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THE new tariff act, as was expected, provides that all sawed lumber except whitewood, sycamore and basswood, imported into the United States, shall pay a duty of two dollars per thousand feet. This is the same rate as that imposed under the McKinley law; but on certain kinds of manufactured lumber the rates are now higher than under the McKinley law, as for example, on pine clapboards, which pay a dollar and a half per thousand, in place of one dollar, as fixed by the McKinley law, and on pine shingles, the duty on which is also one-half higher than under the McKinley law. Although no one denies that the duty will lead to the rapid clearing of our remaining white-pine forests, the New York *Tribune* makes a suggestion which is worthy of careful consideration, to the effect that the increase in the price of pine will lead to the planting of new trees, so that, in the end, our forest resources will be increased, rather than diminished by the effect of the tariff. It quotes an expert, who says that "the tariff will help us to get practical forestry started," and it seems quite possible that this opinion may be well founded. A rise in the price of white pine is inevitable, in any case, from the diminution of the supply; and, if anticipating the rise by the imposition of the duty should lead at once to extensive and scientific planting of pine trees, the benefit to the country will be incalculable.

MEANWHILE, the provision of second-growth pine which we already have becomes interesting, for it is to this that our children must look for their supply, the product of trees planted now being available only for our remoter descendants. Mr. Mlodziansky, of Washington, D. C., in an interesting letter to *Garden and Forest*, describes a second-growth pine forest in Pennsylvania, occupying land which is known to have been cleared more than forty years ago. No artificial seeding seems to have been attempted, but the clearing was originally surrounded by pines still standing, so that seeds were abundantly distributed over it by the wind. As usual in clearings in pine forests, the first trees to grow in the open space were hardwood species, birch, maple, butternut, oak, cherry and beech, but Mr. Mlodziansky is of opinion that these ultimately favor the growth of the pine, by shading and sheltering the seedling pines until they are strong enough to take care of themselves. When this time arrives, they are, as it appears, so much more vigorous than the birches and oaks that they soon crowd them out, such of the hardwood trees as remain serving to shade and fertilize the ground for their more powerful rivals. In the particular clearing examined by Mr. Mlodziansky, a measured acre contained three hundred and eighty-three white pines, and thirteen hundred and forty trees of other sorts; but the white pines averaged sixty feet high, and their tops

formed eighty per cent of complete "cover," while there were one hundred and forty-nine pines more than six inches in diameter at breast height, and only thirty of the same diameter of all other kinds. The total amount of pine timber on the acre, not counting pines under four inches in diameter, was about eighteen hundred and twenty-four cubic feet. Pine trees increase in volume more rapidly with age, at least up to eighty years; but supposing the increase in volume to remain only the same as the average for the last ten years, the yield of the acre, fifty-five years from now, will be at least eight thousand cubic feet. Allowing fifty per cent for waste in sawing, and supposing the pine lumber to be sold at a profit, over the cost of felling and sawing, of five dollars a thousand feet, which is certainly not an extravagant estimate for Pennsylvania, the net return from this acre, at the end of the fifty-five years, will be two hundred and forty dollars. Mr. Mlodziansky says that, allowing compound interest at four per cent, the timber on the land would now be worth, under these prospects, from twenty-three to twenty-nine dollars per acre; but this is obviously an underestimate, for the cordwood from the thirteen hundred hardwood trees on the ground, and the waste-slabs from the sawing of the pine, both of which he reckons as valueless, should certainly bring enough, if utilized for firewood, or for making laths and box-boards, to pay the interest on the investment. However, taking his figures as they stand, the land, which could probably be bought for a dollar an acre, is even now worth twenty-five times that price for its white-pine growth alone; and, as he says, it is valueless for agriculture, being on a steep slope, and absolutely unfit for cultivation.

AN Italian Journal, the *Rivista Agraria*, publishes an article on American timber, which recalls in more than one respect the German descriptions of American pork. According to this article, to which attention has been called by our consul at Palermo, American hard pine is "infected with a fungus known as 'Merulius lacrymans,' which destroys the fibre, and is responsible for serious disasters to buildings in the construction of which pine was used." It is hardly necessary to say that the *Merulius lacrymans* is simply the dry-rot fungus, and it is rather startling to hear this described as if it were a novelty in Europe, and, especially, to learn that American hard pine is peculiarly subject to its attacks. The author of the article goes on to describe the dry-rot as a "parasite," which "lives on the trunk of the pine and other American conifers," and, while difficult of detection, "develops rapidly," while "the remedies used to prevent its spread have been unsuccessful." It is hardly necessary to say that Italians who read this gloomy description are likely to refrain from using American pine afterwards, and the opportune suggestion is made for their benefit that chestnut, although somewhat dearer than the American pine, "resists the attacks of the parasite." Chestnut, we may remark, is produced in Italy, and the agrarian members of the population of Europe, that is, the wealthy land-owners, are quite alive to the value of literature in fostering a demand for the products of their estates.

THE protest of the Fine-Arts Federation of New York against the adoption of the plan proposed for the buildings of the Botanical Garden in Bronx Park has been very satisfactorily answered by the Park Commissioners. It seems that the original plan, which was objected to by the experts called in by the Park Commissioners, instead of being adopted, in total disregard of their objections, was radically modified, in accordance with their suggestions, so as to carry out the greater part of their recommendations; but, while the Commissioners appreciated and complied with the measures which the experts proposed for preventing the buildings from injuring the natural beauty of the Park, the arrangement of them which the experts advocated seemed to the Commissioners, on mature consideration, too crowded for the proper movement of the visitors who, in their judgment, would be attracted to the place, and they provided for such spacing as appeared to them necessary. It is obvious that the Commissioners are better qualified than the experts to judge of the probable number of visitors to the building, and their experience is certainly valuable in determining how circulation can best be provided for; so that, while it would, perhaps, have been desirable to instruct the experts as to the amount of space

required between the buildings, and let them frame their recommendations accordingly, the Commissioners probably did all that could have been done under the circumstances to reconcile a satisfactory arrangement of the buildings for landscape effect with other requirements of equal importance. The Commissioners, in their reply, express a regret, which every one will share, that the Fine-Arts Federation should not have informed itself of the facts before making a public protest against an imaginary grievance, but the courtesy with which they have replied to the protest, by explaining the misapprehension on which it was based, will go far toward smoothing hereafter the relations between the city officials and committees charged with the duty of criticism.

THE romance of the New Mexican mesa which Professor Libbey went from Princeton to investigate, has been completely demolished by his visit. The so-called "Mesa Encantada," or Enchanted Table-land, is a plateau, several miles long, and bounded on all sides by almost perpendicular cliffs, some seven hundred feet high, which rises from the plains of New Mexico, a few miles from Albuquerque, and near the present Indian village of Acoma. For many years the Indians and white settlers have entertained fancies about the table-land which do credit to their imagination. According to the Indian legend, the interior of the mesa is enchanted, and no man can live there; but the white settlers, more practical in their notions, assume that the enchanted land contains vast quantities of precious minerals; and, in addition to these superstitions, stories have been circulated about the fresh bones of the North American rhinoceros, and the little four-toed horse, which are occasionally found at the foot of the cliffs, and, as we are informed, lead "scientists" to the conclusion that these prehistoric animals, whose bones are found fossilized elsewhere in the west, still flourish on the fairy plateau. From high lands in the neighborhood can be seen, on the top of the plateau, a tolerably luxuriant vegetation, and also masses of stonework, regularly formed, and suggesting the work of men. The ascent or descent of the cliffs by ordinary means being impracticable, it has been assumed that these structures, if really of artificial construction, and not the work of fairies, must have been built by a race which was cut off from communication with the rest of the world many years ago, and might be presumed to have retained characteristics of much interest.

THE middle portion of the Mesa Encantada consists of a ridge, only a few rods wide, and Professor Libbey's party resolved to ascend the cliff at this point, by throwing a line over the ridge, and using it to draw up a rope strong enough for ascent. This undertaking was successfully accomplished. The first line was thrown by means of a mortar, similar to those used in throwing life-lines to wrecked vessels, and, by means of it, tackle carrying a chair was raised to the top of the cliff. Professor Libbey was the first to make the ascent, but, instead of being received by a crowd of welcoming sprites, and conducted at once to a fairy castle, he found only a pile of stones, somewhat regularly arranged, standing in a landscape which presented no striking variations from that of the surrounding plain, and offered no evidence whatever of having been inhabited by fairies or men at any time. The four-toed horses and rhinoceroses also failed to appear, and Professor Libbey returned from his explorations with the conviction that the local legends in regard to the Mesa were quite unfounded.

A SCANDAL has broken out in Fall River, in which an architect figures as the champion of the people's interest, and the exposé of official dishonesty. It seems that information was conveyed to this architect that a certain alderman, in consideration of four hundred dollars, would get his plans for an intended public building accepted by the Committee of the City Government which had the matter in charge. The architect, as any other decent architect would be, was indignant at the suggestion; and, unlike most architects, he had courage enough to resent it effectually. Reporting the matter to the Law and Order League of the city, it was arranged that he should make an appointment with the alderman in question, as if to carry out the compact proposed; and as the alderman's hand closed over the two hundred dollars which the architect tendered him as a payment on account, he was arrested by officers who had, in disguise, witnessed the transaction. What

will be done to him remains to be seen, but it is unlikely that he will suffer any material inconvenience for his indiscretion, unless public opinion should be so much stirred up about the matter as to make it advisable for his friends to immolate him on the altar of public rectitude. The Springfield *Republican*, which exhibits an innocent astonishment at the affair, asks "How many architects get their plans for public buildings accepted by means of bribery," and answers its own question by saying that "There are those situated so as to know the inside facts who declare that bribery is a not infrequent method employed."

SO far as architects are concerned, the *Republican* may rest assured that very few of them get their plans for anything accepted by means of bribery. That there are some persons, who are scarcely known in the profession except for the public work which is put into their hands, and against whom it is generally understood that it is useless for other architects to compete, is true enough, but the evidence, in such cases as have been investigated, is that these men owe the preference shown them rather to their intimacy with members of the governing body, and to a willingness to influence the award of contracts to serve the political or personal exigencies of legislators, than to the offer of direct bribes, which, in fact, they could rarely afford to pay out of their slender fees. Where the transaction is one between public officers and the selling agents of manufacturers, or the representatives of unscrupulous contractors, the case is different, and there can be no doubt that the prevalent impression in the building world, that except in the great cities, where the acts of the municipal authority are closely watched, nearly every expenditure of public money is more or less tainted with favoritism, or worse, is well founded. Of course, we should be very far from saying that all city and town officials are corrupt, and, in the worst cases, it is probable that only a small number among them are consciously influenced by improper means; but one person who knows what he wants, and has private reasons for impressing his views upon other people, can usually succeed in making them prevail in a governing body, most of the members of which are careless or indifferent; and in case of opposition from other interests, a compromise can generally be made beforehand, which, by uniting the forces of corruption, has even greater chance of success.

THE preliminary competition for the New York Library has resulted in the award of premiums to Messrs. J. H. Friedlander; Haydel & Shepard; Hornbostel, Wood & Palmer; Howard & Cauldwell; Lord, Hewlett & Hull; Clarence S. Luce; Parrish, Schroeder & Ellingwood; Ross & Weber; Walker & Morris, with W. Wheeler Smith; C. W. & A. A. Stoughton; James E. Ware & Son, and Whitney Warren. Nearly all these gentlemen are well known among the younger members of the profession. Out of twelve prize-winners, six are to be selected by the Trustees of the Library, to compete again with six invited architects who did not take part in the preliminary competition.

THE German architectural journals call the attention of their readers to the competition for the Legislative Palace at Mexico, remarking, however, that each architect should decide for himself whether it is desirable for him to enter it, and adding a new consideration, which is that "French influence" is apparent in the composition of the programme, and that it is therefore not improbable that French influence will prevail in the award of the prizes. What basis there may be for this suggestion we cannot say, but there is no internal evidence, that we can discover, in the programme itself to indicate any stronger French influence in the matter than would be apparent in the programme for such a building in any of the United States. It must be remembered that instruction in architecture in this country is based almost exclusively on the French system, and that Paris is the place to which all our architects turn as the fountain of architectural light, so that, between the Mexican architects and engineers who have studied in France, and the Americans, who take a certain lead in intellectual matters in Mexico, it would be strange if the French way of looking at architecture were not tolerably familiar there. So far as the jury is concerned, there is not, apparently, the least reason to apprehend that any foreign influence whatever is to be exercised, all the members being Mexicans of high official or professional standing.

AN ARCHITECTURAL "SUMMER SCHOOL" ABROAD.¹—II.



Members of the Massachusetts Institute of Technology "Summer School of Architecture for 1896," at Hampton Court.

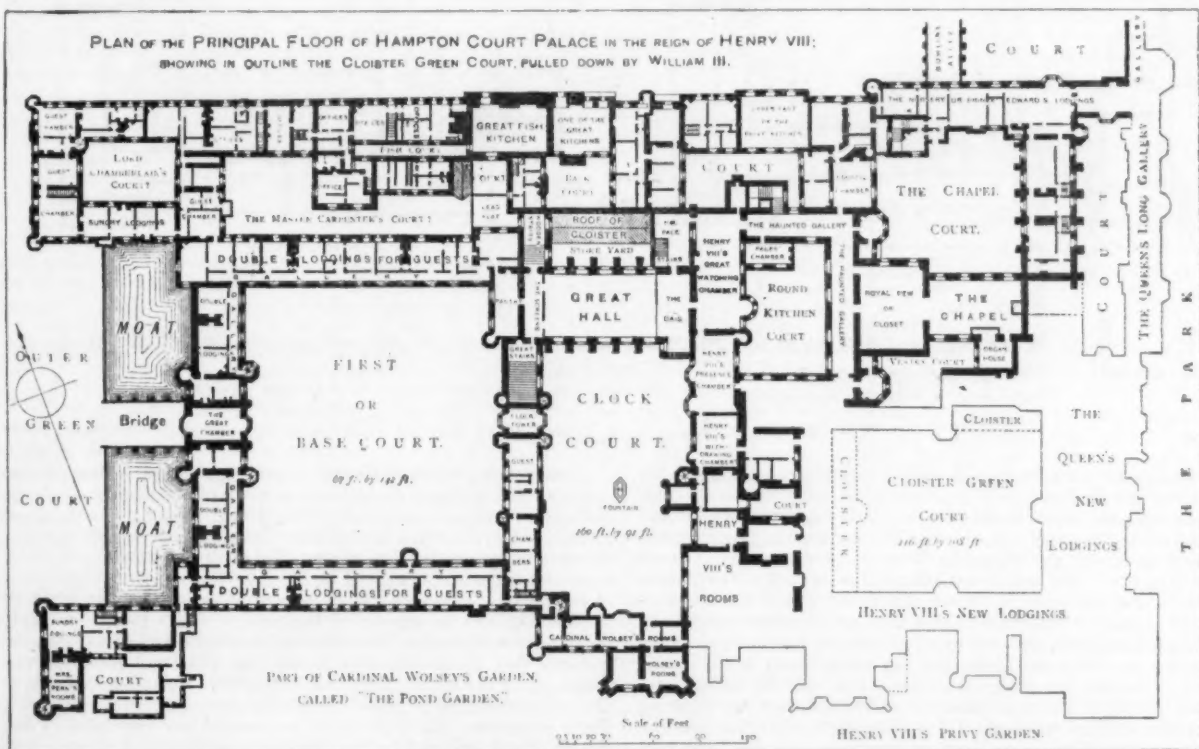
AT the beginning, however, we had a good test for soft muscles in the long grade from the river to the top of Putney Heath. The steady rise of one hundred and sixty feet in a little over three-quarters of a mile remains fixed in our memories, for, though we had longer and heavier grades later on, Putney Hill was conquered when riding muscles had not been in training for a long time. The High Street along which we passed is a broad, well-kept thoroughfare lined with shops in the lower part of the town, but having many good residences near the upper part of the hill.

The town has little to attract the architectural student, although its church, rebuilt in 1836, has good Perpendicular piers and arches in its interior and a beautiful chantry built by Nicholas West, Bishop of Ely (d. 1533), who was born at Putney. Gibbon the historian was also born here, April 27, 1737, in a house near the present Putney Station. It is also of interest to architects to know that Robert Wood (d. 1771), author of "The Ruins of Palmyra and Baalbec," lived and died here. At Tibbets Corner we turned into Kingston Road, along which the old coaches formerly passed when making the run from London to Portsmouth. Passing the trees of Richmond Park on our right, and Coombe Wood, a delightful bit of forest, on our left, we soon reached Kingston-on-Thames and obtained lunch at the "Sun."

As every one knows, Kingston possesses the famous "coronation stone," upon which were crowned the seven Saxon kings, from Edward the Elder to Ethelred.

A two-mile ride through Bushey Park brought us to the gates of Hampton Court, where, under the surveillance of a good-natured policeman whose principal duties consisted in keeping the children in order, we stacked our bicycles in a corner and prepared to see the famous palace. It was found that permission to sketch should have been obtained from the Board of Public Works in London, but the courteous superintendent of the palace gave permission for outside sketching, also accompanying the party to the old Cardinal Wolsey kitchen and the famous tennis-court, pointing out many interesting things that we should not otherwise have seen. The palace with its 1,900 acres of grounds is now kept in excellent condition, and as it is open to the public every day, except Friday, it is always filled with visitors. The pleasanter ways of reaching the Palace from London are by coach, or by express steamers starting from London Bridge. The excursion steamer that arrived about one o'clock was, however, unpleasantly crowded.

It is hard to give here any idea of the many interesting nooks and corners of this vast building that covers an area of eight acres and contains one thousand rooms; but this statement gives little idea of its



[From Law's "History of Hampton Court Palace in Tudor Times."]

The ancient King's Town has a few old houses and an Early English and Perpendicular church; but, as we found at noon that the clouds that threatened us in the early morning were entirely gone, the boats, colored sails and bright waters of the Thames proved to be greater attractions than the antiquities of the town.

¹ Continued from No. 1127, page 41.

extent: it is about 700 feet long from east to west and 400 feet broad. Originally built by Cardinal Wolsey, it is in the main an excellent example of palatial architecture of the Tudor period, but owing to various changes only the western and northern parts belong to his time. Presented by Wolsey to Henry VIII the palace was greatly enlarged by that monarch, although much of his work around the cloister and on the south and east sides was torn down, or is now

concealed behind the great south and east façades built by Sir Christopher Wren. The present building contains the large courts, the Entrance Court, the Clock Court and the Fountain Court, the first two dating from Wolsey's time and the last designed entirely by Wren. The principal attractions of the old part around the Entrance Court consists in the quiet and simple use of deep-colored red brick, the plain surfaces relieved by the light stone dressings of the archways, mullioned windows and battlements, and the sky-lines varied by the clustered chimneys, of many varieties of plan, all richly decorated with designs in moulded and rubbed brick. There is a very picturesque chimney on the north side, opposite the superintendent's house, that runs in several stages down to the ground, its base partly covered with vines. Law's "History of Hampton Court Palace" states that the architect of Wolsey's palace is not now definitely known, but that an old Latin parchment tells of one James Bettes, master of the works, and what is of more importance, that there is some likelihood that Mr. Williams, a priest and the surveyor of the works, was responsible for much of the artistic detail. The general plan was probably by Cardinal Wolsey himself.

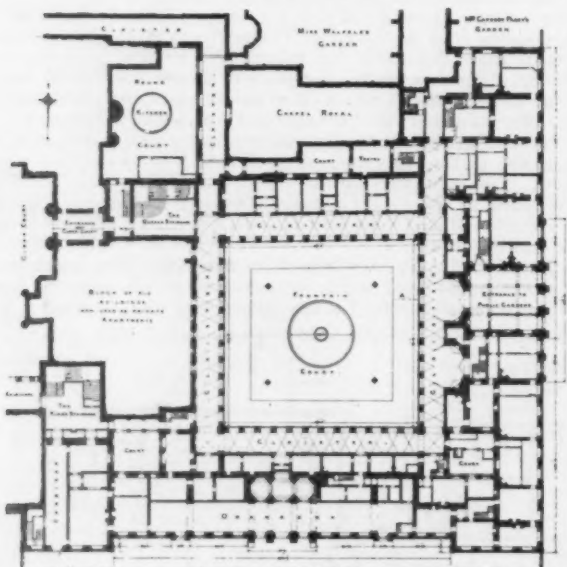
In May, 1516, Wolsey received the King and Queen at dinner in his new abode, which was at that time sufficiently advanced to house the 500 retainers of the Cardinal, the royal guests and court. Our visit to the old kitchens gave us some idea of the scale on which the entertainments were maintained, for the great fireplaces there were

106 feet by 40 feet and is 60 feet high. On this account the best place to see the trusswork is near the wall at the entrance end, as it requires a neck-breaking effort to examine the roof from any other standpoint. The room is a remarkably stately and dignified one.

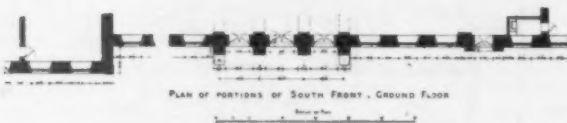
Returning to the level of the court-yard, we next pass through the Fountain Court, one of Wren's happiest efforts, although the carved stonework of the circular windows is a little heavy for the best effect, giving a slightly overloaded appearance. A curious adaptation of design to construction is seen in the arcade, for as the top of the arches are on a level with the top of the floors behind, the floor is concealed behind a lower false arch resting on about one-third of the thickness of the piers. One would hesitate to design such a makeshift, but the actual effect on account of the depth of the outer arch is not so bad after all. Wren's great east and south façades are very impressive and as viewed from the gardens completely conceal all traces of the older parts of the building. This part is now devoted to the numerous rooms of the great picture-gallery, one of the principal attractions of the Palace. The rooms are arranged without any attempt at interior effect and simply form a succession of monotonous apartments. Both the garden façades are built of brick, with light Portland-stone dressings and quoins, only the central motives being entirely of stone. The carvings are carefully executed and are on more of a natural than conventional type.



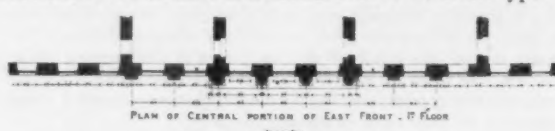
PLAN OF PORTIONS OF EAST FRONT, GROUND FLOOR



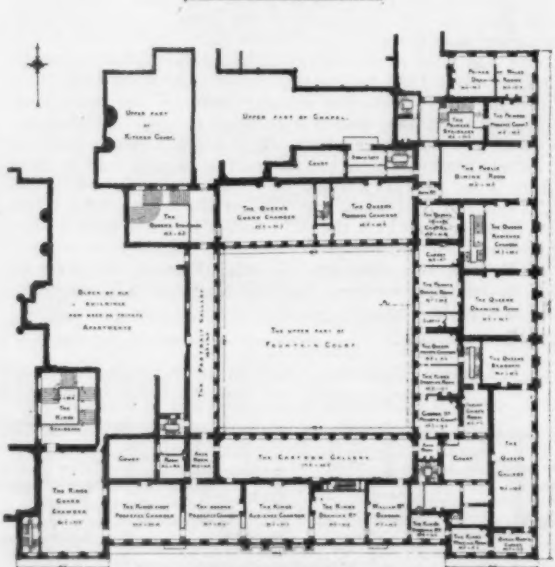
PLAN OF THE GROUND FLOOR



PLAN OF PORTIONS OF SOUTH FRONT, GROUND FLOOR



PLAN OF CENTRAL PORTION OF EAST FRONT, 1ST FLOOR



PLAN OF THE FIRST FLOOR



PLAN OF CENTRAL PORTION OF SOUTH FRONT, 1ST FLOOR

[From the Builder.]

large enough for a dozen or more men to stand in at one time. We also saw in the kitchen a section of the lead pipe that the Cardinal laid to bring good water to the palace. Aubrey's "History of Surrey," says that the water came in a double set of pipes from Coombe to Surbiton, under the Hogsmill River, then under the Thames above Kingston Park, and so through the Home Park to the Palace. Law adds that the pipes were moulded in lengths of 25 feet, were about 2½ inches in diameter, about ¼-inch in thickness, weighed 15 pounds per lineal foot, and that in all 250 tons of lead were used.

Between the Entrance Court and the Clock Court is the tower, bearing on its east side the great palace clock. An old record contains an "Item to Athony, clockmaker of Westminster, for repairing of the cloke at Hampton Court, fyllinge the wheels and other matters, wth setting up of the same there in the frame, 6s. 3d." but it is hard to believe that this can apply to the elaborate mechanism of the present highly decorative time-piece. Under the clock-tower begins the broad flight of steps leading to the Great Hall, built by Henry VIII, and covered with one of the richest timber roofs in England. The high walls of the hall are quite simply treated, one-half of the height being taken up by rich tapestries, while between the windows great stags' heads slightly relieve the flat surfaces. But the chief glory of the building is the elaborate hammer-beam roof, with its finely-carved pendants and spandrels. The hall measures

After looking through the great building, the extensive picture-galleries and gardens, sketches were made of interesting doorways and quaint groups of clustered chimney-tops; then, later in the afternoon, our bicycles were mounted for the short ride to Esher, where we were to spend the first night. Before leaving Hampton Court a photograph was obtained of eighteen of the twenty-two members of our party. This view gives a very good idea of the way in which we travelled and the amount of baggage carried. It is particularly pleasant to look back to this picture, taken on our first day out, for it shows that all the members at one time possessed coats, bicycle-lamps, and a few other things that were afterwards discarded. It is also unique in that it shows thirty-six American tires without a single puncture. Six days after, we counted ten punctures on one tire alone. A delightful ride along the narrow, winding road that skirts Esher Court and Westong, brought us again to the old Portsmouth Road, and we were soon welcomed by the genial landlord of that old coaching inn, the "Bear," at Esher.

Esher, pronounced with a long E, is located on high ground, sloping away in all directions from the typical English village of which the "Bear" seemed to be the centre of life. Many wheelmen and wheelwomen, riding safeties, tandems and tricycles, stopped there during the evening and we had good opportunity for comparing American and English bicycles, with the result that we were all well

satisfied with our own machines. Throughout the town the natives seemed to be skeptical as to the strength of our wood rims, as very few are seen in either England or France, but the rims were not the weak parts and only one was broken during our entire ride. In the evening we mounted our bicycles and wandered down to the river Mole, but failed to find there the square tower, all that remains of the palace to which Cardinal Wolsey was banished when, in 1592, the Great Seal was taken from him. About dusk three of our scorchers started to "do up" a party of fast riders who had just gone by and it was not until after dark that they returned, well winded, but with the story that America led England for three miles.

Next morning we had a picturesque ride through Street Cobham and across Wisley Common, then stopped for a time to sketch the group of houses at Hyde Farm just before reaching Ripley, a prosperous looking village of good brick houses that stand some distance back from the wide road. We had intended to stop at Sutton Place, a picturesque Tudor and transitional Renaissance building, erected by Sir Richard Weston about 1520, to have a look at its interesting terra-cotta details; but as distances are short in England, and we were not at that time accustomed to travelling by map, we ran by the small road leading to the house and were well on the way to Guildford before we thought of looking for the side trip. This was very much regretted, as we desired to see the combination, unusual in England, of red brick and light terra-cotta, called Flanders brick, said to have been brought from the Low Countries. The mullioned windows are particularly rich, as can be seen in an illustration in Harrison's "Annals of an Old Manor-house," a very interesting monograph of Sutton Place published in London in 1893.

E. B. HOMER.

(To be continued.)



WITH the first of July the new license law for architects practising in the State of Illinois is supposed to have gone into effect. But although the recommendations for positions upon the Examining Board have been made to the Governor by the Illinois Chapter of the American Institute of Architects and the Architects' Business Association, no persons have yet really been appointed to set the legal machinery in motion. As a matter-of-fact, there is actually a period of six months from the time that the law is supposed to go into effect before it is absolutely essential to have the State license.

Whether this law was really desired by the majority of the profession in Chicago, seems to be almost questionable. Certainly a few members worked very hard for it and are extremely enthusiastic over its probable or, indeed to them, inevitable benefits. But the great majority of the most prominent architects seem to have been entirely uninterested, and quite without any particular prejudice, their attitude being that of mere curiosity as to the law and its possible effects.

The bill was passed through the Legislature under the plea that it was absolutely essential to the safety of the lives of the people. Among the architects, however, it was almost entirely urged as a measure for raising the general standard of the profession and particularly of eliminating that large element of contractors, real-estate agents and young draughtsmen, who without any particular professional education or experience, "draw plans" and sign themselves architects whenever there is opportunity to do so, even if the compensation is very far below what it should be.

The main provisions of the bill in a very general way are as follows:

1. Any one may draw plans for a building he is to build himself, for himself.
2. Any one who can, within six months after the bill goes into effect, bring evidence that he was a regular practising architect at the time of the passage of the bill can be licensed upon payment of \$25, and thereafter \$5 annually.
3. After six months no one can be licensed to practise architecture until he has passed an examination before a Board, composed of architects and State officials appointed by the Governor. The fee is then \$50, and \$5 a year afterwards.
4. All architects must have a seal and all drawings must be stamped with this seal.
5. The penalty for practising without license is not less than \$50 per week, nor more than \$500.

Even if this law does not give rise to legal wrangling, it is certain to give rise to considerable disputing, especially relative to work done in Illinois by architects that are duly recognized in their own State. There would seem to be a possibility, under the wording of the present statute, of insisting upon the architect of the United States Government Buildings in Illinois being licensed, a claim which would probably meet with some opposition at Washington.

In one particular the law is certainly clumsy and burdensome, in-

asmuch as an architect who is licensed cannot even then practise, but must at an additional expense each year have his license or seal recorded in every county where he does work. As nearly every prominent architect in Chicago has clients in from three to eight counties, it means a considerable expense and a great nuisance, especially as this has to be done every year. Also if old plans, made one year for out-of-town jobs, are temporarily put aside cannot be used the next without danger of prosecution, should the record have lapsed, there will be liability of some pretty mad architects in the course of the next five years. Such difficulties may in time be overcome, remedied, or may even be found unimportant, but they look disagreeable just now. At present, the whole attitude of the Chicago practitioners seems to be one of waiting, and whether the results for the profession will really be beneficial in giving the members a legal and recognized existence, or whether such recognition may imply added responsibilities is a question for future answering.

By the time this letter has gone to press there will have been unveiled in our city a statue which Chicago justly hopes will be an ornament to her Lake-front. It is that of General John A. Logan by Augustus St. Gaudens. It is reported that Mr. St. Gaudens feels satisfied with the result of his labors, and if this is the case we shall certainly have something on the South Side as fine as the Lincoln Monument on the North. The statue is an equestrian one, the figure in the uniform of a major-general, bearing the flag in one hand while with the other he draws the rein of his restive charger. The bronze group, which has been cast at the Henri Bonnard Bronze Works in New York City, is 25 feet high and weighs over 14,000 pounds. It is to stand at the south end of the present Lake-front Park, opposite to the Illinois Central Station and midway between it and Michigan Avenue.

Though the dreams of the Lake-front are far from being realized, the place is much changed since the old "Fair" days when the place was so familiar alike to both strangers and our own citizens. The dreadful statue of Christopher Columbus, which at that time was such an eye-sore, has been removed and has been placed temporarily in a space behind the stables in Washington Park. It has been the object of many cruel jests on the part of the newspapers, a final occasion occurring when there came a bid for the poor, despised discoverer from Neenah, Wisconsin. The land in the park has been graded up towards the tracks and a retaining-wall has been built on the western side; this rise in the land, together with the stone balustrade, entirely shuts out the view of the Lake which was once an especial feature to the pedestrian on Michigan Avenue. It is certainly a most desirable way of shutting out the railway tracks. The approach to what seems like a suburban station, at Van Buren Street, is through a broad, inclined, paved way between retaining-walls which rise on either side with the grade. The station has practically no façade and no visible roof, the flat surface which covers it not being noticeable from the Avenue side, and it is really unusual that so many architectural features could have been introduced with such a building. Mention has been made before of this same structure when it was nearing completion, but when one sees how admirably it is suited to the peculiar requirements of the place, and how many features marked with excellent taste have been introduced into it, one is tempted to mention it again. One unusually good point is the way the metalwork has been used with entirely good effect. One down-spout at the front of the building has been converted into a column of very decorative character at the entrance, to divide the sheep from the goats, if one may so designate the slow and fast suburbanites. The electroliers and the iron screens over the windows also come in for their share of good design. The interior walls are finished with glazed tile, thus increasing the effect of light in what could not be a very light room. The supporting columns of the roof are iron encased in glazed terra-cotta. The western wall of the interior being built directly against the terrace is naturally without windows, but the eastern one is one succession of low, broad openings, affording a quite picturesque outlook onto the Lake, across the narrow platform.

While St. Gaudens has been giving us the best in his art, science has also been contributing to the glory of Chicago. Professor Alvan S. Clark lived just long enough to complete and put in place the great telescope which was the gift of Mr. Yerkes to the Chicago University. This wonderful instrument has before been described in these letters. Though belonging to the Chicago University, it was considered best to locate it on high ground at Geneva Lake, where it would be far removed from the murky atmosphere of our town. Professor Clark and some members of his family brought the precious lenses West in a special car, and saw them safely placed in their cell. The Northwestern University has one of Professor Clark's instruments, an 18½-inch refracting telescope; so Chicago is unusually favored in this respect and, though deemed a very wicked city, can come closer to heaven than most places. At the time the Evanston instrument was made, a little over thirty years ago, it was the largest one in the world.

THE "TURBINA."—That remarkable little torpedo-boat destroyer "Turbinia," in a trial at Newcastle-on-Tyne, is said to have reached a speed of thirty-three knots. There are those who have hinted that she can do forty knots "if once she is opened out," and they have hopes that future torpedo-boat destroyers will be built after her plan. It is possible that the steam turbine will become the propeller of the future.

—N. Y. Tribune.

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 [To be continued.]



[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

THE UNITY BUILDING, CHICAGO, ILL. MR. C. J. WARREN, ARCHITECT, CHICAGO, ILL.

[Gelatine Print, issued with the International and Imperial Editions only.]

THE GREAT HALL: HAMPTON COURT PALACE.

For description of this and the following illustrations, see elsewhere in this issue the article, "An Architectural 'Summer School' Abroad."

THE ENTRANCE-COURT: HAMPTON COURT PALACE.

THE EAST AND WEST FRONTS: HAMPTON COURT PALACE.

THE SOUTH FRONT AND THE FOUNTAIN COURT: HAMPTON COURT PALACE.

INTERIOR OF THE CHURCH OF THE MADONNA OF S. BIAGIO, NEAR MONTEPULCIANO, ITALY. ANTONIO DA SANGALLO, ARCHITECT.

This church, built on the plan of a Greek cross with a detached square tower in the northwest re-entrant angle, was begun in 1518. It measures about 115 feet in either direction and is covered with a dome.

CHURCH OF STA. MARIA DI MONTELUCE, NEAR PERUGIA, ITALY.

This little church dates from 1218, although the façade was rebuilt in the fifteenth century.

[The following named illustrations may be found by reference to our advertising pages.]

COMPETITIVE DESIGN FOR MONUMENT TO PRESIDENT CARNOT, LYONS, FRANCE. M. NAUDIN, ARCHITECT.

CHAMBER OF COMMERCE, PARIS, FRANCE. M. LISCH, ARCHITECT.

INDUSTRIAL SCHOOL, HAGEN, WESTPHALIA, GER. FELIX GENZMER, ARCHITECT.

A GROUP OF APSES, ETC.

[Additional Illustrations in the International Edition.]

HOUSE OF JOHN JACOB ASTOR, ESQ., FIFTH AVENUE AND 65TH STREET, NEW YORK, N. Y. RICHARD MORRIS HUNT, ARCHITECT.

[Gelatin Print.]

DETAIL OF THE KAMMERZELL-HAUS, MÜNSTERPLATZ, STRASBURG, GER.

[Gelatin Print.]

The principal corner-pillar, running through all three stories, is richly carved, showing three female figures, one above the other, representing "Faith," "Hope" and "Charity." Other carvings represent the 12 signs of the zodiac, four in each story, while there are 15 statuettes of children, all playing on musical instruments. In the interior, the old wainscoting, as well as some of the original wooden ceilings, are still well preserved. The ground-floor is now given up to an Alsatian "Weinstube" (wine-restaurant). The architect's name is not known.

GRAND STAIRCASE: MUNICIPAL BUILDING, SHEFFIELD, ENG. MR. E. W. MOUNTFORD, ARCHITECT: TWO PLATES.



HEATING BY ELECTRICITY. — It can hardly be generally realized, as yet, how much heating is done by electricity. The shoemaking industry employs it. Silk-finishing rolls and leather-working machinery are heated by it. During the past eighteen months 14,000 electric-car heaters have been installed. Blank-book manufacturers, starchmakers, and piano factories use electric heat. Large clothing houses do their work in certain departments by electric irons. Such irons have been supplied to State asylums in Michigan, Indiana, Wisconsin, Illinois, New York, Massachusetts, Maine, and Maryland. Electric heaters are found useful in many homes. Two combined New York hotels ordered 387 electric-heated curling-iron sets. Seventy-two sets were ordered by a Boston hotel, and a large number for line steamers crossing the Atlantic. — *Philadelphia Telegraph*.

LEIPSIK WORKMEN'S LODGINGS. — The following is taken from a report in the *Recueil Consulaire*, Brussels: "The Society for Constructing Cheap Houses for Workmen of Leipsic, which recently built thirty-five establishments, has constructed four more, and now has 39 houses, valued at 1,627,000 marks (\$387,216), with 361 lodgings for families and 38 for single persons. Since the Society desires only 3 per cent returns, lodgings can be rented in its houses at the following rates: Single rooms, 40 to 60 marks (\$9.50 to \$14.25) per year; apartments consisting of three rooms, from 130 to 160 marks (\$31 to \$38); of four rooms, 155 to 200 marks (\$36 to \$47). A small garden costs 15 pfennigs (nearly 4 cents) a week, and 20 pfennigs (about 5 cents) is paid for the care of a child during the day, including meals for the latter. Rent is payable weekly, and the deficit caused by delays amounts to only 6 per cent of the total receipts. It is not allowed to sub-rent the rooms.

The proprietor can give a week's notice and the renter three months' notice before changing."

IRON FELT, A NEW INVENTION. — The State Department has received the following from Consul Monaghan, dated Chemnitz, May 17: "Berlin and Leipsic are boasting about a new invention, to be known as 'iron felt.' It is made of the very best woolen materials, impregnated with the inventor's patented preparation, which gives it 2,220 pounds power of resistance to every square centimetre (0.3937 inch). The article is most useful for railroads of all kinds. Placed between rails and sleepers, it deadens sound and prevents shocks. The first experiments with the new material were made by the Berlin city street railway, over which 360 trains pass daily. The results surpassed the company's most sanguine expectation. Not only was the noise brought down to a minimum, but the wear and tear were materially diminished. It is to be tried on the new roads in Leipsic. Old buildings, and particularly buildings of stone and iron, suffer most from the shocks and noise of passing trains. Such an insulating material seems to be specially adapted for elevated roads."

THE SHOREDITCH DESTRUCTOR. — An economic and scientific experiment was inaugurated recently, when Lord Kelvin opened at Shoreditch the combined electricity and dust-destruction works erected at a cost of about \$750,000. The destructor cells are capable of burning 20,000 tons of ash-bin refuse yearly, and the heat given out is sufficient for the electric light and the power of the whole of Shoreditch, with a population of 124,000, besides supplying heat to the adjoining baths and wash-houses. In Paris, lamps will be lighted for the first time on Monday by electricity furnished by a destructor. This unique municipal enterprise is exciting the liveliest interest in scientific and municipal circles in Great Britain and abroad. If successful, it promises to revolutionize the public supply of electricity, as the Vestry of Shoreditch promises to supply electricity at 2d. (4 cents) per unit in day time and at 4d. (8 cents) per unit at night time. During a preliminary test, 150 pounds' pressure of steam was raised in the boilers from dust alone, absolutely no coal being used. — *N. Y. Times*.

THE VILLA BORGHESE. — One of the most highly-prized possessions of the Borgheze family has been the well-known and celebrated park and palace at Rome, known by the name of "Villa Borgheze." This has just been purchased from the trustees of the Borgheze bankruptcy by the City of Rome for use as a public park. For three centuries Romans have been allowed to walk and drive in this park on certain days of the week, until custom had made it appear to be public property, which it has until now not been. Indeed, on one or two occasions the heads of the House of Borgheze have sought to remind the Romans of their own rights of proprietorship by closing the doors of the park on the public days, almost creating thereby a riot. The fact is that it is not merely one of the show places of the Eternal City, but also the lungs of the latter, and the shutting of the park to the public was just as serious a matter to the people of Rome as the closing of Central Park would be to the people of New York or that of Fairmount Park to Philadelphians. The City of Rome has now purchased it for the ridiculously small price of 3,000,000 francs, which is about a quarter of what has been offered for the park by several foreign millionaires, the vested rights of the public to visit the park on certain days in the weeks — rights indorsed by the municipality and by the Government — standing, however, in the way of the sale to any foreigner. It is only fair to add that the 3,000,000 francs are for the park and villa alone, and that before the end of the year the representatives of the Borgheze family will have removed, not only the archives, the pictures, statues, furniture and works of art from the villa itself, but also all the beautiful and numerous statues from the park and gardens, which for more than three centuries have done so much to embellish and adorn the grounds. — *Marquise de Fontenoy in the Philadelphia Press*.

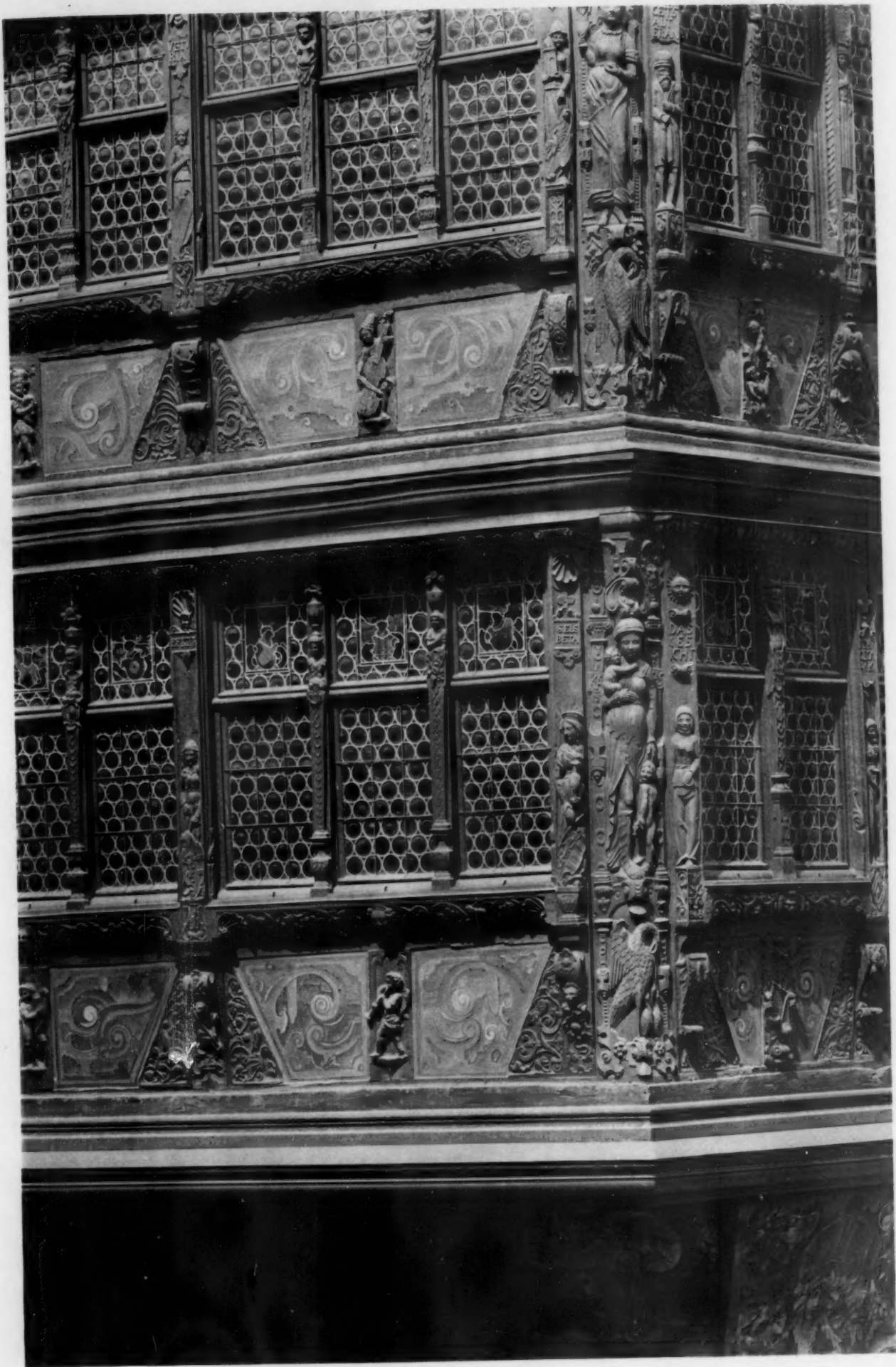
PANAMA CANAL'S CONDITION. — The British Consular officers at Panama and Santa Martha describe in their last reports the present condition of the work on the canal across the isthmus and of the railway connecting the Atlantic with the Pacific. The New Canal Company, formed in Paris in 1891 to continue and complete a ten-lock canal rising to a maximum altitude of 133 feet 8 inches, in place of the original sea-level scheme of M. de Lesseps, has made good progress with the small capital at its disposal, and the reduced canal trough, or cunette, in the Emperador and Culebra sections is now assuming definite proportions. Although the end in view was the final completion of the canal, it could hardly have been supposed that this great undertaking could have terminated and the canal be opened for maritime traffic with only £2,500,000, of which only about half was to be spent on the canal proper. The work is of a purely experimental character, in order to demonstrate that a lock-canal is feasible. It consists of a water-course 98½ feet wide at the surface, with half that depth of bed. About £80,000,000 have been raised since the inception of the scheme, sixteen years ago, for the purpose of the canal, and have been spent in one way or another. The railway from Colon to Panama was constructed in 1855 by a company registered in New York, of which Mr. Aspinwall was the leading spirit. The concession expires in 1906, and costs the company £250,000 a year. Almost the whole of the shares are held by the Canal Company. During the ten years preceding 1893 the Company paid an average dividend of 7 1/2 per cent per annum; but during the last four years the net earnings have been applied to the purchase of three large ocean-going steamers and otherwise to improve and protect the Company's interest as carriers. The traffic from the Pacific to the Atlantic has decreased recently, owing to small crops and the competition of "tramp" steamers that carry produce through the Straits of Magellan at cheap rates. But there is an increase in the traffic from the Atlantic to the Pacific, owing to improved arrangements with steamship companies on the Pacific coast. Last year nearly 280,000 tons of goods and 103,000 passengers were conveyed by the railway. — *The London Times*.



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THE UNITY BUILDING, CHICAGO, ILL.

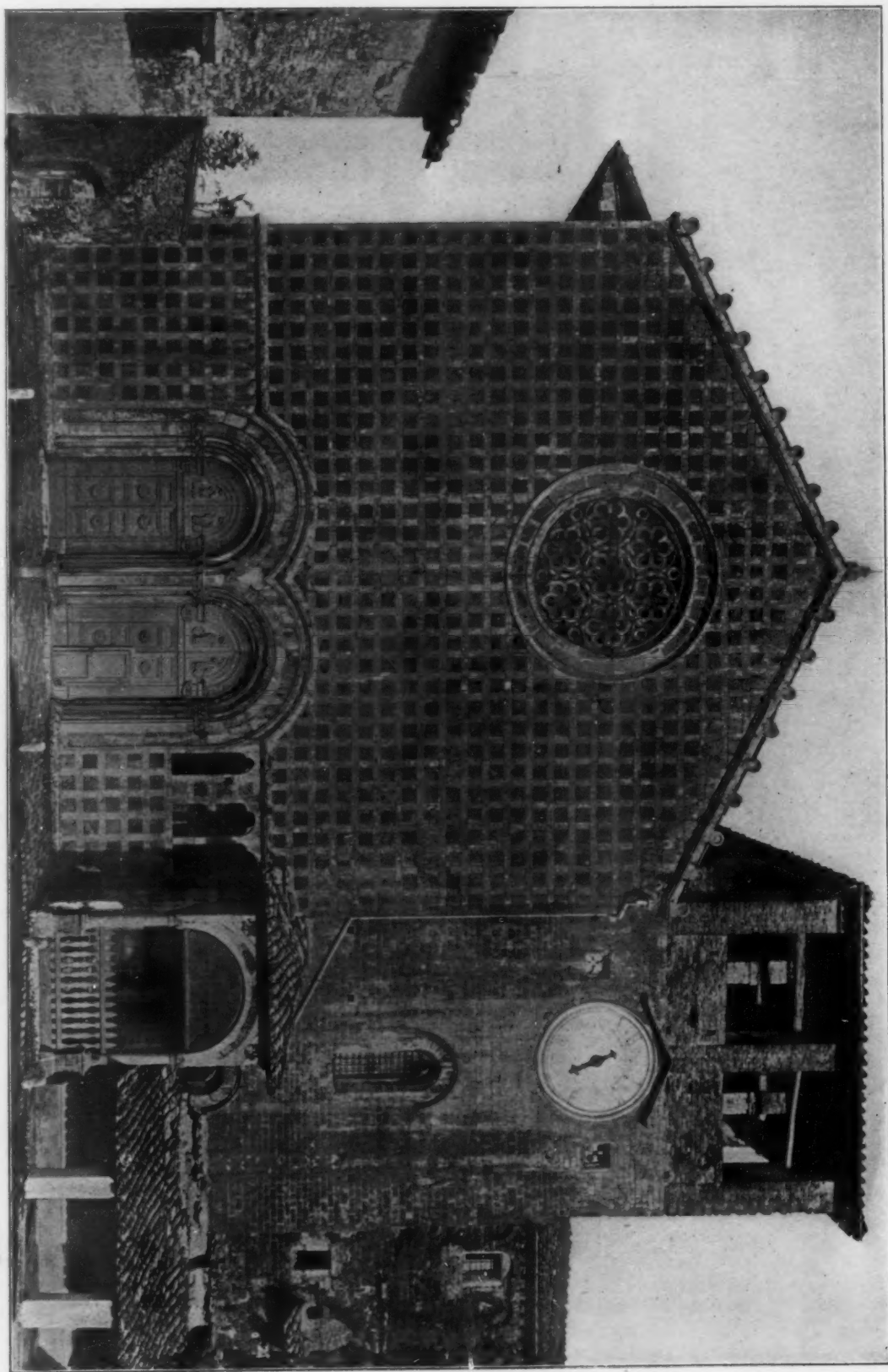
C. J. WARREN, Architect.



Blätter für Architektur.

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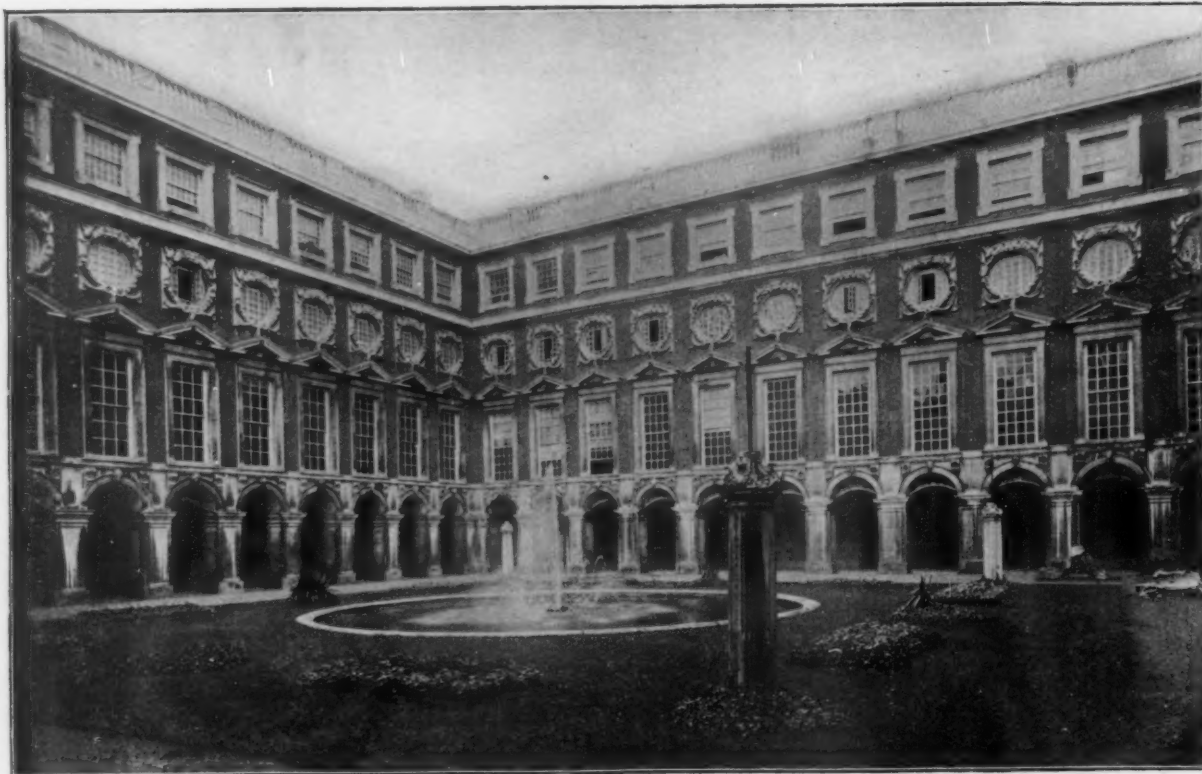
DETAIL OF THE KAMMERZELL-HAUS, MÜNSTERPLATZ, STRASBURG, GERMANY.



CHURCH OF STA. MARIA DI MONTELUCA, NEAR PERUGIA, ITALY.



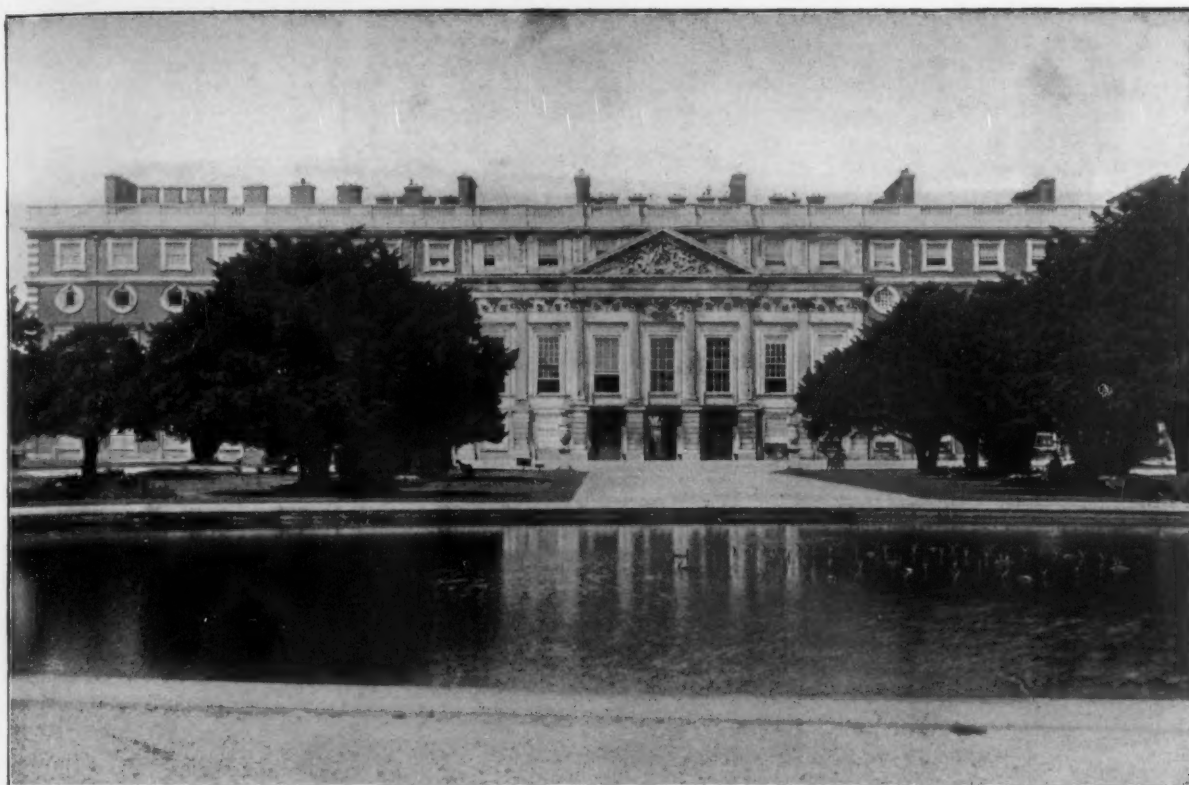
INTERIOR OF THE CHURCH OF THE MADONNA OF S. BIAGIO, NEAR MONTEPULCIANO, ITALY.
ANTONIO DA SANGALLO, ARCHITECT.



FOUNTAIN COURT:—HAMPTON COURT PALACE.



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SHEFFIELD MUNICIPAL BUILDING
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