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Need for
an Artists'
Memorial
Building.

Some years ago a suggestion came from one of the most prominent architects in the country that should be revived at the present time. This was the erection at Washington of a memorial building to artists, sculptors, architects, and those who have made a name in the arts and in literature. The architects, artists and sculptors have in the past year completed a work that has at once elevated this country in the eyes of the world from the level of commercial ignorance to the high plane of artistic intelligence. Their work at the Columbian Exposition was not a spectacle for the world to wonder at, but an exhibit of the high art education and perception this people have attained. Can it not be argued, therefore, that the country should recognize such services? And in what better way than by the erection of a memorial building that will gather its great ones in the arts as Westminster Abbey does the distinguished sons of England. We have been a people with no yesterdays, but it is time that we gathered something of today that is part of our greatness and placed it where it would remain a part of our activity in its example. Then, too, genius should receive its meed of recognition. The tribes of the North had their Valhalla, and we, their descendants, should establish a place of rest for our great ones who have given their best effort to the advancement of civilization, those who have made two blades of grass grow where one grew before.

Our World's
Fair Photo-
gravure
Illustrations.

With the present number our special series of World's Fair Photogravures is completed. In these we have endeavored to illustrate the architecture of the buildings of the World's Columbian Exposition, the states, foreign countries and exhibitors, in a way to make it intelligible to such architects and amateurs as were unable to visit Chicago. We do not claim to have given a comprehensive view of the Fair or its architecture, which the size of this or any other journal would not permit, but mindful of the extent of our capacities have made a careful selection of such views of what must soon pass out of existence as are worthy of record and will be of interest to future investigators. The subjects have been selected and the descriptions written by an architect of experience, who was obliged to be on the ground during nearly the whole time of the exhibition, and had seen most of the buildings erected. In order to get as much as possible into the limited number of views that we have published, all general views, and pictures of the large buildings were avoided. It was assumed that these would be so extensively illustrated in popular publications, that all intelligent persons would be familiar with them, and it would not be wise to crowd out interesting views of details for their sake. Only parts of the large buildings have been shown, and those parts which are of most interest in their proportions and details. We have endeavored to illustrate the best that is in them, and from the best points of view. A large number of our subjects have never been photographed by others or even by the official photographer for other than our own use, and the negatives all belong to the Inland Publishing Company. We doubt not that many who visited the Exposition have

been surprised to see some of our views and wondered that they had never seen the originals; for we have searched in many secluded places for whatever will be valuable to fix on paper, and the merit of the objects has been the sole reason for their selection. Our readers will be able to realize from what we have done that the architectural glories of the Fair were not all in the Grand Court, and that there were many buildings of great merit in other styles of architecture besides those selected for the great show buildings. Much of this good work was inconspicuous, but it served to illustrate many of the phases of contemporaneous architecture, and the fact that architectural art is progressing in more directions than that which was made so prominent.

The Loss of Sculpture at the World's Fair Fire. The fire which destroyed the Columbus Arch, Peristyle, Music Hall and Casino, has left the east end of the Grand Court open to Lake Michigan, and the observer, standing

in front of the Administration building sees nothing to intercept the distant view but the Statue of the Republic rising out of the water, which is now shown to better advantage than ever before. From this point no ruins are visible, for the destruction was complete. The great buildings on each side still stand in all their pristine beauty, and are not crumbling with the ravages of a wintry climate. A new perspective is now obtained, and the Court of Honor takes on a new aspect, making it again an object of interest, notwithstanding the loss that has occurred. We have heretofore given the opinion that the Columbus Arch, or Water-Gate, as it is officially called, was the most interesting structure, architecturally (after the Administration building), in the main group and the best of Mr. Atwood's works. It was such a monument that, if not preserved for as long a period as possible, ought to be reproduced in permanent materials. As the completion of the park will now be on a plan that will not be influenced by the location of the Peristyle, there is a location where the Columbus Arch could be reproduced, with the grandest possible effect. It should be at the main entrance to the park from the Midway Plaisance, which is already a grand driveway, and serves the purpose for which it was intended, to connect Washington and Jackson parks. As such a suggestion as this could not be practically carried out for many years to come, the realization of one feature of the loss that has been sustained in the burning of the Peristyle becomes stronger day by day. And that is the sculpture that adorned the Arch. This consisted of the famous "Quadriga," representing Columbus in triumph in a four-horse chariot, which surmounted the top of it, the work of French and Potter, and the four groups of allegorical figures attached to the main piers of the arch, by Bela Pratt. In addition there were 128 statues on the pedestals of the main balustrades that surmounted the Peristyle, Music Hall and Casino, being enlarged reproductions of four figures modeled by Theodore Baur. All are gone forever. There are no full-size molds or models for any of these in existence except for the four figures by Baur. The Quadriga and groups on pedestals were enlarged and built up from small models which fortunately are still in existence. It may be of interest in recording this loss to know that the Quadriga cost the Exposition \$17,174, which included the modeling by French and Potter of the groups of domestic animals with their attendants, that were reproduced at the boat land-

ings, and are still in existence. The four groups modeled by Mr. Pratt cost \$6,685. So the loss of sculpture with the Arch alone was \$23,859. The additional loss of the 128 figures on the Peristyle, Music Hall and Casino, represents an outlay of \$17,520. But these were all reproductions. However, it is worth recording, as showing the extent of sculptural adornment on the World's Fair buildings, that this fire destroyed what originally cost \$41,379. But the park commissioners have plenty more on hand. Around the basins and lagoons alone, without regard to the buildings, are the animal groups, by Kemys and Proctor, which cost \$13,241; those of French and Potter, which cost \$23,861, and the MacMonnies Fountain, which cost \$50,000, or a total of \$87,102. With the exception of the sculpture of the fountain these were all carefully painted and wrapped up to protect them from the weather before the park was returned to the custody of the commissioners.

Supervising Architect's Bill Passed.

Under a misapprehension of the facts we have urged upon the architects of the country the necessity of securing the passage of the supervising architect's office bill. We succeeded in resurrecting the fact that the bill in question was passed and signed by President Harrison, it being one of his last official acts. The knowledge was not locked up, but was conveyed to the members of the Institute in a circular issued last February by Secretary Stone, and printed in *THE INLAND ARCHITECT* for March. It was probably a "Florida Enchantment" that prevented the writer reading that report upon his return from that country in April. The matter ended there with the Institute, it not being even mentioned in the report of the president at the last convention. It now transpires that there are difficulties in the way of the law being put in operation. The government, it is said, is making no contracts for building or pushing work other than that absolutely necessary, that the secretary of the treasury and the supervising architect are hostile to the law, and that only the warm support of the president can be looked for in the official family at Washington. It is hard to believe that Mr. O'Rourke is opposed to the measure, and Secretary Carlisle has heretofore been friendly to the measure, but as it is with these gentlemen that the operation of the law rests and as it has been dead as a door nail for the year since its passage, there must be some grounds for the rumor. The directors of the Institute evidently took action at the annual meeting last week, and the sending of a letter to the secretary of the treasury will probably bring this much needed reform to the surface. We have strongly urged the necessity of its passage, and now that the law has been discovered to be already on the statutes we reiterate everything that has been said and further urge the Chapters to support the Institute in its effort to have its provisions become the rule for the designing of public buildings.

Milwaukee Library and Museum Competition.

The competition for a five hundred thousand dollar library and museum for the city of Milwaukee has been decided. Seventy-four sets of plans were submitted. Professor W. R. Ware adjudicated the drawings and selected five designs. The joint boards of the library and museum selected Ferry & Clas, of Milwaukee, one of the five premiated, as their architects.

DIRECT METHODS IN ARCHITECTURAL PERSPECTIVE.

BY CHARLES E. ILLSLEY, A.M., C.E., ARCHITECT.

CHAPTER VIII—Continued.

ANOTHER direct mode of subdividing the side wall to correspond with the front wall is as follows: Select any portion, as v_i of the indefinite extension of $v e'$, and subdivide it proportionally with the front, or with $A B$. Through the points i and w' draw a line to the horizon at V' , and from V' as a center draw radial lines as before to the points i , 2 , 3 , 4 , etc. These lines will cross $v w'$ in the required points for its piers and arches. Of course these last points will coincide with those previously found; their failure to do so would indicate an error in the drawing.

125. As it is often necessary to divide one line proportionally with another, a method of doing this is illustrated in Fig. 125.* $A B$ is the original line; $A C$ is to be divided proportionally with it. From either end of $A B$ draw $A C$ at any angle. Join $B C$, and through each point in $A B$ draw a line parallel with $B C$ to cut $A C$. Lines parallel with the base of a triangle divide its sides proportionally, hence $A C$ is divided proportionally with $A B$. The divisions on $A C$ may be transferred by a slip of paper to the line it represents.

126. The expedient used in subdividing the line $v w'$ (Section 124) is of great service in perspective. It involves a principle whose full development must be deferred to another chapter. As here illustrated the explanation is as follows: The line $v w''$ is an extension of the horizontal line $v e'$, while $v w'$ is the perspective of a receding horizontal line corresponding with $v e'$. Both represent horizontal lines, whence the triangle $v w' w''$ represents a horizontal surface. Such surfaces all vanish in the horizon (Section 79), and, if any line in a perspective horizontal surface be produced to meet the horizon, the point of intersection is the vanishing point of perspectives of all parallel lines. Vice versa, if from any point, as V or V' in the horizon, radial lines be drawn, they will be perspectives of horizontal lines parallel with each other. Hence (Section 125) the perspective lines drawn from V or V' divide $v w'$ proportionally with $v w''$ or with v_i respectively.

From the above it will appear that any length of line along $v w''$ will answer. It is simply necessary that $v w''$ shall be horizontal, and shall lie in the picture plane or parallel with it, that it shall connect at one end with the perspective line which is to be subdivided, and that a line shall be drawn from its free end through the point w' and continued to the horizon.

127. In subdividing the second story of the perspective side wall another serviceable expedient is employed. The front wall, as previously explained, is simply a front elevation constructed in the usual way. This is to be reproduced twice on the side wall, which is twice as long as the front wall. Draw the slant line $x'' x$ across the front from x , at the middle of the end pier. On the side wall extend the vertical from v''' to the line of window heads at x''' . Join $x'' x'''$ and $x''' w$. These are perspectives of slant lines corresponding with $x'' x$, excepting the reversed inclination of $w x'''$. Mark the points i , 2 , 3 , 4 , etc., where $x'' x$ crosses the pier lines in front, transfer these by horizontals to the corner $x' x''$, and thence by normals across the side wall. They cross the slant lines $x'' x'''$ and $w x'''$ in the points required for the side windows corresponding with those in front. The direction of $x''' w$ is reversed in order to bring the whole pier at w and the half pier at x''' .

128. The base lines of the reveals of the front openings are obviously normal. The verticals $l' l''$, etc., are projected directly from the points l and m in the plan below. The base lines for the reveals of the side openings are horizontal both in plan and elevation. The verticals which limit the reveals in the side wall are concealed, as an attempt to project them will show, by the proximate corners of the same openings.

The second-story walls are to be of two-thirds the thickness of the lower story. Along the right-hand corner of the right pier in front lay off from e' upward any distance three times, as shown, draw normals across the reveal from the two upper divisions and a slant from e' to the end of the upper normal. This slant cuts the second normal at two-thirds the thickness of the pier back from its face. From this point is projected the vertical back edge of the reveal for the right-hand window in the second-story front. A horizontal from the base of the line last drawn cuts the normals already drawn at the base of all the second-story front piers in

points whence rise the back edges of their respective reveals. The reveals over the transoms are found in like manner.

129. For the front steps draw through the middle of $b c$ on the plan a normal $z''' z^4$. To the right of c , on the line $A B$, lay off the true width to scale of two steps, and by diagonals transfer these to the normal $m c$ produced, also draw horizontals through the points so found on $m c$, and normals as shown at the right ends of the steps. These form the plans of the half-flight at the right. In the elevation at the center of the opening draw the vertical $z z'$ down to the base line, divide into thirds and draw normals through the two lower points. For the front of the steps project verticals against these normals at z'' , etc., from points in $z''' z^4$, where crossed by the perspective plans of the steps. Through the points so found draw horizontals and normals as shown for the right half of the elevation of the steps. For the left half, duplicate with the dividers the half already drawn, and finish by horizontals, normals and verticals, as shown.

The treads of the two steps within the reveal of the archway are laid off along $b c$ to the left of c in the plan and transferred by diagonals to $m c$, thence projected up to meet normals from the heights of the risers marked on the corner $c^4 c''$ of the right pier.

For the inner flight the perspective plans of the two lower steps are drawn in the normals $5, 6$, etc. Lay off its entire width with buttress along the inside of the front wall on the plan below, transfer by diagonal to the point 6 on the normal $5, 6$, then project up against the normal which designates in the elevation the bottom of the lower riser. Lay off along $b c$, as shown, the widths of two treads, transfer by normals to a horizontal through 6 and project up in the risers shown. Lay off the height of the first riser on $c^4 c''$, transfer to m' by a normal, thence by a horizontal and another normal to the back of the steps in elevation. Repeat twice on the line of the first riser its height and transfer to the other risers as drawn. Complete by normals as shown.

130. Fig. 126 illustrates another mode of transferring distances from a front line $A B$ in a horizontal plane, to a normal receding line $A E$. Draw an auxiliary normal $B F$, transfer the points on $A B$ to $B F$ by diagonals, thence to $A E$ by horizontals (Section 104). To repeat this process, transfer from $A B$ to $C D$ by normals, then by diagonals and horizontals to the right and left as before. This method is available when $A B$ is symmetrically divided or when the divisions on $A C$ are required in the reverse order of those on $A B$.

When $A B$ is not symmetrically divided and the order from A to C is to be the same as from A to B the method shown in Fig. 127 applies. Transfer the points on $A B$ by normals to the line $A D$, thence by horizontals to $A C$. This makes the order from A to C the same as from A to B .

131. Fig. 128 illustrates a mode of transferring subdivisions on elevations.† Here the side wall $A C E F$ corresponds to three rooms of equal width, each room with a pair of windows similar to those in the front wall. To divide $C E$ into thirds, lay off any distance three times on $E F$ produced, as at a, b, c , draw normals through b, c , to meet a slant line $A C$, and from the points of intersection drop verticals $b' b'', c' c''$. These divide $C E$ in thirds and indicate the centers of the partitions between the rooms. Carry across the side wall two normals for the lines of window sills and heads obtained from the front elevation, and draw the slant diagonals $d c'', d' b'', d'' c'', d''' b''$. Join C with the center of the front pier $B D$, draw parallels therewith from the lower corners of the front windows, to cross the corner $A C$, and transfer these points to the slant lines in the side walls by normals as shown. These intersections mark the divisions for side windows corresponding with those in front.

The slant line $b'' d'''$ is in a reverse direction from $d c''$, in order to bring the half pier at b'' and the whole pier at the end d''' . Of the slants $b'' d', c'' d''$, the upper portion only is used. This is necessary to obtain half piers instead of whole ones at each side of the centers b'', c'' .

132. In Figs. 129 and 130 a side wall is designed without reference to a front, and mainly without vanishing points except for the normals marking the lines of window sills and heads. In Fig. 129 a window is required at the rear end, $C D$, of the same size as the front window and at the same distance from the corner, and a similar window midway between the two.

† It will sometimes happen that the vanishing points S, V_1, V_r , etc., fall beyond the limits of the printed cut. At this stage the reader is presumed to be so familiar with normals and diagonals (Section 104) that the omission of the vanishing points in an illustration will cause no embarrassment.

*For diagrams 123 and 125 to 133, inclusive, see insert pages in this number.

Find t , the center of the wall, by the slant diagonals $A C$, $B D$, produce the line $a b$ to meet $B D$ in e . Transfer e and w , where $B D$ crosses $a e$ and $c d$, to e' and w' on $A C$, by the normals $e e'$, $w w'$. These are the required points for the sides of the end window. For the middle window draw a vertical $t h$. Find the center f , of the first window, by slant diagonals and drop a vertical $f g$. In like manner find the center of the rear window and drop the vertical $s m$. Join $m h$, $g h$. The latter line crosses $c d$ at k . Lay off $c l = d k$, and draw through l a normal; it cuts $g h$, $m h$, in $u v$, which are the points required for the center window.

In Fig. 130 the same problem is solved by slant diagonals. From the lower corners of the first window draw through b , the center of the wall, slant diagonals as shown; they meet the line $a a$ of window heads in the points required for the end window. Through b draw a vertical $c b e$; this marks the center point of the head and sill of the middle window. Mark corresponding points in the first window by a vertical, $d f$, through its center (at the intersection of its slant diagonals, as drawn).

Join $e d$, $c f$. They cross at g , which therefore is perspectively midway between $c e$ and $d f$. Slant lines through g from the lower corners of the front window, meet the line $a a$ in the upper corners of the center window required. The reveals of these windows are not drawn, in order to avoid confusion.

133. When the points $V r$, $V l$ are inaccessible, what may be called a "Divided Distance" is convenient. This is illustrated in Fig. 131, where S is the point of sight, and $V r$ is one point of distance. $A B C D$ is a perspective square, the length $A B$ being transferred to $A D$ by the diagonal $A C$ toward $V r$ (Section 106). Section 103 explains why $V r$ is called a "Point of Distance." The line $S V r$ is often called "The Distance" also, since it denotes the distance of the observer from the object. The middle of $S V r$ thus becomes the "Half Distance" (designated $\frac{D}{2}$), and the middle of $S D$ is the "Quarter Distance" (marked $\frac{D}{4}$), etc.

It will be seen in Fig. 131 that if we take $B a = \frac{A B}{2}$ and draw a line from a to D , it will pass through the same point C in which the diagonal $A V r$ crosses $B S$, also that a line from b at one quarter of $A B$ drawn to $\frac{D}{4}$ passes through the same point C . This is not an accident but a geometric necessity. The vertical angles of the similar triangles $S C V r$, $A C B$ are equal and are bisected in each triangle by the lines $C D$, $C a$, from their common vertex to the middles of their bases, wherefore these bisecting lines form one and the same straight line; moreover it can be shown that the sum of the small angles at C , on one side of $D C a$, equals the sum of those on the other side, whence $\frac{D}{2} C a$ constitutes a straight line. A similar demonstration applies to $\frac{D}{4}$.

Hence with the half distance $\frac{D}{2}$ we lay out from B toward A one-half the true length of our desired perspective, and with the $\frac{D}{4}$ we use one-quarter of the true length. Again if we join A with $\frac{D}{4}$ we obtain a distance on $B S$ equal to twice $A B$, the same as found by a diagonal $D V r$. This gives the rear corner of a second square, duplicating $A B C D$. Again, joining A with $\frac{D}{2}$ we obtain a point on $B S$ distant four times the length of $A B$. This gives the rear corner of a fourth square like the first, and, dividing by cross diagonals as shown, we obtain the third square.

134. Fig. 132 shows the use of the Divided Distance in subdividing a vertical wall $A B C D$. The point S is on the horizon; D is vertically above S at the same distance to scale as the observer is from the plane of the picture, wherefore D is the vanishing point of lines in vertical planes making angles of forty-five degrees with the horizontal (or vertical). Hence D is the vanishing point for diagonals of perspective squares in vertical planes. Lay off on $A B$ the true span $a c$ of the first opening. Transfer by normals as shown to a' and c' . Draw $c' D$; this cuts $a S$ in the required corner of the first opening. If we take half the width, as $a b$, transferred to $a' b'$, and draw $b' D$ to the "Half Distance" we obtain precisely the same width for our perspective opening. Carrying b' and c' over to the next pier at $b'' c''$ we obtain a similar result from both $\frac{D}{2}$ and D . Afterward only $\frac{D}{2}$ is used.

The width of the piers is set off in true size at $A a$; hence d , where $c' D$ cuts $A C$, marks the distance for the second pier line $b'' c''$. In like manner d' locates the next pier, for, D being the vanishing point for $c' D$, $c'' D$, etc., these perspectives represent parallel lines, i. e., $c' d$ and $c'' d'$ are parallel in space. In using D to locate the remaining piers it must be remembered that, since this is the "Half Distance," we must set off from A only half the required width of our piers, i. e., we must use $A e$ instead of $A a$. Drawing a normal $e S$, its intersections with each successive line from D will give correctly the perspective widths of the successive piers.

135. PROBLEM VIII, FIG. 133.—To draw to scale a side wall thirty-one feet long containing three window openings six feet apart, the terminal piers being four feet wide, the central window being five feet wide by eight feet high, the other two being three feet wide, the wall being one foot thick. Here the half distance is shown: S is beyond the limits of the cut at the left.

At A lay off $A a =$ two feet, $a b =$ three feet, $b c =$ two feet: then $A a$ will be half the width of the first and last piers in the side wall $A B C D$, $a c$ will be the width of the central window, and $a b$ the width of the others. On $A D$ lay off $A d =$ three feet and $d e =$ eight feet. Through $a b c$ draw normals. A diagonal from A to $\frac{D}{2}$ will cut the first normal in a point which in perspective is four feet distant from a . Transfer this by a horizontal to a' on the base line $A B$. Continue this horizontal back to f on the normal from b , and through the middle of that part of this horizontal which lies between the normals from a and b draw a diagonal to D . This will cross the normal b in a point, g , which, transferred by a horizontal to the base $A B$, gives b' , the distant corner of the first window three feet wide.

From the point where $b' g$ crosses the normal through a , draw a diagonal to $\frac{D}{2}$: it will cut the second normal in h , which, perspectively, is distant from g by twice the width $a b$, i. e., $h g$ represents six feet, the width of the second pier. Transfer h to c' by a horizontal and produce $c' h$ to meet the normal from c . The normals through a and c are by construction five feet apart, hence a diagonal toward $\frac{D}{2}$ from the middle of that part of $c' h$ produced which is intercepted by the first and third normals, will cut the third normal in a point k , which, transferred to d' on $A B$, gives a window $c' d'$ five feet wide. The pier $d' e'$ is obtained in the same way as $a' b'$, by a diagonal, through the point where $d' k$ cuts the first normal, and $e' f'$ and $f' B$ in the same way as $a' b'$ and $A a'$.

136. As a check find, by cross diagonals, the center, m , of the wall, and through m draw, from the base of the first window, cross diagonals to meet the general line of the window heads. The points so found coincide with those already obtained; hence their accuracy is confirmed.

For the thickness of the wall (one foot) draw a normal through l , the middle of $A a$, and project upward its intersection with the horizontal $b' g$. At the tops and bottoms of the windows in the elevation draw horizontals through the distant corners, which will limit the vertical reveals. The inside line of the wall, as seen through the windows, is a normal.

Where construction lines can be drawn solid (not dotted) without confusion, as in this and several preceding problems, that course will sometimes be preferred.

(To be continued.)

NOTES FROM OUR FRENCH EXCHANGES.*

POPULAR OR FOLKS' ORNAMENTATION.

SAVANTS, anthropologists, archaeologists, ethnologists and others are accustomed to class the human races according to what they term the cephalic index, a cranial measurement invented by them, and from which they cannot deviate. A people has so many centimeters of temple measurement; so far from the junction of the nose to the crown, etc. Hence they are dolichocephalic, brachycephalic, or some other "phalic," and when they are numbered, labeled and placed in glass cases, everything has, of course, been said. There could not, by any possibility, be among peoples any race characteristics which could be deeper and more significant than the dimensions of their skulls!!

A Polish philosopher, Joseph Lelewel, who was an expert on ceramics, once proposed to name the different races of the earth according to the shape of their vases and jugs. He placed the

*Translated and arranged for THE INLAND ARCHITECT by W. A. Otis.

pottery of different nations in rows, analyzed them, and compared them with each other, drawing some very curious conclusions, insisting that "The history of ceramics is the history of the entire human race."

We would not go quite so far, but it does seem as if a study of the "people's ornamentation," as it is called, would be of very considerable use in the researches now going on into the origin of the different races. It was on visiting the "Exposition of the Feminine Arts" that that idea was especially strengthened. This popular ornamentation, so disdained in France, is, in certain foreign countries, greatly appreciated. In Austria, among others, there are everywhere established municipal schools for their special study, and at Vienna the Imperial Museum of Art and Industry has made a collection of the embroideries, necklaces, jewels, and headdresses of the peasants of the provinces belonging to the holy empire. In France we are taught in our schools only to draw Greek curios and keys, with egg and dart moldings, and when we know how to correctly trace these conventional signs on our moldings and designs, we are then "sharp shod" and ready to advance without fear! Fortunately below, or rather above, the school there is with us, as in some other nations, the people, who, having studied nothing, have remained in direct contact with that inspiration of true art, Nature. This exhibition shows how much instruction may be obtained from the single glance at the work, and proves in a truly astonishing manner how many valuable hints we architects, frequently called upon for motifs of decoration, might obtain from a more deep study of these novelties. A most remarkable series of Tcheco-Slav embroideries, sent by the city of Prague, occupies the place of honor. Glass cases filled with headdresses, mingled with bed curtains, neckerchiefs, corsages, jewels, infants' toys, and rich potteries, show a surprising wealth of invention. Flowers, flowers, always flowers, thrown upon backgrounds, now of red, now of black, or of white, but always with a marvelous artistic ability. The organizers of this exhibition have accompanied their cases with figures representing the peasant women of Moravia, Galicia, Bohemia, etc., which explain the uses of all the specimens of embroidery. All the history of the folk ornamentation from modern times back to its very beginnings, which seem to be Indian, are here classed in order, and the schools of the empire of the house of Hapsbourg have profoundly studied these collections and interpreted them with great talent and science. Also at this Exposition there is one especial hall devoted to our own popular ornamentation. The doorway even had inscribed upon it the pompous title, "National Costumes." But, alas! when one enters the room, nearly vacant of exhibits, it is with a blush, for here are three peasant costumes from Bourg, a few Normand and Pouterins headdresses, a collection of jewelry loaned by collectors, and a few paper images. Not a piece of the magnificent embroideries of Quimper, nothing from the mountaineers of Puy-de-Dôme, or from twenty other districts that might be mentioned, and which are known to us by the splendor of their antique costumes of years ago. While imperial Austria founds schools to study the arts of its peasantry, republican France has yet to learn the first rudiment. A few savant artists have, however, sought to discover the wherefore of the double volutes, the multiple crosses, the regular stone, with alternate leaves, etc., etc., which are encountered as well in Galicia and Middle Russia as in Wales, Cornwall, and Spain. They find certain similarities of taste, and hence probabilities of identity of race which are exceedingly surprising. By analyzing and classifying these forms of popular ornament they have made a kind of genealogy, proving that being neither Greek, Roman, Byzantine, or Merovingian, they go back to the primitive Aryan race and to India. So place together the artistic works of the peasants of all different countries and you will have before you, as said above, the history complete of entire humanity.

THE SCHISIOPHONE.

A new instrument by the above name, which has just been invented by Captain Place, is described by *La Semaine des Constructeurs*, the object of which mechanism is to detect any fissures or flaws in the interior of a block of metal. The inventor has presented to the academy one of these machines, which is composed of a microphone combined with a mechanical tapper or knocker, and a sonometer. The schisiophone will detect the difference of sound given out by a solid or a defective piece of metal, no matter how slight the defect may be.

CELERITE PAPER.—From the Celerite Paper Company, McVicker's Theater building, Chicago, we have received samples of their Celerite Paper. This is a substitution printing process and is closely allied to platinum printing, the most radical difference being that the resulting image is in silver. In our hands, once we understood the value of the bichromate solution, which was after the first trial, the paper works very well indeed, giving pure whites and fine gradation in the middle tones and deep shadows. We have seen specimens in the hands of other workers which were very good, so that altogether we can commend this to all who wish a mat surface paper that is moderate in price and good in quality.—*Photo-Beacon*. The peculiar qualities which recommend Celerite are that its tones are closely allied to the bromides and give a finish in surface and color similar to prints from copper plates in gravure and etching. Its easy manipulation and the facility with which any tone can be obtained or the effect regulated make it, to those who can draw away from the inartistic glazed effects of the gelatine papers and see the artistic value of natural surface and tones, an indispensable printing paper.

ANNUAL CONVENTION NATIONAL ASSOCIATION OF BUILDERS.

THE eighth annual convention of the National Association of Builders will be held at Boston, Massachusetts, on Tuesday, Wednesday and Friday, February 13, 14 and 16, 1894. The convention hall will be in Mechanics' building, on Huntington avenue, and the general headquarters for Monday and Monday evening, February 12, will be at the Master Builders' Association, 166 Devonshire street. The headquarters thereafter, during the entire convention, will be in parlors 11 and 12 at the Parker House, Tremont, corner of School street. The general programme is as follows:

PRELIMINARY MEETINGS.—A meeting of the directors of the National Association is called for February 12, at 10 o'clock A.M., in the rooms of the Master Builders' Association, 166 Devonshire street, Boston, Massachusetts. Provision has been made for meetings of all committees, standing and special, on February 12, at the same time and place.

BADGES.—The Master Builders' Association of Boston will provide distinguishing badges for all the cities represented in the convention, and therefore no badges need be provided by any of the filial bodies for their delegates or visitors.

INTERMISSION.—On Thursday, February 15, an intermission will be made in the programme of the convention, to give committees an opportunity to meet and consider subjects referred to them, and to afford delegates and visitors an opportunity to visit places of interest in and about the city without absenting themselves from sessions of the convention. The regular sessions will be resumed on Friday, February 16.

RAILROAD CERTIFICATES.—Delegates and others are reminded that certificates entitling the holder to return fare at one-third of the regular rates are useless unless signed by the national secretary and countersigned by the agent of the railroad companies. They should be presented to the secretary for signature at the earliest possible moment. (See Circular No. 2 on Transportation.)

SESSIONS.—The opening session will be called to order at 10 o'clock A.M., Tuesday, February 13; following sessions will be as voted by the convention.

RESOLUTIONS.—Resolutions must be presented in writing and in duplicate, both copies being signed by the parties presenting the same.

VOTING.—All votes, unless otherwise ordered, must be announced by the chairmen of delegations.

ENTERTAINMENT DURING THE CONVENTION.—It is the purpose of the National Builders' Association of Boston to arrange such entertainment as it has to offer to delegates and visitors, in a manner that will avoid the introduction of large events, which would require the simultaneous presence of all those attending the convention. This method will permit each delegate or visitor to accept the hospitalities offered, in an individual way, and to suit his tastes and convenience. Committees have been assigned so as to provide each delegation with special hosts whose only concern will be the entertainment of their particular guests in the way most attractive to them. Souvenir books will be given each delegate and visitor, in which will be found detail of entertainment plan. No banquet will be given, but a reception and smoker will be tendered the delegates and visitors on the evening of the day upon which the convention closes.

HEADQUARTERS.—Headquarters for Monday and Monday evening, February 12, will be at the rooms of the Master Builders' Association, 166 Devonshire street. After Monday, February 12, parlors 11 and 12, Parker House, will be open as headquarters for delegates and visitors throughout the convention.

LUNCH AT CONVENTION HALL.—The fact that the convention hall is at quite a distance from hotels where delegates and visitors have been recommended to locate, and that a return for lunch between sessions would therefore consume much time and interfere with the work of the convention, has caused the General Committee on Entertainment to provide a collation which will be served in the rooms immediately below the convention hall between sessions each day.

ENTERTAINMENT OF LADIES.—A committee of ladies has been organized for the purpose of entertaining any ladies who may accompany the delegates and visitors. The headquarters of this committee will be in parlors 1 and 2, Parker House, and visiting ladies are invited to meet the committee at these rooms as soon as convenient after their arrival.

ORDER OF BUSINESS.

Tuesday, February 13, 1894.—Morning Session.

Address of welcome, by Hon. Nathan Matthews, Jr., Mayor of Boston.
Annual address by the President.
Appointment of Committee on Credentials.
Recess.
Report of Committee on Credentials.
Roll call.

Afternoon Session.

Appointment of committee to report time and place of next convention, and to nominate officers for 1894.
Annual report of Secretary.
Annual report of Treasurer.
Reports of Standing Committees.
Reports of Special Committees.
Distribution of reports of Filial Bodies.
Submission and reference of Resolutions.

Wednesday, February 14, 1894.—Morning Session.

Roll call.
Submission and reference of Resolutions.
Discussion of reports from Filial Bodies, with the object in view of securing suggestions which will lead to improvements in the administration of Exchanges and the more effectual carrying out of the recommendations of the National Association.

Afternoon Session.

Address on "The Relations of Employer and Workman," by Hon. Carroll D. Wright, U. S. Commissioner of the Department of Labor.
Discussion of Mr. Wright's address, with the purpose of taking action looking toward the improvement of our form of Permanent Arbitration.

Friday, February 16, 1894.—Morning Session.

Roll call.
Discussion of the Uniform Contract, with the purpose of securing suggestions as to possible improvement of the form, it being understood that the only action which can be taken by the Association is to recommend our delegates to the "Joint Committee on Uniform Contract," to urge the adoption of changes, which, after discussion, may be approved by the convention.

Afternoon Session.

Report of the Committee on Resolutions, and action on same.
Report of Committee on Time and place of next Convention, and Nomination of Officers.
Election of officers.
Naming and election of directors for 1894.
Unfinished business.
Miscellaneous.

ADJOURNMENT.

MEETING OF THE BOARD OF DIRECTORS, A. I. A.

THE first meeting of the Board of Directors for the year was held in New York on Monday and Tuesday, January 8 and 9. There were present President D. H. Burnham, First Vice-president George B. Post, Second Vice-president Levi T. Scofield, Treasurer Samuel A. Treat, Secretary Alfred Stone, and Messrs. E. H. Kendall, R. M. Hunt, C. F. Schweinfurth, George A. Frederick, George W. Rapp, W. G. Preston, R. W. Gibson, W. W. Clay, J. F. Baumann, A. F. Rosenheim, James W. McLaughlin, W. S. Eames, W. C. Smith, C. F. McKim and Thomas Hastings.

The result of the last letter ballot was announced, and W. P. Gintner, of Akron, Ohio, and Clellan Waldo Fisher, of Worcester, Massachusetts, were declared elected, and the secretary announced the deaths of James P. Johnson, of Ogdensburg, New York, and Alpheus C. Morse, of Providence, Rhode Island. The resignation of J. C. Plant, of Minneapolis, because he was no longer engaged in the practice of architecture, was received and accepted, and a communication was received from the Buffalo Chapter in regard to the relation of the Chapters to the Institute, which was very fully discussed, and the whole matter was referred to a committee of five to report at a meeting of the executive committee, to be held at least sixty days previous to the next annual meeting, and they were requested to communicate with as many members of the Institute as possible and to report such changes in the by-laws as they deemed expedient. The chairman announced as members of this committee E. H. Kendall, New York city; R. W. Gibson, New York city; E. A. Kent, Buffalo, New York; J. W. McLaughlin, Cincinnati, Ohio; W. L. B. Jenney, Chicago, Illinois.

A communication from the Buffalo Chapter was received containing a woodcut purporting to be a representation of the proposed Federal Building for Buffalo from the Supervising Architect's drawing, "three clippings from the Buffalo Courier," and a series of resolutions concerning the Federal Building Law.

After an examination of the drawing and a consideration of the resolution and the newspaper clippings it was voted that the secretary be authorized to draw a memorial and resolution in regard to the Buffalo building, and that they be prepared to present the same to the board at its next adjourned meeting for consideration.

At the adjourned meeting held on the next day the secretary presented a draft of a letter to be sent to the Secretary of the Treasury, Hon. John G. Carlisle, which was referred to a committee—Mr. George B. Post, Mr. C. F. McKim, and the secretary—who subsequently reported a modified letter, which was unanimously adopted and signed by all of the general officers and by the members of the board present, twenty in all, and forwarded to the Secretary of the Treasury by Messrs. Clay and Treat, of Chicago. The secretary was directed to send a copy of the communication to every Chapter of the Institute, with a request that they take such immediate action thereon as may seem to them best.

The board received and acted upon eighteen applications, and the secretary was directed to issue a letter ballot for the election of the following as Fellows of the American Institute of Architects: William Schickel, Frederick W. Perkins, C. P. Baldwin, G. E. Harding, J. W. Moulton, A. Page Brown, Joseph Wolf, J. H. Duncan, James Brown Lord, J. O'Connor, R. W. Gilbert, W. Chamberlin, J. S. Barney, W. T. Gooch, J. G. Stearns.

Mr. P. B. Wight having resumed the practice of his profession, was transferred from corresponding member, and was duly reinstated as a Fellow of the Institute. The following persons, upon the nomination of the president, were elected to act with President D. H. Burnham, Treasurer S. A. Treat and Secretary Alfred Stone, as members of the executive committee, namely: E. H. Kendall, C. F. McKim and R. W. Gibson, of New York, and W. W. Clay, of Chicago. It was voted to present the name of W. P. P. Longfellow to the next annual convention as an honorary member.

The matter of proposing J. S. Walker, of Samoa, as a corresponding member, was referred to the executive committee.

A communication of D. W. Gibbs, of Oklahoma, in reference to a change in the by-laws in regard to members incapacitated by ill-health from active professional practice, was referred to committee on constitution and by-laws.

By the vote of the last annual convention, New York was selected as the place for the next annual convention of the Institute, and the board appointed October 16 as the date for opening the same.

The appointment of a committee of arrangements was referred to the executive committee.

Messrs. R. M. Hunt, George B. Post and E. H. Kendall were appointed a committee to collect data with regard to the early organization of the Institute and its acts to the time of its consolidation with the Western Association of Architects, said committee to be empowered to supply a clerk, if necessary for the purposes.

The secretary was directed to print a form for Chapter reports.

Messrs. Post, Hastings and McLaughlin were appointed a committee to prepare rules to govern competitions, and to report them to the board of directors before the next annual convention.

Messrs. Napoleon Le Brun, T. M. Clark and Alfred Stone were appointed as members of a joint committee on better fire protection.

Mr. Kendall read a communication from Baron Von Geymuller on his proposed Thesaurus of Architecture, and urged that the subject should enlist the interest of the board and through them

subscribers be obtained from the public libraries and persons of wealth throughout the country.

Adjourned.

ALFRED STONE,
Secretary of the American Institute of Architects.

HOW THE A. I. A. APPROACHED THE COMPETITION AND COMPENSATION PROBLEMS.

IN an editorial in our December (1893) number it was incidentally mentioned (referring to the early experiences of the American Institute of Architects) that "two years after its organization, written documents show that the conservatism of the members was such that it was a matter of doubt whether such things as competitions and commissions could with propriety be discussed in its meetings." It was by the merest accident that some of these documents turned up, and, we think, there will be no impropriety after the lapse of thirty-three and a half years in publishing one of them, for it was fruitful of good results. It is a curiosity from the fact that it shows how gingerly the Institute approached the question. It is valuable as the work of one of the fathers of the Institute, now deceased, whose whole life and practice was an example of uprightness and character that all others may envy.

It seems that the Institute had been organized for three years under the preamble still adhered to, before anyone dared to suggest that the regulation of competitions and minimum rates of charges was any part of its business. When it was at last brought up, it was not even at a regular meeting, but an "informal" meeting was held lest the subject might appear on the records. It was at an informal meeting of the Institute, held June 5, 1860, that the subjoined report was presented. The number of the committee does not appear, but as another report was also presented, by a member who is also deceased, taking a somewhat opposite view of the subject, there must have been only two members, and their opinions were divided. As the first mentioned report was adopted and led to the adoption of the first schedule of charges, which was modeled after that of the Royal Institute of British Architects, it is of the greater interest. The members were thereby settled in their minds as to the propriety of "discussing" the subject. Their reserve was overcome, the ice was broken, and the result was not difficult to attain. They must have breathed easily when they were able to talk openly about rates of charges, without the fear of being called a trades union, or being classed with the vulgar mechanics upon whom they depended for the execution of their designs. When in after years the subject of rules for competitions was considered and acted upon, the analogy so clearly stated by Mr. Hatfield with such contests of pure skill as regattas, horse races, foot races and cricket must have carried the day. The argument in favor of *minimum* charges for work performed with a good degree of excellence, holds good to the present day and nothing can be added to the reasoning therein briefly and concisely given. It is well known that architects of great reputation are accustomed to charge higher rates than the schedule in many cases. The following is the document referred to:

Report of committee on the propriety of discussing before the Institute the question of "Establishing Rules for Competition and Compensation," reported to an informal meeting of the American Institute of Architects, June 5, 1860, by R. G. Hatfield, member of committee.

The question is not as to the propriety of adopting rules, but the propriety of discussing the question of the adoption of rules; or, whether it is within the province of the Institute to consider such subjects.

Among the objects for which the Institute was established is that of "combining the efforts of those engaged in the practice of architecture for the general advancement of the art," and, as a "means of accomplishing this, there shall be regular meetings of the members for the discussion of subjects of professional importance." Thus reads the constitution of the Institute. The question turns on this point, namely: Is the subject important? If it is, then it may be discussed. Would it be to the advancement of the interests of the Institute to establish rules? In order to answer this question it will be necessary to inquire the nature of the subject upon which it is proposed to establish rules.

The subject is double: competition—compensation. First, as to the nature of competition, does it require rules? Competition among architects resembles in a degree that exhibited in a regatta or on a race-course; it is a trial of skill by which the powers exercised are developed and strengthened. This has been found to be the result of all contests when conducted fairly and in accordance with established rules. Without rules no contests of this kind are entered into. Regattas, horse races, foot races, cricket and all contests which are calculated to draw upon the brain or muscle for an exhibition of skill or endurance—all have their well-established rules. In all these the contest is reduced to a system, the operations are like the movements of a nicely adjusted piece of machinery—all are conducted with order and system, except contests in that profession which has to do only with that which is based upon order and system. Strange inconsistency, that those whose daily duties inculcate regularity and method should have no established rules for conducting contests of genius and skill. From these considerations it may be fairly inferred that there should be well-established rules for the regulation of competition among architects, and therefore the subject is important and should engage the attention of the Institute.

Second, *Compensation*. What is the nature of this subject? Are rules required to regulate it? Compensation, to be equitable, should equal in value the work performed. Its value when considered not only as to its amount but as to its quality. As in other professions, the quality of the service rendered differs; the services of no two architects are alike valuable. One has been longer in the profession than another, and of those who have practiced a like number of years, one has had more business than the other, and again, of those who have had the like amount of business, one has superior talents to the other, so that the services of all differ in value more or less. Now, rules that are to be adopted for regulating the price for architectural services must, to be equitable, have reference to the quality of the service as well as the quantity. Hence, however desirable, yet how difficult, nay, how impossible, to graduate prices in accordance with the talents of the various members of the profession! From these considerations it may be shown that there cannot be fixed prices established that shall be alike binding on all members of the Institute without doing great injustice to some. Yet that there should be fixed rates agreed upon for the various kinds of work, when performed with a good degree of excellence, is undoubtedly true, and well-established members of the profession should be expected to adhere to them, and therefore the subject is important and may be discussed by the Institute.

NEW YORK, JUNE 5, 1860.

MILWAUKEE LIBRARY AND MUSEUM COMPETITION.

THE conditions, names of competitors and the report of the expert employed to adjudicate the plans, William R. Ware, Professor of Architecture, Columbia College School of Mines, New York, in the late competition for a library and museum for the city of Milwaukee, Wisconsin, is as follows:

INSTRUCTIONS TO ARCHITECTS.

The joint Boards of the Public Library and Museum of the city of Milwaukee solicit plans and outline specifications for the new Public Library and Museum building to be erected on block 174 in the Fourth ward, in the city of Milwaukee, the dimensions and location, with the grades of the adjoining streets, location of sewers and water pipes being given upon the annexed plat. Plans to be drawn to the scale of eight feet to the inch, and to be what is known as sketch plans.

The specifications to be a typewritten description of the building, giving as clearly as possible such information concerning materials, methods of construction and decoration as cannot be shown on the drawings.

The said plans to show the arrangement of all rooms, etc., on each floor, and to contain also a section of said building from basement floor to roof, showing the method of construction; also two perspective drawings, one showing the south and east fronts, the other the south and west fronts. The elevation of the nearest corner to be on a scale of eight feet to the inch.

The building is to be a modern structure, substantial, fireproof and ornamental, and adapted to the uses of the Public Library and Public Museum, and its exterior on Grand avenue, Eighth and Ninth streets, is to consist of stone of either of the following kinds, namely: 1st, No. 1 Portage red sandstone; 2d, No. 1 cream buff Amherst; 3d, first quality dark blue Bedford limestone; 4th, Berea sandstone, 10 feet ledge; 5th, Lake Superior brown sandstone, or stone and brick above the first story.

The foundation to the surface of the ground to be of good limestone.

It is to have three stories and a basement. The basement will be full size of building. The boilers for the heating apparatus must be located in a separate building.

The successful competitor will, if he so desires, be employed to furnish the detail and working drawings, and to superintend the erection of the building at the rate of compensation fixed by the joint boards.

All drawings to be in ink and to the same scale of eight feet to one inch.

The perspectives to be without shading or landscape embellishment except a single human figure six feet high to indicate the scale. The Public Library is to be located on the east portion of the ground, and the Public Museum is to be located on the west portion of the ground, and the ground space to be divided between the Library and Museum as equally as possible.

The plans of the basement are to be made as complete as possible in order that excavation and foundations may be proceeded with during the winter.

GENERAL REQUIREMENTS.

It should be especially required that every detail of the plans for ventilating and warming the building, for the arrangement and construction of plumbing, and for all, in fact, that pertains to the sanitary conditions, as well as for the natural lighting of the rooms, shall be such as is most certainly approved by science and experience.

The building should be of a pure style of architecture, befitting its uses, and impressive to the eye by beauty of proportion and harmony of lines rather than by showy ornament or eccentric features.

It should be of a fireproof construction, and all floors should be so deadened that noises will not penetrate from one story to another.

Wherever there are outside courts for lighting the interior of the building the walls should be faced with enameled brick of a light color, preferably a cream tint, in order to give a good reflecting surface that cannot become dimmed or be made ineffective by moisture.

NAMES OF COMPETING ARCHITECTS.

1. Appleton P. Clark, Jr., Washington, D. C.
2. G. W. Foote, Atlanta, Ga.
3. C. M. H. Vail, Ravenswood, Ill.
4. C. H. Eckert, New York, N. Y.
5. Wilson Bros. & Co., Philadelphia.
6. J. C. Worthington, Philadelphia.
7. A. T. Riley, Detroit, Mich.
8. Paulsen & Laval, Boston, Mass.
9. W. W. Lewis, Boston, Mass.
10. W. Frank Bower, Newark, N. J.
11. F. E. Edbrooke, Denver, Colo.
12. Wilson & Simon, Baltimore, Md.
13. Arthur H. Bowditch, Boston, Mass.
14. Wm. M. Kenyon, Minneapolis.
15. Lewis & Wocher, Chicago, Ill.
16. Austin Terryberry, Duluth, Minn.
17. Nettleton & Kahn, Detroit, Mich.
18. A. W. Hodgkins, Washington.
19. A. O. Elzner, Cincinnati, Ohio.
20. Stewart, McClure & Mulgardt, St. Louis, Mo.
21. Varney & Woolrych, St. Louis.
22. Frank H. Wright, Chicago, Ill.
23. Henry Ives Cobb, Chicago, Ill.
24. J. Spencer & Trowbridge, Chicago, Ill.
25. F. Velguth, Milwaukee, Wis.
26. Bertrand & Keith, Minneapolis.
27. Garden & Garden, Chicago, Ill.
28. Gunder & Brainerd, St. Louis, Mo.
29. C. W. Pomeroy, St. Louis, Mo.
30. C. L. Staub, St. Louis, Mo.
31. Henry A. Dumper, Brooklyn.
32. Ernest Flagg, New York, N. Y.
33. Hartung & Richter, Milwaukee.
34. L. G. Middaugh, Kansas City, Mo.
35. Chas. F. Whittlesey (Badger), Chicago, Ill.
36. J. E. O. Pridmore, Chicago, Ill.
37. Jacob Jacobi, Milwaukee, Wis.
38. Alex. Eschweiler, Milwaukee.
39. W. A. Holbrook, Milwaukee, Wis.
40. J. C. Morrison, Chicago, Ill.
41. Patton & Fisher, Chicago, Ill.
42. Traphagen & Fitzpatrick, Duluth.
43. R. C. Spencer, Jr., Chicago, Ill.
44. Hodgkins & Barrows, Chicago, Ill.
45. Rau & Kirsch, Milwaukee, Wis.
46. D. F. Kennard, Chicago, Ill.
47. Howland Russel, Milwaukee, Wis.
48. C. F. Ringer, Milwaukee, Wis.
49. A. J. Grenier, Utica, N. Y.
50. H. C. Koch, Milwaukee, Wis.
51. Ferry & Clas, Milwaukee, Wis.
52. Charles Fink, Milwaukee, Wis.
53. Andrews, Jaques & Rantoul, Boston, Mass.
54. Starbuck & Rose, Milwaukee.
55. Coulter & McCafferty, New York.
56. J. J. Ray Mulcahy, Boston, Mass.
57. William R. Gibb, Chicago, Ill.
58. Minneapolis Architectural Bureau, Minneapolis, Minn.
59. Gordon & Helliwell, Toronto, Can.
60. Nettleton & Weaver, Detroit.
61. Nicholson & Schugens, Rochester.
62. D. Schureman, Rockford, Ill.
63. Patrick A. Tracy, Boston, Mass.
64. Arthur Woltersdorf, Chicago, Ill.
65. W. D. Kimball, Milwaukee, Wis.
66. Radcliffe & Willoughby, Duluth.
67. Bosworth & Hunt, Chicago, Ill.
68. Gibel & Gaebler, Nashville, Tenn.
69. Ralph M. Hulett, Cleveland, Ohio.
70. Neal & Hopkins, Pittsburgh, Pa.
71. Alfred Bryan, Duluth, Minn.
72. J. Beckmann, Rochester, N. Y.
73. John A. Moller, Milwaukee, Wis.
74. Boring & Tilton, New York, N. Y.

REPORT OF PROFESSOR WARE.

"I have examined the seventy-four designs submitted in competition for the Milwaukee Public Library and Museum, and have carefully studied those among them, about twenty-five in number, which seemed of most promise. Of these the five numbered 17, 50, 51, 53 and 74 seem to be on the whole the most acceptable, though none of these offer as they stand a perfectly satisfactory solution of the problem. Any of them, however, would, if subjected to certain obvious modifications, perfectly well answer the needs of the city, and provide a handsome convenient building.

"The necessity of thus changing the designs, in order to adapt them to the requirements of the case, arises in the main not from lack of skill and judgment on the part of competitors, so much as from their having mistaken the meaning of some portions of the paper of instructions, as in the case of the museum, or attached undue importance to the requirements which it now proves to have

been impossible strictly to follow without sacrificing other things more important, as in the case of the lecture room. This does not affect the merit of a design, as a solution of the problem presented, though it may make it unsuitable without alteration. This is especially the case in regard to the Museum, which some of the competitors have supposed to be intended for pictures and statuary, and for miscellaneous works of art, when in fact it is, in the main, a museum of natural history.

"The scheme best suited to such a museum seems to be a series of large rooms, occupying, one over the other, the whole of the wing assigned for this purpose, with no entrance from the side street. But as this was not especially stated in the instructions, and as it was impossible for the competitors to have known this, especially for those living at a distance, it would be unjust to reject the designs that embody a different idea, simply because it happens to be a mistaken one. Moreover, it would not only be unjust to the competitors, it would be contrary to the interests of the city, which it is the first duty of the committee to protect. To deprive the city of a design, in other respects admirable, because in certain particulars, which can easily be altered, it requires alteration, would be contrary to public policy.

"Now, this particular alteration can easily be made in the plans which are herewith presented that do not already show this arrangement. Three or four stories, with a large hall in each, as wide as the western wing, and nearly, if not quite, as long, can easily be provided in each of these designs, without materially disturbing the arrangements of the rest of the building. This being so, the question, which design best accommodates the museum, ceases to be an important consideration in choosing among them. All can be made to furnish just the accommodation that is most preferred. The designs which present this arrangement already, and accordingly do not require alteration, have, of course, a certain precedence, and stand first from this point of view. But if other designs are preferable, from other points of view, their mistake in this respect does not disqualify them from selection. Indeed, if such a rule as that were adopted, all the designs but one or two would have to be thrown out at once. It is not for the interests of such enterprises that any such rule should obtain.

"What has been said of the museum applies, though with less exactness, to the library. The trustees of the library know just what they want, but it was impossible for the competitors to know it with exactness. They had to work, for the most part, very much in the dark. Some have shown great skill, but have avoided just what is not, in fact, the desirable thing. Others have by hit or by wit, done almost exactly what was wanted. It is right that these again should have a distinct preference, and should not be set aside except for some paramount excellence, which other designs exhibit and they do not. This claim for consideration is stronger in the case of a good library plan, than in the case of a good museum plan, the library problem being a more complicated and difficult one, and the prospect of satisfactorily altering an unsatisfactory scheme being much less promising.

"Another particular which needs to be dealt with in a liberal spirit is the lecture hall. The competitors have been somewhat embarrassed by the requirement that it should be in a central position, and that it should be on the first story. It was difficult to meet these conditions in any way, and almost impossible to do so without making sacrifices that were very undesirable. In this case some of the competitors have spoiled their plans in a conscientious endeavor to fulfill the requirements, others have violated this requirement for the sake of the general good. In this case, again, a design should not be summarily rejected for either reason, and those that suffer from fidelity to the programme should, if otherwise acceptable, have the benefit of all possible alterations. Such alterations and transmutations are more practicable and more defensible in the present instance than is generally the case, because, by reason of the shape of the lot and of the peculiar instructions of the programme, the shape of the building is substantially the same in almost all the plans, and almost any of the internal arrangements could be placed within almost any of the external walls. But the most important element in a design is its architectural character, and this element is not susceptible of such manipulation. In this respect the different designs must be judged as they stand.

"The architectural treatment without and within is not open to such modification and substitution. It is something individual, and personal to the design and its author. The taste, skill, knowledge and judgment evinced by any one of these competitors cannot be transferred to another. In choosing among the designs submitted, this is accordingly a consideration of paramount importance. The object of a competition, indeed, is not only to secure a convenient and suitable building, but to secure evidence of the taste and skill of its designer. The exhibition of taste and skill, and of professional capacity and resource is, accordingly, a main consideration in choosing among the designs submitted. This cannot, of course, be transferred from one set of drawings to another. In a building like this, which is eminently a public monument, this consideration is of exceptional importance. This does not mean that there is no substantial ground of choice between these designs. It means that artistic considerations should, in such a building, have a certain precedence, since matters of practical convenience can always be secured with sufficient care and pains, while all the care and pains in the world will not change personal and professional qualities.

NUMBER 17—NETTLETON & KAHN.

"The design numbered 17, like most of the others, would need to have the partitions removed from the main floor of the museum

and need to have the lecture room put up stairs, instead of on the first story, as required in the instructions. As to the library, while the arrangements for the delivery room and the book-stack could remain substantially as shown, the position of the reference rooms and service rooms would probably have to be reversed. It would hardly be worth while to contemplate so much alteration if it were not for the admirable architectural character of this design, both within and without. The disposition of the staircase and of the delivery room is extremely effective, and though the main doorway is a little small and could be made more important to advantage, the general character and effect of the building is dignified, elegant, and monumental. The exterior is one of the very best, the arrangement of the upper windows being especially agreeable.

NUMBER 50—H. C. KOCH.

"The design numbered 50 gives the museum three floors, each occupying the whole of the west wing, with hardly any partitions. In the third story is a gallery, lighted from the roof, nearly equivalent to a fourth floor, and the basement is made to count as a fifth, which is, however, only twelve feet high and not well lighted. The requirement that the museum shall be seventy feet wide is not observed, the width being cut down to sixty-three feet, which secures better light than in most of the designs which adhere strictly to the programme in this particular. But the width could, of course, be diminished in any of the others, and a fifth floor, for the museum, obtained in the basement also, if this occupation of the lower story is admissible. The arrangements for the library seem convenient, except that the librarian's room and the trustees' room had probably better change places. There are two good stairways, well placed. The most noticeable feature in this part of the design is the semi-circular book-stack. It is for the trustees to say whether this would or would not be convenient in practice. It is obviously not so susceptible of enlargement upon the ground as the oblong plan shown as an alternative. Two lecture rooms are shown, besides a recital hall, one over the other, in the middle of the front of the building. The one in the second story seems superfluous. The upper one is well placed, if not too high up, being equally accessible to the museum and the library. It is ingeniously designed, with a gallery on three sides. The stage is on the long side of the room, a disposition good for hearing, but bad for seeing the illustrations, which, in a scientific lecture room, is an essential consideration. The external appearance of the building, as shown in the elevations and perspectives, while simple and unobjectionable, does not specially commend itself for elegance. The attic story over the central doorway seems heavy.

NUMBER 51—FERRY & CLAS.

"The design marked 51 has as little to be said against it and as much in its favor as any. The arrangements for the library seem perfect, the form of the book-stack being especially ingenious and if those for the museum are less satisfactory, this is because the first story is encumbered by the lecture room. If this were removed, then all three floors of this west wing would be available for museum purposes. The second story is lighted by a central opening in the floor of the third story, a device almost essential if the required width of seventy feet is observed. A gallery could probably be added, if needed. The lecture room, which certainly ought not to be on the first floor, could be put on the second story, next the eastern staircase, occupying the whole width of the building, where are shown the patent office and the Milwaukee authors. The elevation is, to my mind, one of the best, if not the very best of them all, elegant and sufficiently dignified, and a great improvement upon the library at Leipsig, which it notably resembles. The central feature, especially, is much more to be commended.

NUMBER 53—ANDREWS, JAKES & RANTOUL.

"The design numbered 53, while it would require perhaps more alteration than some of the others, exhibits more than almost any other of them the qualities of elegant and scholarly arrangement that should characterize a building of this class. The museum, indeed, is not only cut up into small rooms, which, of course, can easily be thrown into one, but the wing is much wider than in any of the designs. If, however, such rooms are more than sixty feet wide, they had better be open in the middle, so as to let the light from the roof penetrate to the lower floor, and if this is done, a width of eighty feet may not be too great. The staircase is opposite the entrance and the different rooms of the library elegantly arranged on the right. The reference room is ingeniously placed half a story above the main floor, and the newspaper room half a story below. But this is not essential to the design and need not be seriously considered. The only serious alteration that would be necessary, besides removing the partitions of the museum, would seem to be the change in the position of the lecture room. This could be put in the basement under the museum, or on the front of the building, in the second or third story, as might be preferred. The external aspect does not quite bear out the promise of the interior. But it is simple and dignified, and if treated with the elegance of detail that the handling of the problem seems to promise, would be suitable and satisfactory.

NUMBER 74, BORING & TILTON.

"Design Number 74 is one of those that suffer from a too faithful adherence to the requirements in respect to the lecture room. Putting it on the first floor injures the museum. The lecture room itself is one of the best, and in other respects the plan seems an excellent one. The museum itself adheres to the requirement

that it shall be seventy feet wide. This would make the middle of the building quite dark, especially in the lower stories. This design obviates this by lighting the whole middle of the building from the roof. Both the upper stories have an open well in the center. This gives three well lighted stories, besides a gallery. The external treatment is simple and monumental, and all the details give evidence of taste and refinement.

"The final choice of the committee must probably be determined in large part by consideration of expense. The best way to ascertain what any of these designs would cost to erect, is to obtain from its author such drawings and specifications as will enable an experienced builder, in the service of the committee, and in whom they have confidence, to make an estimate which he himself has confidence in. If the choice between two designs depends upon their cost, the same contractors shall make estimates upon both, under as nearly as may be the same conditions. It will be time enough to report their conclusions to the city authorities and recommend a course of action when they have thus satisfied themselves that they have found not only a desirable but a practical solution of the problem confided to them."

WHICH IS THE BUILDING LINE.

A CORRESPONDENT having submitted a case respecting the legal building line of a lot, Mr. Dankmar Adler, whose experience in matters pertaining to such questions is second to none, was asked for an opinion. It is as follows:

Editors Inland Architect:

Your note, inclosing two letters from Mr. W. G. Robinson, is at hand. In answer I submit the following:

First. If A owns a block of lots fronting on a street, and sells B a lot with the understanding that a certain building line shall be maintained by B and by all future purchasers from A, this agreement of A's will not bind future purchasers unless the condition agreed to between A and B is also made a condition in each of the various deeds issued to those who purchase from A after his transaction with B.

If, however, B can prove that one of the conditions under which A sold him the property was the establishment and maintenance of a certain building line, then, whether this proof is made by B by written document duly signed by A, or by witnesses to a verbal agreement between A and B, B will have a good claim for damages against A in case A has neglected to fulfill the terms of his agreement with B as regards building line. The extent of the damages, however, would be determined by a jury.

If B cannot prove, either by a writing of A's or by witnesses to the agreement, that the establishment and maintenance of a building line was agreed upon by A, then B has no case.

Second. As to whether the line of main wall or the line of projecting bay windows or verandas determines the building line depends very much upon the wording of the original agreement. I know of several in which this point was particularly agreed upon and clearly stipulated.

If nothing is said to determine whether the main building line or the line of projecting cornices, balconies, bay windows or verandas is meant, much will depend upon the decisions upon that head of the higher courts of the state in which the property concerning which the controversy has arisen may be located; and if no decisions have been made in that state, it will be for the courts to decide which shall be the interpretation. Very truly yours,

DANKMAR ADLER.

ASSOCIATION NOTES.

DENVER ARCHITECTURAL SKETCH CLUB.

The annual election of officers for this club for 1894 took place at the last regular meeting of the old year, December 29, 1893. Apparently the members are well satisfied with their ruling powers, as the subjoined list, almost unaltered from that of 1893, will show: President, William Cowe; vice-president, Thomas A. Green; secretary, Harvey Pridham; treasurer, William E. Fisher. Directors in addition to the officers—Eugene R. Rice, Daniel R. Huntington, Harry Thomas.

It would hardly be relevant now to do more than allude to the chaotic effect which the late demonetization of silver brought upon Denver. But we, the Sketch Club, have felt it severely, not only in a financial way, but in a manner far harder to recover from, the loss of some of our brightest and most enthusiastic members. They have scattered to the four corners of the states in search of work, and I am glad and proud to record that they not only had a blessing on leaving, but have found a welcome wherever they have gone. We give a prominent place in our architectural creed to the belief that a D. A. S. C. man can earn his living anywhere.

While recording our regrets at the loss we have thus sustained, it is gratifying to mention that new members are joining, and that the annual report of our treasurer shows us to be financially

ahead; also that we have an unlimited balance of enthusiasm to draw upon for future use.

The matter of essays at informal meetings is being taken up more than ever, and the president started the new year's list with one entitled, "What the World Owes to the Arts of the Ancients." It was an excursion back into past history, handled with careful thought and artistic feeling, showing not only what those arts *had been* to the ancients, but what, if we chose, they still might be to us.

I will send the list of our subjects for competitions next month.
HARVEY PRIDHAM, Secretary.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

At a meeting of the City Hall Committee of the Architectural League of New York, held January 1, 1894, the following resolutions were unanimously adopted and forwarded to the Mayor and the Advisory Committee of Architects to the municipal building commission of the city of New York:

WHEREAS, The report of the Advisory Committee to the Board of Commission on a municipal building of the city of New York has been handed in, and certain adverse criticism has appeared in the public press; and

WHEREAS, Competition drawings can under no circumstances be more than elaborate sketches, the object of a competition is fully accomplished if a plan is selected which in its general features of design, both in ground plans and elevations, conforms with the instructions given, and offers a project, which with careful study and without any radical departure from the original scheme of the design, may result in the construction of a thoroughly satisfactory building.

Resolved, That the undersigned committee of the Architectural League of New York, after carefully reading the full report, believe it to be in accordance with the terms of the instructions, and hereby reaffirm their entire confidence in the judgment of the said Advisory Committee.

GEORGE B. POST, ex officio.
CHARLES I. BERG.
JOHN DU FAIS.
G. L. HEINS.
BRUCE PRICE, Chairman.

MINNESOTA CHAPTER, A. I. A.

At the last annual meeting of the Minnesota Chapter, A. I. A., the following officers were elected to hold office for the current year:

President, Cass Gilbert; vice-president, George E. Bertrand; secretary and treasurer, Clarence H. Johnston.

The election of directors and the appointment of committees for the various branches of Chapter work has been fully perfected with a large promise of fruitful results.

The Chapter numbers thirty members on its rolls, and being well organized and energetic, it is fair to presume that the various activities in which it is engaged will make an exceedingly creditable showing when the year book is made up.

Meetings are held monthly, alternately in St. Paul and Minneapolis, at which papers are read and discussed, interesting professional data compared, and reports of committees on legislative matters, current work and draftsmen's competitions received. The draftsmen's competitions inaugurated last year have been so successful that they will be continued during the current year.

The field is ripe for harvesting much that is of benefit and value to the profession in Minnesota, and the Chapter, recognizing its opportunities, expects to accomplish correspondingly large results.

NEW PUBLICATIONS.

ELEMENTS OF SHADES AND SHADOWS FOR ARCHITECTURAL STUDENTS. By William H. Lawrence, Instructor in Architecture, Massachusetts Institute of Technology. H. G. Collins, publisher, 15 Milton place, Boston, Massachusetts, 1893.

This is a neat little octavo containing twenty-four pages of text and eight folded plates, with thirty-seven cuts. The work is divided into four chapters, embracing general principles, polyhedrons, cylinders and cones, and double-curved surfaces of revolution. The text is a model of concise and accurate demonstration, showing the skill of a practical teacher and the precision of a thorough scholar. The illustrations are admirably drawn and lettered, and the typography and paper are of the best.

As the work professes to give only the elements of the subject, the omission of many practical applications is accounted for. The only matter of special interest to architectural students as such is the last problem, which develops shadow lines on a pediment of somewhat uncertain contour architecturally.

COMPOUND RIVETED GIRDERS. By William H. Birkmire. New York: John Wiley & Sons.

This book is of the shop, "shoppy." In saying this we mean to compliment it as a book that is eminently practical, although it does not so state on the title-page. We have seen so many so-called "practical" books, at least so self-entitled, which were written by impractical men, that whenever we see the word "practical" on the title-page we are apt to take it as meaning the reverse.

The book is evidently written by one who is accustomed to execution of work and who knows the absolute necessity, in a shop, of rules which are readily applicable to the work on hand.

The first chapter is a general statement of rules. The remaining chapters give eight examples of how work should be executed and the rules for so doing. Indeed, the bulk of the book is taken up by these examples; and no better way of teaching the novice or of explaining rules to a practical man can be given than by the working out of examples.

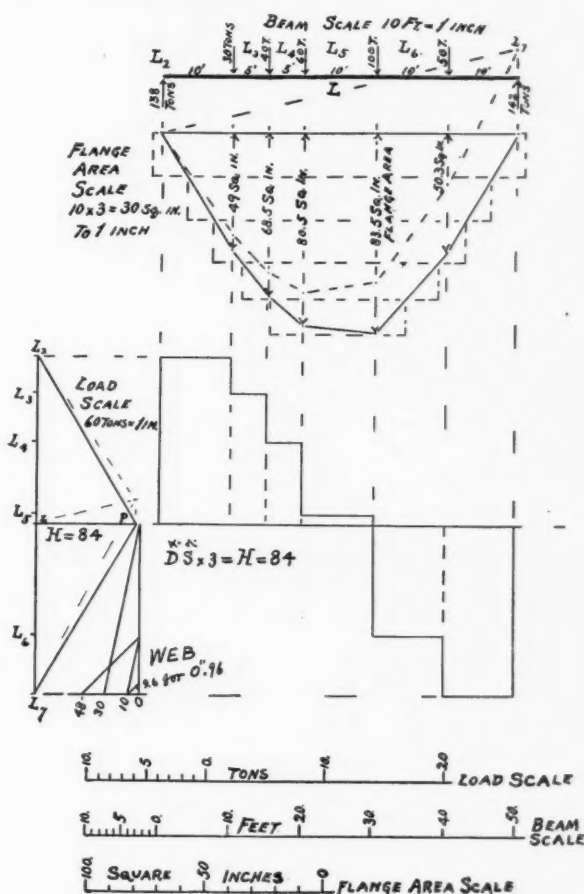
The theory of the subject is but slightly touched upon. Readers should have some knowledge of Bending Moments, etc., in order to properly understand the examples.

The graphic method is used somewhat, but not as much as it might have been. This is the more surprising as in his preface

the author speaks favorably of it. In example 8, he obtains the moments graphically, and then turns to arithmetic to find the area of a flange; whereas, if the pole distance had been taken, equal to the depth multiplied by the safe strain per square inch, the flange could have been scaled off directly by the beam scale, and saved the arithmetical operations. Since these were based on measurements by scale, the areas certainly would be as accurate in one way as the other. This is the more surprising since he has given in most of his examples three separate drawings, whereas one would have sufficed.

If the product of the depth by the strain should be either too large (or too small) for practical use, then it could have been multiplied by any assumed factor that might be necessary to bring it to a practical length; and by multiplying the beam scale by the same factor, the flange area scale would have been obtained. A little practice in such methods enables one to assume a factor such as would cause the flange area scale to be a convenient decimal scale.

We give an illustration of example 8 worked graphically.



The scales mentioned on the figures are the ones by which the figures were drawn; but, as the figures were altered in size for printing, these scales are no longer correct. The scales which are drawn at bottom of figures are, of course, correct for the figures as printed.

The loads are given in tons, yet the rules for thickness of web, and also buckling, require the tons to be brought to pounds. This is unnecessary. The rules might as easily have been given so that tons could have been used. The same is true with regard to the shearing and bearing resistances of rivets. Where loads are given in one unit, it is not desirable to be changing the unit; and this is especially true if the solution is to be obtained graphically.

The rule given for obtaining the number of rivets on each side of the zero shear is sufficient; but there is no rule clearly given by which the number of rivets between any two loads can be easily obtained.

In considering the subject of stiffeners, the thickness of the (angle) iron is only considered; its shape and area appear to be neglected, and there is no rule given by which they can be obtained. Indeed, the stiffeners appear to be treated like a rectangular plate without its breadth being given. It is quite true, however, that the writer knows of no satisfactory rule for stiffeners that can be readily applied.

The book is an excellent one for office use. While it gives nothing specially new, the rules are such as can be readily applied. The practicing architect would recognize the usefulness of such a work.

There are a number of typographical errors which need correction, there is also a want of system at times perceptible, but the work as a whole is so good that such matters can well be overlooked.

A PRACTICAL TREATISE ON FOUNDATIONS: Explaining fully the principles involved, with descriptions of the most recent structures, accompanied by numerous drawings; also an accurate record of the bearing resistances of materials as determined from the loads of actual structures. By W. M. Patton, C. E., of Lexington, Virginia. New York: John Wiley & Sons, 1893.

Mr. Patton, in his preface, offers some timely suggestions pointing to the need of a work on foundations that is of a more practical nature than those that have heretofore been issued. He felt the necessity of this in his own experience as a student and teacher. He followed the latter vocation for six years and this has been succeeded by eighteen years of experience as a constructor. The book is therefore largely made up of the results of his own experience, and in giving them he has eliminated all that is possible of dry formulæ and details. But he states that of these matters he has preserved accurate records that can always be reached. He divides the whole subject into two parts: First, foundation beds, or the natural substances on which foundations must rest; and second, foundations or sub-structures, being the parts under the surface of the ground or water, as the case may be. Very little space is given to superstructures except where necessary to make the treatment of foundations more clear. He has therefore confined himself to the subject closer than is usually done in such works, and has also covered the whole field. While the largest part is of interest to the engineer there is much that addresses itself directly to architects and engineers who may be associated with them. It will be of profit to architects to read much that refers purely to engineering work, and thus, by realizing the great care that is taken in the other profession to overcome structural difficulties, they will be better prepared to meet them if encountered in their own practice. For a foundation has to do nearly the same work whether in a bridge or a building, and the principles that apply to one are applicable to the other. The chapters on concrete, building stones, quarrying, stereotomy, masonry, wind pressure, arches, brick, mortar and sand are of equal interest to the engineer and architect. Much information can be had from this book on the use of timber for foundations, and the latest experiments and opinions of experts on piling are given. The subject of borings is also carefully treated. Even the use of metallic caissons and wells has recently been introduced into architectural practice and are exhaustively treated of, not only from the writer's experience but that of other experts. A careful description in advance of the work being done is given of the proposed caisson foundation for the Manhattan Life Insurance Building in New York, which is the only matter referred to which is not an account of actual experiences.

Two interesting chapters are given on foundations for high buildings, and reference is made mainly to the experience of Chicago architects, which is very correctly summarized. This information is drawn from various reliable sources, and is not personal with the author. Among the few problems that are demonstrated in detail are comparisons between the older forms of foundation piers of concrete and stone and the later ones of rails, beams and concrete. The formulæ for constructing the latter are given in full, with illustrations. Not having personal knowledge of the "foundation beds" of Chicago, he quotes from those whom we consider to be good authorities, and makes a fair statement of points in dispute. His demonstration of a comparison between the steel and concrete foundation and the value of two different arrangements of piles covering the same surface is slightly in favor of piles. The estimate for piles is his own and is drawn from generally accepted data rather than their experimental use in the "foundation beds" of Chicago. But, as might be expected, it demonstrates practically that we may get equally safe foundations with piles, without covering so much surface, as with concrete and steel; and the question as to the advisability of using one or the other is still an open one. Altogether the account of Chicago foundations is a valuable compendium of all the information we have on the subject up to the present time. A considerable space in these chapters is devoted to matters which seem to belong in other parts of the book, and are interjected toward the end as if omitted or forgotten elsewhere. This can be corrected in future editions. Among them is a discussion of the question of frictional resistance in bridge foundations. But the subject is one in which architects are unfortunately greatly at sea. One matter of interest referred to is the fact that in estimating the weight of structures the buoyancy or flotation of a body of water or saturated earth equal to that displaced by the foundation is not always taken into consideration. This applies equally to foundations, for buildings sunk below wet or soft earth or water, and to bridge piers. It should be deducted from the actual weight. He might also have said that the unequal settlements and even the unexpected general settlements of high buildings in Chicago, on which the greatest care is supposed to have been exercised, is due to gross inaccuracies in estimating the weights of structures. We hear many statements about these unaccountable settlements, that are always charged up to "soft spots," but it would be interesting to know by whom the weights had been estimated and on what data.

The author makes these sensible remarks at the conclusion of his chapters on high buildings, which we readily indorse: "The reader will have learned, if he has even casually glanced over this volume, that engineers and architects are far from agreement as to the mode of determining the bearing power of any of the materials upon which we have to build; we are far from agreement as to the safe loads that can be put upon them or the proper manner of distributing the loads. In such cases arguments are useless; high sounding or ingenious formulæ are of but little value. Theories will not solve the problem. What we need is systematic,

honest, extensive experiments and tests, and with these, honest, impassionate interchange of ideas and deductions, without petty jealousies or fault-finding. With rigid but kindly criticism of designs and of methods of construction, we might hope to advance our knowledge, improve our practice and give the public safe, substantial and satisfactory results, at the least cost and in the least time."—P. B. W.

Volume I of the two-volume edition of the Funk & Wagnalls Standard Dictionary of the English language has been issued. The publishers say that this volume has been four years in making; two hundred and thirty-eight editors and specialists have been employed upon it; and the cash outlay has been about a half million dollars. The advance orders for the work mount up into the tens of thousands.

The following letter was received by the publishers from a well-known gentleman, prominently identified with the late World's Fair at Chicago:

"MINES AND MINING BUILDING, Jackson Park, Ill.
"Messrs. Funk & Wagnalls:
"GENTLEMEN.—I am pleased to inform you that the Standard Dictionary has been granted an award (diploma and medal) in group No. 150. The exact wording of all the awards will not be announced for probably three or four weeks."

The dictionary exhibit consisted of a number of proofsheets, as the work was only part in type—this fact makes the award more significant. The award of diploma and medal is the only class of awards granted. A gentleman who was present during the examination informs the publishers that the judges devoted nearly three hours to a critical inspection of the sheets (it was a very unusual thing to devote so much time to the examination of any exhibit), comparing the definitions with those of other dictionaries, and that they frequently expressed themselves as highly pleased and in favor of the features of the Standard. At the close of the examination, one of the judges remarked: "I have the best of other dictionaries, but this work has desirable features that others have not. I must possess a copy when it is published."

The vocabulary of the Standard is extraordinarily rich and full, that of no other dictionary nearly equaling it, although great care was taken to throw out all useless words.

The following is an actual count of words and phrases recorded under the letter A:

Stormonth Dictionary, total terms in A.....	4,692
Worcester Dictionary, total terms in A.....	6,983
Webster (International) Dictionary, total terms in A.....	8,358
Century Dictionary, total terms in A.....	15,621
The Standard Dictionary, total terms in A.....	19,736

The full number of words and terms in these dictionaries for the entire alphabet is as follows: *Stormonth*, 50,000; *Worcester*, 105,000; *Webster* (International), 125,000; *Century* (six volumes, complete), 225,000; *Standard*, 300,000.

OUR ILLUSTRATIONS.

Residence. Manly N. Cutter, architect.
A Colonial Doorway. Drawn by C. Bryant Schaefer.
Residence Entrance for Maddison Ballard. J. M. Van Osdel, architect.
House for J. G. Chapman, St. Louis, Missouri. Eames & Young, architects.
Sketch for Residence. Barnett, Haynes & Barnett, architects, St. Louis, Missouri.
Accepted Design for Milwaukee Library and Museum building. Ferry & Clas, architects.
The National Bank of the Republic. Eames & Young, architects, St. Louis, Missouri.
Premiated Design for Milwaukee Library and Museum building. H. C. Koch & Co., architects.
Block of Residences for Joseph Greusel, Detroit, Michigan. Edw. C. Van Leyen, architect.
Residence for Mrs. H. Sellick and Miss Park, Detroit, Michigan. Edw. C. Van Leyen, architect.
Exterior of Russian Court, Manufactures building, World's Columbian Exposition, Chicago. Petrovo Ropett, architect. This work was designed by one of the most distinguished of modern Russian architects, who is an expert in the vernacular style which is still practiced in the interior of that country. It is all built of wood and stained, showing the natural grain. Russia is one of the few districts that retains and practices an indigenous architecture, which this is intended to illustrate. It is remotely descended from the Byzantine and has never been influenced by the revival of Roman art which occurred in the sixteenth century. Russia was never invaded by Renaissance art until the last century. It entered by way of St. Petersburg, while the vernacular continued to be practiced in Moscow, where there are many remarkable examples in the old and new churches. The view of the Russian Court is taken from the northwest, showing the corner where Columbus avenue is intersected by a cross aisle. The arch to the right is the main entrance and is in the center of the west front. The photograph was taken a few days after the close of the Exposition, which accounts for the boxes which obscure the view.

The Castle in the German Village, Midway Plaisance, World's Columbian Exposition, Chicago. Karl Hoffaker, architect. We have elsewhere* given an account of the author of this work and

* See INLAND ARCHITECT for September, 1893.

the scheme for exhibiting a typical German village at Chicago. The whole was carried out thoroughly, successfully, and, we hope, profitably, for it was mainly instrumental in giving a respectable tone to the much abused Midway. The castle stands in the middle of the grounds covered by the village and some distance back from the main street of the Midway. The grounds are surrounded by a mimic wall, which seclude them from other attractions. Our photograph was taken after the fixtures of the concert garden had been removed. It is autumn. The trees are leafless, and we are looking across the wet ditch that surrounds the castle. To the right is the drawbridge and machicolated entrance tower, through which the main court is reached. To the right of this entrance the buildings were used for a museum of German antiquities. All the buildings to the left and the courtyard were used as a restaurant. The wall seen to the left in our picture surrounds the outer courtyard, but is roofed over to serve as a kitchen. Those parts which resemble stone walls are of framework and German stucco. But all the visible framing and timbering is genuine and built in the ancient manner. The roofs are covered with slate. For the sake of associating with it some bits of legendary lore it is supposed to be the castle of the knights of Von Langenau and to have been spirited across the ocean with all its contents from the fruitful pastures of Lahn and Gelbach. It is a real moated castle, such as were built with preference on those parts of the plains which could be protected by water; the well-filled moats, together with the bastions and palisades, forming a sufficient protection against hostile attacks. The building of bay work which is seen above the strong stone walls, gray with age, is decidedly the work of a more modern period, perhaps somewhere about the latter part of the sixteenth century. The original castle was destroyed by the enemy, and there was nothing to be done but to repair the injury as well as possible by erecting a story of framework, with steep roofs and turrets on the remains of the stone walls. And so a most picturesque effect has been produced, the brown-red shade of the woodwork with the white plastering of the intermediate brick filling and the gray of the stones having, under the harmonizing influence of age, melted into an artistic unity of color.

Herr Hoffaker has realized in this work all that his imagination ever depicted. He has done all that is possible with modern appliances to reproduce the actual representation of an ancient building without any scenic or theatrical accessories whatsoever. He wisely selected as his subject a castle of six hundred years or more that had been restored only three hundred years ago and kept in preservation. No detail has been neglected. Even every bit of hardware has been fashioned by hand expressly for it. We have not space to describe the painted decorations of the interior, especially those of the banquetting halls, which being in the oldest part of the castle that did not need so much renovation is all in the late Gothic style. Of this kind of work he is the acknowledged master, all the paintings being handwork and after his own designs.

Passing in at the main entrance, we turn to the right and enter the part that has been used as a museum during the Exposition. The first apartment is the great hall, or knights' hall, of the castle. It is connected at the back with the armory, and this again leads into the chapel. All these rooms have roofs of ancient timber construction. The chapel is wainscoted with paneling nine feet high, and is covered with an admirable hammer beam roof, in places richly carved. From these rooms we descend to the open court, or castleyard, where, under a shady linden tree, we behold the stone table and well-filled tankards, as if waiting for Wendelin von Langenau and his jolly band of knights, who will return no more, but whose place has been taken by Midway sight-seers and the *bon vivants* of the nineteenth century who are seeking for new excitements. After inspecting the living rooms, banquetting halls, pantries and kitchens on the left of the court, we pass out again at the front gate, step across the bridge, admire the artistically carved escutcheons which ornament the parapet of the balcony over the gate, and notice the date "1564." It was at this time that the building was restored and rescued from the ravages of centuries, and the portal newly erected by one of the knights of Langenau, who at the same time had it embellished with his armorial bearings.

Photogravure Plate: Residence for Dr. H. Genet Taylor, Camden, New Jersey. Wilson Eyre, Jr., architect, Philadelphia.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure edition.

Detail of entrance residence of J. W. Farlin, Chicago. Henry Ives Cobb, architect.

Apartment building, at No. 5515 Woodlawn avenue, Chicago. Pond & Pond, architects.

Residence corner Thirty-sixth and Barring streets, Philadelphia. Wilson Eyre, Jr., architect.

Semi-detached houses for J. W. Farlin and George M. High, Chicago. Henry Ives Cobb, architect.

Residence of Dr. H. Genet Taylor, Camden, New Jersey. Wilson Eyre, Jr., architect, Philadelphia.

Merchant Tailors' building, World's Columbian Exposition, Chicago. S. S. Beman, Chicago, architect. This beautiful structure is the only one in the park that can be put into direct comparison with Mr. Atwood's classic revivals, and therefore has been supposed, by many uninformed persons, to be from his designs. It is an accurate reproduction of the details of the Erechtheum at Athens, with the addition of a flat dome, which has everywhere been seen to be most appropriate where Greek details are employed.

It was in every way well suited to its location, and could be seen from many points of view. It was built of staff on a framework of wood.

French Asiatic Colonies building, World's Columbian Exposition, Chicago. This building is about sixty feet long and thirty feet wide, the long front to the west being seen in the illustration. It was located at the south end of the park near the anthropological exhibits, and was erected to show the products of the French colonies of Tonkin and Annam in Asia. It was designed and built in Annam by native designers and workmen, and was exhibited first at Paris in 1889. It is all of timber construction, and the interior roof construction was elaborately and artistically carved, even surpassing, in that respect, the work on the Singhalese pavilion. The exterior was treated in polychrome, which is toned down by the photograph, and the window panes were of colored glass. One of the most interesting features was the roof, which was covered with glazed tiles, the cresting of which, standing nearly four feet high, was one of the most remarkable pieces of ceramic work in the Exposition. This is in sections, about eighteen inches square and of two thicknesses so as to face both ways. In this building we find a style of architecture that is entirely new to us.

Black Forest Farmhouse, German Village, Midway Plaisance, World's Columbian Exposition, Chicago. Karl Hoffaker, architect. In illustrating the diverse styles of habitations of the German Empire in the latter part of the middle ages, the projectors of the village selected an example to show the characteristic home life of those people in whose veins German, Suabian and Franco-German blood is intermingled. It is a sample of many standing on the Gutachthale. The location in the village is such that it was not much seen by the cursory observer. It was appropriately located at the east end among trees whose foliage was so dense that we were unable to get a photograph until the leaves had fallen. Everything is there to give it a natural appearance except a mountain background. It is of timber construction on a basement of stone covered with stucco, and the roof is covered with heavy thatch, the straw for which was brought from Germany. This is a farmhouse, which, according to the custom of the country, combines with a residence all the usual requirements of a barn. The living rooms and bedrooms are on the first story below the barn floor, with its hay loft, and are accessible by a flight of steps outside, where the guard stands. On the ground floor within the stone walls are the stalls for horses and cattle. To the left, as seen, are the pig-sties. The carefully arranged beehives may be seen at the foremost corner. The building is made picturesque by many bracketed balconies, and the main roof overhangs with great boldness. If located in a hill country the barn floor would be reached from the higher ground in the rear. This, with all the other buildings of the German Village, is still intact, though the contents are removed, and they are all guarded by the faithful German sentinel who did duty through the Exposition. It is very pleasant to learn that there is a possibility that the buildings of the German Village, or most of them, may be acquired by the Park Commissioners for permanent adornments. This at least would make a valuable exhibit of the typical domestic architecture of a period of which we have few reliable illustrations.

LEGAL DECISIONS.

SUFFICIENCY OF NOTICE OF CLAIM ON MECHANIC'S LIEN.

A lien for materials furnished in the construction of a house will not be enforced when the description in the notice of claim is so defective that the premises cannot be identified by it.—*Mount Tacoma Manufacturing Company vs. Cultum*, Supreme Court of Washington, 32 Pac. Rep., 95.

WHEN MECHANIC'S LIEN IS INVALID.

Where, in an action to foreclose a mechanic's lien, the court determines that the lien is invalid, it has no authority to render a personal judgment against the one sued for the amount of the lien; and the question of jurisdiction may be raised upon appeal, though such person did not object to the court proceeding in equity, or demand a jury.—*Hildebrandt vs. Savage*, Supreme Court of Washington, 32 Pac. Rep., 109.

PRIORITY OF MECHANIC'S LIEN OVER MORTGAGE.

A mechanic's lien exists from the time the work is begun on a building, if the verified account is filed for record within four months after the demand becomes due, and is entitled to priority over a mortgage executed by the owner during the performance of the work, though the lien was not recorded when the mortgage was executed.—*Schultze vs. Alamo Ice & Brewing Company*, Court of Civil Appeals, of Texas, 21 S. W. Rep., 160.

FORECLOSURE OF MECHANIC'S LIEN.

A contractor employed an attorney to sue the owner of a building for the amount alleged to be due him under the contract, and agreed to pay him ten per cent of the recovery as a fee. The action was subsequently discontinued, and an action to foreclose a mechanic's lien was brought by the contractor, in which various other persons were sued. Several of such lienors were present or represented by counsel, when it was determined to discontinue the first action; and the contractor and his attorney testified that the attorney refused to discontinue the first action unless he could have ten per cent for collecting the money. The mere silence of

the lienors, who employed other attorneys to represent them, and who all swore positively that they made no agreement to pay the contractor anything, could not be construed into a consent for the payment of such ten per cent, and that consequently that the contractor's attorney was not entitled to a lien on the portion of the fund awarded to them.—Wright vs. Reusens, Supreme Court of New York, 21 N. Y. S., 485.

WHEN RIGHT TO MECHANIC'S LIEN IS FORFEITED.

Where a material man took a note of the owner for whom the materials were furnished, the note including the amount of such materials, and also an old book account, the note falling due more than 30 days after the last item furnished, and within which a mechanic's lien might be claimed, and being not paid at maturity, the rights of innocent purchasers intervened, and the taking of the note was a complete settlement to date, and no lien could thereafter attach for any of the accounts included therein, even though the material man continued to furnish material subsequent to the execution of the note.—Blakely vs. Moshier, Supreme Court of Michigan, 54 N. W. Rep., 54.

LIABILITY OF RAILROAD COMPANY FOR BURNING OF BUILDING BY LOCOMOTIVE.

Where, in an action to recover damages against a railroad company the complaint alleged that sparks were emitted from an engine through a defect in the spark arrester, and through the negligence of the engineer, and blown by the wind against a building, igniting and consuming it, the court will not, under the rule that a pleading susceptible of two constructions must be construed least favorably to the pleader, presume that the wind designated was an extraordinary wind, and the proximate cause of the injury, in that it is not authorized to insert words into a complaint not used by the pleader. In such an action, special interrogatories and answers thereto as to whether the company had at specified times examined the spark arrester, and whether it was in perfect condition at the time of the casualty, cannot control a general verdict in favor of the owner of the building, in that the question of the negligence of the company's employees in operating the engine is left out of consideration. Where there was evidence that at the time the accident occurred the engine threw an unusual quantity of sparks and coals of fire, and that such coals were of unusual size, the jury could rightfully infer that the fire was caused by negligence of the company. The fact that the fire originated in a partition wall by reason of one or more boards of such wall being off, is not conclusive evidence that the owner was guilty of contributory negligence, since he had a right to presume that the company would manage its engine carefully, and since there was no obligation on him to provide against unusual dangers.—C., I., St. L. & C. R'y Co. vs. Smock, Supreme Court of Indiana, 33 N. E. Rep., 108.

"GEORGE, dear," she said one evening, "don't you think it would be a very wise scheme if we were to build a house? It's awful to have to pay out a lot of money for rent every month. Now, there's Allie, who was married a year ago. She told me that Teddy was always as cross as he could be on rent day."

"How dreadful," George murmured. "We certainly ought to build."

"We'll only need a little bit of a house, you know, with a lovely big hall—"

"And a library with a grate fire. We must have a library."

"Yes, won't that be too lovely! And then you must have a card-room and a billiard-room, and I must have a little sewing-room and a cunning little drawing-room."

"Don't forget the conservatory, dear," he suggested, "and suppose we have bay windows in every room."

"That'll be splendid," she answered, "and let's draw the plans right now."

The result, says the *Chicago News Record*, was that the following outline was received by an architect with a note asking that he immediately forward a perfect drawing, together with specifications.

When George was ushered into the presence of his prospective bride a few days after their house-planning he appeared agitated.

"George, you're certainly ill," she exclaimed.

"No, I'm not—never felt better in my life," he growled.

"Something troubles you then," she persisted.

"Well, yes. I guess you are right. A fellow don't like to know that he's the champion idiot of a town as big as Chicago. Just read that," and he unfolded a type-written letter which was as follows:

My Dear Sir: Your favor with plans for a house received. The sketch is the most unique thing we have ever had occasion to look at. We would suggest that you remodel your outline, as sometimes a dining-room, kitchen and pantries are considered necessary to a perfect dwelling. Also, will you kindly signify where the front door is to be, and would it not be wise to have one stairway? Doubtless these few things were overlooked by you.

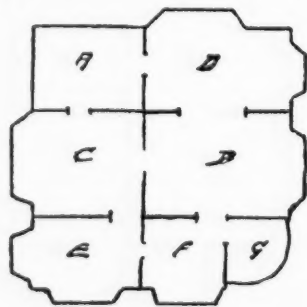


DIAGRAM OF THE HOUSE.
a. Reception-room. e. Card-room.
b. Drawing-room. f. Sewing-room.
c. Library. g. Conservatory.
d. Billiard-room.

DRAW, SKETCH & CO.

BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, January 10, 1894.

Business of all kinds is at a very low ebb. Scarcely any preparation has, as yet, been made for the new year. Business men, big and little, are awaiting developments. The facts, as they exist, can be very briefly enumerated. Confidence is lacking; general credit has been weakened; a cautious policy has been stimulated in every channel of trade and industry; prices have declined to unheard-of limits; trade and manufacturing have been interrupted, and calculations for the future set at naught. Six months ago money disappeared from its ordinary channels so suddenly and unaccountably that business men found themselves unable to provide for current obligations. Almost as suddenly, money has returned to the vaults of bankers, and the financial statements of eastern banking centers show an unusual condition of things. The surplus reserve has reached the highest limit ever known; bank deposits are larger than they have been for years; the rate of interest has fallen to a low limit, and the banks are unable to lend idle funds on either good or indifferent security. This condition of things is surprising; it will not probably continue very long. The agencies which have brought about this unusual industrial and financial condition are not understood, and, therefore, cannot be met. The country is drifting along in shoal water, and the dangers ahead cannot be very clearly indicated. It may be safely said, however, that the greatest dangers have been passed. The large volume of money promises a revival of confidence and of industry, after certain other conditions have been adjusted, notably those of a purely legislative character. The country is wearing out its old clothes and old tools, and must shortly buy more. It is this inevitable demand which will impart the first activity which we are to enjoy. Whether that activity will be followed by increased investments in building operations, in railroad construction, railroad equipment, or in the expansion of our manufacturing capacity, and in the enlargement of our agricultural area, west and south, remains to be seen. The probabilities are that such will be the case, in a measure. The country is now in better shape than it has been for many years, for entering upon an era of prosperity. The reasons for this statement are that the cost of labor and of material has been reduced, the supply of available capital has been increased somewhat, and more and better than all, the danger of unwise expenditure, or rather of unwise commercial enterprise, has been demonstrated. In other words, the business brains of the country have learned the lesson to not do certain things, and to do certain other things. Speculation has been placed under control; high prices have disappeared; natural values have been restored and reestablished, and the legitimate in business has been made more apparent. The country needed the lesson it has received. As to the future, the only safe inference to draw is that industrial activity will necessarily expand, but gradually and on safe lines; building operations will be revived, as a consequence of a general industrial improvement, and the railroad activity will within a short time draw in its train a multitude of demands, which will give life and activity to scores of industries now suffering.

SYNOPSIS OF BUILDING NEWS.

Architects are invited to furnish for publication in this department monthly or occasional reports of their new work before the letting of contracts. Reports of buildings costing less than \$5,000 are not published.

Chicago, Ill.—Architect J. T. Baxter: For L. H. Thomas, at 783 Warren avenue, a two-story flat building, 25 by 73 feet in size; to have a stone front, oak interior finish, marble vestibules and bathrooms, modern plumbing, electric light, etc. For Charles Comisky, corner of Fifteenth street and Turner avenue, a two-story flat building, 26 by 63 feet in size; to be of rock-faced stone front, have open plumbing, oak interior finish, mantels, marble work, furnaces, pressed brick on the sides, etc. Same architect has just sent out drawings for a five-story apartment house, 72 by 126 feet in size, to be erected at Kansas City for George W. Goldman; it will be of handsome design and have two fronts of pressed brick with terra cotta trimmings; the interior will be finished up in a first-class manner in oak, marble, tile floors, etc.; steam heating, gas ranges, electric light, elevators, etc., will be put in.

Architects Kiley & Lang: For Mrs. Ellen Durkin, at the corner of Prairie avenue between Forty-third and Forty-fourth streets, a three-story and basement flat building, 22 by 65 feet in size; to be of stone front, have sanitary plumbing, mantels, gas fixtures, heating, etc.

Architects Hallston & Peterson: For John Erickson, on Seminary Place near Seminary avenue, a three-story and basement flat building, 22 by 54 feet in size; to be of pressed brick and stone front, have bathrooms, closets, wash-bowls, furnaces.

Architect Julius H. Huber: For H. Meckelke, at 588 Burling street, a three-story apartment house, 25 by 70 feet in size; to have a stone front, hardwood finish, mantels, all the sanitary improvements, heating, etc. For Edward Bingle, at Southport and Belmont avenues, a two-story apartment house, 27 by 70 feet in size; to have pressed brick and stone front, bathrooms, closets, wash-bowls, mantels, electric bells, speaking tubes, furnaces, etc. For F. Links, a handsome mausoleum, 10 by 16 feet in size; to be of blue Bedford stone with bronze gates; to be erected at St. Boniface cemetery.

Architect C. M. Almquist: Making plans for a four-story and basement apartment house, 75 by 23 feet in size; to be erected on Townsend street; to be of pressed brick front with stone trimmings, all the sanitary improvements, gas fixtures, mantels, heating, etc. For A. Johnson, Graceland avenue near Ashland avenue, a three-story flat building, 22 by 75 feet in size; to be of pressed brick and stone front, have all modern sanitary and other conveniences, mantels, etc. For William Bryar, at 2949 South Park avenue, a three-story flat building, 61 by 23 feet in size; to be of pressed brick and stone front, have all the sanitary and modern improvements, mantels, gas fixtures, laundry tubs, etc.

Architect Robert Rae: For James T. Parish, at Fortieth street and Prairie avenue, a three-story flat building, 50 by 71 feet in size; to be of stone front, have hardwood interior finish and mantels, all fine open nickel-plated plumbing, hot-water heating, electric light, electric bells, speaking tubes, laundry tubs, driers, etc.

Architect W. A. Furber: Made plans for a five-story store and apartment house, 93 by 60 feet in size; to be pressed brick and stone front, have hardwood interior finish and mantels, all the modern sanitary improvements, steam heating, electric light, etc.; to be erected at Twenty-sixth court, for E. F. Pulsifer.

Architects Ruehl & Gatterdam: For P. Farley, on Hermitage avenue, a three-story and basement flat building, 22 by 67 feet in size; to have a pressed brick and stone front, gas fixtures, bathrooms, closets, laundry tubs, mantels, etc. For Edward Landsberger, on the corner of Forty-first street and Wilcox avenue, a two-story flat building, 22 by 50 feet in size; to be of pressed brick and stone front, have all the sanitary improvements, gas fixtures, mantels, electric bells, speaking tubes, laundry tubs, etc. For Herman Paesler, on

Douglas Park boulevard and Central Park avenue, five three-story flat buildings, 22 by 70 feet each; to have pressed brick and stone fronts, hardwood interior finish and mantels, all the modern and sanitary conveniences, steam heating, etc. Also made plans for a three-story flat building, 50 by 62 feet in size; to be erected on California avenue opposite Douglas Park; it will have a stone front, hardwood interior finish and mantels, the best of sanitary arrangements, gas fixtures, laundry tubs, electric bells and speaking tubes; cost about \$15,000.

Architect R. G. Pentecost: For Mrs. L. Engle, a four-story store and apartment building, 25 by 86 feet in size; to be erected at 4232 Cottage Grove avenue; the front will be of pressed brick with stone trimmings, the interior to have hardwood finish, mantels, gas fixtures, all fine open plumbing, iron store fronts, freight elevator, laundry tubs, etc.

Architect J. C. Brompton: For Louis Zulck, at Hollywood, a two-story and basement residence, 24 by 40 feet in size; to be of frame with stone basement, have hardwood finish and mantels, gas fixtures, furnace, laundry tubs, etc.

Architect Frederick W. Perkins: Made plans for a four-story store and flat building; to be erected at the corner of Halsted street and Evanston avenue, for Dr. E. E. Gwynne; it will have fronts of pressed brick, with stone trimmings, all the modern sanitary conveniences, gas fixtures, mantels, heating, etc.

Architect W. T. Leshar: For Jacob Brown, on Loomis street, west of Edgemont avenue, a three-story and basement apartment house, 50 by 42 feet in size; to have a handsomely designed front of stone and pressed brick; the interior to have hardwood trimmings, mantels, gas fixtures, the best of sanitary plumbing, etc.

For J. M. Tanner, on Chestnut street east of State, a four-story and basement apartment house, 46 by 70 feet in size; to be of stone first story, and the balance of pressed brick and stone; the interior to have hardwood finish and mantels, laundry tubs and driers, all the sanitary conveniences, bells, speaking tubes, freight elevator, etc.

Architect A. F. Hussander: Has just commenced work on the six-story and basement warehouse, 50 by 158 feet in size; to be erected at State street near Sixteenth, for Martin Dawson; it will be of pressed brick front with stone trimmings, mill construction, have elevators, probably steam heating, etc.

Architects Newman & Demoney: For C. F. Gardner, on the corner of Madison avenue and Seventy-third street, a three-story apartment house, 50 by 70 feet in size; to be of pressed brick and stone front, have the best of modern plumbing, electric light, mantels, bells, tubes, etc.

Architect Niels Buck: Made plans for a two-story flat building, 22 by 44 feet in size; to be erected on Commercial avenue near Lincoln avenue; it will have a front of pressed brick with stone trimmings, partly hardwood trimmings, mantels, gas fixtures, sanitary plumbing, etc. Also made plans for three two-story flat buildings; to be erected on Paulina street near Cornelia, for J. B. Durand; to have fronts of pressed brick and stone, plumbing, mantels, etc. Also will begin work very shortly on a two-story flat building; to be of stone and pressed brick front, have plumbing, mantels, etc.; to be erected at Paulina street near Cornelia. Also made plans for a three-story flat building, 23 by 70 feet in size; to be erected at Rice street north of Chicago avenue, for M. Petersen; it will have a front of pressed brick, with stone trimmings, mantels, gas fixtures, the sanitary plumbing, etc.

Architect L. E. Stanhope: For Mrs. E. F. Leach, at Sixty-second street and Wharton avenue, a two-story and attic residence; to be of frame construction, have hardwood finish, mantels, gas fixtures, etc.

Architects Ostling Brothers: For John B. Johnson, two three-story and basement flat buildings; to be erected on Newport avenue near Clark street; they will be 23 by 56 feet in size each; have stone fronts, hardwood interior finish, mantels, all the latest sanitary improvements, gas fixtures, etc. For O. Vider, at Garfield avenue near Sedgwick street, a four-story and basement flat building, 48 by 70 feet in size; to be of stone for the first story, and the balance to be of pressed brick and terra cotta; all the modern sanitary conveniences, mantels, gas fixtures, bells, tubes, etc., will be put in.

Architects Boehm & Zimmerman: For M. Kotz, at 115 North Clark street, a two-story flat building, 25 by 60 feet in size; to be of stone front, have all modern plumbing, mantels, furnaces, etc. For J. Floeter, at Unter Den Linden, a three-story flat building, 21 by 47 feet in size; to be of pressed brick and stone front, have plumbing, mantels, etc.

Architect Frederick Foehringer: For Michael Mead, a four-story and basement apartment house, 20 by 87 feet in size; to be erected on Superior street near State street; it will have a Bedford stone front, hardwood finish and mantels, speaking tubes, electric bells, gas fixtures, etc. For John H. Mayer, at 479 North Clark street, a four-story double store; new front of pressed brick and stone, new plumbing, gas fixtures, etc.

Architect J. P. Larkins: For J. P. Schlund, at South Chicago, a two-story basement and attic residence, 22 by 50 feet in size; to have a neatly designed front of stone and pressed brick; will put in all the modern sanitary conveniences, mantels, furnace, gas fixtures, etc.

Architects Crowe & Richards: For Theodor Nelson, at Forty-sixth street and Forestville avenue, a two-story and basement residence, 25 by 65 feet in size; to be of pressed brick, stone and terra cotta; the interior to be finished in Georgia pine, have the modern sanitary conveniences, mantels, etc. The interior will be handsomely finished in polished and carved white oak for the front stairway, reception hall and principal rooms; also mosaic floor; hot-water heating, electric light, the best of open sanitary plumbing, and specially designed mantels and sideboards will be put in.

Architect George Grussing: For C. Gardner, on Fulton street near Kedzie avenue, a two-story and basement flat building, 25 by 57 feet in size; to have a front of rock-faced and cut stone, hardwood interior finish and mantels, gas fixtures, etc. Also, making plans for two three-story and basement flat buildings, 38 by 60 feet in size each; to be erected on Adams street and Spaulding avenue; to have handsome fronts of stone and pressed brick, interior in hardwood finish, and mantels, and all the modern sanitary improvements.

Architect E. R. Krause: For L. D. Kneeland, two three-story and basement apartment buildings, 75 by 63 feet in size each; to be erected at West Pullman; to have fronts of pressed brick, stone and terra cotta; the interior to be finished in Georgia pine, have the modern sanitary conveniences, mantels, etc.

Architects Turnbull & Postle: For J. Flood, on Calumet avenue near Forty-ninth street, a three-story and basement flat building, 38 by 84 feet in size; to have a front of pressed brick and stone, hardwood interior finish and mantels, the best of plumbing, etc. Also, made plans for remodeling the Hotel Champlain, on Sixty-sixth street and Champlain avenue, into a modern apartment house; will put in all the modern sanitary improvements, gas fixtures, steam heating, etc.

Architects Adler & Sullivan: For J. L. Ball & Co., a four-story and basement warehouse, 50 by 107 feet in size; to be of pressed brick and stone front; to be erected on the northeast corner of Taylor street and Fifth avenue.

Architect S. V. Shipman: For J. H. Andrews, at 389 Wabash avenue, a five-story and basement warehouse, 25 by 160 feet in size; to have a front of pressed brick and stone.

Architect Robert S. Smith: For B. W. McDevitt, on Wentworth avenue and Sixty-eighth street, a three-story flat building, 50 by 65 feet in size; to have a front of stone and pressed brick on the side. For Albert J. Maher, on Sixtieth street and Madison avenue, a four-story and basement apartment house, 50 by 65 feet in size; to have a pressed brick and stone front, hardwood interior finish and mantels, the modern sanitary plumbing, etc.

Architect Theodor Lewandowski: For Louis Wille, on York place near Clark street, a two-story and basement double flat building; to have a stone front, the sanitary plumbing, gas fixtures, mantels, furnaces, bells, speaking tubes, etc.

Architect W. R. Gibb: For William Hancock, on Jackson boulevard near Rockwell street, a three-story and basement flat building, 50 by 64 feet in size; to have first story of stone and the balance of stone and pressed brick; cost about \$16,000.

Architects Raeder, Coffin & Crocker: Making plans for the Menoken Club, to be erected at 1196 to 98 Washington boulevard; it will be two stories and basement, 48 by 100 feet in size; the front will be of Roman mottled yellow brick, with stone trimmings and flat roof; the style of architecture is the Italian Renaissance, and shows a very handsome building; in the basement will be the bowling alley, lunchroom, kitchen, toilet rooms, janitor's living rooms,

storage and boiler rooms; on the first floor will be the reception hall, reading-room, billiard hall and cotroom; the second story will contain library, ladies' parlor and toilet rooms, cardrooms and ballroom; the interior will be elaborately finished, and be well supplied with the modern plumbing, heating, lighting, etc.

Architect Frederick Meyer: For Ed E. Roehle, at 3751 Lake avenue, a three-story and basement apartment house, 24 by 60 feet in size; to have a front of pressed brick and stone, all the modern sanitary improvements, mantels, sideboards, gas fixtures, heating, etc.

Architect W. S. Smith: For H. Bjorncrants, on Norwood avenue, Edgewater, a two-story basement and attic residence, 34 by 40 feet in size; to be of pressed brick and stone front, have pine finish, mantels, the sanitary plumbing, gas fixtures, furnace, etc. For Charles Lutz, at Park Ridge, a two-story residence, 33 by 46 feet in size; to be of frame construction with stone basement, have sanitary conveniences, mantels, gas fixtures, furnace, etc.

Architect C. M. Palmer: For A. M. Ross, on Barry avenue near the Lake Shore drive, a three-story and cellar residence, 28 by 72 feet in size; to have a handsome rock-faced Bedford stone front, hardwood interior finish, mantels, the best of sanitary improvements, electric and gas fixtures, steam heating, etc. Also a two-story brick stable to match, size, 28 by 38.

Architects Jenney & Mundie: For A. J. Monaghan, at Aldine street, Lake View, a three-story and basement apartment house, 100 by 73 feet in size; to have a cut stone front, hardwood finish, all the improvements, steam heating, etc. For E. D. Winslow, at Buena Park, a two-story basement and attic residence; to be of pressed brick and stone front, have hardwood interior finish, hot-water heating, etc.

Architect Perley Hale: For Joseph Beifield, at 3732 to 3740 Cottage Grove, avenue, two fine two-story store and apartment buildings, 42 by 70 feet each, and in the rear of these two four-story apartment buildings; the fronts to be of pressed brick with stone trimmings; have all the modern plumbing and conveniences, steam heating, electric light, etc.

Architects W. A. Youmans & Bro.: For John Johnson, at 6126 Carpenter street, a two-story flat building, 22 by 50 feet in size; to be of pressed brick and stone front, have cypress finish, mantels, gas fixtures, all the sanitary improvements, heating, etc.

Architect Henry Sieks: For Henry G. Emmel, at 500 Wells street, a one-story addition and a rear addition of four stories; will put in steam heating, plumbing, gas fixtures, etc.

Architects Huehl & Schmid: For James Piggott, on Seminary avenue and Newport, a three-story flat building, 50 by 50 feet in size; to have a front of pressed brick and stone; the first story to be of stone, also stone bay windows; will put in hardwood interior finish and mantels, gas fixtures and all improvements.

Architect E. R. Krause: For B. L. Roos, at Lincoln avenue and Wells street, a four-story and basement store and flat building; to be of pressed brick, stone and terra cotta front, have all the modern sanitary plumbing, hardwood finish, and mantels and steam heating.

Architect C. F. Herman: For C. M. Merker, at 261 Seminary avenue, a two-story and basement flat building, 30 by 60 feet in size; to be of stone front, have sanitary plumbing, hardwood finish, mantels, gas fixtures, furnaces, etc.

Detroit, Mich.—Architects A. C. Varney & Co.: For V. P. Bayley, a block of three-story residences on High street; size 100 by 75 feet; brick and stone, all modern improvements; to cost \$20,000. Also a four-story flat building; size 100 by 70 feet; brick and stone, to be built on the boulevard; cost \$40,000.

Architects Malcombson & Higginbotham: For the Detroit Museum of Art, a three-story, fireproof extension; size 80 by 84 feet; cost \$30,000.

Architect Gordon W. Lloyd: For Edson Moore & Co., a five-story wholesale house, iron front, stone and brick to replace store recently destroyed by fire.

Architect Ed C. Van Leyen: For Mrs. H. Sellick, a two-and-a-half-story, pressed brick and stone; size 36 by 60 feet; to cost \$6,500. For John M. Avery, a two-and-a-half-story double brick residence; state roof, modern improvements; size 35 by 65 feet; cost \$7,500. For B. H. Edwards, a two-and-a-half-story frame residence; to cost \$7,500.

Architect William S. Joy: For C. W. O'Brien, a two-story modern brick and stone residence; 39 by 53 feet; cost \$9,000.

Architect P. L. Chapoton is preparing plans for block of stores and residence flats, to be erected on Michigan and Fifteenth streets; size 63 by 78 feet; at a cost of \$8,500.

Estimated amount of building in Detroit:

1893	
January	\$218,300
February	230,400
March	618,900
April	793,300
May	421,600
June	490,600
July	484,900
August	260,300
September	190,300
October	331,900
November	182,300
December	164,000
Total, 1893	\$4,386,800
Total, 1892	5,727,300

Milwaukee, Wis.—The Northwestern Mutual Life Insurance Company are having plans prepared for a six-story office building, to be erected on East Water and Chicago streets.

Architects Van Ryan & Lesser: For E. E. Warner, a three-story block of flats, brick and stone; to cost \$2,000.

Minneapolis, Minn.—During 1893, 2,837 building permits were issued for buildings estimated to cost \$4,301,780; the amount for which permits were issued in 1892 was \$4,729,615.

Montreal, Canada.—Architects Perrault and Mesnard: For the Laval University, a five-story university building, to be built of stone and brick, at a cost of \$140,000.

Architect Felix Labelle: For the Canadian Pacific Railway Company, new depot and hotel, to be four stories; size, 300 by 66 feet, of stone and brick; to cost \$350,000.

Pittsburgh, Pa.—Architects Riddle and Keiru have prepared plans for a three-story brick building, to be built on Penn avenue; cost, \$12,000.

Architect Charles Bickel: For J. L. Mitchell, two two-story stone and frame residences; cost \$32,000.

St. Louis, Mo.—Architects Matthews & Clark: For Edward A. Bayrd, a two-story stone and flat building; 40 by 60 feet in size; to be of brick and stone, and cost \$8,000.

Architect J. D. Paulus: For Charles Burgdorf, a two-story store and flat building; 57 by 64 feet in size; to be of brick and stone, and cost \$9,000. Also, for R. Mueller, a two-story stone store and flat block; 48 by 64 feet in size; to cost \$6,000.

Architect G. Becker: For Charles Hilmer, a three-story residence; 25 by 51 feet in size; to be of brick and stone, and cost \$6,000.

St. Paul, Minn.—Architects Reed and Stem are drawing plans for a residence for Thomas B. Scott on Summit avenue between Virginia and Fannington avenues, to cost \$35,000; it will be of granite with gray stone trimmings, and will have all modern conveniences; the house will be two and one-half stories high, 40 by 65 feet on the ground.

Architect J. Walter Stevens is perfecting plans and will soon let the contract for a four-story mercantile building, to be erected for Joseph McKee, on Sixth street near Robert; it will be fifty by 100 feet, brownstone and pressed brick, steam heat, electric light, hardwood finish on first story, tiled and hardwood floors; to cost \$25,000.

The aggregate amount of building permits issued in 1893 was \$1,636,218, which is fully twenty per cent below the cost of the buildings, as the fee system is used. Plumbing permits were issued during the year for \$30,397 work of work. Less building was done in 1893 than in any year since 1886.

FRANKLIN H. HERR.

The subject of this sketch, Mr. Franklin H. Herr, was born at Longford Hall, Holmesburg, Philadelphia county, Pennsylvania, April 19, 1847, and is a descendant

The advantages claimed by the process of manufacture owned and used by the American Stone Press Brick Manufacturing Company are these:

No special kind or quality of sand is required in the manufacture; for equally

additional expense they can be made equal to choice Philadelphia brick, which sell from \$35 to \$40 per thousand. Indorsed by the following experts:

John M. Dunphy, ex-Commissioner of Buildings and ex-Treasurer of Chicago.
Samuel G. Artingstall, City Engineer of Chicago.

D. H. Burnham, architect, Director of Works of the World's Fair, Rookery building, Chicago.

W. W. Boyington, architect, 159 La Salle street, Chicago.

Thomas C. Goudie, architect, formerly with Adler & Sullivan.

W. E. Mortimer, formerly of Mortimer & Tapper.

C. C. Miller, architect.

John W. Hersey, general contractor and builder, 843 Adams street, Chicago.

George Messersmith, general contractor and builder.

Erick J. Ostling, of Ostling Brothers, Room 88, 159 La Salle street, Chicago.

Curtis & McDonald, architects, 112-114 Dearborn street, Chicago.

Rights will be for sale in every state of the Union outside of Illinois. States will be divided and sold in halves, and counties will be sold. Few shares of stock in parent company for sale.

For information, address F. H. Herr, general manager, or John M. Dunphy, superintendent, Room 11, 149 La Salle street, Chicago.

George B. Foster, president; M. D. Coffeen, secretary; Herrmann Goettinger, treasurer; F. H. Herr, general manager; John M. Dunphy, superintendent.

AMERICAN STONE PRESS BRICK MANUFACTURING COMPANY,
Room 11 Major block, 149 La Salle street, Chicago.

An examination of the brick shows a close fiber, a cohesiveness which is found in few of the burned bricks, and as tests of fire, water and freezing show they are unaffected by climatic changes. Their non-absorption of moisture is strongly in their favor, and it is hoped that in them is found the solution of the efflorescence problem.



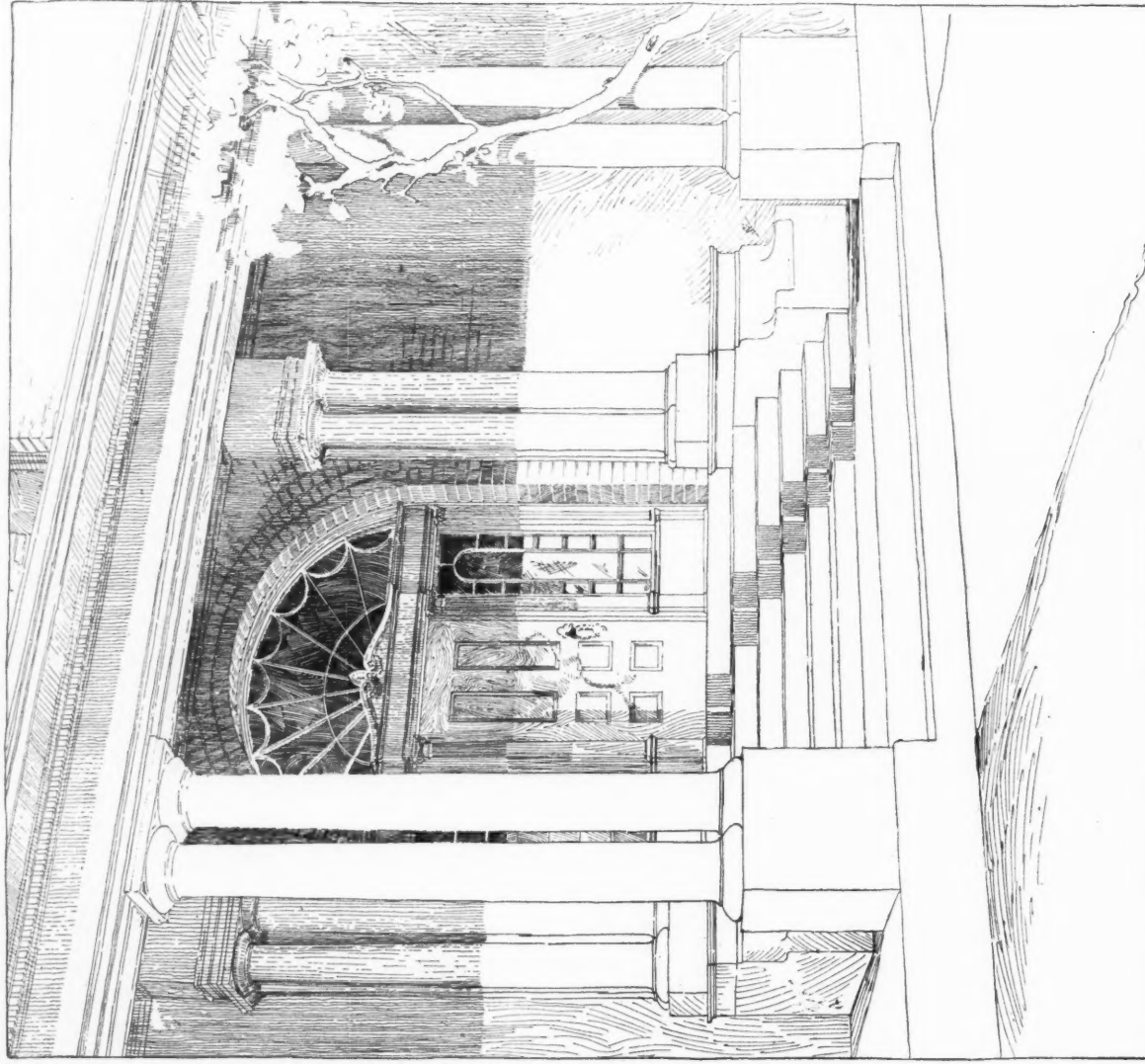
of one of the fine old German families of Pennsylvania, some six thousand of whom are now living in that state. Mr. Herr entered the union army as a member of the 34th New York Light Field Battery, or Romer's Battery. At the close of the war he was honorably discharged, and is now a member of Columbia Post 706, of Chicago. For valuable secret service during the war, Mr. Herr was presented by Major-General Hancock with an elaborate gold medal, of which he is justly proud. He was a prisoner of war at Andersonville and Libby prisons, and carved his name on the window-cap of Libby prison, where it can be seen today, as also on a plate on the floor, showing the spot assigned to him to sleep. He has attained the highest possible position in the prominent secret order to which he belongs, having been twice chosen commander of his commandery, and deputy supreme commander of Illinois and west to the Mississippi.

Franklin H. Herr is a striking illustration of what self-reliance, ability, integrity, perseverance and, in common parlance, "hustling" will do in this age and city in carving out a destiny and raising one to a position of honor and influence. He is in all respects a self-made man, and occupies his present position solely by virtue of his own unaided effort. He has keen business sense, is a great stickler for making all contracts in writing, and makes it a point to have them carried out to the letter. His untiring energy for the past year has resulted in perfecting the brick of the American Stone Press Brick Manufacturing Company, of which company he is a director and general manager. These brick are a departure in building material which are destined to surprise the building world. Mr. Samuel G. Artingstall, city engineer, in conversation with Messrs. Herr and Dunphy, said that he had been looking for this for years and that it was the best brick he had ever seen.

good brick can be made from any ordinary sand bank. The brick require no burning and can be laid in the wall within three days after leaving the press. This saves not only the time and cost of burning, but avoids warping and variations in size, color and hardness, which are inseparable from all burned brick. Every brick is as perfect as the mold can make them, and becomes as hard as stone. This, again, saves all grading, and makes every brick equally available for use. They can be molded to any form, size or color required, and made with any press having sufficient pressure. No disintegration or disfiguration takes place when exposed to the weather. No evaporation or white substance appears on the surface. They can be made to withstand a pressure of 12,000 pounds to the square inch, and severer tests than any burned brick made. They will stand any test required of any brick in the world. They can be sold at a price not to exceed about \$16 to \$20 per thousand, equal to the average St. Louis or Philadelphia brick which sell for \$25 to \$27 per thousand. With a very slight



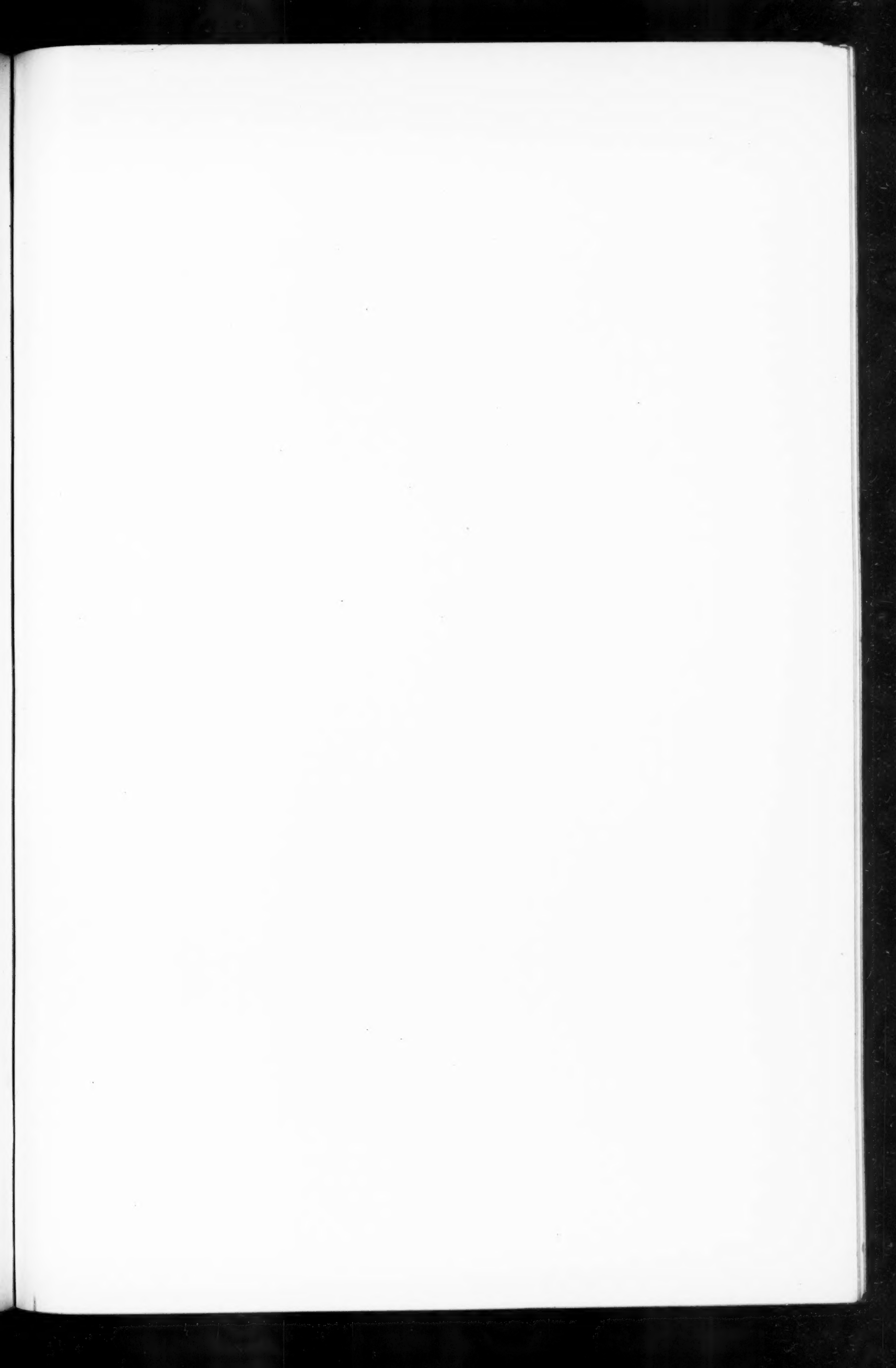
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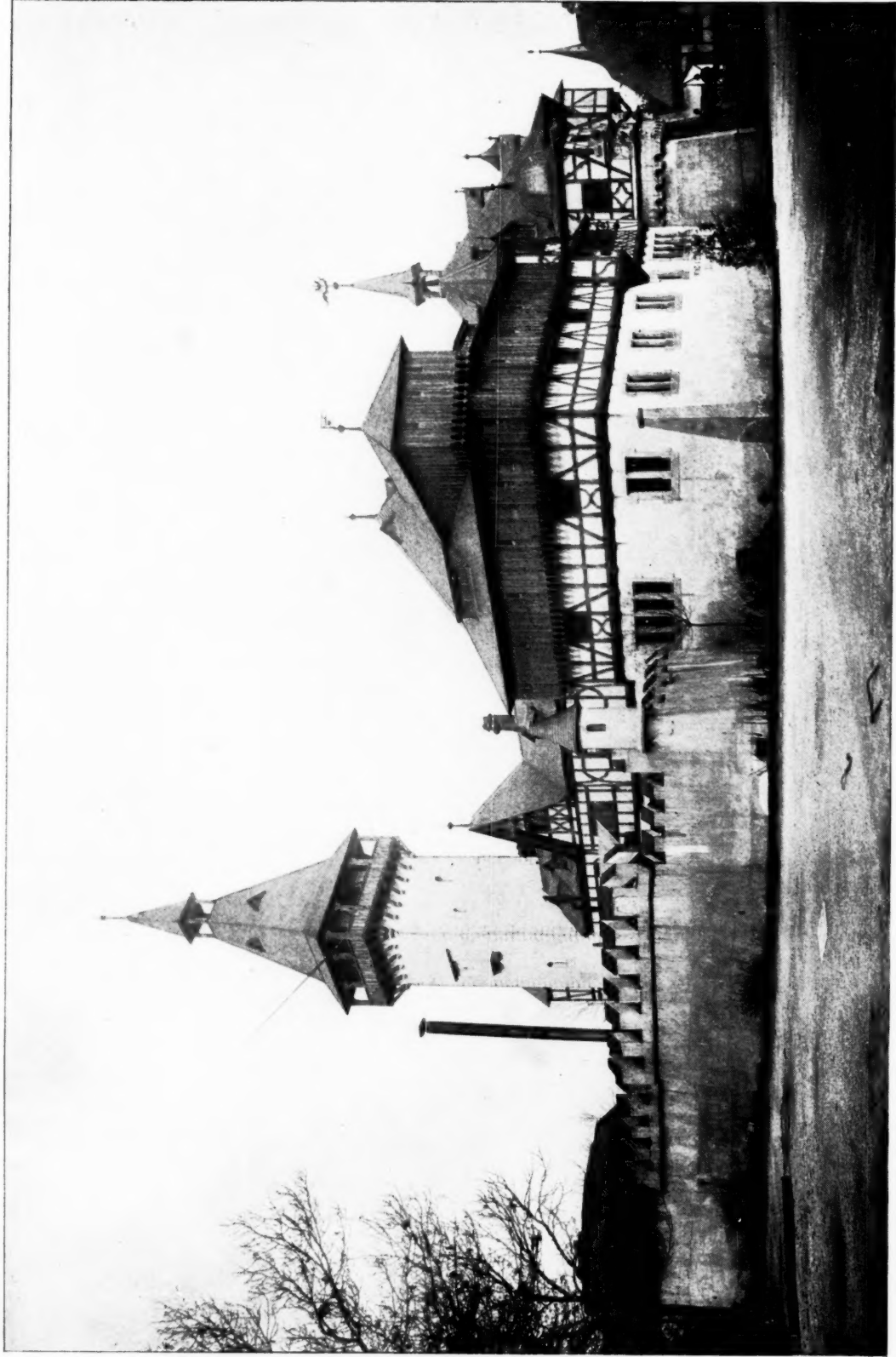


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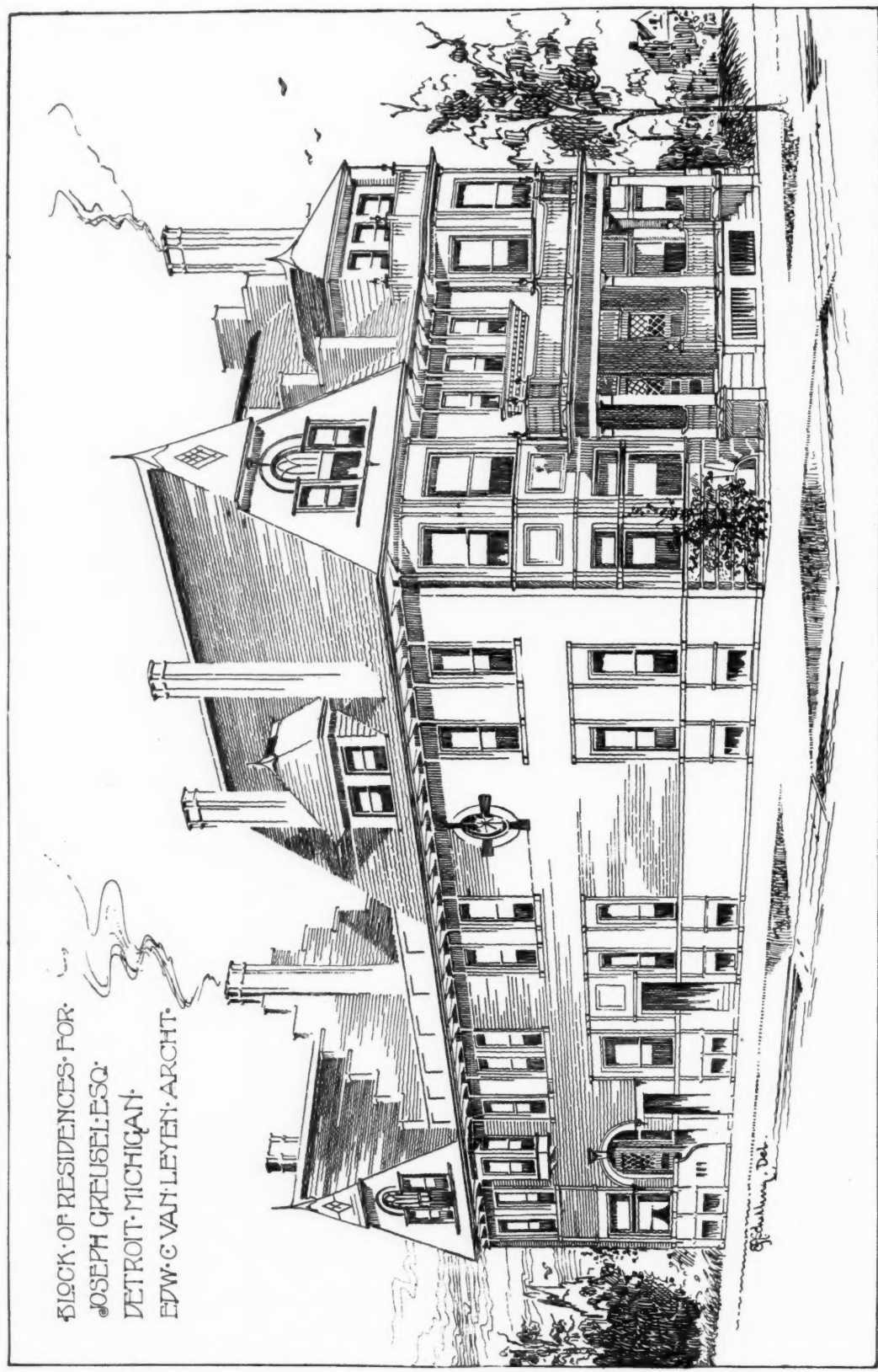
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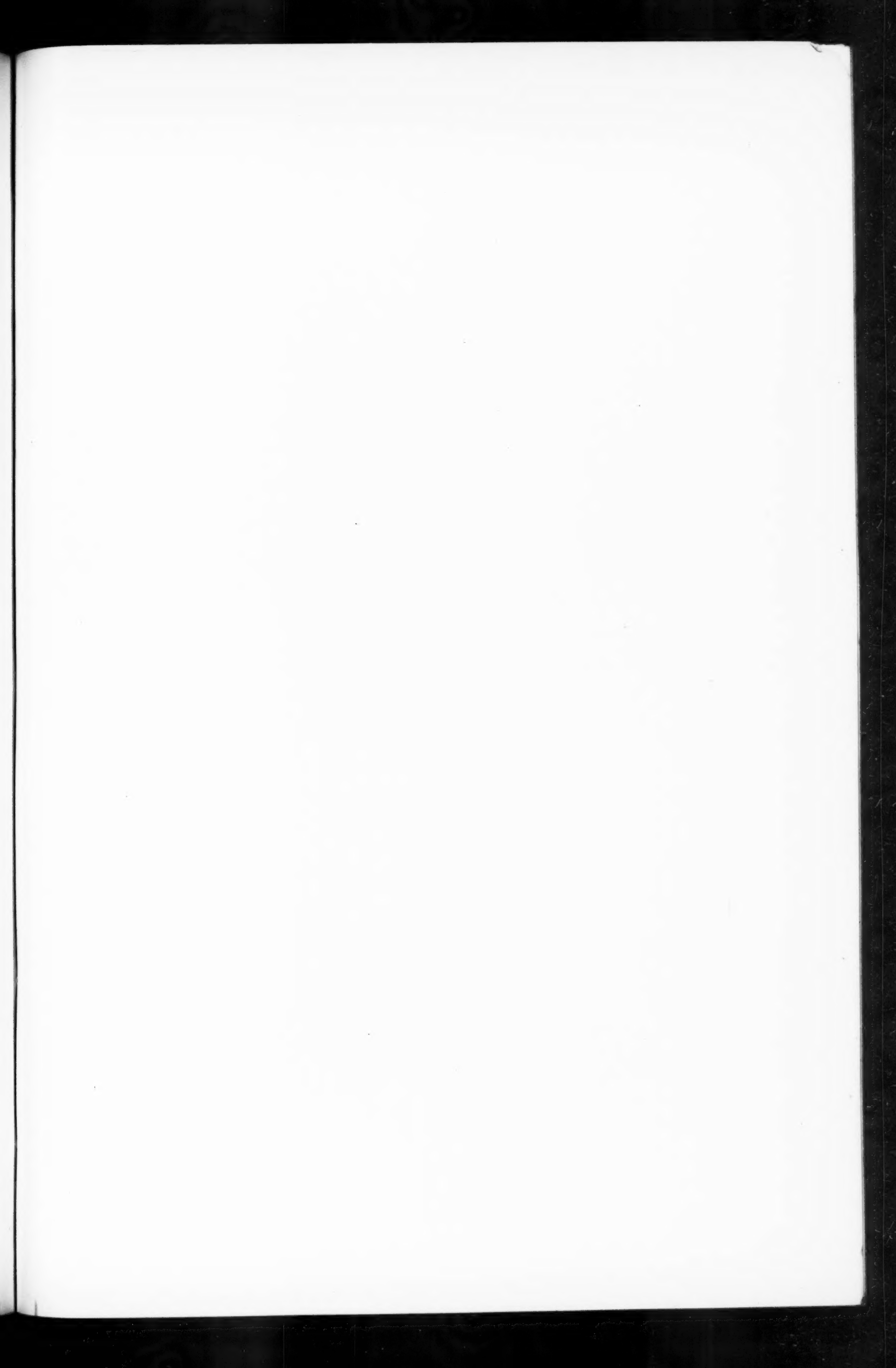


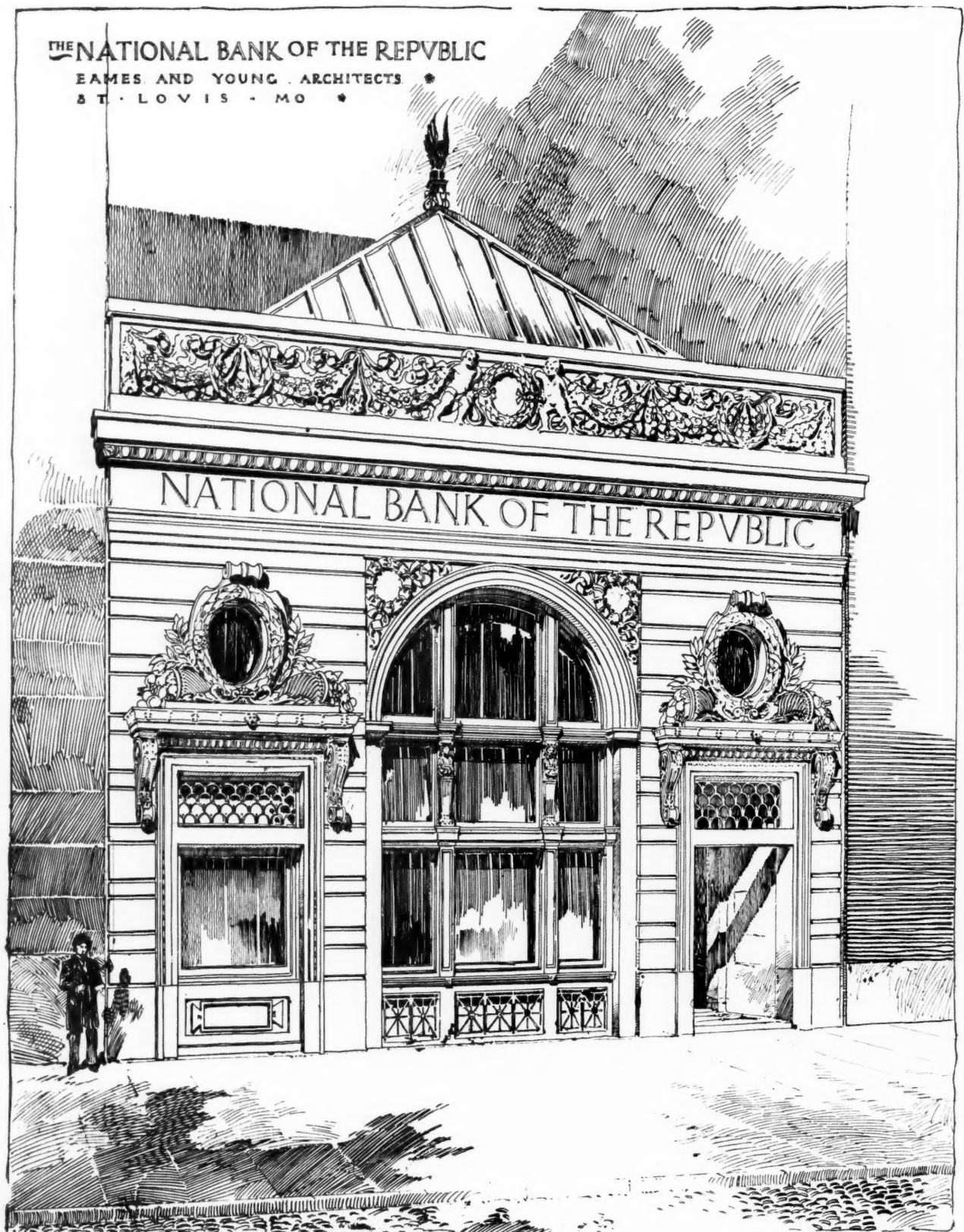


THE CASTLE FROM THE SOUTHWEST, GERMAN VILLAGE, MIDWAY PLAISANCE, WORLD'S COLUMBIAN EXPOSITION, CHICAGO.

KARL HOFFAKER, ARCHITECT.







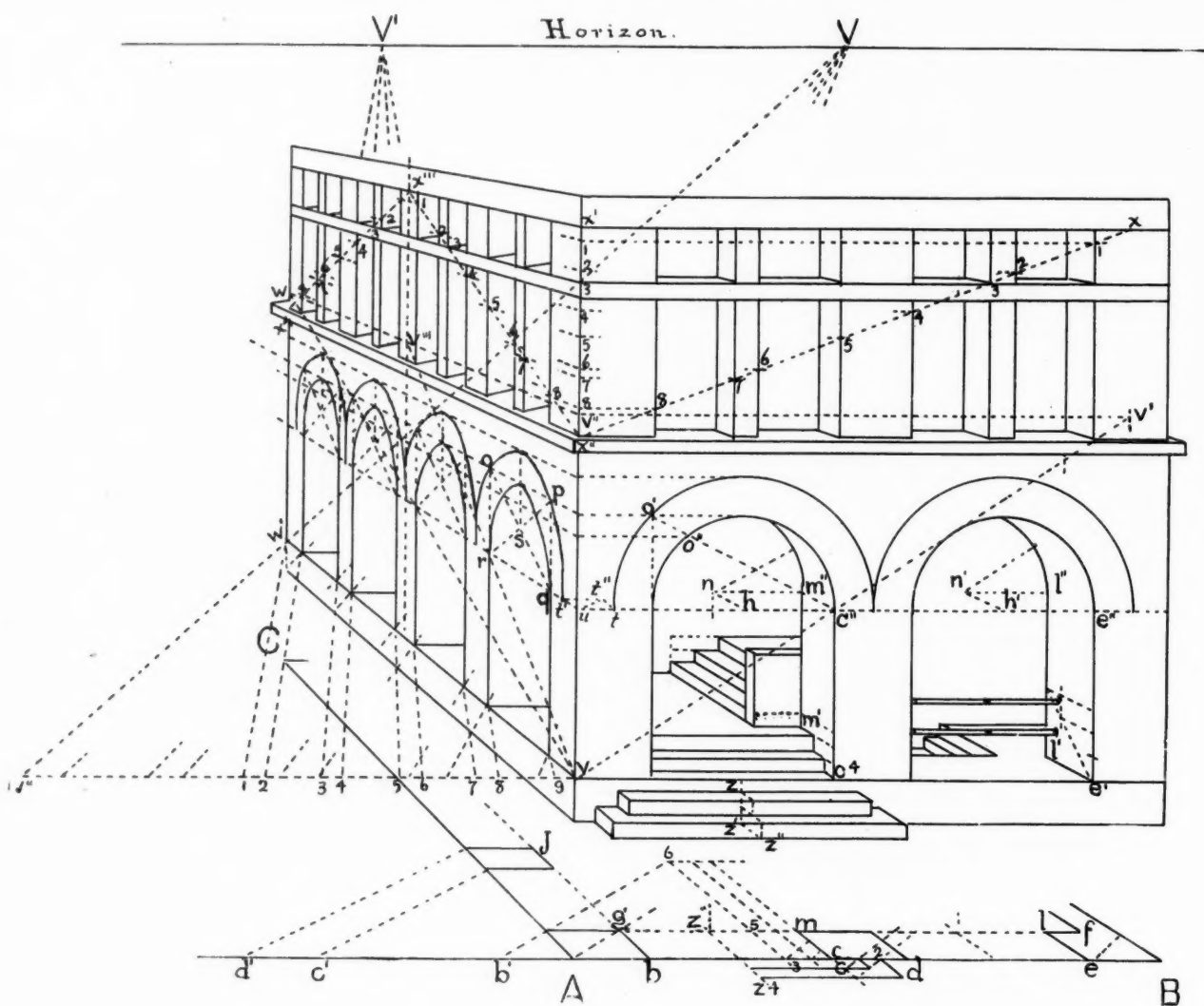


FIG. 123.

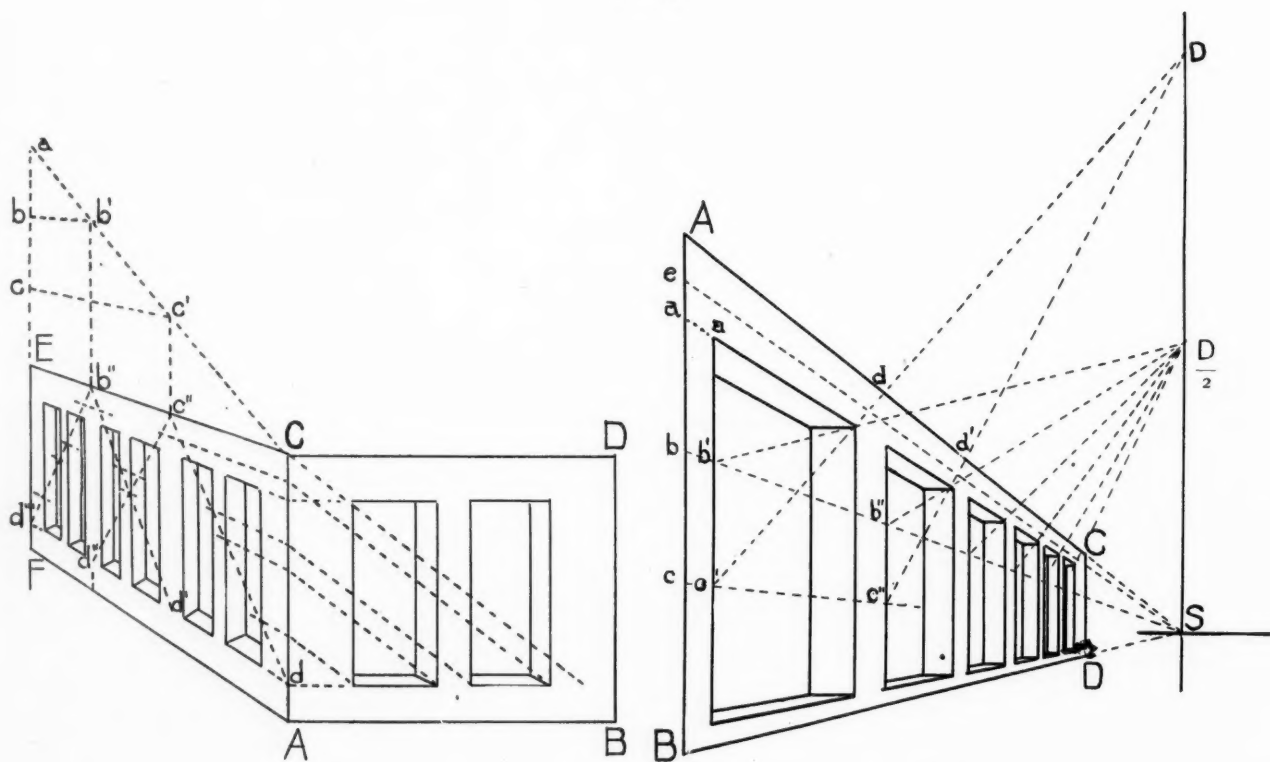
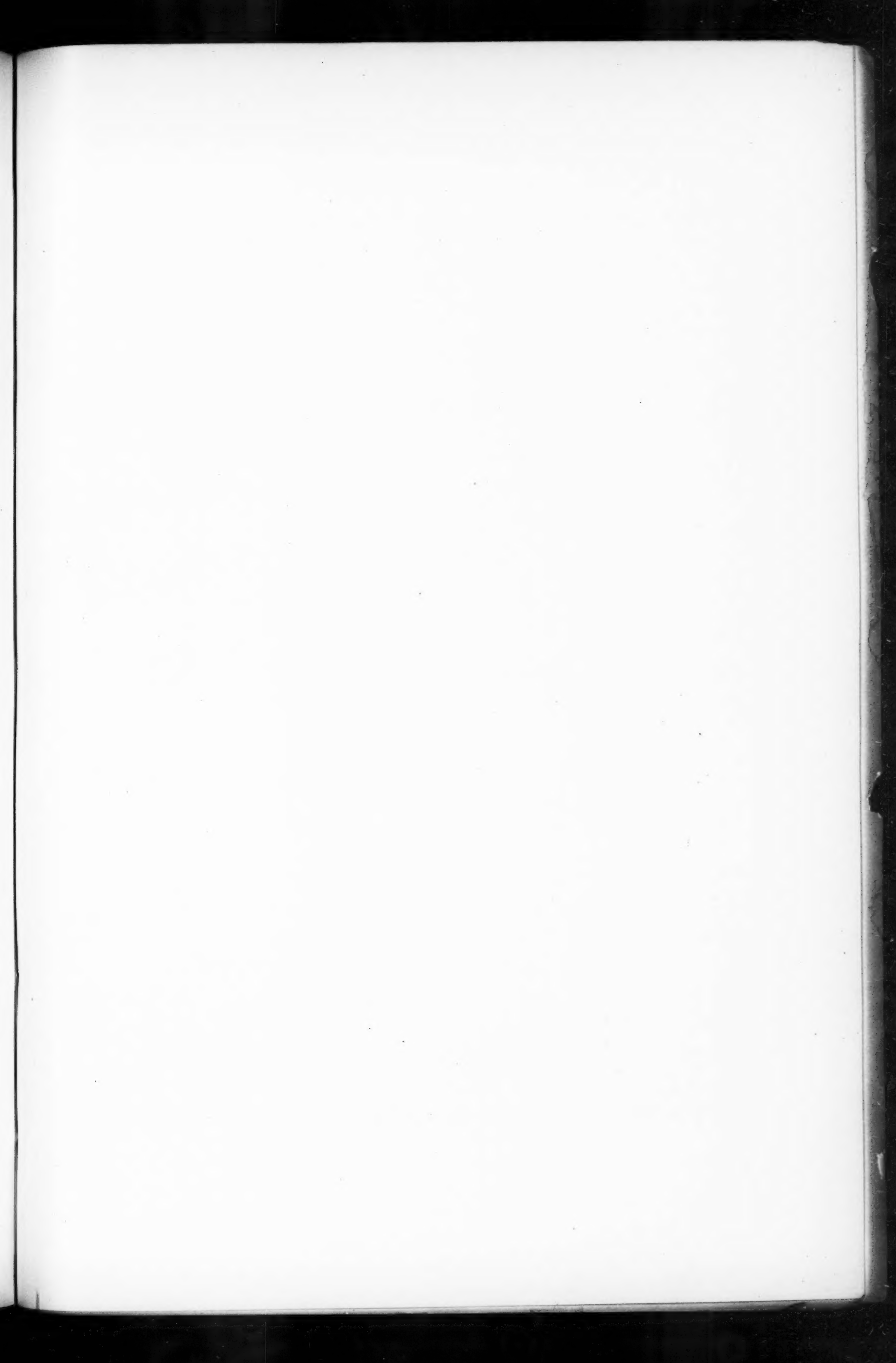
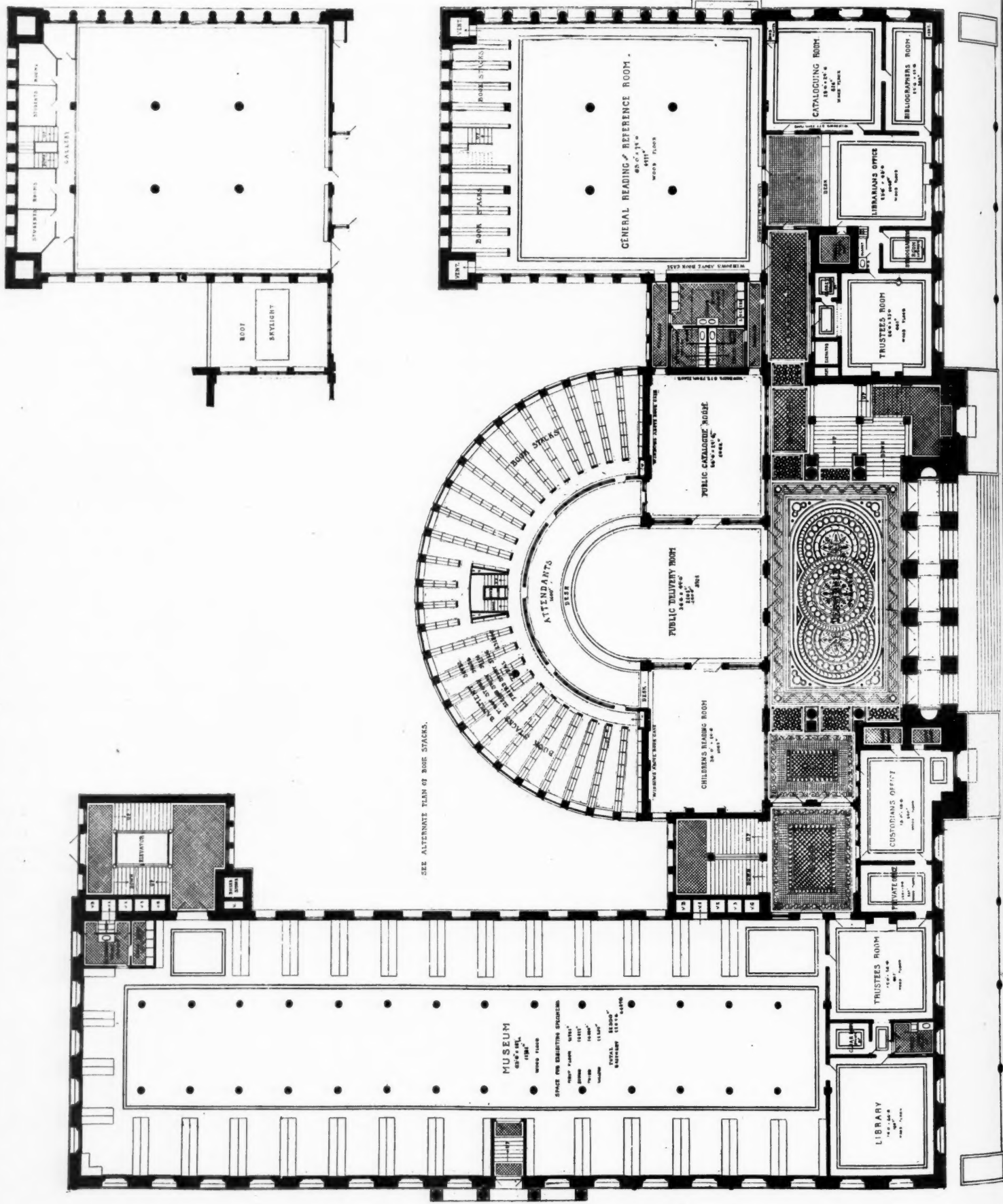


FIG. 128.

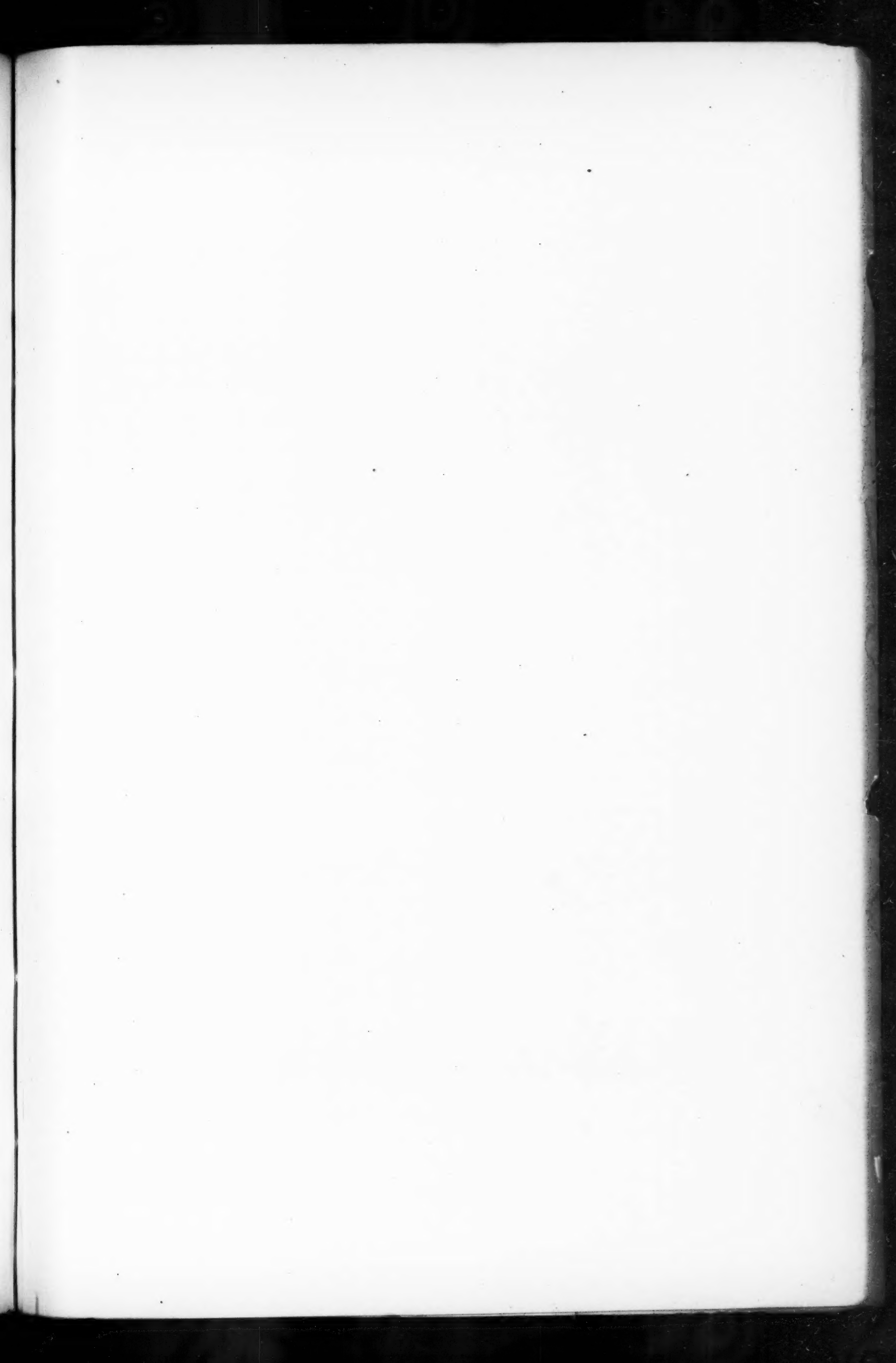
FIG. 132.

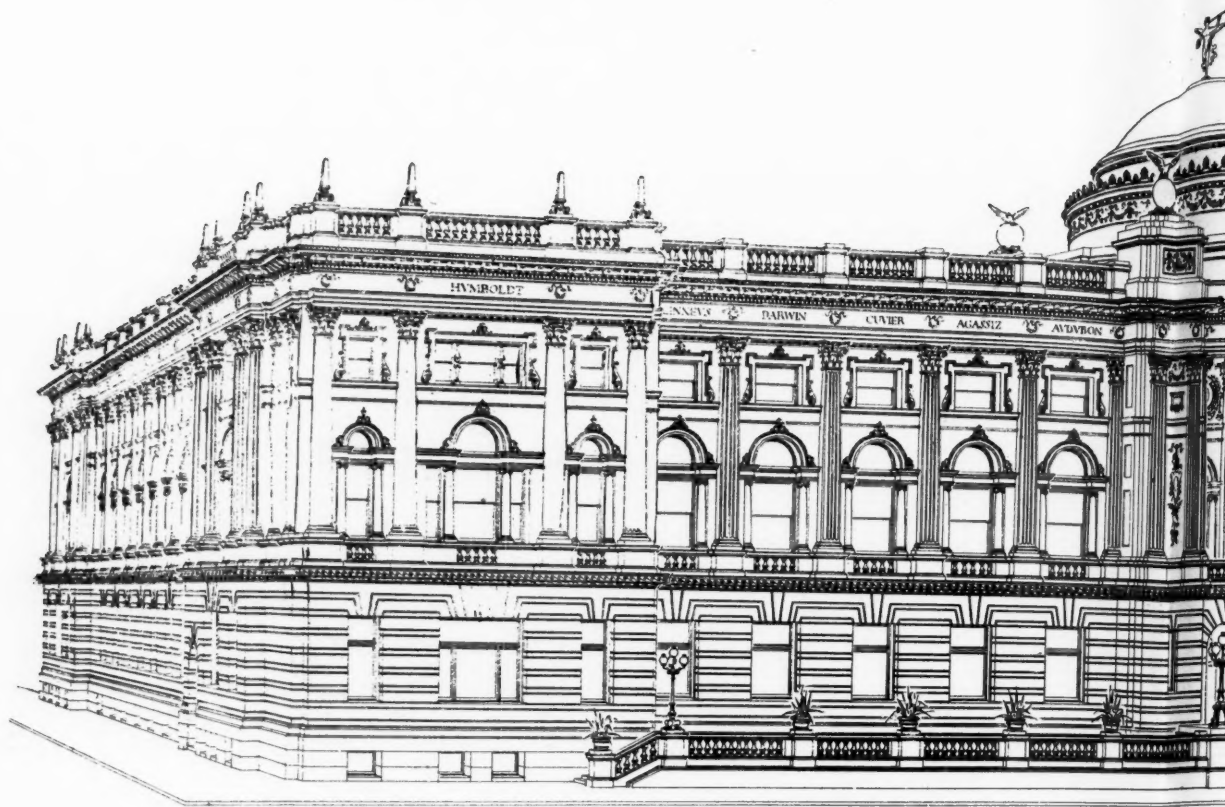
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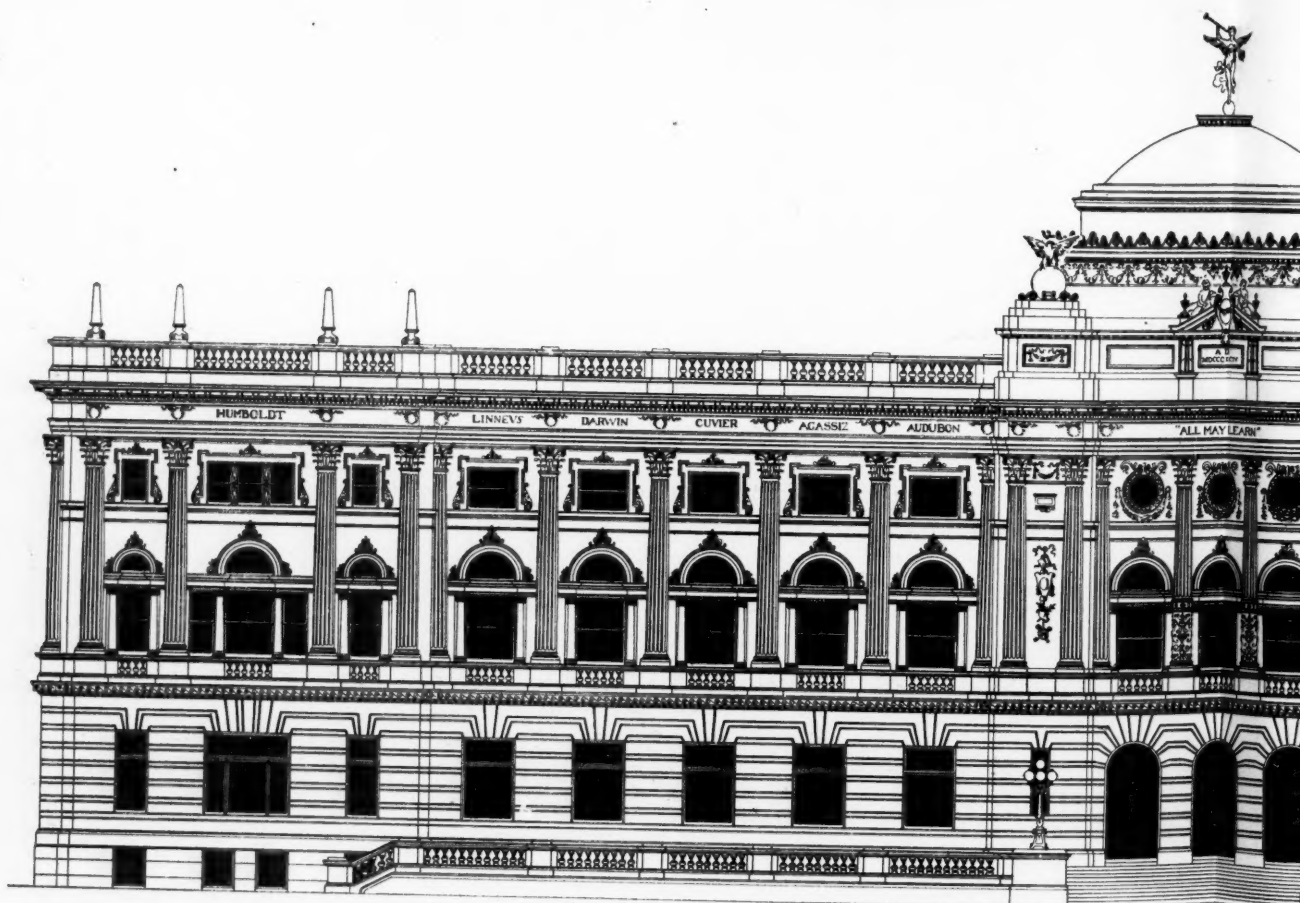


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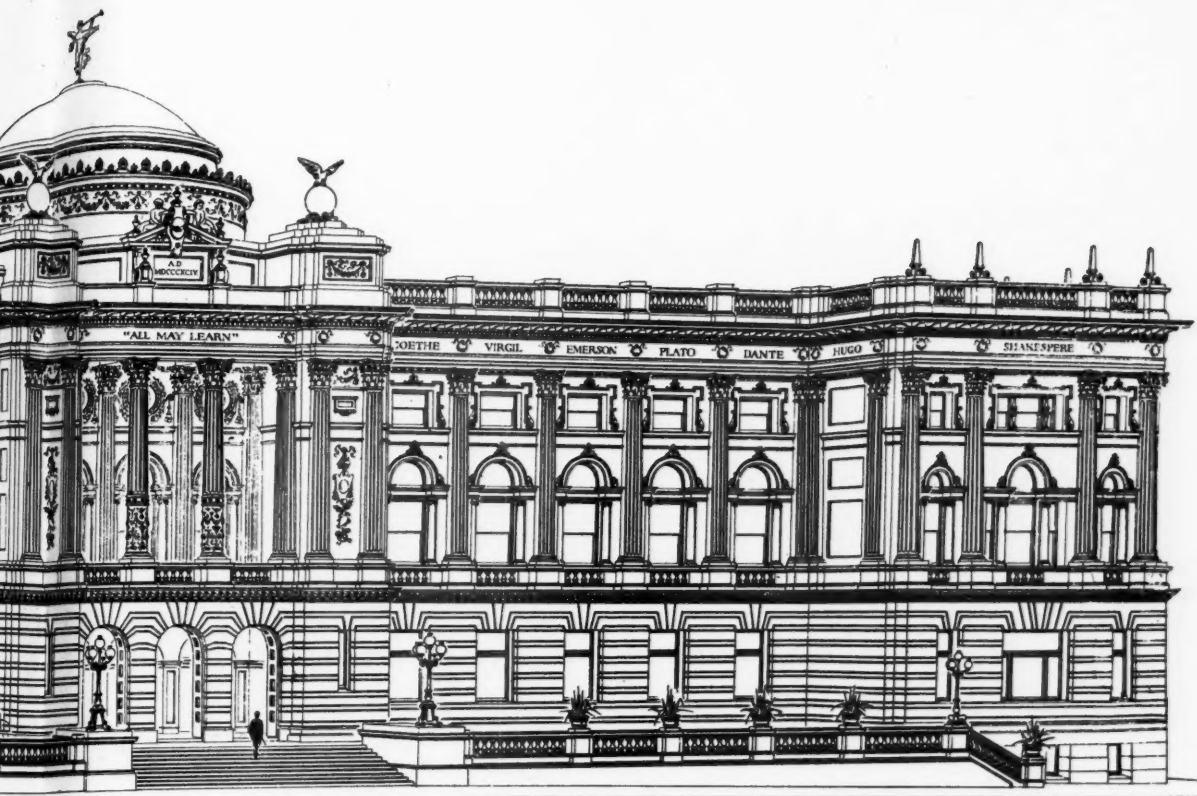
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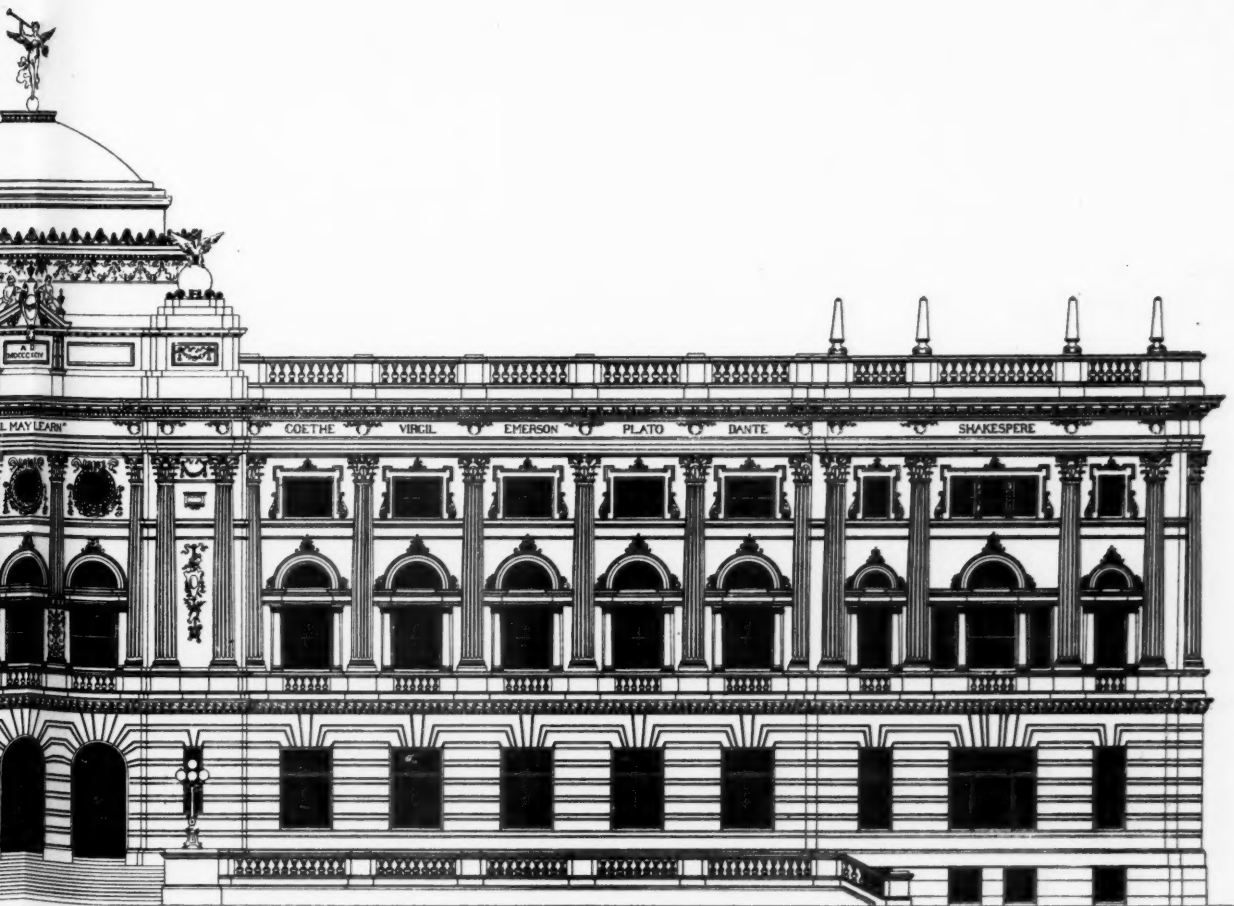
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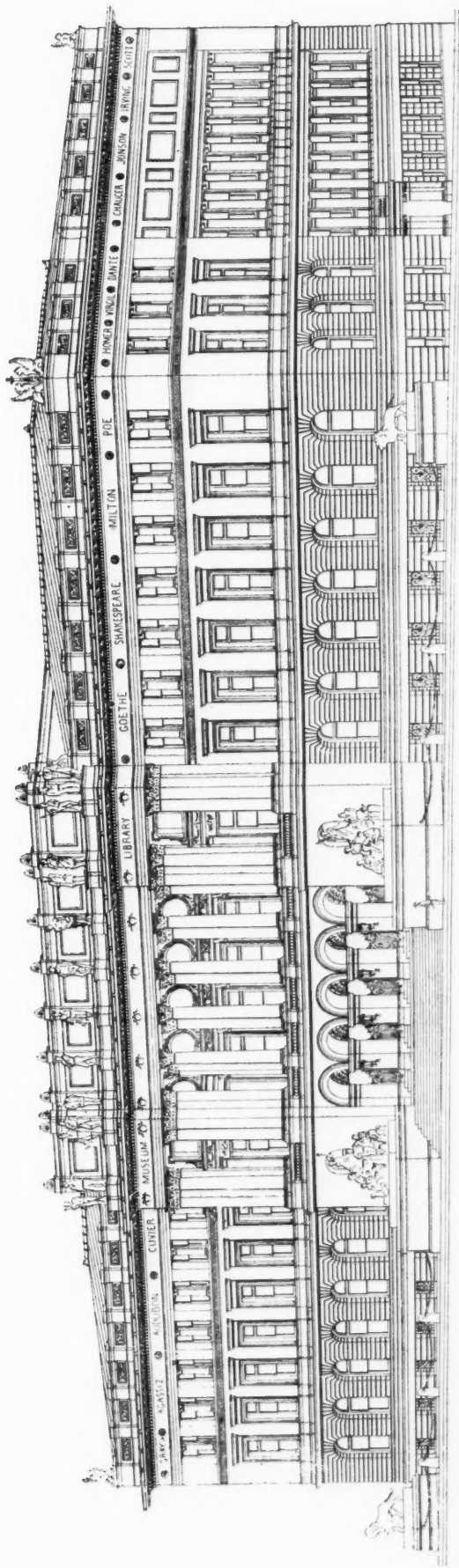
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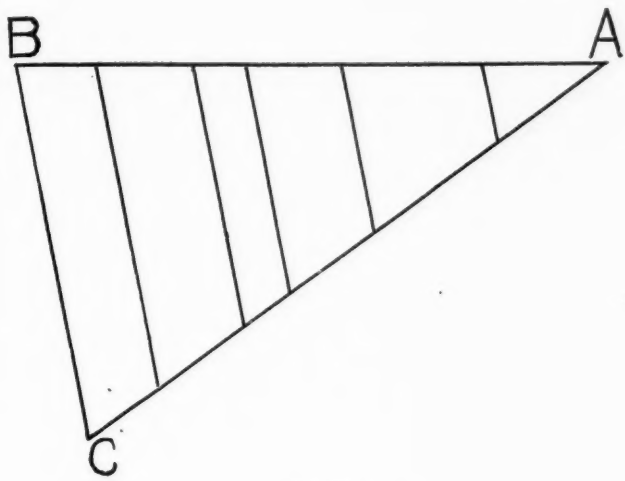


FIG. 125.

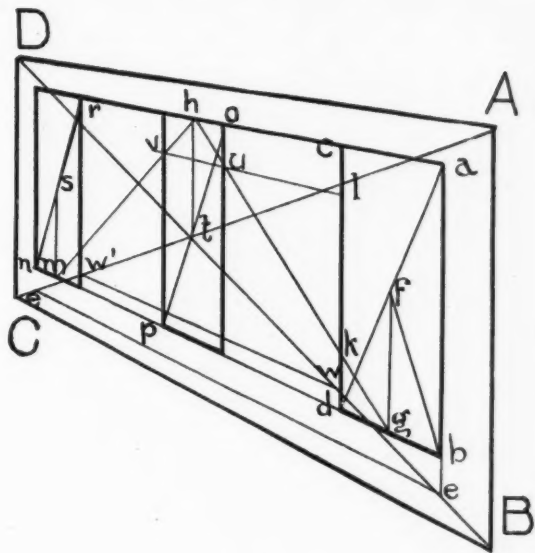


FIG. 129.

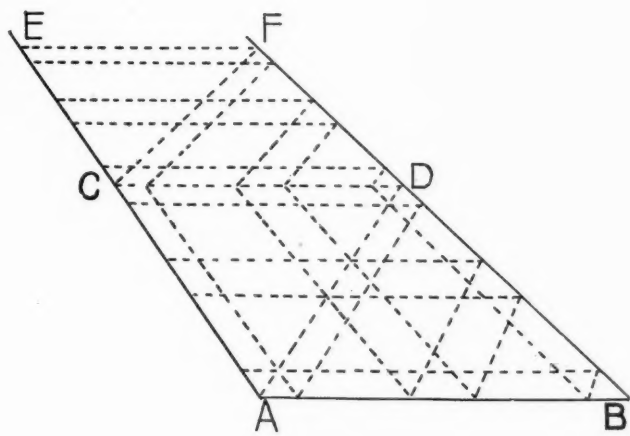


FIG. 126.

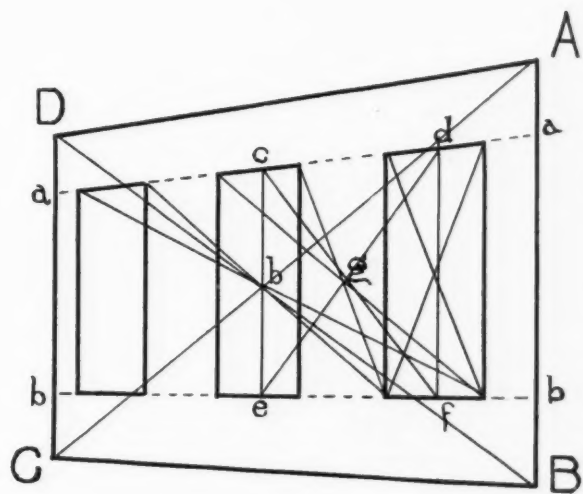


FIG. 130.

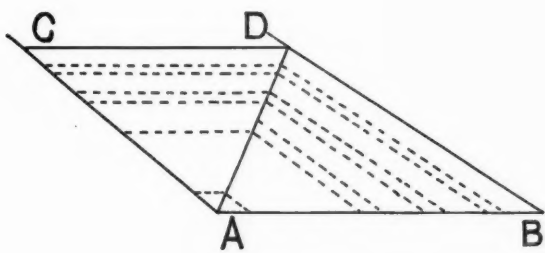


FIG. 127.

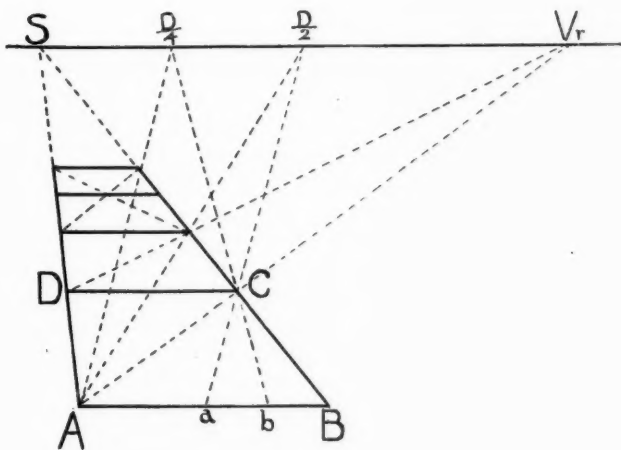


FIG. 131.

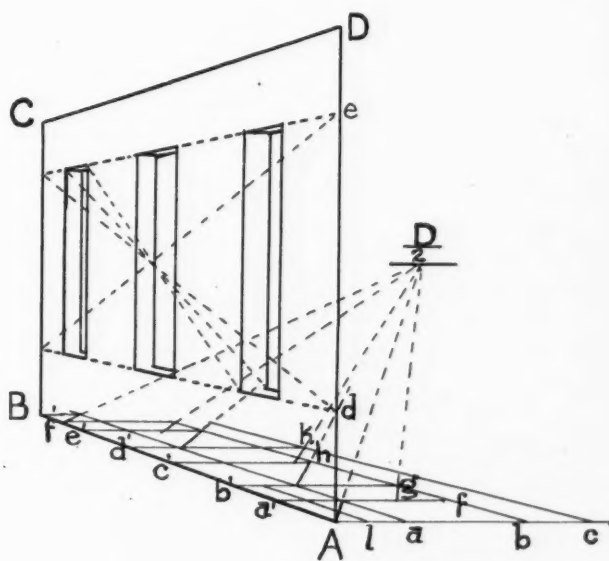


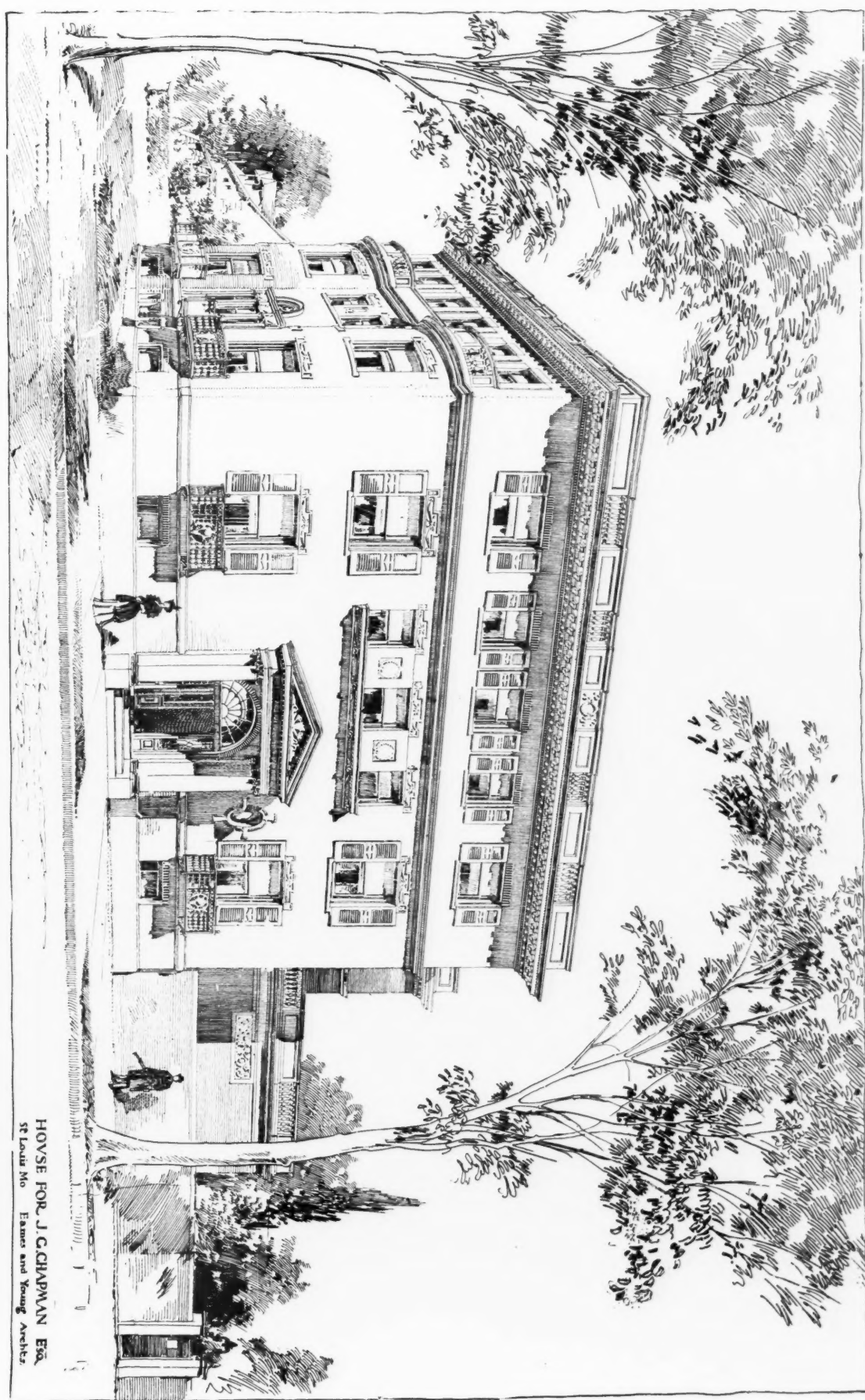
FIG. 133.



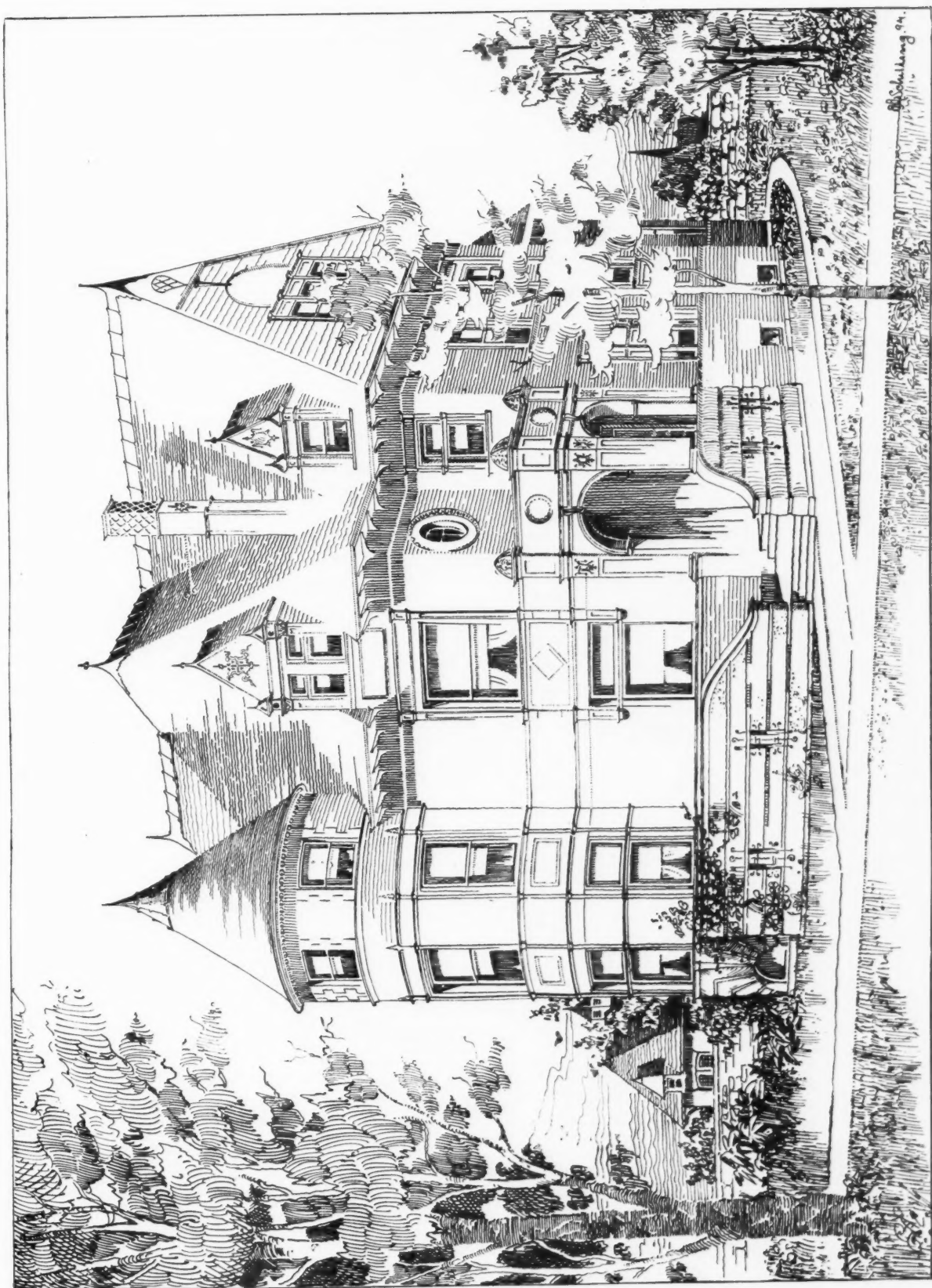
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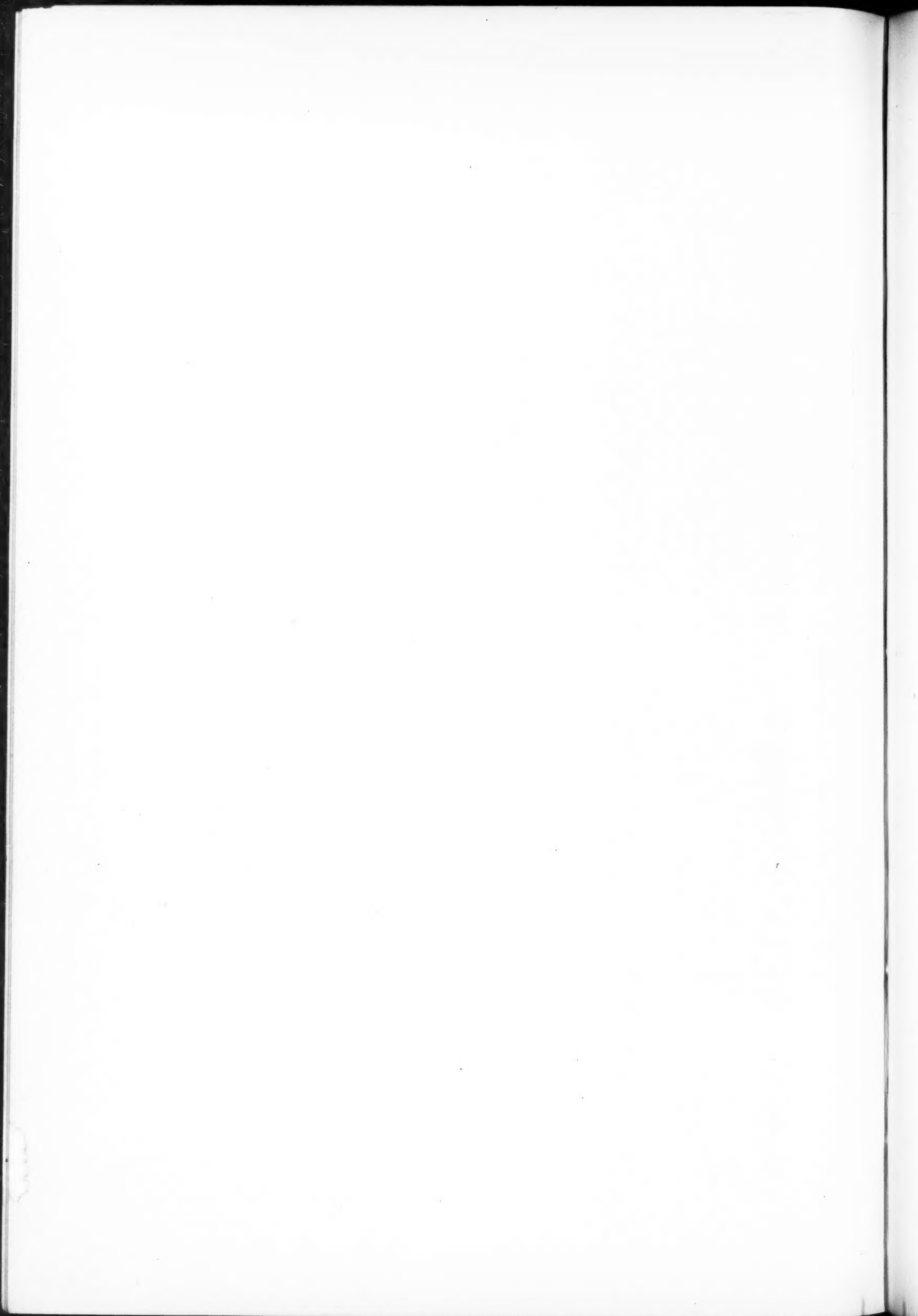
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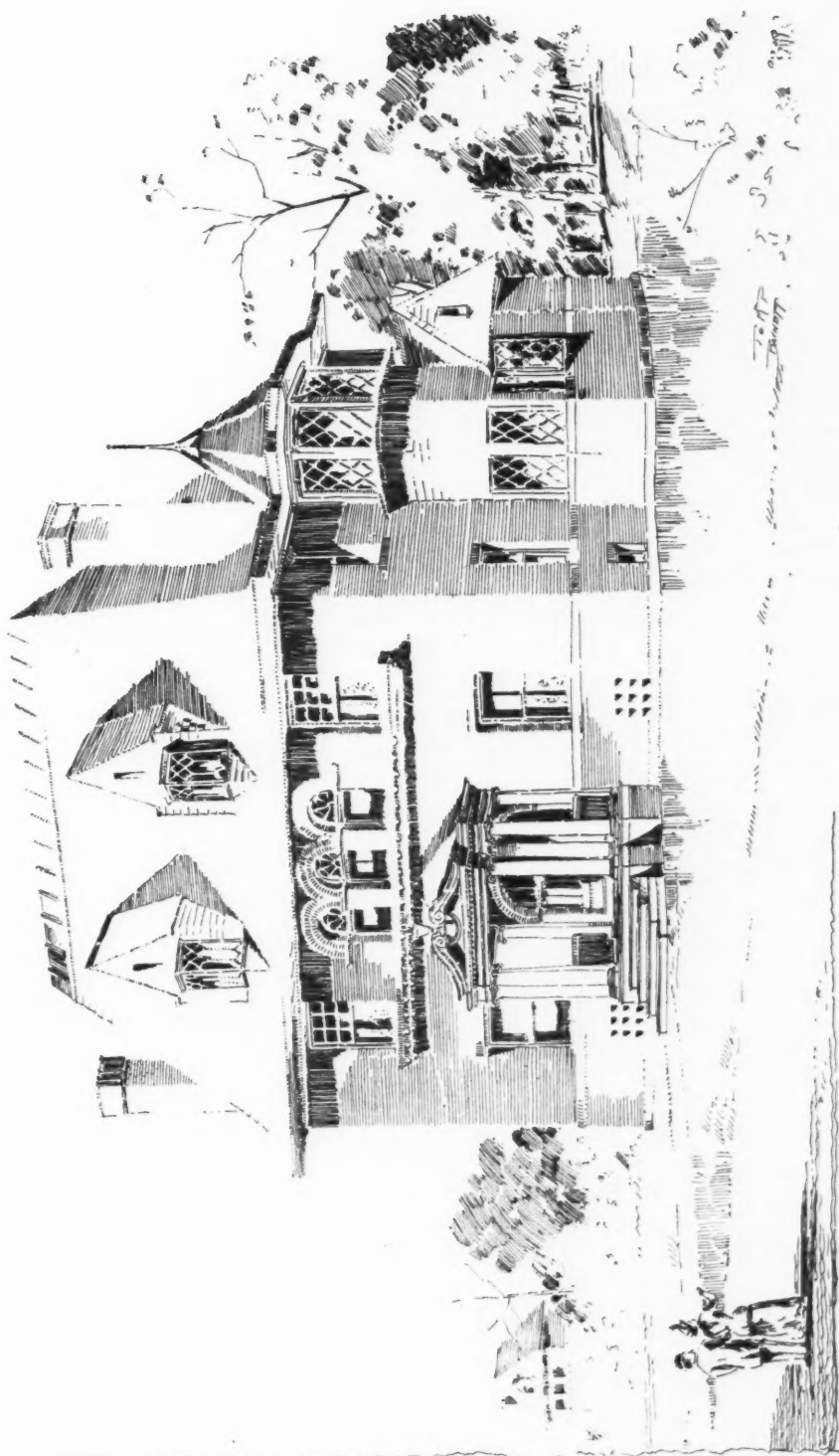


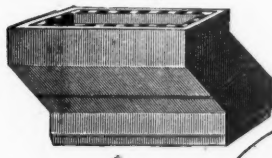
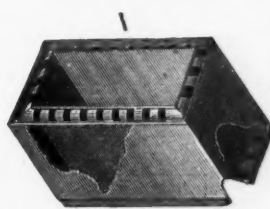
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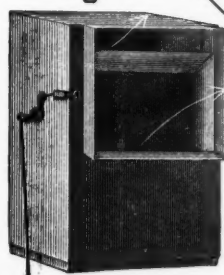
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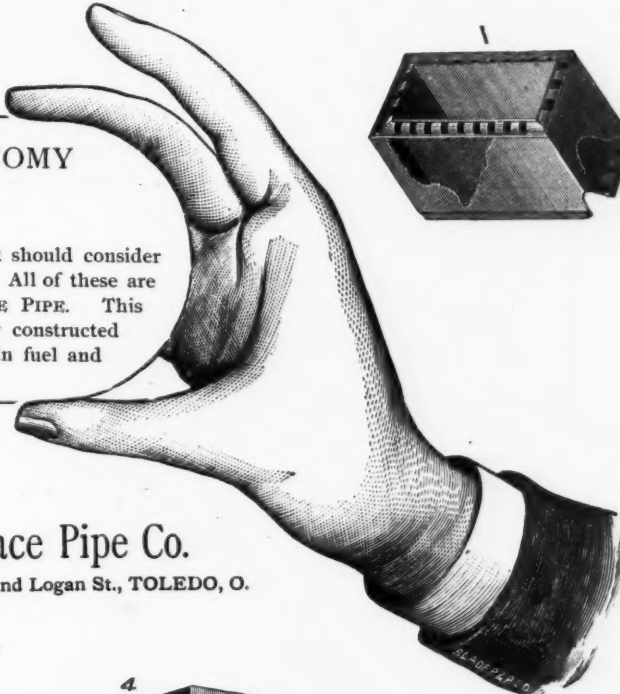
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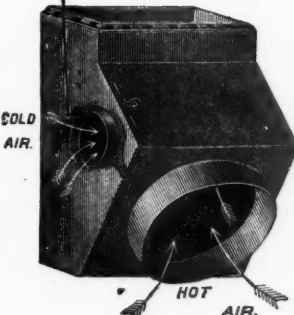


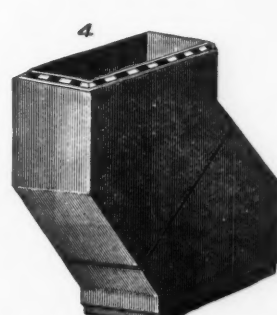
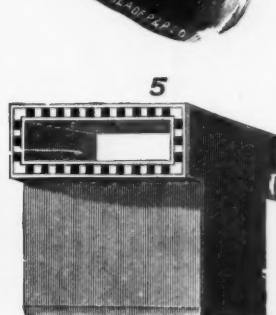
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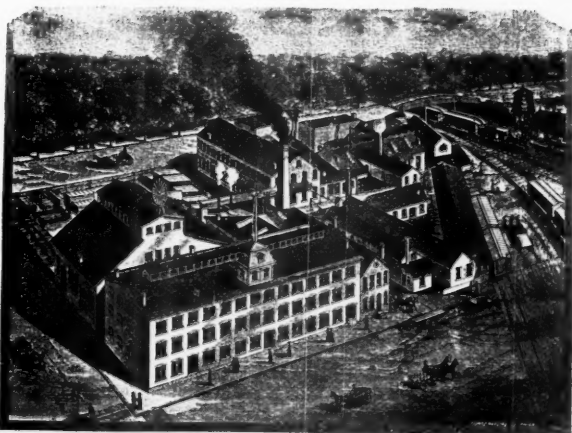
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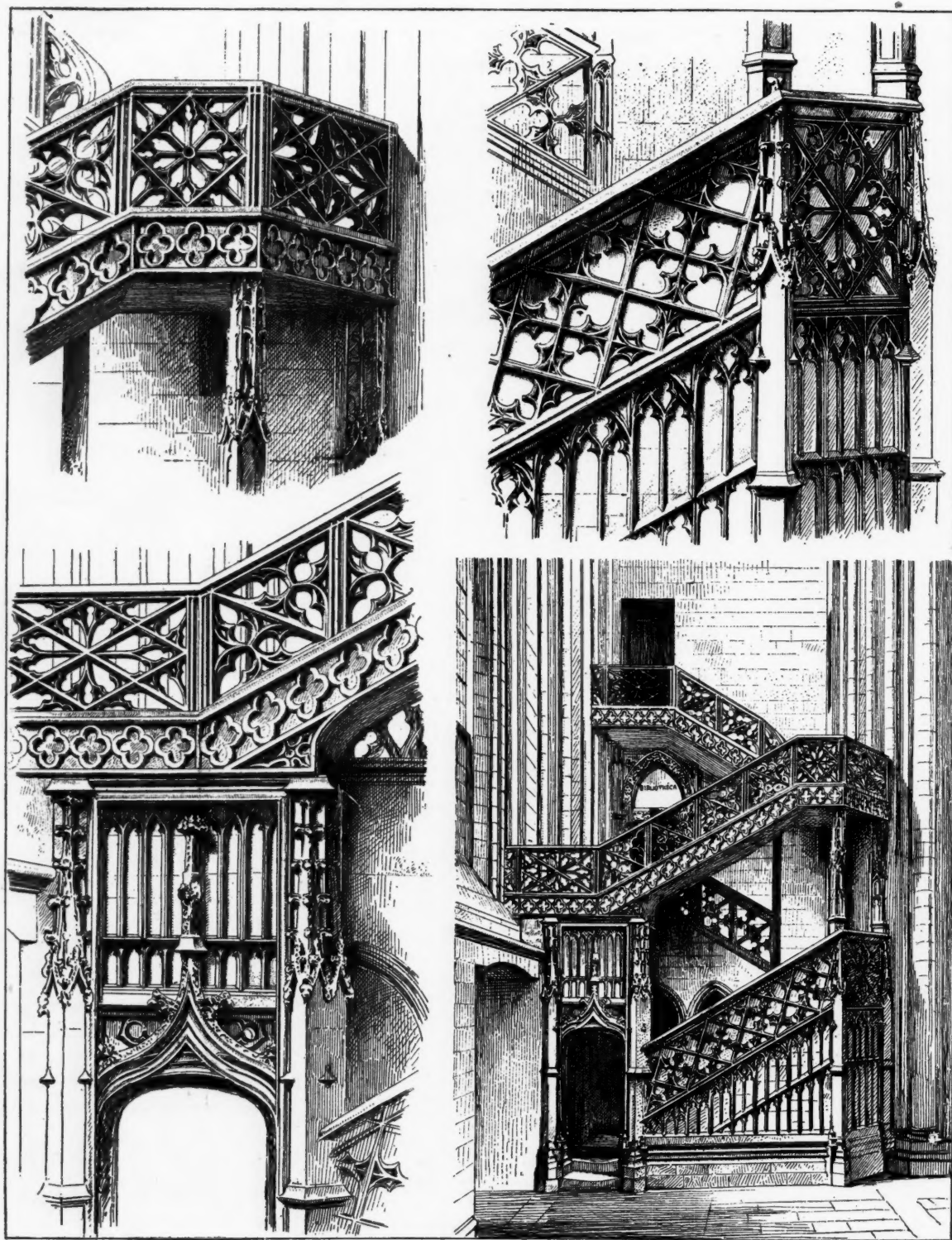
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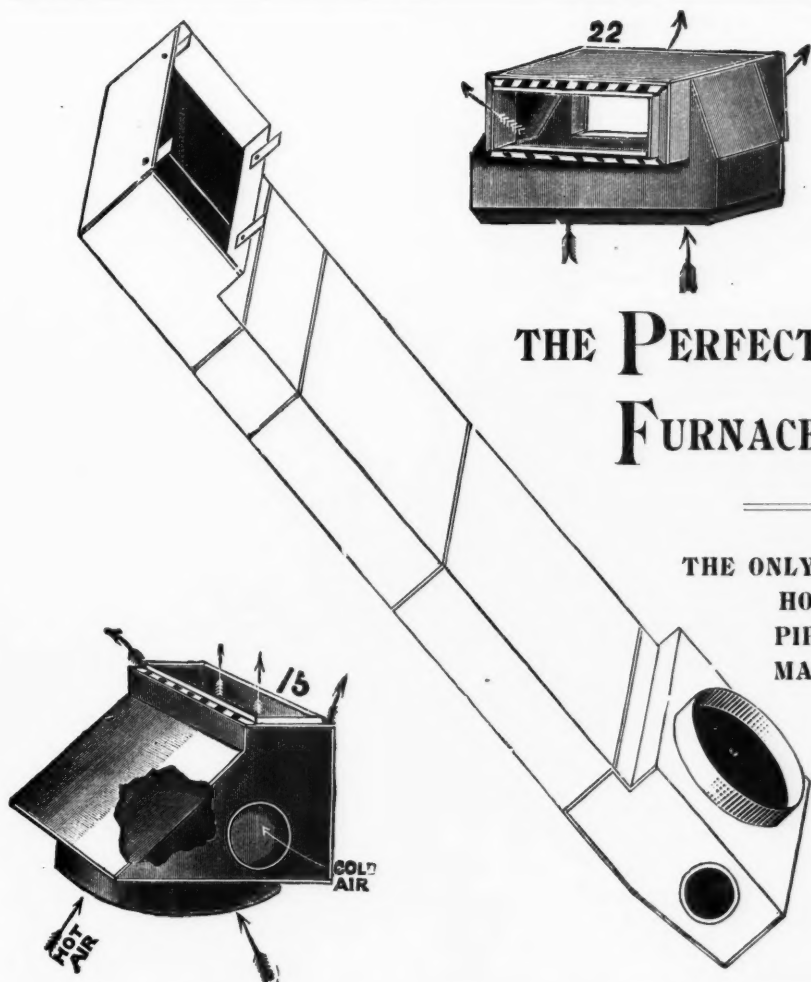
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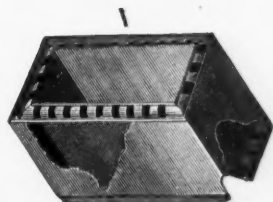
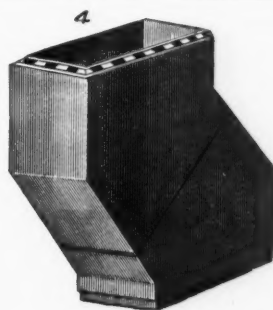


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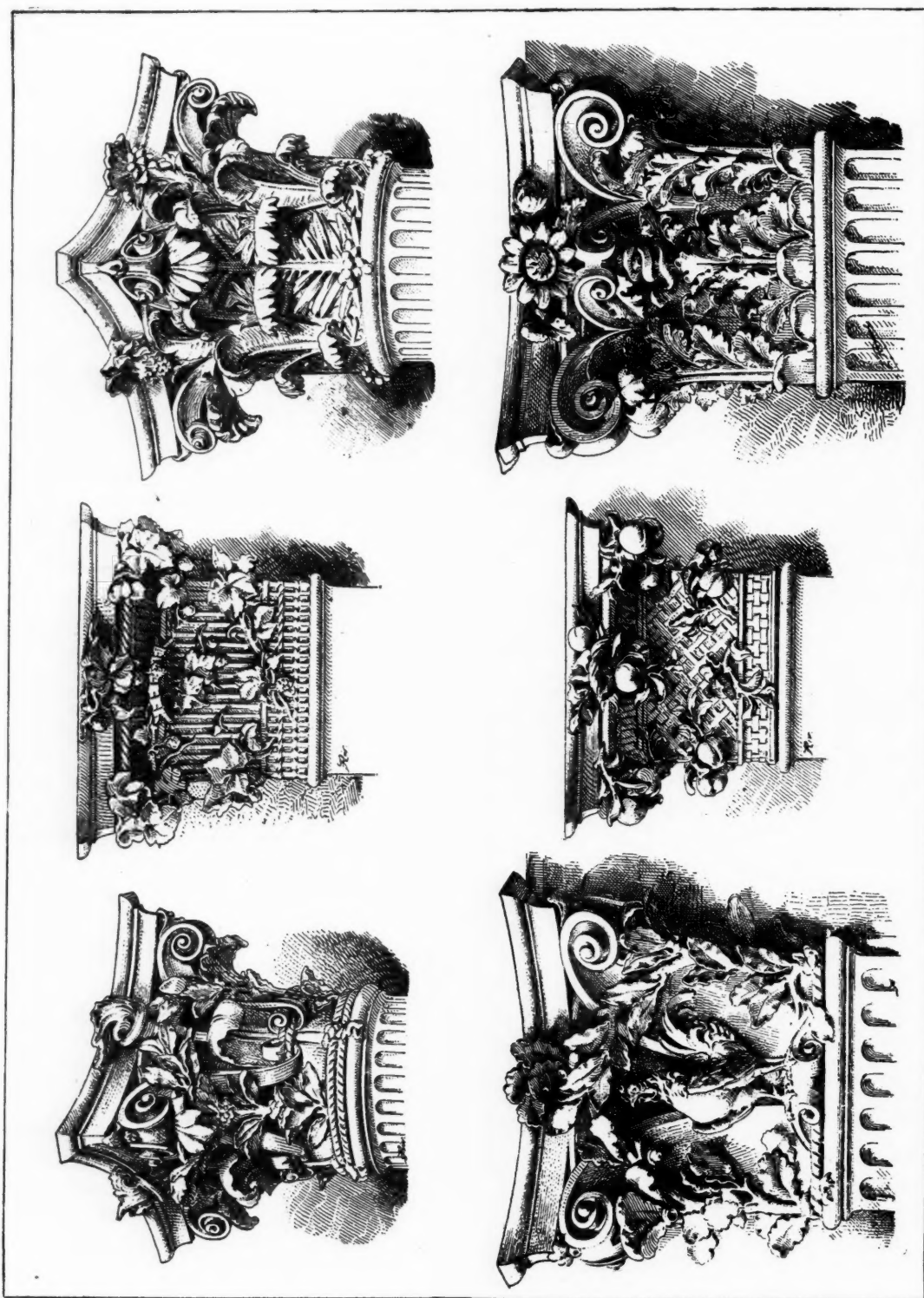
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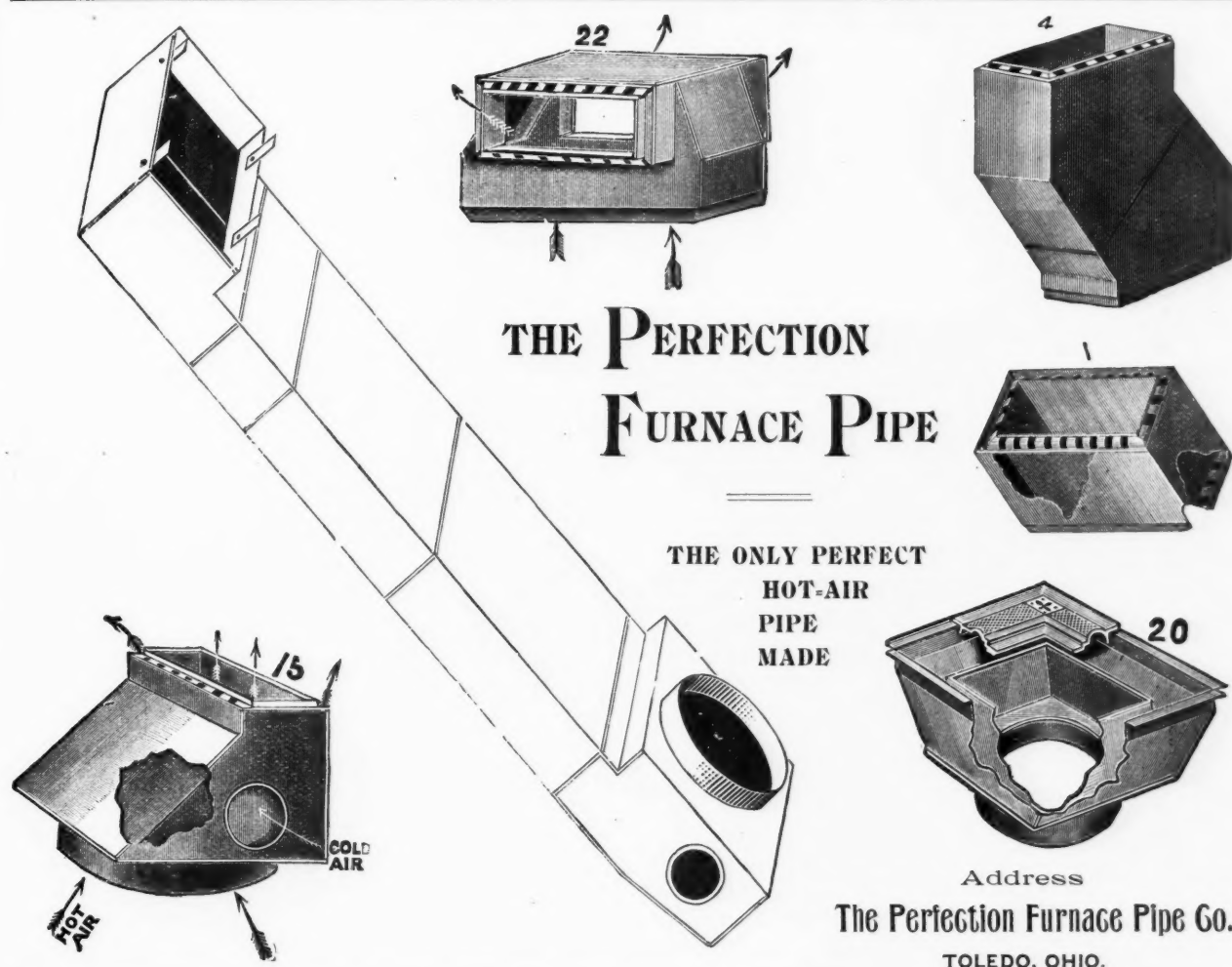
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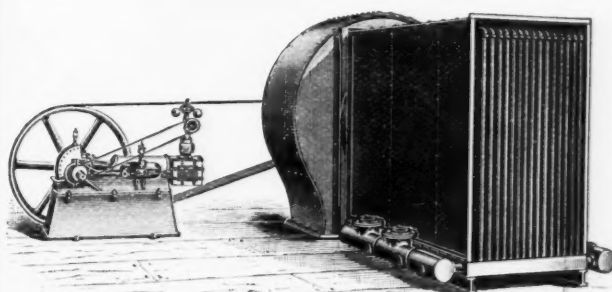
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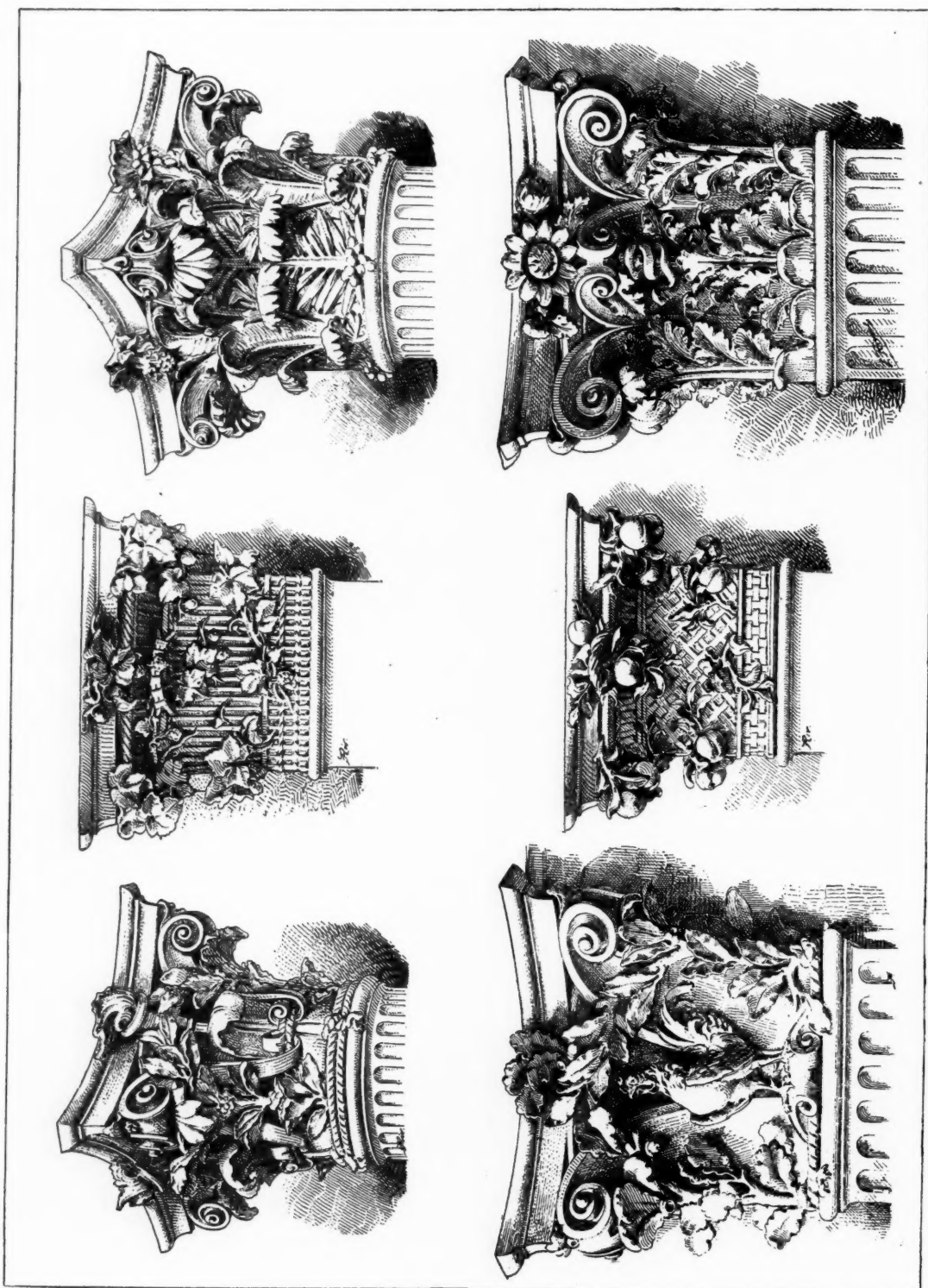
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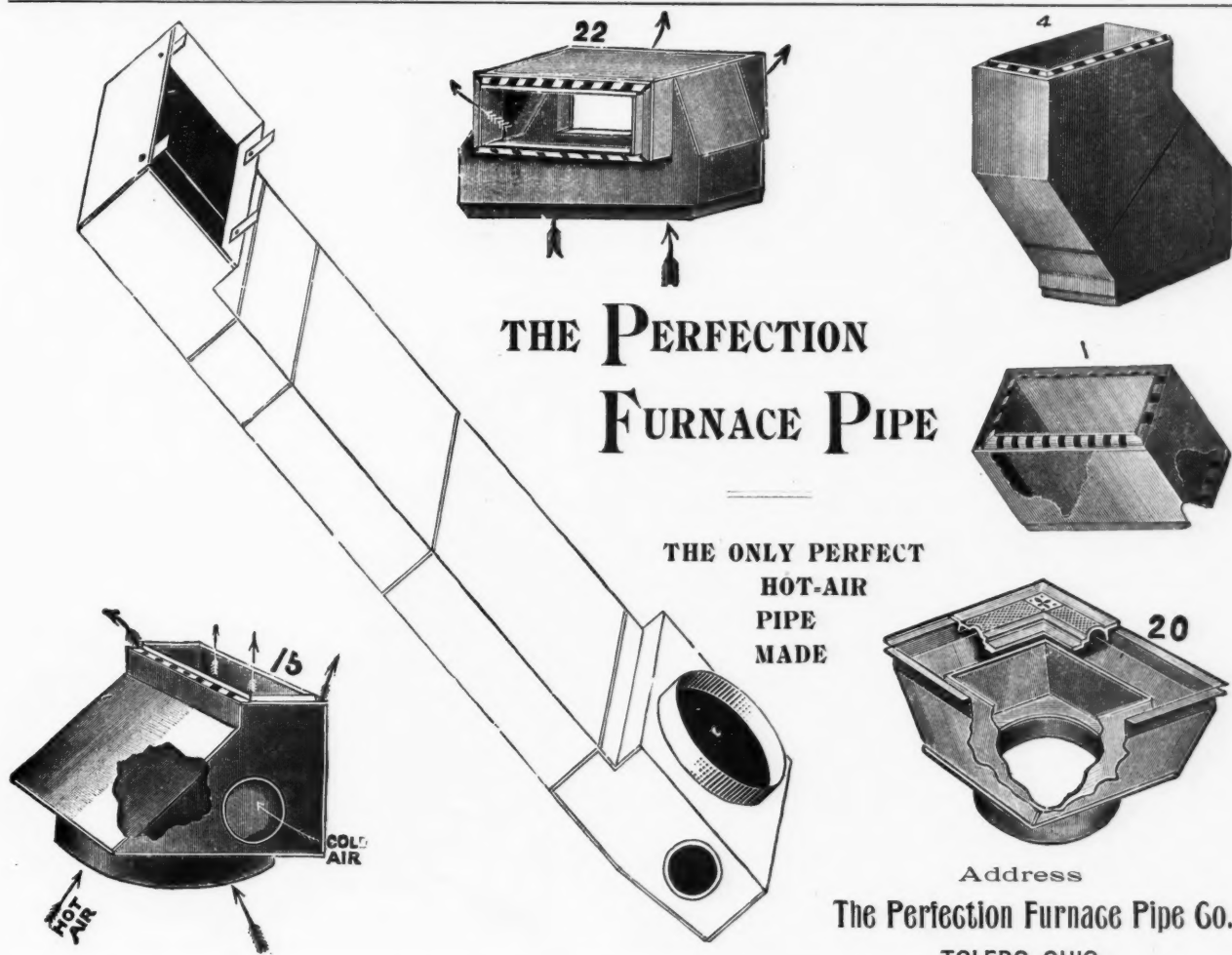
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HAND DIPPED, TREBLE COATED.



These plates are made by the Morrison Tin Plate Co. (makers of the Celebrated Calland Best Quality Bright Charcoal Tin Plates), and are guaranteed as Heavily Coated and equal to any Old Style or Old Method Terne Plates on the market. The makers guarantee that the Tin and Palm Oil used in the manufacture of these Plates are of the

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PROCESS, EXCLUSIVELY THEIR OWN, WHICH GIVES
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PLATE NOW MADE, AND THAT NO FLUX OF ANY KIND
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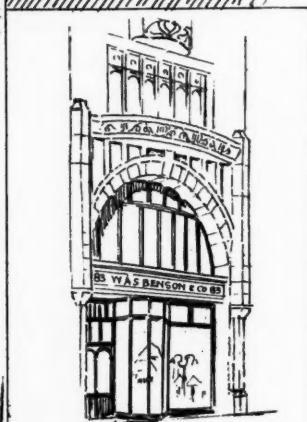
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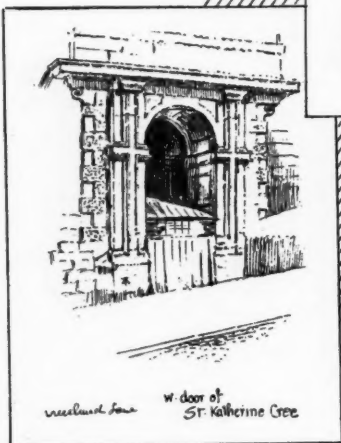
The Font
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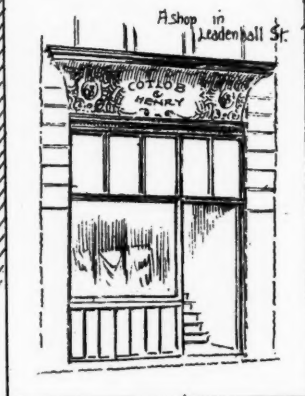
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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXI.

ADVERTISERS' TRADE DEPARTMENT.

No. 1

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

TWO HUNDRED AND EIGHTY BRICKS A SECOND.

What would the Israelites have thought when they were taking their compulsory education in brickmaking down in Egypt if Pharaoh had issued an edict that their output must be 280 bricks for every second of time in the year! "Holy Moses!" but wouldn't it have precipitated that notable strike against hard taskmasters? Well, the St. Louis Hydraulic Press Brick Company, with its ten plants at the great clay centers of Missouri, Illinois, Ohio, Pennsylvania, District of Columbia and Minnesota, can go that number a second several bricks better, and of such a quality that the reputation thereof for excellence has led men into temptation. However, architects, owners and contractors, have a safeguard against imposition since the company has established headquarters at St. Louis, Chicago, Kansas City, Philadelphia, Omaha, Findlay (Ohio), Minneapolis and Washington, D. C.; thus covering an area of territory that makes general inquiry and contract within easy reach and no one need be taken in by imitations.

A CHICAGO HEADQUARTERS.

It will be interesting to Chicago architects and builders to learn that the Willer Manufacturing Company of Milwaukee, has established a branch office at No. 25 Adams Express Building. THE INLAND ARCHITECT has on several occasions called attention to the unique merits of the Willer sliding window screens and screen doors as well as the other specialties of this enterprising company, including the famous inside blinds which have found so many appreciators, all over the western country. So there is no need of repetition.

It is a good time to order work now for the coming season and thus avoid the delay that always attends the rush of business later on. The Willer Company makes no shoddy wares, but everything turned out is of the best attainable material and made in a workmanlike manner. It is well to remember the Company makes window screens and screen doors to order only, taking measurements that insure a perfect fit in each instance.

A PERFECT BRICK.

It goes without argument, that, by the use of a fitting simile, the delineation of human character can be more accurately described by one word than a score of sentences could do it. If a man is called a fox, or a snake, a bear or a mule, no one requires a further waste of words to encompass the leading and governing traits of the individual. Everybody knows the man who is called "a perfect brick" is a prince of good fellows; kind-hearted, just and upright in his dealings with his fellow men—in fact, a good and desirable citizen all round. It seems to be common knowledge that a perfect brick is something peculiarly unique in the way of perfect things, hence it is, we suppose, this complimentary appellation finds its only application in the best humanity affords. By the way, speaking of perfect bricks, calls to mind that the Tiffany Brick Company, of Chicago, has removed its headquarters to 403 Chamber of Commerce Building. This can be substantiated by a reference to the company's advertisement in this journal, and

wherein will be found a list of prominent buildings in which the company's kiln products have been solely used in the construction—monuments, so to speak, in praise of perfect bricks.

ONE MORE.

Those indefatigable tin plate makers and dealers, Merchant & Co., have contributed a very handsome calendar to the formidable pile previously received from kindly remembering friends who were apprehensive we might not be able to keep track of 1893 without assistance. It represents two epochs, by the presentation of an old-time galleon, with torch fires at the cross-trees and prow, and a present-day ocean-going steam vessel with an electric search light. Of course it would not be a calendar without the listing of the days and months in the year, and pictures of a pile of boxes of roofing tin plate; a section of a roof of a supposititious railway station, tin covered; and a chimney topped off with a tin-coated ventilator, emphasizing the listing is to be relied upon.

A GREAT CATALOGUE.

The Buffalo Forge Company, Buffalo, New York, has just issued a mammoth quarto illustrated general catalogue, splendidly printed on super-calendered paper, exploiting the numerous products of its renowned plant and which will be found highly interesting to the architectural fraternity. Particularly will this be the case in the matter of heating and ventilation by the hot-blast process, boilers and engines, electric disk wheels, etc., all of which enter largely into the construction of modern city building. There is a vast amount of practical and useful information in the compiled and tabulated text that cannot be otherwise than duly appreciated by all for whom it is published—mechanics, builders, millmen and constructors generally.

THE LOCK JOINT BRICK AGAIN.

Several numbers back, attention was called to a new form of bricks patented by the designer, Mr. George E. Briggs, of Pittsburgh, Pennsylvania, called by him the "lock-joint brick," consisting of four equal rectangles, three of which are arranged side by side and attached edge to edge, the fourth being attached to the second. By the Pittsburgh papers we learn a company has been formed with a capital stock of \$150,000 to go into their manufacture and which proposes to erect at once a plant with a capacity of turning out 50,000 of these pressed lock-joint brick per day. A number of leading and substantial business men of the "Iron City" have identified themselves with the enterprise, which will be known as the Briggs Lock Joint Brick Company. One of the new public school buildings of that city was built of these bricks. The universal opinion of practical builders who have given this form of bricks investigation under construction, seems to be that it is a welcome innovation on old-time forms and methods.

TRADE NOTES.

SAMUEL CABOT, 1201 Owings Building, corner Dearborn and Adams streets, Chicago, Illinois, is the address of the new supply depot of Cabot's Creosote Shingle Stains, and architects are requested to refer clients to this new address.

On February 15, Samuel Cabot, the manufacturer of the stains which bear his name, filed a bill of equity in the circuit court of Cook county against E. A. Mason, Adolph Muus, Isaac Barnett and the E. A. Mason Stain Company, who do business at 159 La Salle street, in Chicago, for an injunction to restrain them from adulterating Cabot's stains and selling them in an adulterated state. It appears from the bill filed by Mr. Cabot that

he has been under contract with the defendants, or some of them, for several years in the past, and has sold or consigned his stains to them under his contracts and otherwise. It is alleged that Cabot's stains contain percentages of linseed oil, of pigment, and of a still larger percentage of creosote oil, in proportions which must be preserved in order to make the stains effective and satisfactory; but that the defendants, wilfully disregarding his rights and contriving to injure him, have since last June adulterated the stains bought by them from him, and have been selling them in an adulterated state. The bill states that this is a gross fraud upon Cabot, and that the injury thereby caused to him cannot be estimated; that a mere inspection of his stain will not usually disclose adulteration, and that, as purchasers do not ordinarily give the stains purchased by them a very careful inspection, the community is likely to be deceived. Cabot further says in his bill that the defendants have a number of his pasters in their possession and his shingle stain stencil, which they affix to adulterated goods and then sell them as his. The bill winds up with the prayer that summons to bring the defendants into court may issue, and that they may be enjoined by the court from selling adulterated stains as Cabot's. On the recommendation of Horatio L. Wait, Master in Chancery of the Circuit Court, an injunction against all the defendants was issued as prayed, by His Honor, Chancellor Murray F. Tuley, on February 16.

RAILROAD NOTES.

PARTIES going to St. Louis and the southwest, or to Kansas, should take the Wabash Route, the shortest line, smoothest track, finest cars and least obstruction from snow. Depot at corner of Dearborn and Polk streets, Chicago.

A WORLD'S FAIR ALBUM free to any address south of the Ohio river and east of the Mississippi river for 10 cents in stamps. The album will be sent other points outside of above mentioned territory for 15 cents in stamps. The albums are published by the C. H. & D., which, in connection with the Monon route, forms the "World's Fair Route" between Cincinnati and Chicago, being the only line running Pullman vestibuled trains with dining cars between the cities named. Send stamps with address to E. O. McCormick, general passenger and ticket agent, "World's Fair Route," 200 West Fourth street, Cincinnati, Ohio, and get an album containing seventeen World's Fair views.

FOR the Inauguration of Cleveland and Stevenson at Washington, on March 4, excursion tickets, reading via Baltimore and Ohio Railroad, "The Picturesque Route," will be placed on sale at the ticket offices of principal railroads of the West, as well as at the ticket offices of the Baltimore & Ohio Company. The fare from Chicago will be \$17.50 for the round trip. These tickets will be sold from February 28 to March 3, inclusive, and will be valid for return journey until March 8, inclusive.

The Baltimore & Ohio is the shortest route to Washington from nearly all points West. Its trains are vestibuled from end to end, and carry Pullman sleeping cars.

No railroad in America is better equipped than the B. & O. to transport with dispatch, safety, and comfort the large crowd which will visit Washington to witness the inauguration ceremonies. Its long experience in transporting crowds to former inaugurations, G. A. R. Encampments, Knights Templar Conclaves, and similar gatherings, on an extensive scale, will prove most valuable in arranging for the coming inauguration.

For more detailed information as to rates time of trains etc., apply to L. S. Allen, Assistant General Passenger Agent, The Rookery, Chicago, or O. P. McCarty, Assistant General Passenger Agent, Cincinnati.

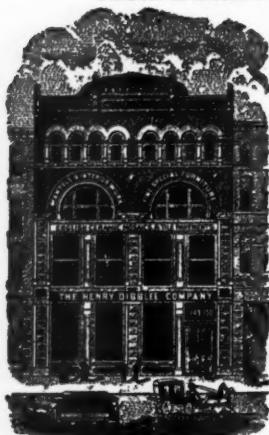
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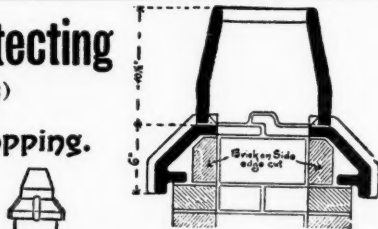
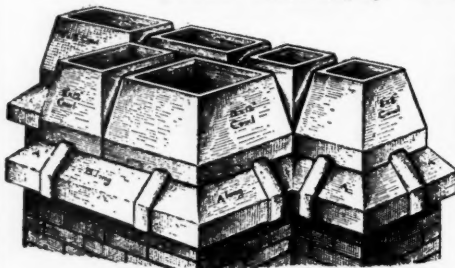
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THESE Toppings, made by steam-
press, VITRIFIED, SALT-GLAZED and in
RICH DARK BROWN color, finish and
weather-resisting quality are just like first-
class Ohio sewer pipe, and cost only a trifle
more than common unprotected brick top-
pings.HARALD M. HANSEN, Architect,
88 La Salle Street, CHICAGO, ILL., Patentee.

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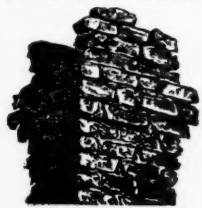
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Magnesia Sectional Coverings.

BEWARE OF FRAUD.

When purchasing Magnesia Sectional Coverings for boilers, steam pipes or other
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MAGNESIA SECTIONAL COVERINGS

Are a type of what a non heat conductor should be. Competitors selling Asbestos and Plaster Paris sections
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vassed and banded them to make them as closely resemble "MAGNESIA" as possible. Now
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See that when you buy "MAGNESIA" you get "MAGNESIA."
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New York Marble quarried Gouverneur, St. Lawrence Co., N. Y., has no superior for building fronts. Send for samples
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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXI.

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No. 2

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REQUESTS FOR CATALOGUES.

Those wishing catalogues sent them by dealers in general can have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT proper credit.

BREDE & MUELLER, new firm of architects, 39 and 40 Kanter Building, Detroit, Mich.

PASS UP TO THE HEAD.

THE INLAND ARCHITECT has been the recipient of many handsome brochures from enterprising firms and companies who have enlisted the best talent obtainable to present in a captivating way their various merchandise. Numbers of them have been not only splendid specimens of typography but artistic revelations as well. Their specific merits have been mentioned from time to time as they appeared, and it had become a settled conviction in this quarter that the end of this commendable rivalry had been reached and that the after-comers would have to depend for novelty upon a judicious selection from and combination of what had already appeared. And now the Beekman Salutory System Company has upset this restful conviction by sending through the mail an illustrated pamphlet of the celebrated Beekman plumbing specialties that eclipses all predecessors, and who must move down and let the company step up to the head of the class. The four introductory embossed chromatic illustrations, representing the whirlpool closet *in situ*, may be certainly termed realistic. They show in miniature just how a closet looks when fitted by the Beekman system. The decorated china closet bowl; the peculiar wood of the cabinet work; the metallic connections and apparatus; the tiled flooring; marble wainscoting; papered wall and tinted ceiling, all are there in shade, color and luster, just as they look in real construction. Surely this is a new departure and original as it is unique. The other portion of the handsome book is made up of finely-engraved monochromatic illustrations of the "whirlpool" closet in various styles and patterns, and well-printed text concerning them. The whole is bound in a cream-colored cover whereon is embossed the name of the company and title of contents. Issued by the Beekman Salutory System Company, New York.

AMERICAN TIN PLATE.

"After the deluge what?" has been answered in one direction, at least. During the late presidential canvass very many partisan newspapers strove to convince the people that there was no such thing as American tin makers and about an equal number, while admitting there were some insignificant attempts at the manufacture, prophesied they would terminate in failure, because we lacked both the machinery and mechanical skill to make a successful competition against the experience and proven methods of the long-time Welsh makers. THE INLAND ARCHITECT is just in receipt of a photograph of the tin plate works of N. G. Taylor & Co., Philadelphia, one of the oldest and best known tin plate houses in the United States, and which among others began the home manufacture early after the passage of the McKinley bill. The photograph apparently substantiates the

assertion of the company that their plant is one of the largest in the world; fitted with new and improved machinery and apparatus and operated by the best skilled workmen. Experts say this company is turning out exceptionally fine brands, and of which the Company states, there is no acid flux used in their manufacture nor any rolls, or any artificial means to create an appearance at the expense of quality. The regular brands of the company embrace seven styles or brands ofterne plate, including the well-known Taylor "Old Style," and six of bright plates. It announces facilities for the manufacture on short notice of any odd sizes that may be desired out of the regular proportions. It is quite apparent that tin plate is an American industry and that a company of such enterprise and laudable ambition as this one is not losing any sleep on account of the worry of foreign competition.

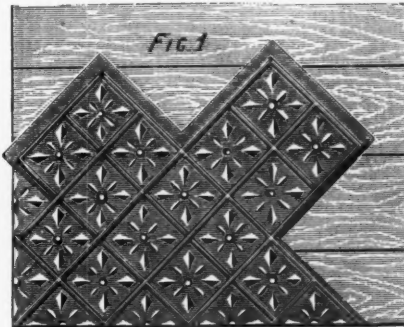
METALLIC SHINGLES.

The arguments in favor of metal roofing, which has become very popular of late years, decide that it will eventually be very largely used for dwelling houses as well as for other buildings.

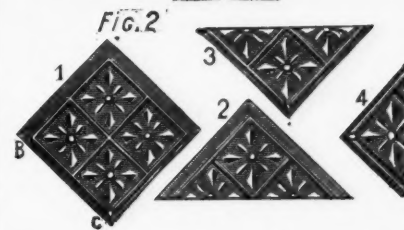
When one takes into consideration that it has all the necessary requisites of a good roofing material, namely, that it is proof against fire, capable of withstanding the force of wind, and provides for expansion and contraction consequent upon variation in temperature, is not heavy on trussing and requires little care, who would not be in favor of it.

By all those having a proper idea of artistic effects, the metallic shingles manufactured by the Garry Iron & Steel Roofing Company, of Cleveland, Ohio, will be appreciated. This company has given special attention to designing new styles in metallic shingles, and the style herewith illustrated is known as the "Swiss Cottage." Another style is shown in the company's advertisement in this number.

These shingles are made from galvanized and painted steel, iron and tin, are 14 by 14 inches and will lay 12 by 12 inches. They



GARRY SHINGLE.



are formed in a press uniform in size and shape. Each plate fits perfectly in its place, so that the nail hole, the tongue on the lower end of each plate, and slot in each left-hand side at the apex all come into their proper place so there can be no mistake in applying. One hundred will lay just one square. They are particularly suitable for Gothic, Mansard, Queen Anne and all roofs having one-fourth or more pitch, and are not intended for flat roofs. They make an excellent covering for churches and towers.

The engravings herewith certainly verify the statement that they are beautiful in appearance, and they are also durable, light and cheap.

The method of application is very simple, and with the directions furnished, anyone with a little ingenuity can apply them.

The new catalogue of 1893 issued by these manufacturers is a fine work of art and contains handsome illustrations of their metallic shingles, of all the goods they manufacture, and also a new and very artistic metallic ceiling that has never before been on the market.

Upon application an illustrated catalogue will be sent to any address.

WATER WASTING.

All over the country, in towns and cities whose water supply is furnished by motive powers, complaints of an insufficient quantity is frequently made, notwithstanding the "works" are pumping into the mains an amount of gallons far exceeding the quantity required by much larger populations. They are made at most unpropitious seasons — midsummer and midwinter — and caused by the selfishness of a care-nothing-for-other-people class of citizens who are content if they have a cool drink or can prevent their hydrants from freezing. This wanton waste of water is becoming a serious question in many municipalities, and there appears to be but one equitable solution of it: Charge users for what they consume. To do this, the gallons used by each must be measured and charged for, and that calls for a reliable and accurate meter. There are such. One that can be relied upon within our knowledge is manufactured by Henry R. Worthington, 86 to 88 Liberty street, New York. It is constructed upon what is termed the reciprocating piston principle, and has stood the test of a forty years' trial, coming out of it without a compromise save in a few improvements which in nowise affect the original principle of construction. Mr. Worthington has just got out a special catalogue giving all the necessary particulars regarding its use, and which may be had either of the home office or branches at Boston, Philadelphia, Chicago, St. Louis and Denver. It is well, as Captain Cuttle said, to "make a note" of this, as most certainly the time is near at hand when water meters will have to be generally used in all large cities and towns where water is supplied through hydrants.

THE SMOKE NUISANCE.

In these days, owing to the enlarged use of steam boilers, there is no inconsiderable "hue and cry" over the "smoke nuisance" in all the large cities. The great volumes of unconsumed coal that, pouring out of the chimneys, besmudging everything about them, is certainly an evil that calls for removal on account of personal discomfort, to say nothing of the attending destructiveness to all manner of property. Smoke consumers upon smoke consumers, that do not consume, have about made the public tired of the name, and offenders have reached that stage of desperation which takes the daily mulct fine as a natural concomitant of business. The question arises "What are we going to do about it?" Do as the doctors do, study the cause and then apply the remedy. Coal combustion is a chemical operation. It is the distillation of the coal into its proximate components, carbon and hydrogen, and then adding to them, in the right proportion, oxygen, taken from the atmosphere. When this operation is imperfectly performed the carbon is carried up the flue on the wings of the hydrogen and you have smoke, and something else besides, a needless waste of fuel that costs, in the course of years, a pile of money. The remedy then is to secure perfect combustion. How can that be had? The answer may be had by an interrogating letter written to the

ADVERTISERS' TRADE DEPARTMENT—Continued.

Theill Combustion Governor Company, of Baltimore, Maryland, which seems to have hit upon a very simple way to secure it. Users say it is a success.

FIRST IN THE FIELD.

THE KNISELY AND YELDHAM ROOFING COMPANY.

One of the most important parts of a house is the roof. Directly subject to all the changes of the weather and the climate, on its strength depends, in a very great measure, the durability of the structure which it covers. This is especially so in this variable northern climate of ours where the air is full of moisture, and the changes from violent heat to extreme cold are sudden and frequent. Thus roofs of inferior and unseasoned material, or roofs with any flaw in their construction, must soon succumb before the violent and direct attacks of wet and drought, heat and cold. With regard to the material commonly used for roofing, there is a variety of opinions. Slate, tin, tiles and many other articles are in use, and each has its advocates who will swear to its superiority above all the rest. It is not our province here to decide the question, but to call the attention of our readers to a house which has made and still maintains a very high reputation for superior work in all kinds of roofing. We refer to the Knisely & Yeldham Roofing Company, whose offices and works are situated in the Knisely building, 68 to 74 West Monroe street, Chicago.

This concern undertakes contracts for slate, tin, corrugated iron and tile roofing, galvanized iron cornices and skylights, and also do a large jobbing trade in tin, sheet and galvanized iron, etc. Their works are fully equipped with the latest and most approved appliances and machinery for the successful prosecution of an extensive roofing trade. They employ a large number of experienced and competent workmen, and with care, diligence, system and attention to details produce results not inferior to those attained by any other house in the city.

The officers of the company are: George F. Knisely, president; H. Judd Yeldham, vice-president; Harry C. Knisely, secretary and treasurer. These gentlemen have all had great experience, the president having been for many years identified with Knisely Bros. & Miller, James A. Miller & Bro., and other prominent firms, and the secretary fully qualifying for that work by years of experience at the head of the financial and clerical department of Richard Knisely & Son and Knisely Bros., their successors. Mr. Yeldham has had a practical training, having worked at the trade for some twenty-three years, and supervising many of their large contracts.

The business was established many years ago by the late Mr. Abraham Knisely, father of the present president and secretary, and is therefore the oldest roofing business in Chicago. It has only been recently organized under its present title, however, but with the prestige attaching to the name of Knisely, and the ripe experience and practical ability of the men now having it in charge, is certain not only to maintain its position but also to greatly extend its scope. The trademark and motto of the concern is "High Grade and Meritorious Work," and this aptly expresses the quality of all the product of this house.

WOOD MANTELS.

Unquestionably, nowadays, mantels are an important factor in interior decoration, so much so that no small attention is paid to the proper selection, from an artistic standpoint, of those that are to enter into the details of the residence under construction or being rejuvenated. In costly residences the architect often takes precious time to work out special designs, but more often relies upon the genius of designers employed by manufacturers whose sole or principal prod-

uct is this prominent wood decoration. All of these special manufacturers, from time to time, issue circulars or other literature affording examples of their product and thus keep the building public posted on their active existence. One of these gentle reminders has just been issued by the Interior Woodwork Company, of 307-309 Wabash avenue, Chicago. It consists of a catalogue illustrated with twenty-three different photogravures, showing as many designs of mantels, running in cost from moderation up to a price that special material and artistic elaboration would naturally name. This company furnishes with its mantels all required fittings, such as tile facing, hearth, wrought brass frame around the inside of the tile facing, dump club grates, etc., etc. It employs no traveling solicitors, and reaches the building public by judicious literature and advertising. It will pay to get acquainted with this company, either by sending for its literature or by correspondence, or both.

THE WILLER MANUFACTURING CO.

The following is a facsimile of a postal card received by the Willer Manufacturing Company, Milwaukee, Wisconsin, unsolicited, from Mrs. W. W. Wannamaker, of St. Matthews, South Carolina. It is a sample of many testimonials received without a solicitation by the company. Mrs. Wannamaker desiring some thirty windows of her residence fitted with sliding blinds, had several manufacturers furnish one set of their blinds as a sample, with the result that the Willer Manufacturing Company received the order to furnish the blinds for all the windows in her house.

*St Matthews, S.C.,
Nov 17th, 1892
Gentlemen,
Casparian
just up the last
blinds yesterday they
are admired by every
one who visit our
dwelling, and there is
nothing in the house
that I am better pleased
with. My husband says
draft had been sent you
in payment for same.
Thanking you for the
superior job & very respectfully
Mrs. W. W. Wannamaker*

THE GARDNER SASH BALANCE.

THE INLAND ARCHITECT has frequently found occasion to say good words for the Gardner aluminum bronze and steel sash ribbon and sash balance which has met with a success since its introduction nothing short of phenomenal. There is nothing new to be said for it only that it appears to be growing daily more popular among architects and builders. The occasion for this reference is the receipt of a handsome illustrated catalogue showing many prominent buildings in which it has replaced other hangings or been specified in the details of construction. They represent nearly every city in the country—New York, Philadelphia, Boston, Chicago, St. Louis, Minneapolis, St. Paul, Duluth, Denver, Kansas City, Milwaukee, Sioux City, Des Moines, Omaha,

San Francisco, San Jose, Oakland City, etc., and comprise an exhibit of seventy-odd among the finest buildings in the United States, not including nor omitting the new National Palace to be built at the capital of our sister republic, Mexico. Accompanying each cut is a testimonial from the architects thereof, and those make the publication more emphatically, what the Gardner Sash Balance Company intended—"a good thing to keep."

A SPECIAL CATALOGUE.

The Joseph Dixon Crucible Company, of Jersey City, has just issued a catalogue, exploiting all the required information regarding the company's numerous brands of graphite pencils. The cover is illuminated with the legend, in gold letters, "Dixon's American Graphite Pencils," and a very realistic print of one of the S. M.—No. 2 brand, enough so to incline one to think the company is distributing actual samples with the catalogue. It is not designed for general distribution, but all dealers and stationers can procure a copy on application. It may not be generally known that the Dixon pencils are the only ones that can claim to be American products in every particular, although it is common knowledge that there are no finer pencils made anywhere on the globe.

ARTISTIC IRONWORK.

Calling the attention of our readers to the advertisement of the Ludlow-Saylor Wire Company, of St. Louis, Missouri, in this issue, we desire to say, that no concern in the country is better equipped to do work in their line. They make a specialty of art metal work, in wire, iron or brass, and with their extensive plating plant, are prepared to treat work in any manner, whether Japanese bronze, nickel, silver or Bower-Barff. Their oxidized work is particularly beautiful, and the counter and floor railing in oxidized silver now being put into position for the Commercial Bank of St. Louis, has received the highest encomiums from every one, even their competitors. They have placed elevator inclosures, bank and counter rails, grilles and stair rails, and art metal work of all kinds, in every city in the country, and ornamental work for theaters is with them a great specialty. They are now at work on this class of decoration for the largest opera house in the South, the De Give Opera House of Atlanta, Georgia. The bathroom stand is something new, and with other bathroom fixtures made by this firm, are just what are needed for the convenience of the bath. Catalogues furnished on application, and estimates made on original designs.

CHICAGO, March 10, 1893.

To the Public, and to Architects especially:

The contract between the North-Western Expanded Metal Company, and S. M. Randolph (exclusive Agent for Northern Illinois), has been canceled this day by mutual consent.

The undersigned will continue the development of improved construction, and hopes to be of greater service to the profession and to the public in a new and larger field for study and experiment. S. M. RANDOLPH.

It will be a matter of great interest to architects in general, and to those of Chicago in particular, to learn that the Ludowici Roofing Tile Company's celebrated clay tiles will soon be manufactured in this city. The plans are already under way, and it is expected that by the end of June the factory will be in full operation. Metallic tiles have been used in this country with good effect and have become quite popular, and this fact is a sufficient indication of the reception that awaits the Ludowici Clay Tile. The office of the company is at room 22, No. 94 Washington street, where samples of the tile may be seen.

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXI.

ADVERTISERS' TRADE SUPPLEMENT.

No. 3

THE POTSDAM RED SANDSTONE.

Something more than a year ago THE INLAND ARCHITECT, after a careful review of a series of government tests and other reports from stone experts on the peculiar characteristics of the red sandstone quarried at Potsdam, New York, crystalized its extended opinion in this paraphrase: "Possibly God may have made a better building stone than the Potsdam red sandstone, but if He has, man has not yet discovered it." Since that time there have been other occasions when it has been favorably mentioned, and wherein the question of a probable higher price, in comparison with other high grade building stone, in the western market, was met by the offset of its unquestionable durability and other superior qualities that most effectually destroyed the idea of apparent costliness, when its use came into the problem of permanent building construction. Of course, the presumption of a higher price was based upon the freight expense that would follow in the transportation of the stone from the quarries to western points, but even this one and only barrier to its introduction in the West on the same basis that it can be utilized at the East may be a mere insignificant addition to the price, owing to the cheap transportation afforded by the great chain of lakes, which would reduce the excess to a barely noticeable figure, hardly worth consideration when the value of material is in the calculation.

The inspiration for once more referring to this particular stone lies in the fact that there are an unusually large number of public buildings about to be constructed in the West, some of them in states and cities bordering on and contiguous to the great lakes, and unquestionably the general desire must be that they shall be of a permanent character and not, as too generally happens, be built of material subject to all the disintegrating influences of atmosphere and time.

It is in furtherance of this presumed universal desire that we reproduce a very interesting article, from the *Scientific American*, of January 7 last, giving a full and complete exposition of everything pertaining to this very peculiar sandstone, as it cannot help but be of value and interest to every architect, contractor and builder at all interested in buildings that will last and retain the evidence of the skill and money expended on them:

"THE POTSDAM RED SANDSTONE QUARRIES.

"A perfect building stone is far from being a common product of nature. To be qualified as a perfect building material, a stone must unite the qualities of resistance to weather and to fire, must be of good appearance and impervious to moisture. It should also not be of such a tint as to become dingy or of ugly color when exposed. The streets of this and other cities furnish the best possible example of defective building stone. Brownstone buildings are seen whose carved portions are disintegrating and the faces of whose smooth wall pieces are flaking off. To avoid this destruction various suggestions and experiments have been made, either in the way of chemical treatment or of method of laying, but nothing seems to stop it. The experience of Boston and of other cities has demonstrated how

poor a resistant to fire is granite. Granite is often a stone of handsome appearance, and will in some cases stand any amount of exposure to the elements, but it is very unsatisfactory in the presence of a conflagration. Although stone is everywhere recognized as the noblest and most desirable of building materials, yet so great has the difficulty of securing good stone become that many large buildings are built entirely of brick and terra cotta, the art of man being relied on to surpass nature.

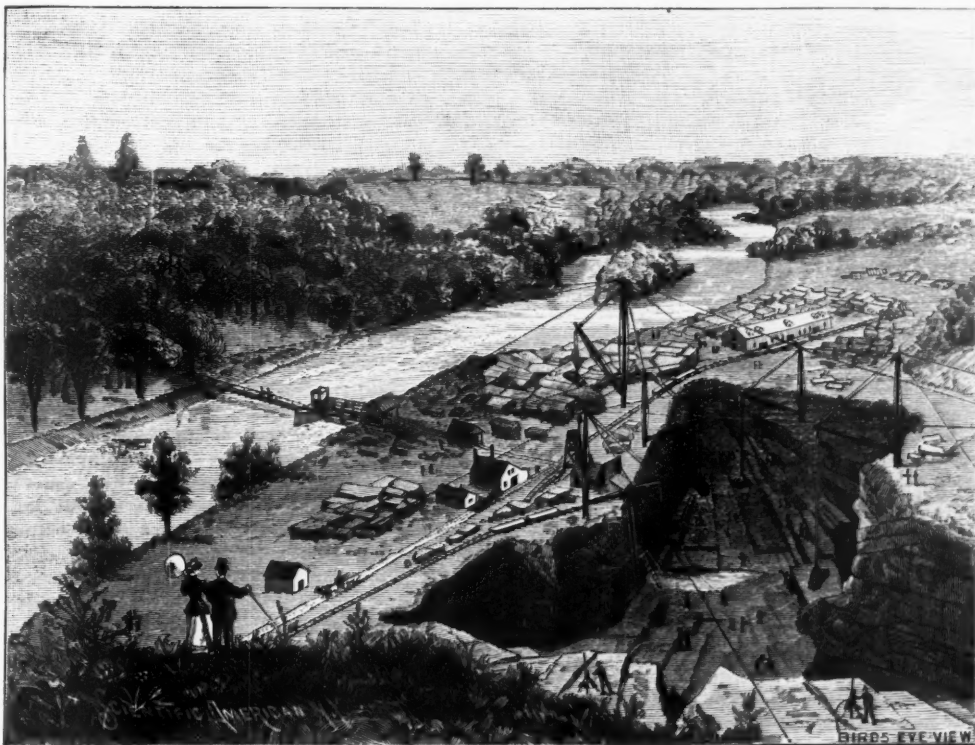
"The Potsdam sandstone is a member of the lower Silurian group and rests upon the primitive rocks of the Eozoic. This lower portion of the Potsdam formation varies from an absolute quartzite to a sand. In the present issue we illustrate the quarries at Potsdam, N. Y., from which this stone is extracted for building purposes. Here the famous sandstone is attacked at the place where it seems to be of the best average quality. A thickness of seventy feet is exposed in the quarries. At this point it is almost a quartzite.

"The examination of a microscopic section of the rock discloses the following char-

silica. . . . In the Potsdam sandstone, on the contrary, the grain of the quartz is quite small; its shape, when it can be distinguished at all by a magnifying glass, is always angular. . . . This is the best of all building materials, though mouldings made of the other variety (large grains) will last for many years without suffering any appreciable amount of deterioration."

"The other sandstones vary greatly from this. In many cases the quartz grains which form a body of sandstone are mixed with grains of feldspar and mica, which in themselves present at least a chance or probability of decay. The cementing material also varies; it may be of argillaceous nature or may be even a calcium carbonate. As cements all these are defective. They always tend to yield to the weather.

"As a weather resistant pure crystalline quartz would be the best of all materials. This, of course, being out of the question, the next best thing would be in the line of a flint rock or quartzite. To the latter type, the Potsdam sandstone is closely assimilated. It departs far enough from it to be workable. Although extremely hard, it can be



acters: It is found to consist of angular grains of clear quartz, quite unmingled with other granular material. There is no feldspar or mica intermingled with it. The interstices between the grains contain a cementing material. This is found to be a clear, colorless silicious cement, so that the rock is virtually silica. On this point, Professor Thomas Egleston, of the Columbia College School of Mines, and an authority on building stones in the United States, in a paper read before the American Society of Civil Engineers, on the decay of building stones, says: 'Of the sandstones having a silicious binding material, Potsdam sandstone, which has been used in the recently constructed Columbia College [an engraving of which is published herewith], and the silicious triassic sandstone, which was the material used in the lower part of the cathedral at Rodez, are the best examples, and in these no decomposition takes place. Of these sandstones, it will be noticed that there are two general varieties, one in which the quartz grains are more or less large, and are rounded, but are cemented together by

wrought into all the shapes demanded by modern building, including the most exquisite carvings and moldings. Its strength is very great. It has been tested on the Emery testing machine at Columbia College in this city, and proved to be of extraordinary compressive strength. Some pieces placed in the machine and subjected to stress broke at a little over 18,000 pounds to the square inch. This figure brings it as regards strength quite out of the range of most sandstones and limestones and makes it surpass the majority of granites. But one marble and one sandstone in a very long list approaches this strength. What is still more extraordinary is that two-inch cubes from one of the quarries proved too strong to be broken by the testing machine, although the pressure was carried to 151,000 pounds. This test reduces to a compressive strength of nearly 43,000 pounds to the square inch, or more than double the strength of the best granite. This result, so extraordinary as to be properly termed an anomalous one, proves what the stone may be.

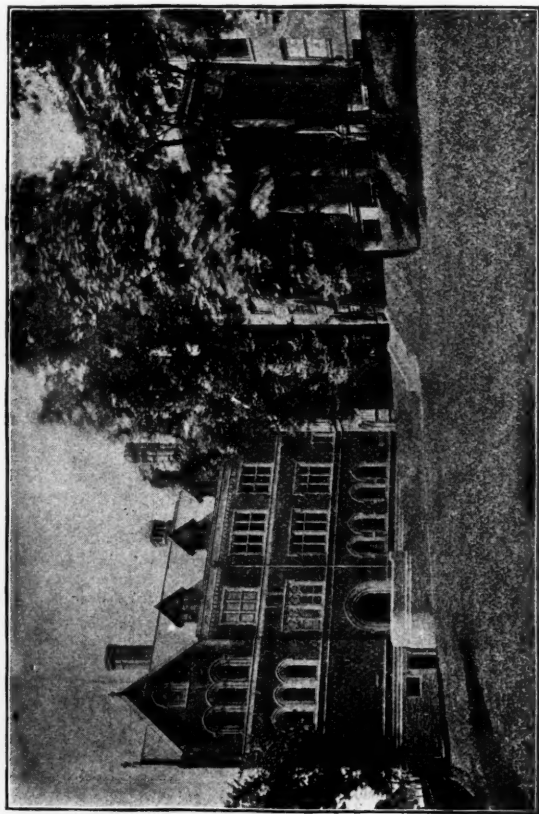
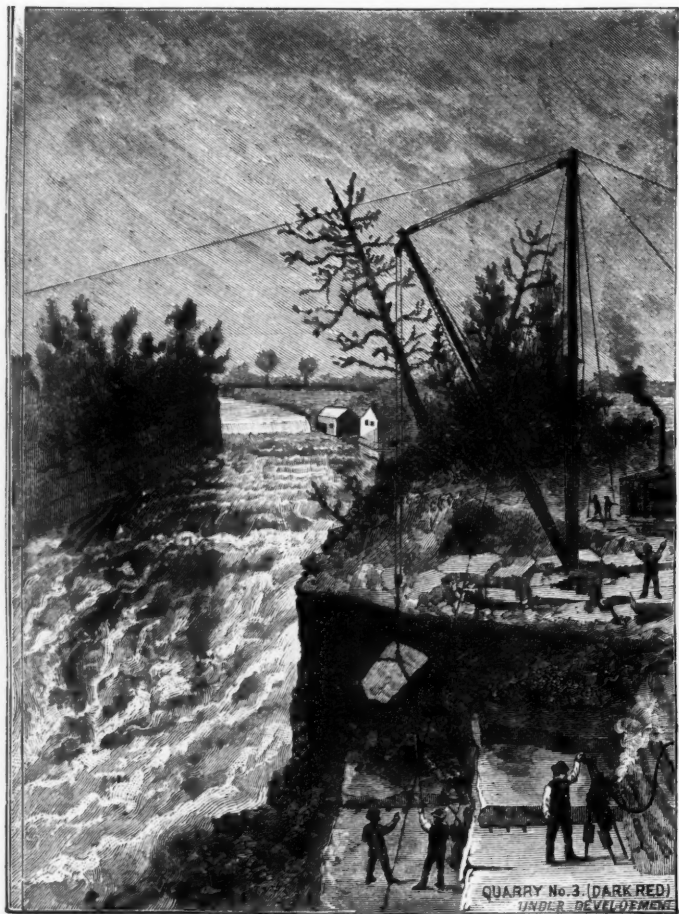
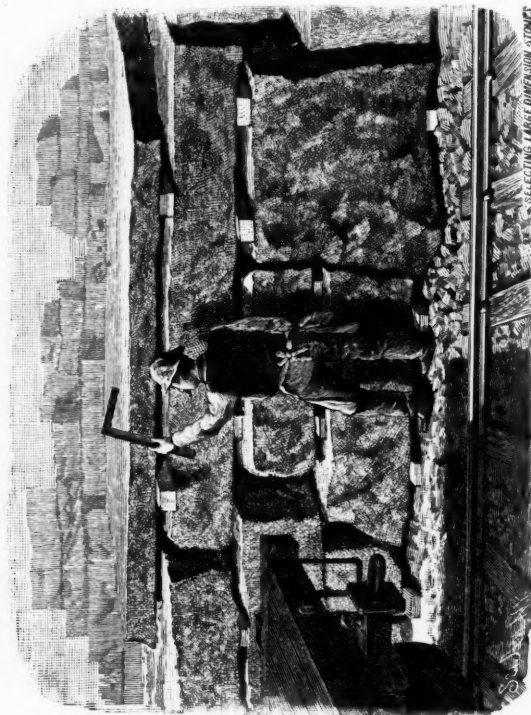
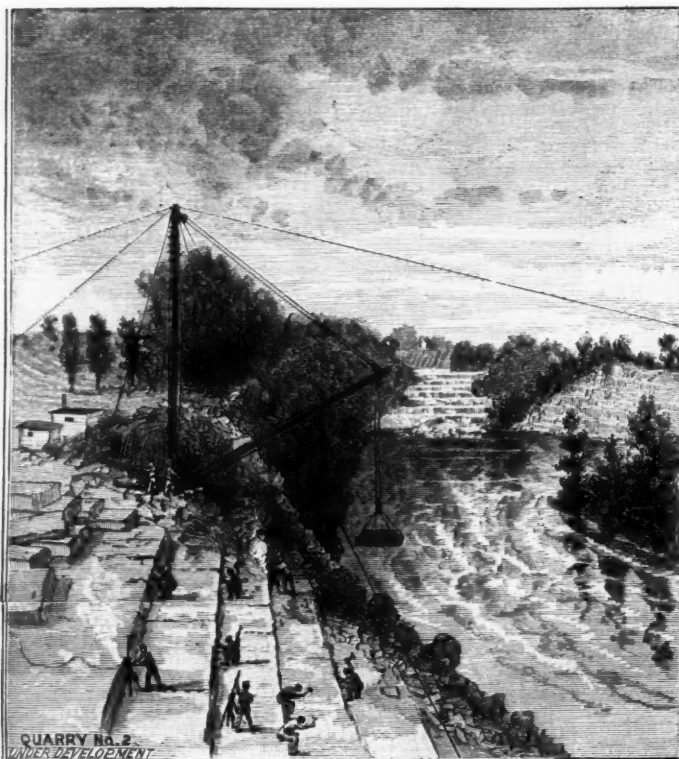
"We have said granite may be weather

resisting. While this is very true, it may be equally true that other samples will fail to withstand the American climate. To determine, as well as possible, what the action of the weather, including a contaminated city atmosphere, might be on Potsdam sandstone, it has been tested by subjection to acid and sulphurous acid gas. Dilute sulphuric acid, after long action, dissolved only $\frac{1}{100}$ of one per cent, or a mere trace, while some stones lost over six per cent.

Sulphurous acid gas only changed its weight $\frac{1}{1000}$ of one per cent. These two tests are designed to represent the action upon it of the city atmospheres. As a direct test, samples have been repeatedly subjected to the severest freezing and thawing, and have remained absolutely unaffected.

"In the vicinity of the quarries, buildings have been constructed of this stone, which have stood for over seventy years. Yet, exposed for this length of time to the trying

climate of northern New York, the stone has preserved its fresh appearance and has not yielded in the least, the tool marks being as clearly discernible as if made yesterday. Professor Newberry has expressed the opinion that 'had the obelisk now standing in our Central Park been composed of such a dense, homogeneous sandstone as Potsdam sandstone, it would today be as perfect as when erected at Tanis 1500 B. C.' Here it may be noted that this very obelisk, which

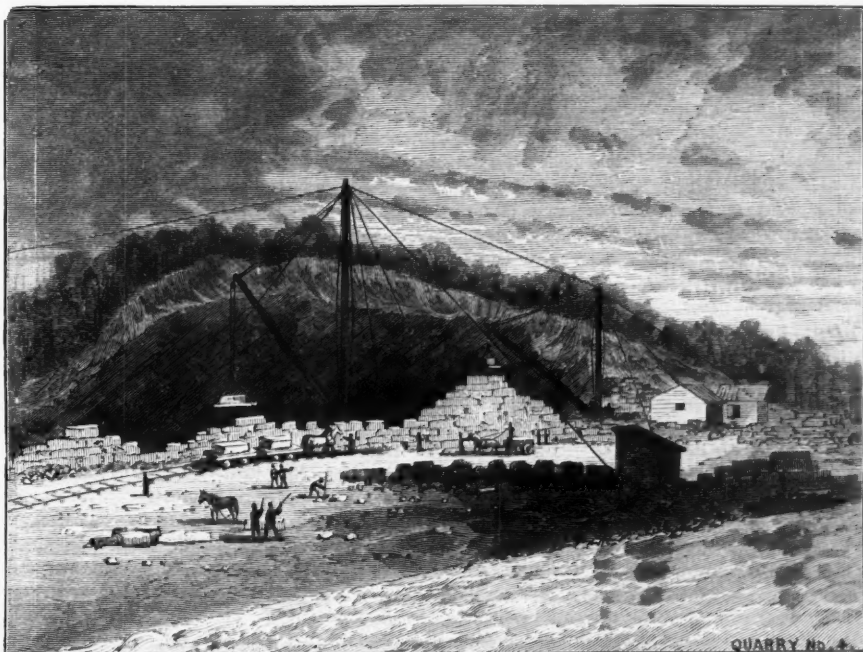


suffered so much on exposure to our climate, is made of granite.

"We have spoken of the poor qualities of granite as a resistant of fire. The action of a conflagration upon granite is to cause it to flake off; walls composed entirely of this material may thus become so reduced in thickness as to fall. It is there that the qualities of Potsdam sandstone appear at their best. It is so absolutely fire-resisting, its granular structure so completely prevents it from cracking, that it can be heated to a red or white heat without injury. By many foundrymen it is preferred to fire brick for lining cupolas, and in the vicinity of the quarries is always used for lining lime kilns. The report of Professor Wilbur, of Rutgers College, to Dr. Smock, the New York State Economic Geologist, showed that this stone withstood repeated heating to the temperature of melted copper, and sudden cooling, without injury or change of color—something which no other stone of the large number tested by him could do.

"The qualities of Potsdam sandstone have been carefully examined and tested by men of the highest scientific standing. Dr. J. S. Newberry had occasion to examine the stone in 1890, and his report fully carries out all that we have said above. Dr. Newberry is professor of geology in Columbia College School of Mines; the opinion of his eminent colleague, Professor Egleston, who has charge of the department of mineralogy in the same great institution, is sufficiently indicated by the extract from his famous essay on the Decay of Building Stone, read before the Society of Engineers, which we give above. Prof. John C. Smock, New York State Economic Geologist, and Prof. Francis A. Wilbur, of Rutgers College Scientific School, are among the authorities we may refer to. Dr. George P. Merrill, of the Smithsonian Institution, at Washington, is our authority on what we have said of the microscopic examination of the stone. In his new work on the Building Stones of the United States, Dr. Merrill says, referring to Potsdam sandstone: 'I consider this, from the standpoint of durability, almost an ideal stone. It is practically non-absorptive, and its surface affords no foothold for growing organisms.'

"Our illustrations of the quarries and workshops of the Potsdam Red Sandstone Company, of Potsdam, New York, tell their own story. They show the immense scale on which the operations are there carried



on. From the everyday point of view a valuable feature is the large accumulation of ready quarried stone, nearly 100,000 cubic feet usually being carried in stock, including 40,000 or 50,000 feet of the famous Potsdam random rockfaced wall facings, cut ready to ship, so that contracts can be filled immediately on receipt of orders. This puts the business on a par with the brick and terra cotta makers, who from necessity are compelled to ship from stock, and absolutely avoids the proverbial delay in stone contracts, which is a standing joke among builders. Although it is the policy of the company to sell rough stone only, yet where local cut stone contractors refuse to make fair figures on work, their unrivaled facilities enable them to cut stone ready to lay in the building, and to set it if required in any part of the United States or Canada.

"The peculiar stratification of the material as it lies in the quarries will be noticed. The natural beds are nearly perfect, which greatly reduces the cost of cutting. Immense blocks are got out almost of perfect

shape, by the use of wedges and feathers, sometimes assisted by some of the patented methods of blasting. The equipment of machinery is of the most modern and complete description.

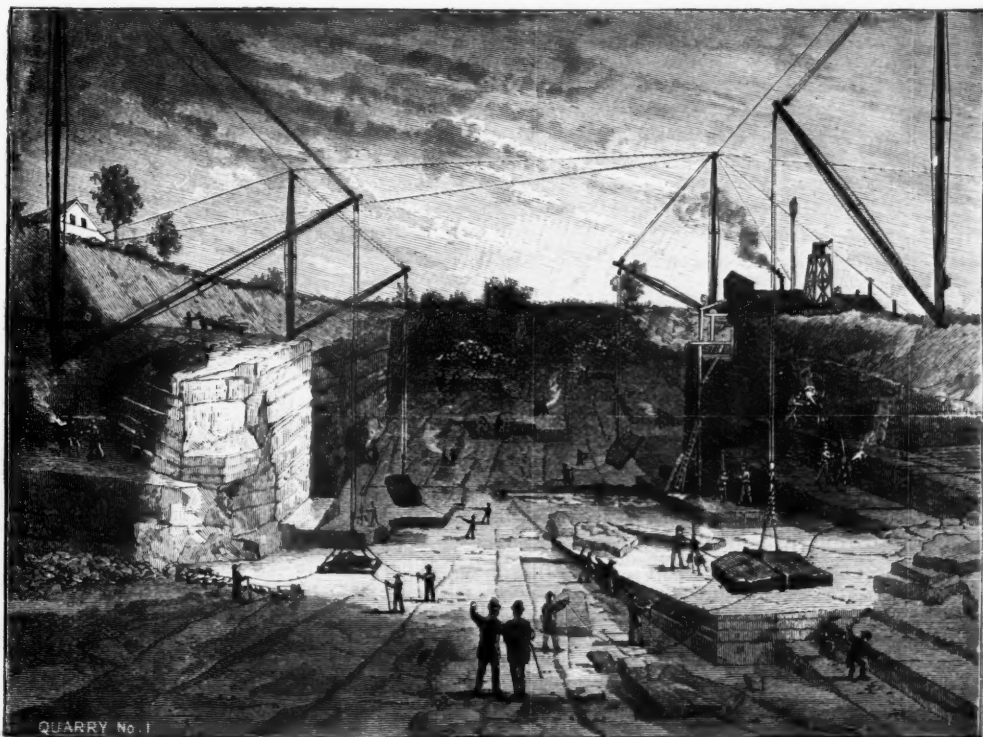
"Doctor Newberry says: 'The element of beauty is no less important in a building stone than strength and durability. In these three qualities this stone is certainly unrivaled.'

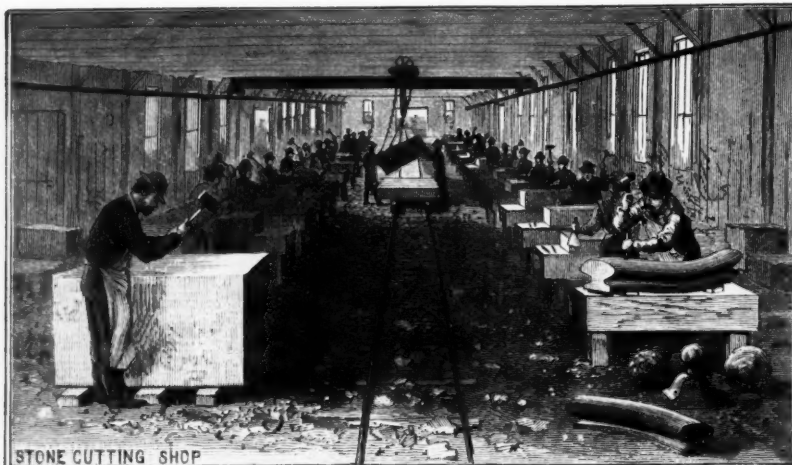
"The different quarries of the company afford a certain choice of color. The red stone is of an exceptionally pleasing and bright tint. About fifty feet of these layers is exposed in the quarries. Stone can be taken out from two to six feet or more in thickness, and can be wedged into any size from these thick stones, resembling granite in this. The company's quarries are distributed for about a mile up and down the Racquette river, and embrace the best outcrops of stone to be found in the district. Doctor Newberry reported, after personal examination, that these quarries were practically inexhaustible. We may, therefore, pronounce the company's quarries an almost ideal source of building material.

"One of the cuts, showing a workman selecting dimension stone from stock, gives an idea of the form in which stone comes from the quarry. Another cut, showing the interior of a stone-cutting shed, shows workmen getting out stoop rails and other forms.

"Quarry No. 1, from which the main supply is derived, is shown in two cuts. The peculiar stratification of the stone is very noticeable. It is exceedingly regular, with sudden variations in the dip. The drainage of this quarry is effected by an undershot water wheel, shown in the bird's-eye view to the left of the picture. From Quarry No. 2, now under development, a medium red stone is taken. This quarry, for a long time to come, will be self-draining, as will also be the case with Quarries Nos. 3 and 4. From Quarry No. 3 a dark red stone is taken.

"The Racquette river, on account of falls and rapids, is not navigable, although it is the second largest river in New York, but great





STONE CUTTING SHOP

numbers of logs are floated down it every year from the Adirondack forests. A fall on their quarry property gives the company nearly twenty thousand horse-power, the entire river falling about sixty feet, and this will be of great value in the future development of the business, giving by means of compressed air or electricity, ample power for the working of machinery now using steam, and for other purposes.

"There is one product of the quarries which should be mentioned, the banded stone. Some layers are strongly banded in different colors. With these the most beautiful architectural effects can be produced. The combination of light, medium and dark red stone in solid colors and the banded variety, gives great latitude to the architect in producing color effects. The colors harmonize excellently with granite or brick, and instances of this use are numerous. Among the buildings where the stone has up to this time been used for the whole or a part, may be mentioned the Dominion Parliament buildings at Ottawa, shown in the accompanying engravings; All Saints' Cathedral, Albany; Columbia College, New York City; the New York State Asylums at Ogdensburg and Matteawan (costing over a million each), and numerous buildings in New York City, Brooklyn, Buffalo, Syracuse, Rome, Albany, Troy, Lynn, Washington, D. C., Rondout, New York; New Rochelle, New York; Ogdensburg, New York, etc., and many smaller cities and villages in the United States and Canada.

"The quarries are situated near the line of the Rome, Watertown & Ogdensburg Railroad, and ship their product by the New York Central system in all directions."

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

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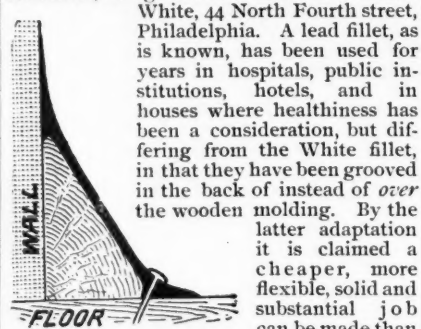
WM. W. FIFE, architect, First National Bank Building, Ogden, Utah.

E. HILL TURNOCK, architect, rooms 29 and 31, No. 155 Washington street, Chicago.

WHEEL & CAMP, 250 Fifth street, Louisville, Ky.

SANITARY FLOOR SKIRTING.

The annexed engraving represents a patent lead fillet, being an invention of Mr. Howard



White, 44 North Fourth street, Philadelphia. A lead fillet, as is known, has been used for years in hospitals, public institutions, hotels, and in houses where healthiness has been a consideration, but differing from the White fillet, in that they have been grooved in the back of instead of over the wooden molding. By the latter adaptation it is claimed a cheaper, more flexible, solid and substantial job can be made than by the former method. It has been spoken highly of by architects who have tested it for a number of years in the construction of sanitary buildings.

FOR THE MORMON TEMPLE.

The Standard Manufacturing Company, of Pittsburgh, shipped today by express a car load enameled baths of special make and design for the great Mormon temple at Salt Lake City. They are the largest ever made and are on a scale of magnificence never before attempted. The contract was first offered to the Mott Company, of New York, and then to European firms, all of whom declined to undertake the work, which, however, has been successfully performed by the Pittsburgh concern. The designs were made by Brigham Young's son, and Elder Midgely, of Salt Lake City, was here for twelve days during the progress of the work.

The Mormon temple is said to be a very gorgeous affair, the lavatories being finished in onyx, and the baths shipped today were made to correspond with their surroundings. A duplicate of one of them will soon be exhibited by the local firm and also placed on exhibition at the World's Fair. The express charges on the lot amounted to \$1,000.

METAL BUILDING MATERIAL.

The "Scott Extra Coated" roofing tin manufactured by J. B. Scott & Co., Pittsburgh, Pennsylvania, is like old wine that needs no bush. The building public is well aware that this brand of tin is made of the best American soft steel and coated heavily and evenly and that every sheet is uniform in quality, nothing else being permitted to have the firm's trade-mark stamped upon it. But while it is so generally known that the firm manufactures this high grade roofing material it may not be so widely known that it is engaged in the manufacture of other metal building material, such as steel roofing, siding and ceiling, of a quality, character and variety, that makes the combined output one of no insignificant import to

architects and contractors, who are engaged in planning and constructing the latest modern architecture in which metal has become so essential an element or component. An attentive reading of the circulars of this enterprising and well-established firm cannot help being instructive and beneficial to everyone interested in building, as they are written in concise words, giving all required information in the shortest possible way.

SHIPPING A FACTORY ACROSS THE ATLANTIC.

On March 15 was loaded at New York the entire plant and equipment for the Steel Clad Bath Company's English factory. The great presses and rolling machines of different descriptions made at Detroit were consigned direct to the company there, and will be erected immediately on arrival under the superintendence of Mr. James Hutcheson, formerly of the Detroit company, who left on March 25, via City of New York for Liverpool.

The remarkable progress of this company is beyond the expectations of the directors, and we learn that at a meeting to be held on the 31st, the plans for a new three-story building will be decided on. Their exhibit at the World's Fair will be one that Detroit may be proud of, and will represent their manufactures in the United States, England and Canada. The Canadian Pacific Railway's exposition train, which recently passed through here, contained a beautiful specimen of their work in the bathroom of its café car.—*Detroit Free Press.*

TRIPLEX POWER PUMPS.

Among the recent installations of triplex power pumps, the Goulds Manufacturing Company beg to call attention to the one just installed in the Fireman's Insurance building, Baltimore, Maryland, by Messrs. D. E. Evans & Co., same city.

The problem for solution was the operation of an Otis Hydraulic Passenger Elevator, which had been formerly run by city water, by means of an electrically operated pump. The plant consisted of 15-horse Thomson-Houston Motor belted to an "8 by 8" triplex pump, which maintained a pressure of 80 pounds in 1,500 gallons pressure tank. The control of the motor and pump being effected by a Clark Regulator, furnished by the Thomson-Houston Company. The pump is speeded at 40 revolutions per minute and maintains a uniform pressure of 80 pounds in pressure tank and upon the starting of the elevator, the regulator is so nicely adjusted, that the pump and motor would start within a variation of a few pounds from the normal pressure and upon completion of the elevator trip and the pressure again accumulated and the pump and motor was automatically stopped and no current used.

From the data collected regarding the power consumption, etc., it is calculated that the power for ten hours a day for a month, would not exceed five to six horse-power, which is indeed a very economical rate for operating an electric elevator for office buildings. Also, the apparatus was so arranged that in case of a break-down at the electric power station, the city water could be instantly turned on and the elevator run from its pressure until the electric energy was again supplied.

I. P. FRINK, New York, manufacturer of Frink's Improved Reflectors, has received the following letter:

"DEAR SIR,—I enclose check for the amount of your bill. The work is entirely satisfactory; your men are excellent workmen, and it is a credit to any establishment to have such able and conscientious employes. I have much pleasure in recommending your work. Faithfully yours,

"JOSEPH JEFFERSON."

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WHEEL & CAMP, 250 Fifth street, Louisville, Ky.

MERCHANT'S GRADUATED TILES.

There are at the present time few first-class buildings being erected that do not have one or more towers upon them, and no feature of the modern building adds more to its architectural beauty than a graceful and well-proportioned tower. Yet in their construction a difficult problem has invariably arisen as to a suitable covering—especially for conical towers, for which there has been nothing in the market adaptable, the only available covering being wood shingles, which split when drawn to the convex form of the tower. Slate from the same cause will break, and metal shingles of forms designed for straight roofing involving a waste of just fifty per cent of materials in fitting to cones and a greater waste of time in putting on, as after the first course each succeeding one has to be reduced in size, and practically made over by the roofer.

To remedy these difficulties we have employed the highest inventive mechanical skill obtainable, stipulating that it must be



(Patent applied for.)

of the "Spanish Tile" pattern and so graduated in size and form, that it will fit all round towers and domes, the lower ends to have a secure fastening and all nail-heads to be covered. The manufacturing to be done in the factory and not by the roofer on the building. These specifications have been

fully carried out in the invention and we now place it before the public as the best and the only suitable covering in the world for conical towers and domes.

We have selected the "Spanish Tile" pattern from all others, as it presents much the richest architectural appearance, having been the most desired form through past ages, and today is the most sought after by all who admire the "artistic."

As tower roofs are always the most difficult portions of a building to get at to repair or repaint, they should be covered with that which will never require either. Copper, therefore, is the only material that will meet these conditions, as it is indestructible and grows richer in appearance with age. We also furnish these tiles made of our Guaranteed Roofing Plates.

It will be noticed that in both our Graduated and regular "Spanish Tile," the locks are so constructed that the water cannot enter them, but is carried from, instead of to the lock. In this feature they differ and are incomparably superior to all others.

GENERAL INSTRUCTIONS FOR LAYING.

Prepare the roof by securely nailing to the sheathing from eave to cone strips of lumber $\frac{1}{4}$ inches thick, suitable width at lower end and $\frac{3}{4}$ inches wide at top. Space between strips must be uniform, varied according to size of tower.

Lay two courses of the flat portion of the tile, first beginning at the eave, using the largest size, or lowest number (the graduated tiles being numbered in rotation), with the upturned edges fitting nicely between the wood strips, through which they are nailed. Overlap to the recess formed in top end of tile below. In putting on the curved parts, use for each course the number corresponding with plain portion, and nail into the wood strips through cleats at upper end, then fasten lower end of first course by nailing upwardly into the end of the strip; all tile above will be secured by telescoping over the tile below. Each tile has its number stamped on it—No. 1 being largest (flat and curved portions corresponding). Full numbers do not taper to next size smaller, but O's do. Should it be required to make a full taper from ordinary numbers cut a strip from each side of the curved parts $\frac{1}{8}$ inches wide at top, and running out $1\frac{1}{2}$ inches above lower end. This leaves the lock perfect.

MERCHANT & Co.

Philadelphia, Pa.

AN INTERESTING CATALOGUE.

The Excelsior Steel Furnace Company, of Chicago, has just issued a 200-page catalogue, prefaced by an interesting treatise on hot-air heating, wherein the specialties of the company are intelligently illustrated and accompanied by all the data of information arising therefrom, arranged in tabulated form. Outside of its advertising features, the book, for such it really is, affords much useful and necessary information on furnace heating that ought to form a part of every house constructor's knowledge. The merits of the company's hot-air and hot-water devices, for house warming, are too well known among the architectural fraternity to require recapitulation.

A RIGHT MAINTAINED.

The Chicago Anderson Pressed Brick Company has just come out victorious in an injunction suit with the city of Chicago, concerning their claim of ownership to quite an extensive strip of land upon which the company had erected improvements to the value of \$200,000. The strip is thirty-three feet in width and extends the length of the company's factory land. The city claimed the strip as having been dedicated for a public street. The decree of the court found that the city never accepted the street or improved it as such and perpetually enjoined the city from interfering with the company's possession.

ORNAMENTAL HARDWOOD FLOORS.

One of the largest and oldest manufacturers of ornamental hardwood floors is S. C. Johnson, of Racine, Wisconsin. He has made an exhaustive study of the different modes of manufacture, and is fully prepared to execute all orders carefully and promptly. He has just issued a new and beautiful catalogue showing nothing but new and artistic designs that are not made by other manufacturers, and will be glad to mail one of these new catalogues to any one who may be interested.

Mr. Johnson also manufactures the very best material for finishing all kinds of hardwood floors. This is Johnson's prepared wax put up in two-pound cans. It does not scratch or show heel marks like shellac, nor does it gather dust and dirt like oil. It is very easily applied, and floors finished in this manner are easily kept in order by inexperienced persons.



TRADE NOTES.

ON May 1 the well-known manufacturers of speaking tubes, electric bell supplies and electric house furnishing goods generally, W. R. Ostrander & Co., removed their place of business from 195-197 to 204 Fulton street, New York city. As the goods of this firm are rated A1 by the building profession, and largely utilized all over the country, it will be well for the fraternity to take down their memorandum books and, as Captain Cuttle would have said, "make a note on't."

SAMUEL CABOT, maker of the celebrated shingle stains bearing his name, has complimented THE INLAND ARCHITECT with a copy of the picture of his vast factory at Boston, done in imitation of water-color painting. It seems to have been published as a souvenir of his exhibit at the Columbian Exposition, as allusions are made to several buildings in "The White City," where the stains have been utilized—two great discoveries, as it were, brought delicately to public attention by a little forethought.

THE B. F. Sturtevant Company, manufacturers of blowers, exhaust fans, steam hot-blast apparatus, portable forges, steam engines, etc., and whose great plant is located at Jamaica Plain, Boston, has recently purchased for occupancy by the Philadelphia branch a four-story building, No. 135 North Third street, where not only a complete line of the company's machinery will be kept, but a loft will be set apart for the manufacture of the sheet-iron piping which is used with the Sturtevant blowers and heating and ventilating. This loft will be in charge and under the supervision of Mr. C. H. Gifford, who has been connected for fifteen years with the Boston concern.

THE Cortright Metal Roofing Company are now prepared to furnish a new size (7 by 10 inches) of their "Victoria" Shingle. Heretofore they have only made the one size, that is 10 by 14 inches, and it proved so popular last year that they have added the smaller size. They particularly recommend it for ornamental bends, gable ends, towers, etc. It has the same side-lock and top and bottom overlap as the Company's other goods which have proved so successful wherever introduced. During the great World's Fair to be held at Chicago from May 1 to October 30, 1893, their goods will be on exhibition in the Manufactures building (North-west corner Section H). The Company have erected a small building and covered the roof with "Victoria" shingles, made of copper, while on the sides their metal slates, 7 by 10 size, are placed. You are invited to visit and examine this exhibit and secure small souvenir samples, which will be distributed gratis by their representative in charge.

ANSON S. HOPKINS, President and Gen'l Manager.

B. E. SUNNY, Vice-President.

I. G. SANBORN, Sec'y and Treas.

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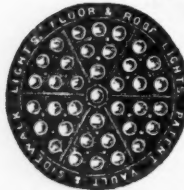
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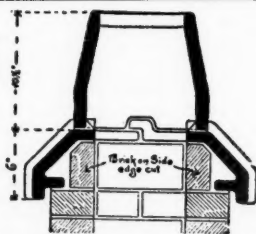
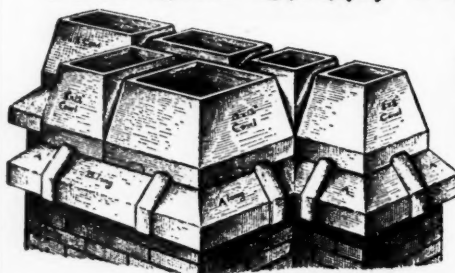
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THE HANSEN PATENT Weather-Protecting SALT GLAZED, (EVER-LASTING) Terra Cotta Chimney Topping.

THESE Toppings, made by steam-
press, VITRIFIED, SALT-GLAZED and in
RICH DARK BROWN color, finish and
weather-resisting quality are just like first-
class Ohio sewer pipe, and cost only a trifle
more than common unprotected brick top-
pings.HAROLD M. HANSEN, Architect,
88 La Salle Street, CHICAGO, ILL., Patentee.

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THE STANDARD DRAIN-PIPE CO., St. Johns, P. Q., Canada.

W. S. DICKEY CLAY MANUFACTURING CO., New York Life Bldg., Kansas City, Mo.

EMPIRE FIREPROOFING CO., Main Office Cor. Wood and Fifth Ave., Pittsburgh, Pa.

Works at Empire, Ohio.

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See that when you buy "MAGNESIA" you get "MAGNESIA."
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Alfred C. Kemper.
F. BOECLER, Manager.
No. 108 Walnut St.THE KEASBEY & MATTISON CO.
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Sectional Covering Co.)
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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXI.

ADVERTISERS' TRADE SUPPLEMENT.

No. 5

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general can have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT proper credit.

E. HILL TURNOCK, architect, rooms 29 and 31, No. 155 Washington street, Chicago.
WHEEL & CAMP, 250 Fifth street, Louisville, Ky.
WOOD & LOVELL, architects, 353 Dearborn street, Chicago.

THE GOULDS MANUFACTURING COMPANY.

This company submit below brief of their World's Fair exhibits, their service, location, etc. These comprise an extended display of Triplex power pumps for almost every service, water lifters and kindred goods. Nearly all will be in practical daily operation; others so constructed that they can be started by pressing the button.

One of their 10 by 12 inch Triplex power pumps, operated by Ideal engine, in service plant in boiler house, Machinery hall, will be used for operating some 4,000 horsepower Heine boilers. A Webster Vacuum Steam Economizer furnishes hot water supply. This exhibit will be marked as the only power pump in the boiler plant.

They were unable to secure such space as would afford a representative display of their full line of goods and confined themselves exclusively to these working exhibits. They have general headquarters in Machinery hall, Section N 15, near water tank, where they will be pleased to welcome their friends.

Goulds Special Triplex Power Pumps—Fig. 920, 10 by 12 inches. In operation in service plant, Machinery hall.

Goulds Triplex Boiler Feed Pump—Fig. 924, 9 by 10 inches. Working exhibit in Western Dummy Railroad Power House (near Forestry building).

Goulds Hydraulic Pressure Pump—Fig. 997, 1 by 4 inches. Joint exhibit with the Hydraulic Press Manufacturing Company, No. 174 Implement annex, Agricultural building.

Goulds Triplex Light Duty Water Pump—Fig. 957, 8 by 12 inches. Joint working exhibit, paper and mill combine. Section 8, Column B, E 42-49, Machinery hall.

Goulds Triplex Stuff Pump—Fig. 969, 7 by 8 inches. Joint working exhibit, paper and mill combine. Section 8, Column B, E 42-49, Machinery hall.

Goulds Triplex Electric Power Pump—Fig. 926, 2½ by 4 inches. 1, Headquarters—Section H 15 (near water tank), Machinery hall. 2, Joint exhibit, General Electric Company, Section N 33, Electricity building, Department J. 3, Joint exhibit, The Elektron Manufacturing Company, Section P, Space 4, Electricity building, Department J.

Goulds Triplex Electric Power Pump—Fig. 934, 6½ by 8 inches. Joint working exhibit, Eaton & Prince Company, Section C 2, Column 8, Transportation building.

Goulds Triplex Electric Deep Mining Pump—Fig. 968, 6½ by 8 inches. Joint working exhibit, General Electric Company, Section N 33, Electricity building, Department J.

Goulds Triplex Portable Mining Pump—Fig. 966, 6½ by 8 inches. Joint working

exhibit, General Electric Company, Section N 33, Electricity building, Department J.

Goulds Power Rotary Force Pump—Fig. 302, No. 2, Bronze. Joint exhibit, the Jeffrey Manufacturing Company, Section N-E, ground floor, Mines and Mining building.

Goulds Duplex Water Lifter—Fig. 935, 3 by 2 by 4 inches. Headquarters, Section H 15 (near water tank), Machinery hall.

TRADE NOTES.

THE F. Weber Company, Philadelphia, have just issued an elaborate and completely illustrated, flexible-covered retail price list of artists' materials and draftsmen's supplies, containing 320 odd pages.

THE Van Wagoner & Williams Company, of 14 Warren street, New York and Cleveland, Ohio, the most extensive manufacturers of spring hinges in the country, have been compelled to add another floor to their New York warerooms. Their rapidly increasing business necessitates this enlargement in order that they may carry a stock that will enable them to fill city and eastern orders promptly.

THE Willer Manufacturing Company have completed their exhibit at the World's Fair in Chicago. This is situated at the north end of the gallery in the Manufactures building. All the goods they manufacture are on exhibition and visitors will find something there to interest them. Their exhibit shows their different classes of sliding blinds, folding blinds, venetian blinds, screens and screen doors, stairwork, etc.

AFTER investigating the heating and ventilating systems of a number of the foremost and largest churches in America, it has been decided to award the Buffalo Forge Company, Buffalo, New York, contracts for the heating and ventilating plants for the new Christ M. E. Church, Pittsburgh, Pennsylvania, and Calvary M. E. Church, Allegheny, Pennsylvania. By far these two churches are the largest edifices in either of these enterprising cities. The estimated cost of each of the buildings is \$300,000. The heating apparatus consists in each instance of twelve-foot fans and heaters, containing 6,000 feet of one-inch pipe. In every example of church heating and ventilating installed by this company, the apparatus is so built that it can be used as a cooling machine in summer, as well as a heating and ventilating plant combined during the cold weather. Arrangement is further provided that during the moderate weather, hot air and cold air can be mixed, and thus the ventilation is kept up without overheating the audience room. The machinery and materials employed in the heating and ventilating plant for the above buildings constitute more than two carloads.

N. & G. TAYLOR COMPANY, Philadelphia, manufacturers of American roofing plates, write us that the demand for their special brands is simply enormous, far exceeding anything before in the history of their business. They send us a long list of buildings that have lately been covered with their special brands, the Taylor "Old Style," extra heavily coated, the "Taylor Roofing Tin" and Taylor's "Columbia": Odd Fellows' Temple, Cincinnati; the Philadelphia & Reading Terminal Train Sheds, Philadelphia; Gilmore's Auditorium, and Women's Christian Association building, Philadelphia; Hotel Imperial, Niagara Falls, N. Y.; Epworth Memorial M. E. church, Cleveland, O.; Grand Opera House, Wilkes Barre, Van Curler Opera House, Schenectady, N. Y.; Hadley Hall, State Building, Willard, N. Y.; Putnam Opera House, Bennington, Vt.; Taunton Theater, Taunton, Mass.; the Southern California Hospital for the Insane; Hill County Courthouse, Hillsboro, Tex.; the Smith Premier Typewriter Works, Syracuse, N. Y.; the Hahnemann Medical College and Hospital, Philadelphia; the Zion's

Coöperative Mercantile Association, Salt Lake City; U. S. Government Military Post, San Antonio, Tex.; C. B. & Q. Freight Depot, St. Louis, Mo.; the Toledo Bee Building, Toledo, O.; the Ackerman Building, Binghamton, N. Y.; "The Arlington," Binghamton, N. Y.; "Hotel Benton," Danville, Va.; Valentine & Co's Factory, Brooklyn, N. Y.; the Grocers' Exchange, Brooklyn, N. Y.; Grayson County Courthouse, Sherman, Tex.; the Larronde Building, Los Angeles, Cal.; the Livingston County Courthouse, Howell, Mich.; D. C. Morgan & Son's Building, Buffalo, N. Y.; the Pennsylvania Institution for the Deaf and Dumb, Philadelphia; the Houston Cotton Exchange, Houston, Tex.

C. SIDNEY SHEPARD & Co., Chicago, have mailed a sample of the Morrison old styleterne or roofing plates to a large list of architects. These plates they guarantee to equal any old style or old method roofing plates on the market and respectfully ask architects to invite bids from contractors for this brand. The makers guarantee that the tin and palm oil used in the manufacture of these plates are of the richest brands, and are purified by a filtration process exclusively their own, which gives the purest and finest surface to any terne plate now made, and that no flux of any kind is used. Being made from best hammered Siemens-Martin soft steel, they will stand any test required.

RAILROAD NOTES.

HALF RATES TO CLEVELAND VIA BALTIMORE & OHIO RAILROAD.—For the benefit of those desiring to attend the International Conference of Epworth League at Cleveland, Ohio, June 29 to July 2, the Baltimore & Ohio Railroad will sell tickets at the low rate of one fare for the round trip. Tickets will be on sale at Baltimore & Ohio offices west of Pittsburgh and Bellaire, and at ticket offices of principal railroads of the West June 28 and 29, and will be valid for return journey until July 3, inclusive. The round-trip rate from Chicago will be \$10. Pullman sleeping car accommodations may be reserved, and all desired information may be secured upon application to L. S. Allen, Assistant General Passenger Agent, Grand Central Station, Chicago.

FROM THE WORLD'S FAIR TO WASHINGTON AND THE EAST.—Do you contemplate going to the World's Fair? Of course you do—everyone does. But you will not end your journey with a visit to the Fair. You will want to go back to the old home in New York, Ohio or Pennsylvania. You will, perhaps, want incidentally, to go to Washington, call on the President to inquire after the "plum" crop, in fact make a swing around the whole circle, take in Cincinnati, Pittsburgh, Wheeling, Washington, Baltimore and New York. That would make a splendid trip if taken over the Baltimore & Ohio Railroad. Over no other railroad route in all the East, can there be found more delightful and varied scenery than over the famous Baltimore & Ohio. It is the only direct route from Chicago to Washington. Leaving Chicago on the finest and fastest trains in the world, vestibuled from end to end, lighted by the famous Pintsch gas, protected by Pullman's anti-telescoping device, and a perfect block system, you are rapidly whirled over a splendid roadbed and down through the grand old states of Illinois, Indiana, Ohio, Pennsylvania and Virginia, away up among the mountain fastnesses of the Alleghanies, past hundreds of historic battlefields and places of note. You cannot conceive of a grander trip on all the American continent. If you contemplate visiting the old home in the East, you should not fail to travel by way of the Baltimore & Ohio Railroad. For information as to rates, time of trains, sleeping car accommodations, etc., apply to L. S. Allen, Assistant General Passenger Agent, "Rookery," Chicago, Illinois.

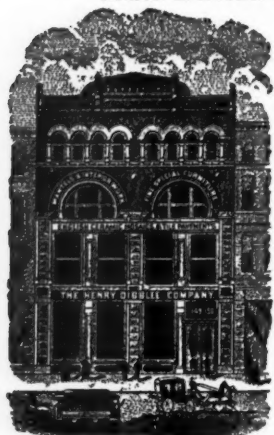
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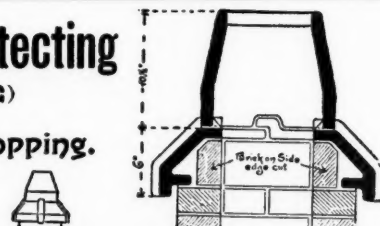
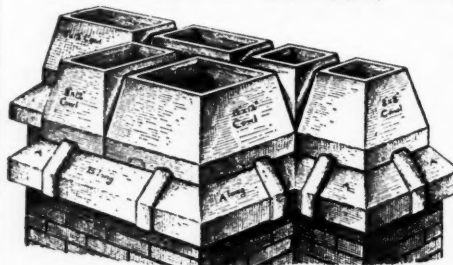
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88 La Salle Street, CHICAGO, ILL., Patentee.

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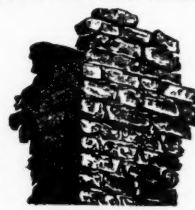
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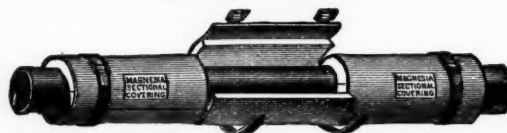
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F. BOECLER, Manager.
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ADOLPH HALLENBERG, architect, 424 West Main street, Louisville, Ky.

BYRON A. PREGIN, architect, 172½ Peachtree street, Atlanta, Ga.

I. JAY KNAPP, architect, 411 National avenue, Milwaukee, Wis.

CHARLES M. H. VAIL, architect, room 5, Bennett Building, Ravenswood, Ill.

E. HILL TURNOCK, architect, rooms 29 and 31, No. 155 Washington street, Chicago.

WHELE & CAMP, 250 Fifth street, Louisville, Ky.

A COMMON-SENSE WINDOW SASH.

If, as some apothegmatic writer has said, a man that succeeds in making two blades of grass grow where but one grew before is a public benefactor, a man whose thoughtfulness has devised ways and means whereby human lives may be saved and the number of maimed persons lessened every year, and which, at the same time, enlarges the area of human comfort ought not to be considered anything less. Think of the lives that have been lost and the men and women that have been made cripples cleaning the windows of houses, just because the idea has prevailed that the up and down sash was as established a fact in architecture as gravitation among the laws of the universe. The attendant inconvenience of the hoary-headed imposition has been carried as a cross by nervous women and disgruntled servants, and it is high time it should give place to something more rationally made, say like Howarth reversible sash, which swings from the center of the sash and therefore is accessible for cleaning the window on both sides from the floor of the room—a sash that dispenses with the need for box frames, weights, cords, spring balances, parting strips, inside and outside stops. This admirable window sash is made by the Howarth Reversible Sash and Sash Center Company, of Detroit, Michigan, and is being extensively used in that city.

THE H. W. JOHNS PAINTS.

A neat publication has just been received, the color card of The H. W. Johns Manufacturing Company. This is a sixteen-page pamphlet, containing samples and describing the H. W. Johns liquid paints, wood stains, fillers, varnishes, colors in oil, coach colors, fire-proof paints for factories, smoke-stacks, etc.

To meet the public demand for light tints they have added a number of new shades to their house paints, and the list of colors must now satisfy the most fastidious taste.

This company also issues a "Pamphlet of Suggestions for Exterior Decoration," which is very helpful to householders in the selection of colors suited to the architecture and surroundings of their houses, and producing harmonious combinations. They also furnish special combinations, prepared by an expert, for individual requirements.

Heretofore these liquid paints have been put up only in pint or larger packages, but this year small strip cans are furnished for

domestic use at fifteen cents each for regular shades.

A liquid wood stain which is a combined filler and stain, and a liquid wood filler which is also a good "knot killer" and shellac substitute, have been added, so that both the stains and fillers are now supplied ready for use as well as in the paste form.

The above company claim to manufacture superior quality materials, and their constantly increasing business, together with the high class of trade patronizing them, seem to substantiate their statements. Those requiring paint or kindred materials will do well to give this make a trial.

A STEEL BATH TUB.

The Northwestern Metal Ornament and Statuary Works, 24 and 26 West Lake street, Chicago, is putting on the market with marked success a patent steel bath tub, which commends itself to the public by a number of unusual good qualities. In the first place, it is constructed to meet the latest sanitary regulations. The material of which it is constructed is of the best 20-gauge steel made especially for the purpose. The inner and outer surfaces of the tub are enameled by a new process, which will not crack or discolor. The rim is of the best hardwood obtainable, and polished in the best workmanlike style. A copper-plated panel on the side adds materially to the handsome and ornamental appearance. It is made to stand raised from the floor, thus making it easy of inspection and allowing no spaces for the collection of dust and foreign matter. It is a very light tub, weighing but seventy-five pounds, and is said to be very economical in the use of hot water. In every respect it meets the latest requirement, and is a most desirable tub for public institutions as well as private residences. It is practically indestructible. It may be had either with or without an automatic valve, as desired.

A GOOD THING FOR SUBURBAN-ITES.

It goes without further argument that people living beyond the reach of city water works are dependent for their water, for the most part, upon wells and cisterns, and that intelligent and provident people provide their households with both means of supply. Good, soft cistern water is really a luxury in a country or suburban home. Its only drawback is that it so often becomes foul, to a degree that compels an emptying and cleansing of the cistern, and that, too, in seasons of the year when the resupplying is out of the question. It will be good news to such users that by a recently invented pump, that may be placed in and over the cistern or located in the kitchen a distance away, this sole defect is entirely removed. The process is simple and perfectly scientific, namely, the forcing of air into the body of water, which is done by this pump during the ordinary act of pumping. The pump is manufactured by the Sandwich Enterprise Company, of Sandwich, Illinois.

TRADE NOTES.

ACCORDING to the *School Board Journal*, a manufacturing concern up in Canada has been manufacturing and putting upon the market of that vicinity a counterfeit of the well-known "Willer" blind that is and has been advertised in and frequently commended by THE INLAND ARCHITECT. The counterfeiters have gone as far as to imitate the advertisements of the Willer people, and apparently have left no stone unturned that would serve to lead the public to believe they are selling something that cannot be told from the genuine. Of course, like all dealers in "coney goods," they offer to sell for less than the original is worth, and hope to hook suckers by the alluring bait. It appears the patent laws of Canada permit

such a transaction, so the Willer people have no defense against the piratical onslaught. It may not be any consolation to them, but it is all THE INLAND ARCHITECT has to offer: It is only the things of real value that are counterfeited; the worthless are let alone. Our advice is to keep on making the blinds just as you have been doing, and continue advertising them in THE INLAND ARCHITECT, and you will come out all right in the end.

THE B. F. Sturtevant Company, Boston, Massachusetts, have printed a third edition of 10,000 copies of their 200-page General Catalogue No. 61, which describes the uses of their blowers, exhausters, engines, forges, and heating and ventilating apparatus, and they desire to place a copy in the office of every superintendent, purchasing agent, engineer or manufacturer using such machinery. All who have not received a copy will confer a favor by applying at once to above address. It will be mailed free of charge.

THE Cortright Metal Roofing Company, of Philadelphia and Chicago, in their advertisement of this issue direct attention to their patent improved valley. Heretofore their patent valley has been made with one fold on each side to which the slates or shingles were attached. The improvement consists of an extra fold on each side, thus forming double protection against driving storms. The folds provide amply for expansion and contraction of the metal. While this valley is especially intended for use with their metallic tiles, shingles, etc., yet it is also used extensively with wood shingles and slate. It can be supplied in any weight of copper or brand of roofing tin. Full information and prices will be furnished by the above company on application.

IN the January number of the INLAND ARCHITECT attention was called to the Gustafson laundry apparatus, manufactured by the United States Mangle and Laundry Machine Company, of 185 Randolph street, Chicago. In speaking of the "combination" machine, which is a combination of five machines in one, and requires no shaping machine for collars and cuffs, we omitted to mention the latter fact, also that they iron starched clothes as well as unstarched. Further, it was omitted to state that a special pattern is made that dries and irons the clothing at one operation. It was easy to make such omissions in referring to the other novel labor and time-saving features of this unique invention, and of the economy of their service. Nevertheless, they are of such intrinsic value that in justice to the manufacturers it is a duty to mention them, even at this late day. It will be remembered that these unique laundry appliances are made in sizes for domestic use as well as in sizes suitable for hotels, restaurants, laundries and public institutions and are arranged to be manipulated with either gas or gasoline.

RAILROAD NOTES.

THE Baltimore & Ohio is the shortest route to Washington from nearly all points West. Its trains are vestibuled from end to end, and carry Pullman sleeping cars.

A WORLD'S FAIR ALBUM free to any address south of the Ohio river and east of the Mississippi river for 10 cents in stamps. The album will be sent other points outside of above mentioned territory for 15 cents in stamps. The albums are published by the C. H. & D., which, in connection with the Monon route, forms the "World's Fair Route" between Cincinnati and Chicago, being the only line running Pullman vestibuled trains with dining cars between the cities named. Send stamps with address to E. O. McCormick, general passenger and ticket agent, "World's Fair Route," 200 West Fourth street, Cincinnati, Ohio, and get an album containing seventeen World's Fair views.

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J. K. WEIGAND, Manager.

THE INLAND ARCHITECT AND NEWS RECORD

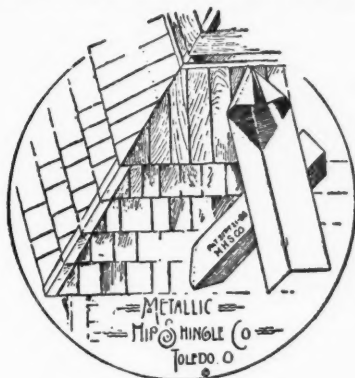
Vol. XXII.

ADVERTISERS' TRADE SUPPLEMENT.

No. 1

METALLIC HIP-SHINGLE.

The Prentice metallic hip-shingle, as shown by the illustration, is a device for the perfect protection of hips without exposing nails. These shingles are manufactured in roofing tin, galvanized iron or copper, as



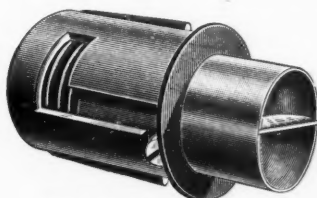
desired, and have been highly recommended wherever used. They make a clean-cut line up the hip and are a thorough protection against rain and snow. In laying by this method it is not necessary to weave the shingles, as is ordinarily done, and material is saved by using the cuttings of the valley shingles on the hips. It is also claimed that a carpenter can lay three times as many shingles in a day by using the Prentice metallic hip-shingle. Architects and builders are enthusiastic in praise of this device wherever used.

MAKING THE CIRCUIT OF THE GLOBE.

It will be of interest to Americans to learn that Worthington pumping engines are to be used for the water supply of the city of Osaka, Japan. By the placing of this order there is literally a "girdle 'round the earth" of Worthington pumping engines, these machines having worked their way as far east as China up to time of the awarding of this last contract.

SASH LOCK AND BURGlar BOLT.

A new sash lock and burglar bolt have been brought out recently by the Gardner Sash Balance Company, 312 First National



THE GARDNER BURGlar BOLT.

Bank building, Chicago. The sash lock consists of a horizontal lever so contrived as to clamp the upper and lower sashes firmly together. The window is not only locked but all annoyance of the rattling of sash in the wind is effectually done away with. The burglar bolt is a separate device attached to the side rail of the upper sash near the bottom rail. When the sash lock is in position the burglar bolt rests on the top of the lower sash and thus prevents the opening of the window. A double protection is thus given, as the window may be locked by the burglar bolt, even if the sash lock is not fastened. The enviable reputation of the Gardner Sash Balance Company in connection with their sash ribbon, pulleys and attachments is a guarantee of the excellence of these new devices. Their aluminium bronze and steel sash ribbon for sash hanging has received the indorsement of a surprisingly large number of first-class archi-

tecs throughout the entire country during the last four years. The ribbon is designed especially for use with heavy windows, as well as for lighter work in the better class of residences. It is adapted to weights of from 5 to 5,000 pounds. The ribbon will not break and cannot get out of order. Used on the Gardner patent pulleys, it runs smoothly and noiselessly, even with heavy iron sash of 350 pounds each.

TRADE NOTES.

THE new gunboat Machias, in her recent speed trial, accomplished the unprecedented feat of beating her guaranteed speed by nearly 2½ knots, winning \$45,000 premium for her builders. The boilers, steam pipes, etc., of this boat are covered with H. W. Johns Manufacturing Company's Asbestos Fire-felt Covering.

THE "Jones Under-Feed Mechanical Stoker" is a fire-box attachment manufactured by the Jogada Furnace Company, of Portland, Oregon, and Chicago. The coal is placed in a hopper and falls into a cylinder, back of which is a steam ram. The ram forces the coal forward and upward under the fire, where it is consumed by an artificial draft. The gases and smoke in the fresh fuel pass upward through the incandescent body of flame where they are consumed, thus rendering the furnace practically smokeless, and securing the full efficiency of the fuel. Actual tests under the boilers of the Portland Cable Railway have developed a saving of about twenty-five per cent of the fuel required in hand firing, with much better results as regards steam production.

JONES & LAUGHLINS, Limited, of Pittsburgh, Pennsylvania, have issued a complete and useful volume of tables, under the title of Standard Steel Construction. Tables of safe loads, areas and circumferences of circles, logarithms, sines and tangents, squares, cubes, square roots and cube roots are given. Jones & Laughlins, limited, make a specialty of steel beams and columns for architectural purposes. Their Larimer steel column is a great achievement in architectural steel work. Actual tests have shown that the resistance to compression for the Larimer column is greater than for any other of equal weight and area; also connections are readily made at any point and from any angle; the Larimer columns are easily reinforced wherever necessary, and when exposed to the weather they can be inspected and repainted on all sides. These certainly are points of the highest excellence.

THE new "Duplex" closet made by Fred Ade & Co., 90 Beekman street, New York, is the *ne plus ultra* of their manufacture up to date, and combines all the points of excellence in a genuinely first-class closet. The "Capitol" and "A. D." closets manufactured by Messrs. Ade & Co. are so favorably known to the trade that it would seem as though no further improvement was possible, but the "Duplex" is a combination of the best features of both these celebrated closets, and besides being better than either of them, is also the best in appearance, a consideration that ought to go far in these days of handsome house furnishing. The "Duplex" will work equally well whether the cistern is placed high or low. The distance may be three or seven feet above the closet, and the flush pipe may be straight or with bends or elbows as many as may be required. This closet also contains a large body of water, and is nearly noiseless in operation. With all its good qualities the price is comparatively low.

Messrs. Fred Ade & Co. have long been known as successful manufacturers of first-class plumbing supplies, and their trade mark is rightfully regarded as a reliable guarantee of the excellence of their goods.

Every article sent out is first carefully tested by them, and is sold with their warrant as to soundness and workmanship. Without doubt the new "Duplex" closet will add to the already excellent reputation of this firm.

THE name Worthington is so indissolubly connected with the manufacture of steam pumps, not only in this country, but in Europe, that any introduction of the Worthington company in this connection would be superfluous. Had this not been the case heretofore, it certainly would have been so now, for the world-wide publicity given to the Worthington pumps by the establishment of the World's Columbian Exposition pumping station is evident to every visitor to the Fair. It may not be generally known, however, that Mr. Henry R. Worthington manufactures at his foundries in Elizabethport, New Jersey, and his hydraulic works at Brooklyn, not only the largest steam pumps ever constructed, but also a great variety of small pumps for almost every conceivable purpose. The principal points of excellence in the Worthington pumps are their simplicity, reliability, and economy. The valve used is the ordinary slide valve, moved with a long and easy leverage which reduces friction to a minimum. The pump has no "dead" point. It is always ready to start on the simple opening of the steam valve. All parts being readily accessible and interchangeable, the expense of renewing worn bearings is reduced to a minimum. Having few moving parts and no harsh motions, these pumps are not easily subject to fracture.

MESSRS. JAMES B. SCOTT & Co., of Pittsburgh, Pennsylvania, who formerly imported the "Scott's Extra Coated" roofing tin from Wales, have been for the past two years manufacturing this celebrated brand in their own factory in Pittsburgh. The high repute in which this tin was held when imported from Wales is well known, and accordingly in manufacturing the same brand in this country Messrs. Scott & Co. determined to spare neither time, pains nor expense in maintaining their production at all times in such rank as to challenge all others to compare with it in quality. Great care is used by them in selecting a superior quality of American soft steel, each sheet being accurately resquared; also the best refined block tin and lead, for which a premium is paid because of purity, and strictly prime Lagos palm oil, free from all deleterious substances. The plates are given the strictest inspection to exclude all imperfect sheets, none of which are allowed to be stamped, so that the trademark, "Scott's Extra Coated" is an absolute guarantee of quality. The success of Messrs. Scott & Co. is gratifying, as indicating that the very highest grade of tin plates not only can be made in this country, but actually are now being produced.

RAILROAD NOTES.

THE Baltimore & Ohio is the shortest route to Washington from nearly all points West. Its trains are vestibuled from end to end, and carry Pullman sleeping cars.

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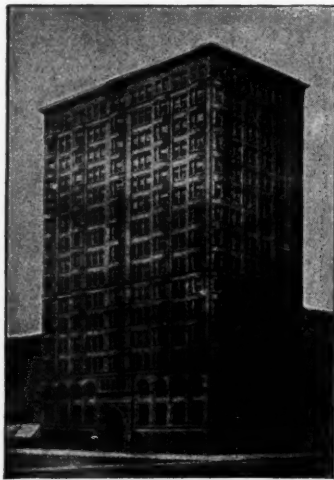
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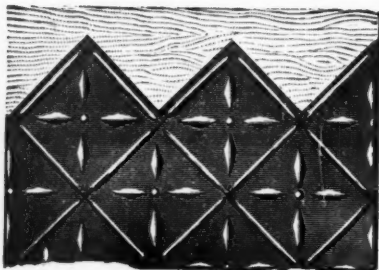
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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXII.

ADVERTISERS' TRADE SUPPLEMENT.

No. 2

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general can have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT proper credit.

ADOLPH HALLENBERG, architect, 424 West Main street, Louisville, Ky.

BYRON A. PREGIN, architect, 172½ Peachtree street, Atlanta, Ga.

I. JAY KNAPP, architect, 411 National avenue, Milwaukee, Wis.

CHARLES M. H. VAIL, architect, room 5, Bennett Building, Ravenswood, Ill.

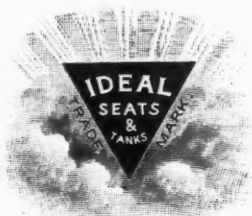
E. HILL TURNOCK, architect, rooms 29 and 31, No. 155 Washington street, Chicago.

J. F. WIELAND, architect, Porter Building, San Jose, Cal.

C. B. KEFERSTEIN, architect, Washington Loan & Trust Co. Building, Washington, D. C.

"IDEAL" SANITARY SPECIALTIES.

The 1893 catalogue of "Ideal" sanitary specialties contains a large number of attractive new designs in seats, tanks and other closet appliances. Illustrations of the



new seat and tanks are given herewith. The tanks, as may be seen in the illustration, are finished in the best style of the art, and the seats are not only extra heavy and durable, but are designed with the graceful outline peculiar to the "Ideal" closet specialties. The "Ideal" trade mark, a cut of which is given also, has long covered goods that are considered standard in their line, but the new designs are a distinct advance over anything yet produced by this house. It would be difficult indeed to match them for beauty and utility.

The makers of the "Ideal" goods claim to be the largest manufacturers of this line



in the world, and they are proud of the fact that their reputation and responsibility is staked on every article of their manufacture. Their guarantee is that the goods

shall give perfect satisfaction. This is as strong a guarantee as could be given.

All materials used in the manufacture of the "Ideal" goods are the natural woods, except when dark or light cherry is specified, when red birch is used. The varnish is the very best, and is claimed to be the only varnish that will positively resist the destructive elements of steam, hot or cold water and gases to which this finish is necessarily exposed. Only strictly oil filler stains are used. Pure copper is used for



linings and floats, and the offsets are made of cast brass and not of bent pipe. The "Ideal" valves are simple in construction, perfect in design, and reliable in operation. They are fully protected by patents. The brass work, nickel-plated hinges and brackets used are extra heavy. To illustrate the care with which "Ideal" goods are made it may be mentioned that the woodwork of seats is in six pieces, framed so as to prevent warping or collapse. The tanks are veneered and the body framed for extra strength to prevent parting at the corners. In short, no expense is spared to make these goods the best of their kind.

TRADE NOTES.

THE problem of roofing, at all times difficult, is rendered doubly so by the breaking of roofs into hips and valleys, and the erection of towers. The use of wood shingles on towers of small diameter is objectionable from their liability to split. The same is true of slate, and metal shingles of forms designed for straight roofing involve a waste of material and of time that amounts to an actual extravagance. Messrs. Merchant & Co., the well-known tinplate manufacturers, have recently put upon the market a graduated tile, which is adapted for covering all conical towers, circular roofs, turrets, domes, etc., being so graduated in size and form as to fit almost any radius. This tile is properly of copper, being indestructible, is of the valued "Spanish" pattern, and the lock is so constructed that the water cannot enter them. The graduated tile appears to be a genuine achievement in the art of roofing.

THE art of stained glass decoration has been brought to a high degree of perfection in some of the recent productions of Messrs. George E. Androvette & Co., the art glass manufacturers, of 27 South Clinton street, Chicago. Among numerous orders for stained glass windows finished or in process of construction for churches and cathedrals, a memorial window for the U. S. Grant Church at Long Branch deserves special mention. The process of stained glass manufacture is full of detail. The design is first drawn in colors and divided into sections. The glass used is of every possible hue and shade. Colors most appropriate for each section are selected, and the glass is cut to the pattern. Painting is frequently employed to modify the natural colors, the paint being mixed with a flux of ground glass and burnt in. A single window may be composed of hundreds of sections, joined

by leaden bars, soldered and made watertight with putty and lead. Seen at a little distance the roughness and irregularities of the glass and the connecting bars give a sparkle and tone to the entire picture that relieve all the usual flatness and dullness of an ordinary painting on perfectly smooth glass.

ACME cement is taken from a mine in Kansas, and without any further preparation than being calcined, is mixed dry with sand, and this mixture, when tempered to a good stiff mortar, forms the Acme Cement Plaster. The cement is furnished in its natural state, if desired, but to meet the demand for the Acme Cement Plaster in a mixed form ready for use, the C. H. Rose Company, of 161 La Salle street, Chicago, have established extensive works at Millington, Illinois, where they have an unlimited supply of white sand, containing 99.82 per cent of pure silica. The Acme Cement Plaster sets frost-proof in three hours, and becomes so hard in a few days that it cannot be removed from the wall without a cold chisel. It is fire and vermin proof and water has no effect on it whatever. It makes an excellent brown coat, or it can be smooth-troweled for painting or papering and makes a fine finish in itself. The Acme Cement Plaster was used in the Manufactures, Fisheries, Transportation, Mines, Administration and Agricultural buildings at the White City, and 600 tons were furnished by the C. H. Rose Company for the Chicago Beach Hotel.

THE business of the Beekman Salutory System Company has passed into the hands of the Mercer Pottery Company, of Trenton, New Jersey, and the Smith & Anthony Company have been made their selling agents at 56 Beekman street, New York. This change having avoided a large amount of expense, a reduced price list has been issued.

The Beekman specialties are the Whirlpool closet and the Duplex (double flushing) tank. The Whirlpool closet has an independent second flushing chamber, through which streams issuing from five different points and meeting in the center of the upper surface of the conduit form a whirlpool of immense force, by which the dome, back and sides of the discharge pipe are thoroughly cleansed and purified and the danger of the foul accumulation of excreta is removed, and clean water is left in the trap after each use. The Beekman Duplex tank presents a second flush, not the old style of dribbling "after wash" in the bowl, but an extra independent flush in the hidden recesses of the closet—those parts of the closet not heretofore reached, but left dangerous to health. The closet and tank together form what is known as the "Beekman Salutory System," and the manufacturers claim that this is the only system which gives an independent second flush. The affairs of the company and the manufacture of the earthenware will be conducted at Trenton, New Jersey, by the Mercer Pottery Company.

RAILROAD NOTES.

THE Baltimore & Ohio is the shortest route to Washington from nearly all points West. Its trains are vestibuled from end to end, and carry Pullman sleeping cars.

A WORLD'S FAIR ALBUM free to any address south of the Ohio river and east of the Mississippi river for 10 cents in stamps. The album will be sent other points outside of above mentioned territory for 15 cents in stamps. The albums are published by the C. H. & D., which, in connection with the Monon route, forms the "World's Fair Route" between Cincinnati and Chicago, being the only line running Pullman vestibuled trains with dining cars between the cities named. Send stamps with address to E. O. McCormick, general passenger and ticket agent, "World's Fair Route," 200 West Fourth street, Cincinnati, Ohio, and get an album containing seventeen World's Fair views.

TIFFANY PRESSED BRICK Co.

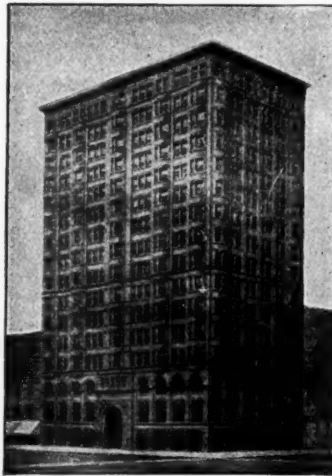
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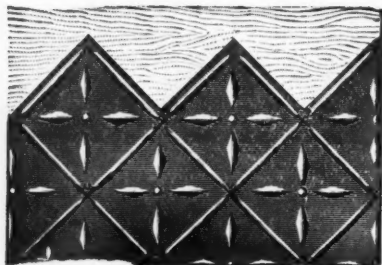
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Catalogues and samples sent on application.

Orders promptly filled for Chicago and other markets.



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The sheets are 12 x 12 inches, and stamped in
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Prices and Artistic Designs.

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NOVEMBER 15, 1899.
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J. K. WEIGAND, Manager.

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXII.

ADVERTISERS' TRADE SUPPLEMENT.

No. 4

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general can have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT proper credit.

ADOLPH HALLENBERG, architect, 424 West Main street, Louisville, Ky.

BYRON A. PREGIN, architect, 172½ Peachtree street, Atlanta, Ga.

I. JAY KNAPP, architect, 411 National avenue, Milwaukee, Wis.

CHARLES M. H. VAIL, architect, room 5, Bennett Building, Ravenswood, Ill.

R. HILL TURNOCK, architect, rooms 29 and 31, No. 155 Washington street, Chicago.

J. F. WIELAND, architect, Porter Building, San Jose, Cal.

C. B. KEFERSTEIN, architect, Washington Loan & Trust Co. Building, Washington, D. C.

EMIL CLARK TRITTIN, architect, No. 502 Walnut street, Philadelphia, Pa.

WINSOR & NEWTON'S WORLD'S FAIR EXHIBIT.



An interesting study in artists' colors, showing the latest achievements in this line, is afforded by the World's Fair exhibit of Messrs. Winsor & Newton (Limited), of London, England. The colors are displayed in a handsome case, in the upper part of which, on glass shelves, is shown a very complete and representative exhibit of pigment colors in lump and powder. A novel feature of the exhibit is that each color is rubbed out in oil and displayed both *per se* and in three tints with white on a palette which hangs beneath each bottle. Each color is thus to be seen in pigment and as prepared for use by the painter.

In the base of the stand are twelve huge bottles—the largest cut-glass bottles ever produced in England—containing samples of Messrs. Winsor & Newton's leading specialties, including their Aurora Yellow, Primrose Aureolin, the Cadmium Yellows and Madder Carmine, and their newest colors, Permanent Violet, Alizarin Scarlet, etc. By the side of these large bottles are framed

porcelain panels, arranged with excellent taste. The permanency of the colors is shown by two large palettes set with colors for oil painting for the London exhibitions of 1851 and 1862 respectively. Messrs. A. H. Abbott & Co., 50 Madison street, are Chicago agents for these pigments.

TRADE NOTES.

WE are pleased to announce that William S. Cooper Brass Works, of Philadelphia, are casting large-size roll-rim bath tubs of pure aluminium. The advantages possessed by a bath made of this metal will be readily understood by the profession, as all have given the study of aluminium more or less attention, and all will doubtless be glad to hear of the success of the Cooper Company in this direction. A bath made of a material light in weight and of a nature particularly suitable for bathing appliances, that is non-corrosive and indestructible, cannot fail to command the attention of all who seek improved plumbing appliances.

THE following "special notice" was placed on the front of their boilers at the World's Fair, Chicago, by The Babcock & Wilcox Co.:

SPECIAL NOTICE.

These boilers have received no award.

Why? Read, Learn.

We were informed that it was the purpose of the jury to make awards on boilers based entirely upon the written statements of the exhibitors of boilers, without tests or any personal knowledge in the possession of said jury concerning the comparative construction, operation, economy or durability of said boilers. We were asked to make such a statement, and were informed that all other exhibitors of boilers had been requested to make a like statement of their claims for the consideration of the Jury of Awards. Believing that an award, based on such insufficient knowledge on the part of said jury could be of no practical value, and notwithstanding the expense incurred by this company in making an exhibit, we respectfully declined to make any such written statement for the purpose of receiving an award upon our boilers. While we do not in the least envy those who have, upon such knowledge by the jury, been awarded premiums, we are equally content to stand upon the record without an award based on such a knowledge of our goods.

THE BABCOCK & WILCOX CO.

THE 1893 catalogue of the Branford Lock Works, a half-morocco book of 461 pages, lies on our table. The sale of the entire product of the Branford Lock Works is controlled by the Yale & Towne Manufacturing Company, and is conducted by the latter jointly with the sale of its own products. The new catalogue is therefore a companion volume to the No. 14 catalogue of the Yale & Towne Manufacturing Company, issued last spring, the two lines of goods represented by the two catalogues being supplementary to each other. Hence the adoption of a uniform size and style of catalogue. This new catalogue of the Branford Lock Works embrace a complete line of locks. The special 1893 features are cylinder locks with flat keys and new and ornamental designs in bronze hardware. All undesirable stock has been eliminated, and the united lines of the Yale & Towne Manufacturing Company and the Branford Lock Works cover the whole field of builders' hardware.

THE art of sheet metal decoration has of late years taken such an important place in exterior construction that it now merits the application of the best talent and the most improved machinery. The plain galvanized iron cornice of a few years ago has developed into the elaborate and highly artistic fronts, cornices, grilles and ornaments of the present day, than which, it would seem, nothing better in the line of iron or copper decoration could be desired. Mr. W. H. Mullins, of Salem, Ohio, is a representative manufacturer in this line. His catalogue of cornices, fronts and ornaments is exceptionally complete and artistic. All the work being manufactured in large quantities by steam-power machinery and from designs, can be furnished at comparatively low cost and on shorter notice than where

special designs are specified, and the very large number of stock patterns shown by Mr. Mullins are of sufficient variety to meet the demands of almost any architect. Mr. Mullins has given special attention to architectural ornaments, of which he has the greatest number of designs of any manufacturer in the world. His line includes not only capitals, garlands, grotesque and natural ornaments, etc., but also a high order of sheet metal statuary. His stamped copper statue of Columbus, which stood in front of the Cold Storage building at the World's Fair, and which Mr. Mullins has recently dedicated as a monument to the firemen who lost their lives in that terrible disaster, is a strikingly beautiful specimen of the art possibilities of sheet metal work.

THE use of ornamental parquetry in floors, walls, borders and ceilings is becoming so common that the manufacture of this beautiful woodwork has assumed large proportions. The new book of designs in half-tone recently issued by the Interior Hardwood Company, of Indianapolis, contains many beautiful and original patterns, and will be sent to anyone interested in the subject. Floors made of parquetry are perfectly dust and insect proof, and thus ideally sanitary. Their cost varies with quality and size, but is not greater than any other first-class floor. The same designs can be used for wainscoting if desired, or for this purpose a special design of wood carpet is to be had. Ceilings finished in this manner produce an elegant effect.

J. E. BOLLES & Co., Detroit, Michigan, are making a specialty of elevator inclosures and metal cabs, and have recently brought out some new patterns in this line which are handsome and unique, yet medium in price. Parties requiring this class of work will do well to send for their No. 12 catalogue of elevator work. They are now putting up elevator fronts and metal cars in the new Bearinger block, Saginaw, Michigan, and have recently shipped elevator inclosures for the Chamber of Commerce, Tacoma, Washington; Fenner building, New Orleans, Louisiana; Washington Post, Washington, D. C.; besides metal cars for the Grand Opera House, Atlanta, Georgia.

A STEEL roofing with standing seams, suitable for any roof having a fall of one inch to the foot—such is the roofing furnished by James B. Scott & Co., Pittsburgh, Pennsylvania. Four varieties are manufactured: The double seaming roll steel, in rolls fifty feet long covering twenty-four inches wide; the corrugated roofing, siding and ceiling, by which a practically fireproof building can be erected on light framing; the pressed standing seam roofing for steep roofs; and the V-crimped roofing, easiest applied and of good quality. The cost, considering covering quality, scarcely exceeds that of first-class shingles. The iron is furnished painted on both sides, and is easily put on by any ordinary mechanic. Its substantial and lasting qualities are much in its favor.

A NEAT catalogue of artists' materials; including supplies for oil and water-color painting, pastel, crayon, lead pencil drawing, illuminating, ornamenting and designing, porcelain and china painting, drafting, etc., has been issued by F. W. Devoe and C. T. Reynolds Company, Chicago. The stock carried by these two houses includes everything used by artists and painters. Their stock of colors is specially complete and reliable. Their new catalogue also includes mention of numerous works on art and instruction books of practical value to the draftsman and architect. These works cover the entire range of art, from simple drawing to oil painting, besides special handbooks on letters, scrolls, etc., building and carpentry, engineering and surveying, machinery and mechanics, mining and hydraulics, and landscape gardening.

100 CITIES AND TOWNS WANTING INDUSTRIES

Is the title of a pamphlet issued by the Illinois Central R. R. Co. If you are thinking of making a change in location and are not well-informed as to the advantages of locating either in the West or South, write for a copy. If you want, in a nutshell, the

Salient Points of over 100 Places

on the line of the Illinois Central and Yazoo & Mississippi Valley Railroads, giving the population, city and county debt, death rate, assessed valuation of property, tax rate, annual shipments, raw materials, industries desired, etc., apply to the undersigned. Our line is in the shape of the figure "7" and runs from Sioux Falls, S. D., and Sioux City, Iowa, to New Orleans, passing through South Dakota, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Mississippi and Louisiana, and has

Nearly Every Kind of Raw Material

used in manufacturing, together with populous sections which are large consumers of the manufactured product. To sound industries which will bear investigation, substantial inducements will be given by many of our places, and they will be welcomed heartily by the different sections traversed by the Illinois Central and Yazoo & Mississippi Valley Railroads. For all information on the subject, address GEO. C. POWER, Industrial Commissioner I. C. R. R., Central Station, Chicago, Ill.

Building Material.

The Chicago, Milwaukee & St. Paul Railway Company's 6,150 miles of road traverses a vast territory, rich in all the resources that insure industrial success.

The towns on the line are full of enterprise and are anxious to encourage new industries. Capital can find a profitable field in the development of the fire clay deposits on the system, and also in the working of the beds of sewer pipe, tile, building brick and other valuable clays along the line. The following quarries on this road are now being worked:

LIMESTONE.

Rockford and Leaf River, Illinois; Mason City and Stone City, Iowa; Dresbach, Frontenac, Mankato, Pipestone, Rushford and Winona, Minnesota; De Pere, Germantown, Janesville, Mayville, Milwaukee, Oshkosh, Pewaukee, Waterloo and Waukesha, Wisconsin.

SANDSTONE.

Dresbach and La Crescent, Minnesota; Dunnville, Goodyear, Gratiot and Janesville, Wisconsin; Mason City, Iowa.

GRANITE.

Ortonville (Red), Minnesota; Dell Rapids (Gray), and Sioux Falls (Quartzite), South Dakota; Amberg (Red and Gray), Berlin (Gray), Heights (Red), Markesan (Gray), Utley (Gray), and Waterloo (Gray), Wisconsin.

There are several quarries on the line in which an interest can be obtained in order to more fully develop them.

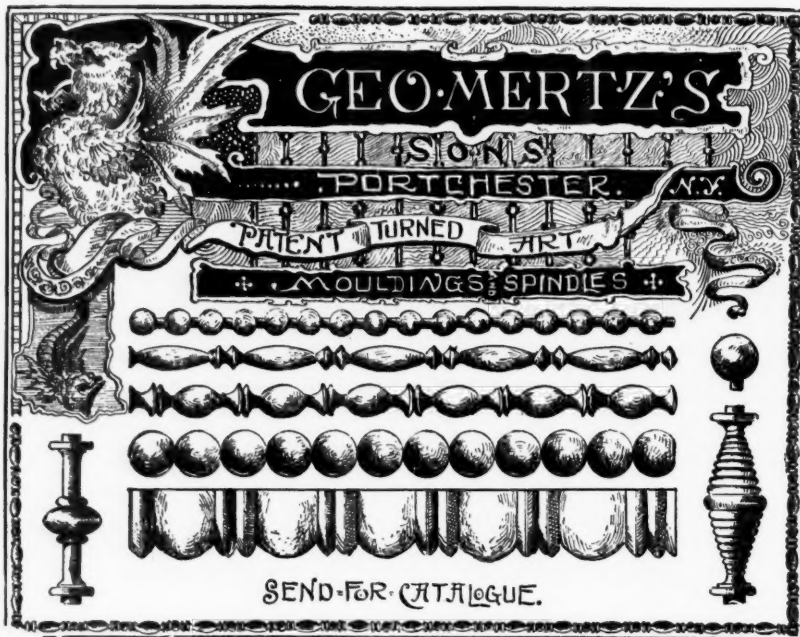
Individuals or companies wishing to embark capital in Western industry can find a profitable field.

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For turning water into or off from the cistern. The handle, which is an iron weight, insures the bucket remaining where placed, and entirely prevents its being turned by the downflow of water. The bucket or valve passes behind the rim at the top and overlaps at the bottom, thus securing perfect water joints at both connections. We manufacture all sizes, from 2½ to 24 inches.

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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXII.

ADVERTISERS' TRADE SUPPLEMENT.

No. 5

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J. F. WIELAND, architect, Porter Building, San Jose, Cal.

EMIL CLARK TRITTIN, architect, No. 502 Walnut street, Philadelphia, Pa.

CHARLES D. STICKNEY, architect, Baraboo, Wis.

AN UNEQUALED BUILDING STONE.

Several important qualities are characteristic of a perfect building stone. It must present a good appearance, and in this respect should improve rather than deteriorate with age; it must be impervious to moisture to enable it to withstand the ravages of frost; it must be hard enough to defy the elements and the changes of weather which time brings; and it must be of such a granular structure as will resist fire. To say that few building stones meet all of these requirements is but an acknowledgment that few of them are naturally perfect.

The Potsdam red sandstone is a remarkable natural product. Examined under the microscope, it is found to belong to the class of sandstones which have a silicious binding material, in which the distinguishing characteristic is that no decomposition takes place. In the Potsdam sandstone the grains of quartz are quite small and always angular. The cementing substance between them is found under the microscope to be a clear, colorless silica. This combination of density and hardness gives to the Potsdam red sandstone its valuable characteristics of indestructibility.

Repeated freezing and thawing have had no effect on it. In buildings constructed over seventy years ago this stone appears as fresh as new, and the tool marks are as clear as if made yesterday. It can be heated to a white heat without injury. Repeated tests of heating to the temperature of melted copper and sudden cooling have resulted in no injury or change of color.

Some important departures in the way of winter cutting and direct estimating have been made by the Potsdam Red Sandstone Company of late, as will be seen by the following circulars:

OFFICE OF
THE POTSDAM RED SANDSTONE CO.
POTSDAM, N. Y., December, 1893.

We have recently added to our facilities for cutting stone during the winter months. During these months of the year but little stone-cutting for building is in progress, and the best workmen can be obtained at a substantial reduction in wages. We have facilities for handling stone by power, and can easily work one hundred and fifty men, in thoroughly warmed and ventilated buildings.

While our aim is to furnish stone in the rough, yet we desire to impress upon the architectural profession that we are prepared to quote reasonable figures for stone, cut ready to set in the building, and delivered to any part of the country. Our estimate will cover setting if required.

In order that we may more thoroughly protect our product from unfair competition by soft stone,

we have lately withdrawn from a number of Quarrymen's Associations, in which our membership has prevented direct estimates from us for cut stone work.

Drawings for estimate can be expressed at our expense. They will be carefully cared for, kept in a fireproof safe, and if requested in the letter forwarding them, will be returned in twenty-four hours after their receipt.

Your attention is called to the inclosed list of buildings, many of which are now in the course of construction.

NOTE.—The Ottman Lithographing Company, lithographers for *Puck*, have in preparation for us a calendar for the coming year. It will be 22 by 28 inches in size, and in a number of colors, and in the highest style of the art for which the Ottman Company are so famous. Competent judges are unreserved in its praise.

We shall be glad to forward you a copy free of express charges, if requested, as soon as the edition is completed. Address

THE POTSDAM RED SANDSTONE CO.,
Potsdam, N. Y.

OFFICE OF
THE POTSDAM RED SANDSTONE CO.

POTSDAM, N. Y., December, 1893.

Among the buildings the stone for which has recently been furnished by us, with one or two exceptions ready to set in the building—the building in nearly every case being of solid stone, though in some, trimmings or ashlar facings only were used—are the following. Many of them are now in process of construction.

A series of helio-chromes (colored photographs) by the Heliochrome Company of a number of these buildings will shortly be issued by us, examples of which we will send to architects on request. If more than one is wanted, a nominal charge of 25 cents each will be made.

Residence of Hon. J. Stevens, Rome, N. Y. Archimedes Russell, architect, Syracuse, N. Y.

Residence of the Medical Superintendent, New York State Hospital, Ogdensburg. Hon. Isaac G. Perry, new Capitol Commissioner, architect, Albany, N. Y.

Residence of Francis Wilson, New Rochelle, N. Y. G. Kramer Thompson, architect, New York city.

Residence of Gustave S. Dorwin, Ogdensburg, N. Y. William J. Akin, architect, Albany, N. Y.

Residence of Herbert P. Bissell, Buffalo, N. Y. Charles D. Swan, architect, Buffalo.

La Concha Building, Syracuse, N. Y. E. M. Buell, architect, Syracuse.

Luburg Building, Philadelphia, Pa. J. F. Stuckert, architect, Philadelphia.

Residence of S. D. Coykendall, Rondout, N. Y. Vaux & Radford, architects, New York city.

Four buildings for St. Lawrence State Hospital, Ogdensburg, N. Y. Hon. I. G. Perry, architect, Albany. (Three of solid Potsdam stone. Over seven thousand feet of waterable furnished by us for these buildings.)

Residence of William K. Pierce, Syracuse, N. Y. Henry W. Wilkinson, architect, Syracuse.

Residence of George W. Daw, Troy, N. Y. F. H. Jones, Albany, N. Y.

Florence Buildings, Syracuse, N. Y. Baxter, Buell & Taber, architects, Syracuse.

Floore Building, Lexington, Kentucky. H. W. Aldenburg, architect, Lexington.

Church at Oswego, N. Y. J. H. Seeber, architect, Oswego.

Residence of F. H. Stevens, Buffalo, N. Y. Lansing & Beierl, architects, Buffalo.

Residence of B. F. Spinney, Lynn, Mass. W. T. Sears, architect, Boston.

Residence of Thos. S. McFarland, Buffalo, N. Y. Chas. D. Swan, architect, Buffalo.

Church at Greenbush, N. Y. Edward W. Loth, architect, Troy, N. Y.

Receiving Vault, New Bedford, Mass. S. C. Hunt, architect, New Bedford.

Residence of David H. Desbecker, Buffalo, N. Y. Chas. D. Swan, architect, Buffalo.

Free Press Building, Brooklyn, N. Y. T. Englehart, architect, Brooklyn.

Residence of Walter H. Johnson, Buffalo, N. Y. F. H. Loverin, architect, Buffalo.

Hospital Building, Pittston, Pa. John T. Windrim, architect, Philadelphia.

Residence of Geo. L. Lewis, Buffalo, N. Y. Chas. D. Swan, architect, Buffalo.

Summer residence for Charles G. Emery, Clayton, Thousand Islands. J. W. Griffin, architect, Watertown, N. Y.

Residence of Edward L. Anthony, Buffalo, N. Y. Charles D. Swan, architect, Buffalo.

Residence of Alexander T. Brown, Syracuse, N. Y. G. A. Wright, architect, Syracuse.

Office Building for Hiram Walker, Sons & Co., near Detroit, Mich. Mason & Rice, architects, Detroit.

Residence of J. H. Kobusch, St. Louis, Mo. Charles F. May, architect, St. Louis.

TRADE NOTES.

WHAT tin shall I specify? This is a question perhaps as perplexing as any which presents itself to an architect. Not only the lasting qualities of the roof or the drain, but the safety of the interior finish and furnishings and the comfort of the inmates of a house often depend upon the intrinsic merits of a roof-covering. It is gratifying to know that at least one brand of tin has stood the test of time so thoroughly that it has evoked unsolicited testimonials from many architects. The N. & G. Taylor Com-

pany, of Philadelphia, have recently received a valuable testimonial for their Target and Arrow brand roofing tin from Architect William H. Mayer, of Cincinnati. Mr. Mayer states that one year ago he exposed a number of samples of tin in the open weather, where he allowed them to remain for eight months, with the result that the Taylor Genuine "Old Style" brand stood the test remarkably well. After rubbing it off the effects of its continual exposure could hardly be noticed. Mr. Mayer says that the other samples were entirely eaten through with rust, and he is, therefore, an enthusiastic champion of the Taylor "Old Style." The well-known trade-mark, Target and Arrow, and the name of the guarantors and makers, N. & G. Taylor Company, are stamped on each sheet, as is shown in the advertisement of this firm on another page. The success of this popular brand of roofing tin is all the more gratifying as it is an American production.

N. & G. TAYLOR COMPANY, Philadelphia, manufacturers of tinplate, have just sold a lot of their roofing tin to the Harvey Steel Car and Repair Works, of Chicago. This firm has secured the contract for altering about two hundred of the Illinois Central railroad cars that were in use during the World's Fair. Everyone will remember those cars that took the visitor from the Auditorium to the Fair grounds in fifteen minutes. Messrs. N. & G. Taylor Company report that the demand for their brand of Taylor "Old Style" is simply enormous and constantly increasing. This brand is claimed to be the heaviest coated roofing tin made.

WITHIN the past ten years there have been some remarkable developments in the line of wood ornamentation. This has been brought about largely by the perfection of wood-working machinery, by which carving and turning which were formerly slow and laborious hand processes, are now done more accurately and swiftly by machinery. The result is that elaborate carvings, which formerly were too costly to admit of general use, are now brought within the means of the ordinary builder. Our attention has been directed to this subject by the catalogue of Moorish Fret or Interlaced Wood Work issued by C. S. Ransom & Co., of Cleveland, Ohio. This highly ornamental work is constructed of spiral moldings, cut in such a manner as to intermix or weave. Any kind of wood desired is used, as cherry, walnut, oak, ash, hazelwood, sycamore, maple, mahogany or prima vera. The frets are finished in the same manner as the finest cabinet work, in oils or varnishes. Messrs. Ransom & Co. have a large variety of elaborate and marvelously beautiful designs, in Moorish, Persian and Colonial fretwork, all of which are fully protected by patents on machinery and patterns. Their achievements in this line have placed them in the front rank of manufacturers of fretwork in this country.

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100 CITIES AND TOWNS WANTING INDUSTRIES

Is the title of a pamphlet issued by the Illinois Central R. R. Co. If you are thinking of making a change in location and are not well-informed as to the advantages of locating either in the West or South, write for a copy. If you want, in a nutshell, the

Salient Points of over 100 Places

on the line of the Illinois Central and Yazoo & Mississippi Valley Railroads, giving the population, city and county debt, death rate, assessed valuation of property, tax rate, annual shipments, raw materials, industries desired, etc., apply to the undersigned. Our line is in the shape of the figure "7" and runs from Sioux Falls, S. D., and Sioux City, Iowa, to New Orleans, passing through South Dakota, Iowa, Minnesota, Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Mississippi and Louisiana, and has

Nearly Every Kind of Raw Material

used in manufacturing, together with populous sections which are large consumers of the manufactured product. To sound industries which will bear investigation, substantial inducements will be given by many of our places, and they will be welcomed heartily by the different sections traversed by the Illinois Central and Yazoo & Mississippi Valley Railroads. For all information on the subject, address GEO. C. POWER, Industrial Commissioner I. C. R. R., Central Station, Chicago, Ill.

Building Material.

The Chicago, Milwaukee & St. Paul Railway Company's 6,150 miles of road traverses a vast territory, rich in all the resources that insure industrial success.

The towns on the line are full of enterprise and are anxious to encourage new industries. Capital can find a profitable field in the development of the fire clay deposits on the system, and also in the working of the beds of sewer pipe, tile, building brick and other valuable clays along the line. The following quarries on this road are now being worked:

LIMESTONE.

Rockford and Leaf River, Illinois; Mason City and Stone City, Iowa; Dresbach, Frontenac, Mankato, Pipestone, Rushford and Winona, Minnesota; De Pere, Germantown, Janesville, Mayville, Milwaukee, Oshkosh, Pewaukee, Waterloo and Waukesha, Wisconsin.

SANDSTONE.

Dresbach and La Crescent, Minnesota; Dunnville, Goodyear, Gratiot and Janesville, Wisconsin; Mason City, Iowa.

GRANITE.

Ortonville (Red), Minnesota; Dell Rapids (Gray), and Sioux Falls (Quartzite), South Dakota; Amberg (Red and Gray), Berlin (Gray), Heights (Red), Markesan (Gray), Utley (Gray), and Waterloo (Gray), Wisconsin.

There are several quarries on the line in which an interest can be obtained in order to more fully develop them.

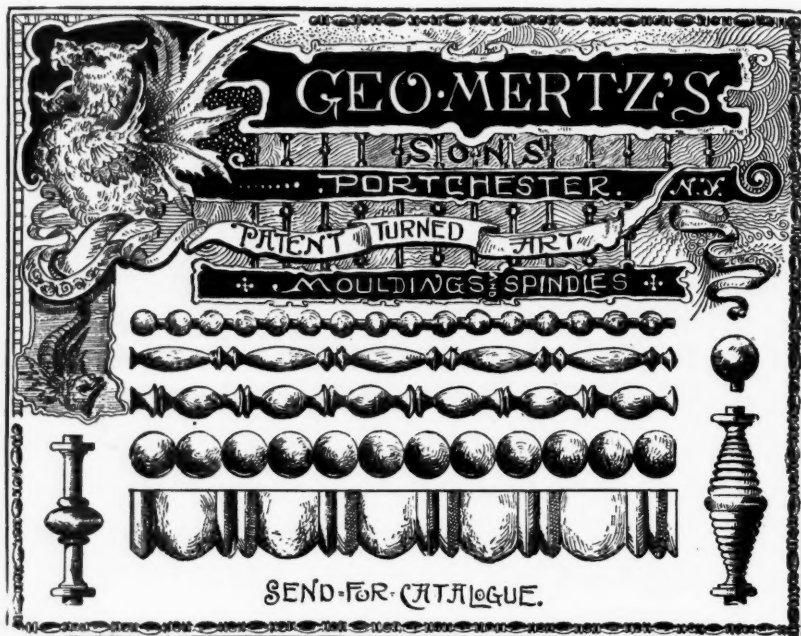
Individuals or companies wishing to embark capital in Western industry can find a profitable field.

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THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXII.

ADVERTISERS' TRADE SUPPLEMENT.

No. 6

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention THE INLAND ARCHITECT, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general can have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give THE INLAND ARCHITECT proper credit.

ADOLPH HALLENBERG, architect, 424 West Main street, Louisville, Ky.

BYRON A. PREGIN, architect, 172½ Peachtree street, Atlanta, Ga.

I. JAY KNAPP, architect, 411 National avenue, Milwaukee, Wis.

CHARLES M. H. VAIL, architect, room 5, Bennett Building, Ravenswood, Ill.

J. F. WIELAND, architect, Porter Building, San Jose, Cal.

EMIL CLARK TRITTON, architect, No. 502 Walnut street, Philadelphia, Pa.

CHARLES D. STICKNEY, architect, Baraboo, Wis.

W. S. HEBBARD, architect, First National Bank building, San Diego, Cal.

A DAILY REMINDER.

Forgetfulness is a common failure of humanity, and everything that helps us to remember easily receives our hearty indorsement. Of just such a character is the "Daily Reminder," which the Bostwick Steel Lath Company, of Niles, Ohio, are now sending out to their friends and patrons with the compliments of the season. This little book is a complete diary and calendar combined, giving the day of the month, the day of the year, holidays, etc. Of course, the company are anxious that reference to its pages shall also remind the reader that the Bostwick fireproof steel lath is unequalled in the market and should be investigated by architects, plastering contractors and others who are trying to find a good lath to put into their buildings. This lath was awarded a premium at the World's Fair.

CABOT'S SHEATHING "QUILT."

FOR SHEATHING, INSULATING AND SOUND-DEADENING.

"Quilt" is a newly patented material for use in place of back plastering or the ordinary sheathing felts or papers, for the protection of houses from heat and cold and as a deafener between the floors or in the partitions, and for insulating in cold storage warehouses, refrigerators, cars, creameries, nurseries, etc., where its first cost and ease of application make it more economical than any other method in use, and more effective. Actual test on differential thermometers shows that one thickness of "Quilt" is equal to six thicknesses of rosin-sized paper, showing a saving in labor alone of great importance.



Quilt is composed of a felting of sea grass (*zostera marina*) held in place between two layers of tough manila paper by quilting, whence its name. The laminated structure formed by the overlaying succession of flat blades of grass produces a series of air

spaces, making the quilt almost impenetrable by heat and cold, and securing, in dwellings, refrigerators, etc., a uniformity of temperature which is of the greatest advantage.

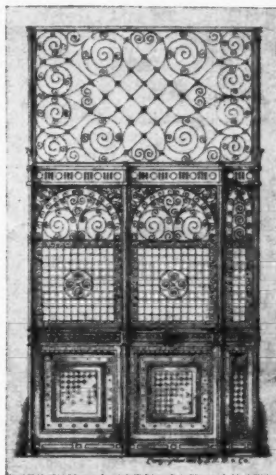
Houses of cheap construction can be protected against cold with this material at a cost so low as not to materially increase the expense of building, and this slight additional cost will in a very short time be more than offset by the saving in fuel resultant from its use. Quilt costs, on the house, about one-half what back plastering does, and it is guaranteed to be a much more effective protection.

Its light weight and great elasticity give almost perfect sound-deadening conditions. This, in connection with the low price, makes it peculiarly applicable for use in office buildings and other large structures, where large quantities of deafener are required, and the cost an important consideration.

A sample of quilt, with circular giving full information, will be sent on application to the manufacturer, Samuel Cabot, of Boston, who is also proprietor of Creosote Shingle Stains.

ARTISTIC IRONWORK.

J. E. Bolles & Co., Detroit, Michigan, despite the hard times report that they have kept their works running full time during the most of the fall, but are now running upon eight-hour time. They are one of the firms who are making a specialty of elevator inclosures, metal cabs, grille and stair work, and state that they have recently furnished

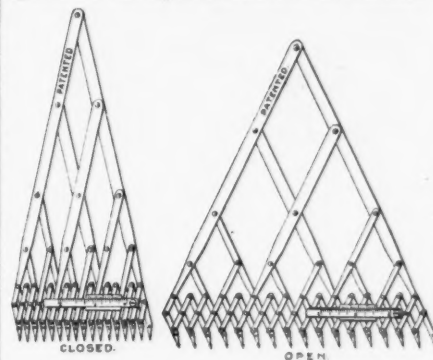


DESIGN FOR ELEVATOR FRONT.
By J. E. Bolles & Co., Detroit.

work in this line as follows: All the iron stairs, grille and brass work for the United States postoffice, at Bay City, Mich.; the iron stairwork, elevator fronts and metal cabs for the two elevators in the six-story office building of Isaac Bearinger, Saginaw, E. S., Mich. (W. T. Cooper, architect); the elevator inclosure, metal cab and grillework for the new Post building, Washington, D. C.; elevator inclosure for Kramer Bros., Scranton, Pa.; elevator inclosure for Fenner Office Building, New Orleans, La.; elevator inclosure for Chamber of Commerce, Tacoma, Wash.; elevator inclosure for Rike Dry Goods Co., Dayton, Ohio; elevator inclosure for Wellington Flats, Grand Rapids, Mich.; elevator inclosure for Joske Bros., San Antonio, Texas; besides various other contracts from all parts of the United States and some foreign countries. They are now preparing a fine illustrated catalogue (No. 12) which should be in the hands of all the leading architects and contractors of the country. It will be mailed free upon application if parties state their line of business. They report prospects for future trade more encouraging than one month ago.

THE STANDARD DIVIDER.

The illustrations represent a novel and it would seem most useful drawing instrument. It is called the standard divider, and its operations are rapid and varied. It divides



a line of any length into any number of equal parts, the scale in connection with the vernier reading the exact length of each part. It is a scaler in itself and marks off a number of equal spaces of any given size and can be used in place of proportional dividers. Its mechanical adjustment is such that absolute accuracy is attained, and is a labor and time-saving device which cannot be too highly recommended. It has been tested by many prominent engineers and all are unanimous in testifying to its general excellence, and many pointing out where it can be of special service. Its adaptability in spacing rivets on bridge drawings and in structural work, its usefulness where rapid and accurate drawing is required, etc., gives this new divider a standing among the indispensable drawing instruments of the architect and engineer. It is made by the Standard Divider Company, of Chicago.

METAL ROOFING.

An illustration in the advertisement of the Cortright Metal Roofing Company, on another page of this issue, shows their "patent valley," in which two folds on each side afford double protection against driving storms. By the use of this device leaks are rendered impossible. A characteristic feature of the Cortright goods is that they are the best that skill and money can produce. No iron shingles nor "waster" tin plate are put on the market by this company. All of their work is of the best tinned steel. For this reason they do not attempt to compete with cheap goods so far as price is concerned, preferring quality to cheapness. The aim of the Cortright Company is to furnish the best roof covering that money will buy. How well they have succeeded is known to all architects who have specified the Cortright metal shingles.

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Rockford and Leaf River, Illinois; Mason City and Stone City, Iowa; Dresbach, Frontenac, Mankato, Pipestone, Rushford and Winona, Minnesota; De Pere, Germantown, Janesville, Mayville, Milwaukee, Oshkosh, Pewaukee, Waterloo and Waukegan, Wisconsin.

SANDSTONE.

Dresbach and La Crescent, Minnesota; Dunnville, Goodyear, Gratiot and Janesville, Wisconsin; Mason City, Iowa.

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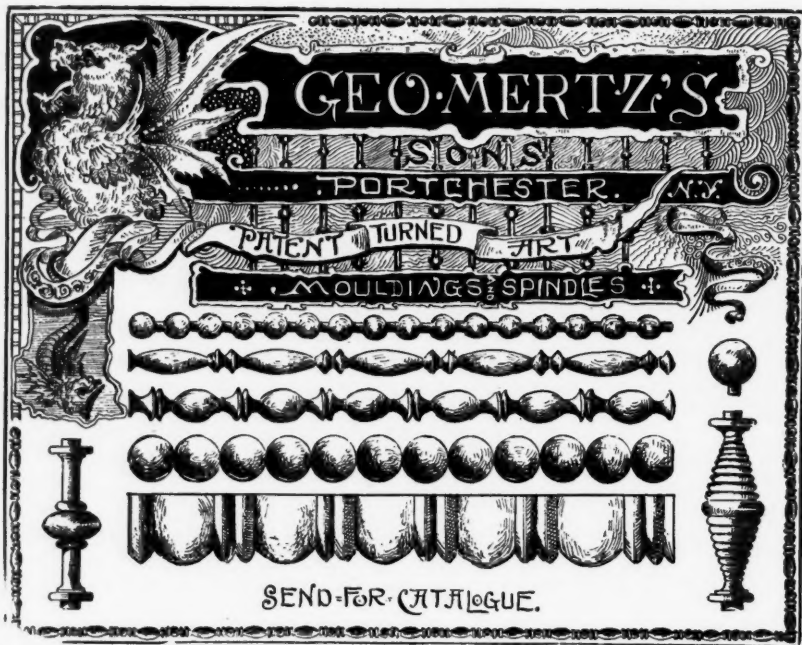
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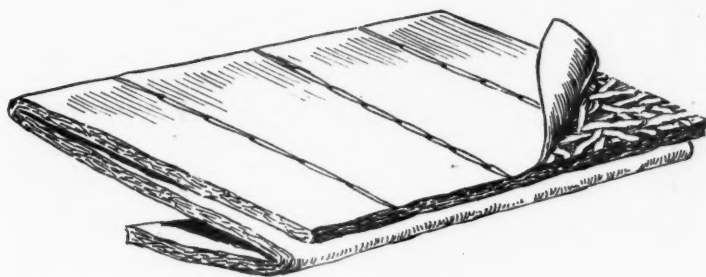
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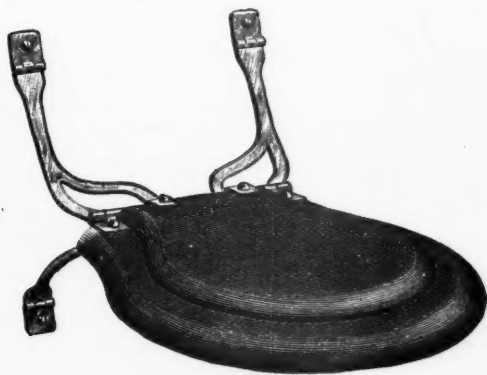
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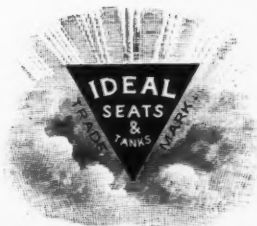
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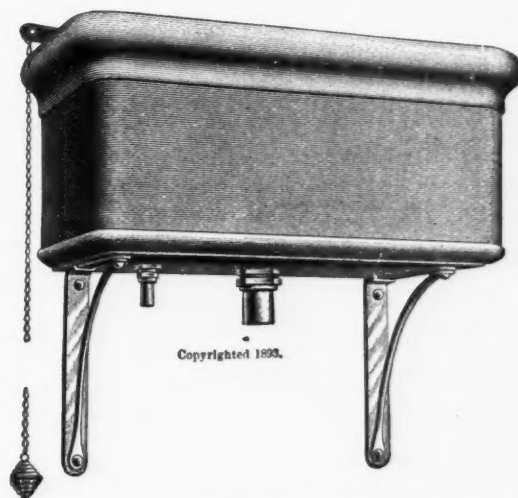


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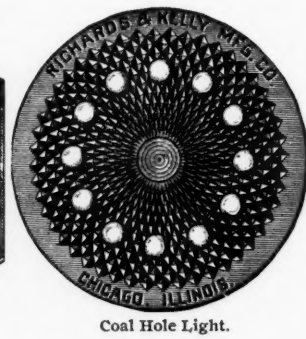
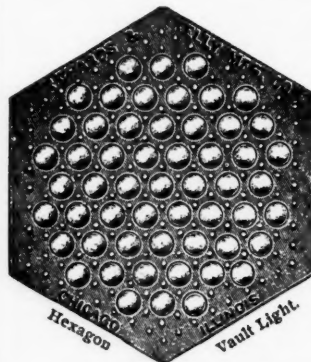
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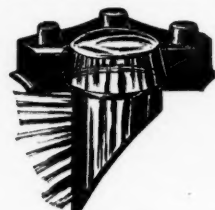
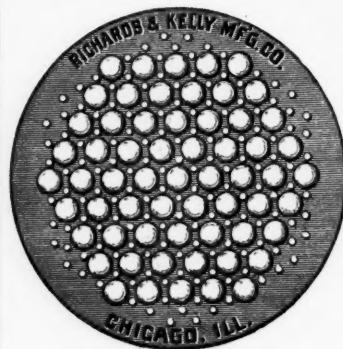
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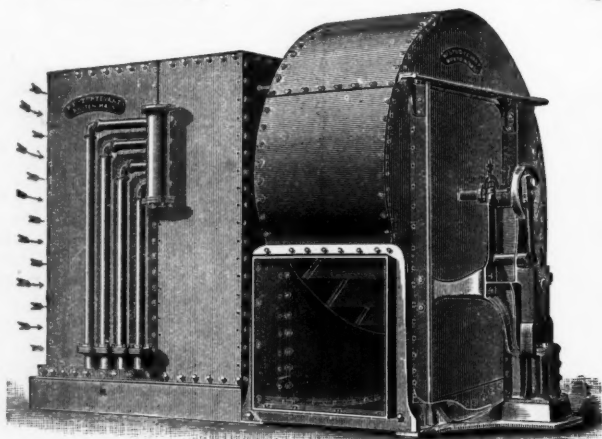
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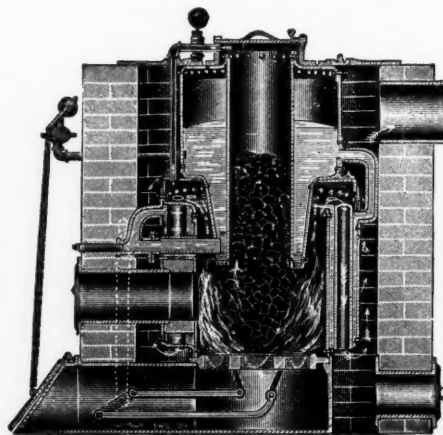
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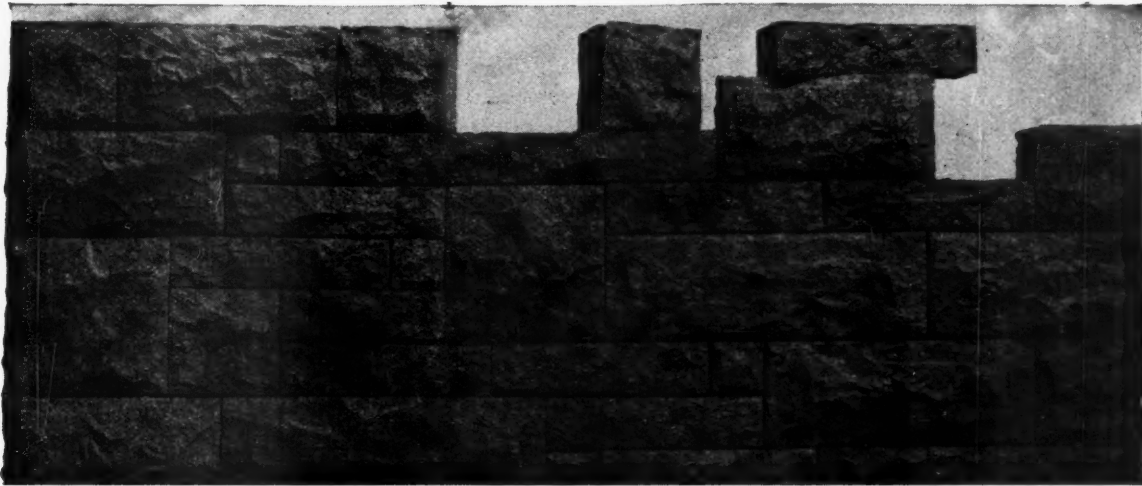
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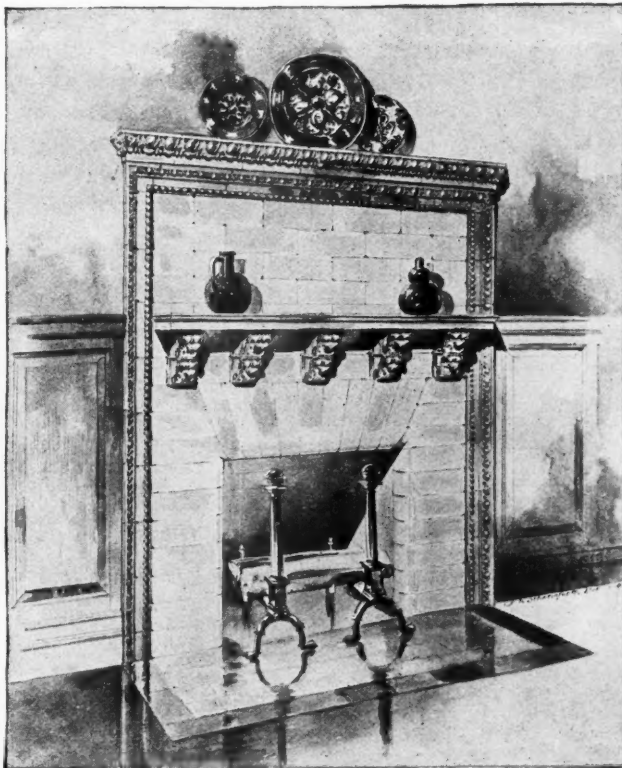


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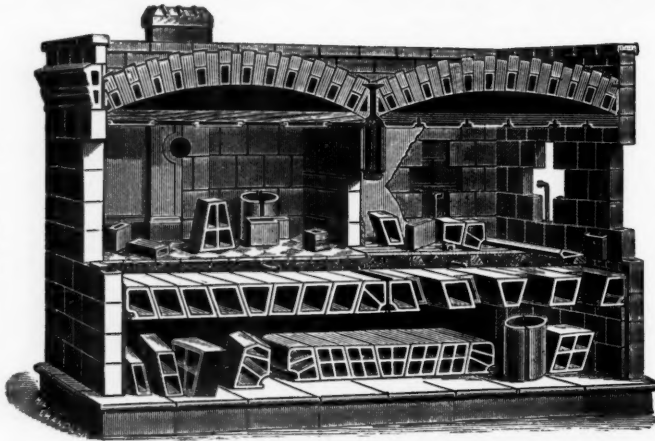
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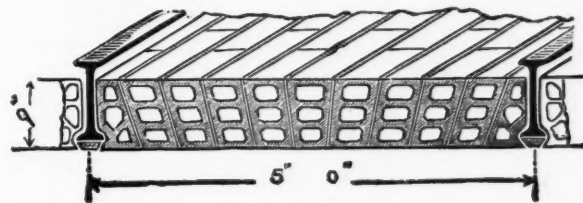
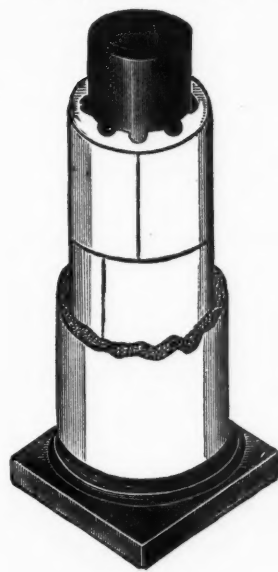
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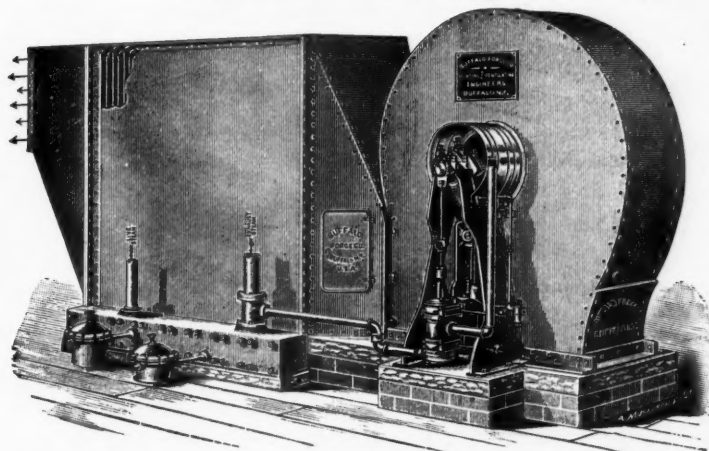
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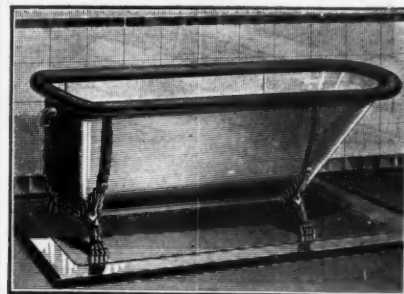
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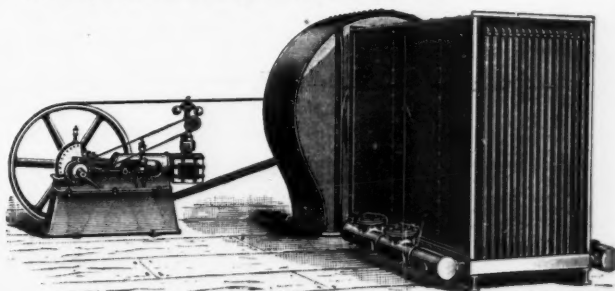
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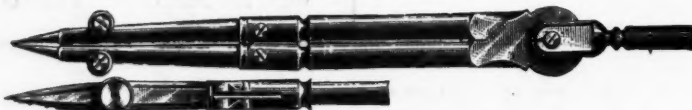
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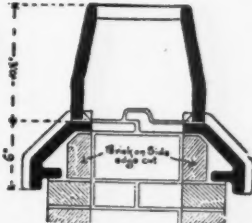
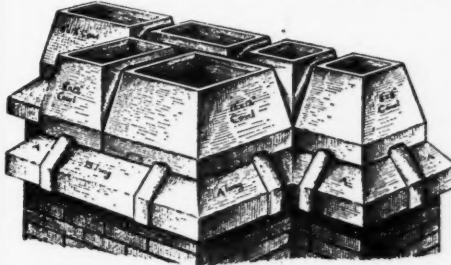
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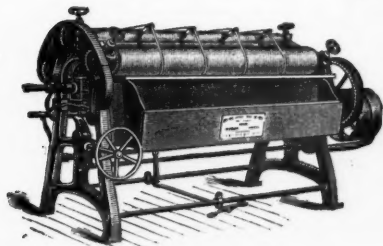
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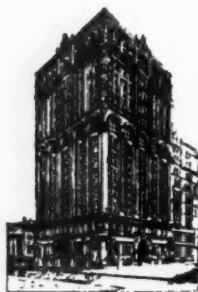


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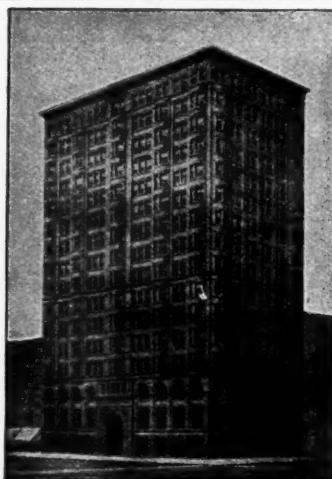
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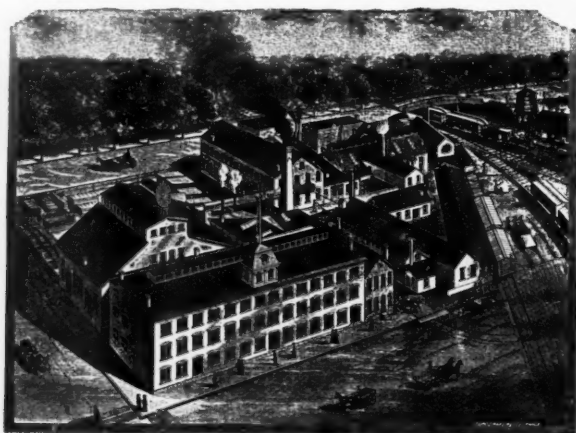
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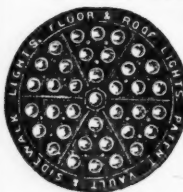
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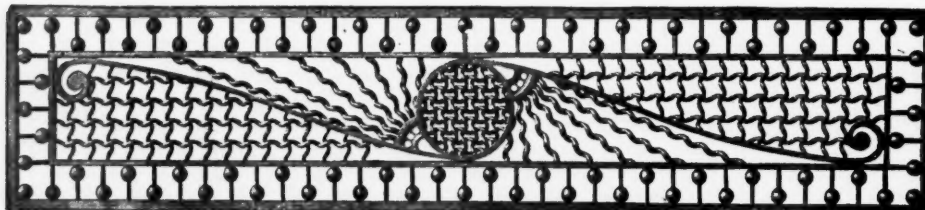
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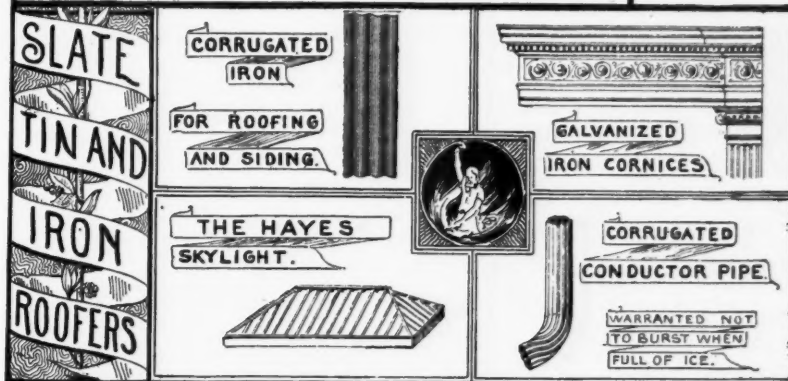
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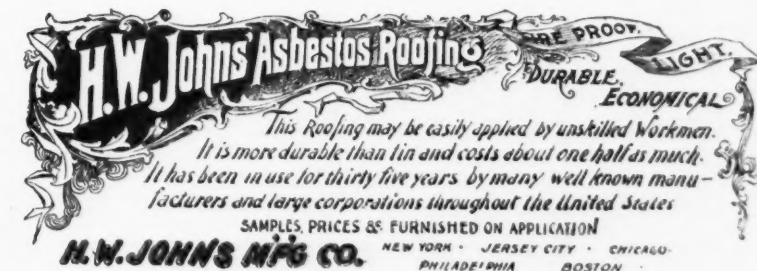
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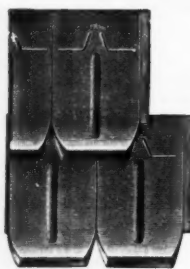
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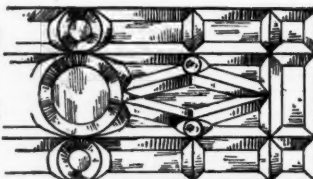
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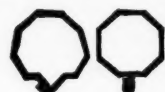
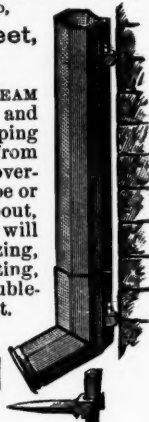
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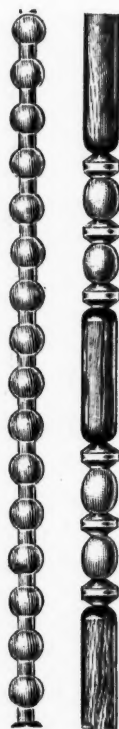
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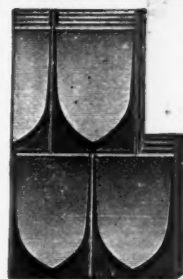
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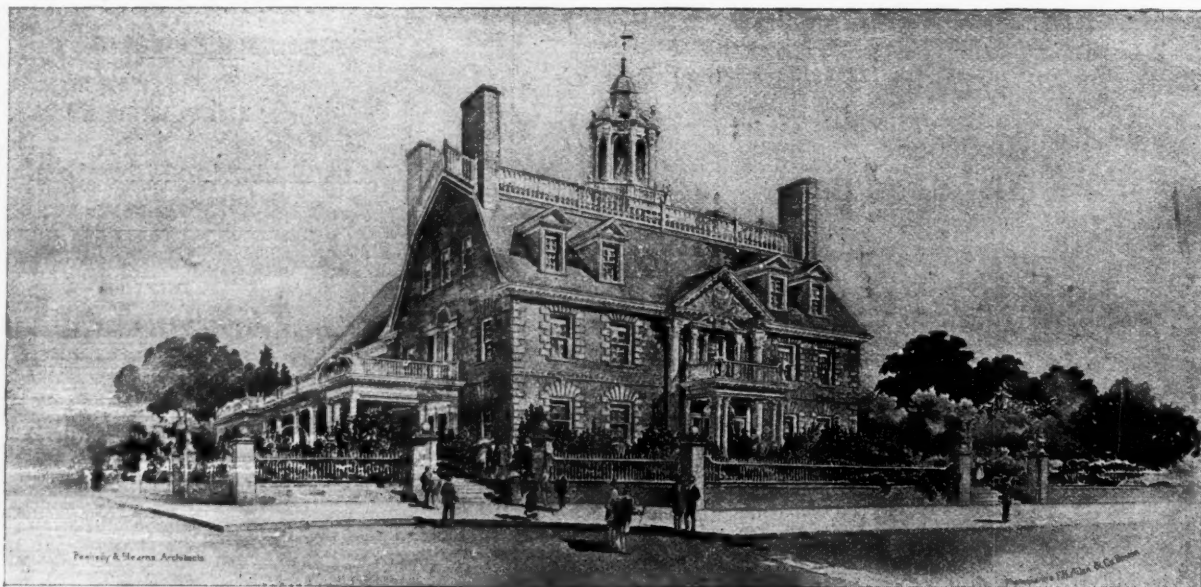
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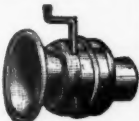
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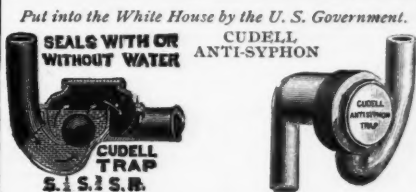
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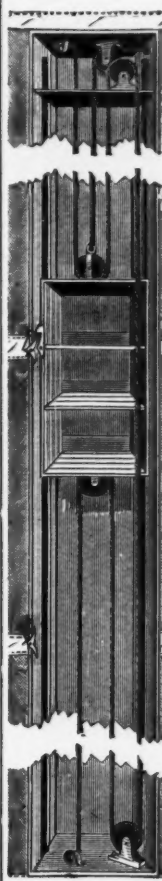
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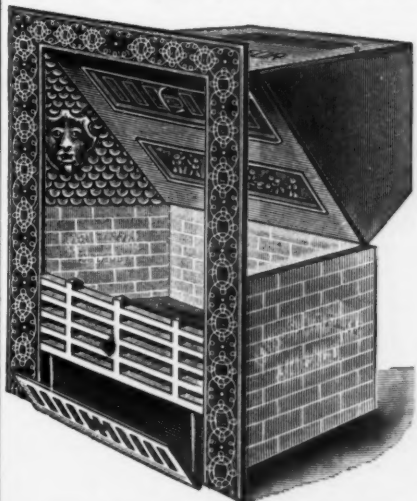
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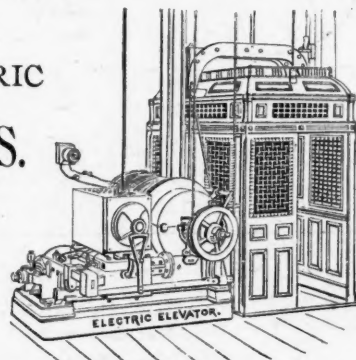
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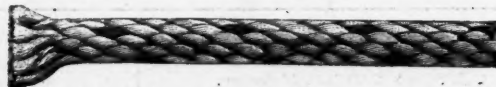


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