> THE AMERICAN ARCHTTECT PUBLISHED EVERY WEDNESDAY INNEWYORK

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# THE AMERICAN ARCHITECT 



# A VISIT TO THE NAGOYA EXHIBITION, JAPAN 

By R. G. LOVELL<br>Illustrations from Original Sketches of the Exhibition Buildings by the Author

NAGOYA is a flourishing commercial city of about 250,000 inhabitants. It is the largest town between Tokio and Kyoto and has made rapid strides in progress within recent years. It is now one of the leading cities of the Empire and has attracted a considerable amount of enthusiasm throughout the country in support of its excellent exhibition. This is the tenth national exhibition which has been held in Japan and it is on a more extensive scale than any of the previous ones. A hundred acres have been set apart for the ground and buildings, the total cost of which has been borne by the Province of Aichi, of which Nagoya is the chief town.
The city's famous castle looms up high above the city. Two gigantic golden dolphins which adorn the roof seemed to glide and glitter from the top of the five-storied donjon. The eyes are of silver and the scales of pure gold. Each dolphin is valued at $£_{1} 8,000$ sterling and measures over 8 feet in height. To the great distress of the inhabitants, one of them was wiecked on the journey back from the 1873 Vienna Exhibition; misfortune to the town followed for some time, until after great difficulties the sunken dolphin
was at last recovered and restored to its original position, amidst public rejoicing of the citizens.
The approach to the long line of white exhibition halls is very imposing. In front of the main entrance is a large cascade arranged in a terraced basin and surrounded by ornamental shrubs and flowers. This is directly in front of the main entrance, which is capped by domes and flanked on either side by wide curving colonnades. These colonnades terminate with small towers which are used as the ticket offices. From the rough sketch I send it will be seen that the architects have followed the traditions of the French Renaissance. They have possibly been more successful with the machinery hall, which is a good piece of Art Nouveau work. The music pavilion, built on a granite base, is in good proportion, the dome ornamented with musical signs and the iron railing made to represent musical notes.
Architecture, as we understand the term, is not natural to the soil of Japan. The marble temples of Greece and Rome, the Gothic buildings of Northern Europe or even our own manor houses of brick and stone could have no place in this land of earthquakes and
tremors. The Shinto temples of Old Japan are famous for the lavished efforts of the wood carver and the painter, not for the skill of the builder or architect. The buildings are of wood, wattle and paper, and the roof of thatch or tiles ; the only pretence to foundation being a large stone placed upon the ground for the main uprights to rest upon.

With these traditions, it is interesting to observe how these clever people solve the problems in constructing buildings in the "Foreign Style." Many of them have been students in Europe and America and have now. established their own architectural schools. My friend, Mr. Teiji Suzuki, one of the architects of the exhibition, is also Professor of Architecture at the Higher Industrial School, Nagoya. Mr. Suzuki explained that

the total cost of laying out the grounds and constructing the exhibition buildings was about $£_{75,000 \text {. The }}$ main halls alone cover an area of 50,000 superficial yards. The construction itself is essentially Japanese; although clothed in foreign style to represent stone and stucco, it is formed of wattle, bamboo and plaster. This then must be the secret which enables such a startling result to be produced at so small a cost.

To a foreigner like myself the smaller buildings in the native style produce a more pleasing effect. It does not gratify our friends and allies to be told this. They boast that they have done in forty or fifty years what it took us in Europe many centuries to accomplish! They certainly appear to be prouder of their more recent efforts than of the works of their predecessors.

One of the most attractive buildings in the grounds is that erected by the Formosan Government. It is more Chinese than Japanese in design, but to our foreign eyes it appears to grow more out of the ground and seems part and parcel of the soil, and is very cleverly adapted to modern requirements.

On a hillside is reproduced one of the most famous buildings of Kyoto, Kinkakuji, or the Golden Pavilion. It is a delightful little three-storied building intended for the entertainment of notable guests who visit the exhibition. The original pavilion at Kyoto is all that remains of an extensive temple built at the end of the fourteenth century. It was almost completely covered with gold, nearly all of which has since disappeared, although the original work remains and bears testimony to the beauty of the work both of the painter and the carver.

There is a full-sized reproduction of Nagoya castle, which appears almost superfluous with the original so near at hand. In a typical Japanese building the Imperial household are showing a special exhibit of forestry; here may be seen the different kinds of wood
from the forest reserves of the Imperial family. The supports are rough trunks of trees representing different species, and the ceilings are panelled to show to best advantage the grains and quality of the wood. I understand that the Imperial Household has never taken part in an exhibition before.

All Japan has contributed exhibits grouped under the following headings: Agricultural Products, Silk, Food and Drink, Dyed Goods and Woven Fabrics, Porcelain, Cloisonné and Metals, Forestry Products, Articles for Personal Adornment, Lacquered Wares, Wood and Bamboo Manufactures, Specimens and Machinery.

Nagoya was the first city in Japan to make clocks and is noted for its manufacture of violins, porcelain and cloisonne ware ; as may be supposed there is an extensive collection of these goods. The best Nagoya cloisonné is quite distinctive from that made at Kyoto or Tokio. The basis of the vase is of silver, often beaten up into the design, such, for instance, as in water and wave pictures, wires are also soldered on as in the usual work, but the enamel employed is for the most part transparent, so that very delicate results are obtained by the silver shining through the glaze.

The collections of the recognized Japanese products did not detain me long, except to observe the quantity and variety of the exhibits. The general impression being that quality did not seem now to be the dominating character of Japanese industries. The most lasting impression that I brought away was the extraordinary progress made by these clever people in reproducing the products of European manufacturers. The largest exhibits were those of dyed goods and woven fabrics. It would be a revelation for our Lancashire and Yorkshire friends to see the working models of looms and appliances produced by the nimble hands and brains of these sons of Nippon. - They seem to be able to turn out practically all that we can do.


The Japanese home market is being gradually closed to us Europeans. Although one hears a great deal of the open door in Manchuria and Korea, the economy of cost and facility of transport must in time surely preclude our goods from these markets also. And why not? The industry, sobriety and thrift of the Japanese entitle them to all the advantages they can gain. They are a peaceful people weary of war of weapons, but keen for commercial competition. They have all the advantages on their side. The great lesson for us at the Nagoya exhibition is to remember how little there is for the Japanese still to learn.

There is a fine display of art treasures in the exhibition proper, and an excellent collection of modern pictures is being held in the Commercial Museum in the town. Experts in "flower arranging" and "tea cere-
monies" give frequent exhibitions of their skill. These functions appear monotonous to a European, but are of fascinating interest to the cultured Japanese.

Another attraction of exciting interest is the cormorant fishing, a custom kept up to the present day in many districts. These great ungainly sea birds are trained when quite young to assist their masters. The fishing takes place at night and by torch light. The fish are attracted by the light. The bird wears at the base of its neck a bone ring, tight enough to prevent marketable fish from passing below it but at the same time loose enough to admit the smaller prey which serves as food. The master stands at the head of the boat and gathers into his hands the stiffened cord, which is attached to each bird, as he lowers them separately into the water. An expert man can thus control a dozen birds, but has a very busy time, as the cormorant sets to work diving and ducking with wonderful swift-
ness. The master must have his eyes everywhere and his hands following his eyes and he must handle his reins so deftly that there should be no fouling as the birds dash hither and thither. Specially must he watch for the moment when any of his flock is gorged, a fact generally made known by the bird itself when it swims about in a foolish, helpless way with its head and swollen neck erect. The master hauling in on that bird, lifts it aboard, forces its bill open and squeezes out the fish, then starts it off again on another expedition-all this with such wonderful dexterity that the other birds have no time to get into a tangle.

The exhibition grounds are very tastefully laid out. The gardener has made the most of every natural feature, the show of flowers and shrubs was good but the condition of pathway and road left much to be desired. At night the buildings are illuminated with electric light, and there are frequent fire-work competitions.

## POLYCHROME TERRA COTTA*

ITS INCREASED USE AND RAPID DEVELOPMENT

THE use of artificially colored terra cotta has developed with a rapidity little short of startling. Fortunately the more important work has usually fallen into the hands of well known architects who bave been able to develop it with discretion; though their efforts are not always entirely free from that tendency toward extravagance which usually attends the introduction of new methods or materials.
On the whole, one is justified in saying that discretion has been used. This is the more necessary because the innate tendency of men is usually toward bright color until the restraining influence of a trained judgment is felt, and especially so in more northerly climes where veiled half-tones are better suited to our more clouded skies, with their diffused lights, which bring out all those nuances and subtle values which sunlight kills.
Polychrome architecture, therefore, requires the nicest judgment with an ample background of experience as it is difficult to foresee the effect of new colors and combinations and the modifications due to varying distances from the eye and heights above the ground.

The accompanying illustrations show some recent work in this direction as well as it can be shown in monotone reproduction, but supplementing these views by a verbal description the total effect can be pretty accurately imaged.

The inclination to use gray as a basic tone, enlivened with green and old gold, is one of the more recent developments. Churchill's restaurant, Broadway and Forty-ninth Street, New York (Herbert M. Baer, architect), is a good example. Gray actually predominates in surface extent but is insignificant by contrast with the more lively colors. It serves the purpose of differentiating the architectural features from each

[^0] accompanying this article and for information regarding details.
other and yet binds them together. The spandrel panels are of green tile, the modeled architrave is decorated in old gold and green, and these colors are repeated in the cornice. The parapet and ornamental pediment are of light gray terra cotta.

A rather unusual color treatment occurs in the Fourth Avenue Building, Fourth Avenue and Twenty-seventh Street, New York; Charles A. Valentine, architect. Here the dominating tone is again gray. The building is sixteen stories high of gray brick and terra cotta. The spandrels from the third story up are gray with old gold flutes. In this feature the colors are not distinctly separated from each other but merge together into a soft warm color, and the result is excellent. The shield panels of the spandrels are outlined in dark blue, used rather to emphasize the modeling than to lend color value to the scheme. The pendant panels at the twelfth story are rather more prominent in gray, old gold and blue, and the brackets at the thirteenth story show stronger individuality in yellow, blue and gray. The spandrels of the three upper stories repeat the color scheme of the lower spandrels, but the modeling is somewhat different. The pilasters have central panels of bright yellow large enough to give true color value. The gray of the architrave is brightened with old gold, and the modeling is again defined with blue. Panels of rich sienna in the frieze give character, tone and warmth to the whole building, and add life to the lighter contrasting colors. The building ends in an overhanging cornice, its shadow relieved with colored ornament.

The Bishop Stang Day Nursery, at Fall River, Mass., Mathew Sullivan, architect, obtains an excellent color effect by the use of bright red brick, white terra cotta, and Della Robbia Bambino panels in terra cotta with a Della Robbia blue background. There are but four panels, yet by what might be termed the unexpectedness


APARTMENT HOUSE, EAST FIFTY-EIGHTH STREET, NEW YORK, J. E. R. CARPENTER, ARCHITECT
of the blue backgrounds they catch the eye and accentuate the cheerfulness and life of the façade. It is a good example of what may be done in a small building with a very meager use of color.

A delicate and effective color treatment is used on the recently completed apartment house, II6 East Fifty-eighth Street, New York, J. E. R. Carpenter, architect. It is a good example of modeling supplemented by color. The terra cotta ashlar of the two lower stories is modeled in low relief, and free from color except for the yellow rosettes in the spandrels, next to the entrance. The entrance is elaborately modeled, but also in low relief and treated in yellow and white with slight touches of light green. The color is applied with intentional lack of exactness to avoid a too mechanical effect. In the belt course and


Upper stories, fourth avenue building, twenty-Seventh street and fourth avenue, new york
brackets under the third story balcony, larger area is allowed for color to minimize the natural shadow. Low relief again occurs in the yellow and white balusters and panels of the balcony. With the exception of the yellow and white shield at the fourth story level the entire façade is pure white from the third to the seventh story. Here the balcony and its attendant features show green and yellow seemingly in the same ratio as in the lower balcony, but actually in a bolder way to overcome the diminishing effect of distance from the ground. The top story panels an I the main cornice not only increase the color areas but use stronger colors to bring the scheme to a consistent conclusion. Green and yellow are supplemented by a warm old gold shade, and dark blue is used on backgrounds.

This buildingthought not in the least spectacular-
shows to advantage the possibilities of polychrome terra cotta. Entirely of terra cotta from the sidewalk up, the large fields of rusticated ashlar indicate the convenience and simplicity of construction, while the varied colors and the modeling of the other features demonstrate its adaptability.

Undoubtedly polychrome terra cotta has come to stay, and now that the experimental stage is over, and the need of excessive caution passed, its development seems likely to be rapid. The architect can use color in a medium that lends itself easily to modeling-and color and form go naturally together. Moreover, terra cotta colors do not fade, are easily cleaned, and the material is absolutely fireproof and will last indefinitely.
The desirability of well arranged color in our everyday life cannot be overestimated. Aside from its artistic influence, scientists have many times, and we believe successfully contended, that temperament is largely


A day nursery at fall river, mass., matthew sullivan, architect
influenced by the dominating color of our environment.

The man who has traveled abroad, and is familiar with the lavish use of color that prevails, particularly in Southern Europe, knows how important a part it plays in those countries of brilliant sunlight. How much more, then, is it to be desired, that in this country, where we have long periods of lowering skies, that in our walks about the streets we should be greeted with something better than the monotony of brick and stone that now confronts us. It is here the architect has his opportunity, keeping in mind as stated at the outset, that he should endeavor to avoid the glaring intensities of the primary colors, and use, with artistic judgment, the secondary and more subdued tones. The examples shown will serve to indicate the use of this new-old medium of expansion, and the means placed in the architect's hands by recent improvements in the manufacture of polychrome terra cotta.


## E LEMENTS of RENTAL VALUES of OFFICE BUILDINGS

An interesting paper on "Comparative Rentals of Office Buildings" was read by Mr. F. H. Heywood, of Columbus, Ohio, at the recent national convention of building owners and managers in Washington.
From a report of the proceedings in the October issue of Building Management we extract from Mr. Heywood's paper the following paragraphs as of immediate interest to architects:

The several items which go to justify differences in rates in different parts of the same building may be set down as follows:

First. The advantage of advertising upon the windows commanding a view of the principal street or streets. Though this is different in different cities and in different locations within the same city, yet instances may be noted where a corner room with windows facing two prominent streets and upon the second floor will rent for 40 per cent. more money than the same sized room at the same corner upon the sixth floor, and ${ }^{1} 30$ per cent. more than the average of the building, 300 per cent. more than the low rate in the building, 17 per cent. more than the same room on the third floor, and 25 per cent. more than the same room on the fourth floor. Again this room commands 17 per cent. more than the one adjoining it upon the principal street and 25 per cent. more than the room adjoining it upon the side street. The manager of the building, under consideration, tells me he has no trouble in getting from 50 to 100 per cent. more rent for rooms which offer advantages for advertising the tenant's business, either by having windows facing principal streets or entrance doors facing the elevators.

Second. Units or rooms with entrance convenient to elevators, or with the entrance directly facing the length of the corridor, in some buildings have added value.

Third. View and quiet.-The upper floor units rearly always command a higher rental, in some instances as much higher than the middle floor, as the advantages of advertising on the second and third floor are greater than on the middle floor. There is everywhere a class of tenants willing to pay for the view obtained from their office windows and for the quiet obtained by height above the noisy streets.

Fourth. Natural light.-In the West particular attention has been given to an effort to obtain natural light to each unit and as a result large areas have been devoted to light courts. Whether or not this pays is difficult to determine. I have at times been inclined to doubt it. You can nearly always find some tenants whe are easily satisfied with artificial light if they can get a lower rental rate, and if you make your own current you can afford to simply figure fuel cost, when comparing extra cost of lighting these dark rooms with what you can get for them. Of course additional cost of construction and service must also be figured. But take a room on a light court with the view obstructed as it must be and very little if any natural light. At the bottom of the shaft you can get practically no more rent for it, because it has windows opening upon the court, than you could if it simply had good ventilation, which
can be had without the windows, and you have lost the space upon valuable ground for many floors in a court which might be yielding an additional income. The rental rate procurable from office space facing light courts varies of course with the amount of natural light therefrom to be obtained, as well as with size and depth of the court. In nearly every instance I have examined even above the adjoining buildings, where the light is wholly unobstructed, the rental rate is io per cent. below the same space facing a street. And this same rate seems to follow on downward io per cent. off of each floor above for each floor below it, after you pass down from the top of the well.
Fifth. The direction from which light comes.-Here there is a great diversity of opinion and it is doubtful if this has any effect upon rates, though it may have its effect upon securing certain classes of tenants. As a rule light from the west seems to be the least desirable. Architects, doctors, dentists, some lawyers, and most office tenants, who devote much time to work requiring absence of shadows and close eye application, prefer north or east light. The south lighted unit always rents well, though it has not much of a lead over the north and east. All this is irrespective of view or other considerations. And so we come to the effect which elegance of structure has upon rates. And you know, and I know, it does affect rates and sometimes very seriously. In many instances it has a greater tendency to reduce the rates of competitive buildings less elegant and built for revenue than to increase them for the elegant building itself. Not that I would for a moment decry all that is fine and great and beautiful in the architecture of our modern office buildings, but you and I, Mr. Manager, are expected to and are desirous of making good returns to the owner upon the value of his investment.

And then we have the big building with its tower reaching almost above the clouds, where you may have an office on the forty-eighth or sixty-second floor, nearly a fifth of a mile above the seat in your automobile at its front gate, the one which consumed 860,000 days of labor to construct, enough to keep one man busy 2.360 years. Built to advertise the business of some great corporation, such as the Metropolitan Building, the Singer-Building and others. Nearly every city has one of these advertising structures and they do advertise their owners' business as well as the business of tenants who occupy them. Try it out and see. Go to Europe. for instance. you may have to explain to some native there that San Francisco is not in the suburbs of Philadelphia, or that Roosevelt is no longer king of the Irish in America, but if you tell him you have an office in the Metropolitan or Singer Buildings he will know at once you are from New York.

## Building Operations for September

According to statistics compiled by Construction News, permits were issued in fifty-eight of the leading cities of the country during September for 16.698 buildings at a cost of $\$ 49.066,879$, as compared with 16.057 structures that were begun during the corresponding month of 1909, involving an expenditure of \$51.950,93 I. This is an increase of 64 I buildings, and a decrease of $\$ 2,884,052$ in cost, or a little over 5 per cent.

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## A PARTIAL ECLIPSE

THE futility of doing good architecture in a conspicuous public place when there is no legally constituted commission to safeguard such interests is well illustrated by the recent appearance of an advertising abomination which rears its abhorrent form in New York alongside the Times building. This latter, since its erection, has been one of the distinctive architectural achievements of the city.

On another page we show a view of this advertising tower, from which it may be seen that its scale and size bring it into such immediate physical competition with the Times tower as to wholly throw the latter out of its proper relation to the scene.

The situation thus created would not be so bad if the competing tower were a thing of beauty, but its gross vulgarity, typical of the spirit of its erection, creates an effect suggestive of a crass boor in refined company.

The American Architect has received from several sources within the past few days clippings from daily papers in the Middle West which appland this tower as a smart piece of St. Louis business enterprise, and refer contemptuously to those New Yorkers whose "artistic ideas" are offended.

The tenor of these clippings uniformly appears to be that, as the advertising enterprise promises to be commercially successful it is futile to pay any attention to protestants whose only objection is an æsthetic one.

We do not know how far this attitude of the press represents public opinion in the Middle West, but we have the best of reasons for knowing it does not in the least represent the opinion of architects there; and we venture to suggest to chapters of the Institute in whose territory such sentiments are given expression to by the daily papers that they could engage in no more laudable educational work than to counteract, by chapter resolution and by individual effort, the utterance of such sentiments in any community.

## COMPETITIONS AND THE INSTITUTE

WE called attention in our last issue to a right and a wrong way of conducting architectural competitions, as tested by the standards recently set up by the Institute.

There can be no doubt that the Institute's rules make for the best interests of both owner and competitor, and perhaps embody all that can be hoped for at present. Yet it is permissible to doubt whether the final word has been said. Time and space alike forbid a discussion at the moment of the fundamental principles of competition among artists, but it seems also permissible to say that a categorical negative cannot be given, as the tenor of the Institute's rules appears to imply, to the proposition that competitions are justified by the essential conditions of the situation which always arise when a body politic, or commercial, proposes to erect a large, conspicuous, or complex structure. The results of competitions may vary as between this or that particular case, and it sometimes happens that it is difficult to pronounce certain judgment between the best half-dozen of the designs submitted. But it is quite as likely to happen (as, for example, in the recent case of the Pennsylvania Masonic Home) that one design is so evidently a better solution of the problem than any of the rest that it puts a quietus on the proposition that it is better to select your architect without competition. This, however, is a purely professional matter, and a careful compliance with the Institute's rules will wholly safeguard the best interests of the owner and, by so doing, those of the architect as well.

## PORTLAND AND SEATTLE

THE growing importance of both Portland and Seatthe as trans-shipping centers for the Pacific trade has made it imperative that the future shall be adequately safeguarded, and as one of the paramount factors in the situation, the extension of these cities in their street and harbor plans is now receiving most careful consideration by the authorities.

In Portland a civic improvement commission, under the chairmanship of Dr. T. R. Wetherbee, with Mr. Bennett, the municipal architect, as professional adviser, is hard at work studying a town plan which shall take care of the demands of a large future expansion, so far as it can be foreseen.

In both Portland and Seattle the harbor problem is the key to the transportation situation, and Seattle, under the direction of a civic improvement league with Mr. Bogue as expert, is studying the wisest expenditure of a recent bond issue of $\$ 1,750,000$ to be devoted entirely to harbor improvement, but as part of the general town plan.

This recognition, on the part of municipalities, of the wisdom of co-ordinating all civic activities and expressing such co-ordination in the town plan, is highly encouraging both as a symptom of sound growth in civic art and as an appreciation of the value of such art as a business asset, and architects will do well to prepare themselves for expert work of this sort by a careful study of what has been done in this field both at home and abroad.

## A World Exhibition of Town Planning Opened in London

An exhibition in connection with the Town Planning Conference, soon to be held in London, was opened in the galleries of the Royal Academy on October 5.

The American exhibit completely fills the largest gallery and overflows into another gallery where are displayed some sixty maps and diagrams of the various improvements projected by the City of Chicago.

There are thirty-three exhibits from the Society of Architects in Washington, beginning with Peter Charles l'Enfant's rough sketch, made in 1790 , and including diagrams of existing and proposed parks and parkways; elevations of the Capitol and the Washington Monument; bird's-eye views from the high stations above Arlington and typical sections of notable improvements.

New York is represented by seventeen exhibits of the Improvement Commission comprising a general map of the metropolis, a panorama of upper Manhattan and The Bronx, diagrams of the park system and waterfronts, the proposed plaza for approaches to the Brooklyn and Manhattan bridges, the subway loop terminals and other improvements.

The Boston Society of Architects have a fine display of diagrams and photographs, and there are similar contributions from Philadelphia, St. Louis, Savannah and other American cities.

The German exhibit fills seven galleries and illustrates with scientific thoroughness the methods of administration by which the rapid extension of the urban districts and the necessities for housing enormous swarms of industrial workers have been regulated.

The French exhibit includes exhibits from Nancy, Lyons, Havre, Paris and other cities, and plans of Versailles, St. Germain and parks characteristic of the landscape art of the eighteenth century.

Amsterdam, Antwerp, Louvain, Stockholm, Gothenburg, Copenhagen, Vienna, Budapest, Rome, Turin, Milan and other Continental cities are represented by drawings of street and park improvements.

The best of the British exhibits are a fine set of drawings and models of Edinburgh and plans of the garden suburbs of Letchworth, Hampstead, Ealing, Port Sunlight, Harborne, Bournville and other villages.

This exhibition may be said to thoroughly illustrate the most difficult work of municipal administration in all progressive countries where the industrial population is constantly increasing, and is a good supplement to the discussion at the approaching conference.

## Sanitary Conveniences for the Tenement

There are several inexpensive sanitary improvements which would make life in the congested districts so much more worth while living that they cannot be too strongly urged. The most important of these are a provision for cremating refuse, the proper venting of gas ranges and the elimination of wall coverings and all projecting shelves and mouldings which serve no utilitarian purpose. Since the coal range is now almost obsolete in the newer tenements the installation of a small incinerating retort heated by gas at the tenant's expense would seem a readily feasible matter mutually
advantageous to landlord and tenant alike. The building code in New York requires all gas ranges to be vented through adequate flues, but when such flues exist they are generally not connected and the heat is a source of great hardship in the thousands of small apartments where the kitchen is required to serve also as dining and living room. The far-projecting so-called "Dutch shelf" now almost universal in New York from the cheapest of the new tenements to the exclusive elevator apartment house, it has been conclusively established, is one of the most frequent causes of the spread of disease, collecting and retaining most of the dirt stirred up by dusting and sweeping. It is almost impossible to clean these shelves as the practice is general of leaving the hidden part of the shelf in the rough. While there is no objection whatever to wall coverings where there is adequate means of keeping the surroundings clean, the tenement is no place for them and the law should unequivocally say so. It would, of course, entail an increase in first cost to paint all walls in tenements, but the gain for better sanitation would be proportionate. Vactum cleaning is becoming more common in the better class of apartments, and is accomplishing a marked advance in household hygiene which must, for the present, be obtained at a greater expenditure of labor by those whose means do not permit them to afford this convenience.


VIEW LOOKING NORTH ON BROADWAY, SHOWING THE ADVERTISING TOWER AND ITS RELATION TO THE TIMES BUILDING
THE AMERICAN ARCHITECT


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## CURRENT NEWS and COMMENT

## A Communication

To the Editor of The American Architect:
Dear Sir-I am able to make an interesting addition to the points of my article of September 28, which related to the Report of the Italian Commission on the Leaning Tower of Pisa.

An Italian translation of this article is in course of preparation, and it occurred to me that a diagram representing the difference in the results of the same plumb, as measured to level and as measured to slope, would be an interesting and useful addition to the article.

In my article in your issue of September 28 I had estimated (by compass test on the very small scale of the original DeFleury section of the Leaning Tower) that the DeFleury sixth story plumb would give a io cm . higher result on the measure to slope than it did on the measure to level.
In order to prepare an illustration bearing on the general principle, for use in the Italian translation, I instructed my draughtsman to make a drawing, four times enlarged, from that part of the DeFletury section which shows the ground floor of the tower, and to report to me what results would be obtained by the enlarged scale as regards the measure to slope.


Diagram of DeFleury's sixth-story plumb in 1859 , showing the difference of measures on the same plumb as taken to level and as taken to slope.
(This level line in DeFleury's original survey starts from the upper step on the north side of the exterior platform and is the level which shows on the south exterior side the total dip at the base of $\mathrm{m}, 1.525$.)

Please note this diagram herewith. The additional amount on the measure to slope is not 10 cm . It is 7 cm .

Now 7 cm . is the amount which the Commission reports that the tower has moved since the DeFleury sixth story plumb of 1859 (if this sixth story plumb can be trusted, which the Commission doubts).
If we suppose that the Commission took a plumb from the sixth story and that this plumb was measured to the surface slope, it appears likely or possible that the erroneous impression was thus derived that the tower had moved 7 cm . since the date of DeFleury's plumb. The correspondence of the figure of 7 cm ., mentioned by the Commission, to the difference of 7
cm . between the two measures shown by the diagram makes this hypothesis attractive, although it obliges us to assume that the Commission overlooked the point that the difference between sixth story plumbs would not be the same as the difference between seventh story plumbs.

Wm. H. Goodyear.

## PERSONAL

The Atelier Wynkoop announce their removal to new quarters, 74 Irving Place, New York.

Frank D. Skeel, it is stated, has moved his offices to Vickers Building, on Euclid Avenue, Cleveland, O. This building is one of Mr. Skeel's recently completed works.
Messrs. George B. Post \& Sons, of New York, are in consultation with President Richmond regarding changes and improvements in the buildings and grounds of Union College at Schenectady, N. Y.

Mr. Oswald C. Hering announces that he has formed a partnership with Mr. Douglass Fitch and will continue the practice of architecture, under the firm name of Oswald C. Hering \& Douglass Fitch, Architects, with offices at No. I West 34th street, New York.

Local papers state that the firm of Hughes \& Mangin, architects, Syracuse, N. Y., has been diśsolved. Mr. Hughes will for the present, it is stated, retire from active practice. Mr. Mangin will continue in the former offices of the firm in the Betts block.

Mr. S. E. Desjardins, architect, informs us that he has removed his office to the Pickering building, Fifth and Main Streets, Cincinnati, Ohio. Mr. Desjardins has admitted to partnership Mr. Roland Bevis, heretofore associated with him as assistant.

## NEWS OF THE CHAPTERS OF THE A.I.A.

Southern Pennsylvania Chapter Holds Meeting
The Southern Pennsylvania Chapter of the American Institute of Architects held its fall meeting October 8. Owing to the unavoidable absence of President Rankin, Mr. John B. Hamme acted as president pro tem.

A number of interesting matters of business received consideration. One of these was to request the board of directors of the A. I. A. to allot, if the way be clear, to its jurisdiction the following additional counties of the State: Bedford, Fulton, Blair, Huntington, Mifflin, Juniata, Snyder, Union, Northumberland, Lycoming, Montour, Clinton and Centre. The counties as covered by the chapter at present are: York, Lancaster, Adams, Dauphin, Cumberland, Franklin, Lebanon and Perry. The balance of the counties are to be divided between the remaining two chapters", Philadelphia and Pittsburg.

The date of the next regular meeting of the chapter is the second Monday of December.

The official special train of the chapter to the con-
vention of the A. I. A. in San Francisco is scheduled to leave Chicago at 9:30 a. m. January II.

## Michigan (Detroit) Chapter.

At a business meeting of this chapter held October II a scholarship to the value of $\$ 55$ a year in the architectural course of the University of Michigan was voted.

By a unanimous vote the directors of the chapter were authorized to subscribe $\$ 500$ for the establishment of a school of design in Detroit.

## BOOK NOTES

The Liverpool Architectural Sketch Book. Being the Annual of the School of Architecture of the University of Liverpool. Published by the Proprietors of the Architectural Review. Caxton House, Westminster, London. Half-crown, net. 1910.
In those who are familiar with the admirable work being done by Professor Reilly at the University of Liverpool, and the energy with which it is prosecuted, the appearance of the architectural school annual for 1910 will excite much interest. This publication takes the form of an 8o-page book somewhat larger than the Architectural Review, seventy-eight pages of which are devoted to illustrations. Part I is devoted to measured drawings by students of the school of such buildings as the Taylorian Institute, Oxford; St. George's Hall, Liverpool; the Custom House, Dublin; St. Mary-leStrand, London; Palazzo Pompeii, Verona; Palazzo Pandolfini, Florence-twenty-three subjects in all. Part II is devoted exclusively to design problems given in the school. In accordance with Professor Reilly's wise policy, these problems deal chiefly with architecture done in "the grand manner," or monumental work, though "a set of twelve almshouses," "a workman's cottage" and "a hotel for a country town" give the student an opportunity to relax occasionally and express his emotions in more homely idiom.

In his lucid introduction to the book, Professor Reilly justly observes "all early teaching, to be effective, must be academic," and though a stranger may not wisely proclaim ex cathedra opinions about any matter abroad, we venture to believe that the School of Architecture of Liverpool University gives the best promise, of any means in sight, of rejuvenating the art architectural of England. It is true the solutions shown are not those likely to be reached by American architectural students, but there is no reason why they should be, and every consideration of wholesome development why they should not.

## Church Tower Moved Intact

In the issue for September, 1910, L'Architecture et la Construction dans le Nord reports the moving intact of a church tower, covering a superficial area of some $\mathrm{I}, \mathrm{IOO}$ feet and I 50 feet high a distance of about thirty feet. The operation was made necessary by alterations and the enlargement of the building, and was performed without disturbing the continuous working of a sixteenth century clock installed in the tower. The work occupied ten days and was successfully carried out by a firm of American contractors familiar with such operations.

## Problems in Town Planning

In the current issue of the London Architectural Review exception is taken by Mr. W. R. Davidge to some current notions regarding traffic problems and the correct placing of monumental or otherwise interesting buildings at civic centers. This paper and its illustrations deserves attention though one may not wholly agree with the author's conclusions.

## D. H. Burnham on Town Planning Conference

In an interview with Mr. D. H. Burnham, of Chicago, printed in a London daily paper, he is reported as being most enthusiastic as to good that will be accomplished by the Town Planning Conference, just closed in London.

We read: "It is the greatest thing of the sort ever held," said Mr. Burnham. "There were present many great authorities on town planning, and the subject has been thrashed out thoroughly. The conference had the benefit of having various town planning schemes illustrated by drawings, which made their meaning quite clear. Germany was represented by drawings of a dozen of her greater cities, while America showed plans for the future development of Washington and Chicago, which plans have taken about four years to work out."

Mr. Burnham acted as presiding officer on one day of the Conference and during the session read a paper on "The Development of the Cities of the Future."

## Competition for Albany. (N. Y.) High School Decided

The first prize in the competition for a high school at Albany, New York, has been awarded to Goldwin, Starrett \& Van Vleek, with Orrin Winthrop Rice as associate. Second prize, Edward Sheppard Hewitt and Frederick G. Frost, of New York; third prize, Louis Boynton, New York. The architects' estimate of cost of building is $\$ 300,000$.

The successful design was selected by the city officials, with Mr. Franklin B. Ware, state architect, acting as professional adviser.

## A Scholarship in Architecture

A scholarship valued at $\$_{\mathrm{I}, 000}$ per year for advanced work in architecture has been made available to the Trustees of the University of Illinois by Mr. Francis John Plym, of Niles, Michigan. The conditions under which this scholarship is to be bestowed will be determined by the Trustees. For the present it is understood that it will be given each year to a graduate of the Department of Architecture for the purpose of foreign study and travel.

## An American Sculptor Dead

Larkin Goldsmith Mead, an American sculptor and brother-in-law of William Dean Howells, died in Florence, Italy, on October 15. His more prominent works in this country are the national Lincoln monument at Springfield, Ill., the soldiers' monument at St. Johnsbury, Vt., and the statues of Ethan Allen in the National Art Gallery, Washington, and in the State Capitol at Montpelier, Vt.


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## BUILDING NEWS

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we cannot guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

## ALABAMA

Dadeville.-Methodist Congregation has decided to erect edifice.

Mobile-Bids will be received until noon, Nov. i, for erection of two-story brick business building at Royal and St. Anthony Sts. for W. D. Bellingrath. Stone Bros., 109 Lowenstein Bldg., architects.

Montgomery.-Mayor Wim. A. Gunter, Jr., has recommended erection of fire station in southern part of city.

## ARKANSAS

Helena.-First Methodist Church is considering erection of $\$ 50,000$ edifice.

Hot Springs.-H. H. Richards, 134 Van Buren St., Chicago, is preparing plans for erection of six-story hotel building for Chas. M. Rix.

## CALIFORNIA

Coronado City.-John B. Lyman, Jr., San Diego, is preparing plans for erection of bank building at Orange Ave. and Park Ave, for Bank of Commerce \& Trust Co.
Huntington Beach.-Holly Sugar Co., Colorado, will erect plant near this city. W M Wiley, President.

Los Angeles.-Plans for $\$ 30,000$ apartment house to be erected at Sunset boulevard and Bunker Hill St. for the American Finance \& Realty Co. have been prepared by the Architectural Designing Co.
Los Angeles.-Santa Fe Springs Hotel \& Sanitarium Co., Dr. C. Stuart Hutchinson, President, is planning to expend $\$ 150,000$ in improvements, including erection of hotel.
Oakland.-Plans for buildings to be erected at County Infirmary for care of tubercular patients have been amended by Board of Supervisors so as to come within the appropriation allowed, $\$ 13,500$. F. S. Voorhees, Architect.

Pasadena.-A local architect has completed plans for twostory, seven-room residence to be erected on West California St. for Brigadier General D. P. Heap.

Pomona.-Board of Trade has had plans prepared for erection of building. M. H. Wilson, President.
Redding-Union High School District will at once choose site for erection of proposed high school.

Sacramento.-Farmers \& Mechanics Savings Bank will erect $\$ 175,000$ 5-story bank and office building on Eighth St. C. T Gaiser, Architect.

Guaranty Title \& Trust Co, will erect $\$ 250,000$ building at Seventh and J Sts.
Sacramento.-Bids will be received Dec. 5 for erection of proposed court house after revised plans.

San Diego.-Citizens will vote Dec. 9 on proposition to build \$200,000 polytechnic high school.

San Francisco.-W. G. Hind, Humboldt Bank Bldg., has prepared plans for erection of $\$ 40,000$ apartment house ; steel contract let. Architect C. O. Clausen has prepared plans for erection of apartment house for M. C. Shaw on Washington St.

## CONNECTICUT

Bridgeport.-Marsh Bros. Co. has had plans prepared for erection of residence on William St.

Plans have been prepared by Architect W. J. Skinner for immediate erection of two residences in Derby for Mrs. E. E. Adams.
Manchester.-Hartwell, Richardson \& Driver, 62 Devonshire St., Boston, have finished revised plans for school building to be erected at the center and bids will be asked at once.

New Haven.-Architects Allen and Williams, 82 Church St., have prepared plans for erection of four-story $\$ 30,000$ building to be erected for Gately \& Brennan.

New Haven.-Congregation Bnai Jacob is having plans prepared for erection of $\$ 30.000$ synagogue at 345 George St.

Watfrrury.-Site on Robbins St., Mt. Pleasant Park, has been purchased by Rt. Rev. Bishop J. J. Nilan for erection of Catholic church.

## DELAWARE

Wilmington.-General Pulaski Club has had plans prepared for erection of $\$ 23,000$ clubhouse at Second and Justison Sts.

## DISTRICT OF COLUMBIA

Washington.-Professor W. S. Small, Principal of Eastern High School, is urging $\$ 150,000$ appropriation for purchase of site for erection of high school.

## FLORIDA

SAnford.-Virginia-Carolina Chemical Co. will at once erect plant on First St.
West Palm Beach.-Dramatic Stock Co. will erect theater on Clematis Ave. Judge W. I. Metcalf is interested.

## GEORGIA

Atlanta.-Atlantic Ice \& Coal Corporation has decided to appropriate $\$ 350,000$ with which to build additional ice manufacturing and storage plants in Atlanta and additions on plants in Georgia and Florida. Ernest Woodruff, President.
Atlanta.-Trustees of Grady Hospital will at once ask for bids for erection of proposed $\$ 100,000$ building.

Beach.-Methodist Congregation is considering erection of edifice.
Crawford.-City will, on Nov. i, sell $\$ 5,000$ school bonds. R. S. McMahan, Clerk Council.

## IDAHO

Coeur D'Alene.-Coeur D'Alene College, Rev. B. Westerlund, President, is having plans prepared for erection of gymnasium.

## ILLINOIS

Carrollton.-Bids will be received until 2 p. m. Nov. if for erection of brick building and frame dwelling. Leroy McFarland, Jr., Secretary Eldred Drainage District.,

Champatgn.-Wabash Railroad has selected site for erection of proposed passenger station. Henry Miller, St. Louis, Mo., General Manager.
Chicago.-Paul Gerhardt, Architect, Schiller Bldg., is preparing plans for apartment buitding to be erected for Gustave H. Poetsch at 4737 Dover St. Cost, \$112,200.

Site at W. Fifteenth St. and S. Fiftieth Ave. has been purchased by Catholic Bishop of Chicago for erection of Lithuanian church and school.

Frederick B. Skillman is considering erection of eight-story, $\$ 250,000$ hotel building at 228 S . Halsted St.
Trustees of the Central Manufacturing District are about to erect for J. L. Metz Furniture Co. six-story, $\$ 00,000$ building. Alfred S. Alschuler, Fort Dearborn Bldg., Architect.
Ottawa.-Pleasant View Luther College Association has decided to erect a new ladies' dormitory, at cost of $\$ 35,000$.

Rock Island.-Bids will be received until Nov. 23 for erection of proposed post-office. James Knox Taylor, Washington, D C., Supervising Architect, Treasury Department.

## INDIANA

Brazil.-M. Johnson has completed plans for erection of apartment house for Chas. Minshall, 1 erre Haute. Bids will soon be asked
Evansville.-J. H. Deakin will erect three-story apartment house on Chestnut St. Frank Ingle, Architect.
Indianapolis.-Eli Lilly \& Co. will erect administration building on Alabama St.
Indianapolis.-Knights of Columbus order has decided to erect, at a cost of $\$ 30,000$, addition to building in North Illinois St.

Plans are being prepared for Mrs. Hannah Mansur and Mrs. Mary E. Hume for erection of building on East Ohio St. Indiana Harbor.-Methodist church is considering erection of $\$ 50,000$ edifice.
Marion.-Site will be purchased for erection of annex to Y. M. C. A. building.


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Mishawaka.-Edward and Charles Mills are considering erection of business block on E. Second St.
Mishawaka.-Church to cost from $\$ 75,000$ to $\$ 100,000$ will be erected by E. G. Eberhart and others and presented to Methodists.
Portland.-Rev. Earl Dunbar, Portland Methodist Church, is interested in proposed erection of $\$ 5,000$ edifice at Union.
Sandborn.-Christian Church is considering erection of $\$ 12$, 000 edifice. Nelson Carroll, Chairman Building Committee.
Terre Haute-Plans have been completed for erection of a second high school:
Vincennes.-United Brethren Congregation is considering erection of edifice.

## IOWA

Cedar Rapms.-First Church of Christ, Scientist, will erect proposed edifice on Second Ave.
Des Moines.-F. M. Hubbel is considering erection of \$500,000 hotel on river front.
Des Moines.-D. S. Chamberlain is considering erection of hotel at Twelfth and Grand Sts.
Lorimor.-Bids will be received until 8 p. m., October 3r, for erection of town hall. H. L. Albert, Town Clerk.
Sioux Ciry.-Clerics of St. Viateur will erect boy's school at cost of $\$ 100,000$. Very Rev. Fr. Charlebois of Chicago, is interested.

## KANSAS

Kansas City.-City Commissioners have approved plans for $\$ 200,000$ city hall and public auditorium which city is to build on North Sixth St. ; bids will be opened Nov. I.
Chicago, Rock Island \& Pacific Railway Co. will build a $\$ 50,000$ freight house at Third St. and Berger Ave.
NewTON.-Board of Education is considering erection of \$75,000 school.

Silverlake.-Architect F. E. Squires, 628 Kansas Ave., Topeka, has prepared plans for erection of $\$$ ro,000 school.
Topeka.-Architect N. P. Nielson, 48 Crawford St., has prepared plans for erection of number of schools.

## KENTUCKY

Cadiz.-Plans will be received until Jan. I for erection of $\$ 25,000$ school. B. T. White, Secretary School Board.

Lexington--School Board has selected architects to prepare plans for proposed West End School.
Louisville.-Hugh L. Nevin has about perfected plans for erection of $\$ 75,000$ apartment house at Fourth Ave. and Oak $\stackrel{\text { erect }}{\mathrm{St}}$

Architects Joseph \& Joseph, Commercial Bldg., will take bids for erection of theatre at Eighteenth St. and Broadway.
Citizens National Life Insurance Co. will erect $\$ 70,000$ home in downtown district.

Shelbyville.-J. C. Bayne, Bagdad, will erect residence on Main St.

## LOUISIANA

Elton.-Calcasieu Parish School Board will soon let contract for erection of school. W. Krielow, Jennings, Architect. John McNeese, Lake Charles, Parish Superintendent.

New Orleans.-Bids will be received about Nov. I by administration of Isaac Delay's Museum of Arts, 518 Iberville St., for erection of proposed $\$ 135,000$ art building. Leidenbaum \& Marx, Chicago, Ill., Architects.

## MAINE

Bangor.-Jas. S. Howe, Jr., is considering erection of fourstory brick building on Harlow St.

Greenville Junction.-State Y. M. C. A. will erect $\$ 25,000$ railroad Y. M. C. A. building. J. C. Smith, Waterville, Chairman.

## MARYLAND

Baltimore.-Wm. H. Ponder will erect residence at Ten Hills. Glidden \& Fritz, architects.
Jas W. Amos will erect seven two-story brick dwellings, cost $\$ 12,000$, on Edmondson Ave. J. F. Gerwig, 210 E. Lexington St., architect.
Baltimore.-Plans have been completed by Jacob F. Gerwig, 210 E. Lexington St., architect, for twelve two-story brick dwellings, to be erected on Chelsea Ave. for A. Warten Edwards; cost about $\$ 30,000$.
Glidden \& Friz are preparing plans for another residence to be erected at Ten Hills for L. D. Davis. Cost about $\$ 8,000$.

George M. Mackenzie, architect, Govans Bldg., is drawing plans for $\$ 10,000$ Sunday School room to be erected in connection with the Govans Methodist Episcopal Church.

Baltimore.-The H. H. Babcock Company, Fayette and Hanover Sts., is planning to build a new building uptown.

Becker Brothers \& Son will start work soon on $\$ 100,000$ building to replace one at Lexington and Frederick Sts. Theodore Wells Pietsch, Architect.

James M. Amos will build seven two-story brick dwellings on Edmondson Ave., to cost about $\$ 12,000$. Jacob F. Gerwig, 210 E. Lexington St., Architect.

Baltimore.-Proposed Lutheran church will be erected at Garrison and Bateman Aves. Rev. Dr. H. W. Hartman, Highland Ave., Walbrook, is interested.

Zion Church has had plans prepared for erection of parish house at Lexington and Holliday Sts.
Council is considering $\$ 15,000$ appropriation for erection of detention hospital.

Baltimore.-Carl R. McKendrick will erect residence at Ruxton.
W. Elbert Sexton has had plans prepared by Mottu \& White, Professional Bldg., Architects, for a residence to be erected at Roland Park; bids now being received.
Archer \& Allen, Architects, Central Savings Bank Bldg., have completed plans for $\$ 25,000$ public comfort station to be erected at Harford and Greenmount Aves.

## MASSACHUSETTS

Boston.-Mayor Fitzgerald has recommended purchase of site in the Fenway for erection of proposed High School of Commerce.
Haverhill.-Lithuanian parish will erect edifice at River st. and Woodmont Ave.
Holyoke.-Dr. G. C. Robert is planning to erect 26 -apartment block at Cabot and Chestnut Sts.
Architect Oscar Beauchemin has prepared plans for erection of residence for Jos. Boyer.
A. J. McDonald will soon begin erection of three-apartment block.

Revere.-Bids will be received until 8 p. m., November 2, for erection of school on Malden St. T. W. Gillette, Secretary Special Committee.

## MICHIGAN

Detrort.-Baxter \& O'Dell, Hammond Bldg., are designing a four-story 32 -apartment building to be erected on Center St. for H. C. Hodges; also two-family flat on Hancock St. for Arthur Schlesinger.

Lansing.-Free Methodists will erect edifice on Madison St. Rev. A. E. Warren, Pastor.

Maple Rapids.-Fisher Bros., Beaudette Bldg., Pontiac, are preparing plans for school. O. M. Snyder, Secretary, Board of Education.

Monroe.-Council has appointed committee to view building sites with idea of erecting city hospital.

## MINNESOTA

Aurora.-School District No. 13 will vote on $\$ 45,000$ bonds to erect proposed high school; also school at Knox and Adriatic mines.

Baudette.-Town destroyed by fire will be rebuilt; school house to be erected at once.

Chisholm.-Architect Edward Sarvari, Virginia, has been selected by Finnish people of this village to design new hall that will be erected at a cost of $\$ 15,000$; work on excavating begun.
Eveleth.-School Board is considering erection of $\$ 60,000$ primary school in Adams District.
Laurel.-First Methodist Church is receiving bids for erection of $\$ 25,000$ edifice.
st. Paul-Plans have been drawn by Architect A. H. Wheeler, Globe Bldg., for $\$ 5,500$ residence to be erected on corner of Portland Ave. and Pierce st. for J. W. Martin.
John M. Carlson, 227 W. Fifth St., will build on Dayton Ave. a 2 -story brick duplex residence.

St. Paul.-Orthodox Jewish Congregation of Hill District is considering erection of temple. Jos. Levy is interested.

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St. Paul-The Low German Society is looking for site for erection of a $\$ 100,000$ clubhouse after old-fashioned German plan. L. F. Schultz, Chairman, Site Committee.
St. Paul-Watson P. Davidson, Pioneer Press Bldg., will erect at 413-417 Sibley St. a three-story, $\$ 35,000$ brick building.
J. W. Lusk, President, National German American Bank, will erect residence on Summit Ave.
L. A. Plaster, 74 West Summit Ave., will erect on Summit Ave. a $\$ 10,000$, three-story brick apartment building.
St. Bernard's Catholic Church will erect $\$ 17,000$ Sisters' Home on Rose St.; work on foundation begun. Plans being drawn by Architect John E. Fisher.

## MISSISSIPPI

Buoxi.-Board of Trustees of Seashore Camp Grounds has decided that plans and specifications be made for tabernacle and school building, and that bids be advertised for construction of buildings.

Jackson.-Bids will be received until Nov. 3 for erection of dormitory and dining hall at Mississippi Industrial Institute. R. H. Hunt, News Bldg., Chattanooga, Tenn., architect. J. S. Sexton, President, Board of Trustees.

## MISSOURI

Kansas City.-Chittenden-Eastman Furniture Co., Burlington, Ia., will erect factory in this city.

Moberly.-Architect U. S. A. Houk has prepared plans for erection of $\$ 8,000$ store building.
; St. Louis.-Board of Education is considering erection of $\$ 200,000$ school at Gano Ave. and Ennly St.

St. Louis.-Crane Co. is considering erection of $\$ 250,000$ warehouse at Eleventh and Gratiot Sts.

Sr. Louis.-Architect P. J. Broadstreet, Leggett Bldg., is preparing plans for $\$ 8,000$ residence to be erected on Parkview Place.

Architects Duggan \& Huff, Century Bldg., are preparing plans for $\$ 15,000$ theatre building to be erected on Jefferson Ave.

## MONTANA

Billings.-Chamber of Commerce is interested in proposed erection of auditorium.

## NEBRASKA

Bloomington.-County will vote on tax levy for erection of court house.
Omaha.-Farmers' Co-operative Creamery Co. will erect factory.

Plans for a new depot, which will be erected at Forty-fourth and $Q$ Sts., have been submitted by the Burlington for the inspection of city officials.

Rushymle.-County will vote November 8 on $\$ 10,000$ bonds for county jail and sheriff's residence.

## NEW HAMPSHIRE

Exeter.-Phillips-Exeter Academy is considering erection of library and dormitory.

## NEW JERSEY

Atlantic City.-Chas. B. Prettyman, Philadelohia, Pa., will erect eight-story brick and stone hotel on Pacific and Maine Aves., to cost $\$ 100,000$, also six-story addition to the Hotel Merion.

Bridgeton.-Commercial League is interested in proposed establishment of plant for making steel castings : ten buildings will be erected.

Elizabeth.-Committee on new high school has asked Board permission to select its own architect, who will draw plans and have charge of the work erecting proposed building.

Bids will be received until Nov. I for erection of brick barn at Almshouse. Oaklev \& Sons, 280 N. Broad St., A rehitects. Geo. H. Schlotterer, Chairman Committee on Public Buildings.
Hackensack.-Citizens have defeated proposition to erect high school; vote will now be taken on erection of grammar school.

Jersey City.-David J. Murphy will erect two eight-family dwellings, cost $\$ 36,000$, on Monticello Ave. Hymen Rosensohn, 745 Broad St., Newark, Architect.

Jersey City.-Plans are being prepared by Architect Frederick Hensel for Hudson County Consumers Brewing Co. for erection of $\$ 8,000$ garage.

Jersey City.-Bids will be received Nov. 22 for erection of proposed Technical and Industrial High School at Newark and Palisade Aves.

Linden:-Board of Education has decided to submit plans and specifications to building architect, Louis Quien, of Elizabeth, so that they might be rearranged to permit of bids within the specified amount of $\$ 84,000$.

Long Branch.-The Keansburg Yacht Club will erect clubhouse early next spring. W. S. Bailey, Commodore.
Montclatr.-Erection of $\$ 200,000$ addition to high school and two school buildings is being considered.
Newark.-Wm. H. Frey will erect three-story frame flat, cost $\$ 35,000$, to be erected at 697 S. Twentieth St. Wm. K. Schoenig \& Sons, 418 Springfield Ave., Architects.
Newark.-Bids will be received until 3:15 p. m., Nov. 9, for erection of Montgomery School. R. D. Argue, Secretary, Board of Education.

Newark.-Architect Alfred Walters, 45 Clinton St., has completed plans for erection of number of buildings.
Rizzolo \& Gonnelli, 8oo Broad St., have drawn plans of a four-story apartment house, sixteen apartments, costing \$12,000, which Michael Perroty will build at 54 Madison St.

Princeton.-Revised plans are being prepared by Renwick. Aspinwall and Tucker, 320 Fifth Ave., New York City, for erection of residence for F. G. Landen, of New York City.

Trenton.-King Candy Co. will erect $\$ 20,000$ apartment house and factory building at West Hanover and Chancery Sts. Wm. P. Enderbrock, Architect.
St. John's Episcopal Church will erect parish hall at South Clinton and Lakeside Aves. Rev. S. Norris Craven, Pastor.

Erection of addition to police station on Chancery St. is being considered.
Trenton.-Council is considering $\$ 80,000$ appropriation for building Rutherford Ave. school and $\$ 9,000$ for rebuilding walls of Cook school.

## NEW MEXICO

Clayton.-Attorneys Easterwood and Eaton will erect brick buildings on Main St.

## NEW YORK

Albany.-Bids will be received until 3 p. m., Nov. 7, for erection of police station on N. Pearl St. I. Wachsman, Secretary Board of Contract and Supply.

Binghamton.-Board of Education has asked Council to secure plans for proposed high school.

Elmira.-The W. R. Compton Realty \& Building Co. will erect a I-story business block on Railroad Ave.
Hudson Falls.-Chas. G. Ogden, 59 State St., Albanay, will prepare plans for erection of $\$ 30,000$ edifice for First M. E. Church. Rev. J. H. Atwell, Pastor.
Jerico, L. I.-Plans are being prepared for erection of residence on Old Glen Cove Road for Mrs. Virginia Fair Vanderbilt.

Le Roy.-County is considering erection of tuberculosis hospital. Address Supervisor McVean.

Lowerre.-John Kirby, 851 Fifth Ave., New York City, is receiving bids for erection of $\$ 50,000$ Catholic Church. Rev. Richard Hughes, pastor.

New York.-Legal Realty \& Mortgage Co., 5 Beekman St., will erect twelve-story $\$ 225,000$ brick loft at Lafayette and Fourth Sts. Herter Bros., same address, architects.

Ebling Brewery Co. will erect $\$ 6,000$ brick garage at St. Ann's Ave. and 156th St. Fred Hammond, 391 E. 149th St., Architect.

Pelham Hoffman Realty Co., Rudolph Simon, 1842 Washington Ave., President, will erect one-story brick stores and amusement hall on Huffman St. at cost of $\$ 25,000$. Goldner \& Goldberg, 704 Jackson Ave., Architects.

New York.-Henessey Realty Co., J. Polstein, President, will erect eight-story $\$ 400,000$ apartment house on Eighty-third St. Schwartz \& Gross, 347 Fifth Ave., Architect.
M. L. Caroll and A. L. Townsend will erect three-story $\$ 17,000$ brick stable on Washington St. H. C. Pittman, 22 East Twenty-first St., Architect.
New York.-G. F. Johnson, Seventy-second St. and Riverside Drjve, will erect 4 -story $\$ 175,000$ brick theatre on Extra Place. G. Kerster, 12 W. Thirty-first St., Architect.
A. F. Eno, 13 S. William St., will erect 4-story $\$ 10,000$ brick store and lofts on Front St. J. H. Whitenack, 99 W. Third St., Architect.
R. I. Brown, 162 W. Seventy-sixth St., will expend $\$ 2,000$ in improving residence on I29th St. Reiley \& Steinback. 48r Fifth Ave., Architect.

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New York,-Robert A. Chesebrough will erect five-story, $\$ 80,000$ dwelling at Madison Ave. andSeventy-first St. A. J. Bodker, 25 W. Thirty-second St., Architect.

Plimpton Construction Co., Nathan Cohen, Plimpton Ave., President, will erect four two-story dwellings, cost $\$ 27,000$, on Cedar Ave. J. J. Vreeland, 2019 Jerome Ave., Architect.
New York.-Rouse and Goldstone, 12 W. Thirty-second St., are preparing plans for erection of twelve-story hotel on Fifty-fifth St., near Broadway.

General contract for erection of eleven-story $\$ 200,000$ addition to Oppenheim, Collins \& Co. building has been awarded to Chas. A. Govan \& Co., 1123 Broadway. Buchman \& Fox, 11 E. Fifty-ninth St., architects.
C. Pull will erect five three-story brick dwellings on 173d St. Cost $\$ 30,000$. C. S. Clark, 443 Tremont Ave., architect.
New York.-Department of Charities will soon ask bids for erection of $\$ 60,000$ industrial school on Randall's Island. W. T. Flanagan, 5 E. 26th St., Architect.

Louis Schramm, 426 W . Twenty-sixth St., will erect $\$ 50,000$ warehouse at 432 W. Twenty-sixth St. C. M. Straub, 147 Fourth Ave., architect.

Niagara Falls.-Architect J. E. Wright has prepared plans for home for Niagara Falls Exempt Firemens' Association to be erected on Third St.; plan to erect home at Walnut Ave. and Sixth St. abandoned.

North Tonawanda.- Church of Our Lady of Cestochowa will erect edifice on Olive St. next spring.
Oswego.-Citizens have voted to raise $\$ 45,000$ for erection of two schools on east side of river.

Rochester.-Catholic chapel of St. Salome at Sea Breeze will be rebuilt in spring. Rev. J. F. Staub, Holy Redeemer Church, city, is interested.
Rochester.-Plant of Rochester Gas Engine Co., 707 Lexington Ave., will be rebuilt. Jas. S. Graham, 485 University Ave., President.

Rochester.-J. W. Sturandt Manufacturing Co. will erect factory on Lyell Ave.

Rome.-J. H. Carroll has had plans prepared for erection of theatre.

Syracuse-Architect Ward W. Ward has completed plans for $\$ 8,000$ residence which Captain John B. Tuck, National Guard, will build for a home at Allen St. and Concord Pl.
Schenectady.-Day Nursery is considering erection of building. Mrs. J. L. Fitzgerald, 831 Union St., is interested.
Tarrytown.-Armour \& Co. are preparing to erect $\$ 40,000$ refrigerator warehouse. R. C. Clarke, 205 La Salle St., architect.

White Plains.-John C. Moore has prepared plans for erection of residence for C. J. Beakes of New York Central Railroad.

Yonkers.-Chas. S. Clark, 443 Tremont Ave., New York City, has prepared plans for erection of brick and marble residence in Sherwood Park for Jos. Tesoro.

## OHIO

Cincinnati.-H. W. Beneker is planning to erect two residences on Glenwood Ave., Avondale.
Cincinnati.-Herbert L. Pachoud is considering erection of number of residences on Williams Ave.

Cincinnati.-Drs. N. W. and C. C. Abbott will erect two modern residences in Clifton at cost of \$14,000. H. H. Seinsheimer Paper Co. will erect two-tory $\$ 50,000$ reinforced concrete warehouse on McLean Ave.

Cincinnati.-Architect Lou Dittoe is preparing plans for $\$ 50,000$ manufacturing plant for the Bode Realty Co., on the east side of Central Ave.

Cleveland.-Chas Orr, Director of schools, will purchase sites for erection of five schools.

Cleveland.-Plans are being prepared by Architects White \& Shupe, Schofield Bldg., for two new residences to be built on Shaker Heights, one for R. L. Andrews and the other for C. C. Wise. Cost, from $\$ 10,000$ to $\$ 12,000$ each.

Collinwood Methodist Church will erect new building. Architects Maurer \& Mills have been commissioned to prepare plans.

Cleveland.-Architects Brunner and Carrere, of the group plan commission, have approved plans of Architect Milton Dyer, Cuyahoga Bldg., for Warrensville tuberculosis hospital.

Columbus.-Architects Stribling and Lum, 85 N. High St., are drawing plans for a three-apartment building to be erected on Hildreth Ave. for W. F. Hutchison.

Architect H. C. Jones, Desher Block, is drawing plans for frame residence to be erected on Hildreth Ave. for H. L. Johnson.
Lima.-Bids will be received until noon, Nov. IO, for building foundations for Infirmary "A"; Infirmary "B"; Women's Pavilion; and Isolation Pavilion; Frank L. Packard, New Hayden Bldg., Columbus, architect. S. A. Hoskins, Chairman Board of Commissioners.
Sandusky.-Suspension Roller Bearing Co. will erect number of buildings.
Toledo.-Board of Education will open bids Dec. 5 for erection of two high schools after revised plans.
Toleno.-Gendron Wheel Co. will erect $\$ 25,000$ addition to plant at Superior and Orange Sts. Langdon \& Hohly.
Toledo.-Bacon \& Huber, The Spitzer, have prepared plans for erection of addition to building on Wheeling St.
W. B. Geroe is having plans prepared by Bacon \& Huber, The Spitzer, for six-apartment flat buliding to be erected at 2121 Jefferson Ave.
Utica.-Architect C. L. Inscho, Brunson Bldg., Columbus, is drawing plans for four-story building to be erected for W. B. Vance.

Youngstown.-Bids will be received until noon, Nov. ir, for erection of school at Truesdale and Charlotte Aves.; also for erection of school in Brier Hill Dístrict. Kling \& Zenk, Architects. W. N. Ashbatgh, Director of Schools.

## OREGON

Klamath Fafle.-Union Meat Co. will erect warehouse and office building. C. F. Conrad, Manager.

Portland.-H. B. Dabney is interested in proposed erection of modern business building at Grand Ave. and E. Pine St.
Thos. H. Garland will erect apartment house at Washington and Twentieth Sts. Williams \& Rasmussen, Architects.

Roberts \& Roberts, Architects, are preparing plans and specifications for $\$ 30,000$ laundry building, which will be built on corner of E. Sixth and E. Oak Sts., for Charles S. Hacker.

Portland,-Complete plans for proposed $\$ 400,000$ Lincoln High School have been presented to the Board of School Directors by Architects Whitehouse \& Fouilhoux.

Building Committee of the Multnomah Amateur Athletic Club has settled upon plans for $\$ 175,000$ club home, to be built on Salmon St.
Portland.-Webster \& Williams, Fashion Stables, are having plans prepared for erection of $\$ 25,000$ building.

National Coal Storage \& Ice Co. will at once erect $\$ 35,000$ annex on East Washington St.

## PENNSYLVANIA

Ambler.-C. E. Schermerhorn and Watson K. Phillips, Associate Architects, 430 Walnut St., Philadelphia, have completed preliminary drawings and specifications for three-story stone residence to be erected for Mr. Harvey B. Allen; bids received by owner not later than October 26 .

Bala.-John R. K. Scott has had plans prepared by Frank Seeburger, Philadelphia, for erection of six modern houses on Upland Terrace and Birch Ave. Cost, $\$ 36,000$.

Chester.-First United Brethren Congregation will erect chapel at Philadelphia and Newberry Sts. Plans being prepared.

Chester.-Brigadier General W. G. Price. Jr., will erect fifty dwellings on Parker St.
Hartsville.-Log College Association will erect auditorium and other necessary buildings.
Ingram.- Plans are made on bids being asked on two brick houses on Stowe and Stanley Sts., on the plan of M. J. McMahon.
Lebanon.-The World's Cigar Co., St. Paul, Minn., will erect plant in this city.

Philadelphia.-Architect E. Allen Wilson, Land Title Bldg., has completed plans for a 3 -story office building at Thirty-ninth St. and Lancaster Ave. for Thomas Collier.

Philadelphia.-Architect Horace Trumbauer, Land Title Bldg., has completed revised plans for erection of $\$ 500,000$ addition to Union League building, Fifteenth and Sansom Sts. Architects Ballinger and Perot, I2II Arch St., have prepared plans for erection of granite chapel at Tioga and Weymouth Sts. for St. Philip's M. E. Church.

Philadelphia.-Architects Ballinger \& Perrot, i2II Arch St., have invited revised bids for eight-story building for Leo and Arthur A. Niessen, at corner of Twelfth and Race Sts.


Peiladelphia.-Jewish Congregation of Frankford is considering plans for erection of $\$ 10,000$ synagogue on Paul St.
Architect E. Allen Wilson, Land Title Bldg., has completed plans for forty two-story houses to be erected on Locust St. for John C. Knox.
Park Commission is considering plans for erection of large municipal convention hall. John T. Windrim, Commonwealth Bldg., architect.
Philadelphia.-Plans are in preparation by H. H. Markley for six two-story flat houses to be built on Markoe St. at a cost of $\$ 6,500$ each.
Philadelphia.-Ballinger \& Perrot, Architects, 121 i Arch St., have completed plans and specifications and invite bids for a chapel, to be erected at corner of Tioga and Weymouth Sts., for St. Philip's Methodist Episcopal Church, under auspices of the Philadelphia City Mission and Church Extension Society, who also plan erection, at a later date, of a large church adjoining the chapel on the corner of Tioga and F Sts.
Pirtsburg.-Architect R. M. Trimble, Ferguson Bldg., has completed foundation plans for three-story brick and terra cotta building to be constructed on Butler and Forty-fifth Sts. for Lawrenceville Branch Y. M. C. A., to cost $\$ 125,000$; architect will soon take bids on foundations only.
Pitrsburg.-Building Committee, Pittsburg Presbytery, has adopted plans by Ballinger and Perot, 1211 Arch St., Philadelphia, for erection of dormitory for Western Theological Seminary. Rev. Dr. Jas. A. Kelso, President of Seminary
Pirtsburg.-Architects Palmer \& Hornbestel, Empire Bldg., have prepared plans for erection of annex to Rodelper Shalom temple.
Rochester.-Dr. J. C. Kunzman, Philadelphia, will erect fourstory brick business block at lower Brighton and Pleasant Sts,
Scranton.-Plans for a $\$ 50,000$ club house and gymnasium are now being evolved by Hebrew Institute Association. Rabbi W. Gold, Linden St. Temple, is interested.

Wilkes-Barre.-Architects Reilley \& Schroeder, Bennett Bldg., have prepared plans for erection of station house.
Williamsport.-South Williamsport School Board has purchased site for erection of school.
Williamsport.-W. H. C. Huffman \& Sons will erect modern garage on Third St.

## RHODE ISLAND

Cranston.-Council has decided to purchase site on Cottage St. for erection of school.
Westerly.-Town has decided to erect proposed town hall at Union and Broad Sts.

## SOUTH CAROLINA

Charleston.-N. Sottile will erect building at corner of King and Market Sts.
Bids will be received until noon, Nov. 4, for erection of Administration Bldg. of Lutheran Theological Seminary. Rev. C. A. Freed, Secretary ; C. M. Robinson, Richmond, Va., Architect.

## TENNESSEE

Chattanooga.-Architects J. G. Barnwell and C. J. Jones have prepared plans for erection of five-story building on Eleventh St.
Nashville.-Bids will be received until noon, Oct. 31, for erection of addition to Ross School on Ordway Pl. Asmus \& Norton can be addressed.

Hospital, cost $\$ 250,000$, will be erected at Sixteenth Ave. and Division St. by Tennessee conference, M. E. Church, South. J. G. Carpenter, Architect. A. B. Ransom is interested.

Nashyille-Plans have been prepared by J. Benner Fletcher, Homestead Bldg., for erection of two store houses at Twentysecond Ave. and Church St. for J. D. Fletcher.

## TEXAS

Cleburne-Olive Lodge, No. 3I, K. of P., has decided to erect Pythian temple.
Dallas.-Breihan-Kaplan Co. is having plans prepared for erection of two-story brick business house on Main St.
De Leon.-Citizens have voted bonds for erection of city hall. Work will begin at once.
Eacle Pass.-Bids will be received until Nov. ig for erection of proposed post office. Jas. K. Taylor, Washington, D. C., Supervising Architect, Treasury Department.

El Paso.-Bnai Zion Hebrew Congregation is considering erection of temple on North El Paso St. J. Snider, president.
Es Paso-Congregational Church has purchased site at Williams and Rio Grand Sts. for erection of edifice.
Floresville.-Council is considering election on $\$ 18,000$ bonds to erect school.
Houston.-Home Telephone Co. is having plans prepared for erection of telephone exchange. F. E. Ebersole is interested.
Houston.-Firm of Mauran \& Russell has been selected as supervising architects for erection of $\$ 1,000,000$ hotel on present site of Rice Hotel.
Houston.-Home Telephone Co. will erect building at Rusk Ave. and Caroline St. Plans being prepared.
Orange.-First Methodist Church has decided to erect edifice at. Elm and Sixth Sts.
San Antonio.-Building Committee of Chamber of Commerce has decided on plans for erection of large building. Jake Wolff and L. J. Hart are interested.
SWan.-Baptist Church has accepted plans for erection of edifice.

## UTAH

Salt Lake City.-Dallas \& Hedges, architects, will prepare plans for erection of school on Eleventh South St.

## VERMONT

Burlington.-Architect Frank L. Austin will prepare plans for erection of new Lamoille County buildings at Hyde Park.

## VIRGINIA

Alexandria.-Methodist Episcopal Church, South, is considering erection of parsonage on S . Washington St.

Harrisburg.-Site at end of Gay St. has been secured for erection of school. Plans being prepared.
National Soldiers' Home.-Bids will be received by John T. Hume, Treasurer, Southern Branch, N. H. D. V. S., until 1:30 p. m., Nov. 10, for constructing three barracks

Newrort News.-Max Levinson will erect $\$ 5,000$ packing plant near Hampton and Thirty-sixth Sts.
Norfolk.-Finance Committee is considering $\$ 55,000$ appropriation for police station.

## WASHINGTON

Pasco.-Gus. Harris, Walla Walla, is considering erection of two-story concrete building.
Spokane.-Bids have been rejected for replacement of South Central High School; new building, cost $\$ 450,000$, is being considered. H. W. Allen, President, Board of Education.
Spokane.-Broadview Dairy Co. will erect $\$ 25,000$ plant. Frank Flood, General Manager.
Spokane.-Fred Markwell will erect residence at Nineteenth and Ray Sts.
Spokane.-Frank Hogan, Percy Howell and W. G. Davidson will erect residences on Wellington Place, Audubon Park, at total cost of $\$ 41,000$.
John Gander will erect $\$ 6,000$ residence on Sharp Ave. C. Harvey Smith, Eagle Bldg., Architect.
Walla Walla.-Walla Walla College, M. E. Cady, President, will rebuild structure destroyeu with loss of $\$ 75,000$.

## WEST VIRGINIA

Huntington.-John Rau, Sr., will erect business block on Fourth Ave.

Morgantown.-Erection of armory is being considered. Lieutenant Price is interested.
Warwood.-Protestant Episcopal Congregation is considering erection of edifice.
Wheeling.-J. E. Moss Iron Works, Schmulbach Bldg., will erect plant.

## WISCONSIN

Belorr.-St. Peters Church, South Beloit, is considering erection of \$15,000 edifice.
Chippewa Falls.-J. W. Keogh, Chicago, will erect factory. Progressive League is interested.

Fond du Lac.-Turn Verein is considering erection of modern brick building.
Madison-Sisters of St. Mary will erect $\$ 75,000$ hospital.!
Milwaukee.-Architects Ferry \& Clas, 419 Broadway, hate prepared plans for erection of temporary stores at Wells and Third Sts. for Patrick Cudahy.


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Treasury Department, Office of the Supervising Architect, Washington, D. C. Oct. 11, 1910.-Sealed proposals will be received at this office until 3 o'clock p. m on the 23 d day of November, 1910, and then opened, for the extension, etc., ex cept elevator (including plumbing, gas pipand wiring system), of the U. S. Post Office at Rock Island, Ill., in accordance with the drawings and specifications, copies of which may be obtained from the Custodian at Rock Island, Ill., or at this office at the discretion of the Supervising Archi tect.-James Knox Taylor, Supervising Ar

Treasury Department, Office of the Supervising Architect, Washington, D. C. Oct. 17, 1910.-Notice is hereby given that the time for opening bids for the heating and ventilating system in the New York Post Office has been extended from No-
vember 3 , 1910 , to 3 o'clock p . m . on Devember 3,1910 , to 3 o'clock $p . m$. on Devising Architect. (1818-19)

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(1818-19)
Treasury Department, Office of the Supervising Architect, Washington, D. C. Oct. 17, 1910.-Notice is hereby given that tion of the new Post Office building at New York, N. Y., has been extended from November 3, 1910, to 3 o'clock p. m. December 1, 1910.-James Knox Taylor, Supervising Architect.

Treasury Department, Office of the Supervising Architect, Washington, D. C. the time for opening the bids for the pneumatic door operating system in the new Post Office building at New York, N. Y. has been extended from November 3, 1910 Knox Taylor, Supervising Architect.

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Easy to install in any house now built or under construction. A great investment-increases the value of your property far more than the cost of the system.

You should know all about it. Takes a booklet to tell. Write today.

## Protect the Buildings at the Top

See to it that the roof is as permanent as the foundation, because the roof is just as important.
Specify a roof that cannot leak, no matter what the climatic conditions-that cannot burn under any kind of a fire test-that will keep your buildings cool in summer and warm in wiater.
The only roofing that fulfils these requirements is


American Ball Bearing Co., Cleveland, O. Covered with 100,000 square feet of J-M Asbestos Roofing

# J-M Asbestos Roofing <br> Made of Asbestos (stone) fibre and genuine Trinidad Lake Asphalt, it is practically indestructible. 

 It is as permanent as the rock foundation you build on, and defies weather, time, fire, gases, chemical fumes, etc.No skin coat of paint or gravel surface to wear away. No painting bill or repair bill.
Its first cost is the only cost. See the blow-torch test illustrated below. Any other ready roofing would burn like tinder in a few minutes if subjected to such a test.

Ask us for a piece of Asbestos as it comes from the mines. Write our nearest branch for sample and Catalog 303.
H. W. JOHNS-MANVILLE CO.
 and Magnesia Products
 Electrical Supplies, Etc.
$\left.\begin{array}{lll}\text { Baltimore } & \text { Chicago } & \text { Detroit } \\ \text { Boston } & \text { Cleveland } & \text { Kansas }\end{array}\right)$
$\begin{array}{ll}\text { Detroit } & \text { Los Angeles } \\ \text { Kansas } & \text { City } \\ \text { Milwaukee }\end{array}$ New Orleans
New York $\begin{array}{ll}\text { New York } & \text { Sitsburg } \\ \text { Phancisco } \\ \text { Philadelphia } & \text { Seattle }\end{array}$

St. Louis
In this test the flame of a
$\begin{array}{lr}\text { Chicago } & \text { Detroit } \\ \text { Cleveland } & \text { Kansas } \\ \text { Dallas } & \text { Lendon } \\ \text { For Canada:-THE CAN }\end{array}$ placed within two inches of
$\mathrm{I} M$ Asbestos Roofing. At the end of fifty minutes the
roofing was not burned or roofing was not burned or
tatured, being ouly slightis

## STEEL-WOVEN OAK FLOORING

## FOR FIREPROOF BUILDINGS

No big beams are inserted in the concrete. No sticking of blocks to concrete and tearing loose with change of season. The floor lies solidly of its own weight. In case of swelling, owing to dampness, or even flooding with water, the floor swells as a whole and takes up the compression space in the border. If the floor shrinks again after such an accident the blocks shrink individually and the shrinkage is divided up so many times that no cracks are seen. In


Showing two border and wall strips with bridge over compression space and short dovetailed pieces of wood to which border strips are lightly nailed. extreme cases the entire floor can be keyed up from the compression spaces.


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We manufacture parquetry and ornamental hardwood flooring of imported and domestic woods, making a specialty of working to architects designs We have our own timber, saw mills, dry kilns and factories, and control every step of its manufacture.

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to enter the toilet rooms of schools, factories, hotels, hospitals,Y. M. C.A. buildings, etc., and find every closet in perfect order-no leaks-no odors-no soil-no unsanitary conditions of any kind.

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HERRINGBONE INGOT IRON LATH IS RUST-PROOF AND FIRE-PROOF
It requires no lapping-each yard of lath covers a yard of wall.
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is the most economical lath when considering the cost of the building as a whole-for it permits the wide placing of studding, and can be easily handled by one man where other lath requires the labor of two.

Send for a sample of HERRINGBONE INGOT IRON LATH-place the sample in a solution of Sulphuric Acid, and note its resistance to all corrosion. Place a sample of steel lath in the same solution, and watch its rapid disintegration.

Sample for this test and our Architect's Pamphlet sent free, postpaid, on request. We want you to investigate, at our expense, the endurance, rigidity, and non-corrodible qualities of

HERRINGBONE INGOT IRON LATH


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 SUPERIOR TO ALL OTHERS

FIREPROOF

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Ideas differ as to the type of sash that permits the best ventilation and is more near weather-proof. The "STRAIGHT-PUSH" SASH OPERATOR can be applied to all types and we may have some information that would help you to determine the kind best suited to your conditions.
Our business is the furnishing of "ANTI-PLUVIUS" SKYLIGHTS, "STRAIGHT-PUSH" and "LOVELL" SASH OPERATORS. We have gathered together much information in the course of many years furnishing these products and results achieved are available for your information and profit. We would be glad to hear from you if contemplating additional buildings or extensions.

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Illustrating one of our several designs of Slop Sinks

MONUMENT PORCELAIN SLOP SINKS are fast superseding all other types, on account of their durability and sanitary features. ©Also made in Columbian or Buff Ware.

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> The Old Man Behind the Boiler is the fellow who builds these Garbage Burners, and will tell you all about them. There are no flies on him.

> Send for Catalogue No. 55.

[^3]
## Yellow Pine Factory Flooring

is suitable for factory, store, warehouse and loading platforms; or for any other floor where hard service is demanded.

Good sound common Yellow Pine, $3 \times 3,4 \times 4$ and $4 \times 6$, surfaced and jointed, laid with the Edge Grain of the timber to the surface, will insure a floor that is practically indestructible, will not sliver under wear, and will ordinarily outlast the erest of the building.

## An Unchallenged Economical and Enduring Floor Surface for Heavy Mill Construction

Beside being durable and practical Yellow Pine factory flooring of such dimensions has strong fire-resisting qualifications. It is also recognized as being much easier on the feet of the workmen, and on the trucks and packages handled by them, than concrete floors.

Your first outlay is your only floor expense; and that is less than for other available wood or cement floors; although Yellow Pine floors will outlast them.

It has been for years the standard factory flooring specification by architects and mill engineers, one factory and warehouse recently built requiring over 817,000 feet of Yellow Pine for its floor surface.

For the laminated floor, thinner Yellow Pine factory flooring is used as the base; $2 \times 6,2 \frac{1}{2} \times 6$ and $3 \times 6$; tongue, grooved and beaded, or grooved for splines. The narrower widths and thinner depths of Edge Grain Yellow Pine flooring are used as a top floor, being laid diagonally across the surface.

For any information regarding Southern Yellow Pine, address

## Yellow Pine Manufacturers' Association <br> 707 Wright Bidg. St. LOUIS, Mo.

# WHITE INTEGRAL SUPPORTS for FURRING BARS <br> PAT. NOV. 24, 1908 

## What they ARE

WHITE INTEGRAL SUPPORTS for furring bars are hooks or stirrups that are punched out, at regular intervals,
 of the main furring angle.

## What they are FOR

WHITE INTEGRAL SUPPORTS for furring bars are designed to act as rigid and permanent supports for the cross furring bars of ceilings.

## What they EFFECT

WHITE INTEGRAL SUPPORTS for furring bars offer just as permanent and dependable a support as is secured in the old and excellent angle-to-angle bolted ceilings. At the same time they cost no more than the unreliable method that has of late years crept into use of securing furring bars by means of more or less variable individual clips.*

## What they INSURE

A glance at the accompanying sketch will readily show that nothing but an absolutely level ceiling can be obtained when WHITE INTEGRAL SUPPORTS for furring bars are specified and insisted upon.
$W^{E}$ WILL take pleasure in sending an illustrated booklet that tells the whole story, free upon request.

## White Fireproof Construction Co.

Concrete Fireproofing Concrete Stairs Metal Furring and Lathing

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NEW YORK PHILADELPHIA ATLANTA MONTREAL TORONTO

[^4]
## Nine Recent Decisions in Vacuum Cleaning

May 3r, 1910: U. S. Circuit Judge Kohlsaat, sitting in Chicago, granted a decree against Streeter Brothers, forbidding them from using a Vacuum Wall Brush which infringes the McCrum-Howell Patent. This suit was brought under one of the eighty-five vacuum patents which the McCrum-Howell Company controls.


July 7, 1910: U. S. Circuit Judge Kohlsaat, sitting in Chicago, granted a restraining order against the Pope Automatic Merchandising Co., and Clarence R. Pope, forbidding the manufacture and sale of the "Pope Electric Cleaner."
3
July 15, 1910: U. S. District Judge Carpenter, sitting in Chicago, after a full day's hearing, denied the motion of the Pope Automatic Merchandising Co., and Clarence R. Pope, to vacate Judge Kohlsaat's restraining order.

July 20, 1910: U. S. Circuit Judge Kohlsaat, sitting in Chicago, after a full hearing, granted the injunction asked against the Pope Automatic Merchandising Co., and Clarence R. Pope, manufacturers of the "Pope Electric Cleaner."
July 22, 1910: U. S. District Judge Morris, sitting in Duluth, granted a restraining order against the St. Paul Electric Co., and B. B. Downs, forbidding the manufacture and sale of the "Downs Electric Cleaner."


July 26, 1910: U. S. District Judge Amidon, sitting in Minneapolis, after a full hearing, granted the injunction asked against the St. Paul Electric Co., and B. B. Downs, manufacturers of the "Downs Electric Cleaner."

August 3, 1910: U. S. District Judge Denison, sitting in Grand Rapids, granted a restraining order against the Menominee Electric Co., forbidding the manufacture of Suction Cleaners in imitation of the "RICHMOND" Suction Cleaner.
August 16, 1910: U. S. District Judge Sanborn, sitting in Chicago, granted a decree against Streeter Brothers, users of a plant installed by a California company, enjoining the use of that plant because it infringes the Matchette Patent on Automatic Vacuum Control, now owned by the McCrum-Howell Co.
9
August 18, 1910: U. S. Circuit Judge Kohlsaat, sitting in Chicago, granted the Pope Automatic Merchandising Co., and Clarence R. Pope, permission to dispose of 1000 cleaners on hand oniy on condition that a $\$ 20,000$ bond be given to protect The McCrumHowell Co., and that each machine be plainly marked, "Not the Richmond Suction Cleaner manufactured by the McCrum-Howell Co.

The McCrum-Howell Co., at a large expenditure, has brought together, under one control, all of the important Vacuum Cleaning patents.

Thus enabling the public, for the first time, to obtain in a single system all of the ingenuities of many inventors.

## WARNING

All persons are warned that henceforth all authorized stationary vacuum cleaning plants will bear The McCrumHowell Company license plate. Systems offered without The McCrum - Howell Company license are infringements and will subject not on nly the makers thereof but also the
purchasers and those who use purchasers and those who use
them to damage suits, which in all cases will be promptly instituted. Please be sure to look for The McCrum-Howell Company license plate, which is to be found in each case on the vacuum producing apparatus.

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Notice to Architects

Architects and Engineers are invited to make free use of our engineering department in solving vacuum
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ments-having a system of accurate tests for all machines. You are invited to visit our Department of Physical Research at the New York office and make your own tests.

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> The
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## Retains

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Has been selected for the pedestals of the most prominent statues unveiled during recent years such as Frederick the Great, Washington, D.C.; Wm. McKinley, Adams, Mass. ; Gen.William T.Sherman, Central Park, New York ; Gen.JosephHooker, State House Grounds, Boston, and George F. Hoar, City Hall Park, Worcester, Mass.


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Commemorating the fiftieth anniversary of the opening of St. Mary's Falls Canal
McKim, Mead \& White, Architects


Horace M. Oren, Charles Moore,
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This shaft is one block of Stony Creek Granite
Quarried, cut, and set in place by The Norcross Brothers

# Harmonizes Well with Statuary Bronze 

## The Limit in Size Is Fixed Only by Transportation Facilities

Polished shaft in Battle Monument, West Point, $42^{\prime} 6^{\prime \prime}$ high, $6^{\prime} 0^{\prime \prime}$ in diameter. Obelisk at Sault Ste. Marie, Michigan, $45^{\prime} 0^{\prime \prime}$ high, $4^{\prime} 6^{\prime \prime} \times 4^{\prime} 6^{\prime \prime}$. Both these shafts are monoliths.

## For Building and Monumental Work It Has No Equal

Branford Syenite was used in The Leeds Monument, Richmond,Ind.;Lee Mausoleum, Hyde Park,N.Y.;Armour Mausoleum, Woodlawn, N. Y.; Batcheller Mausoleum, Saratoga Springs, N. Y.

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## The "Richmond" Concealed Transom Lift


"Simply Turn the Knob"

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and
Compact.

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Principles.

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For
Operator.

For all Size Transoms.

This new device marks an epoch in the manufacture of fixtures for the mechanical equipment of modern buildings, being the first and only concealed contrivance yet devised that will successfully and easily operate transoms.

All parts except only the operating knob, are concealed within the door trim-the device being installed upon the back of the door jamb before the trim is applied. It is light, compact and operates easily, noiselessly and surely.

To open or close transom to any required angle, simply turn the knob on the door trim, and when the required angle is reached, let go, and the transom stops, and cannot be moved until the knob is again turned. No locks or hinges are required to hold the transom, the device itself serving every function required.
The "RicHMOND" Concealed Transom Lift is constructed in accordance with important scientific principles. It is positive in action and contains but few joints or contacts. The different parts work together smoothly and it is practically impossible for it to get out of order-no danger of rods slipping or cogs failing to turn as sometimes happens in the old style appliances.

Think of the convenience of being able to move the transom to any desired angle by a simple turning of a knob within easy reach. Compare this with the clumsiness, unreliable and unsatisfactory working of the usual style of transom fixture.

The "RICHMOND" Concealed Transom Lift will operate such sized transoms as are used above doorways in hotels, office buildings, apartments, schools, etc. A Giant Pattern Device is made for transoms over entrance doors or casement windows.

Easily Set.
The device leaves our factory completely assembled except for the pivot parts which are placed in jamb and ends of transom. These parts are very simple and easy to attach and the installation requires less work and time to install than the ordinary exposed rod.

An interesting descriptive booklet will be sent upon request.

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Kahn System Products cover the concrete field completely: HY-RIB, a self centering reinforcement for Floors, Walls, Roofs, Partitions, Ceilings. RIB METAL, for Slabs and Conduits.
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[^0]:    *We are indebted to the Atlantic Terra Cotta Co. for the illustrations

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