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A CORRESPONDENT in a Western town nonchalantly tosses to us, for answer, four questions upon which he and his fellow-practitioners hold different opinions, and this is hardly to be wondered at, as they all concern points of professional procedure rather than matters of building practice: all are relatively new points in modern practice, and so have not, with one possible exception, been firmly fixed by custom and precedent in one way or the other. But as all four questions are of importance and not clearly decided, they form excellent topics for discussion, and we hope that in spite of, or because of, what we are about to say, those of our readers who have given thought to the matters will express themselves, and so either support or controvert our own line of argument. The questions arise over a certain fourteen-story bank and office building which is to cost about three-quarters of a million of dollars, and the first is as to the propriety of charging five per cent on the total cost in view of the fact that a large number of the office-stories are mere repetitions one of another. Of course, each case is surrounded by its own conditions, which have to be given proper weight, and even the most pronounced upholders of the letter of the law would have to acknowledge that in their own practice they had come upon cases where they found themselves fully justified, to their own professional conscience, in making the charge for their service less than the law allows. At first blush it would seem that a modern office-building affords just the instance where a departure from the recognized rate would not only be allowable but advisable. Yet, in spite of the fact that the architect's powers as an artist are called into play mainly in devising the treatment of the lower three and the upper three stories, and although his skill as a planner is largely limited to fixing the typical plan for one office-floor, it must be borne in mind that the usual rate of payment is devised not only to cover these acquirements of his, but others, the most important of which, perhaps, is his ability as a man of business; and as, in all lines of business, compensation is made to keep pace, more or less well, with the amount of money involved in executing that business, it is not unreasonable to argue that the same relative portion of his fee earned by an architect in his capacity as a business-man in erecting an eighty-thousand-dollar building is equally earned by him in erecting an eight-hundred-thousand-dollar one. The history of practice in this country and abroad shows pretty conclusively that the five-per-cent rule is fairly logical and can be safely applied to most cases. It must be remembered, too, that while in the early years of its career, when conditions were very different in the building world from what they are now, the Institute had incorporated in its schedule a recommendation that only three per cent should be charged for stores and warehouses, — buildings which, in that they called for little architectural expression and were largely repetitions of a single constructive

unit, might be compared to the mid-height stories of an office-building. — there is no such recommendation in the present schedule, and for the reason that such buildings in these days are something vastly different from what they were in the sixties. There are two or three other factors in the question worth glancing at: First, the courts are showing a tendency to hold architects responsible for their mistakes in pecuniary damages, much as architects are held in France to-day, and compensation for this certain anxiety and preparation for a possible assessment of damages in case of mishap should certainly be allowed for in computing the charge that an architect may rightfully make for his work; and mishaps may arise in the building of the mid-height stories as often as in the upper or lower ones. Next, as every one knows, and just as prevails in all trades and all professions, the gains that arise out of one job have to cover not only the rightful profit but the loss that occurred on the last, or will grow out of the next one. Why, then, may not an architect make a "fat thing" out of an occasional building where a typical floor is several times repeated? To be sure, it may seem to that particular client a piece of injustice to him, but that client is the very man who will scold because the druggist charges a dollar for a decoction which really costs three cents, forgetting how great a boon it is to every one to know that at the corner, where rents and expenses must be high, he can in his moment of dire need procure the needed styptic or cathartic. In spite of all these things, there are circumstances whereunder it might be wrong for an architect to charge five per cent on an office-building of great cost. Circumstances govern cases, and the practitioner may give them due weight in reaching his decision, without fear of penalties, whether he finally decide to charge less or more than the rate recommended in the accepted schedule.

THE next question asks whether the clerk-of-works should be paid by the architect out of his own pocket. He distinctly should not, and yet in this country he too often is, because of the fact that a clerk-of-works is a new element in American practice, and architects, finding they have difficulty enough in getting clients to agree to pay the usual full fee to themselves, hesitate to demand also that the client should pay for a clerk-of-works. But architects agree to give only supervision, not superintendence — which would imply the neglecting of other work to give constant personal attention to one job — and if the client demands constant superintendence it is clearly his duty to pay for it himself. The result too often is that the architect assigns to the post some draughtsman from his regular office force, who does as well as he can and does not really add to his employer's expenses. Still this compromise method is not to be recommended and has most of the disadvantages, so far as the client's real interests go, of a makeshift. The continuous presence on the job of a trained superintendent or clerk-of-works is worth to the client all he costs him.

THE third question is, "Should the cost of the steel safety-deposit vaults, which is a large item, be considered as part of the cost of the building upon which the architect's commission is based?" Our answer to this question is deducible, we think, from our discussion of the first one. The architect was desired to design a building of which safety-deposit vaults were stated to be an integral feature. Why, then, should the cost of such vaults be excluded from the cost of the building which the architect was required to create? The steel vaults are unquestionably, in the legal sense, "fixtures," and there is no fixture in a building which may not properly be taxed for the architect's commission. If the client has bound himself to pay a percentage on the total cost of the building he has no right to murmur if in computing that cost is included the cost of steel vaults and all other fixtures. But here, again, circumstances must have their weight and the architect must decide for himself — perhaps with some little heed to what would be good business policy — what under the circumstances it is reasonable for him to do.

THE fourth question is the most difficult of all, because in it are involved elements of practice that had no existence at the time when the percentage system was adopted by the profession in all countries. "Should the architect pay for expert engineering service required in the erection of the steel

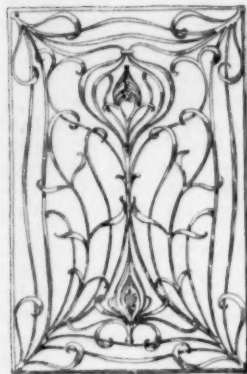
frame and the installation of the mechanical plant?" Here we understand the questioner to lay special stress upon the word "expert." As applied to the particular instance in hand, it may be answered that if the architect happens to have paid out of his own pocket for the expert engineering assistance required in this particular building, he certainly need have no qualms about including in the cost of the building on which he computes his own commission both the cost of the mid-height stories and of the safety vaults. As a general proposition, however, it should be noticed that the question, a certainly debatable one, is all the more so because of the different status of practitioners in all that regards the furnishings of their pockets and of their heads. For the sake of the dignity of the profession one would like to answer that, unquestionably, the architect should in all cases pay for all expert service required, and in the case of an architect who has, at length, won a steady and lucrative practice, and has, of course, so organized his regular office force as to have included in it men of an expertness sufficiently real to cope with all but very extraordinary conditions, there is no reason why he should not provide his own expert service. But in the case of architects in moderate practice, who do not normally have a corps of experts on their pay-roll, the case is somewhat different, all the more if they are young men and their client has already stipulated that in view of their youth they must not think of including in the cost of the building, say, the cost of mid-height stories or deposit vaults. The young man must generally have greater recourse to outside expert help than his older fellows, and he can less spare from his income the fee that must go to these outside aids, so a plausible argument could be made in support of his contention that the expert service should be paid by the client. But this course would have the disadvantage of at once raising the question whether the architect can properly include in the cost of building, on which his own fee is to be computed, the cost of the steel frame which he did not plan, or the roof trusses which he did not design. Moreover, by having the experts responsible not to him but to the owner, his control over the job as a whole would be weakened and new causes for trouble with the contractors would arise continually through having so many different masters on the job, each asserting a final and complete authority. In some cases the client might be willing to make an "allowance" outright for expert service, for it is certain that the customary rate of payment was established when an architect's duties were less complex than they now are and the ratio of net profit higher, but as the suggestion could hardly be made without putting the confidence of the client in his architect at risk, it would be as well, perhaps, not to raise the issue. On the whole, then, it seems best — until the body of the profession adopts a definite ruling — for the architect to hire and pay his own experts, but only in cases where the client pays the full commission. This question was most admirably presented from all sides in the paper read by Mr. Bradlee before the Convention of the American Institute of Architects, at Washington, in 1898, a paper of which the discussion was most unwisely prevented by the presiding officer.

THE notorious "Westminster Chambers" case continues to occupy the attention of the courts, the Massachusetts Legislature and the newspapers, and this is all the more remarkable seeing that the architect has threatened with suits for damages pretty much every one who has opposed the carrying out of the building as he originally designed it. The contractors for the building, Messrs. Woodbury & Leighton, who now have a larger pecuniary interest at stake than any one, have published a very specious argument in defence of the bill for relief introduced in their behalf. In its essence their statement is merely an appeal for mercy, and much as we regret the difficulties of their situation, we cannot but feel that they deserve no more mercy than is usually granted to those who wilfully break the law. They evidently feel that they make an unanswerable plea, even a valid defence, when they say "lawful or unlawful, it is not in the public interest to pull down the frieze and cornice, which is the only effect of the [Attorney-General's] suit, and leave the building, as it will then be left, an object of public reproach and an injury to every building in Copley Square." To such a plea as this it seems as if every one who believes that laws should be upheld and executed, must answer that they would like to see — for a while at least — even in Copley Square, just the kind of monument above described, standing there to declare to all her citizens that Massachusetts has not

one kind of law for the poor and a more agreeable kind for the rich. The men interested in the Westminster Chambers chose to "gamble on the chances" that, in one way or another, they could avoid compliance with the clear intent and meaning of the act of 1898, which limited the height of their building to ninety feet. Their choice made, they can hardly be blamed for making every effort to win their game, but our respect for them would be greater if they showed that they had nerve enough to be good losers. If their building is to become a "public reproach" — but why "public"? — it is through their own choice, and if they object to having their names associated with so pitiful an object, they ought to have made a better forecast of the probable outcome.

FOUR years ago the Massachusetts Supreme Court declared that the "picketing" of an employer's places of business by his striking former employes, aided by sympathizing union allies, was illegal and that the strikers could be enjoined from maintaining such pickets. This decision rested somewhat, but only in a very slight degree, on the allegation that the pickets resorted to methods of intimidation, and even to physical violence, where persuasion proved unsuccessful in preventing new men from taking the places voluntarily vacated by the strikers. The general tenor of the decision, if we remember it correctly, left it clearly inferable that the Court was not quite certain whether peaceable picketing might not be allowable. But the decision, in spite of this weakness, was nevertheless one of very great importance, and if the courts of last resort in other States would but affirm this decision it would go far to remove all possibility of riot and bloodshed as ordinary concomitants of strikes. In default of this action on this side of the Atlantic, the forces of law and order have been greatly strengthened by a case just decided in England, which declares that not even "peaceful picketing" can be tolerated by the powers vested with the duty of upholding and executing the law of the land, and *Lyons vs. Wilkins* has now become a leading case of vast importance. The employers first applied for, and secured, an interlocutory injunction against the maintenance of pickets by their former workmen, and on appeal by the workmen the temporary injunction was affirmed by the Court of Appeal. The employers next secured a perpetual injunction, which the strikers contested, but lost their case in the same way. Then, as their last and only recourse, the strikers appealed to the House of Lords, but before their appeal could be heard they decided to withdraw it and so confess to be hopeless all attempts to prevent employers from honestly and quietly conducting their own business with the aid of such workmen as were willing to accept their terms of employment. This English case is all the more interesting just now from the fact that Oliver Wendell Holmes, Jr., the Associate Judge who, in the Massachusetts case, wrote a strong dissenting opinion, which was in part of its argument not a little socialistic, has just taken his seat as Chief Justice of the Massachusetts Supreme Court, and finds that about the same time the views he advanced in the picketing case of four years ago are overruled by the highest English court.

AN announcement, which seemingly emanates from St. Paul, Minn., runs to the effect that the National Educational Association has arranged a competition in essays on the seating, the lighting, the heating and the ventilating of public school-houses. Particulars are not given, save that the competitions are open to aspirants from any country and that prizes of two hundred and one hundred dollars will be awarded as first and second prizes in each of the four competitions mentioned. Mr. Irwin Shepard, secretary of the Association, and Mr. W. T. Harris, United States Commissioner of Education, are charged with the conduct of these competitions. That this undertaking was seemingly inaugurated in the Northwest, which is so largely settled by persons of Scandinavian descent, is only what might be expected from a community where these intelligent fellow-citizens of ours are so numerous. At the time when the first permanent settlement of Swedes was made in Delaware, in 1638, there "was not in the Kingdom of Sweden a peasant child who could not read and write," as an old chronicler puts it, and this high standard of education which has been maintained not only in Scandinavia itself to this day, but in this country, has, of course, been fostered in Scandinavian families by our common-school system, and it is most natural that they should take an active interest in procuring the best school buildings for their children.

NOTES ON SOME EUROPEAN SYSTEMS OF FOREST ADMINISTRATION.¹—III.

Iron Grille.

THE law of 1882, concerning the administration of the forests and more particularly dealing with procedure in works of necessary reforestation, has admirably stood the test of criticism.

The reforms it proposed to institute were conceived in a spirit of sympathy with the conditions and necessities of the people. The experience of former mistakes was taken into account.

M. Miane points out two weak places in its framework, however, the first in fixing too low the penalties for infringement, the second in making cases of trespass triable by the mayors of communes, who are, he thinks, in all cases too much inclined to deal leniently with such offences. The provision under which the boundaries of reforestation

operations are to be in all cases determined by parliament caused general satisfaction. The people felt themselves thus placed under the protection of their elected representatives.

The regulation of the pasture-lands by mayors of communes, a duty heretofore somewhat perfunctorily discharged, was enforced. The retirement from use, "*mise en défens*," was recognized as the best scheme as yet put forward for the conservation and regeneration of degraded lands.

But while the law of 1882 seems admirably adapted to secure the benefits intended, the results of its application have yet fallen somewhat short of the best.

In concession to a great deal of very excusable protest against the planting of trees upon degraded pastures, especially in localities where pastoral pursuits formed the sole resource of the peasants, returfing was substituted with good results.

The indemnities provided for lands sequestered made good the most serious defect of the enactment of 1860. The recovery of sequestered lands by their owners was facilitated, one-half of reforested lands and one-fourth of returfed being relinquished to Government as an offset to the accrued benefits from improvement.

In actual working, however, the administrative procedure in some cases set aside these advantages. The indemnities were evaded. The people showed opposition to accepting what seemed to them the doubtful benefits of a system whose present cost was more obvious than a vague and distant promised profit.

They even used force here and there to stop the works, and at one place burned over the new plantations. The influence of the wealthier herdsmen was thrown against a system which threatened to interfere with their business. The ignorance and credulity of the mountaineers made it an easy matter to persuade them that in these works the Government was sacrificing them to the agricultural interest of the valley lands.

It was complained that the law dealt somewhat too summarily with the property of the communes; that, in fact, this forcible assumption of private rights by the State was confiscation. The complete expropriations of the 1860 Act had been modified to permit recovery of property on payment of the cost of works or relinquishment of title to one-half of the area improved, but it was maintained, with justice, that both laws bore too hard on the pastoral mountain-folk. Not only the degraded pastures but those still in good state were expropriated—the latter as a measure of conservation.

In certain communes the Act of 1860 worked an absolute extinction of rights to three-fourths of the pasturage. Private owners were obliged to cede part of their property through inability to pay the cost of operations forced upon them. It was urged that reforestation was being pushed beyond what was practical and necessary. Operations projected to cover an area of 1,200,000 hectares were thought to be excessive. The opponents of the reform claimed that geologic and general conditions were insufficiently considered. It was set down as bad policy to put cultivable lands under forest.

The law of 1864 brought in the popular substitute of returfing to meet these objections. But returfing was somewhat overdone, and the regulations governing the work were not such as to satisfy all interests. Local rights and privileges were not in the opinion of the inhabitants sufficiently guaranteed. The law was charged with having granted too arbitrary powers to the Administration of Forests, and their operations became more and more unpopular. Preventive measures were sometimes neglected, the credits voted being inadequate to cover more than the most urgent cases.

From 1840 to 1876 the State had expended some seventy-eight millions of francs to repair the ravages of torrents, while not over one million annually was devoted to preventive operations. From these several causes had grown a distrust of Governmental reforestation projects. Meanwhile various attempts at corrective legislation, and the accumulation of experience, were leading up to the comprehensive legislation of 1882.

In this the chief new features were: 1. The conservation of

certain lands, important to the scheme of reforestation and control of torrents, by means of suspension of the right of use, "*la mise en défens*." 2. The strict regulation of the rights of pasturage. "*La mise en défens*" was put in action by the Administration. Its maximum duration was fixed at ten years. The owner was entitled to indemnity in an amount established by the *Conseil de préfecture*. At the end of the ten years the proprietor could force the State to acquire the lands by paying for them outright. Meanwhile the Administration was empowered to carry out such works as might be deemed advisable, without, however, radically changing the character of the lands. The last provision was meant to check an unreasonable conversion of cultivable and pasture lands into forest.

Indemnity was provided as well for communal pasture-lands withdrawn from use.

These were made subject to the following provisions:—

It became the duty of mayors of communes to report annually to the *préfet* of the district, in form prescribed, the regulation of the pasturage within their purview for the ensuing year. These plans were subject to modification by the *préfet*, who was also empowered to have them drawn up by a commission in case of a mayor failing to perform this duty to the satisfaction of the law and the Administration. Disregard of these regulations was punishable under the penal code.

Thus the general scheme was, to institute reforestation works where the need of them was greatest, to merely retire certain lands from use where the conditions were less urgent, and, finally, to assist natural regeneration of the pasture-lands by strict regulations of their use. Local interests were held in view. This last was the strongest feature of the law and the one which saved it from becoming a dead letter, as had its immediate predecessors.

The consent of parliament being required to determine the extent and to fix the location of Administrative operations, and the latter's working-plans being subject to the approval of the deputies, the people felt their rights to be amply safeguarded. Further, there could be no dispossession or deprivation of use without indemnity.

The mountain pastoral peoples, whose interests had been sacrificed in previous legislation to schemes for the benefit of the valley lands, were well taken care of under the new law, which left as much as possible of the pasture-lands and improved the grazing area. This law favored no one region to the detriment of another. It was logical, based upon true economic principles, being "conceived," as the excellent M. Miane insists, "in a spirit of sympathy for the people." Based upon experience it retained the good points of precedent legislation, while discarding mistakes. It realized that a law to be effective must have the people's support. Instead of a general scheme applied with small regard to special conditions it provided a series of treatments differing with the local needs. "It reconciles," says Miane, "the struggle against destruction of the forests with the local interests of the people."

Under the provisions of this finally-achieved adequate legislation, the law of 1882, the correction of torrential streams and the restoration of the forests of France have been zealously pushed forward. The torrents came first because their case was urgent. Their ravages must have a check. It was out of the question to wait until the growth of replanted forests should extinguish their harmfulness.

The first attack was upon the scouring of the torrent, cross and lengthwise scouring. The tactics in this case were to enlarge the bed and make it permanent. With admirable engineering skill the worst of these ravagers have been tamed.

Widened here, dammed there, and canalized, the wild Alpine brook is again the harmless servant of man. The mad destructive rush of storm-waters is checked by the lessened slope of the bed. This is effected by barriers of masonry or of logs, which make deposits upon which wattlings and hedges of quick-growing shrubs are set to make permanent the gain of soil and stability.

On soils where tree-growth is impossible, whatever vegetation is best suited to the ground, brush, thorn-bushes or what not, is substituted. The point is to hold the ground in place.

Wherever possible, woodland is created as the only sure means to prevent denudation, distribute the waters, and supply the requisite fertilizing humus. Brushwood does not renew itself, yields small harvest, and will not thrive above 1,200 metres of altitude. The altitude, with other conditions, determines the sort of wood to be planted. Between 600 and 1,000 metres lies the belt of oak, poplar, elm, ash and chestnut. At from 1,000 to 1,800 metres come the pines and larches. At from 1,800 to 3,000 metres flourish the larch and stone-pine (*pinus cembra*) alone.

The problem set before the Administration of Forests is a knotty one. In places the work of replanting the denuded mountain slopes has had to be repeated several times before the young growth was able to hold its own against adverse conditions. Severity of climate, rapid variations of temperature, the crumbling action of frost and thaw have to be stoutly combated. Work in progress on troublesome torrent-beds may be swept down bodily by an untimely rain-storm.

To quote briefly from M. Miane's tabulation of work done, we note: from 1860 to 1868 the "Facultative Works" on properties communal, corporate and private, covered an area of 58,383 hectares; for the same period the "Obligatory Works" (urgent) covered 21,320 hectares, of which 2,743 hectares was returfing; grand total, then, 79,703 hectares, which, as the hectare is 2.47+ acres, runs to nearly two hundred thousand acres redeemed and replanted.

¹ Continued from No. 1261, page 61.

It should be noted that the work under the "Obligatory" class, although aggregating little more than one-fourth of the whole, represents far more difficulties overcome.

The falling-off in the amount of work done between 1868 and 1882 was due largely to the unfavorable status of legislation which has been set forth. After 1882 there was new energy displayed. The boundaries of districts undergoing reforestation, which were very large, were subjected to revision. Where possible, "*la mise en défens*" was substituted for replanting, that is to say, the natural recuperation of the lands was encouraged by their simple withdrawal from use. A total area of 316,000 hectares, of which about two-thirds belonged to the Alps, was designated for redemption. The end of 1888 found about one-fifth of the work accomplished. In 1895 a fourth had been restored or reforested. Fifteen years gave a total of 86,000 hectares redeemed by the State foresters. During the same period the State had also aided the restoration of 84,000 hectares of communal and private lands.

The Budget of January 1, 1879, showed the following expenditures:—

In the Alps.....	8,200,000 francs.
" " Cévennes and central plateau.....	2,400,000 "
" " Pyrénées.....	900,000 "
Total.....	11,500,000 francs.

The Budget of January 1, 1889, shows an almost quintuple increase of expenditure for the precedent ten years, under the new law:—

Acquisition of lands (69,576 hectares).....	12,410,000 francs.
Operations in the "Obligatory" class.....	25,390,000 "
Subvention of "Facultative" reforestry.....	6,050,000 "
Expense general and for the personnel (10 years)....	7,820,000 "
Total.....	51,670,000 francs.

(These figures are from M. Zolla in the "*Dictionnaire d'Economie Politique*.")

Of the 25,000,000 francs set down for operations only 7,000,000 went to works of reforestation, or sylviculture, properly so-called. The balance was expended in the correction of torrents, and in auxiliary works, such as roads, barracks, studies, etc. Of the whole amount, 15,000,000 francs were expended in the Alps.

M. Miane gives a supplemental table based upon information from the Administration of Forests, which brings these figures down over the five years from 1889 to 1893, inclusive:—

Reforested.....	17,141 hectares.	} Cost — 16,400,000 francs.
Restored.....	8,931 "	

In 1893 the Chamber voted operations on about twenty-two thousand hectares more, mainly in the Alps, work on which is about completed.

M. Miane estimates that the State must further acquire in the neighborhood of two hundred thousand hectares of land. As to the results obtained from these extended operations and considerable outlay, we may quote some examples from Demontzey:—

1. The torrent of Bourget was a destructive torrent which menaced several villages in the valley of the Barcelonnette. Its extinction was secured in fourteen years by planting a young forest of 400 hectares, which covers the whole area of its upper basin.

2. The torrent of Rion-Bourdoux in the same valley was the worst and most incurable of the lot, and renowned for its devastation. Its cone of dejection, of an area of 240 hectares, was traversed for a distance of three kilometres by the *route nationale*, the highway having continually suffered badly. This torrent is now conquered and confined to a defined and fortified bed upon its cone, leaving 200 hectares upon the cone to be used for cultivation.

3. The Combe de Péguère, above the thermal establishments of Canterets, la Paillière, and Manhourat, had a habit of bombarding these resorts with discharges of stones. The proprietors offered the State 300 hectares of land on which to begin remedial works. Operations begun in 1885 were successful under very adverse conditions. Notwithstanding the dangerous instability of detached rock masses, the foresters succeeded by underpinning the blocks and boulders, and building up a good sod on the bald slopes, in making things safe and permanent. The stone avalanches have ceased.

At Bourg-d'Oisans the dikes, built at great cost to secure the town against the torrent of Saint Antoine, are, thanks to corrective works on the torrent itself, no longer needed. At Fau (Isère) a formerly destructive torrent now flows peaceably within its canalized bed to supply the public fountain.

An inspector of bridges and roads reports: "Thanks to the works of correction, the aspect of the mountains has quickly changed; the soil has acquired such permanency that the violent tempests which have caused such disasters in the Hautes-Alpes have done no harm in the restored areas. The mountain has become productive. Hay is cut where formerly a few sheep could hardly live. There is no more dike-building. Nothing comes down from the mountain. The benefits to valley-lands near the cones of the torrents are immense. The cost of maintaining dikes is lifted, and the land, no longer threatened with floods of detritus, has certain value. Crops are assured. The harvest is certain."

These examples are doubtless selected from the most favorable. It is doubtful if the average result of all the operations effected is nearly so good.

The credits voted for such works have not been large enough for what is needed. Scarcely more has been accomplished than the extinction of the most ruinous of the torrents. Elsewhere, more or less merely provisional work has been done. The replanting has not in all cases succeeded, and large areas of land, of necessity acquired by the State under this law, have not been brought to a productive condition. The trees come on slowly. Many of them die out.

There is much room for betterment in the regulations of the pasturages. In practical working they are too often ineffectual. The mayors do not live up to the spirit of the law in this matter, and the *préfets*, not personally conversant with the lands in question, are apt to approve the projects of regulation without knowing if they are sufficient. Politics are apt to enter largely into these questions. The mayors of communes, who generally own the biggest herds, are not likely to be too strict with themselves.

A comparison of the benefits derived from these works, with the amounts they have cost, is not easy, for their greatest benefit is that of preventing damages, an incalculable factor. Their indirect results, such as agricultural development, safety of communication, arrest of depopulation, etc., are equally difficult to reckon. Demontzey essays an estimate of the value of results arrived at by the extinction of the torrents of Faucon and Bourget in the Barcelonnette, and figures a gain of 1,200,000 francs at a cost of one-half that sum. But such calculations are perhaps somewhat empirical.

M. Girerd, Under-Secretary of State for Agriculture, cites a more remarkable case: "In the district of Remollon (Hautes-Alpes)," he says, "works costing 100,000 francs have preserved from destruction cultures valued at over two millions."

The protection of villages and lands against possible torrential disasters is, however, an item which scarcely permits definitive estimation.

The indemnity for sequestration creates a temptation to wear out lands as rapidly as possible by overstocking them, and thus to urge their need of the *mise en défens*, a plan which easily leads to their being unloaded upon the State at prices beyond their value. The indemnity also is often set at more than the usufruct amounts to.

The people generally can hardly be said to favor reforestation proceedings. Large areas of forbidden land here and there in the mountains rather interfere with moving the herds about. Trespass is sometimes too severely punished. The guards are somewhat too autocratic. There is far too much officialism in the system, as in most things French. There are annoying delays in getting, through the innumerable bureaus, the necessary permits for timber, drop-wood or litter.

A lot of land has been taken over for redemption, for which there is no money at hand. It lies idle, and the capital it represents is unproductive. This kind of thing is not calculated to please the thrifty French. The Administration is unpopular because of all these things. There are not wanting critics who, looking at the results as a whole, do not find them brilliant, considering that they represent thirty-five years of effort and an outlay of 70,000,000 francs.

It is certainly true that the regeneration of the mountain-lands has not as yet been fully accomplished. The mountainous lands of France have been for more than a generation, say for the last third of this century, suffering from the effects of gradual depopulation. The advocates of reforestation hoped to see this evil checked by that means. It has not been so. Depopulation continues, has even been augmented.

The chief cause of the emigration of mountain peoples is to be looked for in the changed economic conditions which the century has everywhere developed, the decreased value of lands, the diminished purchasing power of money, the increased cost and scarcity of labor. Reforestation has as yet in general only decreased the revenues and increased the costs of the communes.

Sequestration suspends the right to alienate forest lands and lays new burdens upon their proprietors. The forest, falling under the *régime* of the Administration, must be provided with guards at the expense of the communes. The case of one commune in the Pyrénées has been cited which receives 348 francs of yearly revenue from its timber land, and pays 240 francs for its care. In the Alps some forests cost four or five hundred per cent for maintenance. In the little communes of Savoy the average cost is 200 francs to 100 francs of revenue.

Where governmental operations are begun, the expense increases as the revenues diminish. The communes can no longer lease their pastures. Other sources of revenue are cut off. Expropriation, interdiction and regulation have crippled the grazing industry so much that the Chambers have considered a direct compensation on this account to the pastoral communities. The people do not submit quietly to these changes in the old order. The year's docket in the Alps shows about one thousand cases of infringement tried. The extent to which expropriation by the State for purposes of reforestry may be pushed might be instanced by the case of Chaudron, an extreme one, indeed, where the whole property of the 120 inhabitants of the place being taken over *en bloc*, they were forced to emigrate in a body to Algeria, where a concession was granted them.

Of course this state of things is temporary, but it shows, after all, how very difficult it is to frame a law for the general economic welfare which may not in some places work hardships. A. B. BIBB.

[To be continued.]

LICENSING OF ARCHITECTS.

CINCINNATI, O., March 3, 1900.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—A bill has been introduced in the Ohio State Legislature providing for the licensing of architects. The Cincinnati Chapter of the Institute is almost unanimously opposed to legislation on this subject, and have adopted the following resolution, viz:—

"That a law to license architects is not desirable or expedient, nor for the best interests of the public or the profession."

This resolution has been endorsed by practically one-half of the architects throughout the State, and we think that if we could get an actual expression from such architects as are usually indifferent to all such questions, or else too timid to express themselves, there would remain but a comparatively small minority in favor of the license law. There is a determined effort, however, being made to have this bill passed, and if this move should be successful, it is likely to stir up similar agitation in other States. We feel that this is all wrong, and that there is not sufficient cause to justify such a law, and in order to avoid the danger of ill-considered action on the part of others, we send you herewith two papers,¹ written by Samuel Hannaford (one of our oldest members), in which he ably presents the arguments against such legislation. We cannot but wonder how any one who will study these arguments with the care which they merit could possibly do otherwise than endorse the resolution of our Chapter.

We think that it is proper that the profession should be fully informed on this question, and hope, therefore, that you will be able to give these papers proper space in your valued journal.

Yours very truly,

A. O. ELZNER, President, Cincinnati Chapter, A. I. A.

February 1, 1900.

TO THE MEMBERS OF THE ARCHITECTURAL PROFESSION IN THE STATE OF OHIO. GREETING AND GOOD FELLOWSHIP:—

The time seems propitious in the minds of many members of our profession that some measure of protection should be afforded the competent and reputable members from the interference of persons who are not architects, or if so claiming, are not entitled to be so classed because of their incompetency and ignorance of the art; hence, as an easy, and as some believe a sure, remedy, they turn to legislative enactments that shall forbid such competition. The members of the Cincinnati Chapter of the American Institute of Architects have suffered from such unfair competition equally with yourselves and earnestly desire a better state of affairs. They have, in company with other members of the profession who are not members of the Institute, carefully considered the subject and earnestly discussed the many reasons advanced by advocates of a license law, and have come to the conclusion that the passage of such a law, which provides for the appointment of an examining board by the State, who shall determine the fitness of candidates for the profession—is unwise—not called for by the public and not to the best interests of the profession.

While perhaps a casual view of the question might lead to an opinion favoring such a law, the Cincinnati Chapter, A. I. A., believe that a more careful examination will result in a different conclusion; hence, they desire to submit to your judgment the following thoughts and arguments bearing upon the subject:—

In all the discussions of the needs of the profession and the public, the advocates of a license law invariably state that they believe that it will be a great help to the profession, and that without it the status of the profession cannot be raised or bettered. This statement of an opinion in which "the wish is father to the thought" is not an argument or a statement that appeals to one's reason, and is fully answered by stating that we do not believe that it will be a help to the profession, neither do we think that the status of architecture will be raised or bettered by it.

The only reason advanced in favor of a license law is that it is necessary to protect the public from incompetent practitioners.

In the consideration of this argument, it may be well to state that there are two channels of possible detriment to public interests in this matter. First.—Bad construction, that imperils the safety of the public. This is possible and does sometimes happen, but it rarely happens as the result of lack of knowledge, but generally is directly traceable to rascally work, to work executed by men who are unscrupulous and who are not moved by any considerations of conscientious relation to their work.

Sometimes accidents occur which are disastrous, but these are nearly always due to carelessness and are not the result of ignorance. While admitting the possibility of danger and damage in these instances, we maintain that they are absolutely outside the remedial or preventive scheme proposed in a license law. No examination, be it ever so rigid, can make a dishonest man honest or prevent occasional accidents occurring.

The second possibility is along the line of bad sanitary conditions. That such bad conditions exist is true, but in justice to the profession we state that in 99 cases in every 100 they are not chargeable to architects, but that they occur in work done by parties who have not engaged the services of an architect, and their parsimony and ignorance are the offenders. But this necessity of decent living is already covered and provided for by the regulations governing plumbing, etc., in our cities, where most needed, and if existing laws are obeyed and honest men are engaged, honest work will result. If additional protection along this line be needed, the laws at present in force in some parts may readily be extended to embrace the entire State.

In concluding the examination of the validity of the claim that the public should be protected from incompetent service, we maintain

¹See also Mr. Hannaford's paper in the *American Architect* for February 4, 1899.

that in the past and at present a person desiring the services of an architect can exercise his best judgment in the selection, and is in no wise obligated to put his material interests in jeopardy by engaging the services of any but one whose reputation and character are a guaranty that he will be well served.

We would further suggest to you that in the case of malpractice, the safeguards of the common law are still in force in all their integrity, and we are liable to our employers for any damage they may sustain resulting from lack of skill or carelessness on our part. This common-law responsibility of man to man has been in the past, is now, and ever will be, the potential protection of the interests of the public.

In conclusion, we would remind you that the public have never, at any time, or in any place, demanded such protection, and it is not a strained or unfair conclusion to believe that they have never needed it.

In regard to allusions constantly made to the professions of Law and Medicine, and drawing a parallel between them and Architecture, and assuming that the proposed method of the examination and licensing architects is identical with the methods imposed upon Law and Medicine, we are of the opinion that the parallel does not hold.

First, there is no analogy between the relative familiarity of the doctor and his patient and the architect and his client. For ignorance on the part of a doctor in giving a wrong prescription may result in death, death so swift and sure that it is impossible to prevent it. Hence, so real is this danger that the exercise of the functions of the medical profession have been rightly hedged around by all possible safeguards in every civilized community. Now, it is clear to all that the relative position of the architect to the health, the life and the death of his client is not so close as that of the doctor—the very proposition is an absurdity.

The parallelism of the architect and the lawyer to their relative duties is not so marked as that one can be used to illustrate the other. The lawyer must interpret the laws of his country in accordance with fixed principles and forms, and his knowledge of such laws must be determined. He cannot be allowed to use them, interpret, or apply them according to his own sweet will and fancy. Such looseness would turn every court in the land into a mere pandemonium of sound, idle and windy harangues, equally as destitute of law as of common-sense. Hence, an examination of candidates for the legal profession is eminently proper, and the law takes cognizance of such.

In addition to the differences in the relative position of architects to their clients and doctors to their patients, which differences vitiate the parallelism desired to be established by advocates of a license law, we would remind you that candidates for the medical profession are not examined by a board appointed by the State, as proposed in the law to license architects, but are educated in colleges under the patronage of the several medical bodies of the country, and having passed a satisfactory examination are given a diploma and are eligible to practice. All that the State does is to require their registration and to show their diplomas as evidence of their fitness.

In this case, therefore, the profession determines what proficiency is requisite in a candidate—not a State Board—and the profession determines their fitness and determines the method and manner of their entry to its domain. Thus the character and fitness of a candidate is determined, and the honor and high standing of the profession is maintained. The method of admission to the medical fraternity is within themselves and is absolutely free from any taint of political influences or jobbery, which in spite of denials, and even facts to the contrary, would to a great extent nullify the value of a license based upon a State examination.

You are doubtless aware that the subject of the advisability of licensing architects has been before the profession in other countries, as England, France and Germany, for many years, and the subject has been well considered and earnestly debated. The general consensus of opinion has been adverse.

The Royal Institute of British Architects, the largest and by far the most influential representative body in England, has always opposed it. It has always been opposed by the great body of the profession in France and Germany. Indeed, it is a true statement that there is not a civilized country in Europe that has any such license law as that proposed in our State.

It may not be amiss to quote the opinions on record of those eminently qualified to speak on this subject. It is well to note that the underlying selfishness of the movement is as plainly apparent in France as in this country, if we are to judge by the remarks quoted.

Not long since M. Planat, in a contribution to a French journal discussing the several diplomas granted there, especially in connection with the School of Fine-Arts, Paris, says: "The profession of architecture should not be limited, even though many practising architects favor it, because it would be advantageous to them to exclude the greatest possible number of competitors. No one thinks of reducing the number of painters, sculptors and literary men, or even to impose examinations and competitions on the debut of their careers; in fact, every profession which is at the service of the public is free."

"There is an exception in the medical profession, but it is rightly so, as medicine in the hands of an incompetent man is one of the most dangerous professions. A wrong prescription might result in death, and in this matter the State has only sought to defend the interests of the public, and not that of the doctors. Can any one say that the free exercise of architecture is equally a public danger? This would truly be exaggerated. A badly-planned building or badly-studied façade does not necessarily occasion any one's death. There may be a certain inconvenience in employing an unskilled architect, but rarely a grave danger."

This quotation is lengthy, but it shows the drift of the controversy in France. So, also, M. Mülle, Professor of Legislation at the Ecole des Beaux-Arts, Paris, in an article discussing the advisability of a license law for architects, and the relative position of lawyers and doctors, for whom a diploma was enacted, says:—

"It is especially the public interest that is taken into account and not the interest of either profession. Complaints do not come from the public, but from the architects, and it is solely in the interest of the profession that this exclusive privilege is demanded."

These two writers go fully to the root of the matter in their opinions, that it is the selfishness of the profession that demands this exceptional legislation and not the demand of the public for protection.

In England the passage of a license law has been consistently opposed by the leading minds in the profession, as R. Norman Shaw, Alfred Waterhouse, T. Roger Smith, T. G. Jackson, Ernest Newton and many others, as well as by the Institute of British Architects. Dr. Rowand Anderson, the late President of the Edinburgh Architectural Association, in a Presidential Address, laid down some of the duties of the medical, legal and clerical professions relative to the public, and stated that the public dealt with the architect on a totally different footing. "The architect was but the interpreter of the public idea of art at any given time, and had to give what the public wanted and was prepared to pay for. No compulsory law or diploma could alter this. The law could not, or would not, protect the public from bad art, because the public could, and must, at all times protect itself."

But what can be done to elevate the profession and render it more efficient as an handmaid of our progressive civilization? This question demands our most serious consideration. Not that we think our profession a laggard in the onward and upward march to the starry ideals of the future, but we must be fully furnished and fully equipped for all the demands that may be made upon us. A profession that fails to discern its own future, that is not eager to meet all demands, is lacking in the virility in which the world delights, as an assurance that we are within call and prepared to respond to all the mighty wants and purposes of the future.

One thing is certain, what we may have known, and what we now know, will not suffice for the future, hence we must by earnest effort prepare for the coming demands.

We need not remind you that the American Institute of Architects — now in its forty-fourth year of usefulness and influence — has prepared a liberal course of study and instituted an examination, and in passing said examination in the future, or upon receiving a diploma from a recognized school of architecture, candidates may become Fellows of the Institute.

That this will result in fitting men for the exercise of all the functions of the profession none can doubt. The R. I. B. A. of England inaugurated the same general scheme several years ago, and it has worked admirably. There can be no reasonable doubt of its beneficent effect on the profession, as far as mental fitness and proficiency are concerned, but in addition to this we must exercise the functions of our profession in an honorable and righteous manner among ourselves and in all our relations with the world, and when the decision of an architect is synonymous with equity, who can doubt but that the profession will be held in honor and respect. To doubt such a consummation is to deny the very foundation principles of righteous living.

The uplifting of the profession must be in the nature of an evolution from within. A State license is weak and impotent for this purpose, and every effort to attain this desirable end that comes from without will be equally so.

For these and many other good and sufficient reasons we are decidedly of the opinion that the passage of a license law is unwise; that if passed it would be inefficient and fail of its intended and desired purpose, and that it is not to the best interests of the profession to restrict its free exercise by the interference of any legislative enactments whatever.

We believe that it should be within the province of the profession itself to determine the measure of fitness and attainment that shall render a candidate eligible to the Fellowship of the profession, being confident that through the method inaugurated by the American Institute of Architects, the usefulness, honor and dignity of the profession will be advanced and maintained.

SAMUEL HANNAFORD.

February 16, 1900.

In a paper addressed to the members of the architectural profession in the State of Ohio, some time since, the arguments advanced were those that mainly concerned the relation of the profession to the public.

There are, however, other considerations — deeper because more philosophic considerations — that appeal more intimately to the profession alone, because based upon our nature and existence as a profession.

Let us consider what we are, and why we exist.

Let us determine what architecture is. Is architecture a science or an art? Is an architect an artist or a builder? Now, we hear of several kinds of art — of the Fine-Arts and of the Industrial Arts. Art, broadly considered, is acquired skill, the power to do something not taught by nature or instinct, the application of knowledge or power to practical purposes. A man that pursues the Industrial Arts is an artisan — a workman. A man that pursues the Fine-Arts is an artist, and the product of his skill is an object of beauty, an object that gives pleasure by the impressions it makes upon the mind, an object that excites the taste and imagination.

An artisan labors with his hands, labors in the sweat of his brow; the product of his labor is the result of the exercise of brawn and brain, perhaps more of the former than the latter. The object may be useful; it may be or may not be pleasing. When brain — meditation and imagination — dominate the production which must be an object of beauty, then he who labors is an artist.

A portrait-painter is an artist.

A sign-painter is an artisan.

We maintain that architecture is a Fine-Art. We maintain, also, that it is a science. When the two are combined, and it becomes the lifework of a man, and is used for the advantage of others, and he, in return, is compensated, then it is a profession.

We declare, then, that architecture is something more than a Fine-Art; it is something more than science. It is a combination, and to determine which element is the more important is a serious consideration, for it is to determine the relative importance of knowledge of what to do — and the knowledge of how to do it. We hold the former is by far the more important. It is, indeed, the line of demarcation between the draughtsman and the architect, between the architect and the builder.

The architect must have trained skill, and, in addition, be able to call into action faculties that are largely in the realms of the imagination. At the very outset of his consideration of a problem, he must have a prophetic vision, so that in his work he can see the end from the beginning. Can you measure this, either in quantity or quality, by examination, that you may license its exercise?

We maintain that this ability to use his imagination, to call into exercise his artistic perceptions — which are largely the result of educated discriminations — is of the utmost importance in the proper execution of the duties of his profession. He must see, as we have said, the end from the beginning. He must also see the several steps that lead to the end. It is his artistic perception that reveals to him the completed thing of beauty, and, through his scientific knowledge, he can crystallize his vision into reality. In this division of labor, we maintain that the former, in a large majority of cases, is of the greater importance to his client, for generally the constructional problems involved are so ordinary, so simple and oft-repeated, that it may be said they build themselves.

Now, one of the first problems that confronts the architect is to determine the proper location of the structure upon the site — if it be an isolated building.

It is his artistic perception that tells him where he can so place it that it will affiliate with and harmonize all the natural advantages of its environment, that, when built, it will command all the beauties of the far-off hills and plains, that such outlooks may be the heritage of its occupants for all time. Can you plant this instinct in him, or find it out and develop it by legal examination?

It is the artistic perception also that enables him to select the proper material, both in color and texture, that will insure beauty to the building, that will blend and harmonize from turret to foundation-stone. Can you determine the measure of a man's art-soul by the proposed examination?

It is his artistic perception again that tells him how the crude material, the stone, the brick and timber, should take final shape in beauty. Can you, through legalities, find out how capable he may be in this?

It is his artistic perception, too, that tells him how his roof shall not only exclude the rains and snows, but that it can be a thing of beauty, and thus the sky-line of his structure nobly crown the whole. Does this faculty respond to the proposed legal inquisition?

Then, too, it is not enough that there are windows to admit light; but it is his artistic perception that tells him how they will group beautifully, and how to bring about a proper balance of void and mass in the wall, and what width and height will give them pleasing proportions. Can you, by legal searching, find out this?

Again, it is his artistic perception that tells him how to arrange the relative locations of the several apartments, that they may combine and connect in a pleasing and dignified manner. It is not sufficient that there are the required number of rooms, but they should be so adjusted that they take advantage of the beauties of the site — the right room should be in the right place. For instance, a family library should open to the most pleasant view possible, while a pantry only needs light. Do you hope to determine the possession of this ability by legal examination?

So also, it is his artistic perception — the prophetic vision only — that shows him how these units shall make a whole, that in symmetrical and harmonious unison will be, as a creation, "a thing of beauty and a joy forever." Can you, by a legal examination, determine the possession of, and ability to use, these faculties in a candidate for the profession of architecture? Absolutely no. It would be quite as reasonable to attempt to determine the ability of the artist by an examination of his ability to mix and grind his colors.

Some may make light of these considerations, and declare them fanciful — mere matters of taste, in nowise essential, etc. We assert the exact opposite — that they are absolutely essential, that they are foundation principles that mark the difference between the artist and the artisan, between the architect and the builder. It is because the public believe that we are in possession of these artistic faculties that we exist as a profession. Belittle them and you belittle the profession. Take them away and the architect becomes a builder. Hence, we maintain that the artistic element in our profession is of paramount importance, and that by undue exaltation of the science of construction, architecture becomes a lost art, architects become extinct, and the engineer takes possession.

Hence, we insist that it is impossible to examine a candidate on the measure of artistic perceptions; that only the knowledge of the lesser element, the mere knowledge of how to build, can be examined, and that a very large majority of the constructional problems that the architect is called to solve are so simple, so elementary and so oft-repeated, that, as before said, the houses build themselves.

Nevertheless, we do not oppose education along constructional lines, but protest that to-day this is not the great need of the profession, but rather it is education in art that is needed, and that this will be best attained by the carrying out and putting in practice the course of study mapped out by the American Institute of Architects, and making it a condition precedent to admission to the A. I. A., that the candidate must pass the examination thereby prescribed.

We are talking now on inner lines of thought — lines that are *sub rosa* to the profession because they concern our own immediate welfare only. Hence, let us consider the effect of the measures of the proposed license law on the future standing and influence of the American Institute of Architects. We do not suppose that any of us think lightly of the Institute, although we may not all be members of it, or that we would knowingly do aught that would lessen its influence, or belittle it in the estimation of the public at large, or the profession. We make bold to say that its influence on the profession and the public has been good, that it is growing, and that never before has it been so much a power for good as now.

It is very evident, inasmuch as the A. I. A. is the central and representative body, that whatever tends to build it up, to enlarge its power and extend its usefulness, has the same reflex effect on the profession at large. It is not claiming too much for the A. I. A. to say that now, to be an acceptable member of it, is an honor and an assurance to the

public that their interests are safe when committed to the care and confidence of a Fellow of the A. I. A. This truth is recognized on every hand, and the Institute is fast gaining additional respect as it enlarges in numbers and influence.

Now, any power or influence that comes between this central and representative body and the profession will tend to lessen its influence, and render nugatory its opinions and regulations, and in general minimize its power for good. And if this belittling of the Institute shall be from within the profession the effect will be to powerfully detract from its influence with the public. We, therefore, believe that the A. I. A. should be the body to dictate as to who are fit for membership within the profession, and to prescribe what educational attainments, what elements of character, are requisite in every candidate for admission. To take away this prerogative, or to open some other door of admission, will be to pour contempt upon the profession at large and its central representative body. It is a declaration that the profession cares not — dares not — maintain its own honor and dignity. The Code of Ethics for the profession established by the Institute is of the highest, and it has now established an educational course and final examination which are made conditions precedent to Fellowship in the Institute. Let this proposed course and method of admission be followed; let the profession at large sustain it in good faith, and this uplift from within will soon be felt in all its beneficence, and the time will soon come when the honor and well-deserved high-standing and dignity of the profession will be fully recognized. State interference will be hurtful to the Institute, and thus hurtful to the profession.

I need not mention how little respect there is abroad in the land for anything that emanates from, or is in any wise connected with politics. "The trail of the serpent is over it all." Yet there is a sort of superstition abroad in the minds of men that a legal examination brings about an equality that makes all equal in value as advisers in special arts, etc., and that thenceforward it is mainly a question of procuring needed services at the lowest price.

Doubtless, you may have noticed the effect of our building law in this respect. There are many that believe that because of its restraints and provisions, individual skill and knowledge on the part of the architect are less necessary than formerly. Follow out this line of thought in connection with a license law and you will see how surely a license law will become a leveller — not up, but down.

We have not mentioned the influence or effect of the law in detecting those reprehensible characters who give evidence of moral obliquity; for it is ridiculous to suppose that any such consummation will follow. A candidate may be absolutely devoid of moral character, pass a brilliant examination and obtain his license, and yet be as unclean as a leper of old.

In conclusion, allow us to say that we state nothing you do not know when we say that the whole movement had its inception, and has its present vitality, in the selfish desire on the part of those already in the profession to keep others out. It is a selfish attempt, supported and reinforced by a selfish hope that business competition may be lessened.

The public are free to act; their judgments are not forced; they need not engage the services of others than true and tried practitioners; and it is fair to say that the same amount of business judgment that enables a man to safely attend to the general material interests of life — the ordinary sagacity that enables a man to purchase sweet butter instead of rancid — will be sufficient to safeguard all his building ventures; hence, we fail in any way to recognize the necessity of a license law.

SAMUEL HANNAFORD.

ILLUSTRATIONS

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

DEPOT FOR THE NORTHERN PACIFIC RAILWAY, SEATTLE, WASH.
MR. CASS GILBERT, ARCHITECT, ST. PAUL, MINN.

THE GRAND PORCH OF THE CHURCH OF STE. CECILE, ALBI, FRANCE.

ALTHOUGH this and the next plate are copied from Baron Taylor's "Voyages Pittoresques," the following description of these unusual porches is taken from a recent issue of the *Churchman*: On approaching the entrance of the church, a most elaborate porch, extending over six bays of the southern wall, we seem to be entering another region of art altogether. The Porte-Dominique-de-Florence is the most splendid entrance to a church which I have hitherto seen in France. A crenellated tower of brick at one corner of it is the sole feature that harmonizes with the material of the rest of the church. The main porch is all stone. Yet an attempt has been made to make the idea of a fortress predominant even in this gorgeous example of fourteenth-century Gothic. The crenellated valance, with machicolations beneath its projections, is indeed adorned with Gothic mouldings and their warlike aspect softened by quatrefoils and floriated brackets. The portal is named after the prelate who built it during the two periods, 1379-1382 and 1397-1410, in which he occupied the see.

The church at Albi is one of the few in France which are dedicated to St. Cecilia, the patron of Music, and of the Fine-Arts generally. It is natural, therefore, to find in the tympanum of the arch at the eastern entrance of this porch a bas-relief representing that saint crowned by angels. At the right hand of St. Cecilia stand the

patron saints of the town, St. Mary Magdalene, St. Salvi and St. Clair; at her left is St. Dominic, presenting Dominique-de-Florence to St. Cecilia; the other figures are those of St. Louis, Bishop of Tours, seated on a throne, a canon kneeling in prayer, and St. Bernard. Beneath these statues appear St. James the Great, Thomas Aquinas, with a sun upon his breast, signifying that he was the intellectual light of his age, St. John the Evangelist, and minor local saints. Above the archway are the arms of Dominique-de-Florence.

From this outer portal we mount two flights of some forty steps in all, which bring us to the actual doorway, whose threshold is on a level with the nave of the church. The platform on which we then stand is canopied with a marvellous structure of sculptured stone. At each of its angles a pillar which meet at the centre of the vaulted roof. The flamboyant style never produced so wonderful a masterpiece, not even in the vestibule of the great hall at Christ Church, Oxford. It seems like a sort of triumphal arch. It is intended, perhaps, more than anything else to perpetuate the name and glory of local prelates and saints. Albi, ecclesiastically, is not only original, but it is patriotic in a local sense. The arms of its bishops adorn this porch, while the six statues of saints which are niched there at the four points of the compass are all Albigenes. These names may be obscure, but Albi will neither forget nor suffer to be forgotten Salvi and Carissimus, Amalandus, Sigoleuna, Eugenius and Martianne. They are ranged in front of a doorway into the church, surmounted by a tympanum filled with highly-wrought, decorated tracery. This doorway is the principal entrance. The vousoirs are occupied by twelve angels, who bear the instruments of the Passion. Below are the statues of St. Joseph, St. Anne, St. Peter and St. Paul, and again the local spirit of the place crops up, for among the hierarchies are placed the patrons of the four principal churches of the diocese, St. Benedict, St. Michael, St. Alain and St. Mary Magdalene. This certainly embodies an idea which illustrates well the ancient conception of a cathedral, which was, that it should be the mother church and should comprise within its memorials a recognition of all the churches over which its bishop presided.

There is only one more portal to the church. This is placed just west of the sacristy, and opens upon the third bay of the choir ambulatory.

EXTERIOR OF PORCH OF STE. CECILE, ALBI, FRANCE.

DETAILS OF INSIDE FINISH: CHURCH OF THE SACRED HEART, NEWTON CENTRE, MASS. MR. W. H. MCGINTY, ARCHITECT, BOSTON, MASS.

THE problem presented was that in which the architect had to finish a church already built, with a most meagre height from floor to trusses. As much additional height as possible was gained by panelling between the trusses.

COFFERED CEILING IN THE SAME CHURCH.

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NOTES & CLIPPINGS

ELECTRIC LAUNCHES IN VENICE.—This week the Syndic and the members of the Giunta were invited to make a trial trip in one of the new electric launches which this summer are going to enter into rivalry with the steamboats, so hated by Mr. Ruskin, which now ply up and down the Grand Canal, and the result seems to have been most satisfactory. The launch is about eighteen yards long by three and one-half broad, and is made to carry comfortably fifty passengers. It is of graceful shape, and built so as to displace but little water, and the undulation produced is so small as to be smoothed out before it can reach the houses and *rivas* on either side. The launch is fitted with 108 accumulators, and the ordinary speed is seven miles an hour, though it can do nine in case of need. It is arranged that on June 1 next two lines of service shall be opened, the one between the station and the Rialto, the other between the Piazzetta and the Lido, touching at the Public Gardens, and the price is to be ten centimes a course. It would be a great benefit to Venice if in this case electricity should win the day over steam, for the puffing little tramvia, as the Venetians call the steamers, do worse harm than merely robbing the gondoliers of their passengers, for the violent wave caused by them as they rush along is destructive to the gondola itself. In old days a gondola would yet be hale and hearty at fifteen years old, but now at seven it is worn out. The steamboat wave and the backwash dash the gondolas against each other and against the piles and the steps of the ferry piers, dislocating their slender sides, and starting their fastenings. A gondola thus quickly loses its graceful curve and acquires an ugly flat one. Nor is this all the harm done by the steamers. When Mr. Ruskin spoke of the damage done by the wave cast off behind them as they bustle along to the foundations of the palaces, people in England laughed and accused him of exaggeration; but he was right, as those living in Venice well know, for water doorsteps and wall-foundations are continually giving way, and reparations have to be made every ten or twelve years where once they were not required in half a century. — *Venice correspondence of the London Globe.*

CEDARS TWENTY CENTURIES OLD.—The sturdy storm-enduring cedar, says John Muir in the April *Atlantic*, delights to dwell on the tops of granite domes and ridges and glacier pavements of the upper pine-belt, at an elevation of seven to ten thousand feet, where it can get plenty of sunshine and snow and elbow-room without encountering quick-growing, overshadowing rivals. It never makes anything like a forest, seldom comes together even in groves, but stands out separate and independent in the wind, clinging by slight joints to the rock, living chiefly on snow and thin air, and maintaining tough health on this diet for at least two thousand years, every feature and gesture expressing steadfast, dogged endurance. . . . Some are undoubtedly more than two thousand years old. For though on good moraine soil they grow about as fast as oaks, on bare pavements and smoothly glaciated over-swept granite ridges in the dome region they grow extremely slowly. One on the Starr King ridge, only two feet eleven inches in diameter, was eleven hundred and forty years old. Another on the same ridge, only one foot seven and a half inches in diameter, had reached the age of eight hundred and thirty-four years. The first fifteen inches from the bark of a medium-sized tree—six feet in diameter—on the north Tenaya pavement, had eight hundred and fifty-nine layers of wood, or fifty-seven to the inch. Beyond this the count was stopped by dry rot and overgrown wounds. The largest I examined was thirty-three feet in girth, or nearly ten in diameter; and though I failed to get anything like a complete count, I learned enough from this and many other specimens to convince me that most of the trees, eight to ten feet thick, standing on polished glacier pavements, are more than twenty centuries of age rather than less. Barring accidents, for all I can see, they would live forever. When killed they waste out of existence about as slowly as granite. Even when overthrown by avalanches, after standing so long, they refuse to lie at rest, leaning stubbornly on their big elbows as if anxious to rise, and while a single root holds to the rock, putting forth fresh leaves with a grim never-say-die and never-lie-down expression.

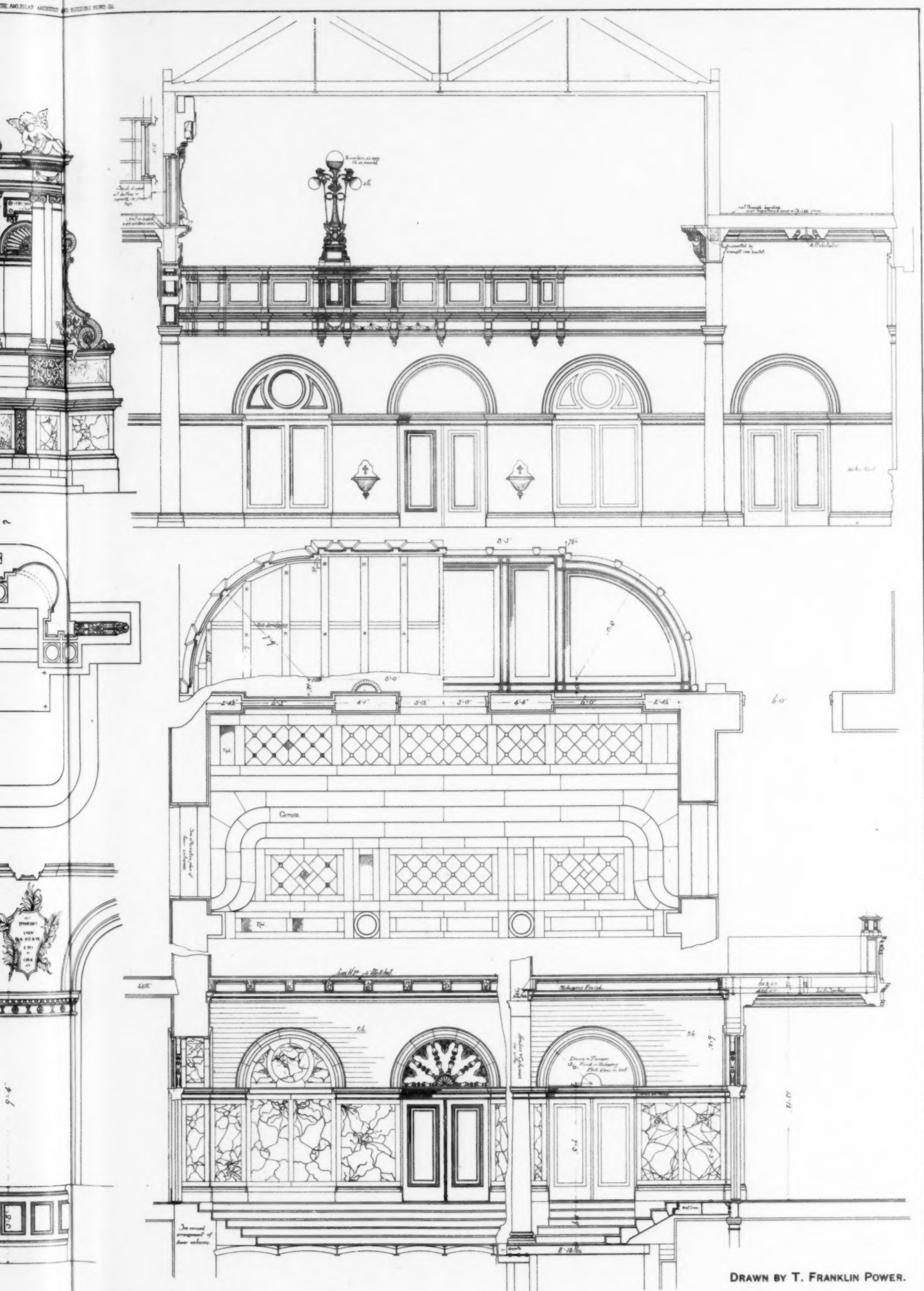
THE WATER-SYSTEM OF POMPEII.—Pompeii, like most Roman cities, had an excellent water-system, but we are able to judge of the systems in other places only by the small remains, but in Pompeii, the whole system has been laid bare, and in "*Pompeii, Its Life and Art*," by August Mau, translated by Prof. Francis W. Kelsey, there is an interesting description of the water-supply of the city. Remains of the great aqueduct near Avellino, a dozen miles east of Nola, have been discovered, and this aqueduct followed the base of Vesuvius and furnished water to Naples, Puteoli, Baia and Misenum, but the source from which Pompeii received its water-supply has not been discovered. The construction of the older baths showed that a free use of water was contemplated. There were many fountains along the streets, most of them at the corners. They were filled by pipes connected with the water-system of that city, and these fountains bear witness to long use by depressions which have been worn in the stone by the hands of those who leaned forward to drink. Water-towers were found at the sides of streets; they were small pillars of masonry which were raised to the height of 20 feet. There was a small reservoir of water on the top, presumably of metal. In all the houses of any size and importance there were flowing jets. Thus, in the famous house of the Vettii, which was discovered a few years ago, there are no less than sixteen jets, and water was not stinted in any of the three baths which have been discovered. The water-pipes were made of sheet-lead folded together, the transverse section somewhat resembling that of a pear. Their size was regulated by the pressure and the water was turned on and off by stop-cocks, which were much like those in use to-day. — *Scientific American.*

THE VICTOR EMMANUEL MONUMENT.—This great monument of Italian unity will, perhaps, create a greater change in the aspect of Rome than almost anything else. It will continue the succession of pompous monuments set up by the Popes of the last two or three hundred years, but will be larger. As a design it is hardly satisfactory; there is too much striving after novelty of detail, and the way in which the "orders" are mixed up together—Doric and Ionic columns side by side—is anything but satisfactory. It is difficult to understand what the effect of the finished monument may be. It seems intended to form a species of retaining-wall to the platform of the Capitol. Immediately behind it, but completely hidden, will be the ancient basilica of Ara Celi, which stands on the highest point of the Capitol. Ara Celi, with its long flight of steps, will form a sort of backing to the whole monument, in the way that some of the fountains of Rome, for instance, the Trevi, are backed up by houses. In front of the monument will be an immense piazza of partly square and partly semicircular form. — *The Builder.*

CONCRETE AS A COMBUSTIBLE.—Some time ago we received reports to the effect that a mass of concrete had taken fire in the boiler-house of the electricity works at Chester. At first we put these down to the overheated imagination of the local reporter, but their recurrence and circumstantial nature led us to make inquiries of the resident engineer, Mr. F. Thursfield. To our surprise we found that our information was correct. The concrete used for the foundations of two of the boilers consisted of one part in seven of boiler ashes; the brick lining under the boilers was omitted in one place, so that the red-hot soot lay in contact with the concrete. The latter became ignited, and the whole block, 8 feet deep, disintegrated; in consequence it was found necessary to pull down the brickwork of the boilers, and to remove the whole of the concrete block. The possibilities opened up by this precedent are appalling; we have seen so-called fireproof floors built of similar materials. Of what use will they be? The calorific value of the boiler-ashes employed must have been considerable, and in the present scarcity of coal, engineers may find it worth their while to stoke with concrete! We commend this suggestion to the consideration of Mr. Crompton, owing to his well-known interest in cheap fuel. In view of the importance of the phenomenon, we should be glad to receive details of similar experiences—if, indeed, it is not without precedent. — *Electrical Review.*

CONTROLLING THE DETRITUS OF TORRENTIAL STREAMS.—A novel scheme for impounding debris in the Yuba River in California has been worked out, mainly by Assistant Engineer Hubert Vischer. The problem of governing vast quantities of eroded detritus in torrential streams was practically new, the California papers claim, about the only former attempt in this line being at the headwaters of the Rhine, where denudation of soil made trouble for Swiss peasants like that sought to be remedied in California. In the Yuba the coarse material is to be held by long and comparatively low dams at different points, but the most novel feature is that to take the fine sediment out of the water. There is to be a settling-basin three miles long into which the river will all flow at ordinary stages. If the water poured out in a stream at the lower end the currents would prevent much settling. So Mr. Vischer has devised a scheme to make the water percolate through eight pyramidal structures of logs, planks, cement and cracks. The water will flow through a great number of half-inch or less slits from all sides of the pyramids, which are to have seventy-foot bases and are to be strung across the basin. The flow can thus be regulated and currents avoided. This basin is calculated to hold 14,000,000 cubic yards of fine sediment, and can be enlarged to hold 50,000,000 cubic yards more. The estimated cost of the work is \$800,000, and \$500,000 of State and national money has been available since 1898, awaiting a practical solution of the problem. — *N. Y. Evening Post.*

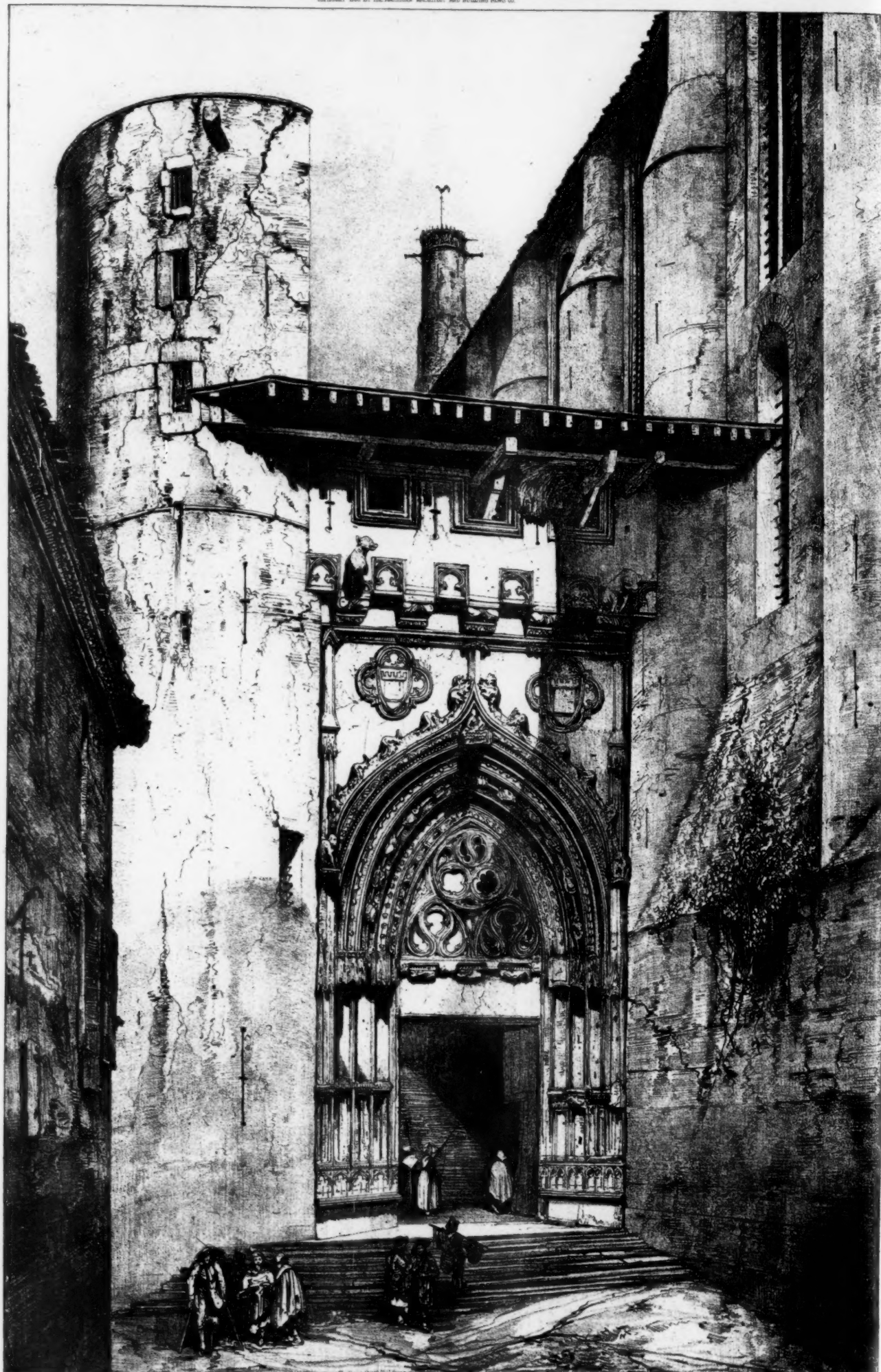
A NEW METHOD OF BLOWING HOLLOW GLASS VESSELS.—Several interesting novelties have been introduced at the glassworks of P. T. Sievert, at Denben, near Dresden. Hollow glass vessels of unusual dimensions are made in the following manner: The glass is ladled from the furnace and poured on an iron plate, which is hollow and provided with very fine perforations for admitting compressed-air. A portion of the glass is caught in lateral grooves, and the glass slab supported in this way, while the plate, with the glass on it, is turned over. The glass begins to ooze out by its own weight, and the compressed-air is turned on to finish the shaping. Suitable supports or moulds are applied from underneath. Professor Walther Hempel reports in the *Chemische Industrie* that he saw a semi-spherical glass vessel, half a cubic metre in capacity, made within three minutes. The yielding of the glass to gravity was checked by raising another iron plate from below, by means of a toothed rack. Cylindrical glass vessels, troughs, etc., are prepared in a similar manner in sizes which no blower could manage, simply for want of strength. But the process lends itself also to the making of smaller-size articles, bells for lamps and lanterns, developing-troughs, etc. Another novelty is curious. The glass is poured on an iron plate as before, and rolled to the required thickness. A pad of asbestos paper, impregnated with water, is then placed on the glass surface, and the respective mould quickly applied. The mould cuts off a slab of glass of the desired size, and the steam, generated from the asbestos paper, gradually forces the soft glass into the mould. The process works much more expeditiously than glass-blowing, and has one advantage over pressed glass. As the inner side of the glass is only exposed to the action of the water-vapor, it retains its natural fine polish. Color-effects are produced in the following way: The pattern, which, we presume, must not be too elaborate, is drawn on thin paper. The pigments are applied to the paper in the shape of powdered glass of the required color, the respective spots having been painted with some sticky substance. The pattern is now put on the glass, when still on the iron plate, pattern downward, and fixed by means of a roller. The paper flares up instantaneously, while the bits of powdered glass fuse into the glass plate, yet preserving some of their sharp edges so that the light is reflected in all directions. — *Engineering.*



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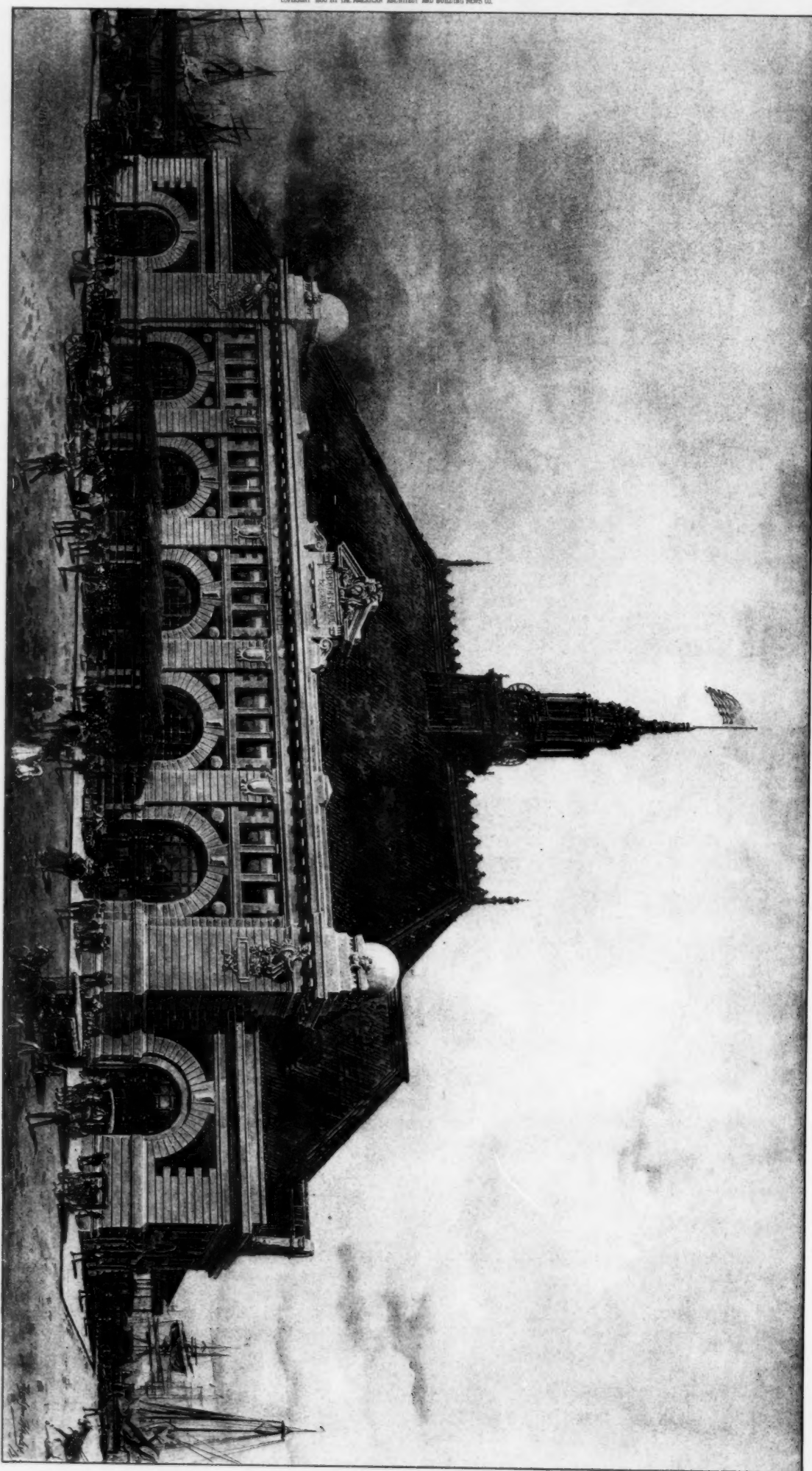
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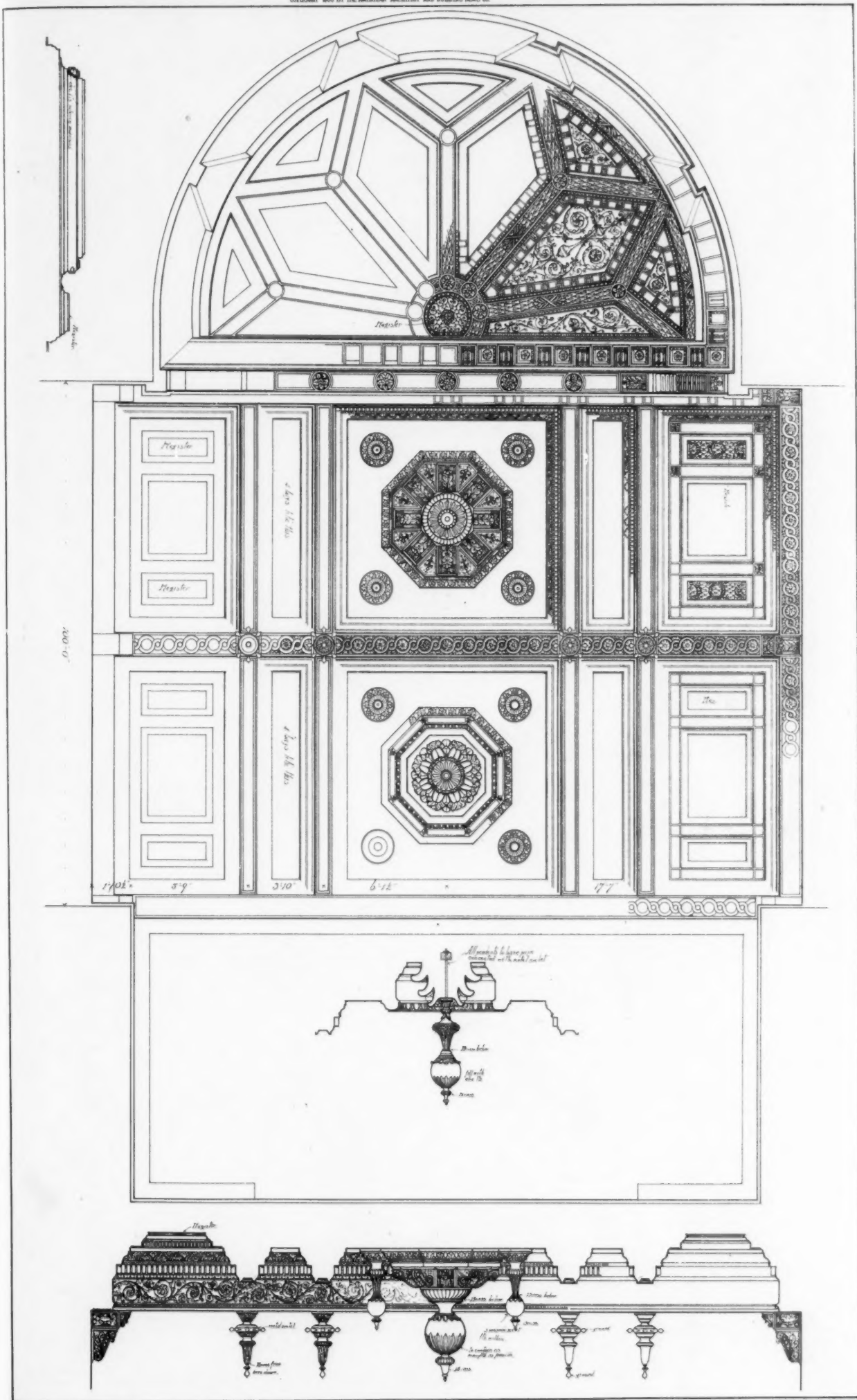
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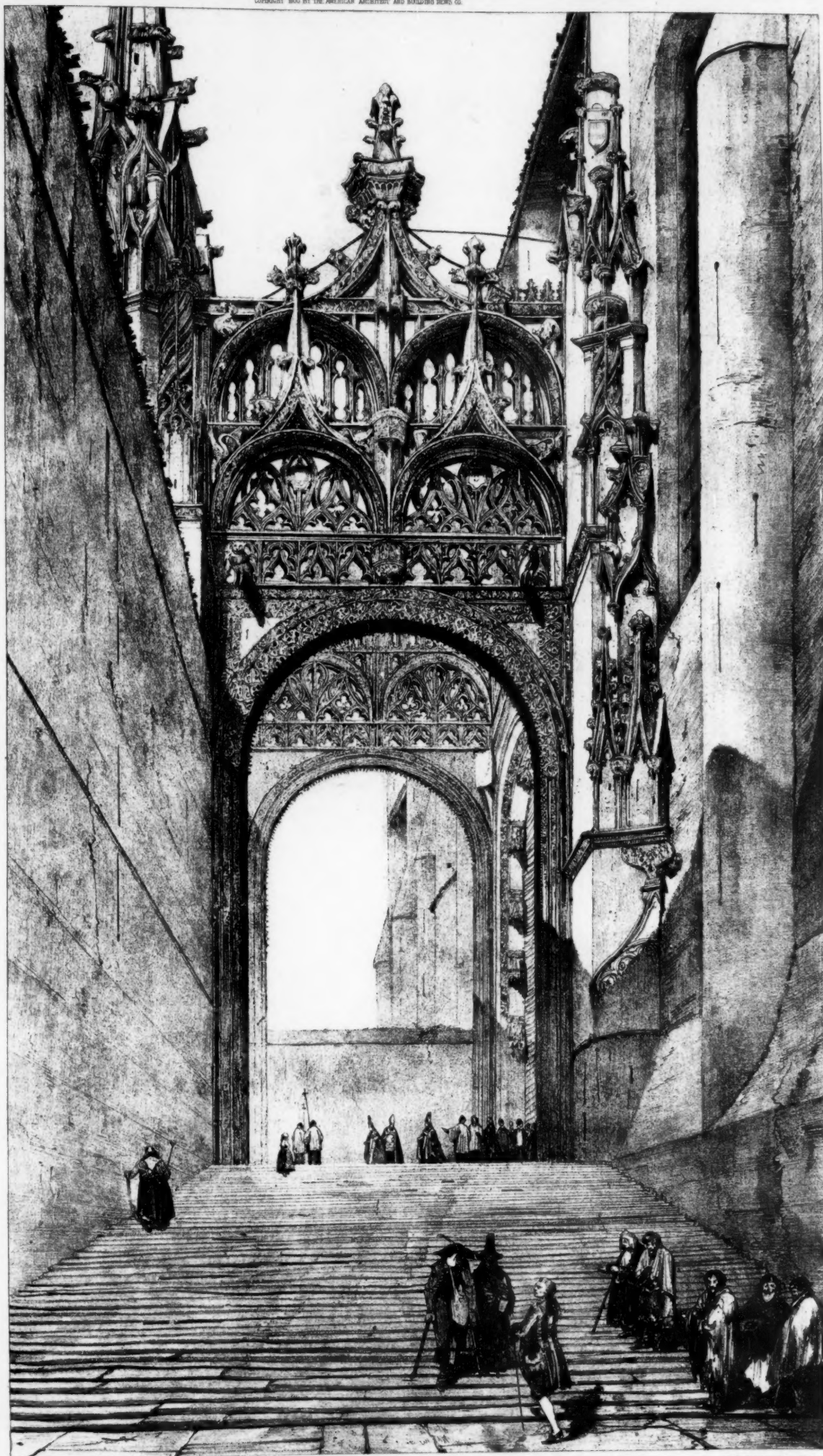
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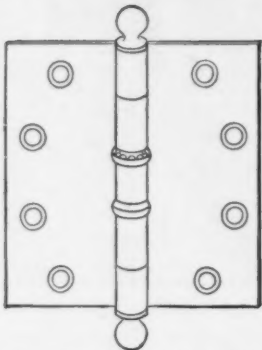
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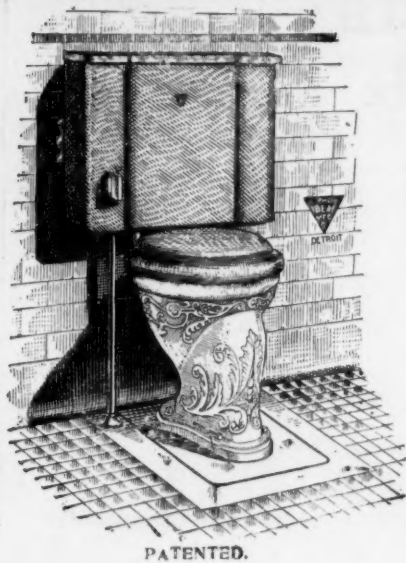
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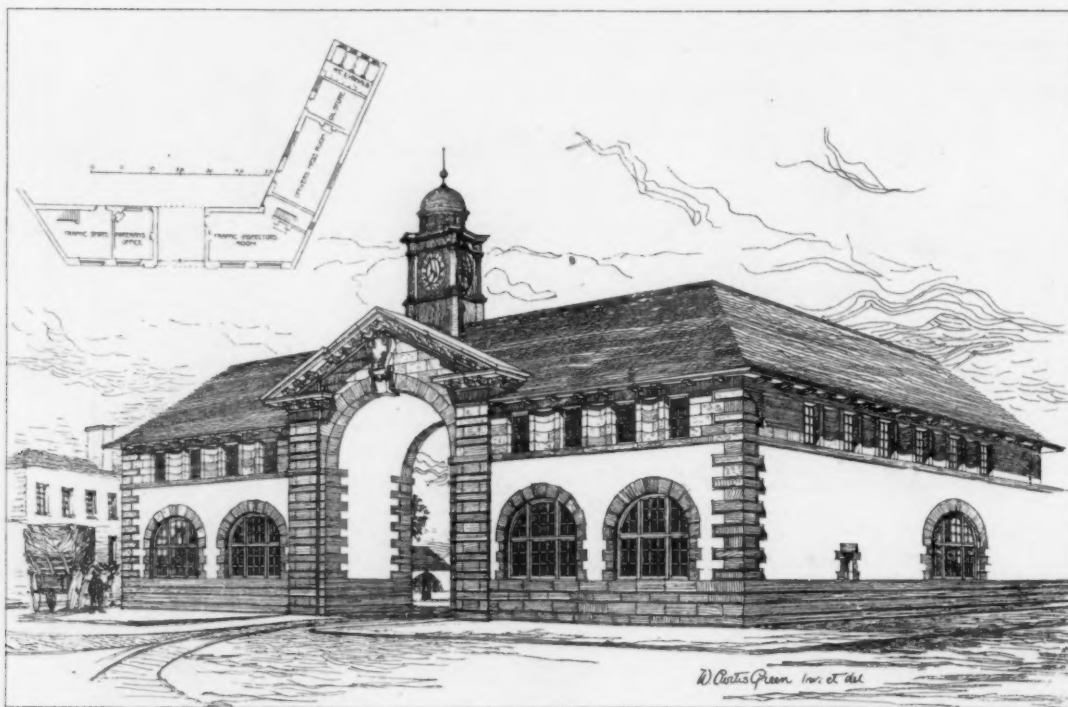
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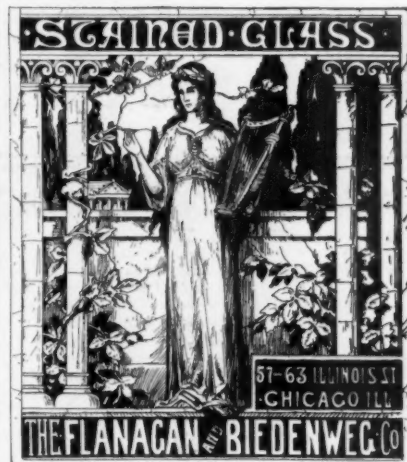
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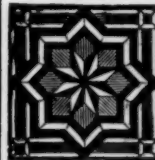
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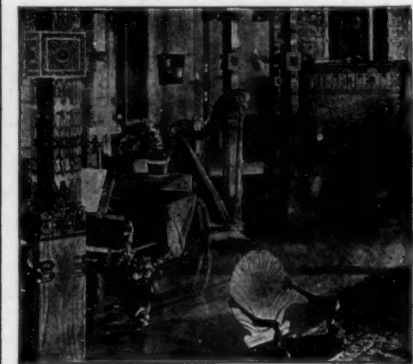
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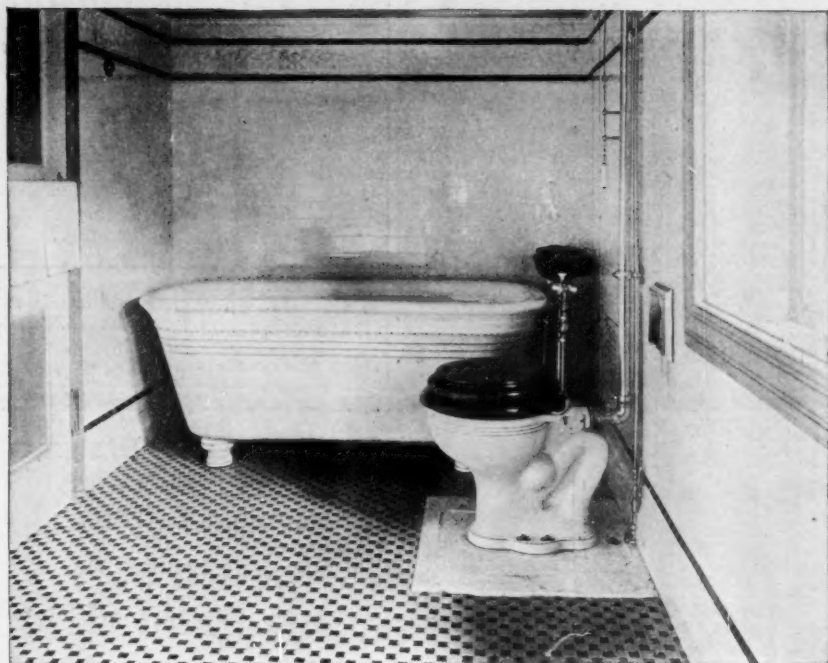
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Cincinnati, O.—Architects Des Jardines & Hayward, 111 E. 4th St., are preparing plans for a two- and one-half story stone residence, to be erected in Rose Hill Park, for Theodore Braemer; cost, \$30,000.

Columbus, Ga.—C. L. Perkins and associates will organize a stock company to build a \$25,000 cotton factory.

Corsicana, Tex.—W. H. Booth is interested in a project to erect a large packing-house here, to cost \$25,000.

Davenport, Ia.—The Knostman-Petersen Furniture Co. have plans for a three-story brick building, 100' x 100'; cost, about \$10,000.

Elgin, Ill.—Architects Turnbull & Jones, 10 McBride Block, have prepared plans for a \$5,000 factory building for the Charles H. Woodruff Co.

Elkhorn, Wis.—The County Supervisors will erect a new poorhouse and use the present buildings for insane. The cost of new buildings and remodeling will be about \$15,000.

Evanston, Ill.—Mrs. H. D. Cable has given \$50,000 for the building and endowment of a hospital for children to be known as the Herman D. Cable Memorial Hospital.

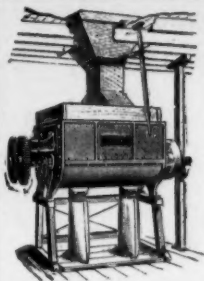
Fort Wayne, Ind.—J. M. E. Riedel, architect, Schmitz Building, is preparing plans for a \$20,000 asylum building for the State of Indiana. The building will be 40' x 170', two stories high, constructed of brick, and have slate roof.

Fulton, N. Y.—The State Street M. E. Society contemplates the erection of a new church during the summer. Architect J. H. Leiber, of Oswego, has drawn plans for the structure, which is to be small but of comfortable and neat design; cost, \$18,000.

Galesville, Wis.—Reports state that contracts will be let at once for rebuilding the Galesville flour mills; cost, \$30,000.

Hackensack, N. J.—The trustees of the Centenary Collegiate Institute have decided to replace the building of the institute that was burned last year with five or six new buildings. In addition to the insurance money of \$160,000, subscriptions of \$50,000 have been received. It is expected that two dormitories will be ready for use at the opening of the fall term.

Hayward, Wis.—It is reported that H. & F. Roettiger, of Fountain City, have been awarded the



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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

contracts for several buildings at the Indian School, aggregating \$60,000.

Kings Mountain, N. C.—Messrs. M. M. Carpenter and others have incorporated the Bonnie Cotton Mills with capital stock of \$100,000, to erect a cotton-mill.

La Crosse, Wis.—G. L. Harvey, architect, of Chicago, Ill., has prepared plans for the building to be erected by the La Crosse Hospital Association. It will be three-story and basement, 40' x 112', of brick and stone, with all modern improvements; cost complete, \$50,000.

Lansdowne, Pa.—Architect Ernest Mann, of Philadelphia, has drawn plans for St. John's P. E. Society for a new church soon to be erected on Baltimore Ave., at a cost of \$25,000. The structure will be built in the Perpendicular style of the late Tudor period.

Lincoln, Ill.—Lincoln University will erect a building after plans prepared by James M. Deal. It will cost about \$40,000.

Loralu, O.—Architect H. O. Wurmer has prepared plans for a three-story pressed brick and stone block for A. Hill; cost, \$8,000.

Louisville, Ky.—W. B. Belknap & Co. will build a six-story brick warehouse on 1st St., near Washington, to cost \$50,000.

Malden, Mass.—The congregation of the church of the Immaculate Conception, Rev. Richard Neagle, pastor, contemplates the erection of a church on the Boulevard, south of Pleasant St., to cost \$80,000.

Mantoville, Minn.—F. D. Orff, of Minneapolis, has prepared plans for remodeling the court-house, at a cost of \$15,000.

Marcus, Ia.—J. L. Skene, architect, of Sioux City, has prepared plans for a frame church, 40' x 50', for the M. E. Society; cost, \$7,000.

Middlebury, Vt.—Ezra Warner of the class of '61 has donated \$50,000 to Middlebury College to be used in erecting a science building on the campus. Construction will begin in the spring.

Minneapolis, Minn.—J. & E. C. Haley, architects, have completed plans for a brick veneered flat building to be erected on 10th Ave. S., and 19th St., for Andrew S. Sauberg. It will be 50' x 70', two stories and basement, pressed brick veneered and stone trimmings; cost, \$12,000.

Modesto, Cal.—Cunningham Bros., Claus Spreckles Building, San Francisco, have prepared plans for a high-school building to be erected here, to cost \$20,000. The structure will be of brick and stone, with roof of California slate.

Moorhead, Minn.—J. W. Keith, architect, of Minneapolis, has prepared plans for the Congregational Society, for a brick and stone church; cost, about \$7,000.

Neenah, Wis.—Plans have been accepted for the First Presbyterian Church and the work of construction will soon be commenced. The exterior, designed in Gothic style, will be faced with mottled dress brick with trimmings of Bedford stone. The auditorium will have a seating capacity of 500 and the lecture-room 400. The total cost of the structure will be about \$40,000.

Northampton, Mass.—C. D. Mather will build a six-story business building, to cost about \$100,000, after plans by Architect Alderman.

Oconto, Wis.—H. A. Foeller, architect, of Green Bay, has completed plans for a granite bank building; cost, \$10,000.

Olneyville, R. I.—The associated French Societies will build a block on the corner of Westminster and Bough Sts., to cost \$20,000. It will be a three-story structure, the ground floor to be used for

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

business purposes and the upper floors to be arranged for club-rooms.

O'Neill, Neb.—J. A. Dietrick, Range Block, Omaha, has prepared plans for a Catholic convent to be erected here. It will be constructed of pressed brick and stone, have slate roof, and will cost about \$30,000.

Pacolet, S. C.—Press reports state that the Pacolet Manufacturing Co. has bought 850 acres of the famous New Holland Springs tract, upon which it will erect a \$1,000,000 cotton-mill.

Palmyra, Mo.—George Behrensmeyer, 6th and Main Sts., Quincy, Ill., is drawing plans for a \$50,000 court-house for Marion County.

Philadelphia, Pa.—William Burk & Bro. will add four stories to their tannery building at the corner of 3d and Wilder Sts., at a cost of \$10,000. The structure after this improvement will be seven stories high.

Providence, R. I.—The Royal Weaving Co., of Central Falls, is preparing to build one and probably two mills. President Goff says that the company is now looking for conveniently situated land. The two new mills will be similar to the one constructed in 1897, which is 77' x 320'.

Quincy, Mass.—It is probable that Congressman Naphen's bill asking for \$90,000 for the erection of a public building here will be allowed. The supervising architect has reported favorably on the bill, and recommends a one-story building, covering an area of 5,000 feet, to be constructed on the Mezzanine style.

Racine, Wis.—Plans are completed for the gas plant for the Gas Light Co. The building will be of red brick and terra-cotta; cost, \$150,000.

Red Wing, Minn.—W. J. Longcor has the contract to erect a modern residence for John H. Rich; cost, \$10,000.

Roanoke, Va.—The National Business College will build a \$10,000 college after plans drawn by H. H. Huggins. It will be built of brick and stone.

Sewickley, Pa.—James Todd, president of the Sterling Varnish Co., is having plans drawn by Architects Rutan & Russell, First National Bank Building, Pittsburgh, for a 12-room stone residence to cost about \$20,000.

Shamokin, Pa.—The Y. M. C. A. contemplates erecting a stone and brick building, to cost about \$50,000.

Shawenegan Falls, Can.—The new power-house for the Pittsburgh Reduction Co. will be furnished by the Berlin Iron Bridge Co., of East Berlin, Conn.

St. Paul, Minn.—Herman Kretz & Co., architects, have plans for a residence to be erected on Summit, between Grotto and Aurora; cost, \$11,000.

Stuart, Ia.—C. C. Cross, architect, has plans for a store-building to be erected here. Will be two-story, 22' x 80', pressed brick structure with stone trimmings, costing \$5,000.

Tarrytown, N. Y.—A new town-hall to cost \$50,000 will be erected here.

Traer, Ia.—Plans have been prepared by E. R. Bogardus, of Mason City, for a \$20,000 church for the Congregational Society.

Waterloo, Ia.—St. Joseph Catholic Society is considering plans for a new church, to cost about \$25,000. C. D. Wangler is chairman of the building committee.

Wausau, Wis.—The Wausau Cigar & Tobacco factory, A. L. Kryshak, proprietor, will erect a three-story building, 24' x 75'; cost, \$6,000.

West Springfield, Mass.—An addition to the

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

town-hall and library, to cost about \$7,000, is agitated.

Winfield, L. I., N. Y.—The Board of Education has accepted plans for the new public school building to be erected on the north side of Maurice Ave., between Columbia Ave. and Carrol Pl. It will be constructed of limestone ashlar as high as the first story; above this it will be of gray brick with terra-cotta trimmings. The main part of the building will be 80 feet long by 50 feet deep, three stories high, with a basement and attic, with an extension 12 feet deep by 60 feet long in the rear of the structure. The building, which will cost over \$60,000, will accommodate 500 pupils, and is so designed that additions may be added, which will not mar its beauty.

Worcester, Mass.—The school authorities contemplate the erection of a gymnasium for the use of high school pupils. A suitable lot of land is available, and public interest is being aroused in the matter of obtaining funds for the erection of a suitable building.

ALTERATIONS AND ADDITIONS.

Brooklyn, N. Y.—*Bushwick Ave.*, cor. Madison St., two-sty' bk. extension to church & interior alterations; \$50,000; o., Geo. F. Chapman, President of Trustees, 1114 Bushwick Ave.; a., G. W. Kramer, 1 Madison Ave., N. Y.

Shore Road and Brighton Beach R. R., *Sheepshead Bay*, alteration to fr. hotel; \$10,000; o., George N. McKane; a., H. D. Whipple, W. 8th St. & Surf Ave., Coney Island.

East Orange, N. J.—Addition to bk. & st. church; \$40,000; o., Munn Ave. Presbyterian Church; a., Cady, Berg & See, 31 E. 17th St., New York.

New York, N. Y.—*Avenue A*, n. e. cor. 22d St., four-sty' extension, 17' 3" x 28' 5"; \$6,000; o., C. De Hart Brower et al., 10 Wall St.; a., Geo. H. Van Auker, 30 E. 14th St.

N. Broad St., No. 1421, new brownst. front, alterations & improvements; \$5,000; o., Joseph Loughheim.

Hancock and Berks Sts., five-sty' bk. & fr. factory addition & elevator tower; 21' x 41', 14' x 21'; \$15,000; o., Peter Wall & Sons; b., William Steel & Son.

Chestnut St., No. 1719, two-sty' addition, steel addition & other improvements, 6' x 16', 4' 3" x 44'; \$11,000; o., Henry Hirsch; b., Charles McCaul.

BUILDING INTELLIGENCE.

(Alterations and Additions Continued.)

Spruce St., No. 1511, interior alterations; \$12,000; o., Mrs. Geo. Campbell; b., Machin & Brown.

Broad St., extending from Pennsylvania Ave. to Hamilton St., four additional stories & two-sty' bk. & st. machine shop, 66' x 207'; \$125,000; o., Baldwin Locomotive Works; b., Roydhouse, Arey & Co.

Chestnut St., Nos. 807-809, remove party walls & interior alterations; \$12,000; o., Partridge & Richardson; b., William Steel & Son.

Delaware Ave., below Snyder Ave., fr. shed covered with metal, 130' x 585'; \$250,000; o., Terminal Land Co., W. H. Addicks, pres.; b., Ryan & Kelley.

E. One Hundred and Sixteenth St., No. 233, raise building; \$20,000; o., Presbytery of New York, 67 W. 55th St.; a., Jardine, Kent & Jardine, 1262 Broadway.

Blackwell's Island, opp. 55th St., five-sty' extension, 65' x 90'; \$100,000; o., City of New York; a., Horgan & Slattery, 1 Madison Ave.

W. Forty-seventh St., No. 106, five-sty' extension, 14' 4" x 26'; \$25,000; o., Maxwell S. Mannes, 150 W. 34th St.

E. Fifty-seventh St., No. 39, three-sty' extension; \$12,000; o., Emily Clinton, 39 E. 57th St.; a., Clinton & Russell, 32 Nassau St.

E. Fifty-seventh St., No. 337, three-sty' extension, 19' 11" x 46'; \$5,000; o., H. D. Gill, 154 E. 57th St.; a., R. W. Havens, 69 Lexington Ave.

E. Forty-second St., Nos. 219-221, repair damage by fire; \$6,000; o., Jno. N. Stearns, 10 W. 58th St.; a., E. E. Shelbourne, 24 E. 42d St.; b., Dawson & Archer, 24 E. 42d St.

First Ave., cor. 26th St., one-sty' extension, 12' x 38'; \$5,000; o., Department of Charities, City of New York; a., Schickel & Ditmars, 111 Fifth Ave.

W. Thirty-ninth St., No. 1, new partitions & stairs; \$7,000; o., Rose Jodrell, 1517 Broadway; a., J. R. Pope, 1183 Broadway.

Sixth Ave., nr. Washington Pl., raise building; \$7,000; o., St. Joseph's R. C. Church, 138 Waverly Pl.; a., Geo. H. Streeter, 289 Fourth Ave.

E. Thirty-eighth St., No. 12, two-sty' extension, 8' x 16' 6"; \$15,000; o., Chas. Scribner, 12 E. 38th St.; a., Ernest Flagg, 35 Wall St.

Spruce St., No. 26, general alterations; \$6,000; o., August Zinsner, 94th St. & W. Central Park; a., Chas. Rentz, 153 Fourth Ave.; b., A. Von den Driesch, 985 Sixth Ave.

Pelham Manor, N. Y.—One-sty' addition to fr. dwell., 50' x 50'; \$5,000; o., George O. Reynolds, 31

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(Alterations and Additions Continued.)

E. W. 4th St., New York; a., Fletcher & Thain, 42 E. 23d St., New York.

Philadelphia, Pa.—*American and Oxford Sts.*, five-sty' bk. factory addition, 72' 3" x 74'; \$24,000; o., A. M. Collins Mfg. Co.; b., R. C. Ballinger; a., Morris & Vaux.

Fine St., nr. 24th St., three-sty' bk. factory addition, 100' x 110'; \$18,000; o., Newton Machine Tool Co.; b., John Borden & Bro.

Fortieth and Spruce Sts., alterations & one-sty' addition to dwell., 12' x 22'; \$9,000; o., F. R. Tobey; b., Doyle & Doak; a., W. F. Smith.

APARTMENT-HOUSES.

Brooklyn, N. Y.—*Pacific St.*, nr. Franklin Ave., four-sty' bk. & st. bachelor apart., 35' x 80'; \$18,000; o., Meyer Bros., 1258 Broadway; a., Axel S. Hedman, Arbuckle Building.

Milwaukee, Wis.—*Thirty-ninth St. and St. Paul Ave.*, two-sty' fr. flat, 30' x 56', shingle roof, furnace; \$5,000; o., Finley Bros.; a., C. Leenhouts.

New York, N. Y.—*One Hundred and Fifty-first St.*, nr. Amsterdam Ave., 3 five-sty' bk. & st. flats, each 33' x 87'; \$100,000; o., & b., John G. R. Lillendahl, 630 W. 158th St.; a., Neville & Bagge, 217 W. 125th St.

One Hundred and Thirty-fifth St., 220' w Brown Pl., 2 five-sty' bk. flats, 25' x 87'; \$40,000; o., J. M. Linek, 685 E. 135th St.; a., H. T. Howell, 138th St. & Brook Ave.

Lexington Ave., cor. 85th St., 2 five & seven-sty' bk. flats, 67' 2" x 89' 4"; \$90,000; o., Wausse & Rothschild, 107 E. 64th St.; a., Brun & Hauser, 1125 Broadway.

Morningside Ave., 118th to 119th Sts., 2 seven-sty' bk. & st. flats, 95' 11" x 100'; \$400,000; o., Central Realty Co., 320 Broadway; a., Harry B. Mulliken, 289 Fourth Ave.

Lincoln Ave., cor. 138th St., five-sty' bk. flat, 25' x 95'; \$25,000; o., D. O'Reilly, 208 E. 119th St.; a., J. Munkwitz, 247 W. 125th St.

One Hundred and Sixteenth St., nr. Amsterdam Ave., seven-sty' bk. flat, 90' 11" x 100'; \$225,000; o., A. S. Luria, 141 Broadway; a., Neville & Bagge, 217 W. 125th St.

E. Thirty-first St., No. 22, seven-sty' bk. flat, 24' 9" x 79' 9"; \$55,000; o., R. H. Sasseen, 120 Broadway; a., Israel & Harder, 194 Broadway.

Sixty-fourth St., n. s. 104' e 1st Ave., 2 six-sty' bk. flats, 97' x 105'; \$150,000; o., City and Suburban Homes Co., 281 Fourth Ave.; a., James E. Ware & Son, 3 W. 29th St.

W. Twenty-first St., Nos. 218-220, seven-sty' & base, bk. flat, 46' 10" x 91' 5"; \$75,000; o., W. A. Schley, 114 E. 10th St.; a., G. F. Pelham, 503 Fifth Ave.

Broadway, 85th to 86th Sts., 2 seven-sty' bk. flats, 102' 5" x 112'; \$600,000; o., Le Grand K. Pettit, 556 Halsey St., Brooklyn; a., Hill & Turner, 150 Fifth Ave.

Trinity Ave., n. w. cor. 165th St., 3 four-sty' bk. flats, 25' x 95'; \$57,000; o., Walter McLaughlin, 138 W. 129th St.

CHURCHES.

Columbus, O.—St. church, 70' x 140', slate roof; mechanical hot air; \$45,000; o., King Ave. M. E. Society; a., Brown, Burton & Davis, Cincinnati.

Fall River, Mass.—*S. Main St.*, two-sty' st. & bk. church, 120' x 250', slate roof, steam; \$250,000; o., St. Anne's Parish; a., L. G. Destramps.

Wilkes Barre, Pa.—*S. Sherman St.*, fr. church, 45' x 110', shingle roof, heat; \$15,000; o., Primitive Methodist Society; a., Klumann & Thomas.

CLUB-HOUSES.

Westfield, Mass.—*Elm St.*, three-sty' & base, Y. M. C. A. building, 40' x 120', gravel roof, steam; \$30,000; o., Y. M. C. A.; a., A. W. Holton.

EDUCATIONAL.

Evansville, Ind.—*Chandler Ave.*, two-sty' bk. & st. public school, 123' x 138', slate roof, hot air; \$30,000; o., City of Evansville; a., Harris & Shopbell.

Lawrence, Mass.—*Ames St.*, three-sty' bk. & granite school, 109' x 178', slate roof; \$80,000; o., City of Lawrence; a., W. P. Regan.

Oshkosh, Wis.—Two-sty' & base, school, 93' x 102', tin roof, hot air; \$25,000; o., City of Oshkosh; a., E. E. Stevens.

Philadelphia, Pa.—*Leopard St.*, nr. Girard Ave., three-sty' bk. school, 34' x 93'; \$32,000; o., City; b., Samuel Gourley, Jr.

Sheboygan, Wis.—Three-sty' bk. school, 66' x 126', shingle roof, steam; \$30,000; o., City of Sheboygan; a., Charles Hilpershauer.

Syracuse, N. Y.—Three-sty' bk. & st. high school, 172' x 224', tin roof, hot blast; \$250,000; o., City of Syracuse; a., Archimedes Russell.

FACTORIES.

Alexandria, La.—Two-sty' fr. & bk. cotton-seed mill, 166' x 216', 108' x 150', 100' x 266', metal roof; \$150,000; o., Kentucky Refining Co., a., F. Erhart, Louisville, Ky.

Atlanta, Ga.—Two-sty' & base, bk. & st. factory, 78' x 225', steam; \$15,000; o., Elizabeth Mills.

Brooklyn, N. Y.—*Nassau St.*, cor. Calyer St., two-sty' bk. factory, 60' x 64', gravel roof; \$5,000; o., Julius F. Gebhardt, 203 N. Henry St.

First Ave., nr. 55th St., two-sty' bk. iron works, 80' x 600'; \$93,000; o., E. P. Morse, 428 Sixth St.; a., J. F. Conlon, 143 W. 95th St., New York.

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factory, 50' x 64' 1", gravel roof, steam; \$6,000; o., Adolf Goebel; b., Adam Wischert, 179 Boerum St.
New York, N. Y.—*Lewis St.*, No. 203, three-sty' & base, bk. factory & storage, 22' 11" x 64' 6"; \$5,000; o., A. Gottlieb, 409 E. Houston St.; a., Horenburger & Straub, 122 Bowery.
Elm St., nr. Pearl St., three-sty' bk. factory, store & office, 36' 9" x 72' 8"; \$20,000; o., Walter Bowne Estate, 111 Broadway; a., E. K. Bourne, 18 Broadway.
E. Fifty-ninth St., Nos. 338-342, six-sty' bk. factory, 75' x 92' 5"; \$40,000; o., J. B. Bloomingdale, 3d Ave. & 59th St.; a., Buchanan & Fox, 11 E. 59th St.
Forty-ninth St., nr. 12th Ave., 2 six-sty' bk. factories, 50' x 110', 117'; \$60,000; o., Matthew Baird, 433 E. 92d St.; a., S. B. Ogden & Co., 934 Lexington Ave.
Water St., No. 671, three-sty' bk. factory, 17' 10" x 67'; \$6,000; o., Mrs. J. E. Cunningham, 191 Hewes St., Brooklyn; a., Chas. Reutz, 153 Fourth Ave.
Philadelphia, Pa.—*N. Sixth St.*, Nos. 249-255, five-sty' paper-box factory, 62' x 204'; \$45,000; o., Geo. Bisler; b., Geo. C. Dietrich; a., J. C. Stuckert & Son.
Pontiac, Mich.—*Pike and Garland Sts.*, three-sty' & base, bk. factory, 55' x 120', tar & gravel roof, steam; o., Howland Mfg. Co.; a., Fisher Bros.
Sac City, Ia.—Two-sty' fr. & bk. corn-canning factory, 40' x 40', 44' x 80', 48' x 170', gravel roof; \$25,000; o., Sac City Canning Co.; a., Murphy & Ralston, Waterloo.

HOSPITALS.

Findlay, O.—*S. Main St.*, three-sty' st. & bk. home & hospital, 72' x 98', slate roof, steam; \$15,000; o., City of Findlay; a., F. W. Dettweiler.
Rochester, N. Y.—Two-sty' bk. & st. hospital, 200' x 284', tin roof, steam; \$150,000; o., Monroe County; a., Foote & Headley.

HOTELS.

Brooklyn, N. Y.—*Surf Ave.*, nr. Thompson's Walk, three-sty' fr. hotel, 31' x 57' 8", gravel roof; \$8,000; o., Patrick Skelly, 23 Ninth Ave., New York; a., J. A. McDonald, Surf Ave. & Sheridan's Walk.

HOUSES.

Boston, Mass.—*Salutation St.*, three-sty' bk. dwell. & store, 25' x 46', flat roof; \$6,000; o., B. C. Colaruso; b., M. Milano; a., F. A. Norcross.
Gainsboro St., nr. St. Stephens St., 2 three-sty' bk. dwells, 18' x 21' x 79', flat roofs, steam; \$20,000; o., H. C. J. Keeler and A. R. French; a., T. J. Gould, Providence, R. I.
Atherton St., nr. Armory St., 24-sty' fr. dwell., 32' x 39' pitch roof, furnace; \$5,000; o., C. E. Balfour; b., D. C. McEachern; a., J. P. Campbell.
Brooklyn, N. Y.—*E. Fifteenth St.*, nr. Albemarle Road, 24-sty' fr. dwell., 31' 6" x 40' 6", shingle roof; \$8,000; o., Jacob K. Draper, 450 Carlton Ave.; a., Mitchell & Farnell, Park Row Building, New York.
E. Twenty-first St., nr. Foster Ave., two-sty' fr.

BUILDING INTELLIGENCE.

(Houses Continued.)

dwell., 20' x 46'; \$6,000; o. & b., E. R. Strong, Avenue F & E, 32d St.; a., Benj. Driesler, 1432 Flatbush Ave.
E. Twenty-fourth St., nr. Foster Ave., 5 two-sty' fr. dwells, 26' x 46'; \$30,000; o., Bauer & Corbin, Flatbush Ave. & Avenue G.
Cincinnati, O.—*Avondale*, 24-sty' bk. & st. dwell., 40' x 60', slate roof, hot water; \$30,000; o., Theo. Braemer; a., Des Jardins & Haywood.
Avondale, 24-sty' bk. dwell., 45' x 50', slate roof, furnace; \$15,000; o., A. E. Conkling; a., Des Jardins & Haywood.
Columbus, O.—24-sty' bk. dwell., 30' x 50', slate roof, furnace; \$5,000; o., T. Bailey; a., W. T. Mills.
Fort Wayne, Ind.—*E. Washington St.*, two-sty' fr. dwell., 40' x 60', slate roof, hot water; \$5,000; o., Wm. Breuer; a., J. M. E. Riedel.
Green Bay, Wis.—*Walnut St.*, two-sty' fr. dwell., shingle roof, hot water; \$5,000; a., W. B. Allen; a., H. A. Foeller.
Knoxville, Tenn.—*Spruce and Walnut Sts.*, two-sty' & base, st. dwell., 50' x 100', gravel roof, steam; \$12,000; o., Robert H. Cate; a., Baumann Bros.
Montclair, N. J.—*Mountain St.*, cor. Myrtle Ave., 24-sty' fr. dwell., 40' x 50'; \$13,000; o., James M. Speers, 14 W. 23d St.; a., A. F. Norris, 150 Nassau St.
Newark, N. J.—*Howard St.*, three-sty' bk. store & dwell., 23' x 58'; \$5,000; a., C. L. Steinhilbrenner & Co., 22 Clinton St.
New York, N. Y.—*Decatur Ave.*, s. w. cor. 207th St., 24-sty' fr. dwell., 30' x 35'; \$5,000; o., G. P. Bodinger, 146 E. 42d St.; a., J. R. Cutler, 489 Fifth Ave.
E. Eighty-third St., No. 117, two & three-sty' bk. stable & dwell., 24' 11" x 94'; \$15,000; o., Jno. B. Simpson, 988 Fifth Ave.; a., S. G. Slocum, 156 Fifth Ave.
First Ave., No. 1788, two-sty' bk. store & dwell., 25' x 62'; \$6,000; o., Henry Lippe, 2 Beekman Pl.; a., Hubert Drosser, 93 Nassau St.
Eighty-sixth St., nr. Madison Ave., 3 five-sty' American basement dwells, 25' x 100' 8"; o. & b., G. C. & Charles J. Weber, 873 Putnam Ave., Brooklyn; Bauchman & Fox, 11 E. 59th St.
Poplar Bluff, Mo.—Two-sty' fr. dwell., 42' x 41', pitch roof; \$5,000; o., D. P. Bacon; a., J. S. Jenkins.
Sheephead Bay, L. I., N. Y.—24-sty' fr. dwell., 40' x 70'; \$20,000; o., J. Tod Sloan; a., Stein, Cohen & Roth, 17 Union Sq., New York.

OFFICE-BUILDINGS.

Eau Claire, Wis.—Three-sty' bk. & terra-cotta telephone building, 40' x 75', comp. roof, steam; \$20,000; o., Wisconsin Telephone Co.; a., H. J. Esser, Milwaukee.
Houghton, Mich.—Two-sty' bk. & st. office-building, 52' x 82', gravel roof, steam; \$10,000; o., First National Bank; a., Charlton, Gilbert & De Mar, Milwaukee, Wis.

BUILDING INTELLIGENCE.

(Office-buildings Continued.)

Knoxville, Tenn.—Four-sty' bk. office-building, 50' x 65', gravel roof, steam; \$12,000; o., Dr. Thomas; a., Baumann Bros.
La Crosse, Wis.—Three-sty' bk., st. & terra-cotta telephone building, 60' x 125', comp. roof, steam; \$20,000; o., Wisconsin Telephone Co.; a., H. J. Esser, Milwaukee.
Madison, Wis.—Three-sty' bk., st. & terra-cotta telephone building, 50' x 90', comp. roof, steam; \$18,000; o., Wisconsin Telephone Co.; a., H. J. Esser, Milwaukee.
New York, N. Y.—*Cedar St.*, Nos. 51-55, fourteen & fifteen-sty' office-building; \$1,000,000; o., Mutual Life Insurance Co., 32 Nassau St.; a., Clinton & Russell, 32 Nassau St.
Oconto, Wis.—*Main St.*, two-sty' granite bank building, 26' x 70', meta. roof, steam; \$10,000; o., Citizens' National Bank; a., H. A. Foeller, Green Bay.

PUBLIC BUILDINGS.

Duluth, Minn.—24-sty' bk. & st. public library building, 55' x 100', tile roof, hot water; o., City of Duluth; a., Radcliffe & Willoughby.

STABLES.

New York, N. Y.—*Tremont Ave.*, nr. Anthony Ave., two-sty' fr. stable, 25' x 89'; \$4,500; o., Wm. Donaldson, 975 Dawson St.; a., Jos. C. Cocker, 850 E. 158th St.
W. Eighteenth St., Nos. 239-241, six-sty' bk. stable, 50' 7" x 88'; \$48,000; o. & a., W. H. Totten, 336 W. 15th St.

STORES.

Brooklyn, N. Y.—*Fifth Ave.*, nr. 56th St., 3 two-sty' bk. stores & dwells, 16' 8" x 40' 6"; \$15,000; o., Frank Gelston, 166 Fifty-second St.; a., G. C. Gillespie, 125i Fifth Ave.
Pacific St., cor. Stone Ave., four-sty' bk. store & tenement, 20' 3" x 95'; \$7,000; o., Pasquale D. Antrea, 164 Stone Ave.
Manhattan Ave., nr. Seigel St., four-sty' bk. stores & tenement, 25' x 61' 6"; \$7,000; o., Jacob Pomeranz, 76 McKibben St.; a., M. J. Smallheiser, 23 Park Row, New York.
Fourth Ave., w. s. 20' x 52d St., 2 three-sty' bk. stores & dwells, 20' x 55'; \$14,000; o., Mrs. Rachel Soutars, 68i Fourth Ave.; a., A. Young, 283 Fifty-third St.; b., J. W. Soutars, 226 Fifty-second St.
Chicago, Ill.—*Thirty-ninth St.* and *Forest Ave.*, two-sty' bk. stores & flats, 45' x 50'; \$7,000; o., G. A. Springer & Co.; a., W. D. Cowles.
New York, N. Y.—*Tenth St.*, nr. University Pl., ten-sty' bk., st. & iron lofts & stores, 26' 5" x 87' 3", 82' 3"; \$125,000; o., Philip Braender, 47 W. 125th St.; a., F. C. Browne, 143 W. 125th St.
Webster Ave., e. s. 160th St., 2 four-sty' bk. & st. flats with stores, 18' x 75', 26' x 78'; \$45,000; o. & b., Adolph Wexler, 620 E. 11th St.; a., Harry T. Howell.
E. Eighth St., Nos. 69-71, eight-sty' bk. & st. lofts & stores, 50' x 87' 11"; \$100,000; o., John and John Jr., Daniell, 759 Broadway; a., Clinton & Russell, 32 Nassau St.

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No. 620,888, Mar. 14, 1899
No. 601,435, Mar. 29, 1898
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BUILDING INTELLIGENCE.

(Stores Continued.)

Seattle, Wash.—First St., cor. Pine St., two-st'y bk. store & flat, 120' x 120', gravel roof, steam; \$40,000; o., C. D. Stimson; a., C. H. Bibb.

TENEMENT-HOUSES.

Boston, Mass.—Lynde St., No. 40, three-st'y bk. tenements, 24' x 60', flat roof; \$20,000; o., H. A. Le Bow; a., G. H. Smith.

Brooklyn, N. Y.—Thirty-ninth St., nr. 4th Ave., three-st'y bk. tenement, 25' x 66' 4", felt & gravel roof; \$8,000; o., Mrs. Mary McCaffey, 131 Floyd St.; a., M. Thomas, 16 Court St.
Twelfth St., n. s., nr. 8th Ave., three-st'y bk. tenement, 40' x 51', felt & gravel roof; \$3,000; o., G. Reimer, 542 Eleventh St.; b., P. G. Bolton, 250 Baltic St.

New York, N. Y.—Eighth Ave., nr. 154th St., 4 four-st'y bk. tenements & stores, 25' x 85'; \$72,000; o., F. J. Schnugg, 1 E. 94th St.; a., Louis Entzer, 78 E. 96th St.

Timpson Pl., nr. 149th St., 2 three-st'y bk. tenements, 20' x 55'; \$10,000; o., Antonio Gallo, 853 Wales Ave.; a., L. Falk, 2785 Third Ave.

Eighth Ave., cor. 13th St., four-st'y bk. store & tenement, 24' x 89' 2", steam heat; \$13,500; o., Wm. M. Calder, 478 Thirteenth St.

WAREHOUSES.

Boston, Mass.—A St., nr. Congress St., three-st'y bk. storage house, 30' x 70', flat roof; \$8,000; o., Edison Electric & Illuminating Co.; b., Whidden & Co.; a., Wetherell & Bigelow.

New York, N. Y.—W. Twentieth St., No. 11, nine-st'y bk. warehouse & store, 28' 6" x 92'; \$135,000; o., Estate G. Spitzer, 156 Fifth Ave.; a., Geo. Spitzer, 156 Fifth Ave.

Lewis St., No. 283, three-st'y & base. bk. & st. storage, 23' x 59'; \$5,000; o., Aaron Gottlieb, 353 E. 3d St.; a., Horenburger & Straub, 122 Bowery.

COMPETITIONS.

COURT-HOUSE. [At Charlestown, Mass.] Plans and specifications will be received until April 2, for a court-house. JOHN F. NEELY, Clk. Co. Bd. 1266

STATE-HOUSE. [At Columbia, S. C.] Plans and specifications will be received until April 12, for the completion of the State-house; probable cost, \$200,000. D. H. MEANS, Clk. of Commission. 1267

HIGH SCHOOL. [At Savannah, Ga.] Designs will be received by the Trustees of Chatham Academy until April 25, for a high school. HENRY C. CUNNINGHAM, Chmn. Bldg. Com. 1269

PROPOSALS.

CHURCH. [At Mantador, N. D.] Bids will be received until April 10, for the erection of a Catholic Church here. REV. J. F. STUDNICKA, Wapeton, N. D. 1267

HOTEL. [At New Ulm, Minn.] Sealed proposals will be received until April 10th, for the erection and construction of a brick hotel. GUST DREWS. 1267

COURT-HOUSE. [At Macon, Miss.] Bids will be received until April 4, for erecting a court-house. W. CHAMBERLIN & CO., Knoxville, Tenn. 1266

PROPOSALS.

JAIL. [At New Orleans, La.] Sealed proposals will be received until April 9, for the erection of a new police jail on the site of the present police jail in the square bounded by S. Robertson, Perillat, Cypress and S. Liberty Sts. W. S. DOUGLASS, comptroller. 1267

COURT-HOUSE ADDITION. [At Grand Rapids, Wis.] Bids are wanted April 7 for an addition and alterations to the court-house. W. E. WHEELAN. 1266

SCHOOL BUILDING. [At Slippery Rock, Pa.] Bids will be received by the Building Committee until April 6, for a school on State Normal School grounds. W. J. EAST, Pittsburgh, Pa. 1266

COURT-HOUSE. [At Minnewaukon, N. D.] Sealed proposals will be received until April 2, for erecting a court-house. A. A. LINDAHL, County Auditor. 1266

BANK. [At Lake Charles, La.] Sealed bids are wanted until April 2, for the erection of a new brick building for the First National Bank. 1266

SCHOOL-HOUSE. [At Niagara, N. D.] Sealed proposals will be received by the Board of Education until April 14th, for the erection and construction of a school-building. GEO. L. TRIEHLER, pres. 1267

HOSPITAL. [At Tomah, Wis.] The Commissioner of Indian Affairs, Washington, D. C., will receive sealed proposals until April 9th, for the erection of a hospital at the Tomah School. W. A. JONES, com. 1267

BANK BUILDING. [At Hedrick, Ia.] Sealed proposals will be received until April 3d, for the construction of a bank building. J. T. BROOKS. 1266

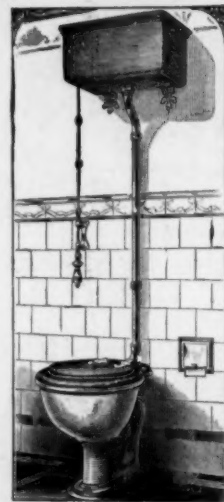
BRICK VAULT. [At Grand Forks, N. D.] Bids will be received by the County Commissioners until April 3, for a two-story brick and steel vault. J. W. SCOTT, Co. Aud. 1266

COURT-HOUSE ADDITION. [At Mantorville, Minn.] Bids will be received by the County Commissioners until April 16, for an addition to and remodeling the court-house. GEO. A. NORTON, Co. Aud. 1268

SCHOOL-HOUSE. [At Elmwood Place, O.] Bids are wanted April 15, for erecting a school and for modifications in the present school. B. C. DE CAMP, architect, Neave Building, Cincinnati. 1268

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 17, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 26th day of April, 1900, and then opened, for furnishing the heating and ventilating apparatus, complete in place, for the U. S. Custom-house and Post-office building at Bristol, Tenn., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Bristol, Tenn., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1266

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PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 17, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 25th day of April, 1900, and then opened, for furnishing the heating and ventilating apparatus, complete in place, for the U. S. Post-office Building at Newport, Kentucky, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Newport, Ky., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1266

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 15, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 13th day of April, 1900, and then opened, for stairs, elevator enclosure and incidental changes in the U. S. Court-house and Post-office Building at Dubuque, Iowa, in accordance with the drawing and specification, copies of which may be had at this office or the office of the Superintendent at Dubuque, Iowa. JAMES KNOX TAYLOR, Supervising Architect. 1266

Treasury Department, Office Supervising Architect, Washington, D. C., March 14th, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 24th day of April, 1900, and then opened, for the extension and changes incidental thereto, at the U. S. Court-house, Custom-house and Post-office Building at Omaha, Nebraska, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Omaha, Neb., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1266

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SECTION 1. No Member should enter into partnership, in any form or degree, with any builder, contractor, or manufacturer.

SECTION 2. A Member having any ownership in any building material, device or invention, proposed to be used on work for which he is architect, should inform his employer of the fact of such ownership.

SECTION 3. No Member should be a party to a building contract except as "owner."

SECTION 4. No Member should guarantee an estimate or contract by personal bond.

SECTION 5. It is unprofessional to offer drawings or other services "on approval" and without adequate pecuniary compensation

SECTION 6. It is unprofessional to advertise in any other way than by a notice giving name, address, profession, and office hours, and special branch (if such) of practice.

SECTION 7. It is unprofessional to make alterations of a building designed by another architect, within ten years of its completion, without ascertaining that the owner refuses to employ the original designer, or, in event of the property having changed hands, without due notice to the said designer.

SECTION 8. It is unprofessional to attempt to supplant an architect after definite steps have been taken toward his employment.

SECTION 9. It is unprofessional for a Member to criticize in the public prints the professional conduct or work of another architect except over his own name or under the authority of a professional journal.

SECTION 10. It is unprofessional to furnish designs in competition for private work or for public work, unless for proper compensation, and unless a competent professional adviser is employed to draw up the "conditions" and assist in the award.

SECTION 11. No Member should submit drawings except as an original contributor in any duly instituted competition, or attempt to secure any work for which such a competition remains undecided.

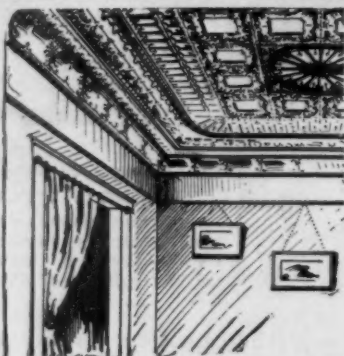
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot give proper personal attention.

SECTION 13. No Member shall compete in amount of commission, or offer to work for less than another, in order to secure the work.

SECTION 14. It is unprofessional to enter into competition with or to consult with an architect who has been dishonorably expelled from the "Institute" or "Society."

SECTION 15. The assumption of the title of "Architect" should be held to mean that the bearer has the professional knowledge and natural ability needed for the proper invention, illustration and supervision of all building operations which he may undertake.

SECTION 16. A Member should so conduct his practice as to forward the cause of professional education and render all possible help to juniors, draughtsmen and students.



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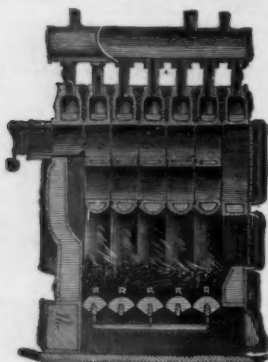
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