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THE case of the painter in New York State who was expelled from the painters' union because he had belonged to the State militia has excited much interest throughout the country. It seems that the painter, William Potter, after his expulsion from the union, wrote to every master-painter in the town in which he lived, asking for employment, and received letters from all, refusing it, on the ground that they could not employ non-union men, some of them expressing their regret that they were unable to do so. In consequence of this, Potter applied to the courts, alleging that neither the union nor any of its members had any property out of which damages could be collected, and praying that an order might be issued, commanding the union to reinstate him. It is pleasant to learn that an order to this effect was promptly made, and, unless the union restores him to his standing, all its members are liable to punishment for contempt of court.

THERE is no need of dwelling on the un-American tyranny and degradation of a system by which a gang of confessed paupers can rule absolutely an honorable profession in a community of considerable importance, as all this has long been familiar to everybody; but the point in which this case differs from any other is that the courts have, apparently for the first time, issued to a union a definite command, and thereby put unionism generally in a position of great perplexity. It is obvious that if the members of unions can, by command of courts, be compelled, not only to desist from oppression, but to do acts of justice, they become like ordinary citizens, and the absolute and irresponsible power, practically of life and death, with which they have kept their victims in terror, disappears. It is needless to say that if a man expelled from a union on account of belonging to the militia can be reinstated by the public force which carries out the decrees of courts, the men who have been deprived of their living in the same way on account of being too old, or not having been born in Belgium, or being too ambitious and industrious, or not drinking enough beer at a certain saloon, or having incurred in some way the ill-will of an influential "champion of labor," will soon be besieging the courts for justice, and the tyrants who by starvation and murder have established their authority over the best class of citizens that we have in this country will at last find a curb put upon their energies. The "labor champions" understand all this perfectly, and it is certain that every possible effort will be made to evade the direct conflict of authority between the courts and the unions which the Potter case has raised, either by getting Potter quietly away to some other place, and finding him satisfactory employment, on condition of his letting the case drop; or by raising some different issue, which will save the union the humiliation of submission to the constituted authority in the vital matter of the admission of a member to their ranks. What the result will be in the present instance no one can tell, but the issue, having been once raised, is sure to make its appearance again.

WHAT it would be a great advantage, in the end, for the unions to be subjected, like other associations of citizens, to the control of the courts is unquestionable. Nothing has done more harm to the union workingmen of this country than the feeling of great and irresponsible power over other people, which could be exercised arbitrarily or maliciously, and practically without restraint, so long as the members of the unions were careful not to save up money for their families, which might be held liable for damages. Although the general sense of honesty and decency, which is very strong among those who work hard, has kept them at ordinary times within reasonable bounds, the excitement of strikes has led even the better class of union men to unjustifiable measures, and the impunity which these have found, joined with the steadily degrading influence of the premium placed by union methods on improvidence, have cultivated in the union members a contempt for law, and for the rights of other people, and an indifference to the duties and responsibilities of citizenship, which are particularly dangerous in a democracy like ours, which is largely ruled, and has hitherto been well ruled, by workingmen. The compulsory incorporation of unions, by restoring the liability of corporate property for the debts or misdemeanors of the union, as well as by freeing the individual property of the members from such liability, would do very much to encourage workingmen again to make provision for old age or misfortune, as well as to feel themselves again sharing all the duties and responsibilities of citizens; and the recognition of the authority of the courts over them would complete the assimilation of workingmen to the rest of the community which has made our country what it is. That those who have found profit for themselves in separating workingmen into a class apart should dread their incorporation again into the great body of American citizenship is to be expected; but the tendency toward such a change in the position of working people is clear, and there are many indications that the abolition of the barriers between the so-called "classes" which theorists and demogogues have for so many years been trying to establish will be followed by a mutual respect and regard which has never been known before, even in this country. There has never been a time when so little of the pride of family, one of the most hard-hearted varieties of that sin, existed here, it having been all but swept away by the flood of new wealth which has overwhelmed it; and, although there is such a thing as the pride of wealth, it rests on so insecure a basis as not to be very dangerous; while, as a matter of fact, nearly all our very rich men have themselves been workingmen, and are not only proud of the fact, but use their knowledge of the needs of workingmen, and their sympathy with them, in a way which signifies more for the future of the Republic than most people imagine. When we reflect that it is not much more than a hundred years since Marie Antoinette, if we may believe the legend, when she heard that multitudes of her subjects were without bread, wondered why they did not eat cake, and then observe Mr. Andrew Carnegie devoting enormous sums to providing, with anxious and wise care, those advantages for the poor boys and girls of the future of which he felt the need when he was himself a poor boy; or Mr. Charles M. Schwab, brightening the existence of the thousands of people who work under his direction by his unfailing interest and kindness; or the Bishop of New York, to whose impartial sympathy employers and employed resort with equal confidence; or the Tenement House Commission, through which the very poor have been brought nearer to their more fortunate fellows than ever before; or the thousand and one ways in which poor people are made to feel the personal interest and consideration of richer ones, the devices of designing politicians and demagogues to set the poor against the rich, and to keep them poor that they may do so more effectually, seem horrible anachronisms, which must, sooner or later, be swept away, and which every American who loves his country and his countrymen should help to sweep away as quickly and effectually as possible.

THE recent successful tests in New York of the practicability of sending a stream of water from a fire-engine into the upper stories of the new "Flatiron Building," which is about three hundred feet high, have revived the public interest

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in the stand-pipe system, which alone makes such a feat possible. It is not long since some distinguished fire-engineer announced that everything above the twelfth or fifteenth story in a modern office-building was beyond the reach of any appliances at the command of fire-departments. It is evident that ordinary hose would not resist the pressure necessary to lift a stream of water to a height of three hundred feet; but there is no difficulty in fitting a building with permanent wrought-iron pipes, tested at a thousand pounds' pressure to the square inch, and so arranged that water can be pumped by fire-engines directly into them, and so conducted to any height. Years ago, when seven stories was the usual limit of height in mercantile buildings, it was a common practice to place on the street front of such buildings one or more vertical wrought-iron pipes, with a single or double coupling near the sidewalk, for making connection with a steam fire-engine, and an outlet in every story above, to which a hose could be attached in case of need. All the connections were closed with brass caps, attached to a chain, so that they could not be lost, but easily removable in time of fire. The same system has now been revived for the protection of high buildings, and might, with advantage, be required in all structures used for storage, manufacturing, mercantile or office purposes. For a lofty building the lower coupling should always be double, so that the power of two engines can be united to force water through the pipe; and it is now common to place the pipe either outside the building, or, more usually, just inside the wall, where it is safer from freezing, but near a line of windows, so that firemen can reach it from the outside, with ladders. In the case of a three-hundred foot office-building, outside ladders, unless in the form of a permanent fire-escape, would be out of the question, and the position of the stand-pipe for fire use is then determined by accessibility. In either case a good stand-pipe, as the tests at the "Flatiron Building" show, is an invaluable security. Even on the roof of the structure a pressure-gauge showed forty-seven pounds' pressure in the pipe, so that the water could easily have been forced a hundred feet higher still.

A VERY interesting paper was read before the London Agricultural Association a few weeks ago, by Mr. F. C. Eden, on "Roof Coverings," and the discussion which followed the reading brought out with peculiar emphasis the "eternal conflict" between the useful and the beautiful which gives the profession so many anxieties. As Mr. Eden began by quoting Goethe's saying, "Take care of the beautiful, for the useful can take care of itself," experienced architects can imagine what he thought of roof-coverings. His opinion that no roof is either more useful or more beautiful than one of good, hand-made, hard-burnt shingle tiles, not less than half an inch thick, will be shared by most American architects, and many of them will also agree that such tiles should not be selected for uniform color, and that a little warping in the burning is rather an advantage than otherwise; but those who have listened meekly to a client's animadversions on their attempts at picturesqueness are likely to hesitate before adopting, at least as a rule of practice, his opinion that the best ridge for a tile roof is made with plain half-round tiles, with a thick fillet of white mortar over each joint, and a bottle stuck in the end, as a finish over the gable.

SOME of Mr. Eden's other ideas of roof-finish would hardly appeal to the average client. Speaking of lead roofing, he mentions certain old English churches covered with this material, which have no gutter, but in which "the lead hangs easily over the eaves like a flounce, which gives a curiously forlorn look, not without charm." We imagine that an architect who accompanied his church building-committee on a visit of inspection of the "forlorn" effects which he had contrived for their benefit would never forget the occasion. In regard to projecting rafter-ends, also, he would be a bold architect who would venture to follow Mr. Eden's advice, and "space them unequally, and vary their sizes," however convinced he might be personally of the advantages of this arrangement. Within certain bounds, however, these suggestions are valuable. We once had a very considerate and satisfactory client whose instructions were confined mainly to one requirement — that everything about his house should be "square, true, plumb and level"; and the young architect who thirsts for an opportunity to astonish the world by the picturesqueness of his work will do well to ascertain beforehand his client's views on the subject; but having made sure of this point, some of Mr. Eden's observations might be applied with profit. In a tile roof, for example, he advises spacing the rafters far apart, so that the laths, when loaded with the tiles, will sag between them; and although this gives a suggestion of an old horse's ribs which is not quite pleasant, a certain safe sagging unquestionably adds much to the beauty of a roof, throwing the distressing parallel edges of tiles, slates or shingles into varying curves. In repairing the roof of the fifteenth-century house known as Ockwells Manor, Mr. Eden says that the purlins were found to be set at such a level that the rafters did not touch them by about an inch until loaded with the tiles, the effect being to throw the completed roof into gentle undulations, the prominent portions being over the main trusses. This effect must have been intended, and it illustrates curiously the passion for the picturesque which characterized the Middle Ages, and which has been so ably traced, in another field, by Professor Goodyear.

THE remarks made by the audience upon Mr. Eden's paper were about what might have been expected. One architect happened to have a reversionary interest in some real estate in Kent, "where," as he said, "could be found the features dealt with by Mr. Eden," such as oak timbers, hand-made tiles, and so on. The cottages on the property were exceedingly picturesque, and were often sketched or painted by artists, but they had one defect — from the landlord's point of view — that they were uninhabitable. Another hearer, while he agreed with Mr. Eden that rainwater gutters were not always desirable, and that a choked gutter or conductor would often do more harm in a few minutes than dripping eaves would do in as many years, observed that local building regulations always required rainwater gutters, whether they were picturesque or not; and a third "disagreed with almost all Mr. Eden's conclusions," for the very sensible reason that architects had to satisfy their clients in their houses, rather than themselves, and that clients were not likely to appreciate an inordinate picturesqueness, however gratifying it might be to the young artists who did not have to live in the houses. On the whole, however, the members of the audience agreed, as artists, with Mr. Eden, the doubt in their minds being whether architects were justified in imposing their own notions of picturesqueness on their employers.

STUDENTS of art do not know so much as they ought about the prizes open to them in this country. A few days ago the noble Lazarus Scholarship for mural painting, which gives to the winner three years' residence in Europe, with the ample income, for a student, of a thousand dollars a year, was awarded to the author of the best out of only seven competing designs. If artists realized that this great prize is only second in value to the Prize of Rome in the French School of Fine-Arts, and that, in these days of increasing demand for good mural decoration, the winner of such a prize has his whole future practically secure, the competitors should be counted by hundreds, and the competition itself should be one of the great events in the artistic world. Instead of that, in 1896, when the scholarship, which is triennial, was first awarded, there were only three competitors; in 1899 there were six; and this year one more has joined the lists. Although the three winners of the prize, Mr. Breck, in 1896, Mr. Schwartz, in 1899, and Mr. Rylands, this year, have all been pupils of the New York Arts Students' League, the scholarship is not restricted to New Yorkers. On the contrary, the competition is open to all unmarried male citizens of the United States who can pass a satisfactory examination in the history of architecture, free-hand drawing, and elementary French and Italian, and the sketches submitted are judged by the most accomplished experts in the country. American artists are accused, perhaps with some reason, of being too conceited to venture their work in competition with that of others. If there is any truth in this notion, the sooner they change their minds, the better it will be for them. Nothing does so much to clear out of an artist's head the fog raised by the flattery of his friends and the newspaper reporters as to try his strength in competition before a good jury. If he wins, he gains a better idea of his own capacities, as well as of his limitations, than he could get in any other way; and if he loses, he has the inestimable advantage of finding out where his weak points are, and in what ways his competitors surpass him, to say nothing of the increase of power which every man gains by doing the very best of which he is capable, and cannot gain otherwise.

BRONZE DOORS IN ITALY.

UPON every side artistic Italy is worthy of remark and attention; and if from the solemn "monuments" we descend to the complementary and decorative parts of these same monuments, in every one, or almost every one, we shall find objects worthy of study. To-day, I mean to discuss the matter of door-valves in wood and bronze; and even if I limit myself to the chief types, we shall find many models, an acquaintance with which will not be useless. I beg the reader to be assured that the information which I give is not improvised, but is authoritative and exact, particulars in which the writers of to-day are not over-careful.

For the sake of brevity I will not begin with the Greek and Roman epoch, but limit myself to the Paleo-Christian epoch. I call your attention, therefore, to the wooden door-valves, the most ancient of the Christian epoch. These are the doors in the basilica of Sta. Sabina at Rome, the objects of a wide and serious consideration by many writers of many countries. M. Kondakoff, the celebrated historian of Byzantine art, since June, 1877, has concerned himself with these doors, and aims at showing the high value of the opinion expressed by De Rossi, the prince of Christian archæologists, and of Cavalcaselle and Crowe, as well as of Doppert, to the effect that these doors date back to the sixth century, and not to the twelfth or thirteenth century, as has been supposed. Our author proves the earnestness of his opinion by a comparison with similar monuments, especially with the sarcophagi and ivory diptychs of the fourth, fifth and sixth centuries. Lately, a writer of high standing, M. Grisar, published on the same subject a very elaborate essay, which reached almost the same conclusion. This author, who also attempted to fix the exact date of the doors of Sta. Sabina, satisfied himself that they must have been begun about the year 435, the time when the basilica itself was finished, and since these doors exhibit figured panels not all wrought in the same style, M. Grisar, far from admitting that the sculptures are of different dates, tries to prove that several contemporary artists of different degrees of ability carried out the work. The subjects are allied with the iconography of Christian cemetaries: the series is not complete, since ten of the fables have been carried off by some one. These Roman doors deserve attention, too, because, earlier than any other to our knowledge, they exhibit the Crucifixion, and certain writers have seen in these doors the model of the celebrated door by Bernward († 1022) in the Cathedral of Hildesheim; but the resemblance is not really a striking one. The same thing may be said of the resemblance which they have tried to establish between the Roman doors and the chief doorway of the Cathedral of Spalatro, which dates from 1214. It is enough to say, however, that the doors of Sta. Sabina form one of the most important monuments of primitive Christian art.

Italy also boasts another very ancient monument of this class, one less known than the doors already spoken of, namely, the doors for the principal entrance to San Ambrogio, at Milan, which were removed in 1750 because of their ruinous condition; being at that time replaced by modern doors, incorporating certain portions of the originals. I have always considered these fragments as work of the eleventh century; but recently a student of the subject has shown that these sculptures date back to the same time as those of the door of Sta. Sabina. I can hardly give my adhesion to this new opinion emitted by Herr Goldschmidt. But, in any event, we are here in the presence of the remains of wood-carving of really venerable antiquity.

But it is not the wooden doors which in point of antiquity form the most remarkable group on the Peninsula. Italy could hardly be richer in bronze doors of the Byzantine type, and whoever would study this class of monument must, perforce, address himself to Italy. All writers who have given attention to Italian art of the Byzantine period have discussed the influences that this art exercised over the national traditions, some expanding and others restraining them. The truth is that this influence was not exercised with uniformity; a certain provincial admiration for Greek work has been remarkable, and even to-day is very evident. Elsewhere, it was less felt, and disappeared altogether at an early date. Aside from the city of Ravenna, in the North of Italy, the Byzantine influence was powerfully felt in the South, and an important witness to this is the many door-valves to be found in the Southern cities of Italy. This does not prove that there were none of these in the Northern and Central Provinces of the country, and here I mean the carved or engraved work, the most ancient specimens not dating back farther than the second half of the eleventh century. At this time, and in the twelfth century, bronze doors, particularly those executed in Constantinople, had an extraordinary vogue in Italy, but as soon as Italian artists attempted to imitate them the fashion ceased and, side by side with doors unquestionably of Byzantine origin, the Peninsula decorated itself with doors which betrayed their national origin. In this connection, that is to say, on the matter of the influence exercised by Byzantine work upon the authors of our bronze sculptured work, which I shall presently mention, one might write a long dissertation; but this is not the right place, or, at least, not the right time, for entering upon such a discussion. I will, therefore, limit myself to the most important facts, the ones best established.

There will be found amongst the illustrations the bronze door-valves of S. Zeno at Verona, one of the Northern cities of Italy, which fondly cherishes this venerable monument of the eleventh and twelfth centuries. These doors are really older than the time which we are studying, but they have not come down to us in their primitive state; for in the twelfth century they were very materially worked over, and of the ancient parts there only remain the left valve and some of the lower bas-reliefs upon the right valve. The carvings in general are crude, especially those of the eleventh century, but the general decorative effect of the door is particularly remarkable.

Nevertheless, any of my readers who might desire a model of door-valves of the twelfth century should not lose sight of the bronze doors of the cathedral at Benevento, in the south of Italy. The work in question is a monument of exceptional beauty for its time, and its general air and artistic worth connect it directly with the school of art which produced the celebrated doors of Andrea da Pontadera at Pisa, and Lorenzo Ghiberti at Florence, to such a degree as to enable one to affirm that the door at Benevento holds the same place in the art of the twelfth century as is held by the doors of Pontadera and Ghiberti. The door exhibits forty-three scenes from the history of the life of Christ; and this sacred composition is quite unique in the twelfth century. Never at this epoch had sculpture or painting composed so complete a story of the life of Jesus, and unfortunately the author's name is now unknown.

The doors at Benevento are sometimes compared with the two doors at Troia and Ravello, in the south of Italy, but if the details of the sculpture upon these doors remind one of those at Benevento the resemblance of the *ensembles* is less noticeable.

To summarize matters as much as possible: we shall make the acquaintance of a number of monuments, that is to say doors, some decorated with bas-reliefs, others engraved, the images being inlaid with metallic wire. The doors of the latter class are of the greatest antiquity: amongst them we find the doors to the Cathedral of Amalfi (1062), the Abbey of Montecassino (1066), of S. Paul. Outside the Walls of Rome, executed in 1070, at Constantinople, by the sculptor Staurakios; the door of S. Ange "sul Gargano" (1076) in the cathedral at Salerno (1077); the Church of the Saviour at Atrani (1087), and at the Cathedral Troia (two doors) 1119 and 1127; those by Barisano da Crani, in the Cathedral of Ravello (1179); the door at Pisa, executed by Bonanno Pisano, destined for the Cathedral of Monreale (1186), a work later than those by the same artist executed in 1180 for the cathedral of his natal city, which burned down in 1596, and the doors of S. Clement at Casoria (1191); of the Cathedral of Benevento, end of the twelfth century; and of S. John Lateran, at Rome (1196), etc.

As I have already said, in this series of monuments, rich though very incomplete (I give a list of doors later on), the doors have been executed either with images and ornaments incised and filled-in with gold or silver wire, or with bas-reliefs of small dimensions. Sometimes, as in the case of the door to the Boemondo Chapel, at Canosa, the Mussulman influence has the upper hand, and the ornaments are conceived in such a manner that they might properly enrich the doorway of a mosque. This should not excite surprise, as we know that we here deal with a province of Southern Italy dominated by the Normans, who had also conquered Sicily, giving to it a government and eclectic culture: and furthermore, in Sicily, the Normans found an old civilization — the Mussulman and the Greek, Byzantine art and the art of the Arab mixed together, at times one influence getting the upper hand, and at another the other, as in the Cappella Palatina at Palermo, with its ceiling enriched with stalactites, and I might say, as in the door at Canosa, if this had not arrived in Italy from Constantinople. Nevertheless, the fact of having accepted for a Catholic church an ornament of Oriental character is very significant, and the curious contrast is explained in the same manner in Apulia as in Sicily, the Government being the same.

Annexed is a short list of Italian bronze door-valves, naturally limited to the epoch of the Middle Ages, which has left us a great number of these works of art that have come down to us in a generally satisfactory condition. In addition to the name of the structure, I give the year or the epoch, the place of origin and, possibly, the name of the author; and I will add that this list of mine corrects inaccuracies in lists elsewhere published.

DOORS ENGRAVED AND INCISED.

Cathedral of Amalfi	1062	Constantinople.
Abbey de Montecassino	1066	Constantinople.
St. Paul, Extra Muros, Rome	1070	Constantinople.
Monte S. Angelo a Gargano	1076	Constantinople.
Cathedral of Salerno	1077	Constantinople.
S. Salvatore, Atrani	1087	Constantinople.
Chapel of Boemondo at Canosa	End of XI Century,	Ruggero d' Amalfi.
S. Mark's, Venice	1085	Constantinople.
S. Mark's, Venice	1112	Imitation by a Venetian Artist.

DOORS DECORATED WITH BAS-RELIEFS.

S. Zeno, Verona	X-XII	Century partly German work.
Cathedral of Troia	1119	Oderisio Berardo.
Cathedral of Troia	1127	Oderisio Berardo.
S. Bartolomeo, Benevento (destroyed)	1150-1	Oderisio Berardo.
Cathedral of Trani	1160	Barisano di Trani.
Cathedral of Ravello	1179	Barisano di Trani.
Cathedral of Pisa	1180 (?)	Bonanno da Pisa.
Cathedral of Pisa (destroyed)	1180 (?)	Bonanno da Pisa.
Cathedral of Monreale	1186	Bonanno da Pisa.
Cathedral of Monreale	End of XII Century,	Barisano di Trani.
Abbey of S. Clemente, Casoria	XII Century (?).	
Cathedral of Benevento	End XII Century (?).	
S. John Lateran, Rome	1196	Umberto and Pietro da Piacenza.

Now we have some slight knowledge of several of the Italian sculptors of the Middle Ages, three of whom especially interest us: Oderisio Berardo, Barisano di Trani, and Bonanno da Pisa; two

from southern Provinces, the third from Tuscany, that is to say, from one of the central Provinces. The last two named are sufficiently well known. The first, on the other hand, is almost a new name, even in Italy; yet some would, mistakenly, like to attribute to him the most magnificent door of the twelfth century, that in the Cathedral of Benevento; perhaps for the reason that this sculptor was a citizen of that city, for this reason being sometimes styled "Oderisio Beneventano." The fact that he is not the author of the doors at Benevento is demonstrated by a comparison of these door-valves with those of the Cathedral at Troia, which certainly are due to him: having been executed, as we have seen just now, the principal door in 1119, and the secondary door in 1127. I am sorry not to be able to halt longer over this subject; so, apropos of Oderisio Berardo, I will only add that M. Barbier de Montault has imagined that this Berardo (who is not Berardi, as we sometimes find him named) was a Frenchman of the name of Beraud.

Perhaps the door at Benevento was executed by the Greeks, for there is a tradition to this effect; and for my part, I am not unwilling to accept it, merely adding that it was quite possible that it should have reached Italy from Constantinople. Now, let us leave, for the present, the Mediæval epoch, and at the very opening of the Renaissance we shall find a door of admirable beauty, one of the most exquisite ornaments of the Italy of the fourteenth century, the work of Andrea da Pontadera, falsely styled da Pisa, he being really a citizen of Pontadera, one of the suburbs of Pisa.

Andrea da Pontadera influenced the artistic spirit and thought of his time in an exceptional manner. Born in 1270, he died at Florence in 1348; and during this long lifetime of seventy-eight years, we know with certainty of only a single work of his, the door with which we are now dealing. This is found in one of the secondary entrances of the Baptistery at Florence, and Vasari, who stated a great many facts which are not facts at all about our Tuscan artists, commits an error in refusing to credit him with the sole paternity of the Florentine door; but Vasari, as already has been remarked, would not deserve serious consideration if his statement had not been accepted by the eminent authorities Crowe and Cavalcasselle in the following words: "The chief work of Andrea," they say on page 3 of Volume II, "is certainly the bronze door of the Baptistery of Florence, in which, to the excellence of the composition and distribution due to Giotto, he knew how to add, with equal skill, a simplicity of expression, which admirably renders the chief idea of the subject chosen for treatment." This opinion cannot be for a moment sustained in face of the work. Andrea's gracious and tender style has no likeness with the profound, forceful gravity of Giotto's work. Moreover, Andrea began his work on the Baptistery door in 1330, when he was sixty years old, and no one can believe that an artist of his stamp, a real leader of his school, as he was, could accept a divided commission: a master of his stamp could not have been so humiliated. Well composed, as the door as a whole certainly is, it deserves examination more because of the many bas-reliefs, which divide it into twenty-eight panels; twenty of which are devoted to the life of St. John, and eight to the illustration of the virtues. The beauty of these images, the serenity and simplicity of the composition, make of Andrea's door a monument of extreme interest, a marvellous source of æsthetic pleasure. After examining this door, one understands the incomparable power of the two other doors of the Baptistery, the work of Lorenzo Ghiberti.

In Italy one cannot speak of bronze doors without having his thoughts turned to those doors which Ghiberti sculptured for two of the entrances to the Baptistery at Florence. The Baptistery has three doors, and every one remembers the competition which was held for the first door, which brought face to face several of the leading sculptors of Italy, artists as celebrated as Jacopo della Quercia, and Filippo Brunelleschi, the great architect. At the last moment the struggle lay between Ghiberti and Brunelleschi, who each executed a bas-relief which is still preserved in the National Museum at Florence; and everybody now knows that in 1403 Ghiberti received the commission for executing the door, which, still in a good state of preservation, commands our admiration, at the Baptistery. The composition of this door greatly resembles the door-valves by Andrea da Pontadera, so much so that they might be confounded, a fact which indicates how much the spirit of Andrea's genius influenced such a master as Ghiberti, whose second door Michael Angelo proclaimed worthy to be the doorway to Paradise.

The valves of this door date back to 1425, and in them Ghiberti abandoned the distribution of parts adopted by Andrea, and felt that it was fair for him to enter his bas-reliefs into direct competition with the painting of his times. He made paintings, as it were, out of his sculpture, surrounding each scene with an architectural or landscape background, richly staged. These doors were richly gilded, and here and there are still to be seen bits of the original gilding, but the present coloration of the doors is, to-day, that of bronze.

A matter discussed in these last years is the cause which might have destroyed the ancient gilding, and a very conscientious student declares that in modern times the doors were given a coat of paint. This statement, denied at first, has at length been admitted; for documents have been found which confirm the story that the doors of the Florentine Baptistery did receive a coating of bronze-colored paint: so we should be grateful to those who have made moulds of these doors, that we are, to-day, able to see traces of gold on Ghiberti's work, for the material used in making the moulds tore away the bronze paint, but left the gilding. This may appear doubtful to the reader, but I have the documents which support my statement.

Ghiberti's second door exerted a very marked influence throughout Italy, and the monumental bronze door of the basilica of St. Peter's at Rome, ordered by Pope Eugenius IV, from the Florentine architect and sculptor Pietro Averulino, called "Il Filarete" (died 1465?), follows the theme of Ghiberti's second door; so, too, does the little bronze door — a very pretty bit of sculpture — with which Jacopo Sansovino, about 1540, decorated the entrance to the sacristy of St. Mark's at Venice. As for the door at Rome, it is in merit far beneath what one might expect, when account is taken of the fact that it was intended for the noblest temple of the Christian religion. Life and character are lacking in these valves upon which Averulino had several collaborators, but amongst whom certainly was not Simone di Giovanni Ghini, as stated by Vasari.

I am sorry not to describe for the reader, at length, the door of the Castle Nuovo at Naples — very remarkable from the historic point-of-view — bronzework dating from 1462–68, and the doors of the north sacristy of the Cathedral of Florence, executed by Luca della Robbia, between 1447 and 1474, and originally ordered in 1437 from Donatello; and I much regret it, for the latter work is of the first class, sometimes forgotten, for the reason that Luca della Robbia's fame rests on his enamelled terra-cotta work. During his career Donatello did model the bronze doors of the sacristy of San Lorenzo in Florence, but the work adds nothing to the renown of this great master of the fifteenth century.

If we turn to the illustrations, particularly to the wooden doors at Lucca, Monteoliveto Maggiore, in the province of Siena, Parma and Pistoja, desire seizes me to discourse upon Italian Renaissance wood-carving, especially in that exquisite Tuscany, where bloomed the genius of Ghiberti, Donatello and Michael Angelo; for it is Tuscany, the home of so many admired sculptors, that produced a quantity of carved wooden doors, which decorated our monuments, even in the Middle Ages, as, for instance, the door-valves which adorn the Cathedral at Lucca, and the Baptistery at Pistoja. And since we have many works from this company of wood-carvers, a large part of whom were also architects, or sculptors, or painters, attaining sometimes the highest excellence with their works, we have a sufficient explanation for finding amongst these carved doors veritable *chefs d'œuvre* of composition. A certain architectural frigidity characterizes this class of doors, and the use of caissons, which is very often repeated in the ceilings of the halls and rooms in the time of the Renaissance, gives a rather monotonous aspect to our fifteenth and sixteenth century doors, which, nevertheless, in the course of the last half of the latter century, to some degree abandoned the rigid formula which I mention, and are enriched with *motifs* which Classicism would not admit.

As a sample of the transition between the Renaissance and the work of the Baroco period, we have the bronze doors at the main entrance to the Cathedral of Pisa. Here we perceive an effort of fancy which aims at an independence wholly unknown to the artists of the "high Renaissance," as my friend E. Muntz would say. The storied doors are generally attributed to John of Bologna or "Giambologna," the dean of the craft, to whom Italy owes a quantity of fountains. This master sculptor, born at Douai, France, 1524, and who died in Florence in 1681, must have received the order for these door-valves, and also for those which closed the two side doorways of the cathedral; but, although after rather indefinite data, the ascription of the work to Giambologna has been agreed to by most writers, recent investigations have shown that the actual part which the Flemish master had in these doors is really very modest, and might practically be left out of consideration. These doors were modelled by several artists of the school of Giambologna; such as Giovanni Caccini, Pietro Francavilla, Gaspare Mola, Angelo Serani, Pietro Tacca, etc. Moreover, the architectural design cannot be credited to the master, but should be attributed to Raffaello Pagni. This makes it apparent that an important series of sculptures at the end of the sixteenth century (the doors at Pisa were begun in 1596, and the master founder, Domenico Portigiani, who did almost all the founding during that period, died in 1602) were carried out by a group of sculptors most of whom had been almost wholly lost sight of.

A. Melani.

THE RELATION OF NATURAL TO ARTIFICIAL BEAUTY IN LANDSCAPE.

It chanced seven years ago, when we had to chronicle the untimely and particularly pathetic death of John Stewardson, that we had just noticed in *Lippincott's Magazine* the last piece of writing he had time to complete: a forecast of American architecture, and this we obtained permission to lay before our readers a few weeks later.

In the same way it happened that on the day we learned of the equally regrettable death of John Stewardson's friend and partner, Walter Cope, the mail brought us the report of the Fairmount Park Art Association, which contained the following lecture delivered before the Association recently, in all probability the last piece of writing by Mr. Cope: —

In announcing the subject for discussion this evening I feel that I owe you an apology for using such a broad, comprehensive title. Certainly, I do not intend to inflict on you a comprehensive discussion of the subject. It is too broad and touches too many details for me to attempt anything like a thorough treatment in one evening. "The Relation of Natural to Artificial Beauty in Landscape" is, in fact, a subject on which volumes might be written.

And first, as to the word "landscape," — I intended to use it in its widest sense as applying to any scene, whether that scene contain any element of man's handiwork or not. At the present time the subject of "landscape-gardening," "landscape-design," "landscape-architecture," or whatever it may be called, is receiving a great deal of attention, but in speaking of artificial interference with Nature, I should like to abolish the word "landscape" and use, instead, the words "out-door design," reserving "landscape" for that broader meaning which would cover every scene, whether natural, artificial or partaking more or less of both, anything, in short, which the eye may meet under the open sky.

At this age we are in the midst of great structural and engineering undertakings to meet the practical needs of our present civilization, with little thought as to their artistic expression. But times will change and the practical developments of applied science will some day give way to more definite efforts to make the face of the earth more beautiful. It may be a question only of a generation or two when the imagination of the multitude may cease to be moved, as it, undoubtedly, is to-day, by the great developments in transportation, the building of huge buildings and swift steamships, and by the constant improvements in electrical propulsion and communication. And when we shall have solved all these questions of applied science and are content with our achievements in that direction, we may turn our efforts to still greater achievements in an artistic way. To-day, those in whom the artistic sense is dominant are in the minority and this has always been so and probably always will be. But to-day differs from past ages in this fact, that the great majority of people in this age do not really care for artistic expression, do not care as much for the beautiful as they do for what we commonly call "the practical." To-day the artist occupies a relation to the great mass of humanity almost analogous to that which the mediæval alchemist or scientist held in the day when it was the artist who counted, and who captured the applause of the multitude. It is true that the support of the multitude is constantly increasing, but as yet this support has not swept everything before it, and a utilitarian and purely practical tendency is still dominant. The artist of to-day is not in need of better criticism. He has as good criticism as any age has produced, but he is in need of a greater amount of criticism and of the backing of the majority of the people, the criticism of the masses which finally, if not immediately, condemns the inartistic and upholds that which is sound and true in art.

Whatever scene our eyes may light upon, whatever landscape we may contemplate, there can be only two factors — two agencies — which determine its effect upon our minds, upon our sense of the beautiful — Nature and Man. Nature, of course, is a very wide term, but we know what we mean. It is the supreme, the eternal, the ever-present factor. We cannot escape from it entirely if we would, for even man in his works is governed by Nature's own laws. No one of them can he undo or abrogate. The primary laws of physics must govern everything which he builds, and the artistic expression of his building must reflect an acknowledgment of natural laws. But in distinguishing between these two agents, I mean to refer to Nature as that which she does without the aid of man; what she would have done had man never lived upon the face of the earth. On the other hand, in many scenes and many things which we love to look upon there is predominant the other agency, and our delight in its contemplation at times transcends even that which we feel in looking upon Nature; the thought that this stone has been hewn and set, this building has been reared, this path has been cut, these trees have been planted by *man* and to satisfy man's needs and ideals. Perhaps no two of us could agree upon the intensity of pleasure derived from the contemplation of a great cathedral, on the one hand, or the majesty of a rock-ribbed mountain, or the boundless sea, upon the other, nor is it worth while that we should agree. To some of us Nature appeals more than art, though I believe that to most of us each appeals with almost equal force, according to our varying moods.

It follows, then, that if we are to arrive at the true sources of artistic enjoyment we must cultivate and love and study first of all *Nature* and after that man's history, man's ideals, all, in fact, that has led him to express his wants, his aspirations, in physical form. This last is nothing more nor less than the study of architecture in its broadest sense. For all that man builds with an eye to use and beauty is architecture in the sense that it is governed by one system of principles and laws. From time immemorial man has built houses and temples and bridges, has hewn roads and laid out gardens and wrought whatever pleased him upon the face of the earth to satisfy his needs, material and spiritual. And from time immemorial it has pleased him, and it pleases us to-day, and will always please our descendants, to follow certain methods, certain principles of dimension, direction and proportion in that which we lay out and build. These methods are, no doubt, deduced primarily from our innate sense of natural laws. But it is scarcely necessary to go into the source of them. Suffice it to say that it is an indisputable truth that man prefers to set stones level, to build walls straight, or, at least, symmetrically curving, to make level places on which to stand or walk, whether they be floors beneath a roof or terraces under the open sky. His sense of mastery over Nature is expressed in doing things not as Nature would do them. Nature upheaves and splits and tumbles down her rocks. Man hews them into blocks and sets them level and true and rears them into walls. So it always has been — so it ever will be.

In every landscape, then, these two elements must remain distinct. We cannot absolutely unite them nor deceive ourselves into thinking that we can. We cannot modify to any extent worthy of consideration the process of natural growth, or at least such modification can be but temporary. Nature is absolutely continuous and persistent. We must then regard ourselves only as intruders — invaders. It is true that we can interfere with Nature, but it is my purpose to point out that it is not as interferers that we should regard ourselves. As invaders we may, for we could not avoid the position if we would, unless, indeed, we return to absolute savagery.

About the middle of the century just passed, there grew up a school of landscape-gardening, so-called, which was, perhaps, a natural reaction against the extreme and lifeless formalism into which architecture had descended. This school made a complete revolution in the principles which had always before that time governed all artificial interference with the face of Nature. It did not propose to do merely what man had always been pleased to do in the way of laying-out and building and planting, but instead proposed rather to imitate and follow Nature on the lines which she has always reserved to herself. This school still has its disciples, and the results of its work are all about us and have caused, to my mind, a most deplorable subversion of the laws and the principles upon which beauty in landscape must depend. Nature is entirely able to do without the aid of man, and it is equally true that it is impossible for man to imitate Nature without making himself and his work more or less ridiculous. When he attempts it, he must cast to the winds all the methods, all the principles which he has developed in centuries past, and he must play at his game as a child would play at horse. But every once in a while he has to leave his play to attend to the serious matters of life, to build a house or a flight of steps, and these he has to do on the same good old lines that have always prevailed in architecture. He may build his silly little rockeries in would-be imitation of Nature and cut his meaningless winding walks, but he cannot cease to build civilized buildings, he cannot be content to live in caves or rude, shapeless huts.

The moral of all this is, let Nature alone, except where, to satisfy your own practical needs, to satisfy your own ideals of the beautiful, you invade her sacred domain with works that are frankly and freely designed upon lines not imitative or in competition with her, but rather on lines which have commended themselves to man as necessary, reasonable and beautiful from his own particular point-of-view, lines which embody all which he has ever developed as an expression of his own mastery over the earth.

Can we, then, intrude upon Nature in anywise without destroying its charm? Decidedly we can. We may invade Nature with our works and find the result all the more charming; and, in the same manner, Nature may, and does, invade our works only to increase their charm. But the source and reason of our invasion must announce itself frankly. We must feel that this space through the forest has been cleared and levelled in order to meet some human need, that it reminds us of the existence of man and enforces the *human* element, and so serves as a foil or contrast to Nature's work. To look at the other side, what can be more beautiful than the work of man overgrown by Nature — the ruined abbey wrapped in ivy, or the old Italian garden, where the balustrades are half smothered in vines and the vistas down the long paths and terraces are framed between giant cypresses, growing without restraint, long after the builders of those stately balustrades and fountains are forgotten!

Nature, in her own wildness and ruggedness and majesty, we cannot rival, and she, on her side, makes no attempt to rival us. The majesty and beauty of the lonely mountain-side we cannot create, but we may invade it without destroying its charm. Nay, more, we may introduce the human element in a way only to heighten and increase that charm, and it is just where those two elements meet, each in its purity, its frankness, its directness, that we often find the very highest and keenest sense of the beautiful. Can anything be compared in beauty with the views from out the terraced gardens of the Italian lakes, across the deep, smooth surface of the water to the great mass of the Alps beyond? Is a flower ever more beautiful than where it has grown in the crevices of a mouldering ruin? And which is most desolate — the city street, devoid of one touch of natural growth, whether of leaf or flower, or the unbroken expanse of a trackless plain? We have our moods when each of these may please us and Nature has every advantage both in majesty and beauty, but it remains that man is a social being, and, as a rule, he loves to be reminded of the existence of his fellow-man both past and present. He will never resent the evidences of that existence if they occupy a reasonable and proper place.

To come, then, to details: Where and how may we invade Nature? First, we *must* build our houses, our cities, we must bridge our rivers and ravines, we must lay out our roads, even our railroads, and we must go even farther. We must, if we are to satisfy our sense of eternal fitness, make our terraces and gardens where, while asserting our dominance, we can hand over a larger share to Nature's decoration of trees and flowers. Nay, we can even take these trees and flowers and arrange them in formal lines, as we might build a wall, according to our own ideals of what man should do. Nature would never do so of her own accord. An avenue of trees planted at regular intervals, or a trimmed hedge, is as much and as confessedly artificial as the road which they skirt. The box-borders of a garden are, in a sense, as architectural as a stone balustrade. They are simply the works of man in a living medium instead of in a dead one. It is merely a question of how much we shall do of this sort of work, how much is appropriate in a given place to emphasize

this mastery of man over Nature. Manifestly, it must depend upon the dominance with which we wish to assert, the extent to which we wish to remind ourselves of, the human element. A planted avenue has no place in the midst of an uninhabitable plain. It belongs as part of a house, some human arrangement made for man's use and delight. But in proportion as we separate ourselves from centres of human life should we restrain ourselves in making artificial arrangements of planting. A garden is nothing but a great out-door room, a house, so to speak, under the open sky, in which the levels, the width of the paths, should be determined by the same principles of design as we would apply within our houses in the arrangement of our rooms, but whose decoration and coloring, so to speak, are turned over to Nature. And a park made for the use of the multitudes of the city will, in the same way, find its greatest beauty in allowing man's work and Nature's to follow each along its own lines. Why is an avenue of great trees more majestic than an equal number of trees equally spaced, but artificially dotted at random over a given area? The avenue in its arrangement, in its spacing, is *man's* way of arranging trees. It is like a peristyle of great columns; but an equal number of trees equally spaced and yet at random is neither man's way nor Nature's. It expresses neither one thing nor the other, either to the lover of art or to the lover of Nature. Nature does not plant her trees like a crop of corn at suitable intervals and of equal age and size, and it is only where there has been an unsympathetic and unnatural and Philistine interference on the part of man, whether in planting or in cutting down, that we find trees grouped aimlessly, but at equal intervals.

Nature does not build river-walls or bridges or roads any more than she does houses, much less does she make railroad cuts or embankments. What, then, should be our rule in dealing with these? The cuts and embankments for railroads our landscape-gardeners have, fortunately, generally given up in despair. Surely, if not discouraged, Nature will take better care of these than man can possibly do. She will gradually shroud them in trees and thickets and hide the ugly bare gashes that the hand of the engineer has made. Our Wissahickon drive is a beautiful example of this. Did it ever occur to you how frightful, how hideous the Wissahickon must have been when that drive was made — the rocks tumbled down into the stream in great masses? Left alone, Nature has made it utterly beautiful. But what of our river-walls and bridges? Do you think to make these beautiful by building them carelessly, roughly, on lines that are not true and perfect and beautiful architecturally and at the same time cut off all chance for Nature to hide their naked ugliness? Or should they be built as we would build any work which we are pleased to call a true work of art, a true masterpiece of architecture? Shall they be carefully designed and laid out on perfect curves as we would a great building? Certainly, — why not? And the only limit in the matter of costliness and perfection of finish should be the predominance which we wish to give at a given place to the human over the natural element. The well-hewn and graded slopes and levels and bridges of a great mountain-pass may rightly be treated as merely utilitarian, laid out on the lines of the most utter reasonableness, the best engineering, — just, for instance, as the Wissahickon drive, — without undue expense of finish or perfection of curve. Nature will take care of them if she is left to herself, and as time goes on the ravage of man's hand will be lovingly hidden by moss and leaf, and there will be nothing to mar our sense of the reasonable and beautiful. But in a great city or its park or within the well-kept precincts of a country place close to the house, where man must be constantly reminded of his own existence, where people congregate, there it is appropriate that the greatest architectural perfection, the most careful study of design, should be given to every artificial work. We are so trained to think that what we build in the shape of a house must be carefully studied by men who have given their lives to the subject, whose life-work it is to design, that in this last century we have forgotten that all building, all artifical interference with the face of Nature, as I said before, is a part of the same thing, — is only the visible expression, — the physical expression of man on the face of the earth. And the same principles of design that determine the proportions of a façade, — whether an arch shall be a little higher or a little wider, — those same principles govern the dimensions that we would spread out on the face of the ground. A flight of steps out under the open sky is just as much a matter of nice design and proportion as a façade of a building. We are not used to thinking so, especially here in this part of the world, but I believe we are coming to it, and every one did think so before the beginning of the century just past. All out-door design was considered as only a part of architecture, and the same nicety and skill applied to it as in the building of houses. The idea is not only unfamiliar to us of the present day, but it is one I have myself found very hard to put into practice. We have all of us grown up in an atmosphere of believing that the work a man does with pick and spade is an entirely different thing from what he does with hammer and saw; but it should not have been so considered.

But let Nature, so far as she will, clothe this work of ours — whether it be simple or elaborate — in her own way, and still the effect will be more and more beautiful. The two elements will stand in stronger and stronger contrast to each other, not in discord, but in utter harmony and agreement. I by no means urge elaboration or overmuch ornament in that which we do. In this we should be governed by the same rules of good taste and restraint that should characterize every architectural work.

In this country we have been so affected by the school of landscape-gardening, to which I have referred, that we are afraid of the doctrine of formalism. The American of to-day, when he sets about improving the landscape, is very apt to think that he should confine his formal work to buildings, and, after that, pitch into Nature with spade and axe and pruning-hook and impress upon her the fact of his existence by thinning out trees in one place, spotting young trees aimlessly about in others, laying out meaningless and meandering roads and paths and building rustic bridges and what not, with the idea that he is showing his sense of harmony with Nature. If he builds walls or outlying works in stone he feels called upon to give them what he terms a rustic appearance. He fits their tops with jagged pieces of stone, paying but minor heed to lines and levels and to the question whether any wall is needed or not. Now, there never was a piece of stone-work that suffered from being too well and decently laid, and there never was a path that looked the better for curving to a given spot when the curve was due to no natural obstacle and did nothing to make the grade easier. And when we come to the cutting and planting of trees as practised, perhaps more particularly in this neighborhood than any other place that I know of in the world, I can scarcely restrain a feeling of bitterness. What other part of the world has been more richly endowed by Nature with noble native trees than ours, or what more beautiful forest undergrowth can we find than that which springs naturally where it is allowed in the woods of Pennsylvania? Why should we insist on discarding our native growth in favor of trees which are not at home in our country-side and never will be? The pointed spruce, which belongs among the rocks and precipices of the mountains or the rocky coasts of New England, has no sympathy with our softly rounded hills — its aggressive, pointed form needs the contrast of huge rocks and cliffs to harmonize with any open landscape. Can the poor, insipid maple (that is perhaps a little hard) compare in beauty with our sturdy native oaks and chestnuts and sassafras? And as to undergrowth, — why do we insist on cutting off the supply which Nature is always providing of young trees that will, in time, take the place of the taller ones as they die? And why, too, in cutting down our thickets, do we deprive the birds of their nesting-places and the ground of its natural store of moisture, so necessary to the health of trees? There is a good old word in our language which is becoming obsolete in this part of the world, and the fact bespeaks our lack of appreciation of what Nature will do for us if we let her. It is the word "copse," or "coppice," — that natural tangle of trees, little or big, with broken outlines against the sky, a mere fragment of woodland, perhaps, but in itself offering a thousand beautiful studies in rounded or broken outline of twig and foliage. Where can we find more lovely masses of broken skyline, of color, light and shade and blossom than along our untouched hedge-rows? What has the nurseryman given us to take the place of these where they have been destroyed?

If, then, we are to invade our woods, let it be only with wood-paths, and let these be as modest as may be where few travel over them: and where the multitudes must needs enjoy the woods, let good, wide, decently levelled and decently kept paths be run. If it is distressing to see a rough railroad-cut or an embankment in the midst of beautiful mountain-scenery, it is equally so to see a wood overrun by people. I know of nothing more unpleasant than a picnic-grove. There is in it only the feeling of desecration. Where people, then, must congregate beneath the shade of trees, let broad walks be provided in a decent and formal way, a way to acknowledge man's self-respect and, at the same time, his reverence for Nature, and let those parts of the woods not open for such walks be kept sacred, if possible, from human footprint or touch.

If trees must be planted (I except avenues), plant them as Nature would, not at "suitable" distances and each one just as big as the nursery will afford, but sow them hit or miss as Nature does and close together or far apart as chance may place them, and not all of a size. For, if you are to grow a wood or a grove, you must leave to Nature to determine which young tree shall outstrip its neighbors. If you cannot persuade yourself that this will produce a beautiful effect, go into any wild natural wood and see how the roots of even the finest trees are interlocked and their trunks almost united in places. It is by this very overcrowding that Nature produces her most beautiful effects of light and shadow, of contrast; it is the first cause of all picturesqueness in bough and foliage. *Luxuriance* of natural growth should be our aim.

On the barbarous practice of lopping trees I need scarcely comment, but let me make another protest. Having planted flowering shrubs, why should we trim them into rounded balls every winter and thereby cut off most of the bloom-bearing wood? In their proper places the trimming of hedges and box-borders and yews into stiff architectural shapes is one thing, but to trim shrubs, which are beautiful because they bear long, feathery sprays of flowers, has no excuse. It is generally from last year's wood that the flower-bearing shoots spring, and to cut these off each winter means little bloom in the following spring or summer. We need waking up in some of these things. All about Philadelphia this is the practice among the gardeners. People who believe that they have beautiful places and have set out plants to grow allow their gardeners to sweep over them every spring and trim these feathery shrubs into round buttons; it is senseless, aimless, ugly, unheard of! I do not know where it came from, but it certainly prevails in the districts around Philadelphia. If flowering shrubs *must* be cut down, well and good, but take them down entirely, just as you pick out a fern from the midst of a group without marring the beauty of the rest. Trimming

a flowering shrub is as absurd as trimming a maiden-hair fern with a pair of shears.

To sum up: I would urge simply that we take Nature more thoroughly as we find her and as she would be if we let her alone, that we treat her with more respect and allow her free sway where we acknowledge her right to exist at all, and that in all we do of artificial work, whether it be to build houses, to level and open roads, to lay-out walks and gardens, we do all with an eye to the eternal fitness of things, not hoping to improve upon Nature, but merely to make beautiful works of our own. These cannot, if they are really beautiful and reasonable, ever interfere or mar to any extent the beauty of the landscape, but will only serve in the long run to heighten its interest and charm. If this country should ever become depopulated in future ages, let the stranger wandering over it feel not only the beauty of its natural hill and forest and river, but, as well, the beauty and perfection and dignity of all that we have left behind us.

Before closing I have just one suggestion to make — one thought to lay before you — and I do it with all due deference, but with the greatest seriousness. The Fairmount Park Art Association has, it seems to me, devoted itself exclusively to only one field of art — to Sculpture — and that, one of the most advanced and developed and intellectual phases of art — one of the finishing touches. "Fairmount Park" and "Art": these two words are associated in my mind in a way which finds, I confess, a very incomplete reflection in the work of your Association. There is a far wider and more appropriate field for art in Fairmount Park than you have ever touched. The fact is that, until there is a place that needs sculpture for its decoration, sculpture is merely an intrusion. To place miscellaneous statues without reference to any scheme architectural in its broadest sense, as I have endeavored to explain, is treating neither sculpture nor Nature fairly. There should be the connecting link, "The Out-door Design," as I have called it, which leads up to sculpture and requires sculpture as its highest accent. What you have been doing is too much like varnishing a board before it is planed or before it is made into anything. With all due deference I would like to suggest that your Association should take up the study of the truly artistic possibilities of Fairmount Park with perhaps greater reverence for Nature, and for art as applied to it, and less concentration upon sculpture alone. The artificial works that have been perpetrated within the limits of Fairmount Park have, unfortunately, been executed with little artistic thought and skill. They are, to be frank, many of them abominably bad and a bitter disappointment to those who know that beauty instead of ugliness might have been created in many places. Nature has been desecrated in many ways, both in laying-out and planting, while the finer touches have been omitted almost entirely or left entirely to the work of your Association. Cannot the Fairmount Park Art Association stand for an insistence on more artistic work in Fairmount Park in the way of bridges, walls and roads? Must we from year to year look on while the beautiful wild banks of the Schuylkill are lined with vulgar river-walls, built with less beauty of curve or precision of line than a railroad would use and yet dressed in ostentatious fringes of jagged stone? I know, of course, that your work is conducted quite independently of the commissioners of Fairmount Park, and that the ill-judged and badly designed works within the limits of the Park are not your work. But, all the same, you have taken upon yourselves with your name a responsibility which the public of to-day, and, still more, of the future, would hold you to if it could. Can you not formulate, with all the means at your command and with all the weight which your membership carries, some plan by which the great possibilities of the Park may be realized? While you are paying your thousands to artists the city is paying its tens of thousands to workmen. Is there no method by which these two forces may be brought to work in one common channel to one common end?

WALTER COPE.

SOCIETIES

THE LATE JOSEPH M. WILSON, MEMBER OF THE PHILADELPHIA CHAPTER, A. I. A.

RESOLVED, That in the sudden and lamented death of Joseph M. Wilson, a Fellow of the American Institute of Architects, we are called upon to mourn the loss of a man distinguished by high professional aspirations and attainments, a dignified and courteous gentleman and a citizen of distinction. As members of the Philadelphia Chapter A. I. A. and as individuals, we mourn his loss and honor his memory.

Mr. Wilson was elected an Associate of the American Institute of Architects in 1871, and a Fellow in 1876. During his whole connection with the Institute he aided with voice and pen in the advocacy of the highest ideals of professional practice and honor. Our sympathy is duly tendered to his family and business associates in their bereavement.

Resolved, That this resolution be entered upon our records and copies sent to his family and to the firm of which he was for many years the honored head.

ILLUSTRATIONS

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

HOUSE OF MR. JOHN M. SULLIVAN, PETER PARLEY ROAD, JAMAICA PLAIN, MASS. MR. J. C. FOWLER, ARCHITECT, BOSTON, MASS.

HOUSE OF MRS. CATHERINE SMITH, PETER PARLEY ROAD, JAMAICA PLAIN, MASS. MR. JUNIUS H. MORSE, ARCHITECT, BOSTON, MASS.

THE FAULKNER HOSPITAL, WEST ROXBURY, MASS. MESSRS. KENDALL, TAYLOR & STEVENS, ARCHITECTS, BOSTON, MASS.

THE problem presented to the designers of the Faulkner Hospital, a fireproof suburban hospital of about fifty beds, was a somewhat unusual one, as the only possible location on the lot purchased was on a slope, to the south, of about 20 feet to the hundred.

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This central combination building is four stories in height and, as the pavilions can properly be of but two stories, the exterior was studied to produce a low domestic effect — the different departments disposed on the various floors as shown in the accompanying plans, with the kitchen, laundry and servants' rooms on the top floor.

The general scheme is to use one pavilion for male patients, the other for female, with the surgical cases on the first floor, and the medical cases on the second floor. Still further classification is possible with the isolation and private rooms provided.

The construction is of steel and concrete, vaulted walls, steel studding, and hard plaster. Exterior of water-struck hard brick, wide joints of white mortar, so laid as to produce the diaper shown. Trimmings of granite, terra-cotta and copper.

The floors are of maple, marble and terrazzo; finish of ash, and everything is of the most solid and substantial character.

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NOTES AND CLIPPINGS

COLORING MUSEUM CASTS. — The Art-director of the Bremen Museum has astonished his fellow-citizens by coloring and painting his immense collection of casts in imitation of the marble or bronze of the originals.

The work has been done with the sanction and help of Professor Ruedorffer, of Munich, and according to the *Kunstchronik*, the result has been greatly to enhance the interest of the collection, and relieve the monotony of long lines of white plaster figures. — *N. Y. Evening Post.*

Heating Shops by the Fan System. — Henry I. Snell, writing in *Cassier's Magazine* on the fan system of heating, says that the first shop heated by this system was furnished in 1873, and that now nine-tenths of all the large modern shops are using it. With it a fan-blower or an exhausting-fan of suitable design is located at any desirable place within or without the building. At the discharge outlet of the blower, or the inlet side of the exhauster, a proper amount of steam-heating surface is placed in the form of coils, cast-iron sections with vertical pipes of steel, or any of the various forms of cast-iron radiators, enclosed in steel-plate casings or brick chambers and connected with the fan. At the discharge outlet of the fan should be a main warm-air duct from which will lead various branches, properly designed and located, with outlets for the most efficient distribution of the warm air. For supplying the heating coils live steam may be furnished from the boilers, or exhaust steam from the engines driving the works. The power for driving the fan may be supplied by a steam-engine, electric-motor, or belt transmission from main shafting. The cost of installing a fan-system is very often less than the instalment of a system of direct or indirect steam-heating, or hot-water heating, of equal effectiveness. The determining quantity in the cost is the amount of galvanized-iron air-distributing pipe, which is a varying quantity in shops of the same size and exposures, depending upon the existence and location of party-walls or office-rooms, and the location of the apparatus.

Italianized English. — The opening of the tunnel in the heart of the Eternal City, through the Quirinal Hill and under the royal palace, has brought forward the interesting question of what it shall be called. At first the English word tunnel was used, as a matter of course, the pronunciation being peculiar, but still recognizable, until a cry was raised by the purists, who insisted that as there was an Italian word it should be used. The choice lay between "galleria" and "traforo." The *Giornale d'Italia* opened a kind of referendum among the best-known authors and literary people, the result being that the majority were for "traforo," which means "through a hole." While in England foreign words, especially Italian ones in music, are accepted in their entirety, such as "crescendo," "piano," "allegro," etc., in the Peninsula they are always Italianized, which produces some most ludicrous results. For instance, beefsteak has been turned into "bistecca," which is applied not to the kind of meat, but to the mode of cooking it, so that one demands beefsteak of veal without a smile, the waiter not having the remotest idea that you are using or misusing a foreign word. Another term is "tramway," which has been made over into "tramvia," and, of course, means the same thing. Then there is meeting, which has become "miting," and to which another syllable has been added, making "mitingaio," which signifies a man of high-flown language who impresses the masses. — *Pall Mall Gazette.*

Even a Draughtsman can be a Hero. — In the crowd that watched the fireworks display in Madison Square Park on the night of election day was a man of fifty, a draughtsman, employed by a contracting-company of this city. He was near the men who were setting off the pieces, and when the explosion occurred, a big piece of one of the iron mortars tore off one of his legs. Panic and confusion followed the disaster. There was no immediate aid for him, nor for a small boy lying near by. The man called for aid for the child, but, though using four languages, he could not make himself heard or understood. He lay there until a dying man called for a priest. No one else responding, the injured man dragged himself over the intervening distance and managed to raise the poor fellow in his arms, while a priest, opportunely arrived, administered the last rites. Then the unnamed hero patiently lay, waiting for assistance, meanwhile pressing his thumb on the severed artery. After a half-hour's delay, he reached the hospital. There the surgeons said that his life was saved only by his cool precaution. At the hospital the patient was cheerful, even joking over his maimed condition. Only one thing worried him; he feared he would lose his situation. Learning of this, his employers promptly sent him word that his place would be kept open. Now, the only trouble they have on his account is because of his constant requests that some of the office's work be brought him at the hospital. He had been engaged on an important set of drawings, and to pacify him, he has been allowed to work at a few of the plans while lying in his cot. — *N. Y. Evening Post.*

Incandescent Lamps. — The manufacture of an incandescent electric-lamp is of special interest because many of the operations have heretofore been regarded as trade secrets and carefully kept from the public. The delicate filaments which produce the light are formed by squirting a paste made from cellulose (wood pulp) through dies, from which it emerges in the form of fine threads, which when dried are tough and flexible. These threads before they are dry are formed into the desired shape. They are then packed in carbon-dust and subjected to intense heat for many hours. The cellulose is completely charred, and the filament now practically consists of charcoal. It is then suspended in an atmosphere of hydro-carbon vapor, in a vessel in which a partial vacuum has been made, and a current of electricity sufficient to bring it to incandescence is sent through it. This decomposes the hydro-carbon, and a carbon-soot somewhat resembling graphite is deposited on the filament. This is technically known as "flashing." After this treatment the filament has a metallic lustre resembling polished steel. The glass-bulbs are blown in moulds to secure absolute uniformity, and as they come from the glass-house they are perfectly smooth at the rounded end and have a long open neck. To the rounded end is fused a short length of glass-tubing opening into the interior of the bulb. This is subsequently used for connecting the bulb to the exhaust pump. For making the connection through the glass between the carbon-filament and the wire the most satisfactory material is platinum, because it adheres firmly to fused glass and because it expands and contracts at the same rates. If this were not the case when it got hot through the passage of the current it would either expand more or less than the surrounding glass, and either break it or make a space through which air would leak. So through the little glass stopper which will eventually project down into the neck of the bulb are fused two platinum wires. This stopper, which has a flange at one end, is now called the mount or stem. Next, the filament is fastened to the ends of the platinum which projects from the stem. This is accomplished by means of a special cement which will stand a red heat. Over this paste is deposited a layer of carbon. The paste is then dried in an oven, and the stem, with its attached filament, is fastened onto the bulb by fusing the flange on its upper end about the neck of the bulb. After this joint is carefully tested to be sure there are no leaks, the exhaustion of the air is accomplished by means of a mechanical air-pump, the last traces of gas or air being removed from the bulb by chemical means. When the vacuum is sufficiently high the tube through which the air has been exhausted is sealed off by means of a small lamp, leaving the small round tip seen on the spherical end of the finished lamp. The lamp is now practically completed, and is sent to the testing-department. Here it is subjected to a series of severe tests before it is considered ready for the market. If it passes these successfully the base (the portion by means of which it is screwed into a bracket) is cemented on, and the completed lamp goes to the shipping-department. — *The Electrical World.*

Streetside Trees in Washington. — With the same care that a Tammany district-leader studies the voting strength of his bailiwick, Col. John Biddle, the Engineering Commissioner of the District of Columbia, enumerates the trees in the public streets. This year the total number of trees residing in the district highways was 84,487. The death-rate of trees for this year was 647; the new trees set out numbered 2,600. The varieties used for planting this year were elms, lindens, Norway, silver and sugar maples and pin and willow oaks. A nursery containing 22,000 seedlings is also maintained for the purpose of providing a supply of trees for annual planting. Washington, more than any other American community, is a city of trees. The broad avenues and low buildings combine to offer the least possible amount of protection from the Southern sun, and only the shade of the numberless trees makes the streets tolerable in summer. Of late years the asphalt paving has caused a great mortality in trees. Not so many years ago Pennsylvania Avenue, from the Treasury Building to the Capitol, was a finely-shaded promenade, along which Congressmen walked almost in procession up to the Capitol in the morning and back in the afternoon. Those trees are gone now, and the pleasant morning stroll is impossible when the sun begins to strengthen. — *N. Y. Tribune.*

Anthracite Coal. — Anthracite coal, which we are all so anxious to get just now, was, less than a century ago, when the first efforts were made to market it, denounced as a fraud. The people of those days declared it was impossible to burn such "stone." At the close of the eighteenth century, in 1791, the Lehigh Coal Company tried in vain to sell in Philadelphia the new fuel which had been found on its property in Carbon County. Several attempts were made to burn anthracite, but for a long time the results were uniformly unsatisfactory. Finally, in 1815, the secret was accidentally discovered. Tests had been made in a rolling-mill at Schuylkill. After repeated attempts to make it burn by means of frequently raking the fire, the workmen gave up the experiment in disgust, filled the furnace with the worthless "black stones" and left it. Returning a few hours afterward they were amazed to find a fierce fire with a terrific heat, and thenceforward the problem of burning anthracite was solved. But the people were slow to believe that it was possible to get heat by burning the black stones As late as 1833 one Charles Miner wrote as follows: "While we push forward our labors at the mine, hauling coal, building arks, etc., we had the greater difficulty to overcome of inducing the public to use our coal when brought to their doors, much as it was needed. We published handbills in English and German, stating the mode of burning the coal, either in grates, smiths' fires or in stoves. Numerous certificates were obtained and printed from blacksmiths and others who had successfully used the anthracite. Mr. Cist formed a model of a coal stove and got a number cast. Together we went to the several houses in the city and prevailed on the masters to allow us to kindle fires of anthracite in their grates erected to burn Liverpool coal. We attended at blacksmiths' shops and persuaded some to alter the 'too-iron,' so that they might burn the Lehigh coal; and we were sometimes obliged to bribe the journeymen to try the experiment fairly, so averse were they to learning the use of a new sort of fuel so different from what they were accustomed to." But even these methods were slow to overcome popular prejudice. It was only when, through a sudden rise in the price of charcoal, the manufacturers began to use anthracite that the new fuel found its way into favor. — *Toronto Mail and Empire.*

The Reichsrath Fountain in Vienna. — The grand fountain at the approach to the Reichsrath in Vienna, the imperial Parliament House, has recently been finished. From the centre of a great basin of marble rises a pedestal with a colossal figure of Minerva. Against the four sides of the pedestal are groups of figures larger than life. In each group two figures represent Austrian rivers, so that eight rivers in all are symbolized. Between each pair a stream of water pours from a jar into the basin, while behind are genii and cupids. — *N. Y. Evening Post.*

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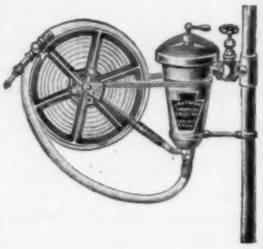

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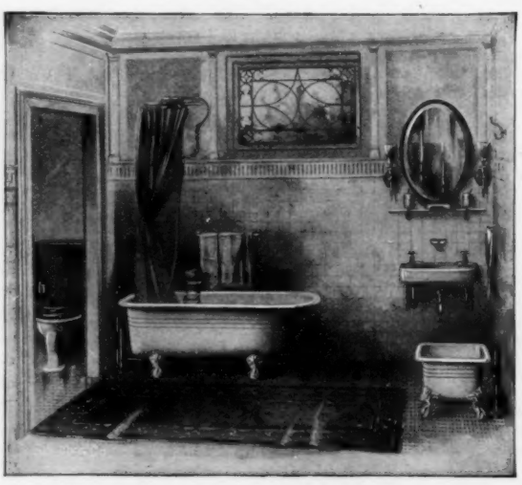

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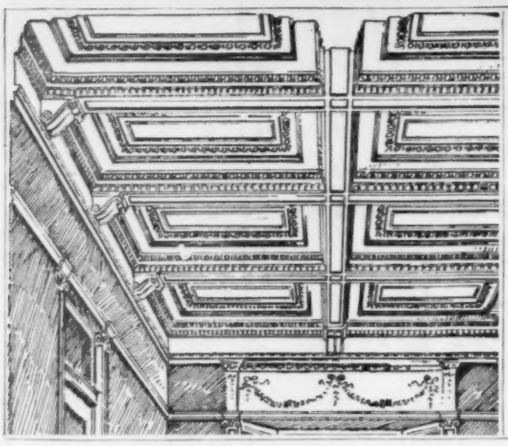

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It is to be noted, too, that the further contents of the several issues named above are not without value to the purchaser.

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PUBLISHED SATURDAY, NOVEMBER 15

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PART I

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The matter illustrated may in small part be classified thus:

PUBLIC BUILDINGS

City Hall, New York, N. Y.	Date 1803-12
Old State House, Boston, Mass.	" 1748
Pennsylvania Hospital, Philadelphia, Pa.	" 1755
Carpenters' Hall, Philadelphia, Pa.	" 1770
Independence Hall, Philadelphia, Pa.	" 1729
Faneuil Hall, Boston, Mass.	" 1741

and others.

CHURCHES

King's Chapel, Boston, Mass.	Date 1749
Seventh-day Baptist Church, Newport, R. I.	" 1729
Christ Church, Alexandria, Va.	" 1767
Christ Church, Philadelphia, Pa.	" 1727
St. Paul's Chapel, New York, N. Y.	" 1764
Old South Church, Boston, Mass.	" 1729
First Church, Hingham, Mass.	" 1681
St. John's Chapel, New York, N. Y.	" 1803
First Congregational Church, Canandaigua, N. Y.	" 1812
St. Peter's P. E. Church, Philadelphia, Pa.	" 1758
Gloria Dei Church, Philadelphia, Pa.	" 1700

and others.

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date 1636
Royall Mansion, Dedham, Mass.	" 1737
Philipse Manor House, Yonkers, N. Y.	" 1745
Tudor Place, Georgetown, D. C.	" 179-
Mappa House, Trenton, N. Y.	" 1809
Woodlawn, Va.	" 1799
Mount Vernon, Va.	" 1743

and others.

Incidentally there are shown special measured drawings or large views of the following features and details:

Porches and Doorways	67 Subjects
Staircases	23 "
Mantelpieces	89 "
Pulpits	9 "
Fanlights	60 "

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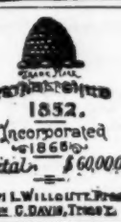

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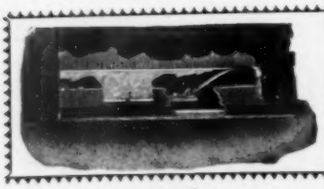

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BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

ADVANCE RUMORS.

Allegheny, Pa.—The Monongahela Trust Co., of Homestead, will soon begin the construction of a $50,000 store and office building on 8th Ave. and Ann St.

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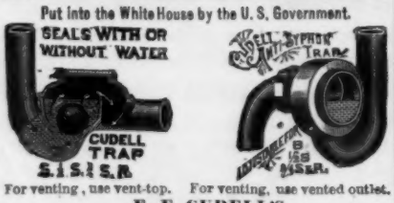

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Ames, Ia.—The Trustees of Iowa State College have decided to erect a central building, to cost $225,000; an agricultural building, to cost $200,000, and a central heating plant, to cost $65,000.

Arverne, L. I., N. Y.—The Arverne Realty Co. is to build a $20,000 casino, with bowling-alleys and roof-garden, on the Boulevard, between Gaston and Meredith Aves.

Asbury Park, N. J.—The Westbrook property on W. Summerfield Ave. has been sold to Mrs. Harry Lake. The new owner will erect a handsome dwelling on the site.

Atlanta, Ga.—It is reported that the Senate has passed the bill authorizing this city to borrow $400,000 to extend the trunk sewers of the city.

Atlantic City, N. J.—Jos. Fralinger, will shortly invite estimates for rebuilding the theatre at New York Ave. and the beach.

W. W. Weeks will erect a six-story hotel in St. James's Pl., 58′ x 75′; cost, $50,000.

The corner of Pacific and Pennsylvania Aves. has been purchased by the government as the site of a federal and post-office building, to be 70′ x 100′, built entirely of stone.

The old Academy of Music will soon be superseded by a new playhouse.

Binghamton, N. Y.—The Security Mutual Life Insurance Co. has under consideration the erection of a $250,000 office-building.

Birmingham, Ala.—The Birmingham Livery Co. is to erect a stable on 2d Ave. and 17th St., to cost $25,000.

Boston, Mass.—Members of the Massachusett delegation in Congress are planning to introduce a bill at the present session providing for a new $3,000,000 custom-house in this city.

Park Street Church is soon to disappear, and will be replaced with a modern skyscraper office-building. It has been sold to a syndicate, represented by Meredith & Grew, for $1,250,000. The Church Society, it is reported, will build a handsome new edifice in the Back Bay.

Brookline, Mass.—A two days' fair in aid of the new building of the Free Hospital for Women on Pond Ave., was held at the Vendome December 3d and 4th. In the twenty-eight years of its existence this hospital has ministered to 4,500 women in its wards and 110,000 in its out-patient department. The work of the hospital has increased so rapidly as to require larger quarters for nurses, kitchens and laundries; these departments being especially cramped for room. While its friends have been generous, there is urgent need of larger funds to meet the pressing demands of the hospital.

Brooklyn, N. Y.—John Kennedy & Sons, 175 Front St., have been given the contract for the six-story brick factory, 123′ x 200′, to be erected on the south side of John St., near Bridge, and on the north side of Plymouth St., east of Bridge St. Cost is estimated at $90,000. Wm. Higginson, 21 Park Row, is the architect.

Buffalo, N. Y.—Plans have been filed for a ten-story office-building to be erected on Main and N. Division Sts. for the Richard Realty Co., of New York, after plans by Carlton Strong, 170 Broadway, New York. Cost, $145,000.

The Board of Aldermen has directed the Comr. of Pub. Wks. to prepare plans and specifications, and ask for bids for a new Quarantine Hospital.

Calumet, Mich.—The Calumet & Hecla Mining Co. will erect a $30,000 armory for the Calumet Light Guard.

Chicago, Ill.—Architect Mundie, of the Board of Education, has completed plans for the Chicago Teachers' College, to be erected on Stewart Ave. and North Normal Parkway. It will be four stories high, 185′ x 236′, and cost $325,000.

Cook County has voted to issue $500,000 bonds, to be used in making necessary improvements in public institutions. For remodelling and erecting additions to the insane asylum, $300,000; for erection of ward for epileptics at County Hospital, $175,000; for installation of new elevator system in County Building, $25,000.

Clayton, N. Y.—Plans for remodelling the Walton House, at a cost of $30,000, have been prepared by D. D. Kieff, of Watertown.

Edmonton, N. W. Ter.—It is stated that McDougall & Secord have in contemplation the construction of a bank building. Plans not yet prepared.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Fairmont, W. Va.—The Fairmont Trust Co. will erect a seven-story brick and stone building, 25′ x 40′, on Main St.

Flushing, L. I., N. Y.—The congregation of St. George's P. E. Church is to erect a new parish house, to cost $25,000.

Grove City, Pa.—It is reported that the Odd Fellows of the Western Pennsylvania district are about to erect 3 buildings here, at a cost of about $80,000.

Homestead, Pa.—David Platt has drawn plans for a corrugated steel building, 200′ x 200′, to be built for the Homestead Valve & Mfg. Co., at a cost of $20,000.

Plans are being prepared by David Platt for the Greek Catholic Church to be erected on 8th Ave., at a cost of $30,000.

Hopedale, Mass.—About $20,000 will be expended in the construction of a new foundry for the Draper Co. Work upon the foundations has been begun.

Ithaca, N. Y.—The work of building the new Cornell is under way. It will take 20 years to complete, and the total cost will exceed $5,000,000. The buildings of each department will be grouped by themselves. A monster dining-hall, in which 2,000 persons can be served at one sitting, will be in the foreground of the dormitory group. The present campus is one of the most beautiful in the world. The new campus will face Cayuga Lake, in accordance with the original idea of Ezra Cornell, founder of the university.

Jersey City, N. J.—It is said that the wooden bridge over the Hackensack on the Newark Plankroad will soon have to be replaced by a steel bridge, at a probable cost of $250,000.

Knoxville, Tenn.—The bridge which is proposed for the crossing of Clinch Ave. over the yards of the Knoxville, LaFollett & Jellico R. R., will, it is estimated, cost $60,000.

Long Island City, N. Y.—Plans have been drawn by Westinghouse, Church, Kerr & Co., 26 Cortlandt St., for what is said to be the biggest power-house in the world for the Pennsylvania R. R. Co., to be built on the block bounded by Front St., West Ave., 3d and 4th Sts. It will furnish electricity for the entire system of the railroad in this city.

Macon, Ga.—The Trustees of the Masonic Home to be established here have decided to at once secure plans and specifications for the new building. The Trustees have on hand $25,000 to be devoted to the construction of the Home. It is expected that, when completed, it will cost about $150,000.

Malden, Mass.—Plans have been submitted by the committee of the Men's Club of the Universalist Church for the new edifice. The plans show a church and club-house, entirely separate, to cost $70,000. It will be erected in the West End, and work will probably begin in the spring.

Manhasset, L. I., N. Y.—It is reported that Payne Whitney will erect a country residence on his new 50-acre estate adjoining that of A. H. Paget, on the Pearsall road.

McKeesport, Pa.—It is stated that the Baltimore & Ohio R. R. Co. will erect a $75,000 depot here in the spring.

Milwaukee, Wis.—The Museum Trustees are considering plans for the erection of a $60,000 addition to the Museum.

Mobile, Ala.—The Mobile Ry. Terminal Co. has been formed to build a depot with terminal tracks, yards, etc., estimated to cost $500,000.

Newark, N. J.—The Essex County Grand Jury has condemned the county jail here as a reproach to the county and states that a new and larger jail is an imperative necessity.

A. F. Leicht, 21-24 State St., has completed plans for the Old Ladies' Home, to be built on Roseville Ave. It is to be a three-story fireproof structure, 70′ x 140′.

New Bedford, Mass.—The plans for the new church of St. Anthony's parish have been completed, and the new edifice will be probably the finest church building in this part of the State. The exterior will be of alternate white and red granite, roofs of slate, cornices and cross of copper and the entire interior of cement relief work. No wood save the seats will be used in construction, everything being fireproof. Cost, $115,000.

New Castle, Pa.—A large silk factory will be erected here by a company of New York manufacturers and importers. The plant is to cost $120,000.

It is stated that the Pittsburgh & Lake Erie R. R. Co. will soon erect here a $100,000 depot.

New Haven, Conn.—Work is to begin at once on the new dormitory of the Scientific School. Two dormitories are to be erected on Wall St. Plans for the new Lampson Hall on High St. call for a building, 50′ x 142′. It will contain a lecture hall, a debating hall, a room for the Yale union, offices for the dean and bursar of the college, and the recitation-rooms.

Newton, Mass.—Papers have been signed for the transfer of nine lots of land on Astor St. by Peter W. French to William Basford. The purchaser will build nine brick six-story apartment-houses.

New York, N. Y.—The Trinity Building, 111 Broadway, has been bought by the United States Realty and Construction Co. and the Lawyers' Title Insurance Co. This building, bordering the north line of Trinity Church cemetery, is one of the best known landmarks and one of the most valuable properties in this city. The purchase price is estimated as about $1,750,000. The purchase undoubtedly means that the property will soon be improved on a big scale.

The Borsel Building, 115 Broadway, will in the near future be torn down and replaced by a modern office-building.

Messrs. Jackson & Stern, 31 Nassau St., are still open for estimates on all interior fixtures for the nine-story brick, stone and iron apartment-hotel, 40′ x 80′, which they will erect at 57½ W. 46th St., after plans by Architect Alfred E. Bradt, 1 Union Sq., West, at an estimated cost of $100,000.

Welch, Smith & Provob, 11 E. 42d St., have plans for 5 four or five-story dwellings, to be erected on 73d St. for W. W. & T. M. Hall, 11 E. 42d St., at a cost of $150,000.

Plans have been prepared by Architects Bernstein & Bernstein, 111 Broadway, for a six-story brick and stone store and tenement-house, 37′ 9″ x 88′ 2″, to be erected at Nos. 66 and 68 E. 3d St. by Messrs. Falk & Feine, 336 E. 4th St., at an estimated cost of $35,000.

Plans and specifications have been completed by Architects Moore and Landsiedel, 148th St. and 3d Ave., and estimates are being taken on 2 six-story brick, stone and iron apartment-houses, 73′ 9″ x 88′, to be erected on the north side of 106th St., 55 feet west of Manhattan Ave., for the Park Construction Co., at an estimated cost of $200,000.

Architect J. B. Colt, 287 Fourth Ave., has filed plans at the building department for an eighteen-story office-building, 111′ 8″ x 130′ 4″, to be erected at the southwest corner of Broadway and Duane St. for the Barclay Realty Co., 280 Broadway, at an estimated cost of $1,000,000.

A contract has been let for the improvement of Seward Park, and the land bounded by Hester, Essex, E. Broadway and Suffolk Sts. will soon be the site of a spacious building, in which will be a gymnasium and baths, and near by a running track. The cost will approximate $55,000. The erection of a pavilion, plans for which have been drawn by Architect Arnold B. Brunner and approved by the Art Commission, will begin this month.

C. C. Shayne, fur merchant, is about to erect a new fireproof building at Nos. 127 and 129 W. 41st St., at the rear of and connecting with his present establishment, at Nos. 124 and 126 W. 42d St. The new building will be ten stories high, covering a plot 40′ x 100′, and specially adapted for the manufacture, sale and storage of furs. The plans by Ward Wellington Ward and Albert S. Gottlieb, show a front harmoniously treated with a combination of materials in the modern French style. It is proposed to start work early in the spring, so that the entire building and its equipment will be ready in time for the season of the following winter.

It is stated that Williams & Gerstle, 1st Ave. and 44th St., are the lowest bidders for the alterations and improvements at Bellevue Hospital, to cost $50,000. Plans by Herman Kreitler, 122 Liberty St.

The Thompson-Starrett Co. have the contract from Dr. Andrew H. Smith for a new eighteen-story office building, to cost about $1,250,000, at Nos. 18 to 24 E. 42d St., 92′ x 98′ 9″, with an L to Madison Ave., 31′ x 58′.

V. Hugo Koehler, 11 Broadway, has awarded the general contract for the four-story brick and stone theatre to be built on the south side of 43d St., near 7th Ave., to John McKeefrey, 289 Fourth Ave. Estimated cost, $200,000.

Louis C. Maurer is drawing plans for a six-story flat to be erected at Nos. 125 and 127 E. 53d St. for Joseph Wittner. The front will be of limestone, terra-cotta and Roman brick. Cost, $45,000.

Plans have been made by McIlvaine & Tucker, 19 Liberty St., for 5 six-story brick tenements, each 40′ x 87′, to be erected at 172 to 188 Sullivan St. for the estate of N. Low, 208 Bleecker St.

Robert Maynicke, 725 and 727 Broadway, is receiving estimates for the ironwork of an eleven-story office and loft building, to be built at 11 to 19 W. 19th St. and 10 to 16 W. 20th St.

Charles Hensle, 302 W. 120th St., the buyer of the plot at the southwest corner of St. Nicholas Ave. and 126th St., will erect a six-story elevator apartment-house. Gilbert Robinson & Son, G. F. Pelham and Henri Fouchaux are preparing sketches in competition.

George F. Pelham, 503 Fifth Ave., has drawn plans for a six-story tenement, 40′ x 62′, to cost $30,000, and to be erected at 473 and 475 E. Houston St. for Feldman & Weiss, 140 Scholes St., Brooklyn.

Charles Simmons, of the John Simmons Co., 110 Centre St., will erect on the northwest corner of Baxter and Leonard Sts., a six-story addition to the present factory. The architects of the latter were De Lemos & Cordes, Fulton and Nassau Sts.

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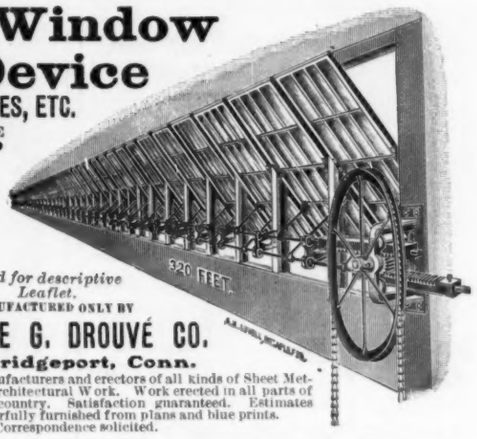

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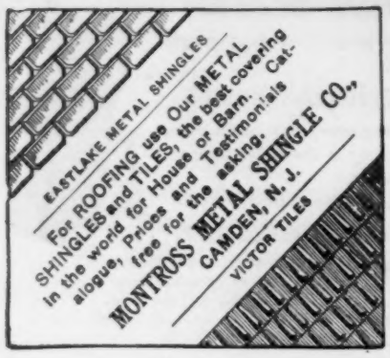

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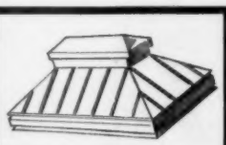

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BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

A syndicate has been formed to buy and improve an old building at 46 50 Broad St. The south halls of the building connect with the entrance to the building Nos. 42 and 44 New St. owned by the Mutual Real Estate Co. If the project is carried out, an expenditure will be made of about $2,500,000. It is said that the plans for a sixteen to twenty-story building are being drawn by George Edward Harding.

An eight or ten-story building for a wholesale clothing-house is likely to be erected on the premises occupied by the buildings 110 to 116 W. 33d St., and 117 to 123 W. 32d St. The plot has a frontage of 75 feet in both streets, and its east line is a short distance from the rear wall of the Manhattan Theatre. This wholesale clothing-house will probably be the first of its kind in the Tenderloin section, and it is thought that similar houses may follow its example.

The Board of Estimate has appropriated $37,462.96 in corporate stock to be used in the opening of Claremont Ave. and 116th St., and $244,367.77 in corporate stock to be used in the opening and laying out of Highbridge Park, both in Manhattan Borough.

Action has been postponed by the Board of Estimate on the application of the President of the Borough of Brooklyn for the reconstruction of the women's prison in Raymond Street Jail, which would cost about $150,000, or the erection of a new building at a cost of about $400,000.

Parkersburg, W. Va.—The Little Kanawha R. R. and the Wabash R. R. Co. propose to build a suspension bridge across the Ohio from this city to Belpre, to cost $500,000.

Pawtucket, R. I.—Another big addition is to be made to the already extensive plant of the E. Jenckes Manufacturing Co. and the work of excavating for the foundations is already under way. The new part will be 200 feet long and 64 feet wide, three stories in height and of brick construction facing on Barton St. It will be spacious, commodious and well equipped and will result in employment being given to a larger force of skilled hands. Dwight Seabury, mill engineer, drew the plans and the contract for the construction of the addition has been awarded to Willmarth & Mackillop.

Philadelphia, Pa.—Estimates have been filed at the office of Wilson Bros., architects and engineers, of the Drexel Building, for the six-story brick addition to the factory of L. Dannebaum's Son & Co., at 806 and 808 Arch St.

Twenty dwelling-houses in the neighborhood of 6th St. and 67th Ave., Oak Lane, will soon be started by G. W. Flavell & Bros., builders. The houses are to be three stories high, of brick and stone, with slag roof and hot air heat. They will cost about $100,000.

The committee on the erection of a University of Pennsylvania gymnasium and on the improvement of Franklin Field has succeeded in obtaining pledges for the amount of money required and has adopted plans and asked for bids for the whole work. The gymnasium will stand at the western end of Franklin Field. In exterior appearance it will be in harmony with the university dormitories, will be built of the same materials and in the same style of architecture. Its principal parts are a central mass containing the gymnasium proper, the swimming room and other large rooms, two wings holding lockers and dressing-rooms, and two towers containing the vestibules, stairways and additional locker rooms. The stands that will inclose Franklin Field on the north, south and east will seat over 20,000 people. They will be enclosed by an ornamented wall in harmony with the gymnasium. At either end of the gymnasium there will be a memorial gateway.

An appropriation of $1,200,000 has been made to purchase new sites and erect new schools.

Pittsburgh, Pa.—Plans are being drawn by Jas. T. Steen, 219 Sixth St., for an eight-story apartment-house to be erected by David P. Reighard on Craft Ave. and Ophelia St., Oakland, to cost $1,000,000. It will be of brick and granite.

Plainfield, N. J.—Mayor Olin L. Jenkins laid the corner-stone of the new Muhlenburg Hospital in this city recently. The stone was laid at the corner of the Wright memorial Operating Pavilion, which is the gift of J. Howard Wright, of New York, in memory of two grandsons. The new buildings are to cost $125,000.

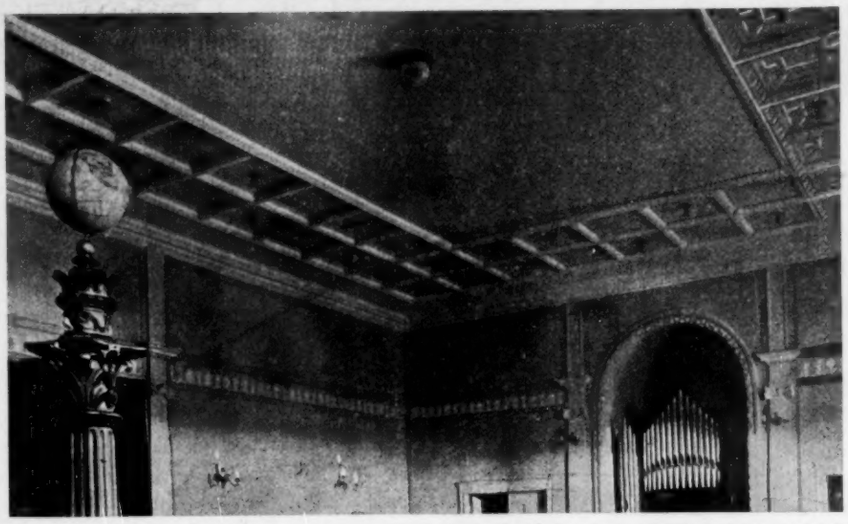
Portsmouth, N. H.—L. E. Gregory, architect at the navy yard, is drawing plans for a Government manufacturing building here, to cost about $160,000.

Pride's Crossing, Mass.—Henry C. Frick, the steel magnate, has bought the estate of Mrs. Emily Tyson. It is thought that Mr. Frick will rebuild or tear down and build a new house, to cost $300,000.

Proctor, Vt.—Senator Proctor, owner of the Vermont Marble Co., has completed plans for the erection of a marble building, 50' x 80', which he will commit to the Young Men's Christian Association to operate for the benefit of his 1,200 employés of this place and vicinity. The building will contain in the basement two bowling-alleys, billiard-rooms, smoking-room, lockers for gymnasium and baths. On the main floor will be a reading-room, parlor, game room, secretary's office and gymnasium. The second-floor rooms are for entertainments and educational classes, debates, discussions of problems of marble workers, etc.

Providence, R. I.—Hoppin & Ely have drawn plans for a new dormitory for Brown University.

Provincetown, Mass.—Representative Lovering has introduced a bill appropriating $40,000 for the erection of a suitable memorial in honor of the first landing of the Pilgrims. The bill provides that



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(*Advance Rumors Continued.*)

only $20,000 shall be immediately available, the remaining $30,000 to be paid when the Cape Cod Pilgrim Association shall have raised $35,000 additional).

Reading, Pa. — Plans for approaches and superstructure for a $30,000 bridge, to be built on Front St. by the Reading Ry. and the United Traction Co. have been completed and are on file in City Engr. Murdoch's office.

Richmond, Ind. — Daniel R. Reid, of New York, once a resident of this city, has bought a large tract of land in the central part of the city on which he will erect a new place of worship for the United Presbyterian congregation. The new structure will cost $75,000, and the entire property will be worth close to $100,000.

Riverhead, L. I., N. Y. — It is understood that the Conklin Farm, near West Deer Park, recently purchased by Bishop McDonnell from the Colonial Mineral Springs Co., is to be used as the site of a seminary to replace the institution now situated in Brooklyn. The tract comprises about 1,100 acres.

Rockford, Ill. — The Chicago, Burlington & Quincy R. R. Co. has accepted plans for a $50,000 depot to be erected on S. Main St.

Rockland, Me. — The plans of Architect J. A. Clough, of Boston, for the $20 000 Carnegie Library for this city have been accepted and he has submitted final plans to the library committee. The library will be of red Jonesport granite, trimmed with Spruce Head white granite. Work will be begun next spring. Ernest W. Bowditch, the landscape artist of Boston, is laying out the library lot.

Rome, N. Y. — The contract for the construction of the U. S. public building has been awarded to Fissel & Wagner, of Newark, N. J., at $46,670.

Saginaw, Mich. — Clarence L. Cowles, 116 N. Washington Ave., has drawn plans for 3 two-story residences for M. Mutshelter, 136 Mott St, to cost $75,000.

Plans for a $30,000 four-story brick store building, 90′ x 126′, for the Smart & Fox Co. on Genesee Ave., have been prepared by Clarence L. Cowles, 116 N. Washington Ave.

San Diego, Cal. — The city has engaged Samuel Parsons, Jr., of New York City, to prepare plans for beautifying 1,400 acres of city park.

San Francisco, Cal. — Nathaniel Blaisdell, 222 Sansome St., has completed plans for a $260,000 six-

BUILDING INTELLIGENCE.

(*Advance Rumors Continued*).

story brick and stone fireproof business building, 87′ x 91′, to be erected at Battery and Pine Sts. for Isaac Upham.

Stone Bros. have secured the contract to build a $100,000 concrete bridge for the Salt Lake R. R.

Seattle, Wash. — The Vulcan Iron Works will build a large iron and steel plant here. The immediate cost will be about $100,000.

Bromley & Wells have the contract for erecting a hotel for C. D. Stimson and A. W. Engle on 4th Ave. and Union St. Contract price, $42,000.

Sing Sing, N. Y. — A press report states that the State Prisons Commission is to ask the legislature to authorize an appropriation of $150,000 for improving the cell building of Sing Sing prison, and making an extension to it. It will be recommended that the lower tier of cells be removed, so as to provide air space between the cell block and the ground, that the remaining cells be enlarged, and that the addition have accommodations for about 500 prisoners.

Sioux City, Ia. — The Agar Packing Co. will erect a $200,000 addition to its packing plant in the spring.

South Boston, Mass. — A foundry building and cupola house, 90′ x 300′, will be erected in E. 1st St., near O St., by the Walworth Manufacturing Co. It will be built from private plans. Cost, $15,000. On a lot, adjoining, the company will build a cupola house of brick, two stories high, with a front of 40 feet.

South Braintree, Mass. — Rice & Hutchins, 6 High St., Boston, have a lot staked out for a $12,000 shoe-factory here. It will be of wood, five stories, 50′ x 200′.

St. Johnsville, N. Y. — The excavation has been completed for the foundations of the new addition to the Royal Knitting Mill.

St. Louis, Mo. — It is stated that condemnation proceedings have been instituted here by the Terminal Railway Association against owners of six blocks of property, for terminal extensions, which will cost several millions and provide entrance to this city from the Eads' bridge without going through the tunnel under the city.

A twelve-story office-building will be erected by the St. Louis & San Francisco Railroad Co. The structure and site will cost about $1,300,000.

W. C. & C. G. Barton have the contract for the erection of the Government building at the Louisiana Purchase Exposition. The contract price is $268,980.

The M. J. Kelly Estate has secured a permit for the erection of a five-story warehouse at 917 N. Broadway, at a cost of about $30,000. Plans by J. L. Wees, 520 Olive St.

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

St. Paul, Minn. — Butler Bros., Globe Building, have secured the general contract to erect the additions to the Herzog Iron & Wire Works' plant, on Earl and York Sts. The foundry will be of brick, 80′ x 160′, 42 feet high, with truss roof and skylights. Cost, $15,000.

Syracuse, N. Y. — The Merrell-Soule Co. has purchased a site for the construction of a new factory building to cost $100,000.

Toledo, O. — A $185.000 seven-story fireproof mercantile or office building, 120′ x 120′, is proposed to be erected by Coghlin & Co. Marble interior finish, tile roof and gas and electric light.

Two Mile Beach, N. J. — It is said that Pittsburgh people of fashion are to have a summer colony that they hope may prove a fitting rival to Newport. Millionaires have bought this place, now a barren island adjacent to Cape May. They will erect several elaborate hotels and handsome villas.

University, Miss. — The University of Mississippi is soon to erect new buildings, to cost $60,000.

Vinton, Ia. — M. M. Hall, of Cedar Rapids, secured the contract for the erection of the Carnegie Library building. Cost, $12,000.

Wallace, Idaho. — The Grand Jury has recommended the erection of a $50,000 court-house.

Washington, D. C. — The House Committee on the District of Columbia ordered a favorable report on the Senate bill for the proposed union station. It provides for a site in Massachusetts Ave., Northwest. The committee amended the bill by cutting down to the extent of $1,000,000 the amount to be paid by the District and the general government for the improvement.

Washington, Pa. — The Pennsylvania R. R. Co. is to erect a $40,000 depot at this place.

Waterbury, Conn. — The American Pin Co. has had plans drawn for a $15,000 shop of brick, one-story, 70′ x 162′. Mr. T. B. Peck, Bank St., archt.

Webster, S. D. — The citizens of Day County have voted to issue bonds for the erection of a $50,000 court-house.

Westboro, Mass. — Plans are in preparation in the office of Kendall, Taylor & Stevens for two hospital cottages to be added to the plant of the Hospital for the Insane. Each will be 40′ x 110′ in size. The architects also have orders to make plans for a dining-hall building.

Wilmerding, Pa. — R. M. Trimble, Ferguson Building, Pittsburgh, has drawn plans for a bank and apartment building to be erected here at a cost of $25,000.

Winnipeg, Man. — The Bank of British North America will erect a building to cost $100,000 or more next season. J. E. Ewart will erect a block in the spring on Kennedy St.

Worcester, Mass. — The Boston & Albany R. R. Co. is figuring plans for a $50,000 machine-shop, two-story, brick.

St. Anne's Roman Catholic parish is about to erect a large parochial school-house, the plans for which are furnished by John William Donohue, of this city. The building will be situated on Gage St., just in the rear of the parochial residence, and will be 118 feet long and 95 feet wide. It will be constructed of red brick with limestone trimmings. It will provide accommodation for 800 pupils. The contract for the erection has been awarded to Jas. J. McDermott who hopes to complete the work by August 25, 1903.

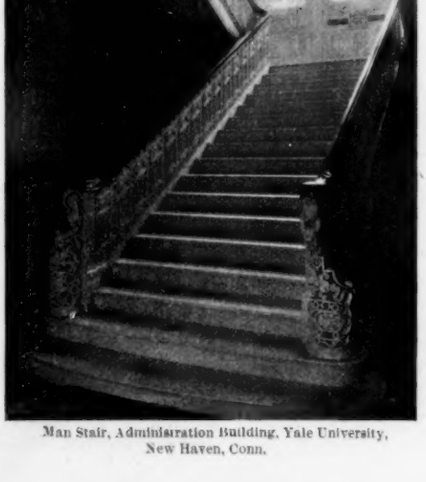
APARTMENT-HOUSES.

Baltimore, Md. — *Chase and Calvert Sts.*, nine-st'y bk. & st. apart., 100′ x 150′, slag roof, steam; $150,000; o., F. W. Trimble & Bro.; a., C. E. Cassell, 404 Law Building.

Chicago, Ill. — *Jackson Boulevard, No.* 1650, three-st'y bk. & st. apart., 50′ x 70′, tile roof, steam: $20,000; o., D. McCarthy; a., D. E. Postle, 1731 Marquette Building.

FACTORIES.

Franklin, Ind. — One-st'y bk. factory, 150′ x 200′, gravel roof, steam; $15,000; o., Indiana Desk Co.; a., H. P. Mozier, 185 Dearborn St.



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HOUSES.

Minneapolis, Minn. — *Aldrich Ave., S., No.* 2204, two-st'y & base. dwell., 30′ x 41′, $5,000; o., A. V. Carlson; a., Harry W. Jones.

Hennepin Ave., No. 2507, two-st'y & base. dwell., 33′ x 56′; $6,000; o., C. L. Otis; a., S. J. Bowler.

Eighteenth Ave. and Mineral St., 2½-st'y dwell.; $10,000; barn, $1,500; o., C. Knoernschild; a., H. Messmer & Son.

Lake Ave., nr. Gilman Pl., bk. dwell., 40′ x 70′; $15,000; o., E. B. Birkenwald; a., Buemming & Dick.

James St., nr. Summit Ave., two-st'y & base. dwell., 30′ x 41′, combination heat; $8,000; o., N. H. Emmons; a., E. C. Haley.

Nineteenth St. and Fremont Ave., two-st'y attic & base. dwell., 40′ x 42′; $10,000; o., C. D. Taylor; a., Boehme & Cordella.

Sioux City, Ia. — *Sixteenth and Nebraska Sts.*, two-st'y fr. dwell.; $7,000; o., Dr. J. C. Dunlavy; a., Henry Fisher.

St. Paul, Minn. — *Summit Ave.*, nr. Western St., three-st'y dwell., 44′ x 86′; $40,000; o., Louis W. Hill; a., Clarence H. Johnston.

TENEMENT-HOUSES.

New York, N. Y. — *Third Ave., Nos.* 4119-21, 2 five-st'y bk. stores & tenements, 25′ x 92′ & 25′ x 89′; $50,000; o., Stephen M. Anderson; a., Rudolph Moeller.

WAREHOUSES.

Charlestown, Mass. — *Rutherford Ave., Nos.* 194-198, nine-st'y bk., iron & st. storage building; $35,000; o., Chas. F. Morrill.

MISCELLANEOUS.

Boston, Mass. — *Carver St., Nos.* 18-20, two-st'y bk. & cement Turkish Bath establishment, 44′ x 86′, comp. roof; $30,000; o., John Ritchie, Jr.; a., Dwight & Chandler.

COMPETITIONS.

Y. M. C. A. HALL. [At Akron, O.]

The Bd. of Directors of the Y. M. C. A. will receive **until December 20** competitive bids for the contract to prepare plans for the Y. M. C. A. Hall, to cost not more than $75,000. 1407

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., December 3, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 14th day of January, 1903, and then opened for the installation of a conduit and electric wiring system for the U. S. Public Building at Helena, Montana, in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Helena, Montana, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1407

Treasury Department, Office Supervising Architect, Washington, D. C., December 8, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 12th day of January, 1903, and then opened, for the construction (except plumbing and mechanical equipment) of the Physical Laboratory, National Bureau of Standards, Washington, D. C., in accordance with the drawings and specifications, copies of which may be had at this office. JAMES KNOX TAYLOR, Supervising Architect. 1407

PUBLIC BUILDINGS. [At Boston, Mass.]

Depot Quartermaster's Office, 170 Summer St., Boston, Mass. Sealed proposals will be received at this office **until January 2, 1903**, for constructing at Fort Strong, Boston Harbor, Mass., one administration building, one double set N. C. O. quarters, and one ordnance storehouse. Blank forms and information furnished on application. Plans and specifications on file in this office. A. M. PALMER, depot quartermaster, Boston, Mass. 1408

BUILDING. [At Fort Getty, S. C.]

Sealed proposals will be received here **until December 23, 1902**, for constructing garbage crematory and shed therefor at this post. Information furnished on application. DAVID PRICE, Q. M. 1407

PUBLIC BUILDINGS. [At New Bedford, Mass.]

Office Constructing Quartermaster, 209 Thames St., Newport, R. I., November 22, 1902. Sealed proposals will be received **until December 23, 1902**, for constructing, plumbing, heating and wiring guard-house; constructing, plumbing and wiring double set N. C. O. quarters and bakehouse, and constructing wagon-shed and fire-apparatus building, all frame, Fort Rodman, New Bedford, Mass. Information furnished on application. CAPT. THOMAS H. SLAVENS, Q. M. 1407

BUILDING. [At Baton Rouge, La.]

Bids are wanted **December 20** for erecting the physical laboratory on the grounds of the Louisiana State University. Farrot & Livandais, architects, Abraham Building, New Orleans. COL. THOS. D. BOYD, pres. 1407

GARBAGE CREMATORY. [At Fort Brady, Mich.]

Bids will be received at the office of the chief quartermaster, Chicago, Ill., **until December 26**, for the construction of a garbage crematory and shed for same. COLONEL E. B. ATWOOD, chief quartermaster. 1407

SEWER. [At Fort McKinley, Me.]

Office of Constructing Quartermaster, 185 Middle St., Portland, Me. Sealed proposals for constructing a sewer system, with all manholes, outlets, flushing tanks, etc., at Fort McKinley, Great Diamond Island, Me., will be received at this office **until December 27, 1902**. Information, specifications, plans and blanks on application. CAPT. A. W. YATES, quartermaster, U. S. A. 1407

LIBRARY. [At Milwaukee, Wis.]

The Pub. Library Bd. will receive bids **December 20** for the construction of the Carnegie Library. 1407

SCHOOL. [At Albany, N. Y.]

Bids will be received **December 24** by the Bd. of Contract and Supply for furnishing material and erecting School No. 9, including heating, plumbing, drainage work, etc. Wm. J. Obsnaus, city architect, 86 State St. ISIDORE WACHSMAN, Clk. of Bd. 1407

Treasury Department, Office of the Supervising Architect, Washington, D. C., November 29, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 15th day of January, 1903, and then opened, for the construction (except heating apparatus, electric wiring and conduits) of the U. S. Post-office at Norfolk, Nebraska, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Norfolk, Nebraska, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1407

POWER PLANT. [At Philadelphia, Pa.]

Franklin Arsenal, Philadelphia, Pa. Sealed proposals will be received **until December 20, 1902**, for furnishing engines, generators, boilers, etc., for a complete electrical power plant for this arsenal. Information on application to MAJOR FRANK HEATH, commanding. 1407

OFFICERS' QUARTERS. [At Sheridan, Wyo.]

Bids are wanted **December 20** for constructing, plumbing, heating, gas-piping and electric wiring one field officer's quarters, one double set captain's quarters, 2 double sets lieutenant's quarters, one double barrack and one bakery, all brick. CAPT. THOS. SWOBE, Constructing Q. M. 1407

LIBRARY. [At Port Huron, Mich.]

Bids will be received **December 27** by the Sec'y of the Port Huron Library Comn., for erecting a stone library. G. L. HARVEY, architect, Port Huron. 1408

BRIDGE. [At Georgetown, Col.]

Bids are wanted **December 30** for a steel bridge across Clear Creek. H. O. WALKER, co. clk. 1408

ROAD WORK. [At Winthrop, Mass.]

Fort Banks, Winthrop, Mass. Sealed proposals for constructing granolithic walks and macadam roads at this post, will be received here **until December 29, 1902**. Information furnished on application. LIEUT. H. B. GRANT, Q. M. 1408

CODE OF PRACTICE
FOR SUB-ESTIMATING AND SUB-CONTRACTING

Adopted by the Master Builders' Association of the City of Boston, Aug. 2, 1894.

ARTICLE I.

Obligation of Principal Contractor to Sub-Contractor.

A principal contractor is under obligation to treat upon an equal basis all estimates which he "receives" prior to putting in his own bid. Estimates must be considered as "received" when they come into a principal contractor's possession, either by his direct solicitation or by being accepted by him. *The opening of a bid, knowing it to be such, constitutes receipt of the same.*

A principal contractor is under no obligation to use a bid which he has not solicited, accepted, or received, but if he does not wish to use the estimate of a sub-bidder he should decline it, if proffered personally, or should return it unopened if sent to him by mail or otherwise. The retention of a bid should be construed as a receipt of the same.

* * * * * * * * * * * *

A principal contractor, when making up his estimate, is not entitled to receive bids from sub-contractors if he is at the same time making himself their competitor by figuring their portion of the contemplated work. It is legitimate for a principal contractor to figure all portions of work, depending upon no one for what are usually known as sub-estimates, but it is not legitimate for him to receive bids from others for sub-work if he is himself figuring those portions independently.

ARTICLE II.

Award of Sub-Contracts.

The principal contractor having been awarded a general contract should immediately award the sub-contracts to the lowest bidder in each branch.

ARTICLE III.

Penalty for not Awarding Contract to Lowest Sub-Bidder.

A principal contractor failing to award a sub-contract to the lowest sub-bidder to whom he is under obligation as previously provided should be liable to pay damages to the said lowest bidder, in amount not less than ten per cent of the amount of the estimate.

Payment of such damages will not relieve the principal contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

* * * * * * * * * * * *

ARTICLE V.

Payments to Sub-Contractors.

Unless the contracts made with sub-contractors otherwise provide, payments during the progress of the work should be made by the principal contractor to the sub-contractors upon the same basis of payment, in relation to amount of work performed, as is prescribed in the contract made by the principal contractor with the owner.

Final payment to a sub-contractor should be considered as *due* at the expiration of thirty days after the completion of his work and its approval by the architect or owner, unless otherwise provided by the sub-contract or agreement.

* * * * * * * * * * * *

ARTICLE VII.

Obligation of Sub-Contractor to Principal Contractor.

Should a sub-contractor refuse to contract at the amount of the estimate he has given to a principal contractor who has used the said estimate in good faith, he then should be liable to the said principal contractor for damages in amount not less than the difference between the amount of the estimate which was submitted by him and the amount at which the principal contractor may be obliged to contract the work.

Payment of such damages will not relieve the sub-contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

* * * * * * * * * * * *

ARTICLE X.

Bids to Architects or Owners.

When bids for separate departments of work on a building are solicited by the architect or the owner, they should be submitted with the understanding that they are direct estimates, for which direct contracts are to be made by the owner with the lowest bidder, and no other disposition of such bids should be permitted without consent of the bidder submitting the same.

Sub-bids should be given only to the principal contractors who are estimating the work in question, and should not be left with architects or owners for the inspection and information of principal contractors. Sub-contractors must understand that bids thus left with architects or owners are in great danger of losing their confidential character, and that if they so leave them they cannot claim protection or redress under the first article of this Code.

SUGGESTIONS.

Members of this Association having sub-contracts to let, or material to buy, should, as far as may be consistent with business principles, deal only with members of the Association, or at all events give their fellow-members an opportunity to compete, and ther give them the preference, other things being equal.

All bidders should take cognizance of the danger they may be subjected to through the practice, so prevalent in some architects' offices, of making change in plans or specifications, or in both, during the progress of estimating. Correction of this pernicious practice can only be obtained through refusal by contractors to estimate under such conditions.

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Professional Ethics.

The following . . .
. . . CODE OF ETHICS . . .
Prepared in Conformity with the Best Standards of Practice, and Recommended to its Members by the Boston Society of Architects, was . . . . . .

ADOPTED BY THE SOCIETY, FEBRUARY 1 . . 1895. . .

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 criticise 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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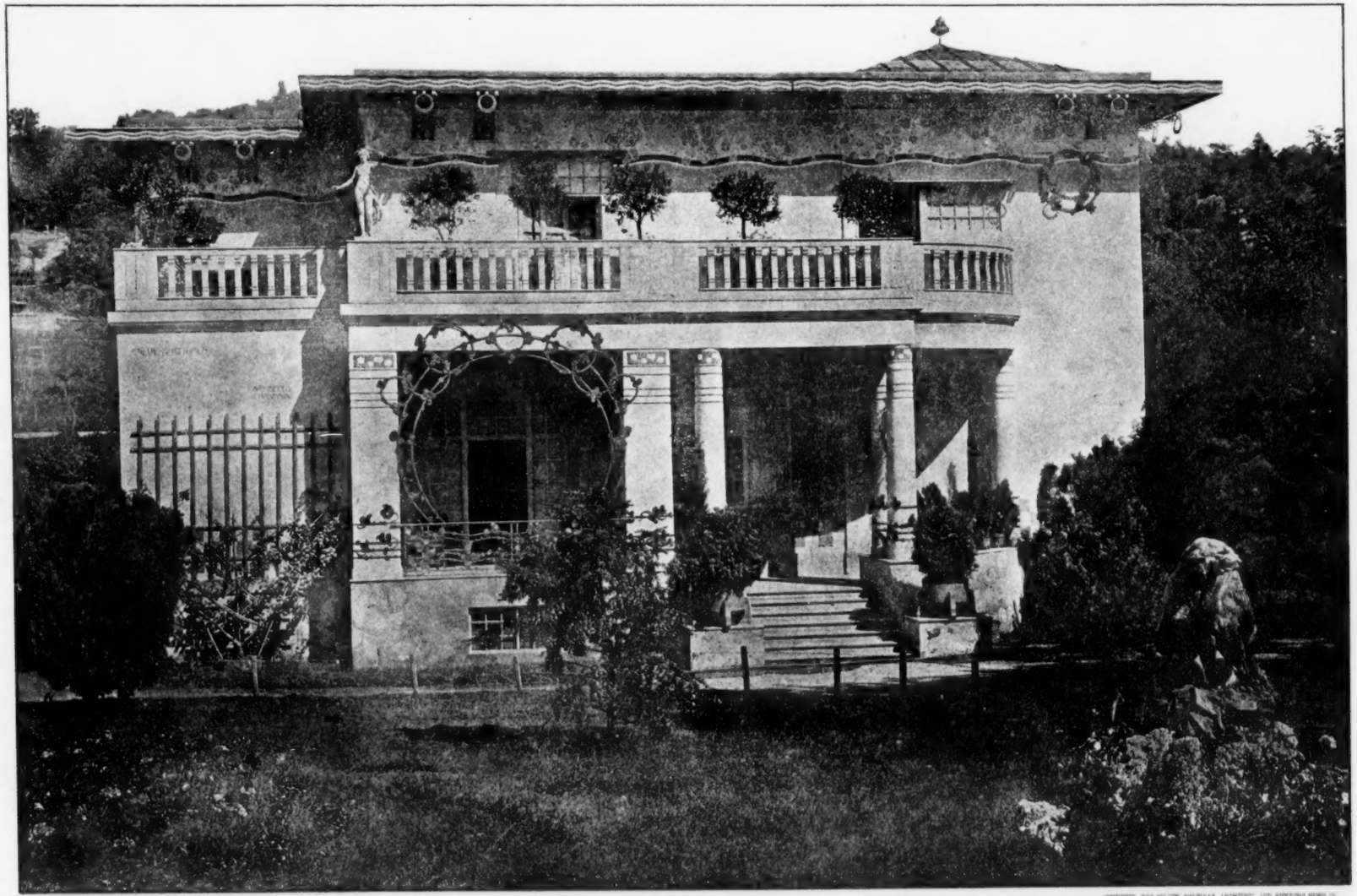

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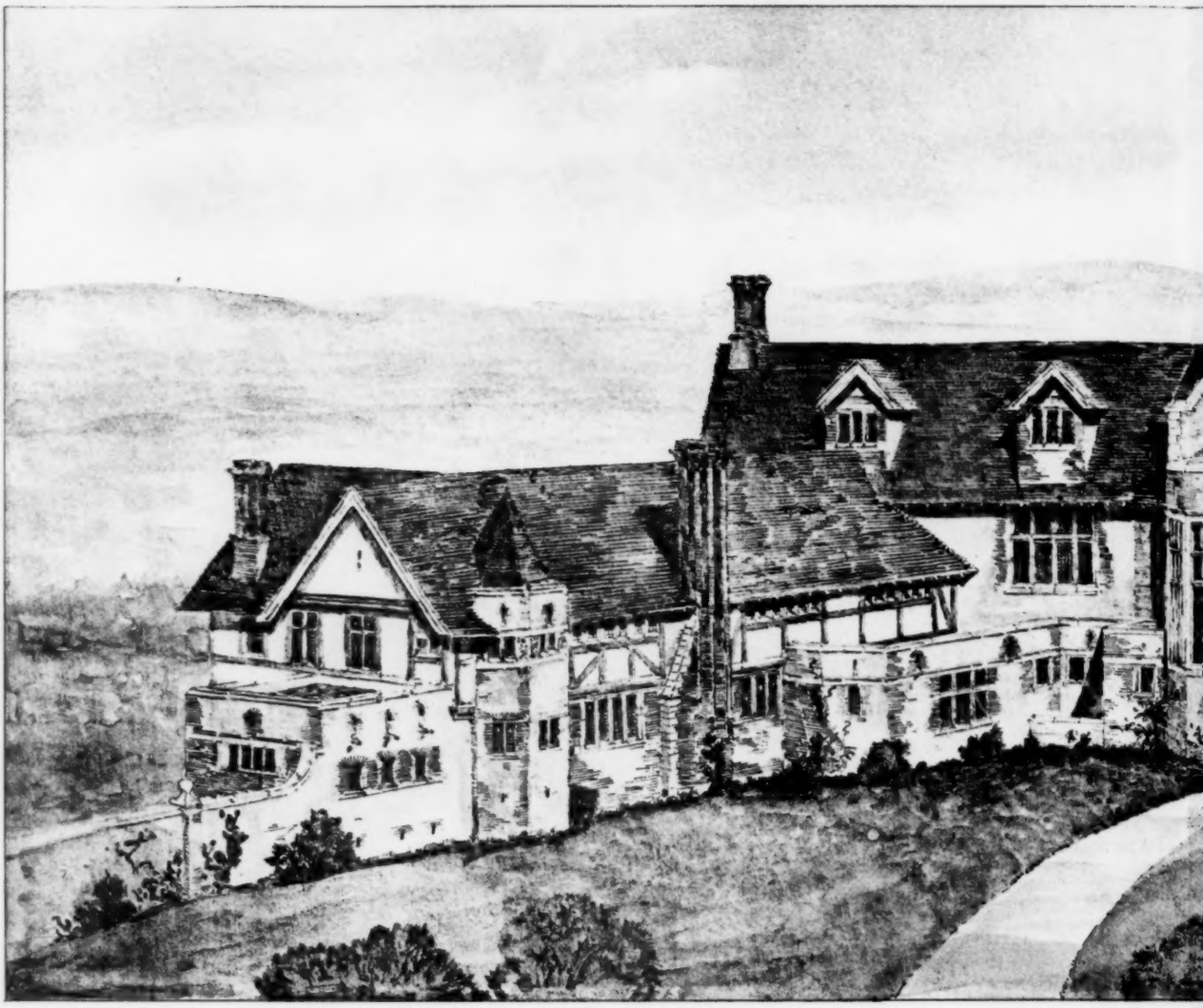

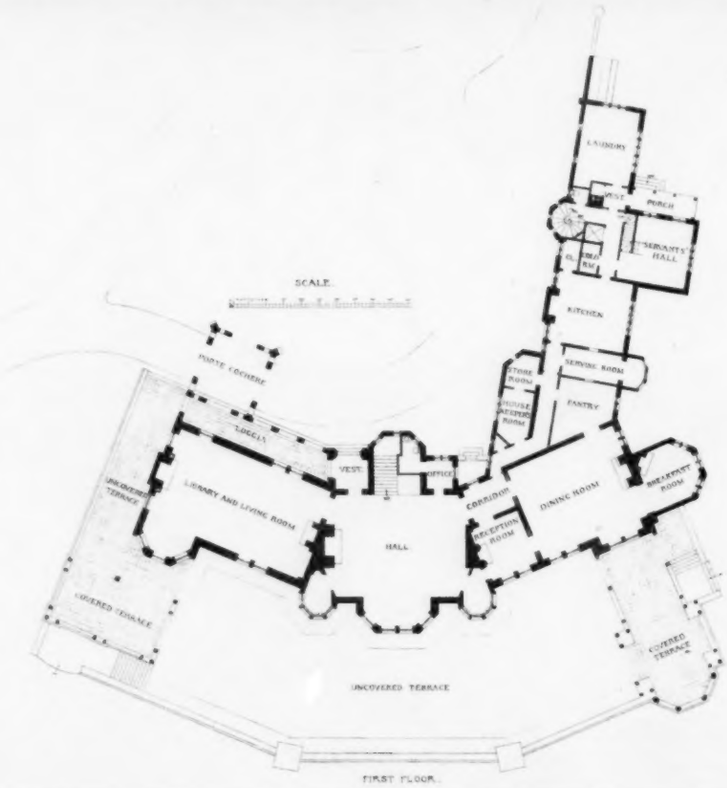

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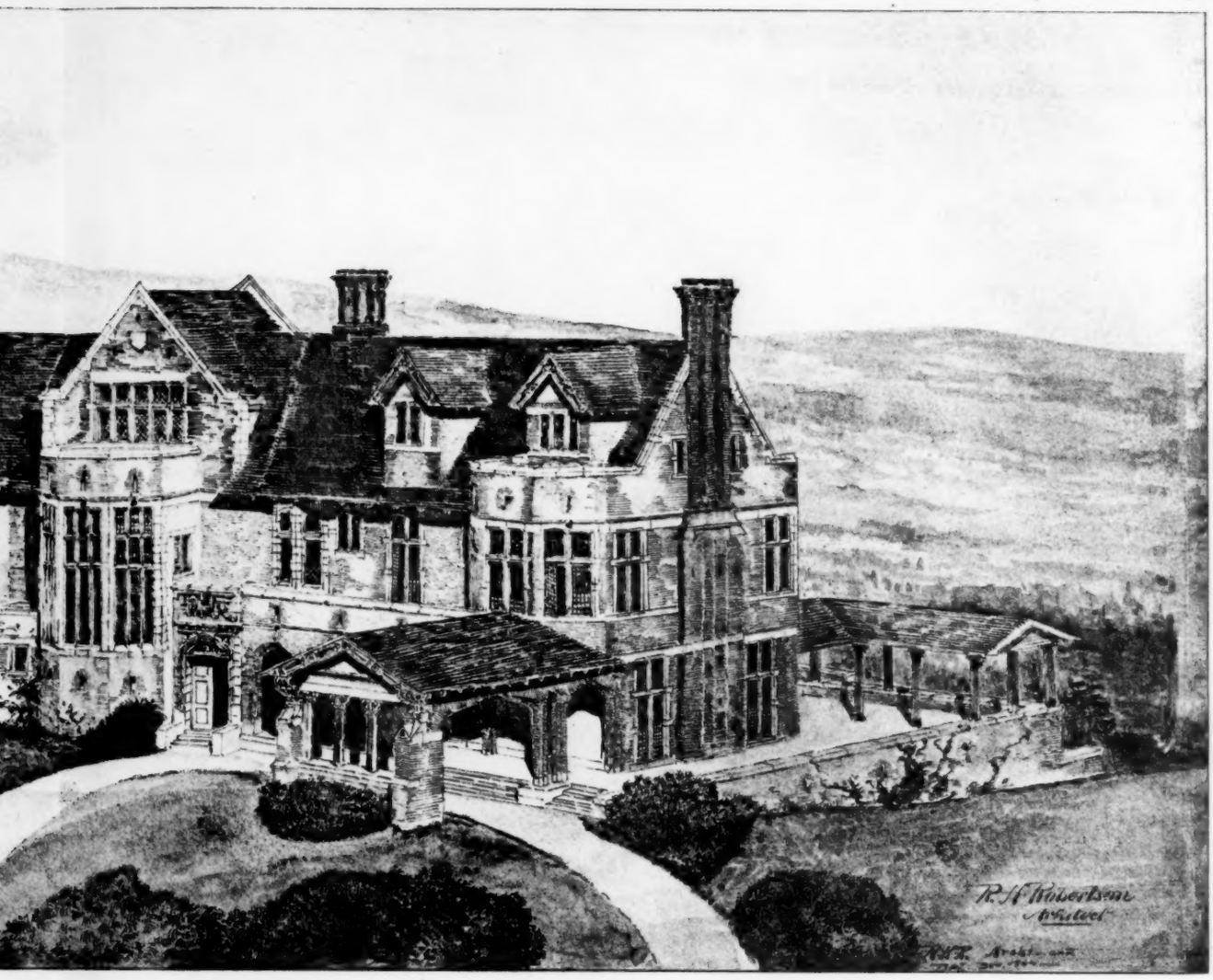

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