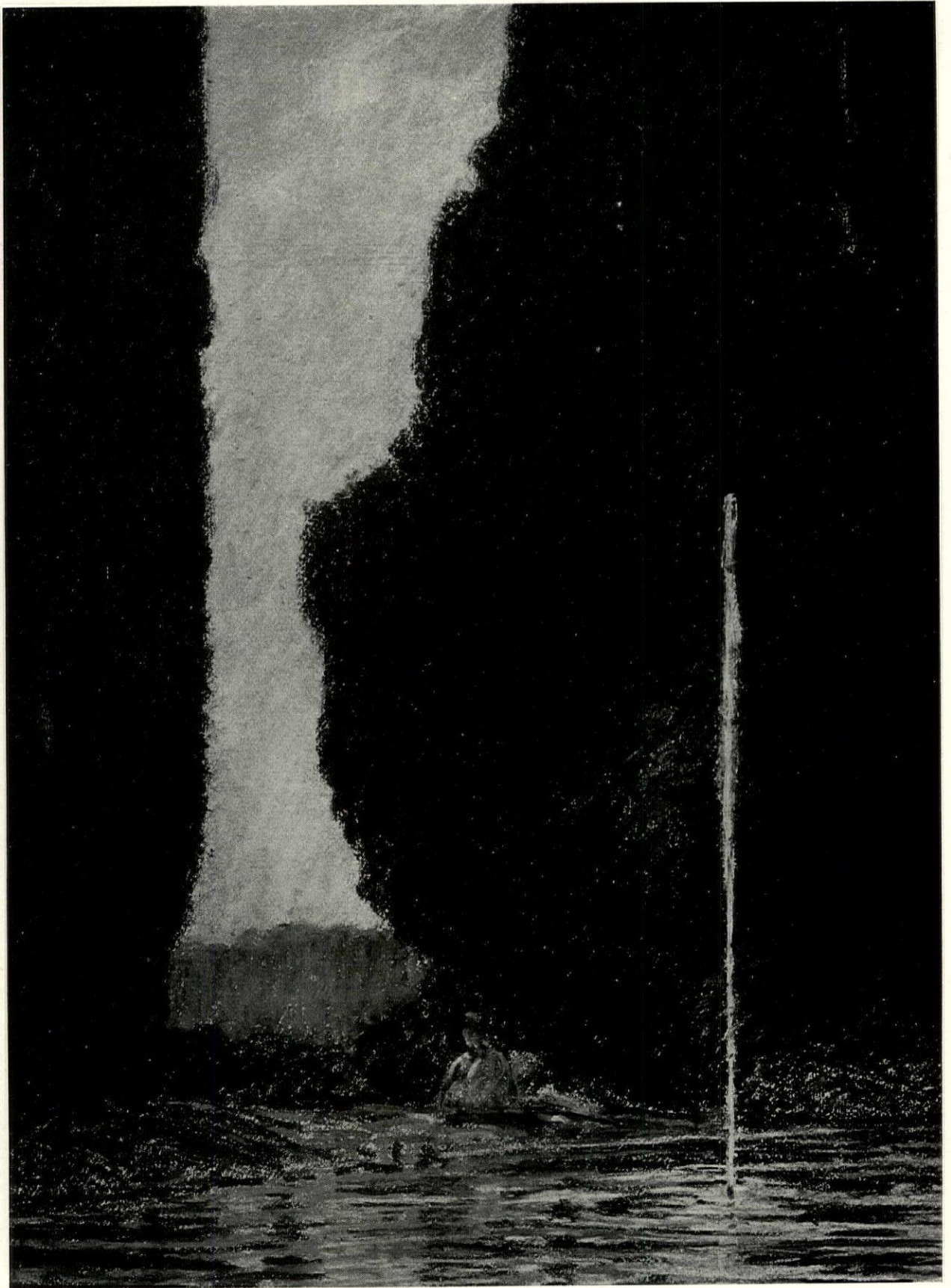
too easy for one to forget, as Guyau reminds us, that there is always a bit of blue sky above him. In the open country when night falls we see the marvellous pattern given by the blue-black sky set with stars; in the city we see, commonly, an unwished-for galaxy of electric lights. We live in a *practical* world. Plans and details must be made, drawings must be presented,—and the whole cavalcade of our economic burdens descends upon us the

instant we attempt to escape from the thraldom of our professional life. Under these conditions, how is one to give himself to the stars and clouds?

Is there any answer? Whether or not there be any solution for the general, there may be, if Destiny has so graced his fate, for the individual, and if you, as a designer, are so fortunately situated that you can, without neglect of those considerations which are the maintenance of your corporeal existence, giving it food and shelter,—if you can give yourself to the study of the out-of-doors world,—you have in your

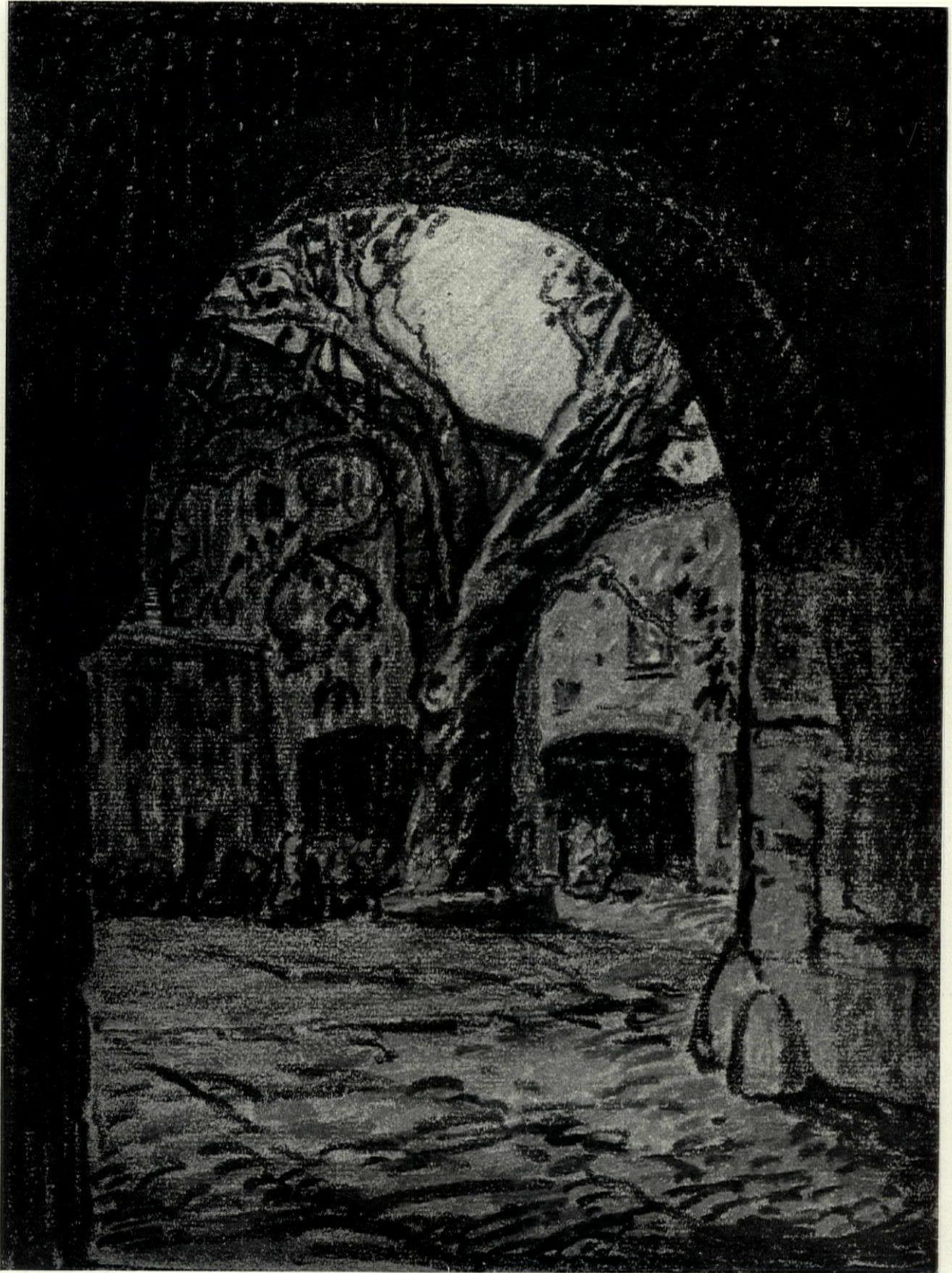


DESIGN FOR ORNAMENT BY H. V. K. HENDERSON
EXACT SIZE OF ORIGINAL DRAWING



"CYPRESS POOL"—PASTEL BY HARRY V. K. HENDERSON

DRAWN ON BROWN PAPER WITH BROWNS, GRAYS, AND OLIVE-GREENS—ORIGINAL SIZE, 14" x 18"



"OLD COURTYARD"—PASTEL BY HARRY V. K. HENDERSON

DRAWN ON BLUE PAPER WITH BLUE-BLACK, PURPLE-BROWN, AND TOUCHES OF BLUE-VIOLET—SIZE, 11" x 14"



"SUMMER CAMPERS"—PASTEL BY HARRY V. K. HENDERSON—DRAWN ON DULL VIOLET BROWN PAPER
VIOLET-BLUE FOR SHADOWS; OLIVE-GREEN TONES FOR TREES; YELLOW-GREEN FOR GRASS IN SUNLIGHT, BLUE-GREEN IN SHADOW; TOUCHES OF RED

possession the key which unlocks the door to untold satisfaction. The repercussion of this communion upon your practical daily work is bound to be fruitful and wholesome; the intimate study of the forms and lights and shades of nature is the only sane corrective to your in-door design which so often follows unconsciously upon stereotyped and academic ways.

Such leisure has been filched from the hands of Time by Mr. Henderson, and his pastels are the children of his avocation. For many years he has been most actively engaged in the work of architectural design. The record of his achievements in architecture and of his untiring activity with the pencil,—for he is an architect who *draws*,—can only be noted here, but it is necessary to call attention to the fact that he has managed, while others figuratively slept, to slip away from the humdrum of his office work into the still shades of the Hudson River valley. That valley has yielded him much, and if the pastels shown in this article evince a decorative rather than a realistic quality, nonetheless they show his deep understanding of nature.

Since "Time and the hour" is the constraining influence in the lives of most of us and since our opportunities for drawing or sketching out-of-doors are extremely limited, it is well to consider the medium which will enable you to achieve as large a measure of success as you may, during the limited time at your disposal, in catching and recording some of the complexities of light which nature presents to the draftsman or painter. Above all other media, *pastel* is without doubt the one which offers the quickest and most comprehensive means of recording the artist's impressions. Its limitations are few and its qualities manifold. Especially is pastel useful in seizing the subtle and quickly changing effects of light. If the phrase may be permitted, the draftsman can "cover the paper" with pastel more quickly than with other media.

Pastel has been recognized as a valuable medium since the early part of the 18th century and, like all human institutions, it has suffered the vicissitudes of popular appreciation and disregard. The manner of handling pastel as practiced today differs, generally, from the manner in which it was first used. "Instead of the thin rubbings characteristic of its early practitioners, it shows hatchings and loadings; it imitates

oil-painting, which it has ended by resembling, whereas in the eighteenth century it was pastel which modified painting."

The technique of pastel is an important consideration and for those to whom an excursion into pastel painting appears alluring, it may be helpful to touch on the qualities and limitations of this medium.

Pastel colors,—commonly to be obtained in short pencil form, consist of pure powder, finely ground with a slight admixture of pipe-clay or gum to serve as a binder, thus making the crayon easily handled. These crayons are of two grades of hardness. Among other makes there are two of recognized merit, the Girault and the Mengs, the first being of French, the second of German manufacture. The Girault pastels

may be obtained in sets and not otherwise, whereas the Mengs pastels may be purchased separately. Generally speaking the soft pastels will be found more serviceable, especially for rapid work.

As for the number of pastel crayons which should compose the palette, that is, as in the case of oils or water colors, a variable and individual affair. With oils, of course, as with water colors, the mixing of pure colors is easily done; with pastel such mixing is not possible. The "mixing" of pastel colors presents peculiar difficulties and limitations. It is therefore advisable to use a palette with sufficient range of colors in order that the varying shades may be applied independently. "Mixing" in pastel

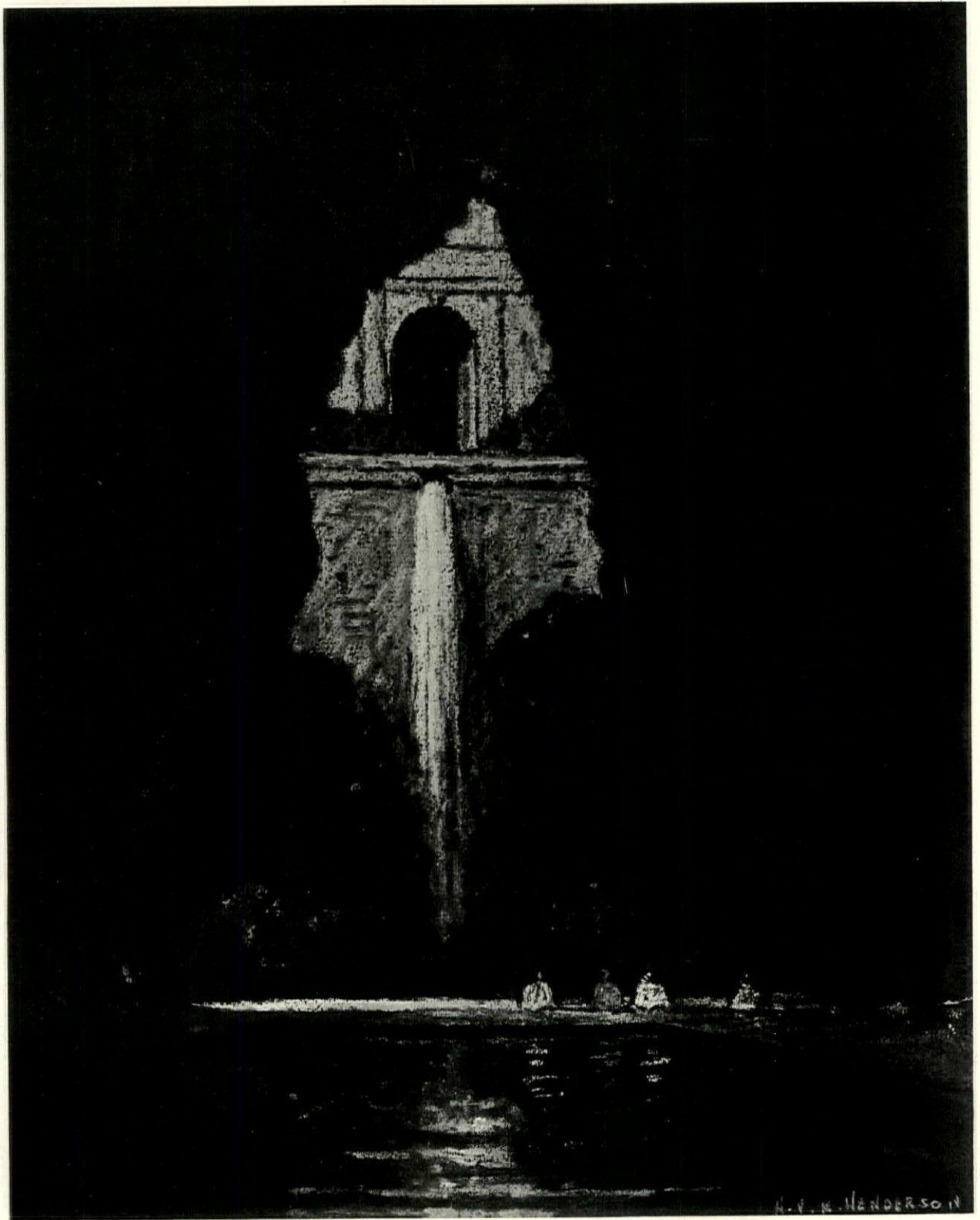
work is obtained by the juxtaposition of the different pastel colors, or by "rubbing" two or more colors. The latter process, of course, invites a smoothed-out texture of the pastel and this may be contrary to the effect desired. Such smoothing out of colors takes away inevitably from the freshness and boldness of the work.

With respect to the kind of paper to be used for pastel work it may safely be asserted that white paper is rarely satisfactory; the paper must be tinted or colored. It must, of course, have sufficient "tooth" to hold the pastel particles. Many suitable papers are sold commercially, and the choice as to those most desirable must depend largely upon individual experience. It may be useful, however, to note that those papers made by Canson and Montgolfier, may be recommended. Darker toned papers will be found generally to give greater satisfaction than lighter,



ORNAMENT DESIGN BY H. V. K. HENDERSON
EXACT SIZE OF ORIGINAL DRAWING

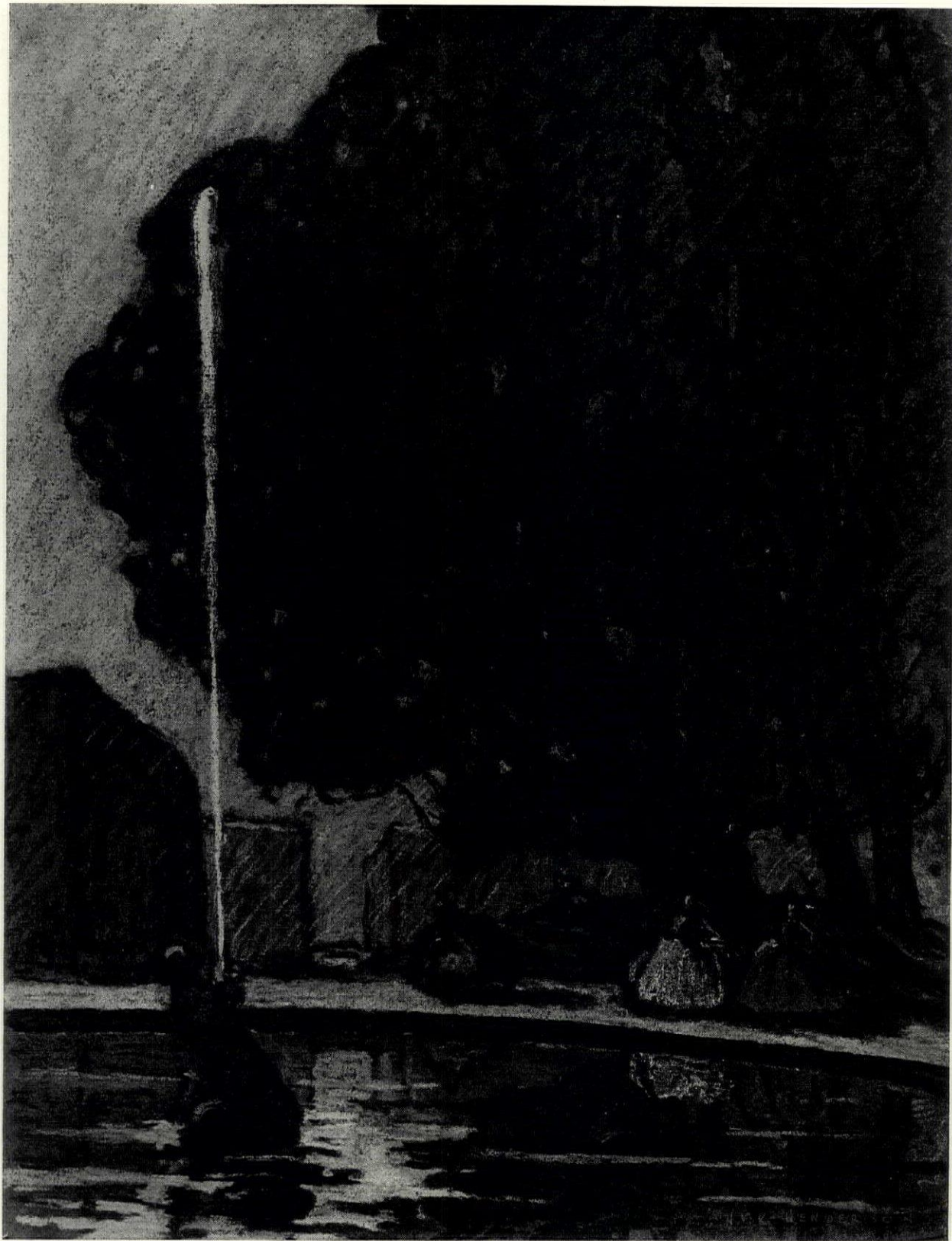
PENCIL POINTS



"FANTASIE—VILLA D'ESTE"—PASTEL BY HARRY V. K. HENDERSON

DRAWN ON BLACK PAPER WITH BLACKS, DEEP PURPLE, PURPLE-GRAY, AND ORANGE; TOUCHES OF GREEN

A DRAFTSMAN DRAWS FOR PLEASURE

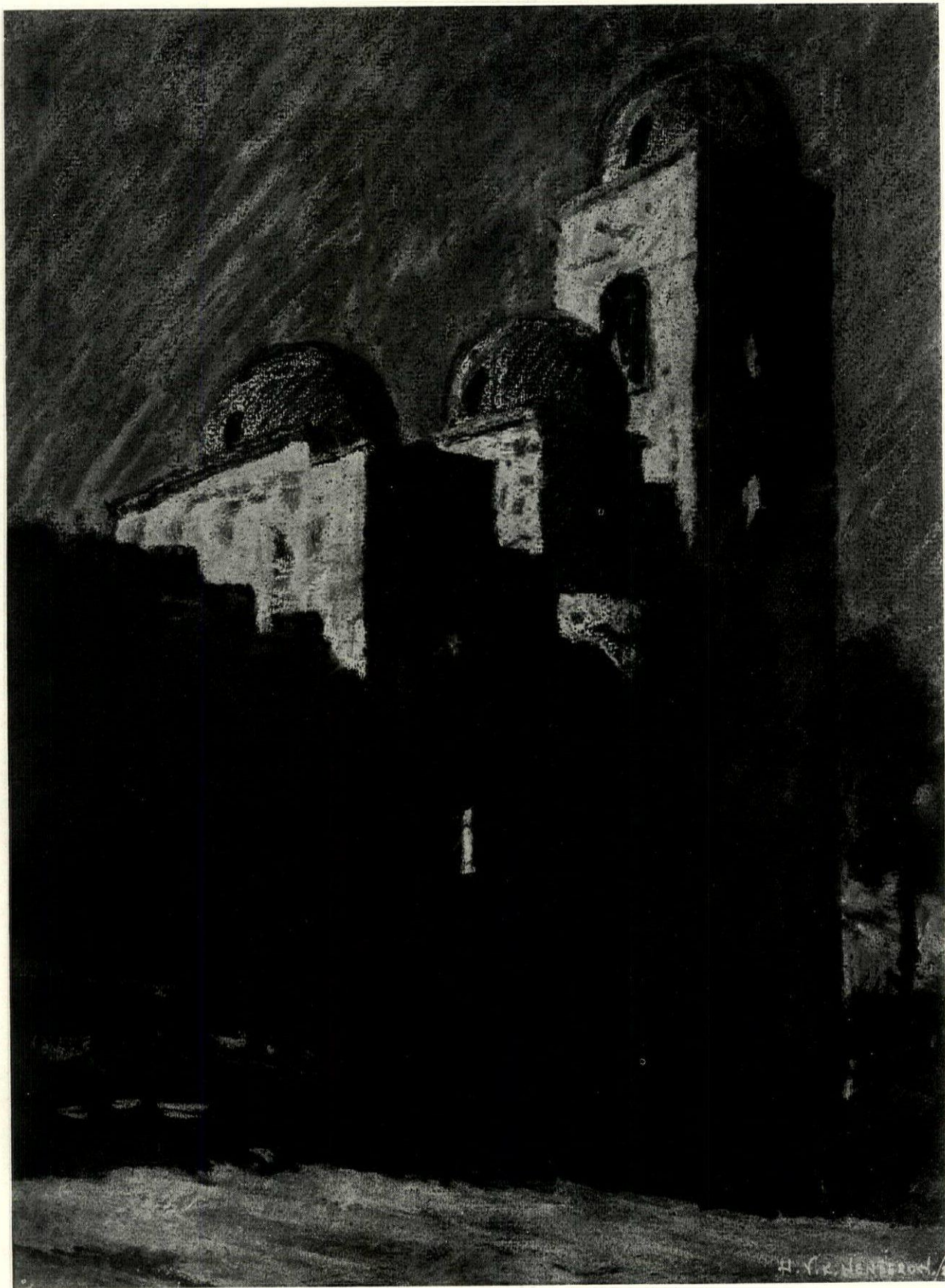


"A TRITON AND SOME LADIES"—PASTEL BY HARRY V. K. HENDERSON

DRAWN ON BLUE PAPER WITH BLUE-BLACK, VIOLET, BLUE, AND BLUE-GREEN, WITH TOUCHES OF OCHRE ON FIGURES

Original size, 10½" x 14¼"

PENCIL POINTS

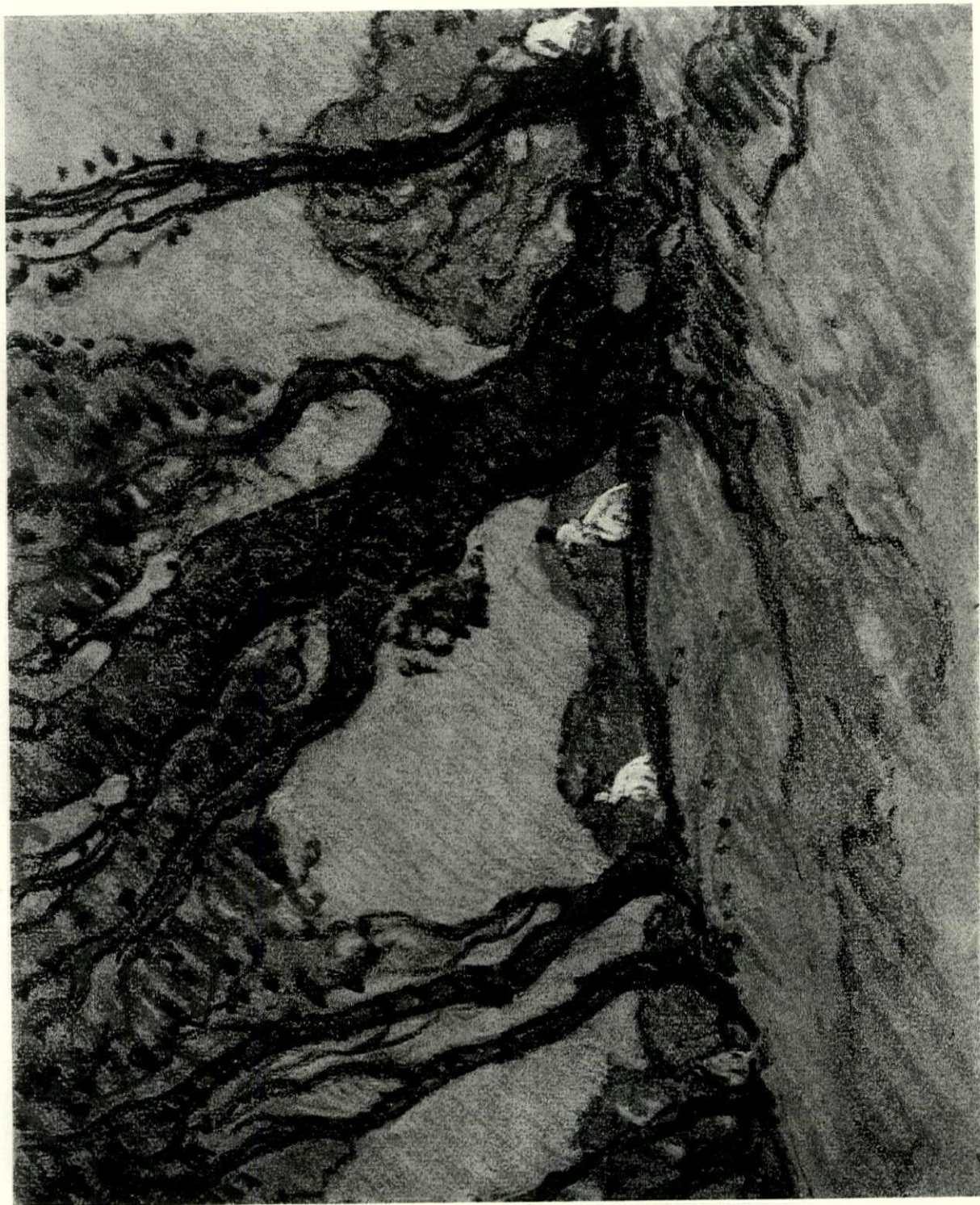


"CHURCH OF ST. JOHN THE HERMIT, PALERMO—MOONLIGHT"—PASTEL BY HARRY V. K. HENDERSON
DRAWN ON BLACK PAPER WITH DEEP BLUES, GREENS, AND BLACK—ORIGINAL SIZE, 10" x 13½"

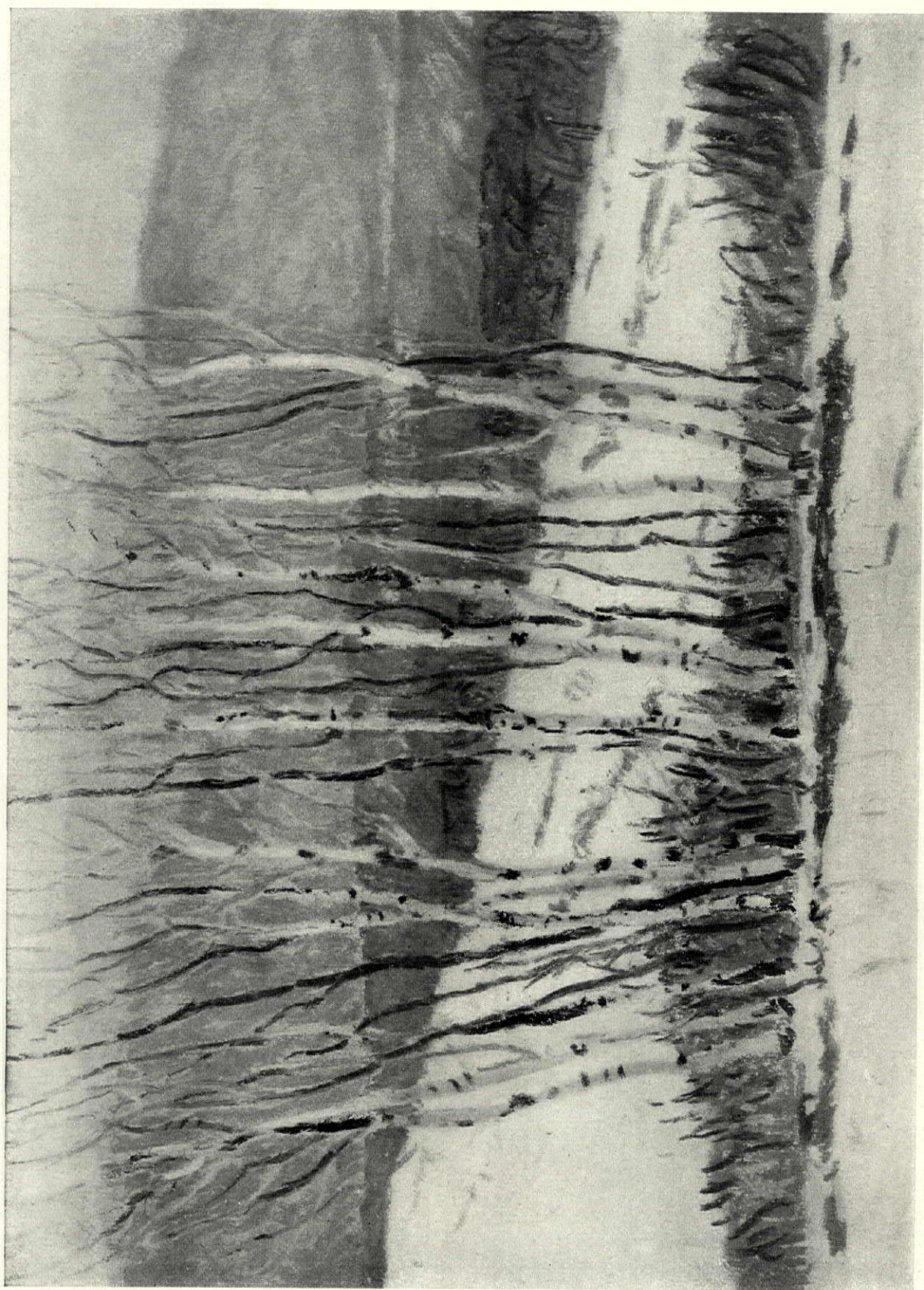
A DRAFTSMAN DRAWS FOR PLEASURE



"GOSSIPS"—PASTEL BY HARRY V. K. HENDERSON—DRAWN ON DARK GREEN PAPER
OCHRE FOR LIGHTS ON WALL, BLUE AND VIOLET FOR FOREGROUND DARKS, SKY IN LIGHT TINTS MINGLED TOGETHER



"THE KNOLL"—PASTEL BY HARRY V. K. HENDERSON—DRAWN ON VIOLET-GRAY PAPER
GRAY FOR SKY, BLACK FOR OUTLINES AND TREES, BLUE-VIOLET FOR FOLIAGE AND SHADOWS, GREEN FOR GRASS, FIGURES GRAY AND GREEN



"BIRCHES"—PASTEL BY HARRY V. K. HENDERSON—DRAWN ON DARK FLESH-COLORED PAPER

BLUES IN DISTANCE; DELICATE WARM AND COOL WHITES FOR SNOW; PURPLE-BROWN AND OCHRE FOR BRUSH; PALE GREEN, BROWNS, AND GRAYS FOR TREES

but the choice of tone and color can only be determined upon by considering the paper in relation to the particular subject to be painted and the particular effect sought. Perhaps, among pastellists, the medium brown tones are those most used.

The handling of pastel, like the handling of all media, is an individual affair. There are no rules. Nevertheless it is fitting to note, without any pretense to dogma, that it is advisable, especially in the recording of the fleeting expressions of nature, to work with a broad, fat line. In the Henderson pastels shown, a broad line, usually a quarter of an inch thick, is used. The very width of the line gives a sense of freedom; it is impossible to be "tight" if your line permits wide variations of interpretation.

As a practical suggestion it may be noted also that a serviceable size of paper for out-of-door work is, roughly, 10 inches by 15 inches. The paper may be strapped to the cover of a portfolio or other suitable frame by the simple expedient of broad elastic bands securing two edges of the paper. It is highly advisable, when the pastel is finished, to protect it by covering it with glazed or waxed paper held firmly along one edge, to prevent rubbing. Rubbing is the one imminent danger; it is like the sword of Damocles, ready on the instant to work its irreparable damage.

When one comes to the actual application of pastel he is confronted by a difficulty. Vauthier puts it thus: "As a fact, the execution most in favor in the eighteenth century, the truly classic formula, was the most rational. The pastel was thinly rubbed and not loaded. Nowadays it is loaded, and made heavy by a system of hatching which, though not without charm, is imprudent and shows a lack of foresight. At a distance, the pastel has the plastery appearance of an oil-painting on a very absorbent canvas. It is true that the material is thus left more intact than when pastel is rubbed on. It offers particles of powder to the light without crushing them, and as each molecule reflects its neighbor, the pastel thus loaded presents all the brightness and freshness proper to it. But this freshness is won at the expense of durability. The artist is confronted always with the same old difficulty."

The peculiar quality of pastel, touched upon by Vauthier, regarding the effect of light upon the particles of pastel, marks the serious limitation of pastel work. Pastel rarely gives that feeling of depth to shadows which is obtainable with oil color or even with water color although the proper selection of paper and correct technical handling of the pastel colors will permit the obtaining of depth. High-lights and lighted surfaces it suggests with an almost unerring fidelity. It is not within the province of this article to deal with the physical laws which account for this difference, but the difference may be noted. To overcome this "surface" feeling, it is common practice to place the pastel under glass; the glass hav-

ing a reflecting power which the pastel lacks, gives the pastel deeper values and a more veridical atmospheric quality.

This limitation is perhaps the only serious one which pastel has. That which is frequently described as a serious limitation, namely, the fragility of pastel, —the danger of its being damaged by rubbing, since the particles cannot be "fixed", seems less important. Still it is true that, compared with other media, pastel is somewhat of a frail angel from heaven; it needs glass to protect it. Attempts have been made to find a suitable method of fixing pastel, but the upshot of all this investigation is: Don't fix pastel. The application of the common fixitifs, such as are used for pencil and charcoal drawings, brings ruin and dismay in its train. The colors change in value and tone, the freshness disappears, and what was a charming image of light and grace is like to become a sullen mass of agglutinated chalk.

In the pastel paintings by Mr. Henderson it will be at once evident that those reproduced in black and white are presented under a great disadvantage. Unhappily we live in an age in which the mechanical science of printing has not yet reached that state of perfection which permits, as some day it doubtless will permit, of the proper reproduction of color, under the ægis of commercial publication. Even in the instance of those pastels reproduced in color in this issue of PENCIL POINTS, due allowance must be made for a certain loss in brilliancy and changes of value from the original pastels.

To those who have been fortunate enough to see the originals of Mr. Henderson's pastels it is evident that they are all the children of an intense love of nature; they represent an earnest attempt to seize and hold, in a decorative *cadre*, the intangible something which the out-of-doors world gives to its devotees. Particularly they are studies, not so much of the forms of things, as of the effects of light and shadow. And it is the search for the proper expression of light and shade, rather than of form, which is the province of pastel.

Guyau commends to us communion with nature as opposed to the giving of ourselves too continuously to the study of the arts of man. Yet the attempt to record the impressions which nature makes upon us is one way of making evident such communion to ourselves. Guyau's lesson, I take it, is that we should not, when our pastel is completed, consider that by some strange metamorphosis we have transformed the clouds and trees into pastel particles, fixed and irrevocable. For him who feels the surging evocations brought by the transient passages of light upon cloud and tree and hill-side, there is the serene satisfaction in the thought, if he be sane enough to hold it, that the picture he has made is of absolutely no consequence compared to the vivifying effect upon

(Continued on page 110)

THE RICKER MANUSCRIPT TRANSLATIONS, VI

VIOLET-LE-DUC'S "RATIONAL DICTIONARY OF FRENCH ARCHITECTURE— FROM THE ELEVENTH TO THE SIXTEENTH CENTURY," VOLUME II.

By Thomas E. O'Donnell

THE SECOND VOLUME of Viollet-le-Duc's *Rational Dictionary of French Architecture* covers over one hundred subjects, ranging all the way from short concise descriptions of some of the minor elements of architecture, to complete and learned essays on the more important phases of French architecture from the eleventh to the sixteenth century.

The Ricker translation follows the same general arrangement: that is, the subjects come in the same sequence. The original, however, is very generously illustrated, which feature is, of course, lacking in the translation. The original illustrations are fine engravings, made from drawings, prepared by Viollet-le-Duc himself, collected through a long period of careful investigation. Throughout the work, one is impressed by the very extensive study and research carried on by this eminent French scholar.

The articles are not the usual dry descriptions and array of technical terms so generally associated with the dictionary, but they are, in most cases, human documents of the work of architects, builders, and craftsmen who were fully alive to the work that they were engaged in.

The scope of this *Dictionary* is very broad. It contains not only a complete list of the highly architectural subjects, but many items of the allied or associated arts are also given. For instance the first subject in this volume is *Liberal Arts*. Among those discussed are: grammar, rhetoric, philosophy, music, arithmetic, geometry and astronomy. The symbols representing these are found in sculptured form on the façades of mediæval church buildings, inter-

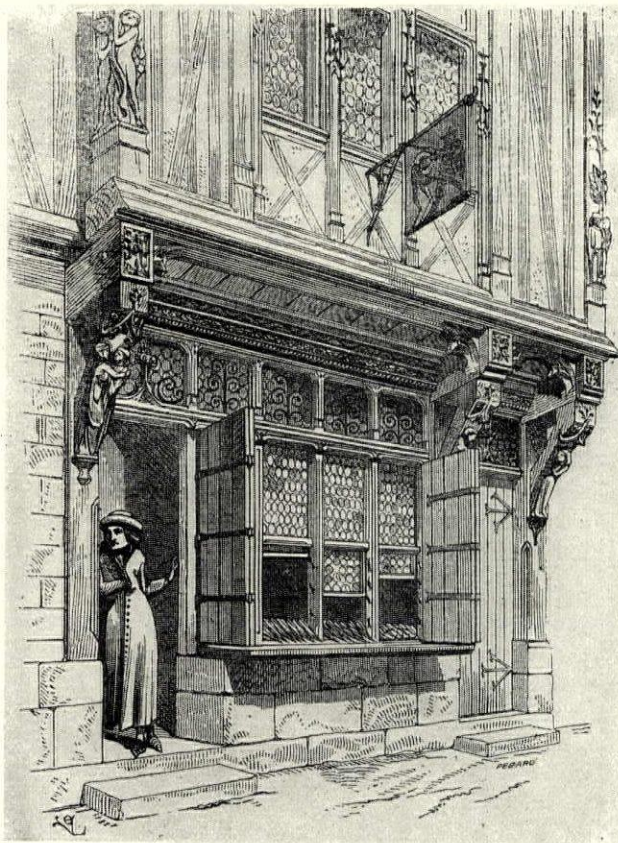
persed with the usual church symbols.

Throughout this volume there are scores of interesting articles, treated in a very brief, concise, yet thorough way. Some idea of the variety and extent of these may be gleaned from the following list of headings: balcony, balustrade, base, bosses, brick, capitals, concrete, coping, flutes, gallery, gargoyle, mortar, quoins, ridge, shingle, wainscot, etc.

Other articles, depending upon their nature, are more fully treated. The different types of structures of the Mediæval Period are discussed in detail. A typical example is the discourse on the *bourse*, or exchange. It also represents a typical early French institution as well as a type of structure. In the old cities of the North, commerce became such an important thing in the development of the country that, after the fourteenth century, merchants found it necessary to establish permanent meeting places where business could be carried on. The resulting structure we now call the *bourse*. Over a long period of development these became the large and important architectural features of every

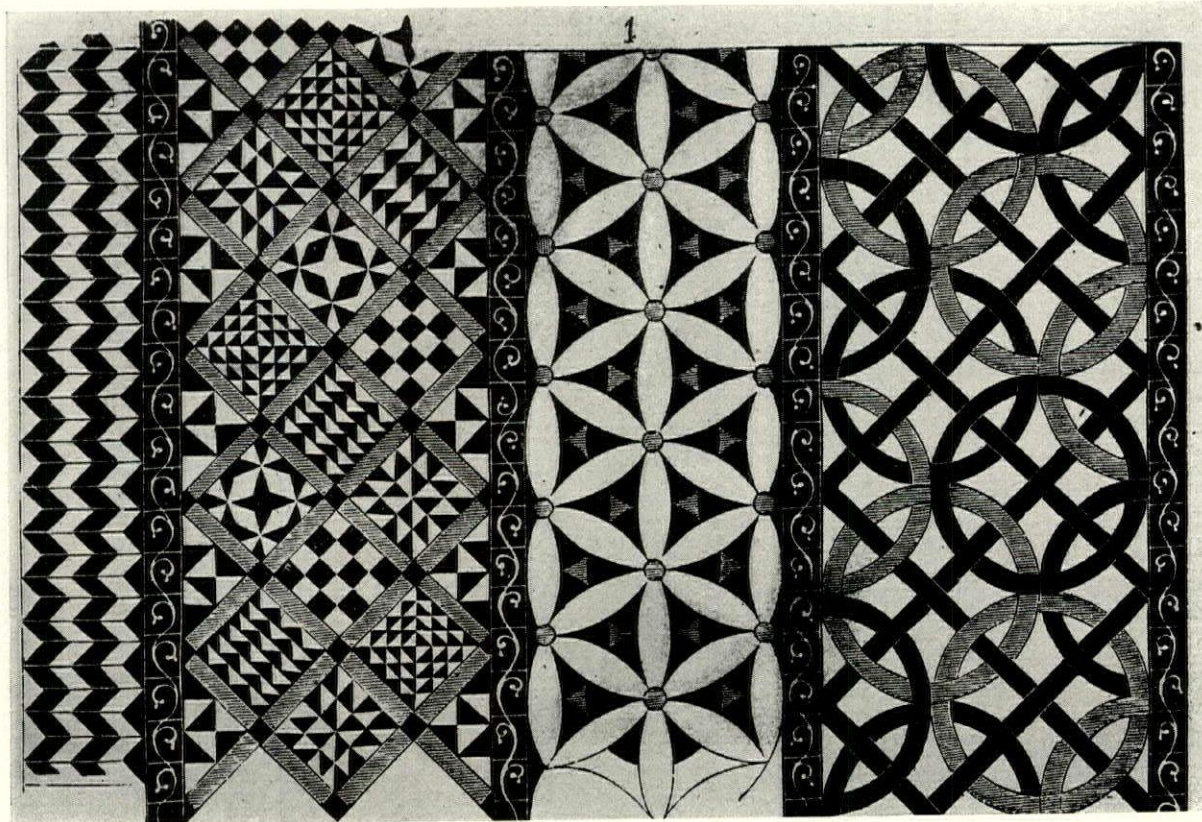
French city, in fact, often became the most beautiful public edifices. Aside from the usual buying and selling operations, the handling of money, and so on, these became stock markets, where speculative operations were carried on and were, therefore, the prototype of our modern exchanges.

One of the most interesting articles to be found in this volume is that on the shop or store. Shops have been developed in all countries, but the French mediæval types offer interesting variations. French



A TYPICAL SHOP FRONT OF THE LATE
MEDIÆVAL PERIOD

Showing half-timber construction and the use of glass in
the windows.



TERRA COTTA PAVEMENT IN THE APSIDAL CHAPEL OF CHURCH OF SAINT-DENIS

A fragment restored by Viollet-le-Duc.

shops, like those of the ancient Greeks and Romans, occupied the ground floor of houses in the cities. The window or opening of the shop front was the one essential and characteristic feature. Usually the opening extended entirely across the front of the building, except, perhaps, for a door at one side. Until the end of the fourteenth century, shops rarely had glass in the front window openings. Shutters were provided for closing up at night. Shutters, for closing down over the modern glass front, are still characteristic of French shops today. In these early shops, sales were made *through* the opening, the purchaser remaining on the street and the shopkeeper standing within his shop. The visible part of the shop interior was, in reality, a storage room with wares so placed that they would show to advantage when seen from the street. Back of this storage and display room was the workshop where many of the articles were made by the master and his apprentices. The work in these shops was usually controlled by the trade guilds.

The earliest shop fronts were of heavy construction, often a great stone arched opening, but in later times these gave way to lighter wood or half-timber construction. This made possible larger and wider openings, and resulted in a better lighted interior, also a more ornamental and attractive front. These old French shops are the prototype of our modern

store fronts, although today the shop front is generally used for display purposes only.

There is a large number of unusually interesting articles, of varying length, on the different phases and elements of religious architecture, such as altar, bench, cathedra, cathedral, chancel, chapel, Last Supper, pavement, pulpit, side aisle, tile, etc. Only a few of the more interesting can be reviewed in detail here.

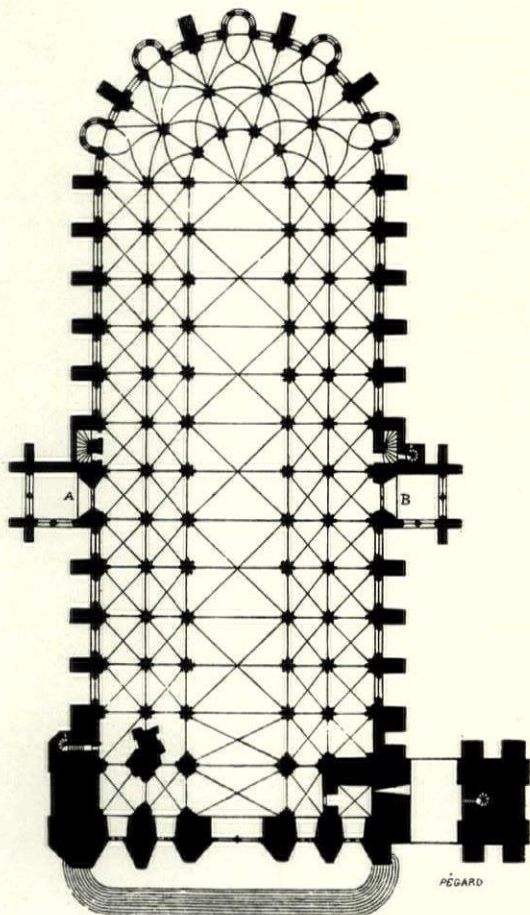
The altar, because of its significance, is discussed at some length. Thirty-two pages are given to an interesting and authoritative treatise upon what is here considered the most important architectural feature in all religious edifices. Whether a humble chapel or a glorious cathedral, the altar is the center of interest. The historic types, development, uses and meaning of the various kinds of altars, high altars, side altars, cathedral altars, altar stones, altar fixtures, veils, lighting, etc., are all fully discussed in the article. The architectural and decorative aspects of altars are especially considered. The designer in the field of ecclesiastical architecture will find here vital information which is not readily obtained elsewhere.

Another subject of interest concerning church interiors is that on the *bench* or church seat. The early churches, chapels and cathedrals prior to the XVI Century had no seats of any kind. It was not

until the time of the reformation that churches generally were fitted with pews or benches. Since that time there has been considerable advancement, although not as much in France, perhaps, as in England.

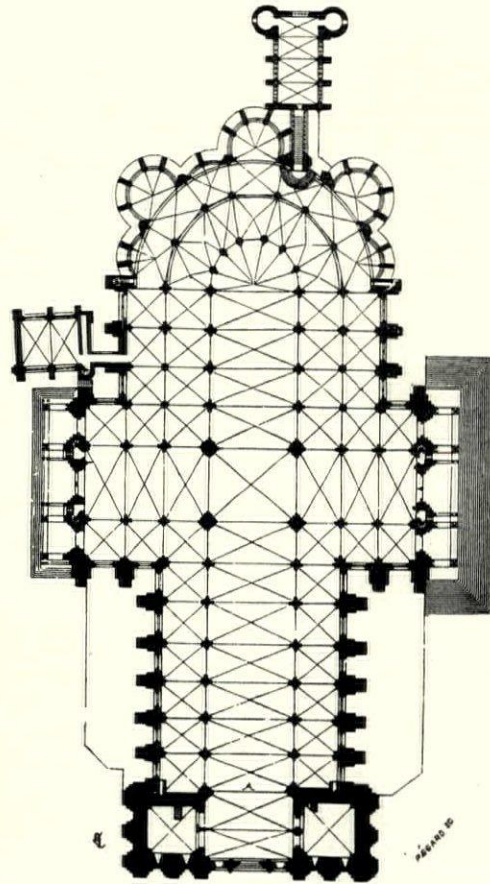
Pavements, especially the types developed and used in connection with churches of the Mediæval Period, are treated in a comprehensive article. Pavements of stone, marble and terra cotta or tile, are all considered. Viollet-le-Duc begins his article with a study of the ancient marble mosaic floors of the Romans, and then traces the influence of this ancient work, as the ideas gradually filtered into Southern France. Down to the XII Century the Roman tradition seems to have held in France.

In Northern France, there were other developments. Marbles were too expensive in the North. They had a stone of fine quality, however, and as a consequence, stone pavements were used instead of marble mosaic floors of Roman derivation. These floors were usually laid of large polished stone slabs with inlays of colored cement. Still later, colored terra cotta or tile was introduced to take the place of stone. These were, in reality, colored glazed brick, but shaped into forms now commonly spoken of as tiles. These are known to have been in use as early as



PLAN OF BOURGES CATHEDRAL

A round-ended type of plan similar to the plan of the earlier cathedral of Nôtre Dame.

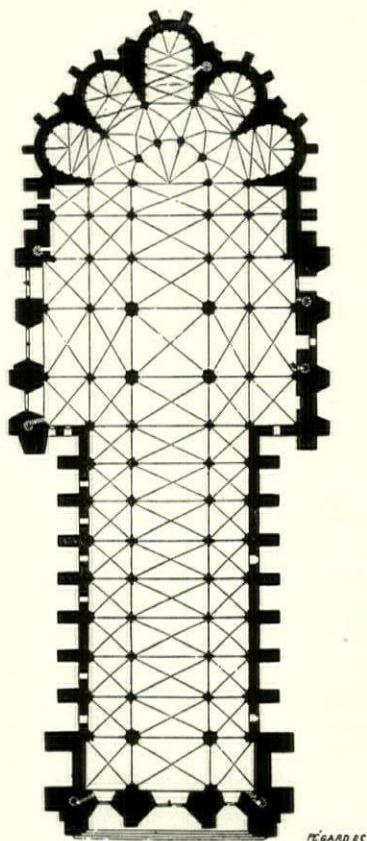


PLAN OF CHARTRES CATHEDRAL

Although a fairly early cathedral, yet it has a full blown type of plan.

the Carolingian epoch. Marble was expensive, stone difficult to work, but there was an abundance of clay and also plenty of wood for fuel. Consequently tiles were comparatively cheap and were extensively used over a certain period. Tile pavements in churches were quite common; however, few examples remain today. Due to wearing and breakage, most of them have had to be replaced, and it seems that this was done by marble or other materials. The oldest tile pavements known to us are those discovered by Viollet-le-Duc himself, which he uncovered while making restorations in the apsidal chapel of the Abbey Church of S. Denis. They date from the time of Suger. This floor was restored, as near as possible, to its original condition, and is one of the most authentic early examples we have. A fragment is shown in the illustration on the opposite page.

The *belfry* or bell tower is also discussed as an adjunct to the church. The origin, early use and development of this important architectural feature, during the Middle Ages, is considered in every detail. Bell cages of carpentry, the proper method of construction, and the effect of these upon the sound of the bells, are also explained in detail. Although bells were not generally used in the earliest churches, in



RHEIMS CATHEDRAL PLAN

One of the most famed of the French cathedrals.

later times they played a most important part, and the bell towers with their spires were among the most inspiring architectural features.

Aside from the various architectural features of religious edifices, Viollet-le-Duc discusses at greater length the various types of religious structures themselves. He gives due consideration to the basilica, church, chapel and cathedral.

The basilica, and its relation to and influence upon religious edifices, is naturally given first consideration. The derivation and development of the basilican type of Christian church is carefully traced and explained. For the prototypes, Viollet-le-Duc turns to the Greek and Roman basilicas of ancient times, and shows how the Early Christians borrowed from them,—the earliest churches being largely of the basilican types, especially in Italy and western Europe. From Italy he traces the introduction of the basilica type into France, and then shows how it gradually developed through all the interesting phases of the Romanesque and into the Gothic, and the influence it had upon subsequent church architecture.

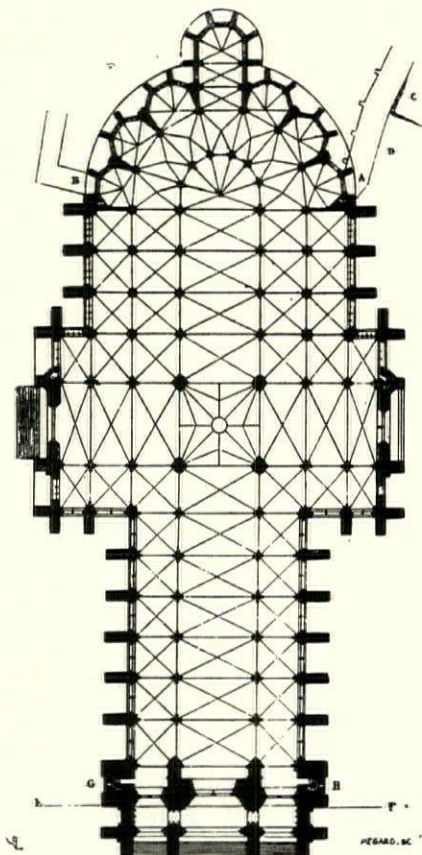
From the basilica and church Viollet-le-Duc then goes to a consideration of the greatest of all Christian edifices, the cathedral.

This subject he considered of such prime importance that he devoted over one-quarter of the whole

volume to it alone. One hundred and two pages of the *Dictionary* are given to this treatise, and it is also generously illustrated with nearly one hundred engravings. Because of his official position as Government Architect and Inspector General of Diocesan Edifices, he was eminently fitted to write a complete and authoritative treatise upon the Cathedrals of France.

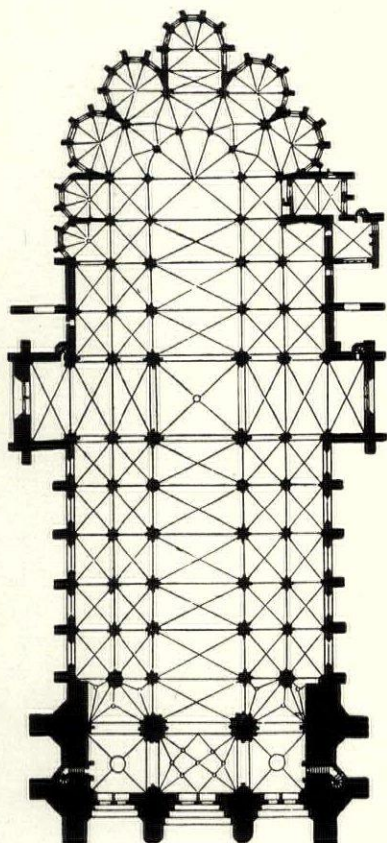
Nowhere, in such concise form, will one find so thorough a study of the essential features of all the great cathedrals of France. The development of the cathedral idea, the place and importance of the cathedra, or seat of the bishop, and the relation they bear to the whole religious attitude of the time; how it operated to give France, during the so-called Dark Ages, an era of cathedral and church building activity that has never been equalled before or since, are all set forth in a clear and convincing manner by this gifted French architect.

Viollet-le-Duc begins his essay on the cathedral by making a careful analytical survey of the historic background and all the environmental influences that in one way or another exerted a shaping influence upon the social and religious customs of the Mediæval Period. He considered the cathedral to be a direct reflection of the spirit of France of the time. Figuratively speaking, the cathedrals of France grew up with the people, rather than being merely built by



PLAN OF AMIENS CATHEDRAL

This is usually classed along with Rheims.



PLAN OF CATHEDRAL OF TROYES

A structure of the first order, yet not so well known as Chartres.

them. It is doubtful whether the mass of the people of the time fully realized what was actually happening. They were busy with the affairs of life, and few of them realized that they were living in the greatest cathedral building era that the world has ever witnessed.

Most of the great cathedrals of France are built upon old consecrated sites, and the structures have often been rebuilt several times, or they have been added to or changed from time to time so that the present edifice is quite unlike the original conception. When making restorations, Viollet-le-Duc's first step was to make a thorough research into the history and construction of each edifice worked upon, and in so doing he established a fairly authentic date for the various parts of the structure.

In the course of this treatise, Viollet-le-Duc discusses some of the more important phases of every cathedral of any architectural consequence in France. Beginning with the first great cathedral erected, Notre Dame, in Paris, he takes them up in a somewhat chronological order. Some of the more important structures considered are: Chartres, Bourges, Noyon, Laon, Soissons, Rheims, Amiens, Beauvais, Troyes, Tours, Sens, Mons, Bayeux, Constances, Rouen, Angoulême, Poitiers, Clermont, Limoges, Toulouse, Albi, etc. Plans, sections, façades and many details

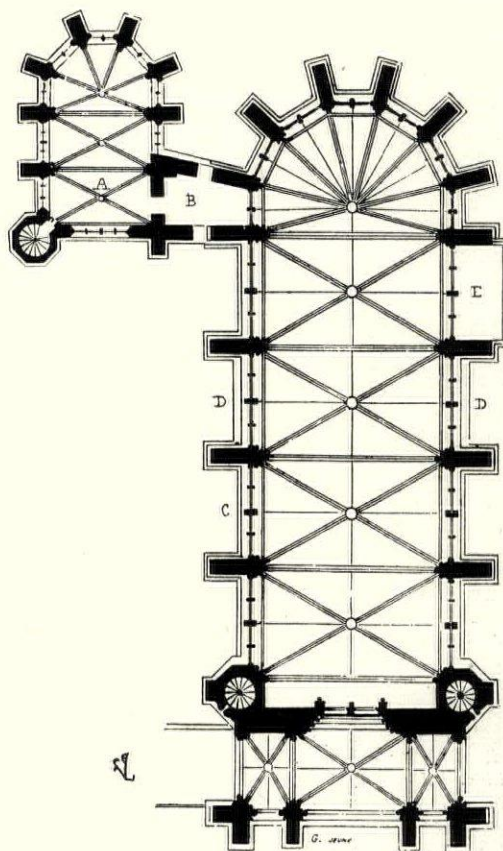
of construction and decoration are used to amplify the various statements. Several of the plans of the most famous cathedrals are reproduced here because, after all, the plans are the most characteristic elements of these great structures.

Each of the great cathedrals, like the cities and provinces in which they were located, was different from every other. The characteristics of the people and the general historical background of each province are carefully examined by Viollet-le-Duc, and all the peculiarities of plan, façade, construction, and decoration, are discussed in a learned manner. An unusual amount of detailed information is given on each example mentioned, and it is presented in a comparative manner so that the reader gains a true evaluation of each great edifice.

The designer who wishes to base his project for a religious structure upon the principles of mediæval work, will find here a great store of vital information which he should master before he draws a line. He will find that a great Gothic church or cathedral consists of far more than the proverbial "vaults of stone carried upon walls of glass."

Following his essay on the cathedral, Viollet-le-Duc then turns his attention to the chapel, which is the cathedral or church on a small scale and, usually,

(Continued on page 110)



MAIN FLOOR PLAN OF THE S. CHAPELLE, PARIS

The gem of all French chapels, completely restored by Viollet-le-Duc.

THE DIMINISHING GLASS, XI

PICTURAE ET PICTORES—NOTES ON ART, 40,000 B.C.—200 B.C.

Sing ho! that archipelago where
mighty Attic thinkers
Invoked the grape to keep in shape,
and lampooned water drinkers.

Henry Morton Robinson

By Hubert G. Ripley

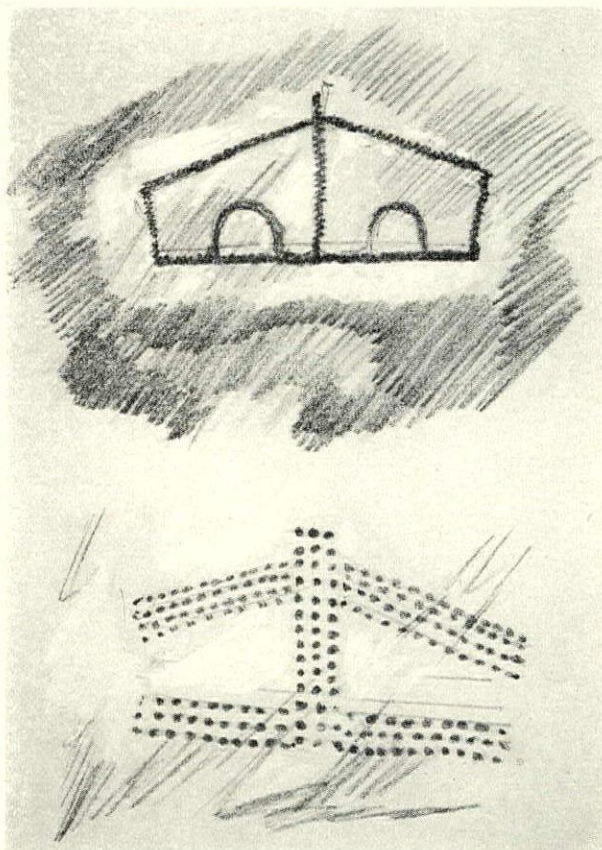
THE PELOPONNESUS, the most famous of all the Greek peninsulas, resembles in figure the leaf of a plane tree. (Strab. B.VIII. C.II. No. 1.) The city of Sicyon, now Basilico, where Adrastus first reigned, is of great antiquity. Founded by Aegialeus* (according to Ephorus, historian of Cumae, disciple of Isocrates, founded by Phalces), it maintained its importance under a succession of benevolent tyrants, until Nicocles, the last, was expelled by Aratus, son of Clinias. Under Aratus, B. C. 275-213, painting and modeling and every art of the kind, flourished in Sicyon like the green bay tree. He made his native town a republic, consolidating its resources, and by his alliance with the Corinthians, strengthened it politically until it became, under his beneficent control, a powerful and important state. Situated less than a mile and a half from the Corinthian gulf, the climate is mild and favorable for vegeta-

tion of all kinds. The ancients esteemed highly the Sesamum of Sicyon, both for its value as a cosmetic, and, when combined with the Oetian hellebore, as a blastopeptic. Sicyonian wine rivalled that of Chios. Bilitis mentions it in one of her strophes, as being served with honey cakes, after the pike course at her symposia. The honey cakes with preserved citron and sesamum are an Oriental luxury; they may be obtained today at the Olympia restaurant on Stuart Street, Boston; the wine of Sicyon, however, is another matter.

A consideration of the Sicyonian School of painting and statuary, noted for its scientific character and fineness of its drawing, involves the mention of such illustrious painters as Eupompos, Pamphylos, Melanthios, Pausias, Aristolaos, Nicophanes, and perhaps the most celebrated of all, Apelles, the favorite painter of Alexander the Great: and in sculpture such statuaries as Lysippos, the master, Lysistratos,

Stheunis, Euphron, Sofocles, Sostratos, Ion, and Seilanian, including other artists of merit, but still far below those already mentioned.

Pliny (XXXIV, 53), mentions a competition for the statue of an Amazon for the Artemesion at Ephesus, where the artists themselves who were on the spot, though coming from various towns, (somewhat after the manner in which a famous architect or firm is chosen from four or five different cities like Detroit, Minneapolis, Cincinnati, Providence, and



THE EARLIEST ARCHITECT'S DRAWINGS KNOWN

Tectiforms from the walls of the cavern of Font-de-Gaume, Dordogne—From Osborne after Brenil.

*Aegialeus was the son of Adrastus who organized the seven against Thebes movement, and who, with a handful of his soldiers, barely escaped with his life from that unfortunate expedition. However, Theseus gave him a leg up, so to speak, and they thoroughly trounced the Thebans. Ten years later, it will be recalled, Aegialeus was the only one to perish in the Epigoni Expedition. Adrastus, overcome with grief at the loss of his favorite son, the rejeton of that romantic affair with Amphitea, or as some say, Demoanassa, (it's hard to tell sometimes where history ends and mythology begins and vice versa), erected a temple to his memory at Sicyon, where annually solemn festivals were celebrated. In a poem generally attributed to Homer, the whole thing is told at length, and Calinus observes that next to the Iliad and the Odyssey, he has never seen finer verse.

Eugene, to compete for the Milwaukee courthouse, for example), would decide which statue should receive the prize. The contestants were Pheidias, Kresilas, Phradmon, Polykleitos, and Kydon. Each artist was to name a first and second choice, and naturally his own work came first. All, however, were unanimous in placing second the statue that proved to be that of Polykleitos, so the decision was not difficult. Herodotus (Urania, 123,) relates the identical anecdote of the award of valor to Themistocles, after Salamis. There can be no doubt but that this is a splendid method for ascertaining expert opinion from those best qualified to judge the problem, for it cannot be denied that it is the judgment of the contestants themselves who have sought the solution by concentrated study, that is of most value to the client. It also possesses the great merit of absolutely eliminating all criticism of the jury, either from the artists themselves, their friends and admirers, or the public in general. If any "framing" be done, it would have to be done by those competing.

The origin of painting is not as obscure now as it was in the time of Pliny. Even as early as the Mousterian period† (4th glacial time) of the Lower Paeolithic Age (40,000 B. C.) there are "tectiforms",—schematic drawings in lines and dots believed to represent huts and larger shelters built of logs and covered with hides, on the walls of the cavern of Font-de-Gaume, Dordogne. These are evidently drawings by the early architects who studied them on the cavern walls with sticks of charcoal during the long winter evenings, for building "service stations," for shelter from the icy blasts of the glaciers which still covered the greater part of Europe. When the parti was finally chosen, the outlines would be chiselled on the softer stone of the cave wall with hard pointed flints. These huts and large shelters were grouped around the foyers or open spaces, and points

†Vid. Osborn's "Men of the Old Stone Age," Charles Scribner, New York, 1916.



Early Aurignacian outlines of animals from cavern walls of Font-de-Gaume—From Osborne after Brenil.



Fresco from Alpera Albacete, Spain, painted in dark red—
From Osborne after Brenil.

favorable for hunting and fishing. The same instinct prompts us now to build "shacks" on Shelter Island and at Coral Gables.

The culture of the Cro-Magnon Race (25,000 B. C.) is indicated by the large and markedly dolichocephalic skull, whose brain capacity, in the case of a woman, exceeds that of the average man of today. Their art implements were of flint and include the Burin, or tool for engraving on bone and stone, the Ciseau or chisel, and the Gravette, or etching tool. Long before Neolithic times the superb frescoed ceiling in the cave of Altamira was painted, and numerous drawings, chiselled outlines of bison, woolly rhinoceroses, musk ox, and reindeer adorn the walls of the caverns of Font-de-Gaume, Pindal, and les Grottes de Grimaldi. Some of these, shaded in red ochre, date possibly from the Magdalenian period, (16,000 B. C.) others from the much earlier Aurignacian.

In sculpture the Cro-Magnons lean more to the modern Italian and Slavic Schools, than the idealized Grecian, though they observed the same rules of art as their descendants. In the middle Aurignacian Period (30,000-20,000 B. C.) we find the first plastic representation of the human figure in the round. They recall the style of the modern cubists in that certain elements are suppressed and others exaggerated. The "Venus of Willendorf" and the "Venus of Brassempouy" are corpulent and callipiginous to a degree. While they bear a strange resemblance to the figurines of negroid origin, it appears probable that this archaic sculpture was autochthonous.** There can be no question but that this is true of the art of drawing and engraving, as it is contemporaneous with the descent of the Alpine fauna. There have been found crucibles for the

**Osborn.

grinding of colors, yellow and red oxides of iron. These colors have certainly stood a time test which even Hockaday, Inc., does not claim. The element of motion in the pictures is remarkable. For example, in the Trilobite grotto, a woolly rhinoceros is depicted with two heads, as if surprised by the relentless hunter while attempting to see two ways at once, like a pedestrian crossing 42nd Street.

Around 16,000 B. C., wall painting reached a very high stage of development. This was the grand period of polychromes. The work is done on a "canvas" of limestone scraped smooth, the lines are etched with flint, then a very strong contour is laid down in black. The colors used were black, brown, red, and yellow, various minerals ground in animal oils. They are quite permanent, and today the handsome Bison of the painted ceiling of Altamira, thanks to the protective darkness of the cave, are as brilliant, sharp, and clear as if executed yesterday.

The Early Neolithic frescoes of Alpera and Cogul in Spain, indicate that about 10,000 to 8,000 B. C., an entirely new race had arrived, bringing its art with it. The presence of human figures in the hunting scenes with bow and arrow, and the drawing of the animals is not dissimilar to the coursing hounds of Hunt Diederich and others. Unlike the early Egyptians, the Cro-Magnons, perhaps the most splendid race the world has ever known, seem to have abstained from miscegenation with the negroid races. This may be due to climatic conditions, as the extreme cold of Southwestern Europe 25,000 years ago tended toward segregation. It seems more probable that it was pride of race, as in the case of Sparta, where physical development reached its highest point in historic times, that kept the Cro-Magnons distinct from others. The culture of the Upper Paleolithic races showed a high appreciation of beauty in line, color, and form that was comparable to the highest antiquity of Egypt. The first paintings of the Old Kingdom antedate the 3rd Dynasty, and were usually applied to sculpture in low relief, like portions of Sargent's work in the Boston Library.

The chapels in the cliff tombs of the monarchs of the Middle Kingdom were elaborately decorated with scenes depicting episodes in the life of the departed. They do not show any material progress over the paintings of the Old Kingdom some 2000 years earlier, while as reliefs they are distinctly inferior. The Theban tombs of the Empire (1350-1205 B. C.) as well as the exquisite paintings of the reign of Ikhnaton, show a great advance in the art of murals. This was the flowering of the Amarna School, which preserved the old tradition, and combined with them the depicting of emotion, and a fine sense of repressed action.

The *Naturalis Historiae*, XXXV, says that the claim of the Egyptians to have discovered the art of

painting some 3000 years before Pliny's time is obviously an idle boast. Pliny was right, for the discovery of the art antedates the claim of the Egyptians at least 20,000 years. Some say that the Greeks re-discovered it at Sicyon, others at Corinth. All authorities agree that the beginning of the art of drawing was the outlining of a man's shadow, either on the wall of a cave, which is most probable, or on some plane surface or other. The earliest style of painting, which is still in vogue, is called monochrome. To Philocles of Egypt and Kleantes of Corinth is attributed the re-discovery of linear drawing. Telephanes of Sicyon used no colors, though he added names on his drawings, a custom that is universally observed by architects today. Ekphantos of Corinth discovered that by powdering potsherds and making a mixture with a base, oil or white of egg, a paint was produced. The old swimming hole also developed painters and pigments, as it was a favorite stunt of Thoranx and Silox, two Sicyonian youths of Dorian times (one was from the tribe of Hyllus, the other a Phamphylian), to pelt each other with yellow clay before taking their daily dip in the rapids of the Helisson. Thoranx in after life was a celebrated tenor while Silox developed the industry of manufacturing colors, and became the Windsor and Newton of his day.

Etruscan painting developed hand in hand with the Greek, and in Ardea, temple paintings older than the city of Rome, unprotected by a roof, remained fresh after six or seven hundred years, showing that invariably these early pigments were permanent. Certain modern colors frequently fade or turn a disagreeable blackish tone, as we all know, and that is why it is desirable to stick to the basic shades in primary hues when sketching or rendering. A namesake of Ekphantos, (who followed Demaratos, the father of Tarquinius Priscus, in his flight from Corinth to Italy), painted at Lanuvium two nude figures, one of Atalanta, and one of Helen, side by side. Both are of great beauty and one is painted as a virgin, and though the temple is in ruins, they have sustained no injury. The Emperor Caligula admired these greatly and wished to remove them, but not having the skill of a Hipkiss or a Duveen, did not know how to transport successfully a composition on stucco. Tarquinius Priscus led a romantic life and besides being a patron of the arts, constructed the Cloaca Maxima, one of the seven wonders of the ancient world.

Painting reached a full development more rapidly than any other art. The high esteem in which painting was held amongst the Greeks and Romans is attested by the sums paid for pictures by noted artists. Apelles spread a report that he was buying pictures by Protogenes at fifty talents (\$52,000) apiece, and the Rhodians were so stirred at the thought of these masterpieces falling into the hands of an

off-islander that they offered a still higher price. Agrippa, a rude man and lacking many of the finer sensibilities, bought two pictures—an Atlas and an Aphrodite—from the people of Cyzikos, for 1,200,000 sesterces (about 19,500 sovereigns), and the dictator Cæsar purchased an Ajax and Media by Timomachos of Bysantium, for the temple of Venus Genetrix, for which he paid eighty talents (\$84,000). The most valuable of all paintings were without price, as certain masterpieces were placed in the temple, a guard set over them with instructions to lay down their lives in their defence, if necessary. The wealth of a city could hardly suffice to buy a single one of the pictures of Apelles, Aetion, Melanthios, or Nikomarchos, though these artists used but four colors combined with exacting skill. Boularchos sold his painting of the defeat of the Magnetes to Candaules, King of Lydia, the last of the Heraclids, for its weight in gold.

Timarete, daughter of Mikon the Younger, painted a picture of Artemis at Ephesus. She affected, according to Brunn, an archaistic style; Eirene, daughter and pupil of the painter Kratinos, painted a maiden at Eleusis; Kalypso portraits, including the juggler Theodoros and the dancer Alkisthenes; Aristarete, daughter and pupil of Nearchos, an Asklepios. Olympias was a painter, her only known pupil was Autaboulos, noted for his celebrated picture "The Vintner." But the most renowned woman painter, whose portraits were much sought after, and which commanded higher prices than those of Sopolis and Dionysios, her well-known contemporaries, was Iaia of Cyzikos, the famous city beloved of Alexander, on the Propontis, not far from the modern Constantinople. The inhabitants of this city were called timid and effeminate, yet they withstood a long and heart-rending siege by Mithridates, during which he lost by sword, pestilence, and famine, no fewer than 30,000 men. Cyzikos was styled by Florus "The Rome of Asia" on account of its splendid architecture. There was a magnificent Temple, the pillars of which were six feet in diameter and 75 feet high, each out of one entire stone only. The polished marble of its walls was jointed with a thin line of gold, much as we now underlay cornice and lintel stones with lead and copper to keep out the weather. The arts flourished here, and Iaia's fame spread to Rome, where she went about 200 B. C., and painted portraits, chiefly of women. Pliny speaks of her as a "perpetua virgo," and tells also of her encaustic work on ivory with the cestrum, and a self portrait executed with the aid of speculii. When Varro saw this work he could hardly repress his astonishment, and asked the artist how on earth she did it.

"It's all done with mirrors," replied Iaia simply.

Thrice Iaia competed for the Rhodes Travelling Scholarship, and at the third trial was successful.

The encaustic on ivory seems to be something like

the scrimshaw work of the Nantucket whalers, done while whiling away the long dog watches.

Pausias of Sicyon, son and pupil of Bryetes, was the first known master of the encaustic style, (wax colors burnt in). He was also the first to paint panelled ceilings, though small pictures of boys and girls were his favorite subjects. His rivals claimed that the encaustic method was a slow one, and for that reason he could only do small stuff. Piqued by this he determined to show that he could if necessary work fast, and painted a picture called "The Day's Work," and finished it all in a single sitting. His date was 380 B. C.

As a youth he became enamoured of Glycera, the pretty little flower girl who used to sell wreaths in the general stoa in Sicyon, and persuaded her to sit for his celebrated picture of the "Apographon" (Wreath Binder) which was still extant in Pliny's day. Branches of trees were used as crowns for the victor in the sacred games, and Glycera used to add flowers of different hues to strengthen the scent and enhance the color effect. Pausias imitated her wares in painting and she used to challenge his art by varying the arrangement of her wreaths. It is believed that the attraction was mutual.

The picture of the seated Glycera became so famous throughout the world, (ponderous old Roman Senators used to gaze at it sentimentally with tears in their bleary eyes, the earliest case known of Heart Interest in Art) that Lucius Lucullus, the well-known voluptuary and military genius (115-47 B. C.) paid \$2000.†† for a copy of it at the festival of Dionysos at Athens.

Pausias also painted large pictures, notably his sacrifice of oxen in the gallery of Pompeius, and devised what was then an innovation, characteristic of the Sicyonian School. Wishing to show the great length of a black ox, he painted it head on, the hindermost parts foreshortened in perspective. While most painters used white for their high lights, Pausias painted his whole ox black, the shadows in deep velvety tones (tonos), the lights in warm shimmery greys, vibrant with sunlight. Thus Pausias excelled at giving, in art parlance, the "impression of artistic reality with only two dimensions."

Euphranor, besides being a great sculptor in bronze and marble, excelled in every branch of art. He wrote a book on symmetry and color, and at Ephesus was his famous painting of Ulysses feigning madness, where he yokes an ox with a horse. Antidotos was his pupil and his chief claim to fame is that he was the master of Nicias of Athens, who colored statuary so beautifully. When Praxiteles was asked which of his statues pleased him the most he replied, "Those which the hand of Nicias has touched."

†† Lucullus visited Athens 88-87 B. C., and on account of the high price paid, it is probable that this was not a copy by another, but the original study or pochar'd for the finished work.

PENCIL POINTS

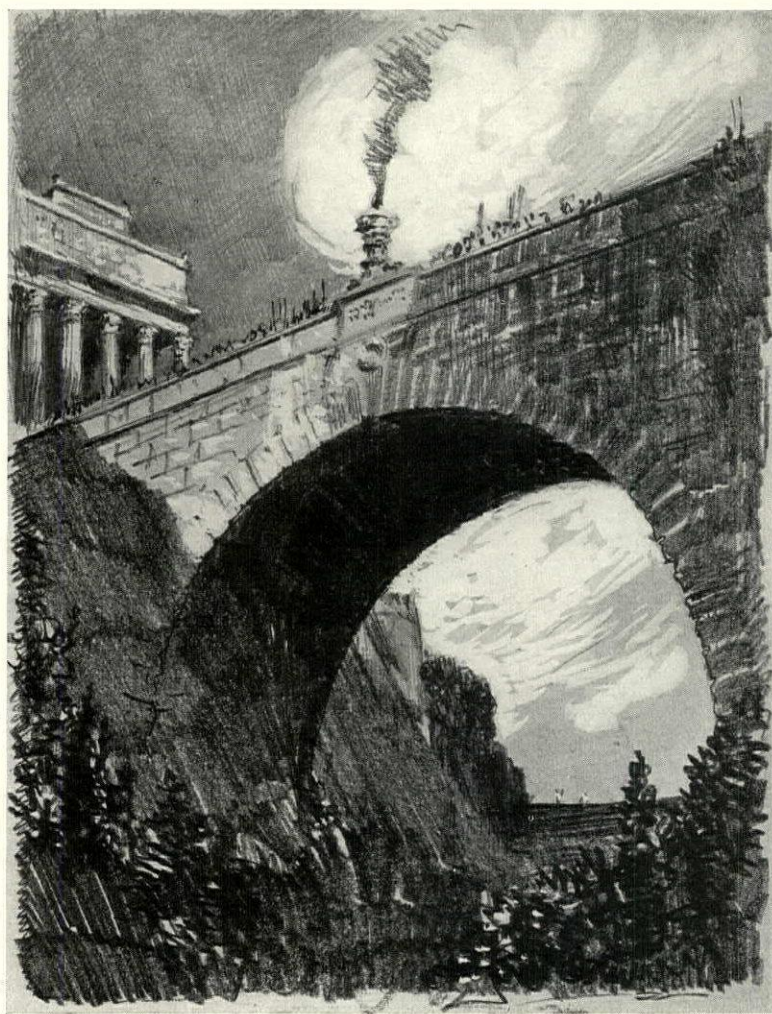
Aristolaos was the son and pupil of Pausias; evidently he did not think his father's work was serious enough, for his style was austere to a degree. He painted pictures of Epaminondas, Pericles, Medeia, Valour, Theseus, the personification of the populace of Athens, and an altarpiece, a sacrifice of oxen. Nicophanes, the painter's painter, and Sokrates, who pleased everybody, were also pupils of Pausias.

Nealkes painted a picture of a naval battle between the Persians and the Egyptians, and wishing to show that the battle was fought on the Nile, he adopted a device that art alone could not express. He showed in the picture an ass on the shore, drinking the water, and a crocodile laying in wait for it.

The Sicyonian school, like the Rhodian School, established scholarships for the cultivation of the arts. The Rhodes Travelling Scholarship was open to artists of Sicyon, and the Sicyonian Fellowship (details of which will shortly appear in a brochure to be published by the Fullerton Foundation) gave preference to artists from Rhodes. This interchange

of friendly relations between the two cities may be compared with the conjunctive competition arranged under the auspices of the S.A.D.G.F. During the aedileship of Scauras, all the pictures of Sicyon were sold to liquidate the public debt, and brought to Rome. The glory of Sicyon had departed. All that remains are a few fragments of frescoes and a portrait or two, attributed to Apelles. Painting, unlike architecture and sculpture, is evanescent. Wood decays and canvas rots, but bronze and marble rest. To build there must first be Drawing, the essence of Painting.

The influence that these Schools of Art wielded from the period of the 90th Olympiad on, can hardly be realized at the present day. The profession of art was jealously guarded; unless one was of good birth the gates were closed, although exceptions to this rule are notable, as in the case of Protogenes for example. The sincere effort that is being made today by a large number of earnest and self-sacrificing artists, idealists in the true sense of the word, is bound to bear fruit in the not distant future.



TEMPLE OF AEGIALEUS AT SICYON
RESTORATION BY COLONEL FULLERTON, 1927

AN ORIGINAL METHOD FOR SPACING LETTERS

By Egon Weiss

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BEFORE GOING INTO the details of the method for spacing letters, we want to recall certain requirements for good lettering and good appearance of name panels. Authorities on lettering state that the spacing of letters is a matter of artistic design and I believe we have to agree with them. However, the writer is of the opinion that, in spacing letters, simple rules of geometry come to our aid. I am sorry to admit, however, that they are neglected by both architects and draftsmen in their stubborn effort to let only ART design the lettering. Let us see what the general requirements are on which authorities on lettering agree.

First and most important: *The letters making up words should have the appearance of equal spacing.* This, however, can not be obtained by providing spaces of equal width between extreme ends of letters; i. e., letters with determined vertical ends, like H and I, will have to be spaced wider than round letters, like O and C, or open letters, like T and L. In general, the white between letters, which we call space, should be kept of uniform area.

The letters making up words can be spaced at slightly less than their height. However, the spacing will be usually determined by the size of the panel, the location above the ground and by the letters making up the words. While the word NINE could be spaced with only small space between the letters, the "TT" in the word "LETTER" compels a wider spacing, unless an overlapping of the crossbars is not objectionable.

The words making up a namepanel should be placed above the actual center of the panel. This should be done to overcome the optical illusion which

tends to make the lettering appear below the actual center, if it is placed on the centerline of the panel. The margin at the bottom should, therefore, be wider than at the top, while the side margins may be of the same width, or slightly wider than the top margin.

Round letters, like O, C, S, G, etc., should extend slightly beyond top and bottom of guide lines. The authorities believe this to be a good means to overcome an optical illusion which may tend to make these letters appear of less height than the others.

The shapes of letters and their spacing is a problem of artistic design which should not be solved by geometrical formulas, so to speak, yet I should say that the geometrical way of arriving at the shapes and spacing should precede any attempt at artistic effect. Then it is up to our artistic sense (after employing the geometrical method of spacing) to make the D a little narrower or the tail of the R a little more

curved or longer so as to obtain just the desired result. When I first arrived at the conclusion that letters could be spaced by simple rules, I wanted to be sure that there was no equally good system of spacing described in books. I spent fully three years in going through the best and less authoritative books on lettering and found that there are systems of spacing letters, but that they are either too complicated or impractical and always confine themselves to one particular alphabet which the Architect or Signpainter and Whatnot was obliged to follow blindly.

The method of spacing letters to be explained in the following paragraphs is shown for a Roman Renaissance alphabet that should deserve the patronage of the most delicate designer. However, and this I consider the most important, you are requested to draw

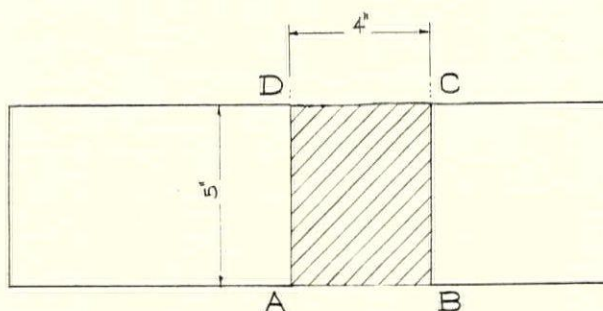


FIGURE 1

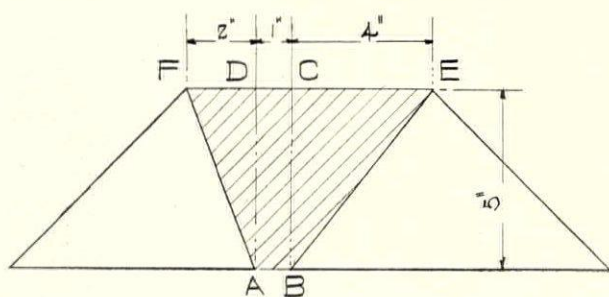


FIGURE 2

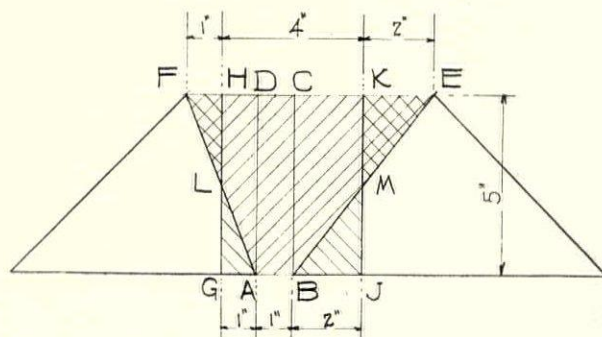
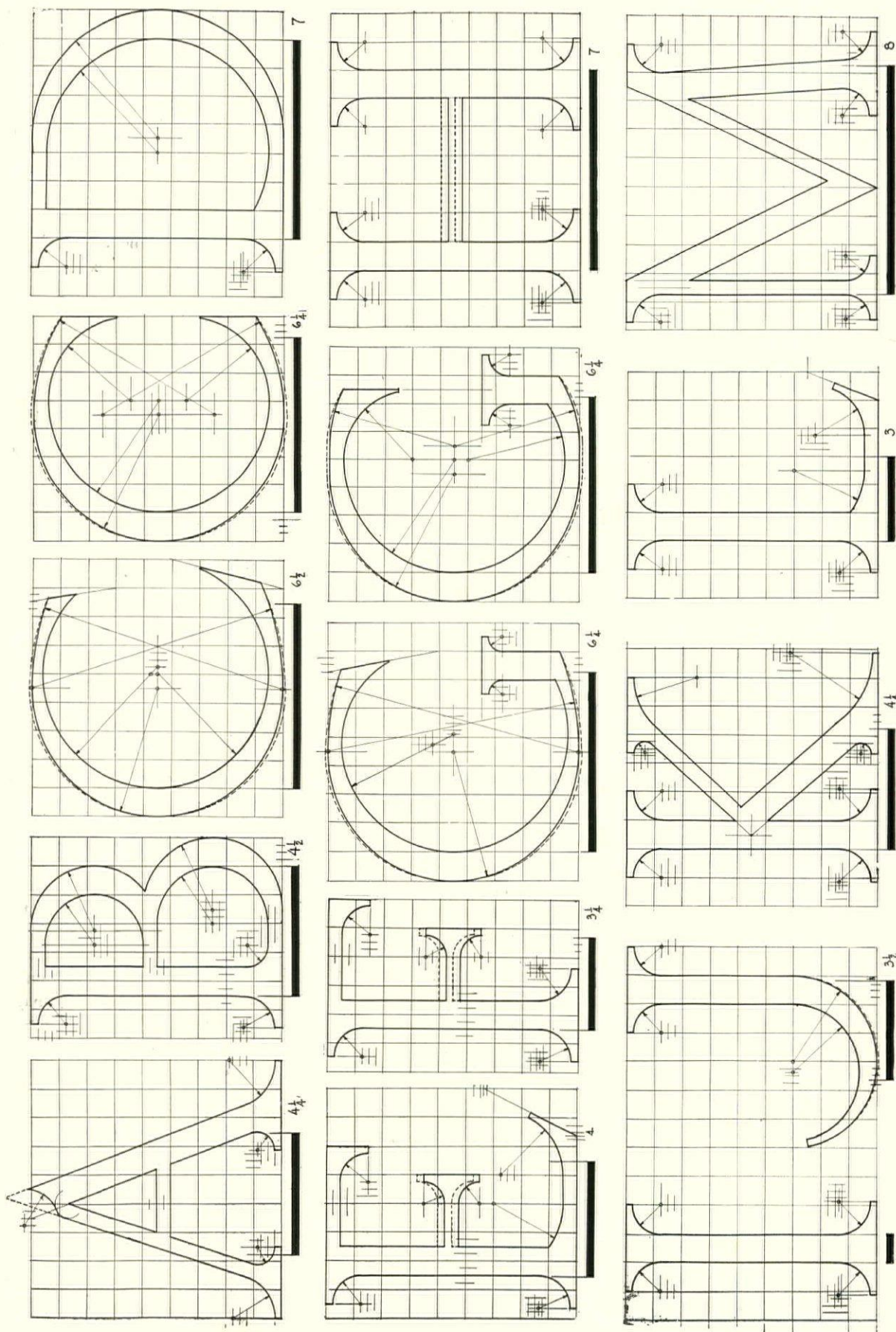
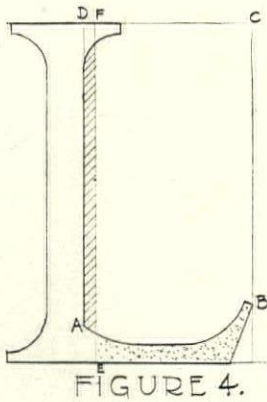


FIGURE 3



PORTION OF ALPHABET WITH NET VALUES OF EACH LETTER AS WORKED OUT BY EGON WEISS

AN ORIGINAL METHOD FOR SPACING LETTERS



your own favorite alphabet, Roman, Gothic, or block, and apply our little geometrical theory, so as to have your alphabet ready for spacing whenever you need it.

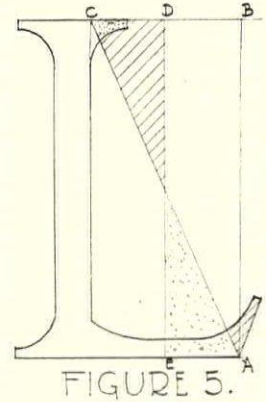
To understand the theory we do not have to go very far back in our lessons of geometry. All we have to know is how to find areas of plane figures and if you should have forgotten all that, well—page “Kidder’s.”

The theory is as follows. Let us assume that we have a rectangle and a square of equal heights as shown in Figure 1. The area of the space between the two geometrical figures is given by the lines between points A-B-C-D and equals $AB \times BC$, which is $4'' \times 5''$, or 20 square inches.

Now let us consider two triangles of equal heights but different sides as illustrated in Figure 2. The area between the two triangles is determined by the lines A-B-E-F. This area divided into two triangles and one rectangle equals $FD \times \frac{1}{2} AD$ plus $AB \times BC$ plus $CE \times \frac{1}{2} BC$. In figures: $2'' \times 2\frac{1}{2}''$ plus $1'' \times 5''$ plus $4'' \times 2\frac{1}{2}''$, which adds up to 20 square inches. It is the same area as we had in Figure 1. Figure 3 shows the same triangles as were shown in Figure 2, but lines G-H and J-K have been added. These lines, as can be readily seen, have been drawn so as to cut equal areas off both the triangles and the spaces, i.e., so that the area GAL equals area LHF, and area BJM equals area MEK. The result is that GH and JK are 4 inches apart which is the same distance as between the rectangle and the square in Figure 1. As has been shown in Figure 2 the area between the two triangles is also the same as between the rectangle and the square shown in Figure 1.

And this is all of the theory we need in order to arrive at our practical method of spacing letters. All we have to find now for each letter making up the word or our complete alphabet is a *line that will cut*

from the letter the same area as it will cut from the space fixed by a vertical line at the extreme end of the letter. Of course there will be two such lines to each letter, one at the left and one at the right end. Let us henceforth call these lines *zero lines*, or *neutral lines*, and the space between them, the *net value of the letter*. In the alphabets shown with this method of



spacing the little black line at the bottom gives the net value of the letters and if the distances between the net values are kept uniform, the result will be equal spaces and a well spaced name panel. As I have mentioned in an earlier paragraph, the designer may now, after the panel is all drawn up and spaced, desire to make one letter a little wider or narrower if he thinks that the spacing has not just the desired effect, but, I also want to say that I have done a great number of name panels and never found it necessary to make even the slightest change after I had it spaced according to this method. I may also mention that this method has been used for the last two years or more by a prominent Terra Cotta manufacturer and the name panels obtained were always liked by the designers and architects.

Designers should have no difficulty in obtaining a perfect looking name panel by use of the zero lines which can be found for any desirable alphabet by mere approximation. Furthermore, as the authorities on lettering state that the black and white, which means for us net value and space, should be of approximate uniform area, our system of zero lines should also enable us to determine the proper width of space between zero lines which should, accordingly, equal the average net value of all letters used. I also want to advise the designer that in determining the zero lines he may neglect the little area taken up by the serifs. Some difficulty may arise at first with letters like K, L, T, C, etc., and we must not forget

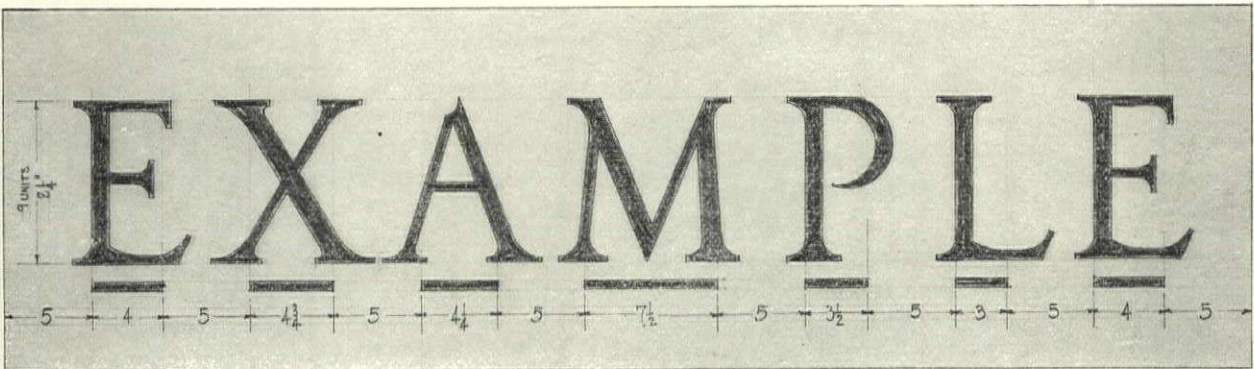
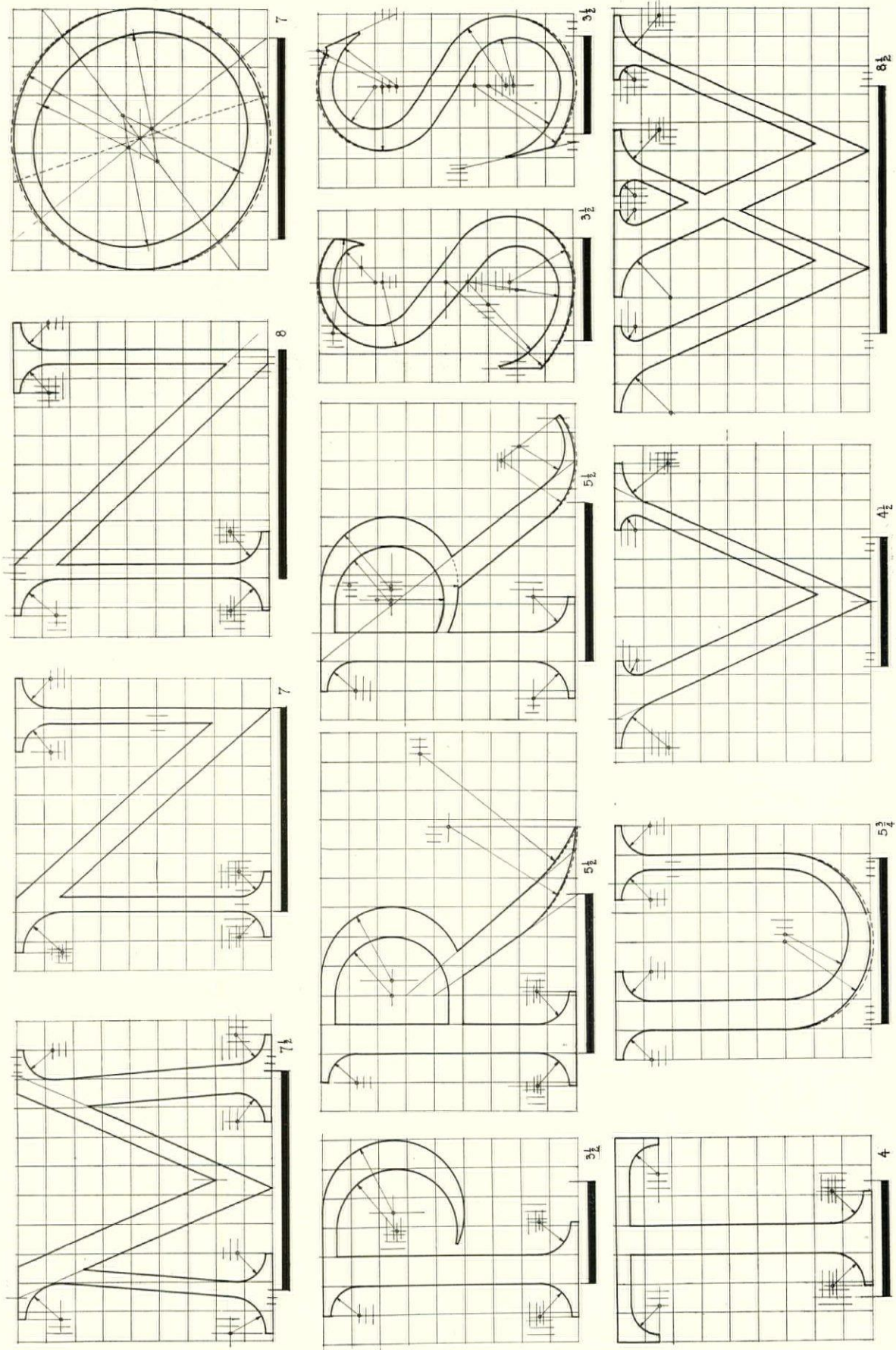


FIGURE 6



PORTION OF ALPHABET WITH NET VALUES OF EACH LETTER AS WORKED OUT BY EGON WEISS

AN ORIGINAL METHOD FOR SPACING LETTERS

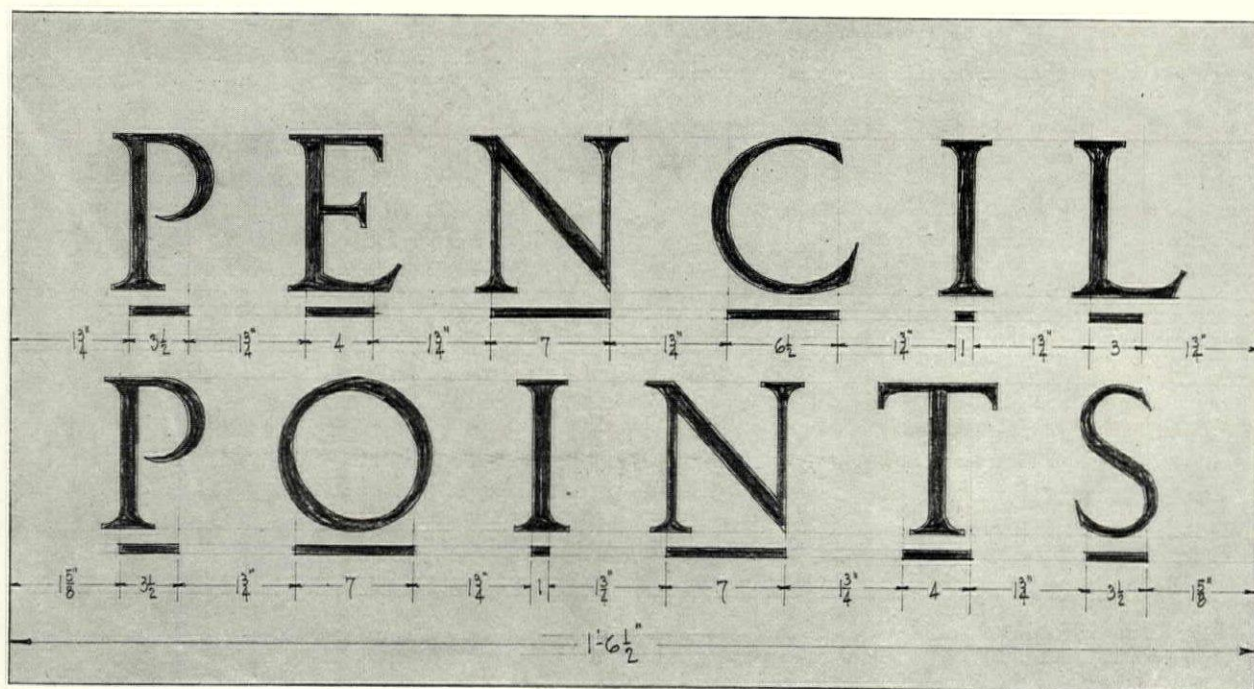


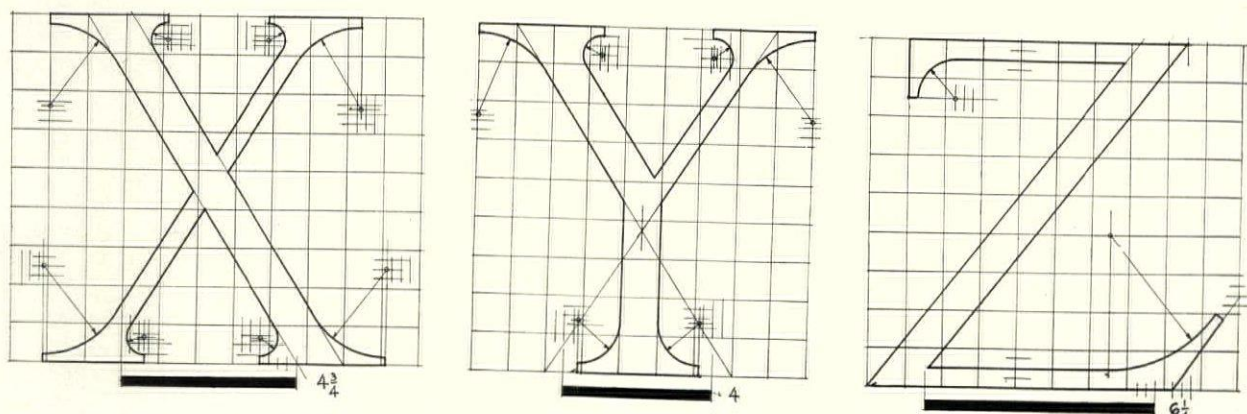
FIGURE 7

that those things we call eyes are fooling us all the time and that we, therefore, must take account of optical illusion. I shall try to illustrate this on the letter "L." Please refer to Figure 4. The rule, without taking optical illusion into consideration, calls for the zero line at EF, the cross-hatched portion showing the space cut off and the stippled surface showing the same area of letter cut off. This however is wrong. Line AC, Figure 5, is an imaginary line and optical illusion will assign the space to the left of this line to the letter instead of to the space as apparently should be the case. Thus we find that the correct zero line is DE and this has been verified by the writer on numerous occasions by actually laying out name panels at full size scale. Letters like K, T, R, C, etc., are to be treated the same way.

The letters used for Figures 6 and 7 were taken from the accompanying alphabet. Figure 6 shows the spacing of the word "EXAMPLE." The

net values of the letters making up the word "EXAMPLE" as taken from the tables are E-4, X-4 3/4, A-4 1/4, M-7 1/2, P-3 1/2, L-3 and E-4. These add up to a net value of 31 units. As there are 7 letters in the word "EXAMPLE" the average area covered by the net values is 31 divided by 7, or 4 1/2, approximately. However, 5 units have been chosen for the width of spaces in order to get a little more distance between the X and A at the bottom. Five units have also been used between the last letter and the border. This example illustrates how the space was determined by finding the average net value of all letters used. By this method the size of the panel will be found after the lettering has been executed.

In our next example, Figure 7, we have the size of the panel given; in this case it is 1' 6 1/2" wide. The word "PENCIL" is to be spaced in this panel and the space between the border and first letter, and last letter and border shall be the same as between



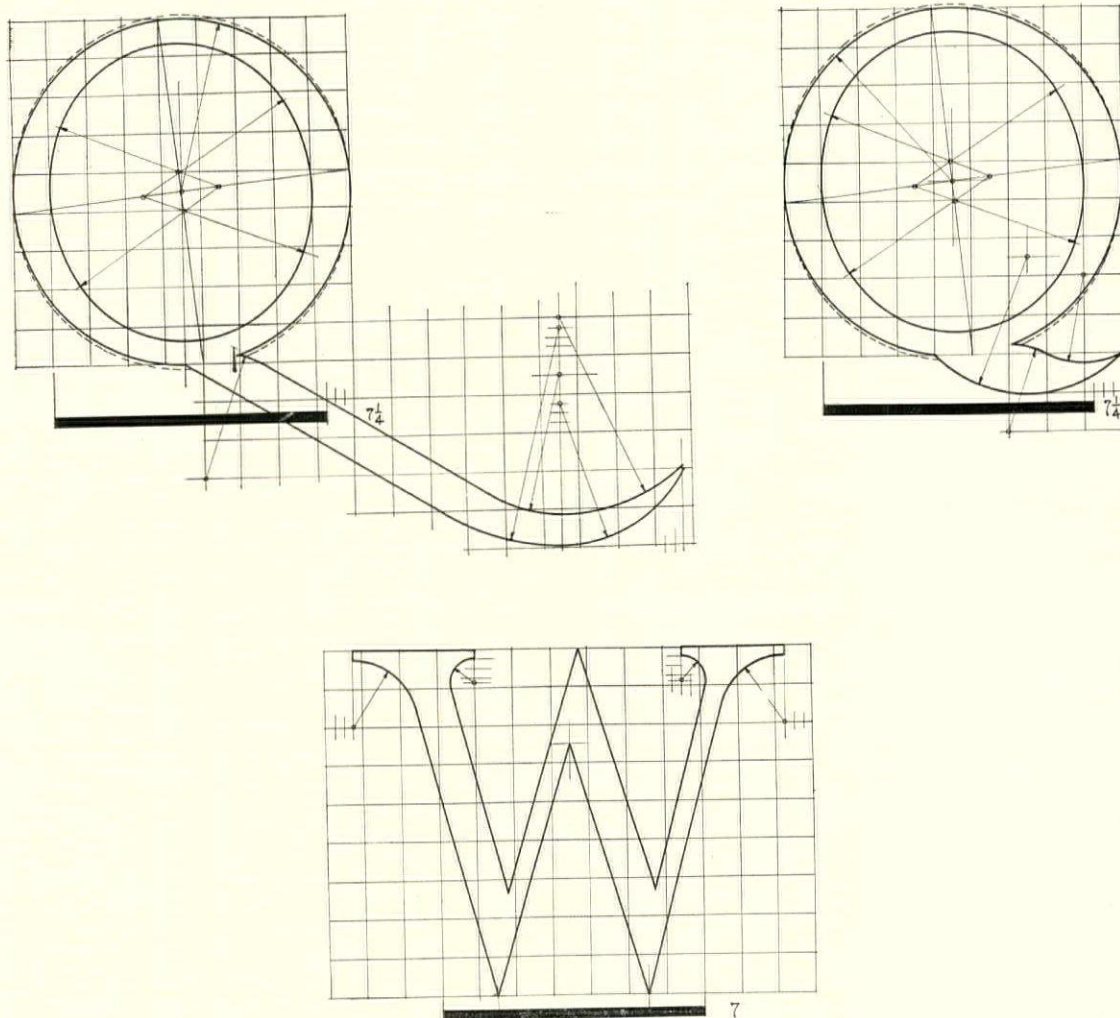
LETTERS AS WORKED OUT BY EGON WEISS WITH NET VALUES FOR SPACING

PENCIL POINTS

net values of letters. Again we have to start out by getting the net values of the letters. They are: P-3½, E-4, N-7, C-6½, I-1, L-3. These net values add up to 25 units. The height of the letters is 2¼" and one unit therefore equals ¼" (letters are divided into nine parts in height). 25 units equal 25 x ¼", or 6¼". This distance deducted from the overall size of the panel (1'-6½"—6¼") equals 1'-0¼". Now we count the number of spaces; there are 5 spaces between letters, one between the border and the letter P, and one between the L and the right-hand end border, or 7 spaces all together. 7 divided into 1'-0¼" is 1¾". Having thus found the width of one space, or distance between zero lines, we can

proceed with drawing up the word "PENCIL." The word "POINTS" underneath "PENCIL" has been spaced so as to have the same distance between zero lines as the word "PENCIL" has. This leaves a space of 15⅝" to the borders. If two or more words are used to make up a name panel, the space between words should be from one and a half to two times the width of spaces between letters and a similar or larger space allowed between borders and first, and last letters.

Now, Mr. Architect or Mr. Designer, use this alphabet and make up your name panel, or, if you prefer, find the zero lines for your own alphabet. You will find it interesting as well as beneficial as a timesaver and you will like your name panel!



LETTERS AS WORKED OUT BY EGON WEISS WITH NET VALUES FOR SPACING

AN ETHIC—WHAT, WHY AND HOW?

By Charles Kyson

"WELL, BOYS, WE'RE HERE tonight to listen to the roar of the cannons of Ethics in the great Battle of Larynx; so if any of you want to toss over a progressive barrage into the camp of the Conservatives,—shoot!"

Tom Kenyon gazed smilingly over the faces of the Blades of Razz, alight with enthusiasm.

"Let's remember," he continued, "it's all good-natured stuff; and while we may spray the old boys with verbal shrapnel,—shooting as straight as we know how and fighting the good fight as best we can,—we are, after all, battling a lethargic mental condition and not an individual or group of individuals. Let's all devoutly hope that when the smoke of battle clears away we can unite as a disciplined and correlated army with the unified purpose of carrying forward the fine old banner of architecture to the front line of progress and keep her gloriously unfurled across the smoking sky of accomplishment."

"Hurrah! That's the stuff!" The crowd was waking up. The warm atmosphere of the old *Café Au Point du Crayon* became electric with enthusiasm.

"Tommie, you are getting to be a reg'lar o-rater," gleefully called out a Blade. Tom Kenyon acknowledged this sally with a smile and a wave of his hand.

"Now, fellows, I'm going to call on John Mannington, who will give us a short talk on Ethics that is guaranteed to keep you awake—you can bet on that! There's nothing like eating lunch with a man to find out his slant on a subject!"

John Mannington rose from his seat amid enthusiastic, expectant applause. He had a reputation of speaking seldom, but with intelligence and power.

"Mr. President and Fellow Blades: I have been asked to speak briefly to you on the subject of 'Ethics'—a word which may be described as 'the science of attaining the highest good,'—a word which in the business world of the past has been all-too-lightly regarded and but little understood. In an age of fierce progress in all lines of material accomplishment, where centuries have been pressed into decades, stress has been laid upon accomplishment in the realm of the material. But paralleling this has been profound research and progress in the field of spiritual and religious endeavor. Progress of such a high order of attainment as to discredit the cynic and encourage us all in the belief and realization that the world is steadily achieving,—practicing advanced ethical standards, withal,—becoming a better and finer place in which to live. Ethics in religion and in business in this practical age have been subject to the revealing spot light of practical analysis and are being judged, not in the beauty of high-sounding words that set forth pretentious claims, but in the practical currency

of accomplishment. Because these ethical standards are fine, true, and richly productive of results will they live, grow, and give vitality to the organization or individuals that practice them.

"The ethics of our own profession of Architecture are being subjected to the searing acids of public opinion. Are they adequate to meet this fearful test? Are they self-centered? Do they touch more on the relations among those practitioners of architecture and the allied arts, or do they go farther afield and deal with our vital relations to the public? Are these canons documents of service and are they couched in the language of today?"

"Personally, I feel that while they may contain many high and beautiful thoughts they are phrased too much in the language of other days—perhaps a choice remnant of the Victorian era of literature.

"Even literature has felt the urge of progress, and the accepted style of today is terse and brief. The grandiose style of the verbose Eighties has been relegated to the attic along with the hoop-skirt!

"If those who compile our code of ethics would read with thoughtful care that literary masterpiece 'The Gettysburg Address,' and encompass some of its style and brevity into a modernized code of ethics, breathing into it the vitality of service and the practicality of modern conditions, they would arrest attention and stimulate action.

"Probably the greatest code of ethics ever evolved, that is most applicable to modern conditions, has echoed down the hall of time for two thousand years—sometimes faintly, but always insistently. The truth of it is being more recognized today than ever before. Those wonderfully practical rules of business ethics and conduct were voiced by Christ himself, when he said 'Love thy neighbor as thyself' and 'Do unto others as ye would that they should do unto you.'

"With but a few amplifications that apply directly to our profession, these simple, potent rules of ethics if practiced, would be all that the business of architecture would ever need."

As John Mannington settled back into his chair, there was complete silence—a reverent silence more impressive than applause.

"A fine speech that, John old boy," George Clarkson remarked finally, as the murmur of approval went across the room. "I wish all the architects in America could have heard it. You know, what we need is not so much preachment as practice. Unquestionably, we should change our code of ethics to meet modern conditions. And the first step in that direction is to rouse ourselves from a mental state of stagnation into which we seem to have drifted.

"It's a funny thing—this progress business. Take

illness for example. More and more it's being recognized as due to incorrect thinking and a warped mental attitude. And in trying to analyse the mental cause of the 'ills' which beset the profession of architecture today, it is my belief that we have fallen into an insidious mental condition, dangerous in the extreme, which explains the lethargic and apathetic condition resulting in our lack of mental progressiveness. Without question, we have been left behind in the race of forward-thinking accomplishment."

Clarkson looked about him expectantly. Soon an active Blade boomed from the rear of the room:

"Well, what's the cause? We must know the cause before we can prescribe a cure, you know."

"I'll tell you the cause," Clarkson retorted, ready for the attack. "An architect in a small way is given a great deal of power. He is a little Czar over a job. His opinion and ideas are carefully watched and catered to by the contractors, the material men, or the sub-contractors on that particular job. And what's the result? The result is he is flattered, 'yessed,' fawned upon, told what a wonderful artist he is, hokum on hokum without end, until his head has no more room for progressive thoughts.

"Nothing is more mentally deadening than the saga of the 'yes'; and under this siren music his chest expands and his head swells until in his glowing egotism he feels pretty close to the throne of deity. His ears cannot hear, above the shuffle of the kowtow, the rumbling protest of the God-of-Things-that-Are. And it is this mental attitude of self-satisfaction that is cheating the architect out of the reward due the advanced thinker."

"That's a pretty hot shot, Clarkson. Better make it a little milder, or there'll be a crowd waiting for you at the 'stage entrance'!" There was a round of smiles at this. But Clarkson was not squelched,—not by any means.

"Maybe it is a hot one, but we architects need a warming up now and then. Why, only the other day I heard someone say that architecture was an 'obsolete profession.' Just think of it fellows—think of it!!" George paused in dramatic emphasis. "That's what we've come to. Now, even a wise man may make mistakes; but only a fool fails to profit by the errors of his ways. And if we would save our beloved profession from oblivion, boys, we've got to apply desperate, and effective measures promptly."

Clarkson was about ready to call it a day when a Blade interrupted.

"Look here, old timer, you've told us everything except what to do about it. Personally, I may be a lot wiser, but not any more helpful. Now, just what is your idea of an easy-to-take, honest-to-goodness cure for this terrible epidemic?" Clarkson laughed. So did the rest of the audience.

"Well, while we're still on the firing line, we might as well use up the rest of our ammunition,"

Clarkson resumed. "About the only way out, that I can see, is to *modernize our ethics*. We have modernized our work. Buildings now don't look like the shacks they set up in the dark ages of the Pullman Romanesque, do they? Well, then we must move along with our own work,—forward and upward. You know, I got a peach of a letter from a friend of mine down in Houston, the other day, and with your kind permission, I'm going to read it to you. Here's what he says:

"Dear Clarkson:

"It is not without some hesitation that I bring myself to the firing line in this ethics-battle; but since everybody else has an idea about ethics, I might as well air mine, and that is that ethics denotes that part or phase of conduct which has to do with the relations of people to one another. While reading a newspaper is *conduct*, it has no ethical significance. But driving a car down the street does have, because it constantly involves the rights and privileges of other people. A clearer understanding of the term 'ethics' itself would assist greatly in a proper solution of mooted ethical questions. All of these questions have their various degrees of importance; but the one that should interest architects most and cause them the gravest concern is that in which ethics reaches its highest degree of importance—the question involving the greatest number of people—the relation of the architect to the public.

"Our relations with the decorative arts and crafts are necessary; with the manufacturers, important; with the draftsmen, essential. And while all of the other relations of professional life have their place and require consideration, yet our relations with the Public far outweigh them all.

"There are certain rights that the public has with reference to the architect, and until we as architects recognize those rights and grant the public those privileges to which it is entitled, our conduct towards it will continue to be unethical.

"First: The public is entitled to accurate information as to the services the architect has to offer. It can never make the proper or utmost use of them until it knows what they are. Obviously, under present conditions of industry and society, when each one of us knows so little about any line of activity except his own, we cannot expect the public to know all about the architectural profession. But it is our duty to supply the thinking world with the information to which it is entitled, by the most effective means.

"Second: The public is entitled to protection against the multitude of unscrupulous people who set themselves up as substitutes for architects and who by various ways and means seek to defraud their clients. Every year that public loses perhaps millions of dollars in this manner, when an effective architect's license law would go far towards eliminating this loss. And this problem is one of ethics.

"If we will glance for a moment at some of the factors that stand between the public and the architect,—which factors destroy or prevent an ethical arrangement,—we will find first a group of so-called "Architects and Builders" whose chief reason for existence is the additional profit to be made by usurping a double title, separating their clients from legitimate architects, and placing themselves in a position to take as their profit what the real architect could save for the builder or owner.

"Another factor: There is an ever-increasing number of contractors who will make a sketch, build a house, and offer it for sale. It usually lacks the economy of material, convenience of arrangement, and substantial construction to which the purchaser is entitled, but the price disguises this inferiority. This method is not limited to the one-room shack, either. I recently heard of a contractor who, aided by a good draftsman, designed and built eleven bank buildings in one state in less than a year.

"A third factor: There are a group of lumber and material companies, each with more or less of an "architectural department," that work along the same lines and co-operate with the other two groups.

"Fourth: There is a large group of real estate operators who will let any contractor build any kind of a house on any lot he chooses and will then use the sales force to sell it to the first sucker that will take it, regardless of actual value.

"It is these groups that are constantly suggesting to the public by every means of communication in their power that the architect is incompetent and an extravagance. All of this is highly unethical. It is an infringement upon the rights of both the public and the architect. And if architects have any honest-to-goodness desire to establish and maintain ethical conduct, they will have to make every effort in their power to put a stop to this practice.

"Just a word as to the seriousness of this situation. In checking over a number of trade journals recently, the number of permits issued upon "private plans" was found to vary from 72% to 83% of the total, and on projects amounting to as much as \$100,000. Granting for the sake of argument that much of this work was small and some of it might, for special reasons, have been assigned by a competent architect, it nevertheless shows that the majority of the public does not see any need for architectural service. If the architect has any value, why isn't it appreciated and used?

"There are two reasons. First: the positive reason that so many large groups are using every means in their power to prevent its use, and second: for the negative reason that the architects do not seem to care and are making no effort to correct the defect or to apprise the public of the value of their services.

"Under modern conditions, no individual can speak with the force or authority of an organization;

and the professions as well as the trade organizations recognize this fact. The beneficial results accruing to the members are apparent even to casual inspection.

"When an organization or a profession approaches the hour of dissolution, the destructive forces which have been slowly accumulating, exceed in their total the preservative forces which have been slowly weakening; and it would be interesting indeed, for someone to figure out how far the architectural profession is from that hour of dissolution. But it is just as interesting and far more vital, to give serious consideration to a means of averting a calamity and keeping in the mind of the public, the place architecture justly deserves. The question is: "What are we going to do about it?"

"Until we abandon the academic for the vital, the theoretical for the practical, we will suffer the inevitable consequences and compel the public to suffer with us.

Sincerely,

Eugene B. Church."

A hearty applause greeted the finish of this letter. An admiring Blade remarked: "Well, I'll say this for Eugene, that boy's receiving set is tuned in to get about everything there is on the air; and when he started thinking, he thought a trunkful!"

"Gosh!" contributed another Blade, "I always thought that ethics were things you printed on frosted Christmas cards and sent to your friends when you couldn't afford to send presents. But I've got a different slant on them *now*. They kinda hit you right where you live, don't they?"

"I'll say they do," added another speaker; "and believe me, I'm going right out and buy me a hat that's three sizes smaller than I've been wearing; then see if I can't shrink my egotism down to fit it."

"So bray we all!" laughed another Blade. "But ye Gods! I'm afraid it's going to be a painful operation, though apparently necessary. Between the efforts of John Mannington and Eugene Church, the permanent wave is completely out of my marcel!"

"Well, you're not alone, old thing." Clarkson was again on the floor. "A friendly back-scratching contest like this proves that apparently we are all afflicted with the same brand of fleas!"

"I'll tell you what, fellows, here's one thing we ought to do." Pat O'Hara spoke thoughtfully. "A whole lot of us belong to the local Chapter of the A.I.A., and we ought to go to the meetings; we should inform the high-hats and the green turbans (in a friendly and courteous way, of course) that the organization is supposed to be democratic. Let them know there are a good many of the younger members, particularly, who are modern and progressive in their thought, who are tired of having their activities discouraged and set aside or killed in non-responsive and unprogressive committees. The officers of the A.I.A. hold their jobs simply on the theory that they

are supposed to carry out the wishes of the majority; and it's up to us to assert the *will* of the majority!"

"Hooray," echoed through the smoky atmosphere.

"There can be no question, when it comes right down to the last analysis, that we architects are progressive-minded enough; but we will have to get a Public Relations Committee on the job that will be in sympathy with us and the public,—that will get busy and DO SOMETHING. If they are afflicted with 'that tired feeling' let them resign and give someone else a chance!"

"Now, suppose we put a motion something like this for example," Pat O'Hara continued. "I move that the President of the Chapter instruct the Committee of Public Relations, our most important Committee, to furnish a report of past activities; that they submit a definite and constructive policy for the future; and that our President austere admonish, joyously cooperate with, and everlastingly high-tail them to constructive and continuous action!"

"Boy! That's what I call a *motion*," howled a Blade, highly enthusiastic. "That's sure going to separate the tomcats from the terriers! I'll bet we get a quorum at *that* meeting, all right!"

A roar of mirth followed. It was evident that

the meeting was warming up to a glorious finale.

"Well," continued Pat, "we might as well have a show-down—now. If we'll just get the fine intellect of the old A.I.A. on the job, we'll be enabled ethically to perform our duties toward the public, with the result that it will employ an architect once in a while. For if the reactionaries of the Old Guard win the argument then the death knell of the Profession sounds for this generation and we might as well get out the hearse. But if, on the other hand, the Progressives win (and I am willing to bet dollars against white poker chips that they will) then let's all unite behind them with the solid unanimity of purpose; assist them in every way possible; give as much as we can of our own time and finances to help put this over; and we'll all be rewarded not only in the terms of self-satisfaction, but financially and spiritually."

A general round of applause sounded good to Pat. Tom Kenyon rose.

"Well, fellow Blades, I'd be inclined to say in the language of the street that this meeting was a 'wow.' For remember, after all, the average architect is actuated only by a strong desire to serve others—sometimes too much for his own good, perhaps. But, after all, this is more of a virtue than a failing."



FROM AN ETCHING BY RODERICK SEIDENBERG
"LEAVENWORTH PRISON"

PENCIL POINTS SERIES of COLOR PLATES

This plate, as well as its companion, is presented as an illustration for the leading article in this issue devoted to the work of Harry V. K. Henderson. The original from which the reproduction was made was drawn with pastels on a sheet of "Ingres" paper, purple in color, manufactured by a well known French firm. It measured $11\frac{1}{2}$ " x $14\frac{3}{4}$ ". Aside from being a most delightful piece of color composition, it is drawn with a freedom which is all too rare among architectural draftsmen. It is hoped that others will be encouraged to experiment with this medium.



AUTUMN FÊTE

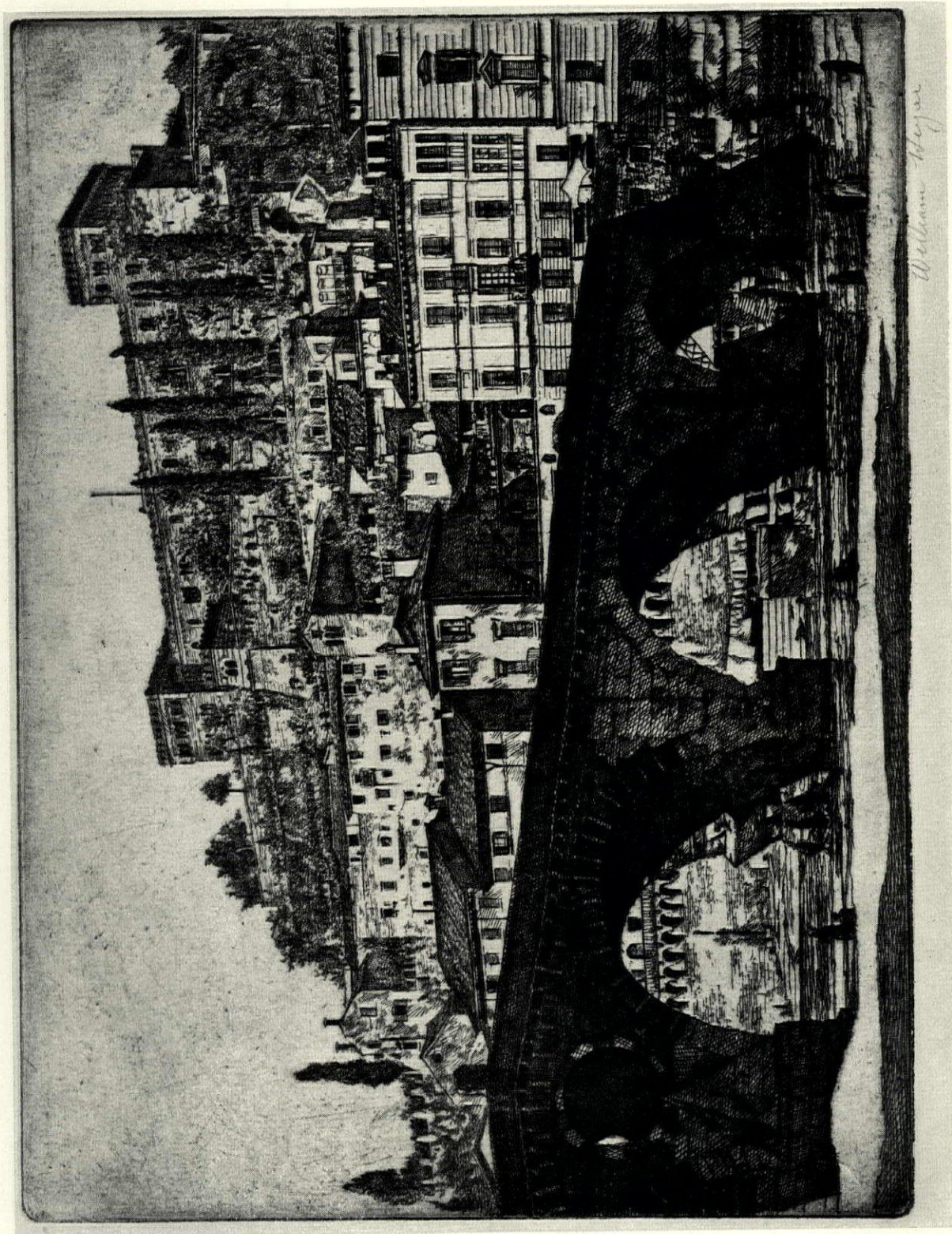
PASTEL DRAWING BY HARRY V. K. HENDERSON



ITALIAN GARDEN FANTASY
PASTEL DRAWING BY HARRY V. K. HENDERSON

PENCIL POINTS SERIES of COLOR PLATES

Pastel, which was employed in the drawing reproduced here, is not a familiar medium to most architectural draftsmen. Its use could be cultivated to advantage, not only for recreational studies such as this one but for architectural renderings as well. It is capable of giving surprisingly good results easily and rapidly and, since the crayons are soft, has the advantage of not being too definite, thus encouraging freedom of drawing. A box of pastels is an excellent antidote for the "tightness" which is apt to develop through constant work with a finely pointed pencil.



FROM AN ETCHING BY WILLIAM HEYER
CASTLE OF SAN PIETRO, VERONA

PLATE V

VOLUME IX

NUMBER 2

The etching reproduced here was done by a young American artist who has been working abroad for the past two years. The original print measured 9 1/4" x 7" and was made on Japanese vellum paper with a rich warm ink which gave a soft sunny effect. It was drawn directly from nature on the plate without reversal so that the print is transposed from right to left.



"PENCIL ETCHING" BY HAROLD GOLDMAN

NUMBER TWO PARK AVENUE BUILDING—BUCHMAN AND KAHN, ARCHITECTS

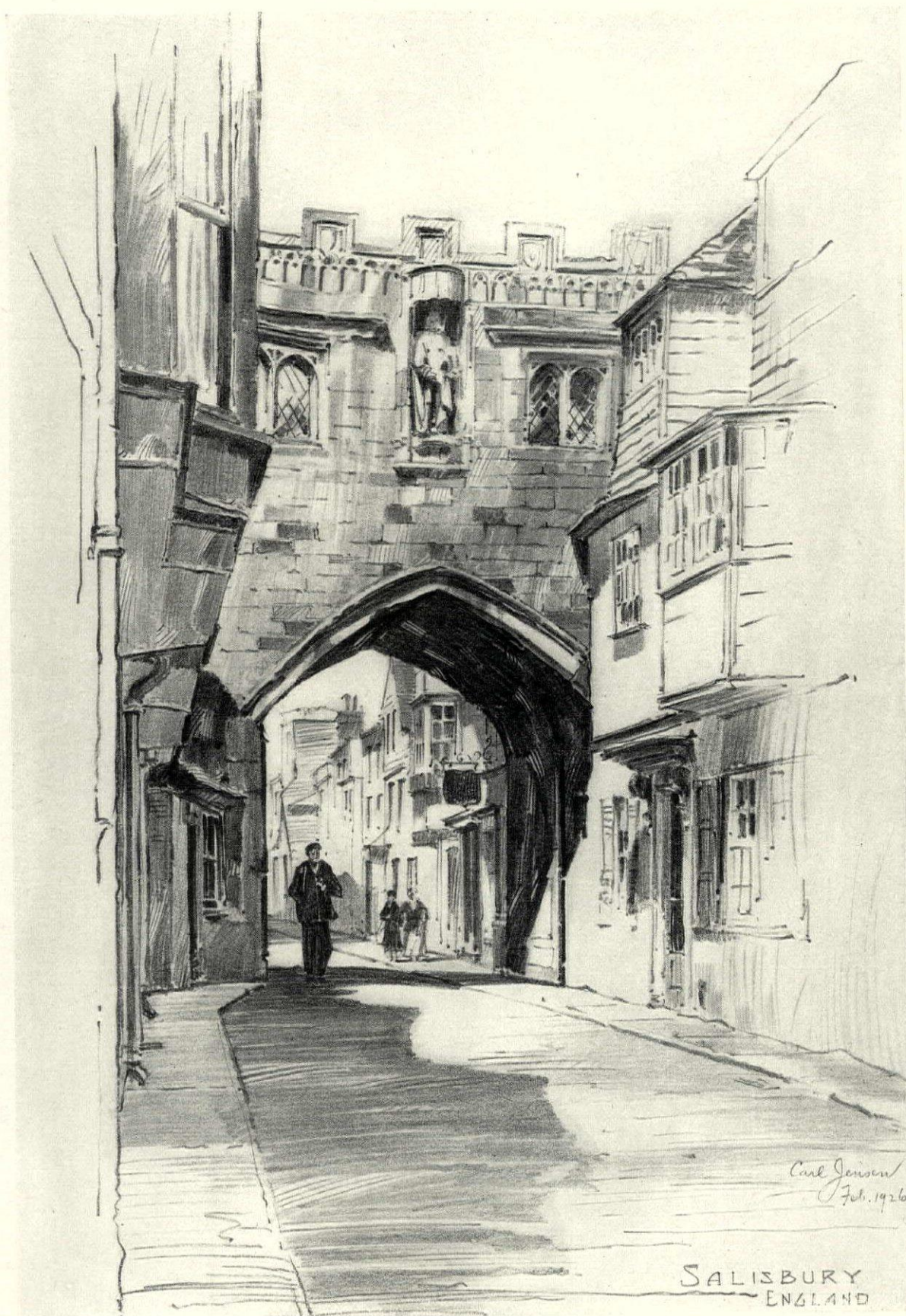
PENCIL POINTS

PLATE VI

VOLUME IX

NUMBER 2

This plate was reproduced from a so-called "pencil etching," the technique of producing which we are, unfortunately, unable to describe since it is the secret of the renderer. By means of a photographic process, any desired number of prints may be made from a negative of the specially treated original drawing, each of which has some of the quality of an etching—hence the name.



FROM A PENCIL SKETCH BY CARL JENSEN
STREET IN SALISBURY, ENGLAND

PLATE VII

VOLUME IX

NUMBER 2

This clean, crisp, pencil sketch is the work of a young man who has been studying pencil drawing under Ernest W. Watson. The original was made on kid-finish bristol board and measured 7" x 10".

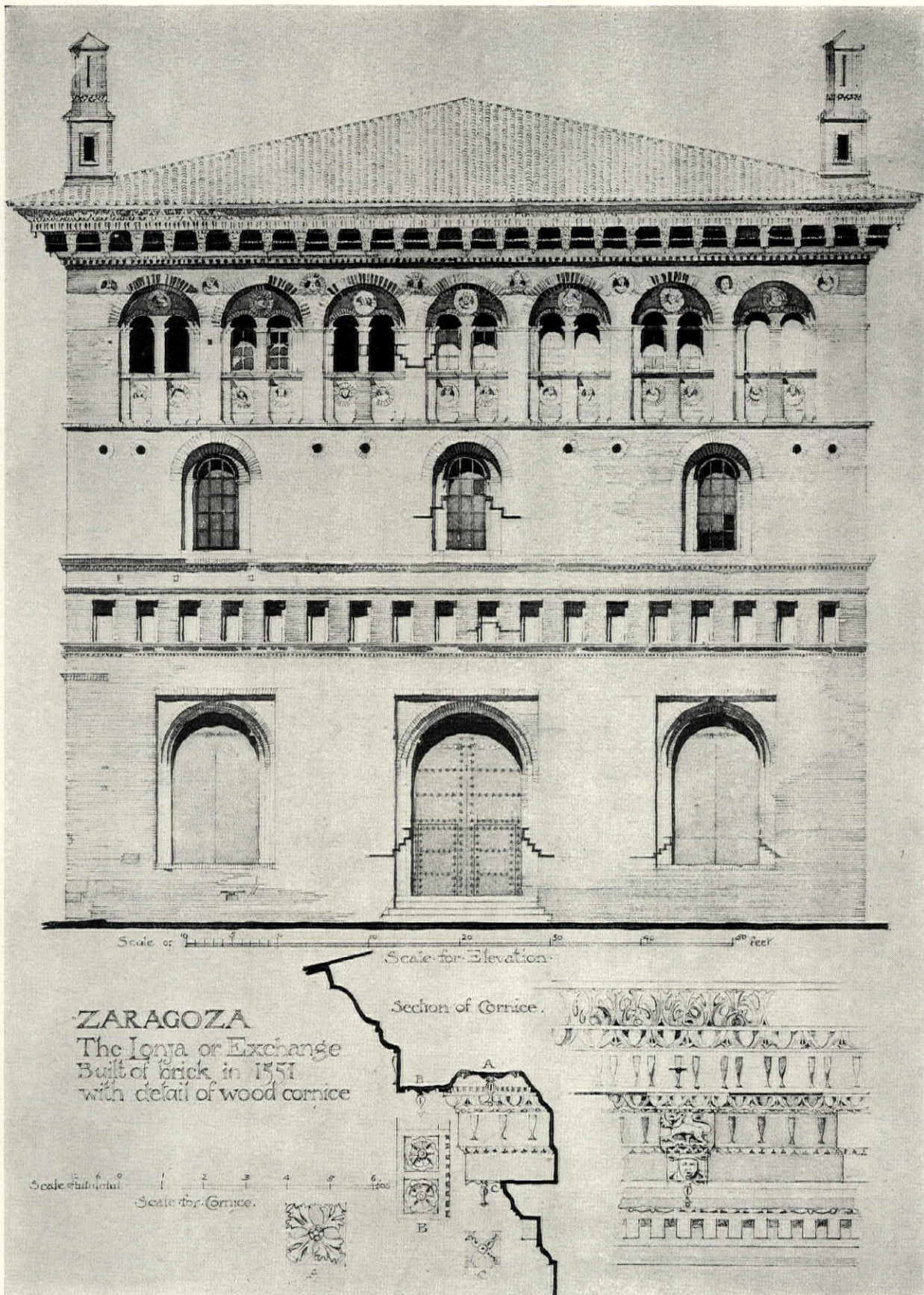


PLATE VIII

VOLUME IX

NUMBER 2

"A valuable example of material controlling the design is presented by this very striking brick-built façade. Built in a district where stone is scarce, the architect, as in the early Italian Renaissance, has evidently adopted the round arch, as he could not obtain large stones for lintels. This surmise is borne out by his treatment of the main cornice, which he was obliged to construct of wood, as the material most appropriate to his hands. The lower strings and cornices, however, are formed of brick, the projection being slight. The interior is a large square apartment, occupying the whole area of the building, divided into three naves by pillars, and extending to the height of the first two stories. Three windows on the central stage light the interior. The large doorway and the window openings on the ground floor have wooden shutters covered with copper. The terra-cotta plaques on the top floor arcade are beautifully modelled, and the small towers are tiled with green and white 'azulejos' or tiles."

A. N. PRENTICE



W H I T T L I N G S



BULLETIN DE "LA GRANDE MASSE,"

Published by the alumni organization of the Ecole des Beaux-Arts, gives a graphic idea of the way the élèves spend their odd moments between projets.

H. HAUGEN,

Chicago banker, testifies to the desirability of employing an architect:

"First: We consider the architect's fee a portion of the cost of the building. Second: We certainly do consider the services of an architect essential in a real estate investment. His ability, character and integrity are invaluable."

SAMUEL J. COLLINS,

Virginia architect, gives the Rotarians of Staunton a line on the elements of architecture:

"There are three fundamental things necessary for the construction of a building, any building. They are, raw materials, work, ideas. The raw materials, nature provides abundantly. For the work, the energies of many men must be bent to procure and fashion the materials and to cut and fit and haul and lift and carry and place them in position. Both the raw materials and work are very necessary—so necessary that a building could not even be started without them. Nevertheless, it is the quality of the ideas that determines whether the materials will be wisely or unwisely selected; correctly or incorrectly fashioned and intelligently or unintelligently assembled, whether the building will be conveniently arranged and strong and durable, resisting the elements, or weak and flimsy; whether it will be warm and comfortable or bleak and miserable; whether it will be, when finished, an ordered and satisfactory housing for the activities of man with all of the many contrivances which we sum up under the name 'Civilization,' or just a misshapen meaningless botch."

W. C. ZIMMERMAN,

Former State architect of Illinois, who has become a resident of California, appears to have acquired the Los Angeles point of view as reported in the "Examiner" of that city:

"Los Angeles has the advantage of being a new city. In the eastern cities you see a few good examples of architecture in public buildings, but there are many more of the old, unsightly buildings. In Los Angeles everything is new and it makes a beautiful city."

C. RALPH NELLIS,

St. Paul realtor, utters a glittering generality in a statement given to his local "News":

"Employing an architect insures not only a beautifully and practically designed home, but also insures construction according to the best practice. The average person who has a house built is not fully acquainted with the proper materials and their correct use."

EDITORIAL WRITER,

For the "San Francisco Examiner," comments on a recent dispute by members of the local Bohemian Club:

"The report that a cultured San Francisco club has ruled that an architect is not an artist, and therefore can not serve on the art committee of the club, will be confusing to the laymen who see beautiful buildings along the streets and very ugly paintings in shop windows.

"But the dictionary seems to stand by the club's ruling. The dictionary doesn't seem to think much of an architect as an artist—it calls him a combination of designer and builder.

"And the dictionary was written after a Greek architect had built the Parthenon. Think of that!"

SIGMUND NESSELROTH,

Birmingham, Alabama, architect, in an interview with the press, dispels a popular illusion:

"There are many who think that the life of an architect is prosaic, but nothing could be further from the real truth, for there is always color and high lights, there is variety in all its myriad angles and to study the character of individuals is one of the most illuminating things imaginable and that is what constitutes a large part of my work."

WILLIAM ORR LUDLOW,

Of Ludlow and Peabody, architects, and champion of good craftsmanship in construction, discusses the problem of small home building in a recent newspaper interview:

"The most vital problem in home ownership today is the elimination of poor construction. Poor construction has an attendant train of evils which causes home owners to expend millions of dollars a year for repairs. These repairs are due in most cases to poor workmanship, materials being on the whole good. By poor construction I mean that caused by a careless or an ignorant attitude toward what should be proper assembly of materials.

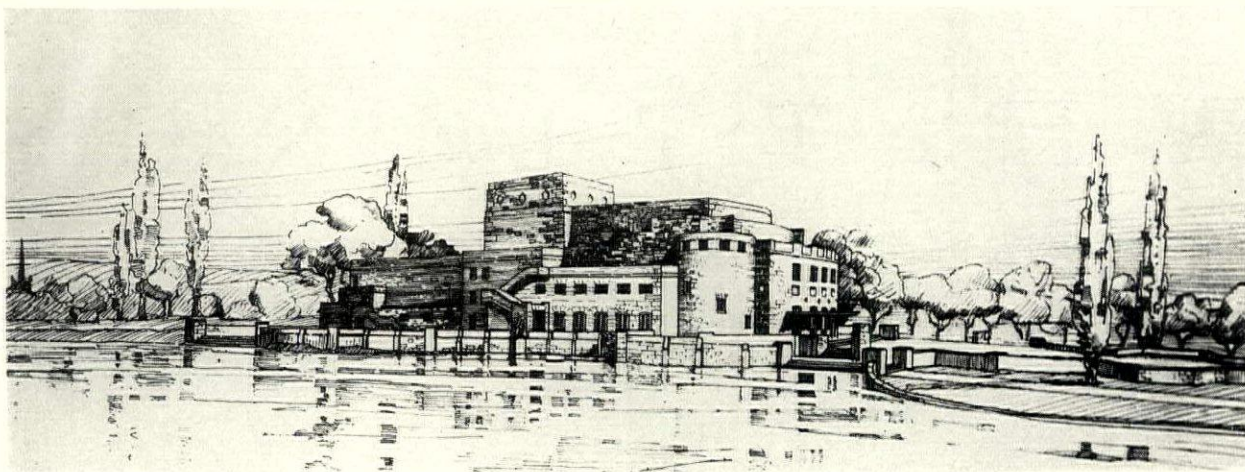
"But we lack craftsmanship. We have good workers, honest men working under conditions never better in history. But we do not give them the incentive to put their heart into their work."

WILLIAM ROGER GREELEY,

Boston architect, in his new book, "The Essence of Architecture," gives an explanation of sincerity in architecture:

"Looked at subjectively, sincerity in the architect is characterized by a high regard for his profession, a strong devotion to work, and a deep enthusiasm with regard to each problem of design that he undertakes to solve. Although a creative genius, he will have more of the point of view of a discoverer than a maker—of beauty. His regard for his profession strengthens him to resist the temptation to secure through tricks and tours de force a temporary personal advantage. His strong devotion to his work frees his mind from the desire for short-cuts and plausible effects. His enthusiasm carries him through each problem to sound conclusions and a true solution.

"Such attributes in the architect give to his work the quality that we call 'sincerity.'"



WINNING DESIGN BY ELIZABETH SCOTT, ARCHITECT, LONDON, ENGLAND

PERSPECTIVE DRAWN BY M. CHESTERTON

COMPETITION FOR NEW SHAKESPEARE MEMORIAL THEATRE AT STRATFORD-ON-AVON

THE COMPETITION FOR the new Shakespeare Memorial Theatre to be built at Stratford-on-Avon was open to English and American architects. Seventy-four designs were submitted in the Preliminary Competition and of these six were selected and their authors invited to compete in the Final Competition. The winning design, by Elizabeth Scott, of London, was unanimously chosen as the most suitable of the six designs submitted by three English and three American architects in the Final Competition.

The Assessors, who formed the Committee of Award, were E. Guy Dawber, and Robert Atkinson, Director of the Education Architectural Association, and Raymond M. Hood of New York. A description of the winning design, taken from the report of the Assessors is as follows:

"Design No. 3 in its general conception, in its acceptance of the site difficulties and their solution, and in its architectural character, shows great ability and power of composition. It has a largeness and simplicity of handling which no other design possesses. Its general silhouette and modelling to fit the lines of the river are picturesque and the character of the design shows consideration for the traditions of the locality; if any criticism is offered, it would be that brick for the external facing would be warmer and more harmonious with the general aspect of the town, and would at the same time be more economical.

"The general lay-out of the site is admirable. The new Bancroft Gardens are made to lead up to the buildings very successfully and parking spaces for cars are provided as suggested in the Conditions.

"Good river terraces, steps, and approaches are also incorporated; the treatment of the river being one of the great features of this scheme.

"The central approach across the gardens might be omitted as it appears to cut the ground up rather needlessly, and the carriage approach to the main entrance is not ample enough and needs fuller consideration.

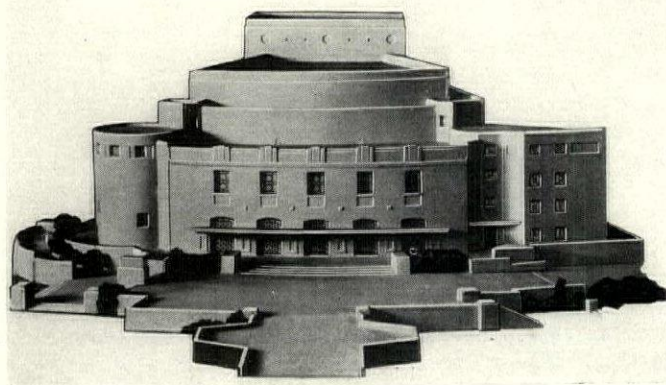
"Internally, the scheme gives substantially the requirements asked for, the stage being admirably arranged and the sighting and planning of the auditorium satisfactory.

"The Assessors do not need to specify the details of the scheme as the drawings will be able to express themselves, but they would point out one or two features where improvements could be effected."

The approach to the theatre will be through a large garden and grove of old trees. A terrace and promenade, from which a number of large doors lead into the auditorium, rests on the bank of the Avon, which is reached by two flights of broad steps leading down to the water. The building probably will be constructed of cream colored brick and natural stone. Ample space is provided for an interior promenade, refreshment and rest rooms, and committee rooms. The stages of the new and old theatres will be separated only by a fireproof drop and can be combined when desired, giving a stage depth of more than sixty feet.

The theatre will be built at an approximate cost of \$750,000, and will have a seating capacity of one thousand. The walls and stage of the old Memorial Theatre, still standing after the fire which destroyed the playhouse in 1926, will form the rear of the new theatre, this section being for use as a conference hall.

Funds for the building and endowment of the new theatre are now being raised in English-speaking countries throughout the world.



MODEL OF WINNING DESIGN

THE GUY LOWELL MEMORIAL COMPETITION IN ARCHITECTURE

THE SCHOLARSHIP. This competition is given in memory of Guy Lowell, 1870-1927, a distinguished architect, who believed in the importance of foreign study and travel, and who was a generous and sympathetic friend of all students.

The value of this scholarship is represented by an annual award of one thousand dollars (\$1000) to assist draftsmen, and students in schools or architecture, whose previous preparation has been in offices, to benefit by six months' travel and study in foreign countries as may be determined by the Committee in charge.

QUALIFICATIONS OF CANDIDATES. This competition is open on equal terms to draftsmen over 21 years of age and under 29 as indicated above, who are citizens of the United States, who have had at least three years of office experience, and who have not been the beneficiary of any other traveling scholarship.

REGISTRATION. All questions and applications should be addressed to Mr. H. P. Richmond, 12 West Street, Boston, and should be received on or before March 19th. The competition will be held the last Saturday and Sunday in April. Applicants must be sponsored by letters from the architects in whose offices they have worked, and each application must be endorsed by someone intimately acquainted with the applicant who is not a member of his family and other than the architects herein mentioned.

COMPETITION. The competition for the selection of the scholarship holder will be conducted by the Committee, and will be in the nature of a week-end sketch problem. The program will be given out at the same time throughout the country, and will be issued at five o'clock on a Friday afternoon, the drawing to be completed by nine o'clock the following Monday morning. In each case the work will be conducted under the supervision of an architect, and is to be performed without outside help or criticism, in an attempt to secure work that shall be in every way representative of the individual applicant's own capacity.

AWARD OF SCHOLARSHIP. The drawings made as above indicated will be sent directly upon completion to Mr. H. P. Richmond, 12 West Street, Boston, and must be received by a date to be announced later.

A jury of award will be appointed by the Committee in charge to consider the drawings submitted, and the final award will be made on the basis of the judgment rendered by this jury, together with the evidence presented in the letters submitted by the different applicants. The Committee reserves the right to withhold the award if in its opinion no drawings are submitted of a standard of excellence such as the competition warrants.

WORK UNDER SCHOLARSHIP. The successful competitor will be expected to use his time for travel in such countries and on the general lines of such an itinerary as may be indicated by the Committee before his departure, and subject to such further modifications as may result from consultation with the Committee's representatives in France, Italy and England. Upon his return the scholarship holder will be asked to prepare a drawing based on notes and sketches that he has prepared during his travels, the selection of the particular subject being left to his decision and the completed work to be in the hands of the Committee within three months after the student's return.

CHICAGO ARCHITECTS' ATHLETIC LEAGUE

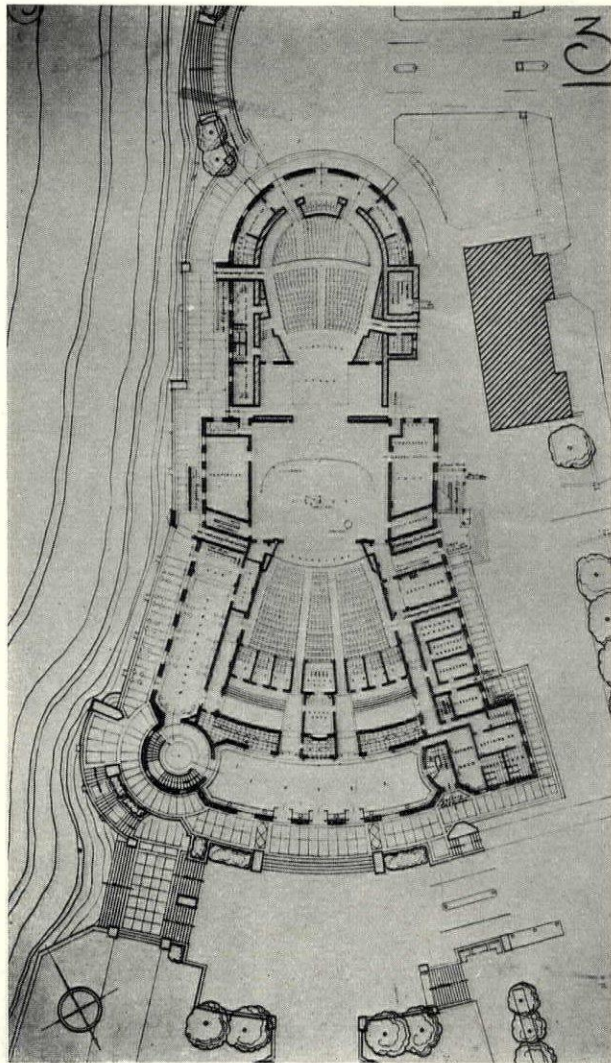
THE LEAGUE recently held a banquet at which a trophy was presented to the office of Graham, Anderson, Probst & White, through their Mr. Neeson, as winners of the championship in indoor baseball for 1927. The team representing that office is to be congratulated for their sportsmanship and fair play that rightfully won them the first place position for the 1927 season. The cup will be placed in the office of the winning team until the termination of next season when the winning team of 1928 will take over the cup. The team winning the cup two years in succession will have it as a permanent trophy.

In addition to the winners of last year's trophy, the following architects' offices of Chicago are represented in the League: Schmidt, Garden & Erickson; Joe W. McCarthy; Granger & Bollenbacher; H. V. Von Holst; Rapp & Rapp; and Childs & Smith. The League will hold a meeting early in April when new officers will be elected and a schedule of games compiled for 1928.

SACRAMENTO ARCHITECTS' CLUB

The Architects and Engineers Club of Sacramento, at a meeting held in the Hotel Sacramento, January 9th, elected the following officers for 1928:

President, J. O. Tobey; *Vice-President*, Jens C. Petersen; *Secretary*, Earl L. Holman; *Treasurer*, H. W. De Haven; *Directors*, P. T. Poage, Fred Ruckh and C. F. Berg.



SHAKESPEARE MEMORIAL THEATRE
ENTRANCE FLOOR PLAN

THE RICKER MANUSCRIPT TRANSLATIONS, VI

(Continued from page 83)

built for some special purpose. Although of less extent, it is nevertheless not lacking in real interest and charm. He discusses all of the important types. Chapels in cathedrals and churches, detached chapels, Saints' or Holy chapels, chapels found in connection with castles, châteaux, and mortuary chapels.

Viollet-le-Duc gives special attention to the beautiful chapel of S. Chapelle, in Paris, which is considered the gem of all chapels—at least in France. As Government architect he was in charge of the restoration of this structure, and, although small, it is considered one of his most brilliant pieces of restorative work. Here he has completely replaced portions of the structure, decorative sculpture, ornament, glass, pavements and brilliant wall paintings. The plan of this very interesting structure accompanies this article, and is shown on page 83.

It may appear to the reader that Viollet-le-Duc has placed too much emphasis upon ecclesiastical architecture in his *Dictionary*. It is true that the major part of his books is given to religious types, but it must be remembered that during the Mediæval Period, the only architecture of any importance was that connected with the religious institutions, and it must also be remembered that the life work of Viollet-le-Duc was in the late restoration of many of those very structures. We should, therefore, expect to find his works completely filled with the best of his gleanings of mediæval church architecture.

The translation into English of the *Rational Dictionary of French Architecture* by Dr. Ricker, makes available to the research scholar a great storehouse of the most vital architectural and historical information that would otherwise be obtainable only to those who are able to read technical French.

A DRAFTSMAN DRAWS FOR PLEASURE

(Continued from page 78)

his imaginative powers and the rectification of his moral self which this peculiar communion with nature has brought to him.

Harry V. K. Henderson was born at Poughkeepsie, New York, in 1884. His architectural training began at Pratt Institute in Brooklyn and continued in the Atelier Prévot and later in the Atelier Corbett in New York. Subsequently, he was engaged in the offices of Howard Greenley and of Tracy & Swartwout, New York. In 1917 he entered the office of Raymond M. Hood, New York, and since that time he has been associated with that office.

BOSTON ARCHITECTURAL CLUB

THE STUDENTS OF the Atelier have had a busy holiday season this year, with keeping up class work, enjoying the holidays and preparing for the Annual New Year Dance. This dance was the most successful one of the past year with over two hundred attending. The Hall was decorated beautifully with oriental rugs and evergreens. The rear of the hall was nearly covered with a large poster representing the old year with the old ideas giving place to the New Year and the new ideas. As this party started at 12:15 A. M. and lasted until 4:30 A. M. it was a novel one and gave great pleasure to all those who were there.

The exhibition of the *House Beautiful* cover designs which was in the Great Hall from Christmas until the New Year attracted the attention of many and drew much favorable comment.

About the middle of January, the *House Beautiful* Small House Competition drawings and photographs were on exhibition.

The joint dinner of the Boston Architectural Club and the Boston Society of Architects was held the evening of January 10th. This dinner proved beyond doubt that the profession has lost none of its interest in the younger members nor interest in the overflowing "punch" bowl.

The Entertainment Committee gave us an informal dance on January 25th. The Annual Costume Ball will take place sometime this month. The costumes and decorations are to be Louis XIV.

NOTES FROM THE

DETROIT ARCHITECTURAL BOWLING LEAGUE

OUR MID-SEASON Handicap Tournament, consisting of doubles, singles, and head pin entries was held on December 30th. Considering the fact that a number of our members were out of the city for the holidays, the meeting was well attended and several good scores were turned in.

The winners and their scores follow:

Doubles

1st—F. McCormick (M. & D.) and K. Fraser (D. & M.)	1141
2nd—Kalsched (A. K.) and Mason (A. K.)	1079
3rd—Collins (L. K.) and Spencer (W. & E.)	1050

Singles—Class A (167 and over)

1st—Smith (M. & H.)	647
2nd—F. McCormick	596
3rd—J. McCormick	583

Singles—Class B (under 167)

1st—Schoerger (M. & H.)	518
2nd—Van Reyendam (VL. S. & K.)	485
3rd—Spencer (W. & E.)	469

Head Pin

1st—Smith (M. & H.)	259
2nd—Kalsched (A. K.)	243
3rd—Michls (A. K.) and Richardson (F. H. N.)	241

There are few changes in the standings of the teams since last month:

	W.	L.
McGrath & Dohmen	31	11
Smith, Hinchman & Grylls	29	13
Frank H. Nygren	23	19
Donaldson & Meier	22	20
Louis Kamper	21	21
Janke, Venman & Krecke	20	22
Albert Kahn	19	23
Malcomson & Higginbotham	17	25
Van Leyen, Schilling & Keough	15	27
Weston & Ellington	13	29
Ind. high 1 game—Krecke (J. V. & K.)	266	
Ind. high 3 games—Jolson (F. H. N.)	654	
Team high 1 game—Janke, Venman & Krecke	1027	
Team high 3 games—Smith, Hinchman & Grylls	2765	
Leading 200 scorer—Jolson (F. H. N.)—13		
High ind. average—Jolson (F. H. N.)—187		

NEW YORK ARCHITECTURAL CLUB ATELIER

THE NEW YORK ARCHITECTURAL CLUB ATELIER has decided to hold its first dance, a Barn Dance, on Washington's Birthday Eve, Tuesday, February 21st, 1928, at the Club rooms, 118 East 42nd Street. The Committee announces that the subscription will be \$1.00 each person and that tickets may be obtained from the following Atelier members: Harold Brinkerhoff, (Cass Gilbert); Louis F. Brass, (Pratt Institute, Brooklyn); C. Corey Mills, (Warren & Wetmore); Anthony A. Zaborowshi, (N. Y. Arch. Club); Harold Stroh, (Ludlow & Peabody).

The dance will undoubtedly be well patronized and those who propose to attend should make ticket reservations immediately. The Committee is preparing a perfect evening, so subscribe early.

SUMMER SCHOOL IN ITALY

A SUMMER SCHOOL AND TOUR OF INSTRUCTION will be conducted in Italy for American students of art by Professor Paul Valenti of Washington University. The tour has been organized with a definite educational object in view, and is authorized by the Italian Government which will cooperate to the end that American students may profit in the highest degree by their studies under Professor Valenti. To this end Villa Plinius, at Bellagio, on Lake Como, has been secured, where regular classes will be held and special lectures given, with periodic visits to all important centers in Italy. A definite course in architecture and archaeology will be offered architectural students.

The tour leaves from New York on July 2nd, returning there on September 17th. The tuition fee, including tour, is \$936.00.

For further information communicate with Professor Paul Valenti, Washington University, St. Louis, Mo.

CINCINNATI ARCHITECTURAL SOCIETY NEWS

AN INTERESTING MEETING was held by the Cincinnati Architectural Society in its Clubrooms Tuesday evening, January 3rd, 1928.

Major L. B. Lent, representing the Common Brick Manufacturers' Association of America, gave an illustrated talk on common brick. Major Lent compared the relative merits of various types of building materials. The pictures shown illustrated clearly the wonderful possibilities offered by common brick.

A brick reputed to be 4000 years old at Christ's birth was passed around. One of the architects regarded it as a fake, because he could not remember having seen it at that time.

The draftsmen were agreeably surprised to find that their drawing room had been cleaned and that it had been equipped with new and suitable lighting fixtures. Now, you know, boys will be girls—they must have a smoke occasionally—so the kind hearted house committee furnished the meeting rooms with iron clad cuspidors provided with copper downspouts.

Every one was happy when the dinner gong sounded—this party was a treat, and they knew they could eat all they wanted without taking out a mechanics lien on their next week's salary.

The one serious note of the evening was the submission of eight Beaux-Arts problems.



Times Wide World Photos

ELIZABETH SCOTT

MISS ELIZABETH SCOTT, winner of the competition for the New Shakespeare Memorial Theatre to be built at Stratford-on-Avon, belongs to the modernist school of architects. She is twenty-seven years old and at the present time is employed by a London firm of architects. Miss Scott is a grand niece of Sir Gilbert Scott and a cousin of Sir Giles Scott. Her winning design for the Shakespeare Memorial Theatre is shown on pages 108 and 109.

SAINT LOUIS ARCHITECTURAL CLUB

THE FIRST REGULAR meeting of the Club for the year 1928 was held at the Clubhouse on the evening of January 5th, when the speaker was Mr. John Lawrence Mauran, of the firm of Mauran, Russell & Crowell, Architects. Mr. Mauran's subject was *The Planning and Development of the City of Washington* and since he has been a very active member of the American Institute of Architects for many years, especially during the years from 1915 to 1918 when he served as National President of that body, few men now living could give us more inside information concerning the many victories that the American architects have won in their determination to have that city's growth follow Major L'Enfant's plan. The slides shown were beautiful pictures, some taken from the air, and gave the audience a comprehensive idea as to the possibilities of making Washington one of the most impressive cities in the world.

The second regular meeting of the Club was held on the evening of January 19th, when we had an illustrated lecture on the subject of Bedford limestone by Mr. H. S. Brightly, who directs the Architects' Service Bureau of the Indiana Limestone Association.

A NEW COMPETITION—HOT DOG!

THROUGH THE ART CENTER OF NEW YORK and the American Civic Association of Washington, D. C., the second of a series of four competitions has been announced. The series of competitions, each having its own objective, is sponsored by Mrs. John D. Rockefeller, Jr.

The complete purpose of this campaign is to improve the appearance of the wayside refreshment stands, which, through ugliness of conception and carelessness of construction, are beginning to menace the beauty of our highways.

The first competition was announced in *The Ladies' Home Journal* in November, 1927, and offered prizes for photographs and plans of the best stands already in use. This competition was concluded December 15th; the first prize was won by Norma Bamman of Plainfield, New Jersey.

The second competition, now announced, is architectural in character and offers prizes for the best original designs for wayside refreshment stands which will improve the present conditions. Prizes will be offered in two classes for the best original designs for: one, a refreshment stand without a gas station; and two, a gas station and refreshment stand. The prizes to be awarded in each class are as follows: First, \$500; Second, \$400; Third, \$300; Fourth, \$200; Fifth, \$100.

The buildings in the first competition, for stands without gas pumps, should occupy a plot of ground not over 3,000 square feet and in the second case, the competition for a gas station and refreshment stand, not over 5,000 square feet. Plans for the stand of the first group should indicate arrangements for preparation of food, space for gas range, cupboards or shelves, work-table, ice-box, sink, etc. Service room should show space for counter or tables with chairs, heating apparatus, display cases, etc.

Plans for the stand of the second group should show arrangements for preparation of food, space for gas range, cupboards or shelves, work-table, ice-box, sink, etc. Service room should show space for counter or table with chairs, heating apparatus, display cases, etc. Men's and women's lavatories should show space for basins and toilets. Gas station should indicate position of gasoline pumps, oil barrels, etc., and approximate distance of station from refreshment stand. The buildings should be simple in design and economical of construction. They should be in harmony with, or follow the architectural traditions of, their locality. Stands must also meet the advertising, service and sales requirements of their locality. The plans must show the paths and drives and underground tanks, if any.

The designs submitted will be judged by a jury consisting of the following: A. F. Brinckerhoff, Harvey Wiley Corbett, George B. Ford, Ely Jacques Kahn, and Electus D. Litchfield.

THE PROGRAM

Considerations of the Jury of Award:

1. Fitness of the design as a whole to meet the needs and spirit of the problem.
2. Aesthetic merit of the design.
3. Excellency and ingenuity of plans.
4. Practicability and economy of construction.

Excellence of rendering, while desirable, will not be considered of extreme importance.

Presentation, Drawings: Mandatory. The following drawings are to be submitted:

1. Perspective of the building viewed from the street, rendered in pencil or ink, must clearly indicate the character of the exterior, the distribution of advertising matter, and show a scenic background which is in keeping with the limitations of the site.
2. Plans, at scale of one-quarter inch equals one foot. The walls and partitions are to be solid black and the name and dimensions of each room lettered plainly. Range, sink, cupboards, exhibition and storage space are to be shown.
3. One façade, scaled as above.
4. Section at scale of one-quarter inch showing all wall, ceiling and roof heights.
5. Plot Plan, in case it is not covered in paragraph 2, at small scale, showing location of building, gas tank and pump and toilet conveniences.
6. Graphic scales must be shown.
7. The drawings shall be made in pencil or ink and shown on two sheets of white paper. Drawings shall be mounted on cardboard or stiff paper.
8. Each sheet is to be exactly 25 x 34 inches. Single black border lines are to be drawn so that space inside them will be exactly 23½" x 32½".
9. Each sheet shall bear the title: *Design for Small Wayside Refreshment-stand* or *Wayside Refreshment-stand and Gas Station*.
10. The perspective of the building and the floor plans are to be shown on the same sheet and this sheet, enclosed in single black border lines, brief notes suggesting the color and treatment of the material. The other drawings called for shall be attractively arranged on the second sheet.

Prize drawings in the competition shall become the property of the Art Center.

Anonymity of Drawings: Mandatory. The drawings submitted shall contain no distinguishing mark which could serve as a means of identification.

With each set of drawings there must be enclosed a plain opaque envelope containing the true name and full address of the contestant. The envelope will be opened by the secretary of the competitions in the presence of the jury, after the awards have been made.

Delivery of Drawings: Mandatory. The drawings submitted in this competition shall be securely wrapped, flat, and addressed in plain lettering to: Secretary of Competitions, in care of the Art Center, 65-67 East 56th Street, New York City. No other lettering shall appear on the wrapper. Contestants sending drawings by registered mail must obliterate the return name and address and not demand return receipt.

Drawings shall be delivered not later than 5 P. M. Thursday, March 15. Drawings delivered to the Post Office or Express Companies in time to reach destination and be delivered within the hour set for final receipt will be accepted if delayed by no fault of the competitor. The receipt stamp will serve as evidence.

Drawings submitted in this competition are at the competitor's risk, although reasonable care will be exercised in the handling, keeping and packing for return. Prize-winning drawings are to become the property of the Art Center.

Return of Drawings: Plans and drawings will be returned only if accompanied by postage.

Judgment: The Jury of Award will meet at the Art Center on Saturday, March 17.

NEWS ITEMS FROM
THE AMERICAN ACADEMY IN ROME

IT IS PLEASANT to record the quick adaptation of our new Fellows in the Fine Arts to Rome and to the daily life of the Academy. Already they have shown themselves to be one of the most compatible groups that have yet come to us. Upon arrival here, one of their first tasks is naturally that of becoming oriented in their new surroundings. Rome offers such a variety of associations for the artist that he may be said perhaps never to complete the task of orientation; yet our new Fellows of this year seem to have made rapid progress toward that end, enough so that they have already been able to make preliminary selection of subjects for part of their work of this their first year here. Homer Pfeiffer (first year Fellow in Architecture) has been spending this past month in Tunis, with a view to finding a subject for restoration at Timgad. Dunbar Beck (first year Fellow in Painting) has elected to make a scale model of the vaulting over the altar in the lower church of San Francesco di Assisi with its Giotto decorations, and for the moment is in Tunis with Pfeiffer. The first year Fellow in Sculpture—George Snowden—has several sketches already well under way and has also spent several days at Naples during this past month in studying Pompeian bronzes in the Museum there. Michael Rapuano (first year Fellow in Landscape Architecture) is at work upon measurements of the Villa d'Este at Tivoli. Alexander Steinert (first year Fellow in Music) is engaged in composition of a trio for piano, violin, and violincello.

For the older Fellows in the Fine Arts, perhaps the most interesting event to record for the month is the visit of the third year Fellow in Architecture—George Fraser—to the excavations at Leptis Magna in Tripoli. It will be remembered that Mr. Fraser left for Leptis Magna late in October, for the purpose of obtaining measurements and data for making an architectural restoration of the Roman Baths recently excavated there. His experience was entirely unique. While there he had the good fortune to be able to live with the Italians directing the excavations and these people aided him in every way to obtain the data necessary for his reconstruction. For instance, they even went so far as to assign laborers to excavate certain parts of the Baths still untouched. Now

he is back in Rome and already at work upon what will be the first architectural restoration yet made of these recent excavations.

Another interesting development in the School of Fine Arts is the recent revival of a pleasant custom on the part of the Fellows in Painting—and that is the leaving behind them here at the Academy of small portraits of the Fellows of their period. The custom had been instituted some fifteen years ago, but was then only short-lived. Now it seems well on the way toward revival, with prospects of developing into a lasting Academy tradition. Each Fellow in Painting (for instance, undertakes to do the portraits of the Fellows contemporary with him. For the past Fellows, who have long since left the Academy, Professor Fairbanks has been active in obtaining similar portraits, with the result that the past few months have seen the collection grow from five portraits to twenty-one.

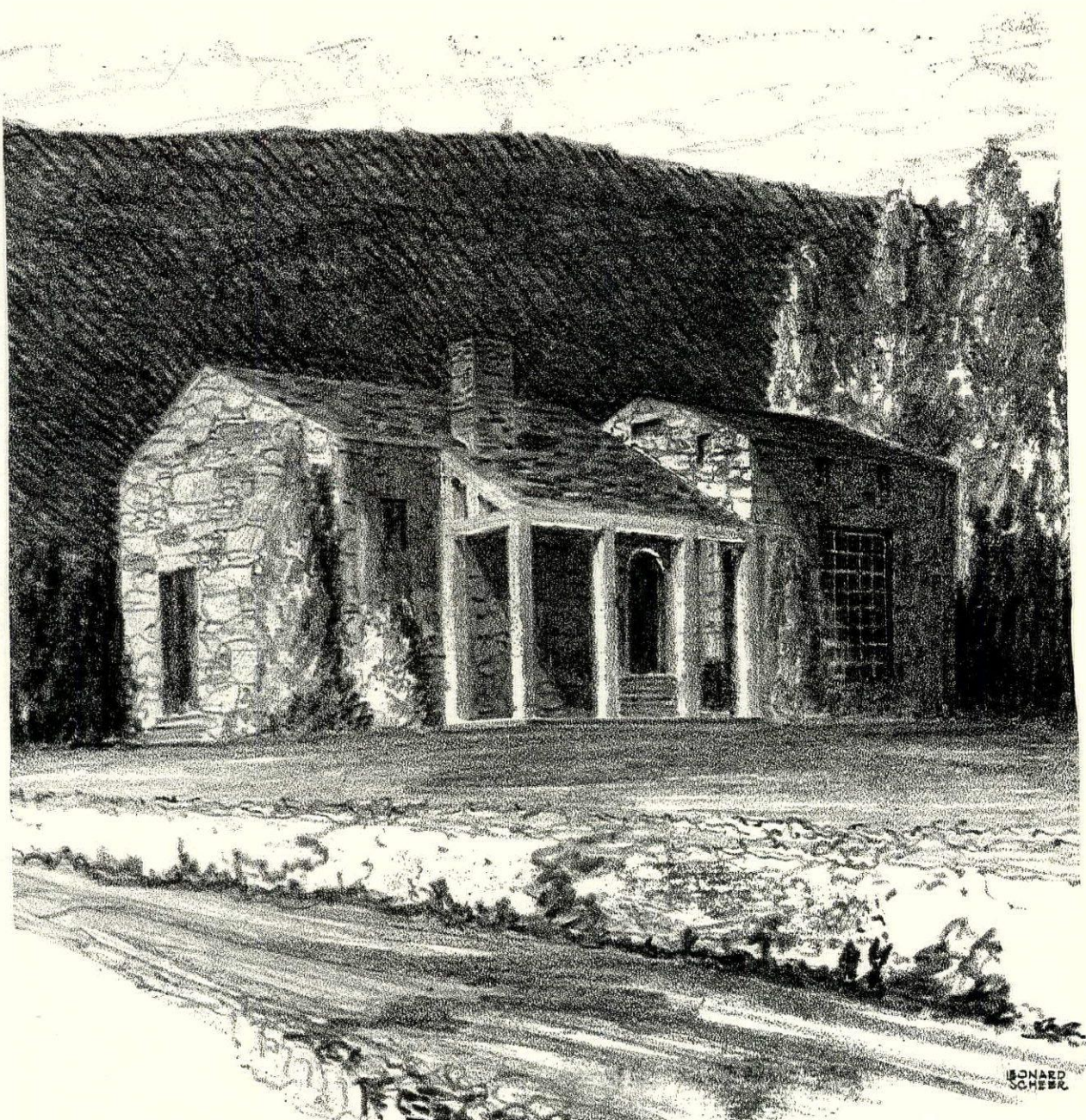
In the School of Classical Studies, the month has seen the continuance and the completion of the autumn field trips through Rome and into the Campagna. These have been conducted by Professor Van Buren, whose close relations with the Italians directing excavations now in progress have made it possible for our people to listen to first hand descriptions of the work being done. For instance, at Ostia the members of the School were able to hear Dr. Guido Calza, the Director of the Excavations, as he discussed recent finds and explained methods of work. In Rome, they were shown recent developments in the work on the Palatine by Dr. Alfonso Bartoli, the Director of the excavations there. At the Villa Giulia Museum, the finds at Cerveteri were interpreted by their excavator, Ingegnere R. Mengarelli. One of the most timely visits of all came when our people were invited to the special advance showing of the excavations at the Mausoleum of Augustus, when there were exhibited the sepulchral inscriptions of Marcellus and Octavia which had been unearthed but a few days previously.

The new plan adopted this year for concentrating during the early weeks of the autumn this outdoor part of the year's work of the School has easily justified itself. There now follows the so-called "indoor work." For this, Professor Lockwood is offering a group of lectures on Renaissance Latin, while Professor Burton is developing an exposition of the Evolution of Ancient Geography.

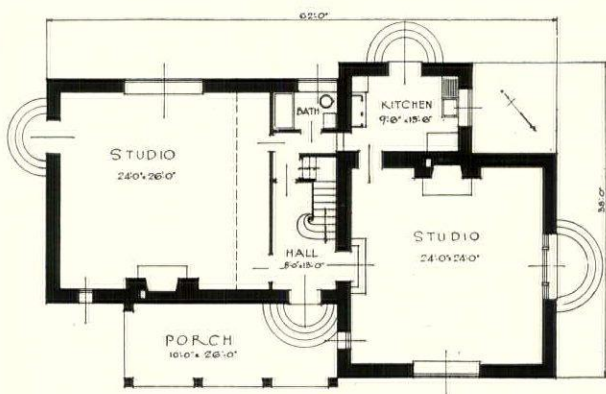


RENDERING IN BLACK AND COLORED PENCILS ON GRAY CARDBOARD, BY S. F. ABRAHMS

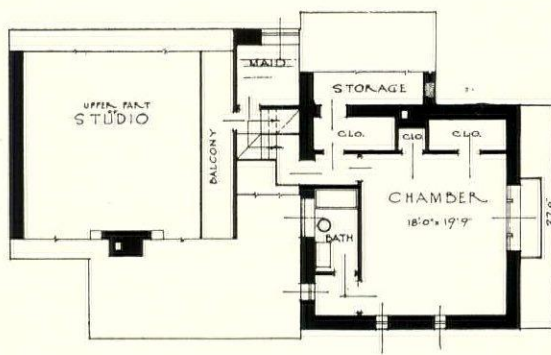
BUTLER & CORSE, ARCHITECTS



LITHOGRAPH PENCIL DRAWING ON CROW QUILL PAPER, BY LEONARD SCHEER



First Floor Plan



Second Floor Plan

STUDIO BUILDING FOR HUGO FELLERT, ESQ., HARRISON, N. Y.

LEONARD SCHEER, ARCHITECT

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

WE WERE MORE than gratified with the success of our Christmas card competition and enjoyed hearing from so many of our contributors. Judging from the entries, the linoleum cut was this year's favored method of making greeting cards. It was a most difficult task for the jury to select a winner, but Mr. Ralph Berger was finally given the prize. Unfortunately, owing to lack of space, we can only show, on the following pages, a few of the many unusual and attractive cards that were submitted.

In our regular prize competitions the winners are as follows:

Class 1, Anthony McGrath; Class 2, P. C. Ogden; Class 3, Arthur Slade; Class 4, F. Wade Brown.

We heartily agree with PENCIL POINTER Theo. G. Ruegg of Berkeley, California, that "A draftsman without PENCIL POINTS is only half a draftsman."

For the benefit of newcomers to this department: we conduct four competitions each month and award a prize of \$10.00 in each class as follows:

Class 1, sketches or drawings in any medium; Class 2, poetry; Class 3, cartoons; Class 4, miscellaneous items not coming under the above headings.

Everyone is eligible to enter material in any of these four divisions. Competitions close the fifteenth of each month so that contributions for a forthcoming issue must be received by the fifteenth of the month preceding the publication date in order to be eligible for that month's competition. Material received after the closing date is entered in the following month's competition.

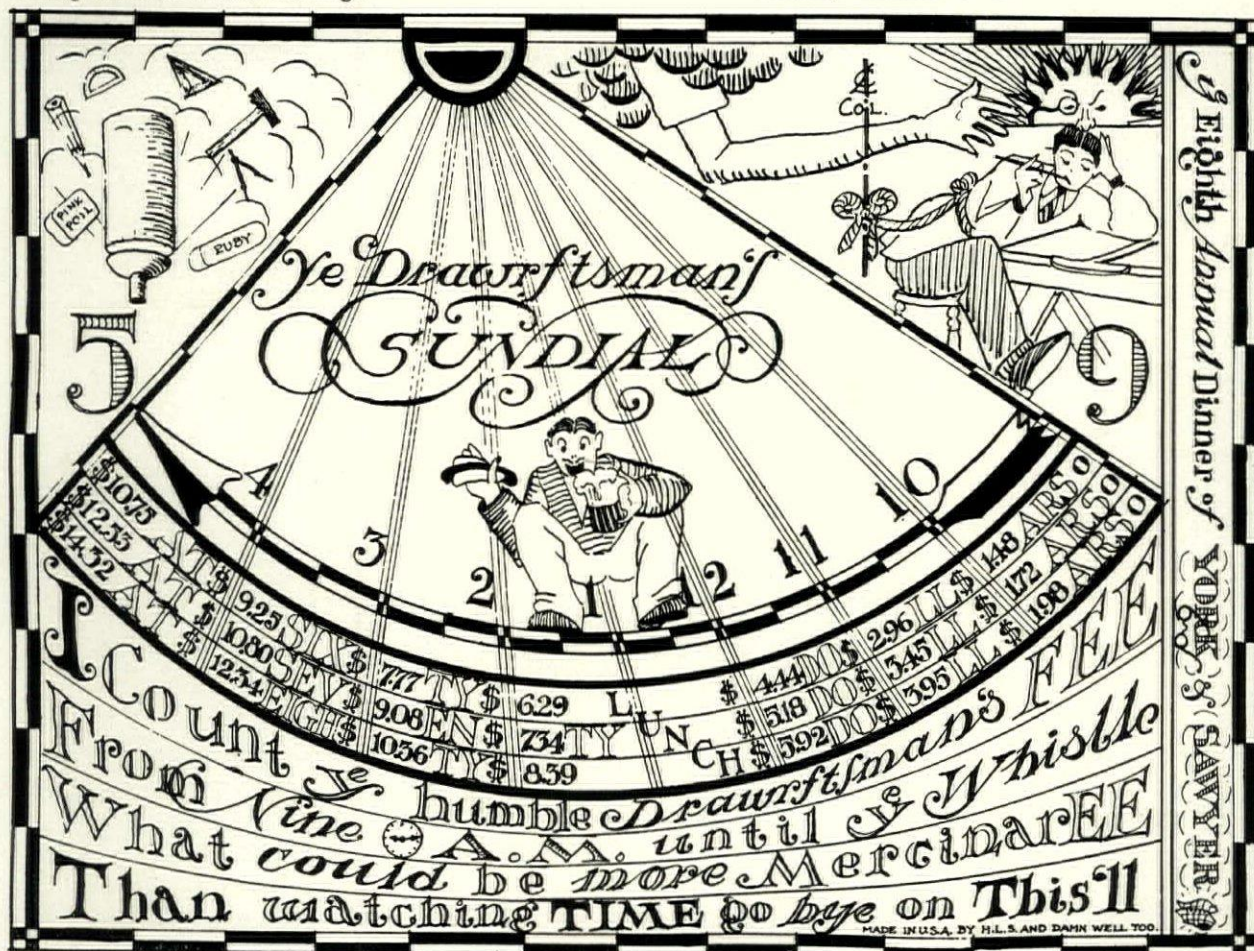
INCONSISTENT REFLECTIONS

By P. C. OGDEN, NEW YORK

(PRIZE—Class Two—January Competition)

I've heard that madrigals are sung
And costly gifts spread forth
To celebrate the birth of kings,
Who come to earth as puny things
Of very little worth.

But when a new man comes to draft,
There is no glad avowal,—
No celebration of his doom,—
Just one more table in the room,
Outside,—another towel.

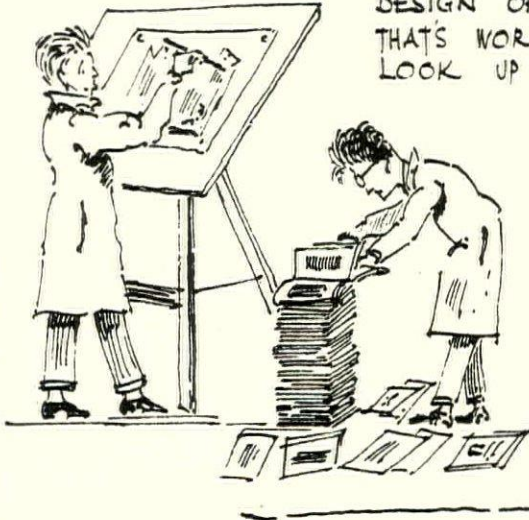


A MENU COVER DESIGN DRAWN BY H. L. SANGER

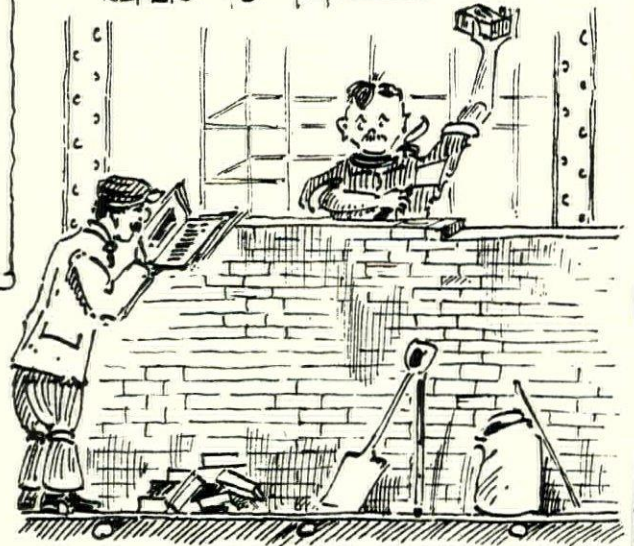
Eighth Annual Dinner of York & Sawyer, Architects, New York

"THE USES OF PENCIL POINTS"

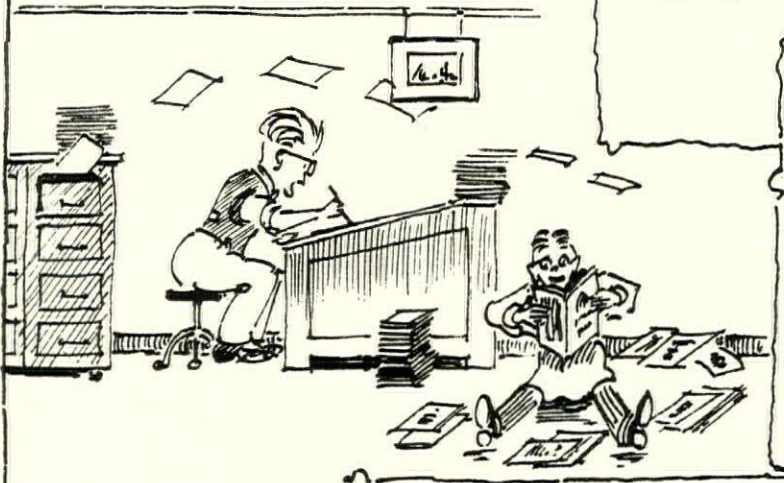
1. IF ITS A MATTER OF DESIGN OR RENDERING THAT'S WORRYING, YOU - LOOK UP 'P.P.' —



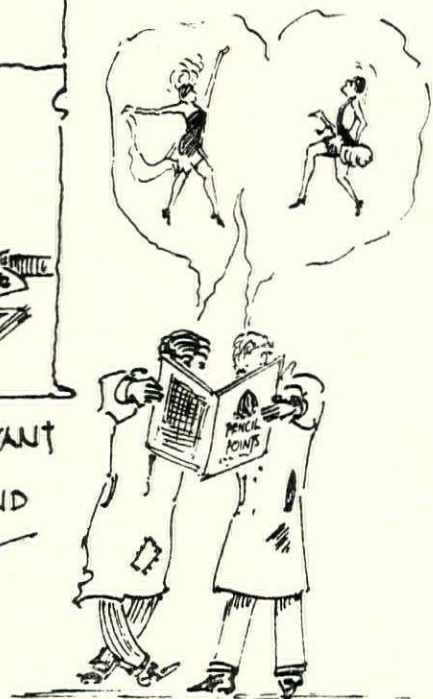
2. OR IF ITS A CONSTRUCTION PROBLEM THAT SEEMS TO HAVE NO SOLUTION - REFER TO 'P.P.' —



3. AGAIN - IF YOUR SPEC. SEEMS FULL OF "OR EQUAL'S", AND YOU CAN'T GET GOING - P.P. WILL SPEED YOU UP —



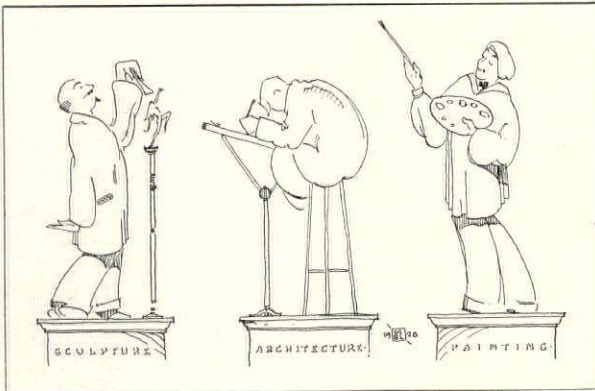
4. AND EVEN IF YOU WANT TO ADOPT A "LOST BABY" - YOU'LL FIND SOME IN 'P.P.'!



YOU GOTTA HAND IT TO PENCIL POINTS EVERY TIME!

SLADE

'27



W. B. ESCHENBACH SETTLES THE PROBLEM OF SCULPTURE FOR THE NEW B. A. I. D. BUILDING

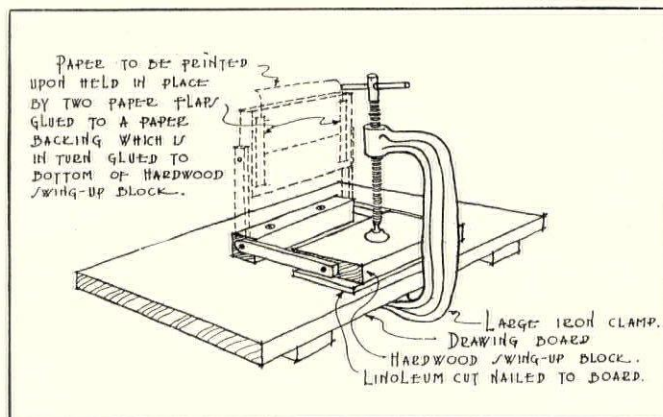
PRESS FOR PRINTING LINOLEUM BLOCKS
By F. WADE BROWN

(PRIZE—Class Four—January Competition)

THE LACK of a proper printing press often prevents the draftsman from trying his hand at linoleum and wood block printing. The sketch reproduced herewith shows a simple substitute for a press for printing small cuts. A husky iron screw clamp with an opening of about 4½ inches, a rubber roller, such as is used for mounting photographs, and a small amount of printer's ink are the only necessary purchases.

The bottom of a flat-iron will serve for an ink plate, and the rubber roller is to be used for inking the cut between each impression. A few pieces of wood complete the equipment, which can quickly be put together as shown in the sketch.

To operate, remove the clamp, swing up the hardwood paper holder, and slide the paper to be printed under the flaps glued thereon. Spread a small amount of ink on



A LINOLEUM CUT PRESS BY F. WADE BROWN



"PARISH CHURCH NEAR LUCCA,"

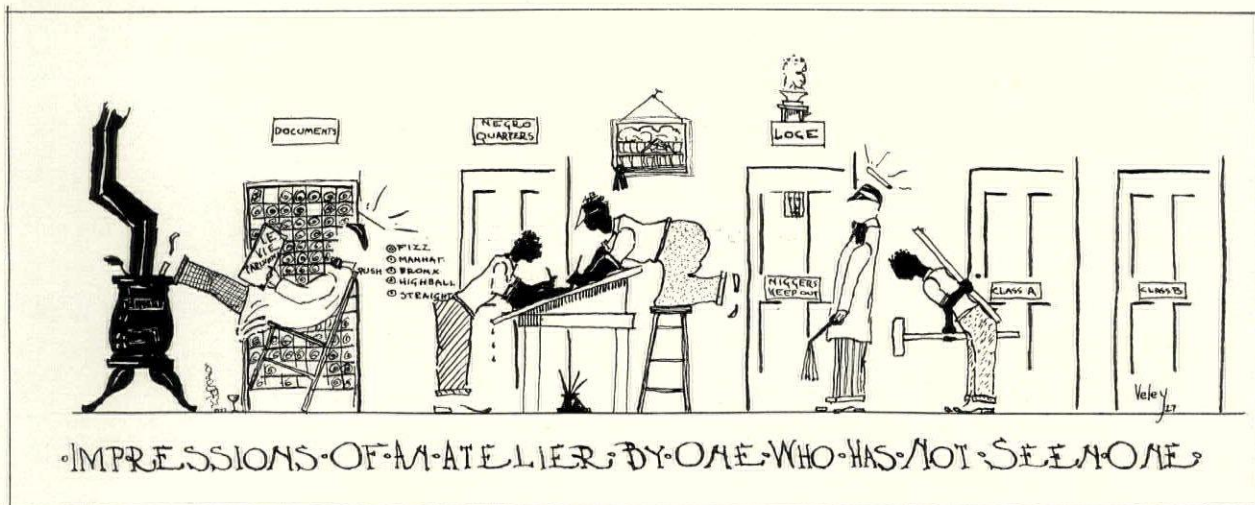
BY ANTHONY MCGRATH, LAKEWOOD, OHIO

(PRIZE—Class One, January Competition)

the flatiron, as much as can be picked up on a match, and spread it thoroughly with the rubber roller, producing a thin film. Apply the roller to the cut and ink well. Then swing down the hardwood paper holder and allow it to rest on the cut. Apply the clamp to the center of

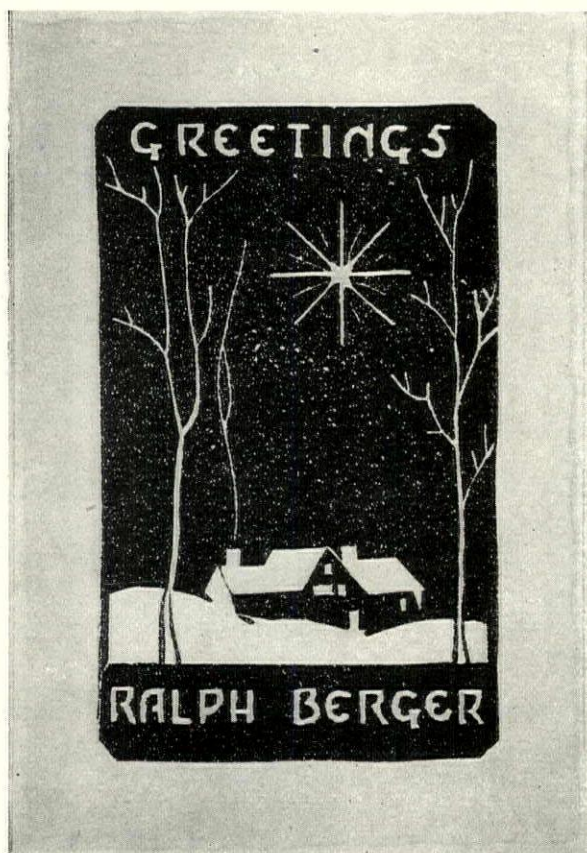
the block and tighten up the screw. A few trials will indicate the proper amount of pressure needed.

When the clamp is removed and the paper holder swung up, the print will remain stuck to the cut, and can then be pulled off. About thirty prints may be made comfortably in an hour. Small zinc photo-engravings worked well with this device, and wood cut prints, too, should be possible.



"IMPRESSIONS OF AN ATELIER BY ONE WHO HAS NOT SEEN ONE"

"IMPRESSIONS OF AN ATELIER BY ONE WHO HAS NOT SEEN ONE," BY JACK VELEY, SAN JOSÉ, CALIF.



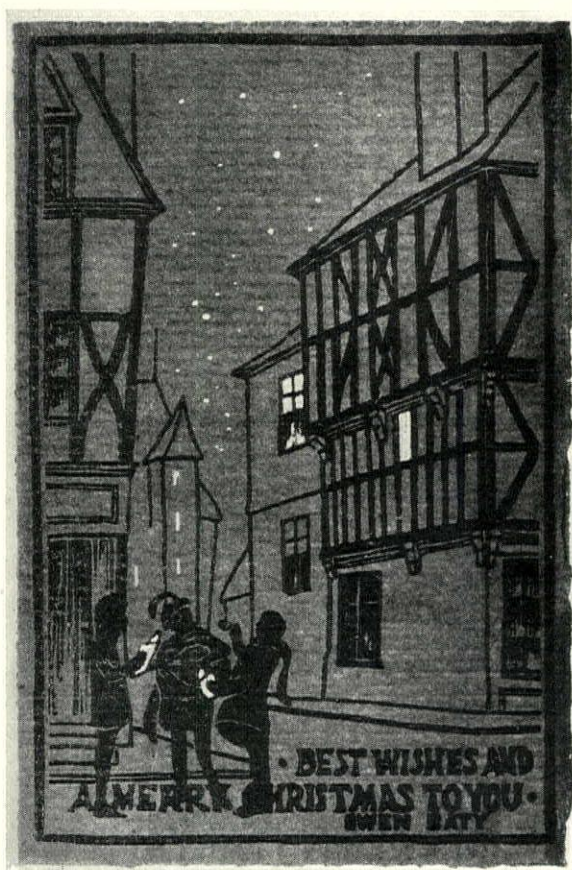
THE WINNER, BY RALPH BERGER, SAN FRANCISCO
A linoleum cut sprinkled with gold dust.



P. G. FREEMAN, OF LIVERPOOL, MADE THIS CARD
A pen and ink drawing printed on a stiff white folder.



BY WALTER DORWIN TEAGUE, OF NEW YORK
Printed on white paper in blue, brown, purple and red.



BY OWEN C. BATY, OF PHILADELPHIA, PA.
An ink drawing touched up with water color.

SOME OF THE DESIGNS SUBMITTED IN OUR CHRISTMAS CARD COMPETITION



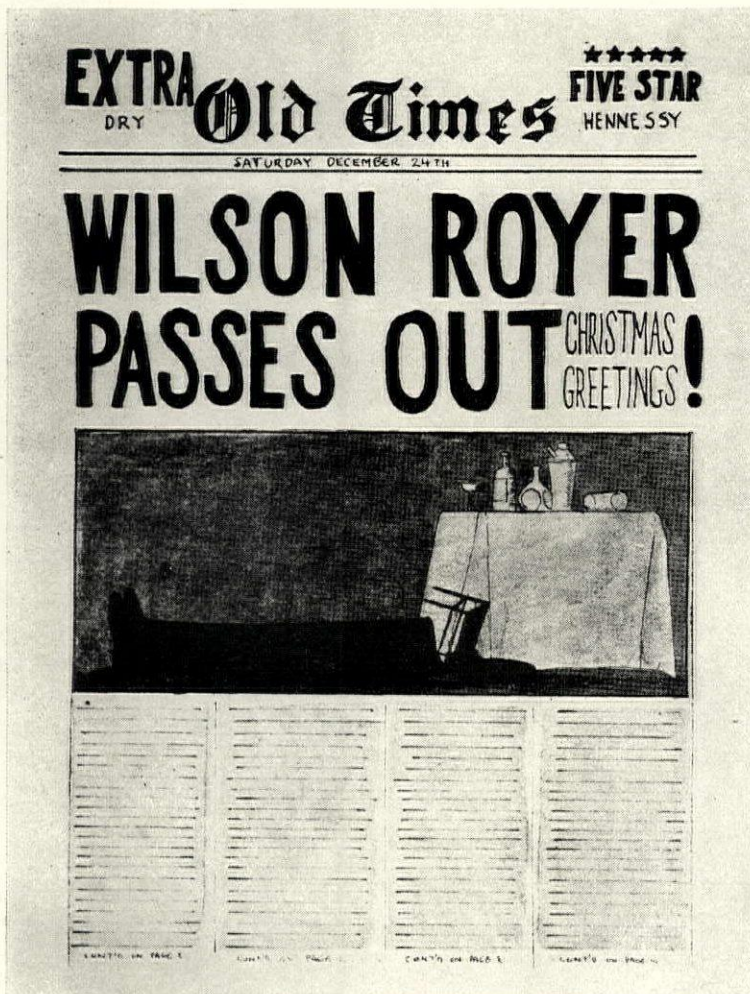
MR. AND MRS. RUSS FUDGE, OF ELMIRA, N. Y., SEND OUT A "MERRY CHRISTMAS"

Outline drawing printed in red and colored with crayons.



AN OLD SAMPLER INSPIRED EDWARD B. LEE, OF PITTSBURGH, PA.

A light yellow card printed in brown ink.



WILSON ROYER, OF NEW ROCHELLE, N. Y., GETS OUT AN "EXTRA,"
In the manner of a tabloid, printed on a light pink sheet.



POLLY POVEY CONTRIBUTES THIS
Black ink and water color drawing.

MORE OF THE ENTRIES IN OUR CHRISTMAS CARD COMPETITION



THE SPECIFICATION DESK

A Department for the Specification Writer

SPECIFY FOR A SPECIFIC BUILDING

By Frederick O. Lewis

OUR VISION LINGERS on that type of architect—we all know him—who does not know how to build, but who dumps a wild gamble on the contractor. He writes into his specifications all that his salesman-friends tell him and copies all the clauses out of his old specifications, until they are lengthy and verbose. Boiled down, such specifications mean that the contractor may “get-by” with what he dares or that he shall furnish anything the architect may wish and get his pay from the owner as best he can. The contractor, from his experience, is left to guess which it will be. The contractor who knows his game can get rich in this way. His competitors fear the hidden details that may be required and bid high. The successful contractor employs a “glad-hand” man to keep the architect happy while he pilfers the owner to his heart’s content. The successful contractors with such an architect are always the same fellows—they know how to handle that architect.

The specification writer is looked upon as a “high-brow” who surreptitiously ruins the contractor and the work of the designer, unless he has been properly mellowed over the architect’s drafting board and on the job. He can not appreciate what is wanted without the one experience or how to get it without the other.

The specification writer is the connecting link between the drafting board and the construction.

As the designer must first learn to draw in order to work out and convey to others his expressions of form, so the specification writer should first know how to use words and grammar correctly. A well written specification should be concise, but complete, without a false or superfluous word. The more involved the phraseology, the less attention it demands.

Perfect command of the language, together with thorough experience on the drafting board and on the job, make the requisites of a specification writer. Experience in estimating aids the specification writer to express himself clearly. On the other hand, following the average specification will train a man into nonsensical, ver-

bose, and furtive phrases and will get him into a rut, so that his specifications mean nothing and are not carried out or even read. Copying specifications of another job is a bluff. There are not two buildings alike, except in Queens. Each construction should be worked out better than its predecessor or we are not advancing.

The writer should state all that is required in a straightforward manner and list all that is wanted. Do not hide back of clauses such as, “furnish everything that is required.” “If the architect does not know what is wanted, who does?” asks an association of iron workers in a circular letter to the architects, pleading for more accurate listing and description of what is wanted.

“Write a short specification, only listing the items wanted,” one architect directs his specification writer, “and leave it to the superintendent to get the best he can.” While that would be better than many wordy specifications, it would at-

tract work of slight esteem which is cheap but not economical.

A copied specification becomes full of ridiculous clauses which show the contractor that the author does not know what he is writing about. Thus the contractor can do what he pleases, offering many necessary requirements as “extras.” Every “extra,” unless it is an additional improvement or embellishment which the owner finds later he can afford, is evidence of a mistake by the specification



FREDERICK O. LEWIS

Mr. Lewis is a member of the firm of Lewis & Leonard, Architects and Engineers, of New York. Besides his own practice, Mr. Lewis writes the specifications for Frederick L. Ackerman.

writer. Of course, none of us is perfect. Occasionally a descriptive paragraph on a similar item can be copied from another specification but it should be studied and corrected carefully to fit the case, omitting any word that does not necessarily apply. We are fully aware of that "efficiency-engineer" system of a stock of numbered phrases, which make a lengthy, non-readable specification.

The specification writer has to be an experienced draftsman and in sympathy with the draftsman's work or he will ruin the design. He should study and know color effects and finishes to specify correctly or the design may be killed. He must know construction in the field and costs, otherwise he can not judge the merits of the different methods of construction to fit particular requirements. How can he write directions for the workmen unless he is familiar with their work?

A good specification should be able to stand a test at law, for it forms the essential part of the contract.

What are the purposes of a specification? The following are essential:

- (1) Itemized order for materials and labor wanted;
- (2) Description of the materials for the material orders, in market terms;
- (3) Description of the workmanship for the workmen to follow;
- (4) Fuller description, where necessary, of the items. These are required for the estimator to price the work, the purchaser to order the materials, the superintendent and foreman to direct the labor, and the architect's superintendent to check the work.

Occasionally conditions governing other requirements are necessary, such as the following:

- (1) Fabrication requirements, for shop work.
- (2) Erection requirements, for shop work.
- (3) Tests, to assist the architect to prove the work.
- (4) Guarantees on works, such as mechanical works, in which, of their nature, the architect may be unable to detect faults.
- (5) Shop drawings, where certain shop practices are involved for the architect to check into the work as a whole.
- (6) Samples, where selection must await determination of those available after contract is let. (However, sufficient description should be given to settle the limitation of what is wanted and the price.)
- (7) Selection of acceptable manufacturers or shops that can produce the quality of work wanted.

Uniformity of specifications assists in reading them. Listing is clearer than running sentences. The most direct manner of indexing is to follow each item in the **WORK INCLUDED** by the number of the descriptive paragraphs applicable to that item. The following is a suggested general form for a work:

Art. 1. WORK INCLUDED: This work includes furnishing all labor and materials to complete the following items, under the accompanying **GENERAL CONDITIONS**, under the conditions below stated and in accordance with the accompanying drawings:

(example)

1. **FACE BRICK:** See Art. 43, 52, 54-56.
Selected by Architect @\$40.00 per M.
4" facing & 8" reveals, in waterproof cement mortar.
On street façades from 2nd story stone sill course to stone course at roof.
2. **COMMON BRICK:** See Art. 42, 52, 54-56
In waterproof cement mortar.
Rear walls above 1st story—4" facing.

Rear parapet walls—12" thick.

Backing street parapet walls—8".

Pent house walls—8" thick.

Backing stone facing—4" & 8".

Basement partitions to boiler, vault and coal rooms—12".

Basement partitions, other—8".

Art. 2. MANUFACTURERS: (state those acceptable)

Art. 3. SAMPLES: (describe kinds to be considered)

Art. 4. SHOP DRAWINGS: (describe what they shall show)

Art. 5. TESTS: (describe method and results required)

Art. 6. GUARANTEE: (state time and exactly what it covers)

Art. 7. MATERIALS: (describe each in market terms)

Art. 8. FABRICATION: (workmanship in the shop)

Art. 9. ERECTION: (workmanship and provisions for erection)

Art. 10. WORKMANSHIP: (describe workmanship of each kind of work included)

Art. 11. DESCRIPTION OF ITEMS: (clarifying items in **WORK INCLUDED**)

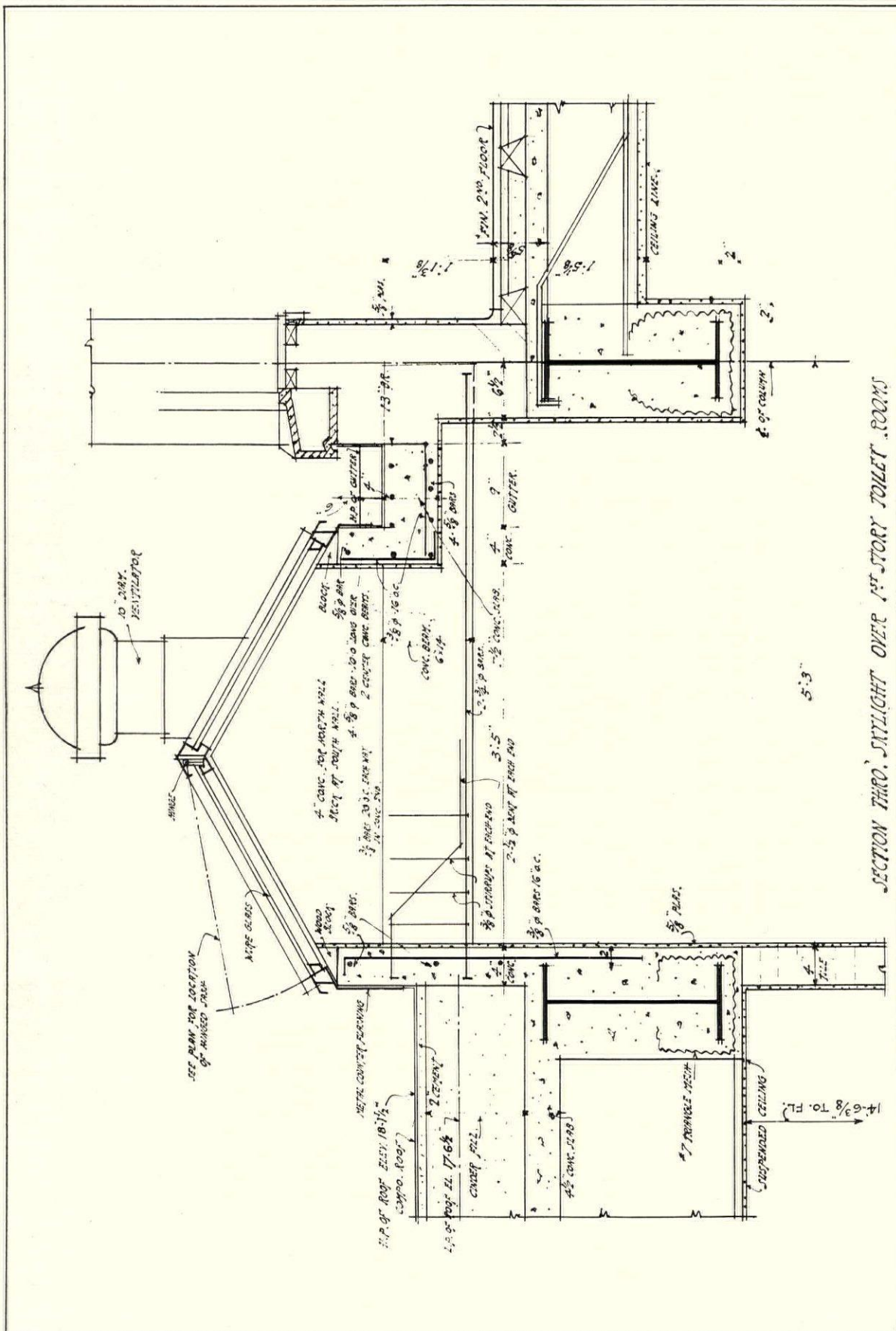
For uniformity, it is recommended that the order as listed in the A.I.A. Filing Index, be followed as closely as possible.

To obtain the items for the **WORK INCLUDED**, which is the scope of the specification, the specification-writer should first visualize the construction from beginning to end, jotting down notes of items to be embodied in the specifications. Afterwards checking lists may be helpful to avoid omissions. But to use them first often causes omissions by leading the mind off the building in question.

The **GENERAL CONDITIONS**, prepared by the A.I.A. (latest edition), should always be included as part of the specifications to be bid on and as part of the contract. The building business works on the basis laid down therein and this form meets contract law. A careful reading will convince an experienced architect or builder that they are well prepared and constantly revised to meet the latest conservative procedure. But how many architects or builders are familiar with all the points these **GENERAL CONDITIONS** embody? Most architects use them but add other paragraphs of their own. A careful analysis generally shows that such additions are antiquated clauses already covered in the **GENERAL CONDITIONS** in a better phrasing. Other such added clauses are not general in their application but belong in one or two particular places under the various works, where they would be easier understood and be more direct.

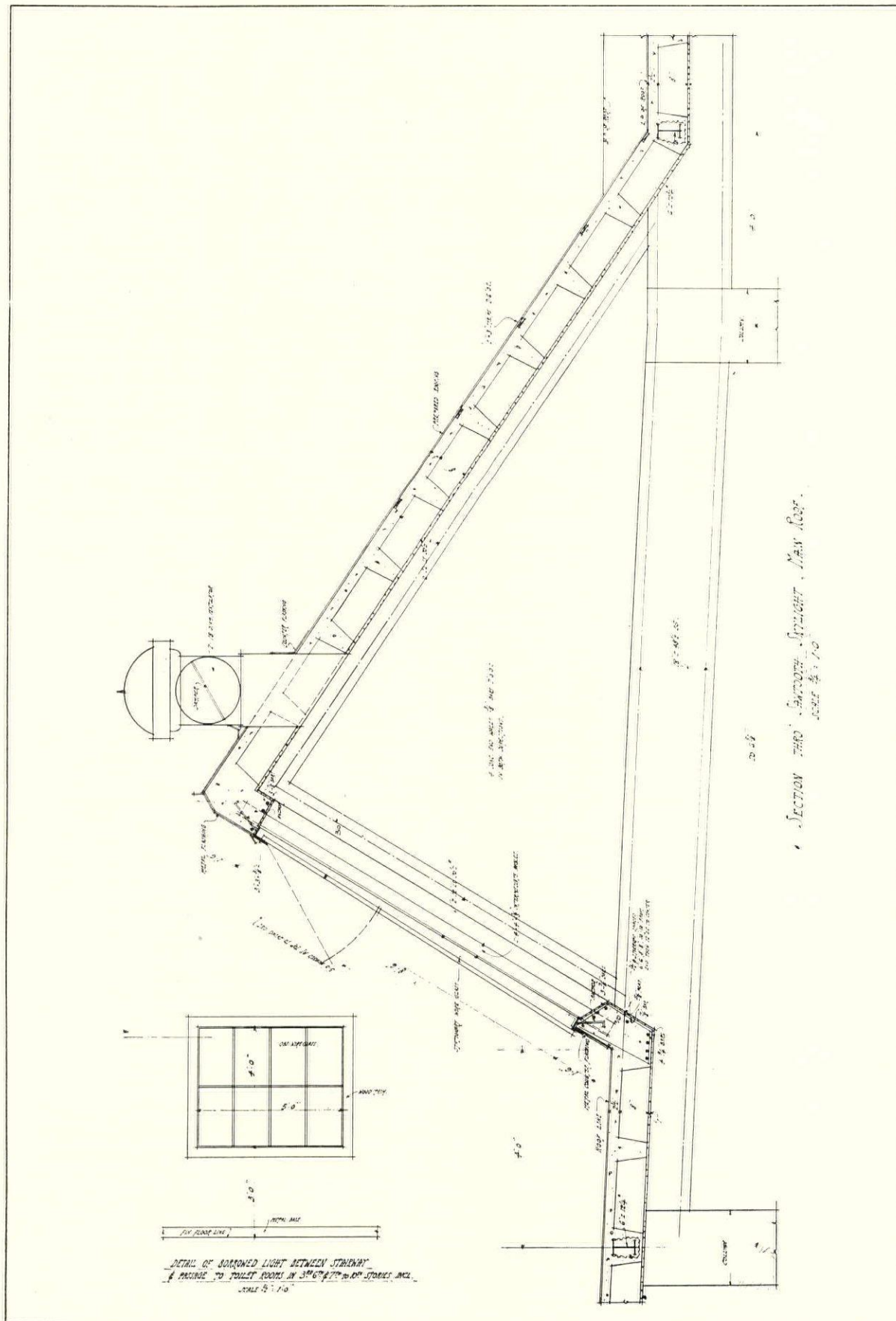
There are some products made by a number of manufacturers. These products usually differ in quality and price. A description of such articles, other than giving the type required, is meaningless, except as a ruse to specify one manufacture without honestly naming it. On such, proposals should be obtained before issuing the specifications, samples examined, and a decision made. Then the make can be specified outright with the statement that prices are on file with the architect. Or the specifications can state the general requirements of such products and that proposals will be considered by the Architect, giving an "allowance" to be included for such an item by the Contractor. The terms of an "allowance" are described in the **GENERAL CONDITIONS**. Such ambiguous phrases as "approved by the Architect", means to the contractor, "guess what I will make you do", unless it is followed by a sentence stating the names of one or more articles or makes, on a par, that are approved. This will bring in competition and give a chance to try new articles on

(Continued on page 127)



SECTION THRO' SKYLIGHT OVER 1ST STORY TOILET ROOMS

DETAILS OF CONSTRUCTION—INTERNATIONAL TAILORING COMPANY, CHICAGO, ILLINOIS
MUNDIE AND JENSEN, ARCHITECTS



DETAILS OF CONSTRUCTION—INTERNATIONAL TAILORING COMPANY, CHICAGO, ILLINOIS
MUNDIE AND JENSEN, ARCHITECTS



SERVICE DEPARTMENTS

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

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed under this heading free of charge.

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

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions. Such notices will also be posted on the job bulletin board at our main office, which is accessible to all. Owing to the very large number of advertisements submitted for publication under this heading we are asking those desiring to use this service to make their advertisements as short as possible, *in no case to exceed forty words.*

Notices submitted for publication in the Service Departments must reach us before the fifteenth of each month if they are to be inserted in the next issue. Address all communications to 419 Fourth Avenue, New York, N. Y.

THE MART

Louis Jallade, 15 East 47th St., New York, wants copies of PENCIL POINTS for September 1924, January 1925, and February 1926.

Lloyd H. Oliver, 2433 Durant Ave., Berkeley, Calif., wants a copy of PENCIL POINTS for July 1925.

R. J. Atkinson, 29 Shannon St., Wellington, New Zealand, has for sale a complete set of PENCIL POINTS from August, 1926, to July, 1927. All in neat condition and will be sold to the highest bidder.

Mrs. Edith Kennedy, 1301 Ave. F, Beaumont, Texas, has the following copies of PENCIL POINTS for sale: November and December 1923; all issues for 1924; and all issues except October for 1925.

The T-Square & Triangle Co., 141 E. Second Ave., Miami, Fla., has the following copies of PENCIL POINTS for sale: October and November, 1926; January, February, March, April, May, June, July, August, September, October, and November, 1927.

C. J. Siecke, 526 West 139th St., New York, N. Y., has for sale a complete set of PENCIL POINTS from June 1920 to December 1927, inclusive, all in perfect condition.

L. E. Parthesius, 1526 Hubbard Ave., Salt Lake City, Utah, has for sale copies of PENCIL POINTS for September, October, November and December 1923; complete sets for 1924, 1925, 1926. All in good condition. \$10. f.o.b. Salt Lake City, Utah.

H. S. Conrow, 616 Fourth Nat'l. Bank Bldg., Wichita, Kans., has the following for sale: Complete set of PENCIL POINTS from June 1920 to Jan., 1928, all in good condition. \$50.00 for set f.o.b. Wichita, Kans. Also practically all issues of *The Architectural Record* from 1914 to date; complete sets of *The American Architect* from July 1922 to Jan. 1928; complete sets of *Architecture* from June 1920 to July 1924; *Building Age* from 1914 to date; also several years of *National Builder*, and other magazines. Complete list will be given on communicating with Mr. Conrow.

Frank J. Roorda, 2 Brimmer St., Boston, Mass., wants copies of PENCIL POINTS for June, July, August and September, 1925.

R. G. Kirby, Box 288, Carnegie Tech., Pittsburgh, Pa., wants copies of *The Bulletin of the Beaux-Arts Institute of Design* for November, 1926, and February, 1927. These numbers are needed to complete a volume and a premium will be paid for them.

Charles L. Sickler, 48 North Lake Ave., Troy, N. Y., wants a copy of *The Architectural Forum* for June 1924, and August 1925.

F. J. Lippell, 43 Freund St., Buffalo, N. Y., has for sale the following copies of the *White Pine Series*, eighteen in all to be sold in one lot to the one giving best offer: Vol. 1, No. 2, 1915; June, August and October, 1916; February and April 1917; October 1918; June, August and October 1919; February, April and December 1920; April, June and August 1921, Vol XI, No. 5, and Vol. XI, No. 6.

For Sale: High grade engineer's transit, used but little. Guaranteed perfect condition and adjustment. Reasonable. Box 718, care of PENCIL POINTS.

PERSONALS

R. T. NUNAMAKER, ARCHITECT, has opened an office for the practice of architecture in the Citizens National Bank Bldg., Tyler, Texas, and desires manufacturers' samples and catalogues.

W. H. WEEKS, ARCHITECT, has moved to 1429 Hunter-Dulin Bldg., San Francisco, Calif.

DAVIS & WALLDORFF, ARCHITECTS, have moved to 17 Whitney Ave., New Haven, Conn.

VIVIAN B. SMITH, ARCHITECT, has moved from 634 Guarantee Trust Bldg., Atlantic City, N. J., to Box 414, Staunton Military Academy, Staunton, Va.

BUCHMAN & KAHN, ARCHITECTS, have moved to Park Ave. Bldg., at 32nd Street, New York.

DENHAM, VAN KEUREN & DENHAM, ARCHITECTS, have dissolved their firm. A new partnership has been formed under the name of Denham & Denham with offices at 1220 Comer Bldg., Birmingham, Ala.

BARK & DJORUP, ARCHITECTS, have moved to Lefcourt-Marlboro Bldg., 1351 Broadway, New York.

GORTON W. BRUSH, architectural and structural engineer, 516 Altamont Apts., Birmingham, Ala., desires manufacturers' samples and catalogues.

HUBERT BENNETT, Dales Brow, Worley Road, Twinton, Manchester, England, architectural student, would like manufacturers' samples and catalogues.

RICHARD A. ATWOOD, 333 John St., Ann Arbor, Mich., architectural student, would like manufacturers' samples and catalogues.

ROLAND C. BUCKLEY, ARCHITECT, has moved from Lakeland, Florida, to Panama, Republic De Panama, care of Wright, Haw & Jaen Guardia.

DAVID J. COHAN, ARCHITECT, has moved to 45 West 45th Street, New York.

SAMUEL FOX has opened an office for the practice of architecture and engineering at 191 Joralemon St., Brooklyn, N. Y., and would like manufacturers' samples and catalogues.

SIDNEY L. STRAUSS has become associated with CHARLES H. GILLESPIE and will practice architecture at 41 Union Square West, New York.

THE MARTIN SYSTEM, INC., has opened an office for the general practice of architecture at 45 Union Trust Bldg., Indianapolis, Ind., and would like to receive manufacturers' samples and catalogues.

CHARLES A. MILLNER has opened offices for the practice of architecture at 4 Court Square, Brooklyn, N. Y., and wants manufacturers' samples and catalogues.

SEYMOUR A. MITTELDORF, architectural student, 859 Lafayette Ave., Brooklyn, N. Y., would like to receive manufacturers' samples and catalogues.

LEONARD WOLF, 118 Campus Ave., Ames, Iowa, architectural student, would like to receive manufacturers' samples and catalogues.

ALEX LINN, ARCHITECT, has moved to 307 Peoples' Savings Bank Bldg., Des Moines, Iowa.

ALFRED E. FLOEGEL, mural painter, has moved to the Mohawk Bldg., 160 Fifth Ave., New York.

FRED. J. SCHMIDT, architectural designer, 4924 10th Ave., Los Angeles, Calif., desires manufacturers' samples and catalogues.

ARTHUR R. HUTCHASON, ARCHITECT, has moved to the Architects' Bldg., 5th and Figueroa Sts., Los Angeles, Calif.

FRANK A. BAGGOTT, 1129 East 22nd St., Bronx, N. Y., is an architectural student and draftsman and would like to receive manufacturers' samples and catalogues.

FRANZ C. WARNER & W. R. McCORNACK, ARCHITECTS, announce a co-partnership, including G. Evans Mitchell, under the firm name of Warner, McCornack & Mitchell. They will continue to practice at 510 Bulkley Bldg., Cleveland, Ohio.

ARCHIE T. NEWSOM, ARCHITECT, has moved to 14 Montgomery St., San Francisco, Calif.

NAT ABRAHAMS, INC., ARCHITECTS & GENERAL CONTRACTORS, have moved to 707 Equitable Bldg., St. Louis, Mo., and desire manufacturers' samples and catalogues.

WETHERELL & HARRISON, ARCHITECTS, have moved to 517 Shops Bldg., Des Moines, Iowa.

FRANCIS KEALLY has opened an office for the general practice of architecture at 101 Park Avenue, New York.

QUERIES AND ANSWERS

Query: In the voting contest, conducted by the *Brochure Series* in 1900, to determine by consensus of votes, which, in the opinion of their readers, were the ten most beautiful buildings, then existing in the United States, did Trinity Church, Boston, receive a place?

Answer: The following ten buildings, named in the order of preference were those which received the greatest number of votes in the *Brochure Series* contest:

1. National Capitol, Washington—Hallet, Thornton, Hoban, La Trobe, Bulfinch, Walter & Clark, Architects.
2. Boston Public Library, Boston—McKim, Mead & White, Architects.
3. Trinity Church, Boston—Gambril & Richardson, Architects.
4. Congressional Library, Washington—Smithmeyer, Peltz and Edward P. Casey, Architects.
5. Columbia University Library, New York—McKim, Mead & White, Architects.
6. Trinity Church, New York—Richard Upjohn, Architect.
7. Madison Square Garden, New York—McKim, Mead & White, Architects.
8. St. Patrick's Cathedral, New York—James Renwick, Architect.
9. "Biltmore House," Biltmore, North Carolina—R. M. Hunt, Architect.
10. City Hall, New York—Makin and Macomb, Architects.

FREE EMPLOYMENT SERVICE

(Other Items on Pages 54, 113, and 118 of the Advertising Section)

POSITION WANTED: Young man, student in architecture, desires position as tracer or beginner in architect's office. Experienced in typing and multigraphing. Box A-658, care of PENCIL POINTS.

POSITION WANTED: Secretary, assistant to executive. Young lady having several years' experience, can handle own correspondence, wishes to connect with firm where ability and initiative count. New York City location. Salary \$40. per week. Box A-659, care of PENCIL POINTS.

POSITION WANTED: In office of interior decorator. Four years' experience in architect's office as architect's assistant. Typing and some stenography. Box A-660, care of PENCIL POINTS.

POSITION WANTED: With architect, 20 years' experience on all types of work. Outside supervision. Would consider position with an allied arts firm. Location, New York or vicinity. Box A-900, care of PENCIL POINTS.

ARCHITECTURAL RENDERER available for engagement. H. Grub, 315 Middle Neck Road, Greck Neck, L. I.

POSITION WANTED: Architectural contact man, one with experience in interviewing prospective home builders and in doing preliminary work preparatory to building, desires connection with architectural firm, development company, contractor or as manufacturer's representative. Eastern part of the country preferred. Box A-661, care of PENCIL POINTS.

POSITION WANTED: Architectural draftsman desires position. Ten years' experience on high class work, planning, complete working drawings, details, structural design and some architectural design. Location secondary if position offers permanence and real opportunity. Box A-620, care of PENCIL POINTS.

SPECIFY FOR A SPECIFIC BUILDING

(Continued from page 122)

condition of a guarantee, also no others need be accepted in the end than those named.

The specification writer can not push the pencil all the time. He has to study the drawings to see how best he can obtain what is indicated. And while doing so he can materially help in working out the construction and in checking the drawings. He should have the building as a whole in his mind before writing. Often, of course, he will be ahead of the working drawings and must watch to see that the drawings meet his scheme or change to suit. But it is in changing that errors are most liable to arise.

While the designer studies old precedent (as he should to get good results), the specification writer must be alert to the new in order to render the client all the advantages of modern methods and apparatus, for which the architect is employed as expert. To this end he has to listen to salesmen, read magazines for new procedures, see new products and their application and costs. In connection with this, remember that the specification writer is the owner's expert buyer. A good buyer does not "get sold."

The specification writer, also, is the authority of the office on laws and codes, because most of such details must be taken care of in the specifications. If he understands the import of such regulations, he will meet them satisfactorily. Remember that it is the architectural profession that is responsible for codes in the end. Let us understand the reason for each rule. Underwriters' regulations are based on fire loss data. That code protects property and means dollars and cents to the client. On the other hand, to be constitutional, State and Municipal Laws are based on safety of citizens. Remember, loss of human

life made each law and loss of property made each Underwriters' requirement.

How beautifully some specification writers commence with the "cure-all" phrase that everything shall be supplied and all work done to meet the requirements of the Underwriters' regulations and governing laws and rules! They then go on describing what they want. Naming apparatus in detail or describing in detail voids their "cure-all" clause entirely. Try it in court and see. Well then, let us not give the items; leave it to the "cure-all" clause; the contractor will know what to put in, or will have to change it after the inspector's visit, if he does not know. If the contractor knows how to build better than the architect, why should the client have an architect?

Another worthless clause often used is, "The Contractor shall furnish all items necessary to complete the work including", followed by a listing of as many items as the writer happens to think of. Before a court of law listing items after the word "including" excludes all others.

To sum up the elements of a good specification:

It must be well written, legal, and as concise as possible.

Materials should be described so that they can be ordered properly.

The work must be explained so that the men can carry out instructions to obtain the desired results.

An appreciation of the designer's work and the proper rendering of the design in the construction of the building should be written into the specification.

A knowledge of the actual construction and materials used must be demonstrated.

Laws and codes must be considered.

A specification *should not* contain furtive and old copied stock clauses.



A NEW YEAR GREETING FROM SEVEN PENCIL POINTERS IN ATELIER OF P. W. FRENCH & CO., NEW YORK
Ernie Hampel, Tammany Puls, Reverend Placek, Boss Miller, Ossining Jahn, Hot Dog Theo, Marcel de Leonardo.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

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

Egyptian Lacquers.—A.I.A. File No. 25-B-14. Architectural specifications covering the use of brushing lacquers for interior and exterior wood and metal surfaces. Standard filing size, $8\frac{1}{2}$ x 11. Egyptian Lacquer Mfg. Co., Inc., 90 West St., New York, N. Y.

Jamison Doors.—Catalog No. 11 covers subject of doors for all types of cold storage conditions. Complete working drawings and blue prints, also specifications. 80 pp. $8\frac{1}{2}$ x 11. Jamison Cold Storage Door Co., Hagerstown, Md.

Vitrified Pottery Lighting Fixtures.—Artistic brochure showing designs of eighteen different fixtures in this material suitable for many uses. Data as to colors, etc. Standard filing size, $8\frac{1}{2}$ x 11. Franklin Pottery, A Corporation, Lansdale, Pa.

Dovetail Masonry Anchor.—Data sheet showing application of this new device with special types of masonry construction, together with drawings, perspectives of important buildings, etc. Standard filing size, $8\frac{1}{2}$ x 11. Dovetail Anchor Slot Co., 660 Builders Bldg., Chicago, Ill.

Pratt & Lambert Specification Manual, 2nd Edition.—A.I.A. File No. 25-c covers painting, varnishing and enameling. Complete specifications attractively and clearly presented. 40 pp. Pratt & Lambert, Inc., Architectural Service Dept., Buffalo, N. Y.

The Ingalls Truss.—Bulletin No. 201. A.I.A. File No. 13-G. This bulletin, together with blue prints showing complete construction details and giving complete specifications, will be of very general interest to architects, engineers and draftsmen. Standard filing size, $8\frac{1}{2}$ x 11. The Ingalls Steel Products Co., Birmingham, Ala.

A Reference Book of Mill Building Construction.—Edition No. 27. A.I.A. File No. 14-j 19-b-4. A valuable handbook covering all of the hardware required in mill construction, together with much engineering data on the entire subject. Detail drawings, safe loads, roof construction, and much other useful data. Standard filing size, $8\frac{1}{2}$ x 11. The Duplex Hanger Co., Cleveland, Ohio.

Bommer Spring Hinges.—Catalog No. 50. Lists in detail complete Bommer line, including many specialties. 50 pp. Bommer Spring Hinge Co., 251 Classon Ave., Brooklyn, N. Y.

North Western Expanded Metal Products.—Looseleaf Folder, A.I.A. No. 20-b-1, containing data prepared for the convenience of architects and draftsmen. Covers all types of expanded metal lath, corner beads and many specialties. Many drawings, specifications, etc. North Western Expanded Metal Co., 207 So. Dearborn Street, Chicago, Ill.

Sani Products.—Catalog in colors showing complete line of products for the modern restaurant, cafeteria, hotel, etc. 60 pp. $8\frac{1}{2}$ x 11. Sani Products Co., North Chicago, Ill.

Western Red Cedar.—Brochure in sepia. Illustrations of many houses, bungalows and other accessories, together with complete information regarding Red Cedar lumber. 24 pp. Standard filing size, $8\frac{1}{2}$ x 11. West Coast Lumber Trade Extension Bureau, Portland, Oregon.

The A.B.C. of Heating.—Attractive booklet covering the question of heating for the modern home. Abram Cox Steve Co., American & Dauphin Sts., Philadelphia, Pa.

Lighting Data.—Cabinet containing 18 bulletins covering every phase of the modern lighting problem. Engineering data of great value to every architect, draftsman and specification writer. Edison Lamp Works of the G. E. Co., Harrison, N. J.

Reflectolyte Lighting Fixtures.—A.I.A. File No. 31-f-23. A very comprehensive catalog in colors showing complete line of modern lighting fixtures for all purposes. 112 pp. Standard filing size, $8\frac{1}{2}$ x 11. The Reflectolyte Co., St. Louis, Mo.

The Par-Lock Method.—A.I.A. File No. 21-f. A series of folders describing Par-Lock for dampproofing and plaster key over concrete and masonry surfaces; waterproofing for walls and ceilings. The Vortex Mfg. Co., 1978 West 77th St., Cleveland, Ohio.

Parker's Shingle Stains.—Samples and color cards. Samples cover complete range of colors and accompanying printed matter gives all necessary information. Parker Preston & Co., Inc., Norwich, Conn.

Elevators.—Catalog No. 29, A.I.A. File No. 33-c, presents in text form complete information regarding all types of hand elevators, invalid lifts, electric driven elevators for all regular and special uses. 30 pp. $8\frac{1}{2}$ x 11. Energy Elevator Co., Philadelphia, Pa.

Wagner Data Book.—Catalog No. 19 contains illustrations and descriptions of door hanger and tracks for overhead carrying systems, fire door fixtures and hardware specialties. Sectional and detail drawings and complete data for specifying. 176 pp. 8 x 11. Wagner Mfg. Co., Cedar Falls, Iowa.

Catalog of Drawing Materials and Instruments.—Catalog showing complete line of everything required in the drafting-room, including many specialties. 380 pp. Substantial cloth binding. 6 x 9. B. K. Elliott Co., 126 6th Street, Pittsburgh, Pa.

The Donley Book of Successful Fireplaces.—A.I.A. File No. 14-c-2. Attractive brochure in sepia showing many interiors of different types and many designs of fireplaces, together with detail drawings of fireplace and chimney construction. Also tells how not to build a fireplace. 44 pp. Standard filing size, $8\frac{1}{2}$ x 11. The Donley Brothers Co., 13900 Miles Ave., Cleveland, Ohio.

Window Screens and Weatherstrips.—A.I.A. File No. 19-e-15. Complete specification data with many full page plates of construction details. A valuable document covering the subject. Standard filing size, $8\frac{1}{2}$ x 11. The Higgin Mfg. Co., Newport, Ky.

The "Roxy" Special.—Bulletin VR 100. Special bulletin covering a new type of sign for theatres, restaurants, hotels, railroad terminals and other buildings requiring such equipment. Illustrations, detailed description and specifications. Standard filing size, $8\frac{1}{2}$ x 11. Viking Products Corporation, 422 West 42nd St., New York, N. Y.

Celestialite.—A new brochure containing illustrations of an entirely new line of lighting glassware for the modern building. Complete specification data. Standard filing size, $8\frac{1}{2}$ x 11. Gleason-Tiebout Glass Company, 200 Fifth Avenue, New York, N. Y.

Enameled Iron Plumbing Fixtures.—Catalog with photographic illustrations and roughing-in diagrams covering complete line of modern fixtures suitable for all types of buildings. 48 pp. Wheeling Sanitary Mfg. Co., Wheeling, West Va.

The Kewaunee Book of Laboratory Furniture.—This important book, covering everything required in the laboratory of educational institutions, hospitals, industrial plants and commercial laboratories, constitutes a handbook on the subject. 376 pp. Substantially bound in cloth. 6 x 10. Kewaunee Mfg. Co., Kewaunee, Wisconsin.

The Wright Rubber Tile.—Specification folder containing in loose-leaf form complete data with color illustrations on the subject indicated. Many original designs for restaurants, stores, and many other types of buildings. Standard filing size, $8\frac{1}{2}$ x 11. Wright Rubber Products Co., Racine, Wis.

Guth Lighting Equipment.—Catalog No. 18, A.I.A. File No. 31-f-23. Brochure published in the 25th anniversary of the founding of the company, containing information on the new Brascolite Guthlite and other specialties originated and manufactured by this firm. Much useful data for the drafting-room. 26 pp. $8\frac{1}{2}$ x 11. Edwin F. Guth Co., St. Louis, Mo.

Desco Copper Store Front Construction.—A.I.A. File No. 26-b-1. Full size details prepared for the information of architects and draftsmen. Detroit Show Case Co., Detroit, Mich.

R.I.W. Specification Data.—A.I.A. File No. 7-a-2. Specification folder containing complete data on waterproofing compounds, technical paints, brick and cement coatings, concrete waterproofings, caulking compounds, and a large variety of other products used in all types of buildings. Standard filing size, $8\frac{1}{2}$ x 11. Toch Bros., 443 4th Avenue, New York, N. Y.

KM Incinerator.—Data sheet containing blue prints of the KM Incinerator suitable for use in residences, hospitals, hotels, apartments, etc. Complete information for the draftsman and specification writer. Kellogg Mann & Company, Inc., Jackson Bldg., Buffalo, N. Y.

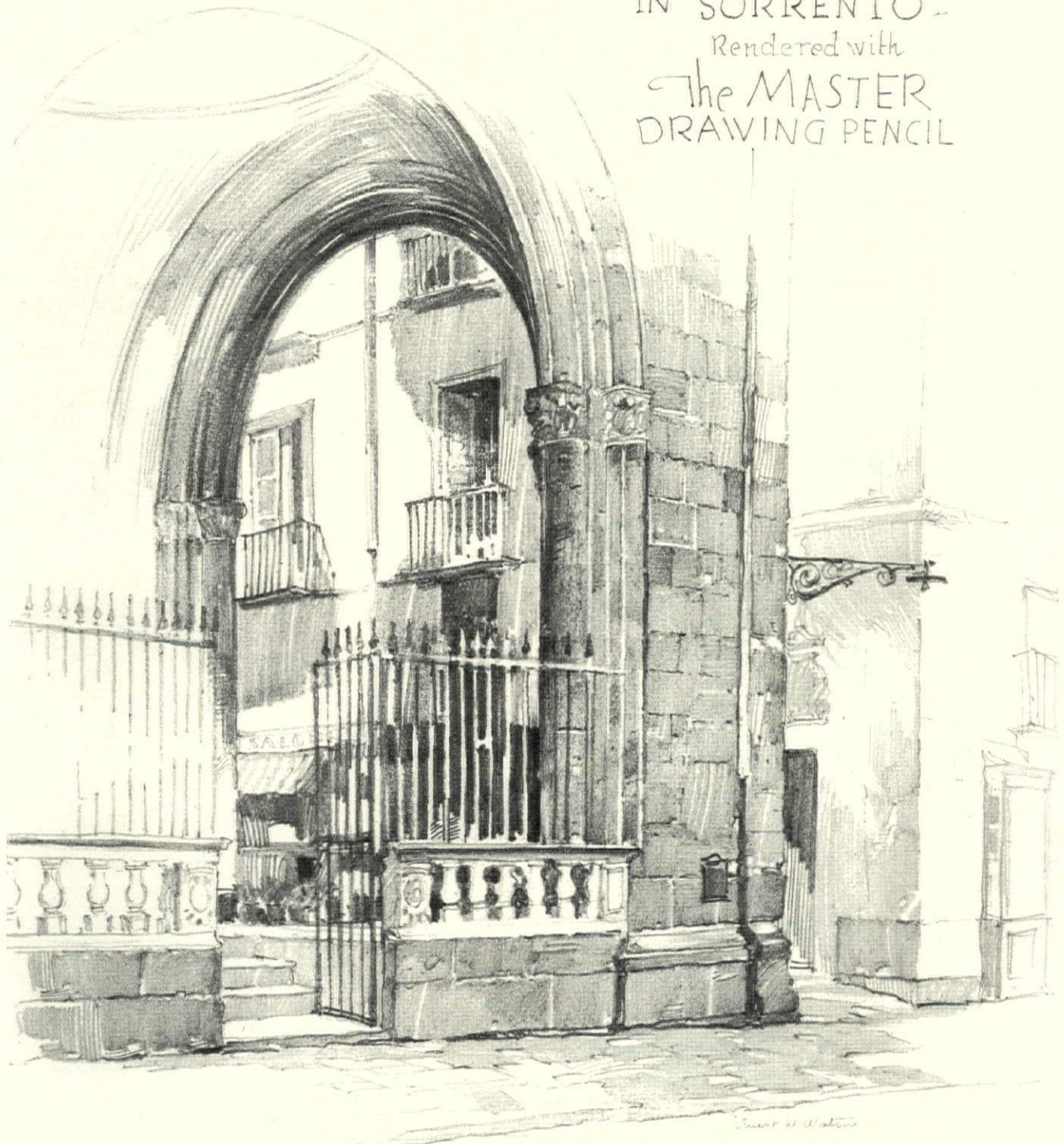
Midwest Destructors.—A.I.A. File No. 35-j-41. Booklet illustrating and describing this type of incinerators, tables of dimensions, details, typical installations, layouts, etc. 11 pp. $8\frac{1}{2}$ x 11. Mid-West Incinerator Corp., 154 East Erie St., Chicago, Ill.

ATP Roof Specifications.—The new 1928 specifications for ATP Roofs include fourteen applications of tarred felt and pitch roofs, both with and without ATP ten and twenty year roof guarantee bonds. American Tar Products Co., Union Trust Bldg., Pittsburgh, Pa.

The ELDORADO PAGE

A BIT OF STONE WORK
IN SORRENTO

Rendered with
The MASTER
DRAWING PENCIL



HERE is some more stone work rendered as described in the January issue. Note that stone joints are suggested with both light and dark lines. Most of the stone area is quite solidly covered with gray tone, almost giving the effect of a wash. The white marble balustrade shines

out in an emphatic contrast against this heavy gray and the true color effect of these two materials is thus suggested. Note how the ironwork is treated; silhouetted in dark where the background is light and left white where the background is dark.

This is one of a series of Pencil Lessons prepared by Ernest W. Watson. Write on your letterhead for samples of Dixon's Eldorado, "The Master Drawing Pencil." Joseph Dixon Crucible Co., Pencil Dept. 167-J, Jersey City, N. J.



PENCIL ETCHING BY HAROLD GOLDMAN, NEW YORK

"PERIGUEUX"

The above illustration is an example of the soft ground etching effect which is obtained by Harold Goldman by means of his special photographic process used in conjunction with a pencil drawing. Plate VI in this issue shows another drawing by Mr. Goldman, done in the same way.

FOR THE ATTENTION OF ARCHITECTS

WE HAVE RECEIVED a letter from Professor C. H. Reilly, of the School of Architecture of the University of Liverpool, England, which can only be satisfactorily answered by some of our readers who are in a position to act upon it. The letter reads in part as follows:

"You very kindly suggested that I should write to you about Christmas time with a view to your obtaining places for some of my fourth year students who want to go to America from the middle of April to the end of September next year. I am writing to the three or four architects who have always had such students but there are sure to be three or four men whom I cannot place and who would like to have jobs. If between now and the end of February you could get to know some architects who would take our men and pay them thirty-five dollars a week, which is the minimum they can manage with, you would be doing us a very great service. The men I send are always men who have done four years in the School and have still a year to go. That is necessary for your Immigration Authorities. The Consul General also requires a definite letter from the architect stating that he is willing to receive a fourth year Liverpool student for six months into his office and will pay him thirty-five dollars a week. I suppose this is an insurance against the student becoming a public charge while he is out there."

Any architect who could use one or more of these students during the coming summer is invited to write directly to Professor Reilly.

LETTERS OF AN ARCHITECT TO HIS NEPHEW

EDITOR'S NOTE:—This is the sixth of a series of letters by William Rice Pearsall, Architect, of New York, addressed to young draftsmen and students about to take up the study of architecture. Mr. Pearsall, who may be addressed at 527 Fifth Avenue, New York, has expressed his willingness to answer any questions which may be addressed to him by our readers.

DEAR NEPHEW:

The question asked me many times during my association with young men while working on the drawings of some problem is, "What is necessary for me to learn to become an architect?" What one has to learn cannot be told in a few words nor can it be learned in a few days or months or years. Like everything else in life the constant daily practice in the use of the principles forms a foundation on which to build the superstructure,—concentration, good drafting and careful study of the problem.

We have good, bad and indifferent plans, as well as designs, all about us. One of the first things to learn is the *power of observation*. George may walk up a certain avenue and will mentally note the characteristics of the buildings he passes. He will, by a brief study of the exterior, guess the use of the building and will then find out if he is correct. John may pass these same buildings but he will not see what George did nor would anything impress his memory. Second, practice daily some form of drafting—planning at small scale, homes, public buildings, stores, office layouts, schools, etc. This can not be done from memory. Collect plates from the magazines sorted into groups and make it a point to study some one of these groups carefully before and during the practice planning. Note the necessity of planning to give a symmetrical form to the exterior. Many designers will say, quite truthfully, "A good plan will always lend itself to a good exterior." Third, learn the method of planning in rough squares the approximate size of rooms required for the purpose of the building. Look up sizes of equipment; determine the *unit* size of kitchen, bath, foyer hall, dining room, bedrooms, etc., as certain standard sizes are sufficient in planning apartments. Fourth, study closet spaces that are of value, size of kitchen cabinet, bookcase depth, and height of shelf space.

Just stop and think back over the last five letters and note the emphasis on the grouping of *units*, lines as letters into groups, the materials of various trades grouped, the rooms of efficient size grouped. "Why the emphasis," you ask? Just to show that you can study the building problem by putting together *units* and by this means obtain the result you desire. Make a drawing to tell *truthfully* what you wish. Don't complain if you have made a sketch failing to find out the limitations of the material you desire used leaving the problem to the other fellow who does not know what you wish because you do not or cannot tell him.

To you these detailed preparations may seem endless but by constant practice and making notes you will soon find that many of these units will readily come to mind when beginning the first rough draft of a plan—just as the lines and forms come to mind now that drafting is more or less automatic.

Dr. Frank Crane says, "No force is so great in any man as the stored-up power of what he has been doing everyday."

Sincerely,

YOUR UNCLE.