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A VERY important and interesting suit has been begun in the New York Courts. Next to the twenty-story Manhattan Life Insurance Company's building on Broadway is a four-story building, owned by Mr. Crocker. Three distinct surveys of the wall of the Manhattan building adjoining the property of Mr. Crocker are said to have shown that the upper portion of this wall overhangs its base, and, consequently, Mr. Crocker's building, by nearly six inches, while an ornamental cornice at the top of the Manhattan building extends from one to three feet over Mr. Crocker's property. Although it is quite common for the owners of high office structures to decorate the upper part of their buildings with cornices overhanging the adjoining estate, Mr. Crocker objects to the practice; and having, it is reported, been refused the privilege of using the Manhattan wall as a party-wall in case he wished to carry up his building, he objects to being compelled to give up six inches of his land to accommodate the overhang of the wall of the Manhattan building, and in the present suit he requests that so much of the Manhattan building as prevents him from utilizing his land to such height as he pleases may be cut off; or, if this is found to be impracticable or inconvenient, that he may be paid a reasonable price for so much of his land as he is prevented, by the action of the Manhattan Life Company, from using.

THE Manhattan Company makes a rather singular defence to the suit. While it acknowledges that its cornice projects over Mr. Crocker's estate, it says that this is merely a temporary ornament, which can be removed at any time if Mr. Crocker should wish to carry up his building, and it denies that the wall overhangs, saying that this is an appearance due to the settlement of Mr. Crocker's building toward its own. As to its own building, it says that the foundations are on rock, and that any settlement is impossible. If this defence is correctly reported, it should not be very difficult for Mr. Crocker's lawyers to bring it to grief. Every one knows that the settlement, and, still more, the perpendicularity of a wall are matters which depend only to a limited extent on the foundations. It is true that if the foundations sink, the wall which they carry sinks also, but, supposing the foot of the wall to rest on immovable rock, the masonry above, far from being incompressible, is, to a certain extent a plastic, compressible mass, which, as the weight on it is increased in the work of building, sinks to a very appreciable extent, and may move outward as well as downward. In point of fact, this often happens, and walls built in winter, particularly, where the mortar freezes at night, and thaws superficially in the daytime, frequently bend outward during construction even where they were originally built

vertically; while many more high walls, carried up with nothing but the bricklayer's plumb-rule for a guide, are found to deviate considerably from the vertical before they reach the top. This deviation is usually outward, as the beams prevent building inward; and, where the natural settlement of a wall by compression of the mortar joints is complicated with an overhang due to the inefficiency of the bricklayers' tools, the result is likely to be an increase in the original overhang. Whether, from these causes or any others, the wall of which Mr. Crocker complains really overhangs his land is a question to be decided by examination with a plumb-line, not by looking at it from the street, or by induction from the solidity of the rock on which it is built; and the court is not likely to inquire into the law of the case until this point of fact is decided.

When it is decided, if it proves that the wall really overhangs, the question of whether Mr. Crocker is obliged to give up so much of his property without compensation, to accommodate it, will become of importance. We once built a building in New York, on a lot adjoining one on which was an old brick house. The wall of the house next the lot to be occupied by the new building was eight inches thick, and overhung its base eight inches. The French rule is that a wall which overhangs its base one-half its thickness or more is in a dangerous condition, and must be taken down, and our clients appealed to the Building Department to have the old wall condemned, offering to allow the adjoining owner the use of their new wall. This request was refused, on the ground that it was a scheme to persecute the poor man who owned the old house; and our clients were advised that they could not cut off any part of the overhanging wall, as this would obviously weaken it to a dangerous extent, and that their only course was to shorten their building eight inches, and allow their poor neighbor the use of so much of their land to accommodate his infirm wall. Whether this advice to our clients was based on knowledge by their counsel of the law of New York in such cases, or only on the general principle that juries are likely to strain the facts in favor of the poor man, we never knew; but the Manhattan-Crocker case, supposing the facts to be as asserted by the plaintiff, and only feebly denied by the defence, seems to bring up the issue in the clearest possible shape, and it will be of great interest to architects and real-estate owners to watch the decision.

THE path of Monument Commissions in New York is indeed a hard one. After years of criticisms, suggestions, reproofs, protests and obstructions of all kinds, the Commission for the Soldiers' and Sailors' Monument had at last selected for the monument a site on Riverside Drive which, if not particularly well suited for a monument, seemed at least inoffensive, and had received and opened bids for its erection, when notice was served of two suits to prevent the award of the contract, or the erection of the monument in the place proposed. One of the plaintiffs claims that the monument would "interfere with the flow of light and air" around her house, and cut off the view from it; and, presumably, the other has the same idea. It is hardly likely that these considerations would, in the end, prevent the erection of the monument on the site proposed, but it would be a long time before the suits could be heard, and the matter settled, so that it seems quite probable that the unfortunate monument may start on a fresh series of peregrinations.

THE movement against American noises seems to be progressing very favorably. In Detroit, Cleveland and Carlisle, Pa., the blowing of factory whistles is prohibited, and many cities and even small towns have put a summary stop to the whistling of locomotives within their borders. More than this, the New York Central Railroad has built for shifting trains engines with a noiseless exhaust, which slide about as quietly as the foreign locomotives, instead of deafening everybody within a dozen rods by the cannon-like forced-draught explosions which form, apparently, the delight of American engineers and master-mechanics. If American railways, instead of destroying the value of property near which they pass by the intolerable noise, smoke, sparks and dust which attend their operation, can be made as inoffensive as those in England and France, a great benefit will be conferred on the country through which they pass. The inhabitants of cities, however, suffer most, not only from railroad racket but from many other distressing noises which might easily be suppressed, and should

be suppressed at once if the nervous and sensitive Anglo-Saxon race is not to die out and yield its place to the more phlegmatic races. The maddening clang of the electric-car bell, for instance, which is practically useless for preventing accidents, as it is rarely rung to warn a foot-passenger until the car is so close upon him that the sound frightens him nearly out of his senses, should immediately be replaced by the tinkle of a small bell, which, like those fastened to the harness of the horses which once furnished the motive-power of street-cars, should ring constantly while the car is in motion. In this way, and only in this way, can the foot-passenger always be made aware of the proximity of a moving car, and can judge instinctively of the direction in which it is moving and of its speed, and only in this way can those numerous accidents be avoided which come from crossing a track on which is approaching a car which has been concealed by a car going the other way, or by any similar obstruction. In such cases, as the foot-passenger is concealed by the same obstruction from the motor-man of the advancing car, the bell is not rung, and no warning is given, while, with an automatic bell, the warning would be always sufficient. It is said, as an excuse for not adopting this obvious improvement on the present system, that no bell has yet been put on the market which will ring by the motion of an electric car; but a demand for such a device, or the assurance that there would be a demand for it, would bring it into the market at once in a dozen forms.

WITH the resources of the railroads devoted to doing their proper work without splitting the air and the tympanums of the public by useless and costly screeching, banging and roaring, and with the electric cars restricted to a steady and unobtrusive warning tinkle in place of an occasional frightful din, the American public would be able to collect its senses sufficiently to think of its city pavements as an agent in the production of brain diseases. It is true that New York has made some progress in laying asphalt pavements, and Washington, Detroit and other cities have done proportionately still more, but the pavements of Boston would discredit an Irish village; and, even in New York, the difference between the asphalted streets and those in which the weary horses hoist their loads over miles of granite hummocks is yet painful to the patriot. We do not dare to say, for fear of being thought extravagant, how much larger is the load that a horse can draw over an asphalted or wood-paved street than over one laid with granite blocks in the Boston fashion, and, in consequence, how much money the citizens spend every year to hire extra horses to lift their goods over the humps and hollows of the business streets, but it may be observed that in addition to the cost of extra horseflesh, the wear and tear of vehicles and harness, and the loss of time incidental to the use of badly-laid pavements of block stone, every jolt and rattle of the thousands of jolting and rattling vehicles that lumber through our city streets, tortures a nervous fibre in a certain number of people, and to that extent impairs their usefulness and shortens their lives.

WE do not realize in this country the extent to which the arts and sciences are encouraged abroad by prizes, medals and honors of various sorts. In Germany the scientific man is incited to exertion by the prospect of official titles, and by the rewards which business there, more than in any other country, offers to theoretical investigation; while in France, by a pleasant custom, it is the men of learning themselves who distribute the prizes which have been founded by persons who have, as a rule, themselves known the value of appreciation and encouragement to people who have consecrated their lives to the pursuit of knowledge. The last issue of *Le Génie Civil* makes a selection out of the list of prizes just awarded by the Academy of Sciences for the present year, which shows that the nineteen awards mentioned carry with them money-prizes to the value of more than eighty-two thousand francs, or nearly seventeen thousand dollars. A considerable portion of this money goes to professors or instructors in universities or technical schools, who, it is reasonable to suppose, find it very welcome; and much of the rest goes to officials, civil, military or naval, in the public service, while the remainder is awarded to private investigators. We have all heard of Bernard Palissy, who spent everything that he had in the endeavor to solve the problem of making a particular kind of pottery, and only succeeded after he had sacrificed his wife's wedding-ring, the last object of material value that remained in possession of the family. The French have had many Ber-

nard Palissys, who have given up all less noble aims to devote themselves to science, and they have been sensible enough to try to do something to show such people that they are not forgotten by those who will reap the benefit of their researches. The effect of this view of the matter is already apparent in the interest and fruitfulness of French scientific research, and it is probable that these will become more and more conspicuous in the future.

GENERAL RIVERA, Secretary of Agriculture for Cuba, has applied to General Wood for permission to take immediate measures for preserving the public forests of the island, which are very extensive. In Cuba, as in the United States, the public forests are ravaged by thieves, to call them by their right name, who steal the property of their fellow-citizens with impunity. As there is little railway transportation in Cuba, plundering is not carried on there as yet on the enormous scale on which it is practised here, but the Cuban timber is very valuable, much of it being mahogany or other slow-growing and precious timber, and it is none too soon to begin to take measures for protecting it.

THE fifteenth annual exhibition of the Architectural League of New York will open in the galleries of the American Fine-Arts Society, 215 West Fifty-seventh Street, February 10, continuing until March 3. The galleries will be open from 10 a. m. to 6 p. m., and from 8 to 10 p. m. every week day, and from noon to 6 p. m. on Sundays.

MR. EDGAR JAMES BANKS, formerly United States Consul at Bagdad, who has before made valuable suggestions in regard to archaeological exploration in Western Asia, calls attention to the ruins of Mugheir, in the desert bordering the Persian Gulf, which is supposed to be identical with the ancient city called in the Bible "Ur of the Chaldees," in which Abraham and Sarah were born, educated and married, and from which, with their nephew, Lot, they emigrated, at the Divine command, to the land of Canaan. Some excavations which have already been made at Mugheir have brought to light ornaments of gold, silver and copper, precious stones, pottery and inscribed tablets, some of which indicate that the original accounts of the creation and the deluge are still preserved there. Even in Abraham's time Ur was an ancient city, and much that is found there will probably belong to a period long anterior to the earliest civilization of Egypt. Thanks to the plastic clay of the Euphrates Valley, the ancient inhabitants of the country between the Indian Ocean and the Caucasus were much disposed to make records on pieces of terra-cotta, and multitudes of these have come down to us. In a single subterranean chamber in this region forty thousand such inscribed cylinders or cones were found, and the ruins of Mugheir are altogether likely to furnish vast numbers of them, which should throw light on that most interesting of subjects, the life and manners of the people who inhabited the world before the historical epoch.

A PECULIAR determination is said to have been reached by "organized labor" in the city of Springfield, Massachusetts. By a rule recently adopted, no member of a union is to be permitted, after March 15 next, to occupy a house built by non-union labor, or to do any work in repairing such a house. The rule is to go very gradually into effect, for it is not to apply to houses already built, but only to those constructed after the date fixed. The inventors of this ridiculous scheme imagine that, by means of it, builders of houses will be compelled to employ union labor, "thereby forcing hundreds of men to join the unions." It does not seem to have occurred to them that the owners of union-built houses, finding that the power of organized labor is to be exercised to provide them with tenants, will fix their rents to suit the demand, and that the non-union man, besides saving the heavy union dues, and being allowed to work when and where he likes, and at such wages as he is worth, will be able to hire a better house for the same money than his union neighbor, who is compelled, under threat of the misery which the union tyrants can inflict on himself and his family, to live in any sort of dwelling that the landlord favored by "organized labor" may see fit to provide him with, and on terms fixed, not by wholesome competition, but by monopoly. If this consideration, added to the others which thoughtful workmen understand, serves to "force hundreds of men to join the unions," human nature in Springfield must be singularly organized.

NOTES ON SOME EUROPEAN SYSTEMS OF FOREST ADMINISTRATION. — I.

RECENT residence, of some years' duration, and rather extended wanderings in the Alps of France, Switzerland, Bavaria and Austria, have afforded me opportunities to learn something of the methods and results of forest-administration in those regions. A constant interest in the subject beginning in some earlier experience at home, and a realization of the vital importance of the question to ourselves, urged me, with the kindly encouragement of the *American Architect*, to set down these notes of a layman's observation for publication in this review, in the hope that something of interest may be found in them, some addition, perhaps, to the knowledge of existing precedents to which we may be inclined to turn for guidance. Through the courtesy of forestry officials in the countries named, and of our own diplomatic and consular representatives, I have been able to obtain copies of legislative documents on the organization, history, etc., of the several systems, regulations and instructions for officers of the service, tabulated statistics, and such-like material, for which I wish to acknowledge here, in grateful remembrance of many kindnesses, my indebtedness. I shall endeavor to use of this information only so much as may be applicable to a consideration of the present state of our own forest-lands and the question of saving them from the destruction which imminently threatens.

In studying these examples of what other countries have done to save their forests from extinction we will find them dealing with conditions analogous to those of the problem we have to solve, a problem, it is needless to say, of the highest social consequence, involving as it does the future of the land and of the people who live upon the land — the problem of how to devise a means consonant with the scheme and traditions of our society to save our beautiful and bountiful country, an inheritance held in trust for our posterity, from the waste of short-sighted and comparatively unrestrained individual greed. Whatever we may ultimately do in the matter is likely to differ from European methods most radically in the particular of State interposition and Federal interference.

The Republic of France has in late years been much concerned with the proper attitude of the State in dealing with matters of individual initiative. A very general desire has been manifested to have the State represented in the direction of all great enterprises whose functions are of a broadly public character, and whose results are likely to be of social importance. More especially has this tendency been marked in the solution of the problems of reforestation. The recent drastic legislation which places the French government in a relation of absolute authority to the private owners of forest-lands, and of denuded lands designed for reforestation, is a going back to first principles which utterly abandons that most sacred dogma of the revolutionary political philosophy, the inalienable rights of individual ownership.

The increase in the area of waste lands in consequence of unchecked exploitation of the forests had begun to depopulate a large extent of territory. The mountain-lands of France were being converted into desert regions. To enable the government to come to the rescue, to render effective the intervention of the State for the redemption of large areas of territory and the economic relief of their communities, legislation of a far-reaching character was devised, and laws were passed which expanded the authority of the State and extended governmental functions to a degree never before reached under a republican system.

Under these laws the right of governmental expropriation has been exercised with an absolutism to which our own people would scarcely become reconciled.

These altered conditions are too recent, and the policy adopted under them is still of too tentative a character to show definite results, but the need of immediate action, and of a new system, had become so apparent that the communes are remaining patient under an exercise of State authority which is, from a republican point-of-view, somewhat extraordinary. The sister republic of Switzerland, suffering under a similar state of things, is following suit in a series of legislations, which we shall glance at later, based upon the same broad principle of State intervention in affairs of such interest to the whole nation as that of preserving the remaining forests, restoring so far as possible those destroyed, and repairing the incalculable damages wrought by such destruction. These two republican countries find no menace to the rights of man in the new régime, and welcome the State's aid of certain populations suffering under conditions brought about largely by their own ignorance and improvidence — conditions affecting the national prosperity by laying waste certain of the most beautiful portions of the nation's territory and driving off the inhabitants, pastoral peoples who find themselves unable to maintain life where the extinction of the forests has destroyed the pastures and created torrents to ravage the cultivated lands.

National prestige and the exigencies of defense demanded the intervention by government to correct a state of things which destroyed the beauty and habitability of their mountain frontiers. In the case of France, and largely also of Switzerland, the question of forest administration now resolves itself into one of reforestation. In the case of Bavaria, we shall be able to study the workings of a permanent forestry system, of some centuries' standing, which has afforded adequate protection to the natural and essential tree-covering of the mountainous parts of the kingdom.

The forests of France have been suffering ruinous exploitation since some time before the opening of the nineteenth century. From time to time French economists have warned the country of the inevitable consequences. Blanqui, in 1847, predicted that in 50 years the alpine frontiers of France and Italy would be desert wastes. While this dismal prognostication has, fortunately, not been quite verified, we shall see that the matter had become sufficiently grave to call for heroic treatment. Until 1860 practically nothing of importance was done to check the well-recognized evil.

Ignorance and greed had ruled, as they rule with regard to our own forests to-day, and will always rule in any society which leaves them unchecked. The Cevennes and the Pyrenees were little better off than the Alps, and floods incident upon the disappearance of the forests have played fearful havoc in those Departments; but the evil being of more recent standing in those regions, the effects, which are terribly cumulative — as we are to experience in our own case — are less sadly obvious.

The Alps are very steep and have a climate of comparative dryness, especially on their southern slopes, which does not give the vegetation such strength as elsewhere. Where the mantle of forest has escaped destruction towards the summits one finds the glades and clearings of the middle terrace still affording abundant pasturage. The roots of grass and herbage, nourished and protected by the tree-belt above, hold the soil in place.

Where this protection has been destroyed, the rills from the melting snow of the peaks, no longer held in check by a living tree-growth whose roots wattle the light calcareous soil in place upon the rocks and holds the streamlets within bounds, grow year by year into torrents. The trees once down, the moss, needles, shrubs and general woodland ground-covering, which takes up and distributes the surface-water like a sponge, are no longer sheltered and shaded, and die out rapidly. The waters of the storm and the melting snows from the crests rush unchecked down the mountain's flank. The little stream is swollen so that it ploughs out of its old bed, runs over the neighboring soil-covering and tears away the shallow blanket of earth down to the underlying rock, washing down masses of detritus to be deposited upon the meadow-lands below. The tilled ground at the mountain's foot is smothered in sand. Above on the shoulders, under the crest, bald rock slopes have succeeded the fresh green pastures.

"A country so ravaged becomes the image of desolation and of death," said M. Michel in his speech of 1880 to the Senate on the subject of the forests.

In the able and interesting brochure of M. Maxime Miane on the "*Reboisement des Montagnes*" will be found detailed descriptions of the evils following the loss of the forests. These notes will draw upon his work for facts and figures which admirably illustrate the subject.

M. Miane instances the case of the *Département* of the Basses-Alpes, where, out of a superficies of 695,000 hectares, there is a non-taxable area, waste lands and barren pastures, of 55 per cent, or over one-half, due to clear-cutting of the upper forest-belts. The residue contains 23 per cent of woods more or less destroyed and degraded mountain-pasturage, to only 22 per cent of cultivable land. He gives another example, the Valley of the Ubaye (*Barcelonnette*), where the arid and waste lands are 41 per cent of the whole area, that is about 43,000 hectares of desert, from the same causes, while the beds of rivers and torrents have increased until they cover 1,761 hectares.

The report of a Commission on the agriculture of South-East France in 1866 gives the following gloomy picture of the ruin caused by the wholesale denudation of the Alps. "In passing through the mountainous parts of the Basses-Alpes one is struck with their imposing but sad and desolate appearance. In place of the rich forests and verdant pastures which once covered those mountains there remain only bald crags and arid slopes where a dwarf brush still holds the little vegetal soil, not yet scoured away by the waters, between the deep ravines in which the torrents have rolled down enormous avalanches of rocks and gravel. Here and there is a meadow, or a wooded slope, whose lesser declivity has spared it, an oasis in that great waste."

These evils had been allowed to continue for a long time. The communities had not attempted to check them. Naturally, the simple peasant of the mountains was incapable, singly or collectively, of devising any scheme broad enough to have effect against abuses of such wide range.

The peasant is apt to take things as he finds them without bothering his head to look for causes or remedies.

He only knows that his fathers lived here on the mountain-side, and pastured their great herds where he now finds scant browsing for a few goats. The forest was dense above his cabin in those days. Now it is gone, and he can see the great cliffs, which are continually bombarding him with falling rock-masses, or trying to overwhelm his hut with snowslides, and ever eating away his land with the torrents they send down from their glistening sides. Perhaps he remembers, or his grandfather tells him, that these fatal torrents have grown in a few generations from innocent little burns which tumbled down in the old days through the forest, and did no harm, but only brought down cool drink for the cattle and moisture for the meadows on their shoulders. He does not think of the slaughtering axe which has never been quiet among the trees for near a hundred years, nor of the thousands of sharp hoofs which have been cutting

up the sod upon the pastures for all that time, leaving no season for rest and regrowth.

The wood was there. It was his. He cut and sold it, and was content in present well-being.

His own sheep fattened on the generous meadows, and there was room for more, so he let his pasturages and filled his pocket.

The present misery is only fate. It was to be.

He does not understand, nor is it easy to convince him, that his destruction of the forest which had stood there so long, useless as he thinks, even encumbering the land where he might be pasturing more herds, has left the streams free to plough the sides of his mountain, to kill out the old clearings where the grazing was so good, and to bury the fields below under tons of rubble, the soil scooped away from the meadowed-terraces of the old smiling slopes.

His fatalism is right in so far that the passive cause of all this ruin lay there always in the geologic character of his mountains, and in a climate which alternates terrible tempests with periods of burning drought. But it was the hand of man, the hand of his people and his own, laying low the brave old forest-guard which fought for them the sun and the storm, that let loose the demon of destruction upon the land of his birthright.

The finger falls readily upon regions upon the map of the United States where the same causes exist, the same evil is working, where nature is preparing a terrible vengeance for blind contempt of her laws. We are awakening to the danger, but slowly.

The air of the Alps is in certain parts dry, and rains are comparatively rare. The friable soil of calcareous earths and black lia-loam is not stable enough to hold the vegetation under the washings of heavy showers. The warring of tree-roots held it in place while checking the scouring rush of the waters. Imprudent cutting, wholesale clearing, and the abuse of the privilege of removing litter, leaves, moss, acorns, etc., have destroyed the natural defences, and the elements work their will unchecked. The balance is lost.

France of to-day is paying the penalty of many centuries of indifferent forestry.

In mediæval times the great religious establishments did not spare the forests, while the secular clergy seldom discountenanced the vigorous cutting and clearing which swelled their tithes.

Venial foresters rather favored abuses which brought them bribes.

Louis IX found it necessary to issue an edict forbidding them to accept gratuities. France at that time was covered with splendid forests.

Charles V had laws passed to forbid reckless clearings (1376).

Francis I multiplied edicts to this end, but civil and foreign wars prevented their successful enforcement.

Sully, in 1597, and Colbert, in 1669, strove to check the destruction of the forests.

After them came a period of neglect and waste. The Revolution knocked down all barriers. The nobles had owned the forests and protected them under royal edicts. This was pronounced tyrannical monopoly of the woods and chase. The wise old protective laws were abrogated as violations of the sovereign right of property, and of "the imprescriptible prerogatives of individual liberty."

The proclamation of November, 1791, placing the forests under the guardianship of the communes, was thus inspired.

"It delivered the forests," says M. Cezanne, "to their worst enemies."

The profound general misery of this period, the dense ignorance of the mountain-people, and their childish ardor for the new régime, gave over the ancient forests to wholesale looting.

The like was never seen—except perhaps in the subsequent history of a young people across the water, destined in the ensuing hundred years to grow into a very great nation, but also destined to continue for all that long time in an incredible unwisdom and improvidence with regard to its mighty forests.

Greed let loose made havoc in the grand old preserves of France. The citizen-peasant was his own master now, and he delighted to taste his liberty in laying low the silent nobles of the forests when not engaged in the keener sport of bagging aristocratic live-game. He would sometimes be known to fell a century-old tree to make him a pair of sabots.

After a while he found that to burn the standing forest was the quickest method of clearing. Firing a forest became a popular way of celebrating Revolutionary victories.

We have seen something of the same sort in our own land and time. I have never forgotten an incident, about the equal of the affair of the sabots, which came within my own ken some years ago in the Sierras. It was an everyday occurrence there, perhaps, and then, but it made a lasting impression upon a young tenderfoot. It was the case of a man who had cut down a round half-dozen forest giants in search of a butt "just right" to split up into shakes for his cabin. They told me he was rather proud of his "shakes." The great trees were left to rot where they fell.

I watched through three months of the same summer—it was in the late seventies—the great virgin forests burning down the ridges of the north fork of the Yuba, a matter connected, I understood, with sluice-mining operations on a grand scale along that stream.

The great hydraulic mines of that region were subsequently enjoined, it will be remembered, from washing down sand and gravel which covered the farms of the upper Sacramento, in a famous decision of the Supreme Court of California, which recog-

nized the sovereignty of the soil, and voiced a principle which might, it would seem, warrant governmental protection of the forests in most of our States, granting that conservation of the forests is an agricultural necessity.

I once sailed up Lake Huron through three degrees of latitude, bisecting an area of 20,000 square miles covered with a dense pall of smoke from forest-fires on the American shore. But one might go on indefinitely citing such cases of incalculable waste and ruin.

It was not long before the plundering of the forests throughout all France aroused the Revolutionary government to action.

It began to be feared that timber for the navies would be lacking. A decree of the 9 Floréal, year XI, prohibited all clear-cutting without express authorization. This prohibition ran for 25 years, and was renewed up to the year 1858, when it became definitive.

Michel estimates the area of forest destroyed under the Revolution at 1,500,000 hectares. The Alps bore the brunt of it.

A. B. BIBB.

[To be continued.]

THE WINTER EXHIBITIONS AT BURLINGTON HOUSE AND THE NEW GALLERY.—I.

THE winter exhibitions just opened at the Royal Academy and at the New Gallery promise to be of exceptional interest; indeed, for admirers of the Old Masters, there is a *embarras de richesses*.

At the New Gallery there are three distinct series, each complete in itself, viz.: a collection of Netherlandish Masters of extraordinary interest, among which are the names of Quentin Matsys, Mabuse, Hans Memlinc, Snyders; an important gathering of canvases by Sir Peter Paul Rubens and his school, also a small selection of works by such distinguished British painters as Reynolds, Raeburn, Gainsborough, Hoppner, Turner and Lawrence.

At Burlington House Sir Anthony Van Dyck reigns alone, six galleries being devoted to one hundred and twenty-nine oil-paintings, while the water-color room contains above one hundred sketches for larger works, and many portraits in *grisaille* of artists, engravers, scientists, etched by Van Dyck himself, and others reproduced by the best engravers of the day, to form the celebrated book known as the "*Centum Icones*." This exhibition is interesting not only as being a collection of the works of a most distinguished artist but as consisting chiefly of portraits of King Charles I, his family and Court.

Before proceeding to describe the works here shown, it may be interesting to run through the principal stages of Van Dyck's career, our knowledge of which remains very imperfect, in spite of several "*Lives*" of the painter which have been given to the world. He scarcely ever signed or dated his pictures, as Rembrandt did; he kept no diaries, as did Sir Joshua Reynolds and Romney; and we are left to learn our facts concerning him from doubtful traditions and chance records. We know, however, that he was born at Antwerp on March 22, 1599, in the same year as Velasquez and eight years before Rembrandt, that his parents were in a good position, and that in 1610, at the age of ten, he took his place as an apprentice in the studio of Hendrick van Balen, who was considered one of the first artists of the day, two years later becoming a pupil of Rubens, with whom he worked for six years. There are many stories of his precocity, and before he was twenty he had made a great name.

Van Dyck's first visit to England was paid about 1620, and King James I gave him £100 "by way of reward for special service performed for his Majesty." What that service was is unknown, but it is believed that on occasions he acted as secret envoy for James I, his passport describing the painter as "servant" to the king, which in a hostile land, as Holland then was, guaranteed his safety, he being a Belgian.

His stay in England was, however, very short, and early in 1621 he returned to Antwerp and resumed his connection with Rubens, assisting him probably in the great work of decorating the Church of the Jesuits. The end of this year saw him on his way to Italy, to which course Rubens urged him, and he stayed there four years, during which time he painted the portraits of many distinguished personages. While in Genoa he frequently visited Sofonisba Agniscola, a noble lady of Cremona, and a famous portrait-painter. This lady had been invited by order of Philip II to Madrid, where, among other sitters she had the beautiful Elizabeth of Valois, Philip's newly-married third wife, and Don Carlos, his ill-fated son. In later life she lost her sight, and Van Dyck was wont to say that he "had been more enlightened in painting by a blind woman than by his own master"—no mean praise from Rubens's favorite pupil.

Some years were spent in Belgium, interspersed with sundry visits to Paris and Germany, and in 1632 Van Dyck arrived in London at the pressing invitation of his patron, the Earl of Arundel. He was at once appointed "Principal Painter in Ordinary to Their Majesties," some months later receiving the honor of knighthood, and from that time onward his career was one of unexampled success.

The amazing number of portraits painted by him can only be accounted for by the fact that the details, etc., of drapery were executed by his pupils from his own small sketches. As a rule he devoted one hour at a time to each sitter, rising at the end of the hour as a token that the sitting had terminated. On occasion, however, he invited his sitters to a lordly banquet, where he had the opportunity to study them at their ease.

The refinement and artistic splendor of the Court of Madrid at the beginning of the reign of Philip IV undoubtedly exerted a great influence on Charles when, as Prince of Wales, he visited Spain, accompanied by Buckingham. And though unsuccessful in his quest of a bride, he acquired or greatly increased those tastes which adorned his few prosperous years as a king, and which still lend a grace to his memory. The galleries of the Escorial and the Prado fired his ambition to form one in England worthy of the British Crown,—the only ideal which Charles was fortunate enough to attain.

Velasquez, who had shortly before come to reside at the Court of Madrid, began the portrait of Charles, receiving from him one hundred crowns; but it was left to Van Dyck to be the unrivalled delineator of that pensive countenance.

It is undoubtedly to Van Dyck's visit to Italy that we must ascribe his pre-eminence as a painter. His mode of conception enabled him to seize the more refined delicacy of the upper classes without at the same time failing to mark with life and spirit the characteristic traits of the lower. As has been well said, "he seems to have come into the world to paint for all time the gallants, the courtiers and the heroes of the Stuart Cause. He found in the work of his predecessors poetry at its highest, brutality at its broadest; then he took up his brush, and, with the best of good painting, recorded the best of good breeding."

In his native country and all over the continent of Europe he is regarded first as the continuator of Rubens, and next as the inventor of a type of aristocratic grace and dignity which has been the world's ideal ever since. To us in England he is this and more, by reason of the political history of those ten years during which he worked among us. He has preserved for us the features and the lavish elegance of a whole generation—a whole social epoch which was swept away at Naseby and Marston Moor. In the judgment of the ordinary cultivated man admiring the art of painting and knowing something of history this is a sufficient claim to immortality.

The present exhibition contains fewer examples of his religious pictures than did the recent exhibition of this painter's works at Antwerp. It is, on the other hand, an almost exhaustive representation of his art as a portrait-painter. We have said "almost," since the absence of the treasures at Panshanger, and the still more celebrated pictures at Petworth, the property of Lord Leconfield (among which are many *chefs d'œuvre*), have left a blank in the collection.

On the other hand we may congratulate the Academy on having received from the Emperor Nicholas II the loan of the "Lord Wharton" from the magnificent galleries of the "Hermitage," St. Petersburg.

Her Majesty the Queen, with her usual kindness, has lent six paintings from Windsor Castle and Buckingham Palace, besides a drawing in chalk of the horse in the large equestrian portrait of Charles I, lent by Lord Barrington. The King of Italy sends several small chalk drawings from the Royal Library.

Truly a gorgeous display meets the eye, culminating in Gallery III, where the centre of each of the four walls is occupied by a masterpiece, viz.: the Queen's "Five Children of Charles I," the Emperor's "Philip, Lord Wharton," each hung with drapery, the Duke of Newcastle's "Rinaldo and Armida," and "Andrea Spinola," lent by Captain Heywood-Lonsdale. In this, the largest gallery, only twenty-eight paintings are hung, so that full justice can be done to these splendid works, and no less splendid and noteworthy frames.

Among the seven pictures lent by the Queen it is strange that there are none of Charles I or his queen, Henrietta Maria, not even the famous three portrait-heads in different positions painted as a model for Bernini's bust. But there are two groups of their children, one of the three eldest, and a second of their five children; in the centre of this latter portrait-group is an immense mastiff, which, though finely realized, somewhat breaks up the composition. The Princess Mary, in white satin, looks around at the spectator with a demurely coquettish air, and is altogether charming. This canvas, 64 x 78 inches, is signed and dated 1637, and is also inscribed with the names and ages of the children in Latin. Van Dyck's familiarity with the Royal Family gave him a great facility in catching the childish grace by which these pictures of the children are distinguished.

Viscount Galway lends also a "Portrait of Charles I and his Family," the queen seated with the infant Princess Mary in her arms, and at the knee of the king stands the little Prince Charles. The queen wears a dress of amber silk, with white lace and pearl necklace; the Houses of Parliament form a background seen through a window.

To a future article must be left a more detailed description of this interesting collection, the present paper being naturally confined more particularly to a general sketch of the man and his style.

[To be continued.]

STRENGTH OF CONCRETE SLABS.

A JOINT committee of representatives of the Northern Architectural Association, the Newcastle, Gateshead and Tyne District Master Builders' Association, and the Council of the Building Trades Exchange, was appointed last March to organize and carry out an independent test of the comparative breaking strengths of concrete slabs made with and without the addition of "expanded metal." The details were left in the hands of a sub-committee, under whose personal direction and supervision twelve slabs were set

up on wood centerings and brick piers in the foundry yard of the Gallowgate Iron Works, belonging to Henry Walker & Sons, Limited, on July 20 and 24 last, the centerings being removed on Aug. 16. The slabs, which were calculated within a fraction of the cost per yard either way, were cast in wooden boxes supported by brick piers, and the concrete was mixed according to the specification of the sub-committee as follows: "Concrete to be gauged 5 to 1 for the five-inch slabs and 3 to 1 for the three-inch, and the cement to be of the ordinary gauge of 2,500 meshes to the square inch. The concrete for the five-inch slabs to be composed of four parts clean-washed gravel to pass a two-inch gauge, one part of clean sand, and one of Portland cement. The concrete for the three-inch slabs to be composed of two parts clean-washed gravel to one-inch gauge, one of clean sand and one of Portland cement."

The cement was procured from a merchant in the ordinary way, and when tested there was no residue through the fifty-sieve, and only two per cent. through the seventy-sieve. It, however, only weighed ninety-four pounds per struck bushel.

The five-inch slabs at 5 to 1 with metal were Nos. 2, 5 and 8, and those without the metal Nos. 1, 3 and 4, being eight inches thick, the extra three inches being necessary to equal the value of the metal (No. 10 gauge). The three-inch slabs at 3 to 1 with No. 8 metal were Nos. 9, 10 and 11, and those without the metal were increased to four and one-half inches thick, to equal the value of the metal omitted, and were Nos. 6, 7 and 12. Each slab had six-inch wall-hold, each end only supported. The corresponding slabs, with and without metal, were made out of the same gauging of concrete. All were four feet wide.

In the presence of several members of the committee and a number of other gentlemen, the slabs were gradually weighted with pig-iron on Sept. 19 and 20 last, and in their report the committee state the results to have been as follows:—

Slab No. 1 broke before the test began, two men and six pigs of cast-iron being on it—i. e., about 9 cwt. No. 2 broke under a load of 237 cwt. 3 qrs. 14 lbs., showing one-eighth-inch deflection under 75 cwt.; one-half-inch deflection under 175 cwt.; it cracked at 220 cwt. No. 3 broke under a load of 22 cwt. 2 qrs. 18 lbs. No. 5 was unbroken under a load of 340 cwt. 1 qr. 21 lbs., though it showed five-sixteenths-inch deflection; it was unsafe to pile the pig-iron to a greater height. When the load was taken off, the slab went back to nearly its original straightness. No. 4 broke under a load of 124 cwt. 2 qrs. 20 lbs. No. 8 was unbroken at 270 cwt. 2 qrs. 2 lbs., at which point the piling of pig-iron was considered unsafe, being about eleven feet high. The slab showed a slight deflection under a load of 261 cwt. 2 qrs. 12 lbs., but went back again.

It should be mentioned that the slabs, when cast, remained exposed in the open to a continuous hot sun, which had "spider-webbed" the surface of the cement. No. 4 slab was partly protected from the sun.

Slab No. 6 broke accidentally while the men were piling up the weight on No. 5. No. 10 broke under 96 cwt. 1 qr. 17 lbs. No. 7 broke under 17 cwt. 1 qr. 25 lbs. No. 11 broke under 113 cwt. 0 qrs. 22 lbs. No. 12 broke under 10 cwt. 3 qrs. 10 lbs. No. 9 broke under 213 cwt. 3 qrs. 8 lbs.

Generally speaking, there was only slight deflection before breaking. The fracture of the expanded metal was clean and free from crystalline appearance, the strands of steel having come closer together under the load, the "diamonds" being considerably elongated.—*The Builders' Journal and Architectural Record.*

ECONOMY OF SLAG-MORTAR.

THOSE who have set out and superintended extensive and important works of construction without being in any manner responsible for the designs, working-drawings and specifications accompanying them, cannot fail to have noticed the lavish and frequently indiscriminate use of Portland-cement, mortar and concrete. It frequently almost appears that when the architect and engineer have to deal with the constantly-recurring, difficult problem of getting in foundations in bad, boggy ground, in wet, spongy soil, and often at considerable depths completely under water, their only idea is to "shove-in" the cement-concrete with reckless prodigality, regardless alike of quantity, quality and cost. This extravagance—it might almost be termed waste—is unquestionably due in a great measure to the fact that the professional man knows that he is perfectly safe in trusting implicitly to so valuable and reliable constructive-materials as Portland-cements, concrete and mortar. Both these materials are very often employed under conditions and in situations in which there is not the slightest necessity or excuse for adopting them, and where ordinary good lime could be substituted for the cement with perfect security, and with a very considerable diminution in the total cost of the work. Another source of pecuniary loss is the very large proportion or "dose" of cement composing the mixtures, which is in many instances greatly in excess of that required for strength, setting or stability. Indeed, it is not going too far to state that some professional men have almost abandoned the use of ordinary lime for building purposes.

That artificial Portland-cement is a good, a very good, cement is universally admitted; but it is a serious mistake to take for granted, as many do, that it is the only good cement, and that no other good specimens exist except those produced, as that is, by the intimate

combination of clay and carbonate of lime or chalk. The excellent quality of artificial Portland-cement and the valuable constructive properties it possesses are unfortunately accompanied by the grave drawback that, if it is one of the best, it is also one of the most expensive of building-materials. This high cost-price is again much enhanced by the circumstance that it is most frequently and most profitably employed in very large quantities,—that is, *en bloc*. As a matter-of-fact, in all engineering work of magnitude, such as docks, bridges, water and sewerage works, and military defences and fortifications, the item of Portland-cement figures as a formidable part of the total expense. It was during the execution of the project, at present in progress, for increasing the water-supply of the city of Brussels, where Portland-cement was used in vast quantities, that the question of its comparatively excessive cost was brought prominently forward, and experiments conducted with the view of instituting a fair trial of the relative merits of ordinary Portland-cement and of another mixture in which the cement was replaced by slag or dross. The results of the experiments are both sufficiently conclusive and important to warrant us placing a brief description of them before our readers.

In the first place, the conditions of test were identical for all the specimens, whether they related to the tensile and compressive strength, the degree of crushing or trituration, the action of boiling-water or the force of steam. It was impossible to adopt a uniform standard of density, because while that of ordinary cement averages about 3.12, it is only 2.75 for the mortar prepared with slag. It was stipulated that the test-samples of pure cement should develop a strength of at least 330 lbs. per square inch after being exposed to the air for one day, and then immersed in water for a week, and that when this latter period was increased to some twenty-five days, the strength should be augmented to 480 lbs. It was conclusively proved that this condition was both worthless and out of date, without taking into consideration that cement is seldom used in a pure state, but, on the contrary, mixed with a certain proportion of sand, which imparts to it the necessary strength. Ordinary cement-mortar generally consists of one part of cement and three of sand, both by weight, and this was the composition of the specimens submitted to trial. At the end of 28 days these specimens were capable of supporting a stress of compression equal to 1,060 lbs. per square inch. When it is considered that nearly 30,000 tons of slag-cement were employed in the new water-works of Brussels for every purpose and under every condition for which it was suitable, and that it fulfilled in a perfectly successful manner all the duties demanded of it, it is evident that the material possesses considerable claims to public notice and investigation. Among the advantages belonging to the slag-cement when compared with the Portland are, first, that it is a good deal cheaper, since it costs ten shillings less per ton; secondly, it can be used almost immediately after its manufacture without the necessity of storing it for some three or four months; and, thirdly, it is lighter, so that it yields a greater volume, weight for weight. The whole of the slag-cement for the new water-supply works mentioned was procured from the factory of M. M. Heeren; but the same product is prepared by the firm of John Cockerill, at Seraing, which, upon trial, has afforded equally excellent results as that from the other well-known establishment. It has been stated on the best authority that over £12,000 was saved by the substitution of slag-cement for Portland in the works at Brussels. — T. C., in *Building News*.

THE ROYAL NATIONAL GALLERIES ILLUSTRATED.

Consul General Mason, of Berlin, has made a report giving a description of an association organized in Berlin some years ago for the purpose of applying a new process of colored photogravure to the reproduction of the masterpieces in the royal galleries of Europe. The educational character of the work, Mr. Mason thinks, makes it worthy of notice. The report reads as follows:

It will doubtless interest the friends of æsthetic culture in America to know that a society in Berlin, known as the Vereinigung der Künstlerfreunde für die amtlichen Publicationen der Königlichen National Gallerie (Union of Friends of Art for the Official Publication of the Royal National Galleries), which is organized under a charter issued by the Prussian Ministry of Worship and Education, is about to send a delegate to our country for the purpose of establishing a branch office in the United States. As its name implies, the society is the vehicle for distributing among the educational and religious institutions of Germany and the people in general facsimile copies in colors of the great masterpieces and famous paintings in the royal galleries in Europe, thus planting the seeds of art education in the minds of the rising generation, and fostering among the intelligent classes a cultivated taste for wholesome art.

The popularity which the society enjoys here and the success which has crowned its efforts must be accredited to the artistic standard of its productions, which rise far above the meaningless black and white prints, cheap chromos, photogravures, etc., that flood the German art market. This superiority is due, in the main, to the peculiar process owned and employed by the society in its reproductions, a process which, in due course, it intends to transplant to the United States. It differs in its method from any heretofore employed, inasmuch as it enables the reproducing artists not only to create true facsimiles of the original in every outline, by means of photography and steel etching, but also to produce the depth of

coloring and the peculiarities of manner of each master by a special employment of the colors called heliotint, thus reproducing the characteristic handiwork of the artists.

The methods employed by the society for the distribution of its productions among the educational and religious institutions of the country and the people at large are unique.

It obtained at the start a list of patrons, who, in consideration of certain annual contributions, caused the society to distribute a number of the works among the educational institutions of the country. This list of patrons gradually grew, headed by the Emperor and Empress of Germany, who are followed by many of the members of other royal and princely families in Europe, until it has reached an aggregate membership of more than sixteen thousand.

These patrons gradually introduced the society's productions into the homes of subaltern officers, teachers, civic employés, and people in the humbler walks of life, who, however, before becoming entitled to the privilege of receiving such art reproductions, had to sign the society's roll of membership and thus become active agents in the missionary work.

Keeping its educational tendencies continually in mind, the society has always exercised the greatest care in the choice of subjects for reproduction. It has made selections from the great classical and modern religious painters, Raphael, Murillo, Guido Reni, Paolo Veronese being among the former, and Hoffmann, Ploekhorst, Gerhardt, and others, among the latter. It has also endeavored to foster the love of home and country by giving reproductions from famous masters which represent scenes from history, and it will adhere to a like policy in the conduct of its American branch. Each year, a number of subjects from the history of the United States, these subjects to be chosen by an American Advisory Board, will be selected for reproduction, the originals to be painted by American artists. (Leutze's famous canvas, "Washington Crossing the Delaware," is already on the stocks in the society's ateliers, to open the American series.) These American historical paintings will be placed on exhibition, both in the United States and in Europe, and gold medals will be awarded by the society to those American artists whose works are chosen for reproduction. American landscapes and marine views will also be included in this line, and it is proposed, in time, to erect a suitable building in one of the principal cities of the Union, which is to serve the purposes of an artistic workshop for the American branch of the society.

THE LAY OF THE JERRY-BUILDER, WITH APOLOGIES TO THE OLD, OLD SONG.

Woodman, slay that tree,
Leave not a single bough,
In age it worries me,
Down with it, down with it now.
A stupid rustic's hand
Once planted it for shade;
Go, man, don't let it stand,
I want a villa made.

That old disgusting tree,
Whose branches tumble down
To strike and frighten me,
Oh! go and hack it down.
Give one good thund'ring stroke,
Cut all its earth-bound ties,
And pull that hideous oak
Down, crashing, from the skies.

When but an idle boy,
I sought its dismal shade,
And laughed with gushing joy,
Or with my sisters played.
My mother chid me there,
My father whacked my hand;
I ask, and with no tear
Don't let that old oak stand!

The midges round it cling,
The gnats with fury bite,
The birds upon the wing,
Go shrieking day and night,
Old tree! it's time you fled,
I want a villa bright,
A villa painted red,
And not quite watertight.

S. BEALE.



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

LIBRARY MANTELPiece: HOUSE OF ADDISON CAMMACK, ESQ., TUXEDO PARK, N. Y. MR. BRUCE PRICE, ARCHITECT, NEW YORK, N. Y.

TOMB OF THE DOGE NICOLÒ MARCELLO, IN SS. GIOVANNI E PAOLO, VENICE, ITALY.

This plate is copied from Cicognara's "*Le Fabbriche e i Monumenti conspici di Venezia*."

TOMB OF CARDINAL CAPRANICA, IN STA. MARIA SOPRA MINERVA, ROME, ITALY.

This plate is copied from Grandjean de Montigny's "*Architecture Toscane*."

HOUSE OF FRANK FLANNER, ESQ., INDIANAPOLIS, IND. MESSRS. VONNEGUT & BOHN, ARCHITECTS, INDIANAPOLIS, IND.

HOUSE FOR LARZ ANDERSON, ESQ., CINCINNATI, O. MESSRS. ELZNER & ANDERSON, ARCHITECTS, CINCINNATI, O.

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

PRINCIPAL MIHRÂB [THE NICHE MARKING THE DIRECTION OF MECCA] OF THE JÂMI MASJID, FATEHPUR SIKRI, INDIA.

OWING to an incident in the chapter of accidents, this plate, which should have accompanied the description published in our last issue, was displaced in favor of certain views of the Pan-American Exhibition buildings at Buffalo.

[Additional Illustrations in the International Edition.]

HOUSE OF ADDISON CAMMACK, ESQ., TUXEDO PARK, N. Y. MR. BRUCE PRICE, ARCHITECT, NEW YORK, N. Y.

[Gelatine Print.]

THE CARNEGIE LIBRARY, PITTSBURGH, PA. MESSRS. LONGFELLOW, ALDEN & HARLOW, ARCHITECTS, BOSTON, MASS.

[Gelatine Print.]

HOUSE OF HERR EMANUEL SCROL, MUNICH, BAVARIA. HERR EMANUEL SEIDL, ARCHITECT.

[Gelatine Print.]

THE GARDEN FRONT: "BRYANSTON," DORSET, ENG. MR. R. NORMAN SHAW, ARCHITECT.

PERSPECTIVE VIEW OF THE SAME FRONT.



THE ITALIAN TAX ON WORKS OF ART.—The question of the Pacca Edict (a law demanding that a duty of 20 per cent shall be paid on all objects of art exported from the Papal States) is interesting when viewed from an international standpoint. While making no comment, I will simply limit myself to facts with regard to the recent action of the Italian Government in this matter, which will, I think, create a certain amount of surprise. The Diplomatic Corps at the Court of the King of Italy have frequently protested against the application of the 10-per-cent tax established by Article 14 of the Pacca Edict, April 7, 1820, on objects of art exported by the representatives of foreign States. They sustain their right of exemption from this tax by virtue of the exemptions established in their favor in the preliminary dispositions of the customs tariffs. The members of the Diplomatic Corps opined that payment for the right to export objects of art should be included under the head of customs dues, from which ambassadors and other foreign ministers are exempt, not only with regard to goods they re-export, but also those which they have acquired during the term of their mission. The present Ministry have replied, however, that a distinction must be made between the customs tariff of one per cent paid by exporters of objects of art at the frontier of the Italian provinces and the tax of 20 per cent imposed by the Pacca Edict in the ex-Pontifical Provinces, which tax admits of no exception. The controversy which has been going on since 1885 has resulted in the question being taken up by the Minister of Foreign Affairs, who has, in turn, placed the matter before the Council of State. The decision of this Council at the sitting of January 1, 1899, was as follows: "That the tax of 20 per cent imposed by Article 14 of the Pacca Edict, April 7, 1820, shall be levied on all the goods therein indicated upon leaving the State, though they may belong to the members of the Diplomatic Corps." Another cause of lively protest is the tax fixed upon objects of modern art of 2.50 lire (2s.) on goods valued at 2687.50 lire (£107 10s.) and under; and of 12.50 lire (10s.) if the value exceeds that amount. This tax was imposed in the ex-Pontifical Provinces by Pius IX in his notification dated August 16, 1848. The Minister of Foreign Affairs, in order to put an end to

the dispute, had recourse a second time to the Council of State, enquiring if the maintenance of this latter tax be legitimate in view of the present condition of artistic legislation. The Council of State, however, at the sitting of February 16, 1899, was of the opinion "that the tax imposed on objects of art exported from the provinces forming part of the ex-Pontifical States, in accordance with the notification of August 16, 1848, has not been abolished, and, consequently, must still remain in force." This decision concerns also the tax on ancient objects prescribed by the same notification, of 12.50 lire (10s.) if the value exceeds 268.75 lire (£10 15s.), and 2.70 lire (2s. 2d.) if the value falls below that amount. — *Alfredo Melani in the Builders' Journal*.

WIRE-NAI LS.—In estimating the cost of work it is necessary that the approximate amount of nails required to complete the work should be known. Since the introduction of the wire-nail the number of nails required to do a given piece of work is not the same as when the barbarous "cut-nail" was in vogue, therefore the rules given for the latter will not apply to the former. The table given herewith is nearly correct, and is based on experience. For 1,000 laths it takes 5½ pounds wire-lath nails; 1,000 shingles, 5 inches to weather, 5 pounds shingle-nails; 1,000 feet 6-inch sidings, 18 pounds 2½-inch wire-nails; 1,000 feet common boarding, 20 pounds 2½-inch wire-nails; 1,000 feet rough boarding, 22 pounds 3-inch wire-nails; 1,000 feet square-edge 1-inch flooring, 36 pounds 3-inch wire-nails; 1,000 feet square-edge 2-inch flooring, 40 pounds 4-inch wire-nails; 1,000 feet matched flooring, blind-nailed, 31 pounds 3-inch wire-nails; 1,000 feet furring, 1" x 3", 42 pounds 3-inch wire-nails; 1,000 feet furring, 1" x 2", 60 pounds 3-inch wire-nails; 1,000 feet pine finish, 26 pounds 2½-inch wire-nails; 1,000 feet hardwood finish, 20 pounds 2½-inch wire-nails; 1,000 feet studding in walls, 10 pounds 3-inch wire-nails; 1,000 feet rafters, cellar-beams, 8 pounds 3-inch wire-nails; 1,000 feet common fencing, 12 pounds 3-inch wire-nails; 1,000 feet pantry fittings, shelves, hooks, strips, and similar work, about 5 pounds 2-inch wire-nails. These figures are very nearly correct, sufficiently so to answer the purpose of the estimator. Of course, if the sizes of the nails are changed—larger or smaller—the figure must be changed to suit. — *The Carpenter and Builder*.

THE "HOUSE OF DOOM," WASHINGTON.—Commodore Rodgers a generation ago brought to Washington from Spain four Andalusian jackasses—no ordinary animals, be it understood, but jackasses of high degree and purest lineage. At that time such beasts were greatly wanted for breeding purposes in this country, and the long-eared quartet excited a vast deal of admiration. Henry Clay saw them, and, being himself interested in the rearing of fine stock, was most anxious to possess one—so much so, indeed, that he offered as a "swap" a large lot of land near the corner of Pennsylvania Avenue and Madison Place, valued to-day at about sixty thousand dollars. The Commodore accepted, and Mr. Clay, having thus acquired title to one of the jackasses, immediately proceeded to lose it over a gaming table. This did not end the matter, however, for Mr. Clay afterward redeemed the jackass and sent it to Kentucky, where it became the progenitor of what is now the most remarkable strain of mules in the United States. As for the lot, Commodore Rodgers built on it a dwelling which in later years obtained the uncheerful designation of the "House of Doom" because of the series of tragedies and misfortunes connected with it. But of that more anon. Speaking of Henry Clay's loss of the Andalusian jackass at the gaming-table reminds one of the remarks of Mrs. Clay when somebody asked her if her husband's gambling habits did not cause her deep pain. She laughed as she replied: "Not at all, I assure you. He nearly always wins." As already stated, Commodore Rodgers built a house on the land which he received from Mr. Clay in exchange for the jackass. It was a large and imposing mansion of brick, and its history from start to finish was made up of a series of tragic occurrences. The commodore died in it soon after its completion, and then it was turned into a fashionable boarding-house, which failed, swamping the finances of the proprietress. Next it became the home of the Washington Club, which included in its membership Barton Key and Daniel E. Sickles. It is said that Key signalled to Mrs. Sickles with a handkerchief from a window of the club; but, anyhow, it was directly in front of the club-house that Sickles shot Key to death, and the latter was carried into the club in a dying condition. When the Civil War broke out, the club went to smash, and Secretary Seward leased the mansion for his residence. It was there that Seward and his son, with three other people, were butchered nearly to death by the assassin Payne. Undeterred by its tragic history, James G. Blaine bought the "House of Doom" in 1890, and from that time on he had nothing but misfortune. He lost a daughter, and his son, Walker Blaine, died in the house. Finally, he himself died there, and then the mansion was torn down, to be replaced by a theatre, which now occupies the site once swapped for a jackass of Andalusia. — *Rene Bache in the Boston Transcript*.

A LETTER RUSKIN DISOWNED.—At Chesterfield, in England, on the occasion of a distribution of prizes to art-classes in that town, a letter was read to the assemblage as the reply of John Ruskin to an invitation to be present at the meeting. It said:—

"I have just returned from Venice, where I have been ruminating in the pastures of the home of art, the loveliest and holiest of lovely and holy cities, where the very stones cry out eloquent in the elegancies of iambs. I could not if I would go to Chesterfield, and I much doubt whether I would go if I could. I have heard of Chesterfield. Hath it not a steeple abomination, and is it not the home, if not the cradle, of that arch abomination, Creator Stephenson? To him we are indebted for the screeching and howling and shrieking fiends fit only for a pandemonium called locomotives, which disfigure the loveliest spots of God's own land. My good young people, this is preëminently the foolishness, yes, quite the foolishness, notion that you can get into your empty little eggshells of heads, that you can be a Titian or a Raphael or a Phidias, or that you can write like Seneca; but because you cannot be

great, there is no reason why you should not aspire to greatness. In joy, humility, and humbleness work together. Only don't study art because it will pay, and do not ask for payment because you study art. Wisdom is more precious than rubies, and is offered to you as a blessing in herself. She is the reward of industry, kindness, and modesty. She is the prize of prizes, the strength of your life now and an earnest of the life that is to come. This advice is better than money, and I give it to you gratis. Ponder it and profit by it.

Ever faithfully yours, JOHN RUSKIN."

It was a message of monition and instruction, not lacking confidence in tone, like others conveyed over its appended signature, and the classes received it in a proper spirit of humility. The next morning, however, the paper which had printed the report of the meeting was adorned with this briefer missive, bearing the same autograph, this time authentic:—

"Sir,—The letter you quote in your last night's issue as having been sent by me to the Secretary of the Art School at Chesterfield is an impudent hoax from beginning to end, and you will oblige me by letting this be known as soon as possible. I am, Sir, your faithful servant, JOHN RUSKIN."—*N. Y. Times.*

A REAL RUSKIN LETTER.—Perhaps Ruskin's blunt honesty of expression is nowhere better illustrated than in a letter written in reply to an appeal for help to pay off the debt on a chapel at Richmond. We copy it from Collingwood's "*Life*."

BRANTWOOD, CONISTON, LANCASHIRE, May 19, 1886.

"Sir,—I am scornfully amused at your appeal to me, of all people in the world the precisely least likely to give you a farthing! My first word to all men and boys who care to hear me is, 'Don't get into debt. Starve and go to heaven, but don't borrow. Try first begging,—I don't mind, if it's really needful, stealing! But don't buy things you can't pay for!'

"And of all manner of debtors, pious people building churches they can't pay for are the most detestable nonsense to me. Can't you preach and pray behind the hedges—or in a sand-pit—or a coal-hole—first?

"And of all manner of churches thus idiotically built, iron churches are the damnablest to me.

"And of all the sects of believers in any ruling spirit—Hindoos, Turks, Feather Idolators, and Mumbo Jumbo, Log and Fire Worshipers, who want churches, your modern English Evangelical sect is the most absurd, and entirely objectionable and unendurable to me! All which they might very easily have found out from my books—any other sort of sect would!—before bothering me to write it to them.

Ever, nevertheless, and in all this saying,

Your faithful servant, JOHN RUSKIN."

It should be added that the recipient of the letter promptly sold it for ten pounds!—*Exchange.*

REFORMING ENGLISH BURIAL CUSTOMS.—A reform movement which has been under way in England for a number of years, endeavoring to foster the spirit of simplicity in matters relating to death, is the Church of England Burial, Funeral, and Mourning Reform Association. Its motto is, "No darkened house, no durable coffin, no special mourning attire, no bricked grave, no unnecessary show, no avoidable expense, and no unusual eating or drinking." In at least one of the above prohibitions, the English reformers have a precedent in the Roman Laws of the Twelve Tables. The first part of No. X forbids useless expense at funerals. An exception in No. XI, which would doubtless be agreeable to the Church Association, states that the gold settings of false teeth, or the gold with which they are bound, should be buried or burned with the deceased.—*N. Y. Evening Post.*

CREeping RAILS ON THE EADS BRIDGE.—We quote the following from our contemporary *Locomotive Engineering*: "One of the 'fishiest' sounding stories we have run across lately is the creeping of rails on the Eads Bridge across the Mississippi, and yet, strange to say, it is borne out by facts and statements that cannot be disputed. Through the kindness of Mr. N. W. Eayrs, we are able to show the creeping points which are used to take care of this and not disturb traffic. This is so clear as to need practically no explanation, the rails from the bridge simply creeping off and past the points, which are securely fastened to the solid approaches at the ends. At the other or rear end (counting the direction of traffic) extra rails are fastened on, and are dragged through and into position by the creep of the rails. When a complete rail-length has been worked through they add another at the tail of the procession, and take off the one which has crept through. This one is transferred to the other track and immediately starts back. There are four of these devices on the bridge, one for each end of each track. These take up the motion of the track over the bridge, a distance of 1,700 feet. At the east end is a double crossover, which is also protected against creep by a pair of these devices, one on each track. East of this, again, is a stretch of about fifteen hundred feet of track on the east approach trestle, where one of these devices is put on each track. Rails placed in the creeping adjustment at the east end of the west-bound track go through the straight track around a 5-degree 45-minute curve, 340 feet long, and out again on a tangent, until taken out at the west end of this section of track. We endeavored to find the relation between the creeping of track and the amount of tonnage hauled over or the number of trains, to try and find some key to the peculiar performance, but have not been able to, as yet. The fact remains that the rails creep from 30 feet to 60 feet per month, or from 1 foot to 2 feet per day, so that a rail creeps across the bridge in from 28 to 56 days. It gives one a kind of 'creepy' feeling, but the facts stand, and explanations are in order."

INCANDESCENT-LAMP TEST.—"A Life Test of Incandescent-lamps," was the title of a paper read by Prof. George D. Shepardson before the

convention of the Northwestern Electrical Association held recently in Milwaukee, Wis., and published by the *Electrical World and Engineer*. An account was given of tests at the University of Minnesota on the candle-power and energy consumption of 16 candle-power incandescent-lamps selected from commercial stock. All the conditions of the test were made uniform for all the lamps. Of fifty-five lamps finally tested, the initial candle-power varied from 14.1 to 23, and the watts from 2.32 to 4.10 per candle. The general average for the fifty-five lamps given a preliminary test was 18.3 candle-power and 3.1 watts per candle. The lamps were run on an alternating-current circuit whose voltage was maintained within a range of two volts. After burning about fifty hours it was found that the candle power varied from 8.2 to 23, and the watts from 2.32 to 4.10, the averages being 17.5 candle-power and 3.27 watts per candle. After 100 hours the candle-power varied from 10.1 to 23.2, and the watts 2.52 to 5.02 per candle; the averages were 17.5 candle-power at 3.3 watts per candle. After about four hundred hours the light varied from about 11.3 to 19, and the watts 3 to 4.31 per candle; the averages were 16 candle-power and 3.54 watts per candle. After 600 hours the light varied from 11.4 to 18.8 candle-power, and the watts from 3.24 to 4.26 per candle, the averages being 14.7 candle-power and 3.82 watts per candle. A few lamps were burning at 800 and 900 hours, after which time the lights varied from 10.8 to 16.4 candle-power, and the watts from 3.6 to 4.4. Early in the test it was noted that several of the lamps were burning "blue," and these had a short life. All the lamps of this lot burned out at 100 hours, and none of those in another lasted more than five hundred hours, only one of them lasting over three hundred and fifty hours. A test was made to get some comparison between the behavior of lamps on constant voltage-circuits and those on a circuit of poor regulation. Several lamps were placed on a circuit varying from 104 to 118 volts. The high-economy lamps died within about three hundred hours, though most of their mates on a well-regulated circuit were in fair condition at 800 hours. The lamps of low initial economy, taking from 3.5 to 4 watts per candle, withstood the extreme variation much better. The candle-power and efficiency of the lamps on the fluctuating circuit fell in 300 hours as much as that of the lamps on constant voltage-circuit in 800 hours. After the test noted had been ended, some of the lamps were placed on a photometer and the voltage raised until the candle-power equalled the initial value. Three lamps marked at 108 volts were raised to 111.4, 112.6, and 114.6, respectively, to restore them to initial candle-power. Another lamp marked for 110 volts which had burned 550 hours on a circuit with widely fluctuating voltage was raised to 120 volts before its candle-power equalled that of its youth. The efficiencies of this lamp at the higher voltage were from 1 to 8 per cent lower than the original efficiencies. This test, Professor Shepardson said, seemed to justify the practice of moving old lamps to places on the circuit having higher average voltage.—*N. Y. Evening Post.*

EATON HALL.—People in London are now asking whether the new Duke of Westminster will follow the example of his two predecessors and rebuild Eaton, the Cheshire country seat of the Grosvenor family. Something like \$15,000,000 has been spent in building at Eaton during the present century. The late Duke's grandfather, dissatisfied with the stately old red-brick mansion of the seventeenth century, formerly known as Eaton Hall, pulled it down and replaced it with a huge and excessively ornate pile, which was justly defined by Charles Greville as a monument of lavish outlay and of bad taste. The first thing that the late Duke did on succeeding to the title was to pull this gorgeous palace to pieces. On its site he has built one of the most beautiful palaces in Europe, designed by the famous architect, Waterhouse. It is known, however, that the young Duke considers it to be too ornate, and if he is imbued with the same building mania as his grandfather, it is quite likely that he may pull it down and erect still another palace in its stead.—*Marquise de Fontenay in the Philadelphia Press.*

THE "LAFAYETTE" STATUE.—Senator Allison, when asked whether he had received the "open letter" written by Charles H. Niehaus to the committee of which the Senator is a member, concerning the cost of the "Lafayette" statue to be erected in Paris, replied that he had read the letter. "I assumed that it was meant for criticism and not for response. An open letter does not call for a reply. But I do not understand that there is any request for additional compensation to that already fixed upon. If such a question should arise I suppose that the commission, which includes Archbishop Ireland, Judge Day, and Mr. Peck, besides myself, would have something to say, just as we were empowered to make the original contract. There has been no other communication that I have heard of," continued the Senator, "touching the making of this statue. If there is any difficulty about it I suppose that the commission will be made aware of it by a direct communication giving the facts. In the absence of such a communication I do not see that there is anything for me to say."—*N. Y. Times.*

THE FRENCH JURYMAN'S WALL-SPACE.—The *Philadelphia Press* says that French artists are considerably agitated over the arrangements for the great exhibition. It appears that a jury of fifty-six members, appointed by the Minister of Fine-Arts, and made up chiefly of painters, decided that each artist on the jury shall be allowed the right of exhibiting eight pictures. Upon the announcement of this ruling a general protest went up, and in order that its motives might not be further misrepresented, the committee added that all painters who had served on a jury either at the Champ de Mars or the Champs Elysées shall be entitled to exhibit an equal number of canvases. It is now called to the attention of the body that if each jurymen takes—in the vulgar phrase—"all that is coming to him,"—there will be 1,200 exhibits as a result of these decisions, while there has been allotted space for only 1,600 pictures in all. No wonder there is perturbation among those French artists who have never been so lucky as to be jurymen!

THE AMERICAN ARCHITECT AND BUILDING NEWS

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SATURDAY, FEBRUARY 3, 1900.

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THE KINNAR MANUFACTURING COMPANY.

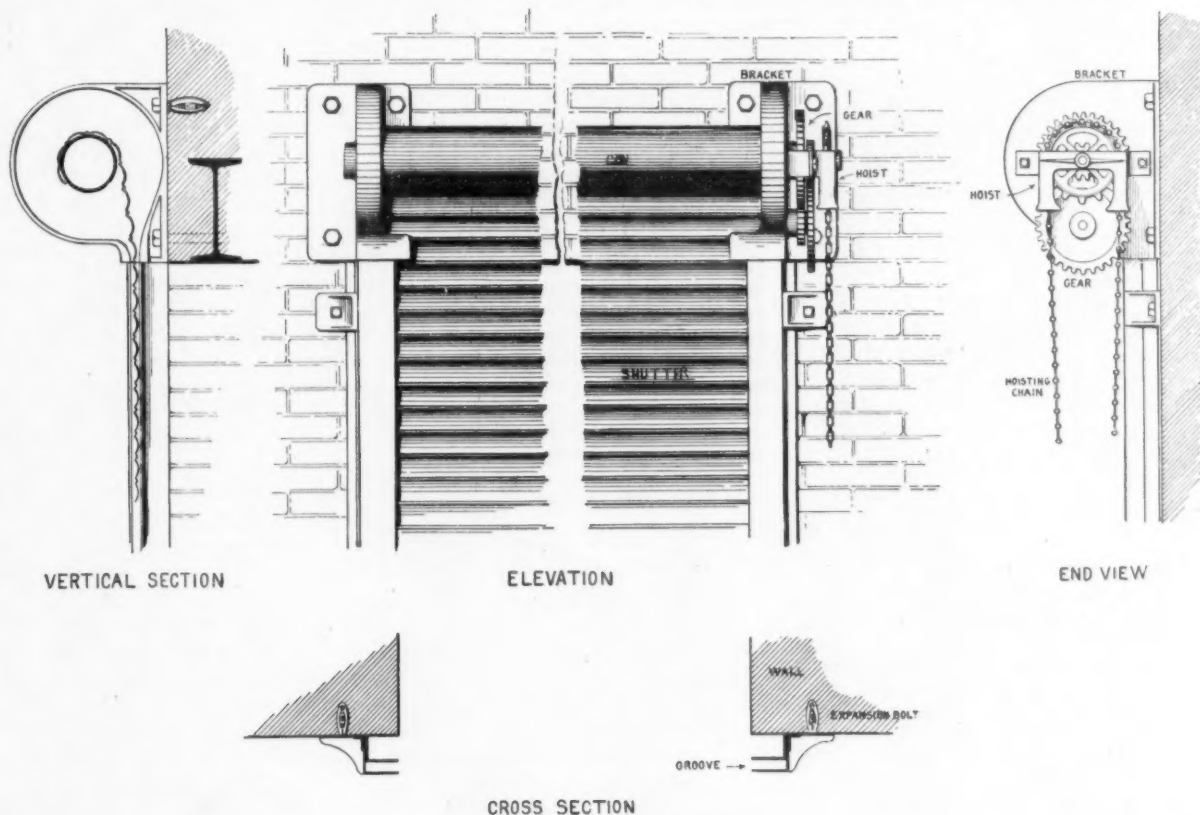
It will be of general interest to many to learn that the newly-organized Kinnear Mfg. Co. was recently incorporated under the laws of West Virginia, with an authorized capital of \$500,000 (\$150,000 of which will be issued), and is composed of some of the best-known business men of Columbus. Messrs. W. R. Kinnear, H. C. Godman, Emerson McMillin, W. A. Gill, S. P. Bush and Ferdinand Schmidt

and buildings recently occupied by the Ohio Buggy Co., on Fourth Street, which premises they will occupy until the erection of their new buildings. These will be under way within a very short time, and will be a model and up-to-date plant in every respect, as all latest appliances for successfully handling and assembling goods will be installed.

The company starts out with very flattering prospects, having on their books now orders and specifications amounting to over fifty thousand dollars, and in these are included

The Kinnear Steel Rolling Fire Shutters are also extensively used on large office buildings, stores and warehouses where fire protection is essential, and where used they not only afford absolute protection against fire, but immeasurably decrease the fire-insurance rate.

The well-known ability of its officers and directors, together with ample funds and most excellent commodities, ensures complete success for the company and profit to its shareholders. Among the articles to be manufactured may be classed the following:—



Steel Rolling Doors, Shutters and Partitions.

comprise the directorate, and the officers are: W. R. Kinnear, *President*; H. C. Godman, *Vice-President*; Ferd. Schmidt, *Secretary*; W. A. Gill, *Treasurer*; T. W. Smith, *Assistant Treasurer*.

A few weeks ago this company purchased from the Kinnear & Gager Co. the patents, good-will, patterns, drawings and machinery pertaining to the Steel Rolling Shutter business, and from the great success and renown this device has attained through the United States and foreign countries, it is safe to venture an opinion that the enterprise will be eminently successful.

The management has leased the property

orders for Japan, Australia, Mexico and other foreign countries.

The Kinnear Steel Rolling Doors and Shutters have achieved a world-wide reputation as the most perfect fire-protection known, and the Kinnear system is indorsed and approved by the principal Fire Underwriters' Associations and architects in this country.

For freight, round-houses and ocean-piers these doors are now largely used by the Pennsylvania, Illinois Central, New York, New Haven & Hartford, New York Central, Chesapeake & Ohio, Big Four, Union Pacific, Denver & Rio Grande, Pittsburg, Lake Erie and many other prominent railroad systems.

Horizontal and vertical steel rolling doors for freight depots, warehouses, factories, stores, elevators, openings, fire-doors, ventilating wardrobes, merchandise cases, book and stationery cases, ocean, lake and river wharves, railroad engine-houses, cotton-compress buildings, asylums, etc.

Horizontal and vertical steel rolling partitions for churches, schoolhouses, assembly-rooms, and other buildings where, at times, temporary division of large rooms into smaller ones is desirable.

Steel rolling window shutters particularly suitable for public buildings, stores, office-buildings and residences. These shutters are

very easily operated from the inside of the building without raising the sash, and when open are practically invisible, and enhance rather than retard the architectural features of the building. They are the best-known protection against fire.

Automatic steel rolling shutters and doors are for fire protection, and are always open, but close instantly in case of fire either from within the building or from adjoining buildings. These shutters and doors are instantly and automatically closed by 150 degrees of heat, and the action is prompt and sure.

Ventilated wardrobes with steel rolling fronts. The market for this device is practically unlimited, and it is coming into very general use in many of the Eastern public-school buildings, being the best-known sanitary construction ever invented.

Metal cases with steel rolling doors for merchandise, books and stationery. While these cases are practically new, they will be thoroughly appreciated by the average merchant, as they insure against loss by fire and water delicate and valuable stock and merchandise, thus making a great saving on insurance, and guaranteeing protection as well.

It will be seen from the above résumé that the company have a large and useful field to cover. The above-described devices are thoroughly covered by domestic and foreign patents, and the company will be the largest of its kind in existence.—*Columbus Board of Trade Bulletin.*

SEAMLESS-DRAWN NICKEL-SILVER TUBING.

If you have been entrusted with the designing and planning of high-class residences, and office and public buildings, the responsibility you have assumed requires giving some of your time and thought to choice of materials. We ask three minutes.

The tubing for exposed plumbing now generally used is made of brass. We are large manufacturers of this brass tubing, as you know.

The surface of brass corrodes so rapidly that without a considerable constant expenditure of labor and expense the tubes do not long remain presentable. So the brass tubes for the finer buildings are nickel-plated. We make large quantities of this nickel-plated tubing also.

But any nickel-plated tubing grows dingy and has to be rubbed. The more faithfully it is rubbed the sooner the plating is rubbed off. Then, in spots, you have the brass tube again. The only way to replating it is to tear out the whole business.

Exposed plumbing in fine buildings, for economy, as well as for beauty, ought to be fitted with tubing that stands rubbing without discoloration.

We make a seamless-drawn nickel-silver tubing—pure white metal all throughout, from the inside to the outside.

It is impossible for it to rub or wear "brassy," because it is white metal through and through. The more you polish, the more silvery brilliant the appearance.

This tubing is now ready for your use. It is made in all the regular iron-pipe sizes, and in any other sizes required. We supply all necessary couplings, elbows, tees, etc., in this same nickel-silver metal.

Do not think of specifying for exposed plumbing any other kind of tubing than "Nickel-silver Seamless Drawn Tubing."

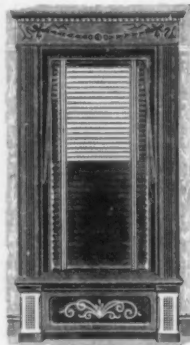
Don't you see the logic of all this?

THE BENEDICT & BURNHAM MFG. CO.,
WATERBURY, CONN.

THE HARTMAN SLIDING BLIND.

THE Hartman Sliding Blind Co., Crestline, Ohio, are making a sliding blind for which they claim superiority over any similar blind in the market. They claim a great many points of advantage which ought to interest architects and induce them to specify the Hartman in preference to any other.

Some of the advantages are that it does not require the window to be of special construction; that it can be placed as readily in an old window as in a new one; that it has a burglar-lock attached to each set; that it has pockets and adjustable cover, and has projecting strips for guideway. Where they project into the room past the casing or narrow jambs, the guideway is set back in a sub-jamb, so that sashes can be removed without removing the guideway. It has tenoned overlapping stationary slats, forming a perfect resemblance to rolling slats. It has novelty or hinged sections and meritorious springs, with the friction-block attached. There is an ingenious device for adjusting the rolling slats and holding them open at any angle. It operates smoothly and easily, and yet holds the section from dropping down, all of which is owing to the superior friction-block springs.



Hartman Sliding Blind.

They use an elliptical-shaped spring, fastened in the middle at equal distance from ends, there being no strain on the nail or screw, thus enabling one to easily remove the blinds from the window for cleaning, and replacing them in a moment without the use of a tool. In point of cheapness, durability, style, convenience and mechanical construction, they claim there is no sliding blind made that will appeal to the architect as forcibly as theirs.

The Hartman Company will be pleased to submit descriptive catalogue to any architect interested enough to inquire for it.

FIREPROOF PAINT.

ROCHESTER, N. Y., July 10, 1899.

MR. SAMUEL CABOT,
70 Kilby Street, Boston.

My Dear Sir,—You may be interested to know how your fireproof paint withstands the action of fire.

On the morning of July 3 a warehouse burned on our right-of-way, adjoining the Wyoming station. The building destroyed was very inflammable, and the fire was extremely hot. The flames reached within fifteen or twenty feet of our passenger station, but I am pleased to report that this was not injured in the slightest degree. The sides were covered with your ordinary shingle-stain, and the roof had a coating of your fireproof paint, applied some six years ago. I consider this a very severe test, for the roof was exposed directly to the fierce heat of the fire for a considerable time.

One of our semaphores, which stood some distance away, was badly burned. This, however, was coated with ordinary lead and oil paint.

Sincerely yours,

WILLIAM E. HOYT,
Chief Engineer.

HENRY WATTS MERCHANT.

THE many friends of Mr. Clarke Merchant, president of Merchant & Co., Incorporated, of Philadelphia, will deeply sympathize with him in the loss of his only son, Henry Watts Merchant, who died in Phoenix, Arizona, Jan. 9, in the thirty-seventh year of his age. Mr. Merchant left Philadelphia about four months ago in a vain search for health in the dry climate of Denver, travelling from thence to Salt Lake City and to Pasadena, from whence came most gratifying reports of improvement. It was therefore a great shock to his relatives and friends to learn of his sudden decease. Mr. Merchant has been associated from boyhood with his father in the tin-plate industry, managing the extensive works in Philadelphia, and travelling through Europe in the interests of the company. He was considered as one of the ablest young business men of this community. Mr. Merchant was treasurer of Merchant & Co., Incorporated, and had recently been elected vice-president of the International Sprinkler Company of this city. He was also a member of the Loyal Legion and the Philadelphia Club. Mr. Merchant is survived by one young daughter, his wife having died several years ago.

"GLOBE" VENTILATOR.

THEATRES, opera-houses and auditoriums should be thoroughly ventilated for their own reputation as places where enjoyment may be found, for the health and comfort of their patrons and for the profit of their owners. Ventilation is one of the things on which the proprietor of the opera-house who relies upon the patronage of the community cannot afford to economize when such economy means inferiority, for the people who attend our theatres are not drawn thither by the elegance and large cost of their internal decorations, but go where they may witness a good play amid comfortable surroundings. Many places of amusement are magnificently adorned, are erected on an expensive and extensive scale, but are so hot, so stuffy, and so poorly ventilated that people will not subject themselves to the severe cold or sick headache that is sure to follow an evening spent within their walls. The opening night has decided the success or failure of many a theatre, as its facilities for comfort have been put to a more severe test than ever again in its history. The income of houses of this character is very greatly affected by the disposition of the public. Any influence that increases the support of the people and enhances the revenue is regarded as a boon; anything that retards it, thus diminishing the receipts, is justly considered an evil.

Among the noted theatres ventilated by the "Globe" may be mentioned the renowned Auditorium, the Grand Opera-House and Central Music Hall in Chicago, the Madison Square, Bijou and Daly's in the metropolis, and in New York State the new opera-houses in Rome, Geneva, Syracuse, Ithaca, Oswego, Plattsburgh, Watertown and Glens Falls.

GLOBE VENTILATOR CO.,
TROY, N. Y.

HINGES.

"WHAT! are we not foremost in all discovery, and is not the whole world giddy by reason of our inventions?"—*Ruskin.*

Our ball-bearing hinges have reached an enviable position in the estimation of architects and dealers. They deserve it, as they

Atlas PORTLAND CEMENT

Used Exclusively in the Following New York Buildings:

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143 LIBERTY STREET
NEW YORK

have many points of superiority over anything else in the way of hinges.

They cannot wear down. They never creak. They never require oiling. They are of moderate cost.

The principal argument for the use of ball-bearing hinges is their endurance. The balls in the washers carry the entire weight of the door, and each ball will sustain a weight of 1,000 pounds without crushing.

All friction in the joint is overcome. The door swings easily and noiselessly, and it is impossible to wear the butt down under any strain that could be put upon it in actual use.

Doors hung with these ball-bearing hinges never have any of that annoying creaking which is an accompaniment of ordinary butts unless they are oiled. Oiling a hinge frequently disfigures the finish and makes a place for dust to collect. These butts never have to be oiled, yet they allow the door to swing easily and noiselessly.

The washers are so made that they will not come apart in use.

We use only the best quality of cold-rolled steel in the manufacture of our butts. Cold rolling hardens it, gives it a bright, smooth surface, greatly increases its tenacity and power of resistance, and enables it to withstand stresses much more uniformly than the ordinary hot-rolled steel.

The pins and ball tips are made from wrought-steel, and will not break. The sizes of pins and joints are so proportioned as to give the greatest wearing surface possible. The butts are made from thicknesses of steel properly proportioned to the weight of the doors on which they are ordinarily used.

Our electro-plated goods of the best grades are very heavily plated by special processes of our own, and finished in various effects of brass, nickel, silver, etc., the heavy coating serving to quite effectually protect the steel from ordinary atmospheric conditions.

Great care is taken to have our products properly adapted to their intended uses in the matter of weight or thickness and quality of materials, and the best mechanical construction.

Stanley's steel shelf-brackets are the most scientifically constructed of any brackets on the market, and worth most to the user.

Arched or angle forms of steel in the wall and shelf plates give much more strength with less metal than if made flat. The corrugation of the brace renders them secure against buckling under the severest strain.

Stanley's corrugated-steel strap and T-hinges are much better than the old style and cost no more.

The corrugations about the joints greatly increase the strength.

It is impossible for them to bind upon the

pin, no matter how rusty they may get. They are somewhat lighter than corresponding sizes of the regular heavy strap and extra heavy T-hinges, thus saving unnecessary expense for freight and duties, and making them easier to handle.

Stanley's wrought-steel gravity blind-hinges for wood lock the blind automatically by the action of gravity, and being made from heavy gauges of wrought-steel, will not break.

Stanley's ball-bearing steel hinges are not only eminently adapted for the heavy doors of public buildings, where a great resistance to wear is required, but they are also very desirable for private residences on account of their non-creaking qualities and the ease with which they permit the door to swing. Two ball-bearing hinges will frequently answer where three ordinary hinges would be required.

We have recently perfected and are now ready to take orders for a line of wrought-bronze-metal butts in all the leading sizes, fitted with ball-bearing washers.

These butts are made to our accustomed standard of excellence in workmanship and finish, and are particularly well adapted for outside doors.

In addition to ball-bearing hinges we manufacture a large line of butts, hinges, door-bolts, shelf-brackets, blind-trimmings, etc., from wrought steel.

A request for it will bring you our complete catalogue.

THE STANLEY WORKS,
NEW BRITAIN, CONN.

DIXON'S SILICA-GRAPHITE PAINT.

EXHAUSTIVE experiments and practical tests of Dixon's Silica-Graphite Paint for the protection of galvanized-iron work, along the seacoast in the South and North, has proved it is the most durable protective coating for this class of work, and the pier-owner and consulting-engineer will do well to consider that the use of this paint on galvanized-iron work will be a money saver, as the structure is not only saved from corrosion, but the expense of repainting every two or three years is overcome. The cost of the labor in painting and repainting is twice the cost of the material, and regardless of the initial cost of a paint, the most durable is unquestionably the most economical.

The Ticonderoga flake-graphite pigment is absolutely inert and unaffected by any degree of heat or cold, climatic changes or destructive chemical agencies, and the minute flakes give greater elasticity and flexibility to the coating, and better protect the binding-material from destruction than amorphous or granular pigments. The Joseph Dixon Crucible

Guaranteed to be Superior to any Imported or Domestic Cement.

Company use for a vehicle in the manufacture of this paint the very purest fire-boiled linseed-oil on the market, and there is yet to be discovered a binding-material that gives as tough, elastic and durable service as pure, unadulterated, fire-boiled linseed-oil.

A particularly interesting case where Dixon's Silica-Graphite Paint has proved its superiority over lead, metallic, asphaltum and composition paints is shown in the following letter of the Interior Elevator Company, Minneapolis, Minn.:

MINNEAPOLIS, MINN., Dec. 7, 1899.

JOSEPH DIXON CRUCIBLE COMPANY.

Gentlemen,—Yours of the 1st inst. received. We believe Dixon's Silica-Graphite Paint to be the best paint in use for painting iron-covered buildings. We have tested it by painting our elevators and in making comparative tests with several (three other) highly recommended roofing-paints, and we find that the Dixon Silica-Graphite Paint is the most durable, having the best body and the best appearance after being on the elevators nearly three years; and we find they are to-day apparently in as good a condition as they were when first painted.

Yours truly,
B. H. MORGAN, Manager.

CALIFORNIA REDWOOD.

BOSTON, MASS., January 26, 1900.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—We are much gratified at the rapid progress which has been made in the introduction of California Redwood. Retail dealers who were crying it down six months ago now find it to their interest to carry it in stock, as will be shown by our list of dealers in our advertisement, who now have it for sale.

That California Redwood may continue to increase in popularity, and that there may be as few mistakes made as possible, on account of its being a comparatively new wood in this market, we will offer a few suggestions to those who contemplate its use.

The nature of the wood is so entirely different from our Western, Southern and New England woods, that its treatment in working and finishing should not be the same. It is much cheaper than the hardwoods, such as quartered-oak, cherry, ash, walnut, maple, etc., yet it is fast displacing them in many expensive structures. Being much cheaper than the better grades of pine, free from resin and gum, and on account of its resistance to heat, it is preferred by all who have looked into its merits, for all exterior covering and finish, where wood is being used. It takes paint or stain much better than any of our resinous or gum woods, and will not stain through the paint as other woods do.

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BRIDGES OVER HARLEM RIVER, N.Y.

Alsen's Portland Cement Works, New York Office, 143 Liberty Street.

AGENTS AT BOSTON: WALDO BROS., 102 Milk Street.

Regarding the dryness of the stock. As we have mentioned before, it is advisable to kiln-dry Redwood for all interior work that is under furnace or steam heat, where the humidity is liable to run down at times as low as 20 per cent or 30 per cent, but it is not advisable to dry the wood below 30 per cent humidity, neither should Redwood be kiln-dried under a high temperature, as much more satisfactory results can be obtained with a temperature from 100 degrees to 135 degrees than with any higher than that. For exterior work, this, or any other wood, should not be dried below 50 per cent humidity, as that is below the mean of open-air humidity, and to get the lumber dryer means that there is liable to be more or less expansion with pine, while Redwood shows but little change.

If Redwood is to be used for exterior purposes, and is to be finished in the natural color, care should be taken to cover the surface with marine varnish before it gets wet, as water takes out the alkali in the wood and colors the surface dark. If the surface is to be painted, getting it wet before painting does no harm. We call attention of the architects to these points so that they may know how to protect their clients when the specifications are made.

Several instances have come to our notice of late where California Redwood has been called for in the construction of buildings, and retail dealers who did not have the Redwood, but had red-cedar, sold that as Redwood. We are surprised at such reports, for any dealer that is in touch with the architects of this city must know that they insist upon what they call for, and whoever undertakes to deceive them does so at his own peril, and it would be much more to the credit of any dealer to state frankly what kind of lumber he is offering for sale. The architects are a class that will not be trifled with, and it is perfectly just that they should resent such imposition. It is well known by all who have used red-cedar for house construction, that it is too soft and brittle for general use, while California Redwood is used with great satisfaction for doors and house-finishing generally.

It is our purpose to get all the information possible for the architects, as we realize that they fully appreciate being dealt with fairly, and having any material which they use honestly represented, and they are showing their appreciation by creating the unprecedented demand which we are now having for California Redwood.

Below we give you a testimonial from one of our customers, which shows their experience with California Redwood.

BOSTON, MASS., January 26, 1900.

BARTLETT LUMBER CO.,
Boston, Mass.

Gentlemen, — In reply to yours of even date as to our success with California Redwood, we would say that our customers are very much pleased with it. Our experience has been that it is a very nice wood to work, a large per cent being good straight-grained lumber and of an even color. We have used the Redwood in the manufacture of some of our highest grades of mantels, as well as in some of the cheaper patterns, and find that fine carving can be executed in Redwood as well as in any of the higher-cost woods.

In finishing the mantels we find Redwood will take as fine a polish as the best-grade mahogany. In fact we have samples of Redwood mantels in our warerooms which have been taken for mahogany by some of our most experienced builders. In conclusion, we would say that we think you have in Redwood a lumber that will largely take the place of anything in the market to-day used for interior finish, and that we are anticipating a very large sale of Redwood finish and mantels next season. Yours very respectfully,

J. W. BAILEY & SONS CO.,
By J. S. PARKER, Secretary.

Again thanking our patrons for their many favors, we are very respectfully,

BARTLETT LUMBER CO.
O. H. SMITH, Manager.

STAFF ORNAMENTATION FOR EXTERIOR AND INTERIOR PURPOSES.

As ornamentation in staff for exterior purposes as applied to buildings does not seem to be generally understood and receive the appreciation it merits, I will endeavor to state a few facts regarding the same. A few months ago I was fortunate enough to obtain a sample of Staff work from the wrecking of a building which was erected some thirty-five years ago, and to my satisfaction found the material in a perfect state of preservation, while the wood to which it was fastened had almost completely rotted away. I say, to my satisfaction, because I had been a devout exponent of that fact before coming in possession of this relic. This sample does not seem to have been made with the same degree of permanency with which the work is done to-day, inasmuch that it had no fibre in it, nor was it apparent that it was made waterproof before it was applied. It was, however, well painted on the exposed surfaces. The work of to-day is interwoven throughout with Manila fibre, and then immersed in a vat of waterproof material, making it waterproof both in and out, and as the sun has no effect whatever on the work, it is self-evident that the material is lasting when used as applied ornament.

The work done on the buildings of our

Chicago World's and other Fairs must not be taken as a criterion, as that is only of a temporary nature.

For interior decoration, the Manila fibre is also used in the creation of this work, and when made and put in position by staff-workers, and not by the plain house-plasterers, its results are well known. As the staff-worker is interested in this work from its beginning until its purposes have been accomplished, I believe that every one will agree with me when I say that every architect and owner should insist that the staff-worker alone should handle this material.

FRANK A. SEIFERT,
ST. LOUIS, MO.

NOTES.

THE architects of the new Court-house at Baltimore understand that nothing is more needful for the working success of a building of that class than abundant and agreeable lighting, and so they have taken care to provide it throughout with Holophone Glass Globes, special globes 16 inches in diameter being used for the purpose.

Those who have an interest in knowing how scientific principles are applied to the solution of practical problems will find in the *Journal of the Franklin Institute* for January, 1900, a very interesting paper on the Holophone Glass, electric and other, lamp shades.

THE annual election of the directors and officers of the Ludlow-Saylor Wire Company was held on the 17th ult., resulting as follows:—

For directors, William Duncan, George D. Dana, H. M. Meier, Charles L. Dean, Frank Low.

The following were elected officers to serve for the ensuing year: William Duncan, President; Charles L. Dean, Vice-President; Frank Low, Secretary-Treasurer; E. J. Gould, Superintendent.

In this connection we desire to say that we are proceeding with the buildings necessary for our new factory, which, when completed, will cover about 60,000 square feet of ground. As the buildings will be from two to three stories high, the floor-space will be over three times what we are occupying at present. We shall still retain our present quarters, as our business will be increased to such an extent that we shall require the full amount of the additional room.

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THE large steel-frame palace which is being constructed for the Crown Prince of Japan contains over 72,000 square feet of floor-area. Corrugated-arches of No. 16-gauge steel are to be placed between the floor-beams. About 125 tons of curved corrugated-steel sheets, manufactured by Wm. B. Scaife & Sons, Pittsburgh, Pa., will be required in this connection.

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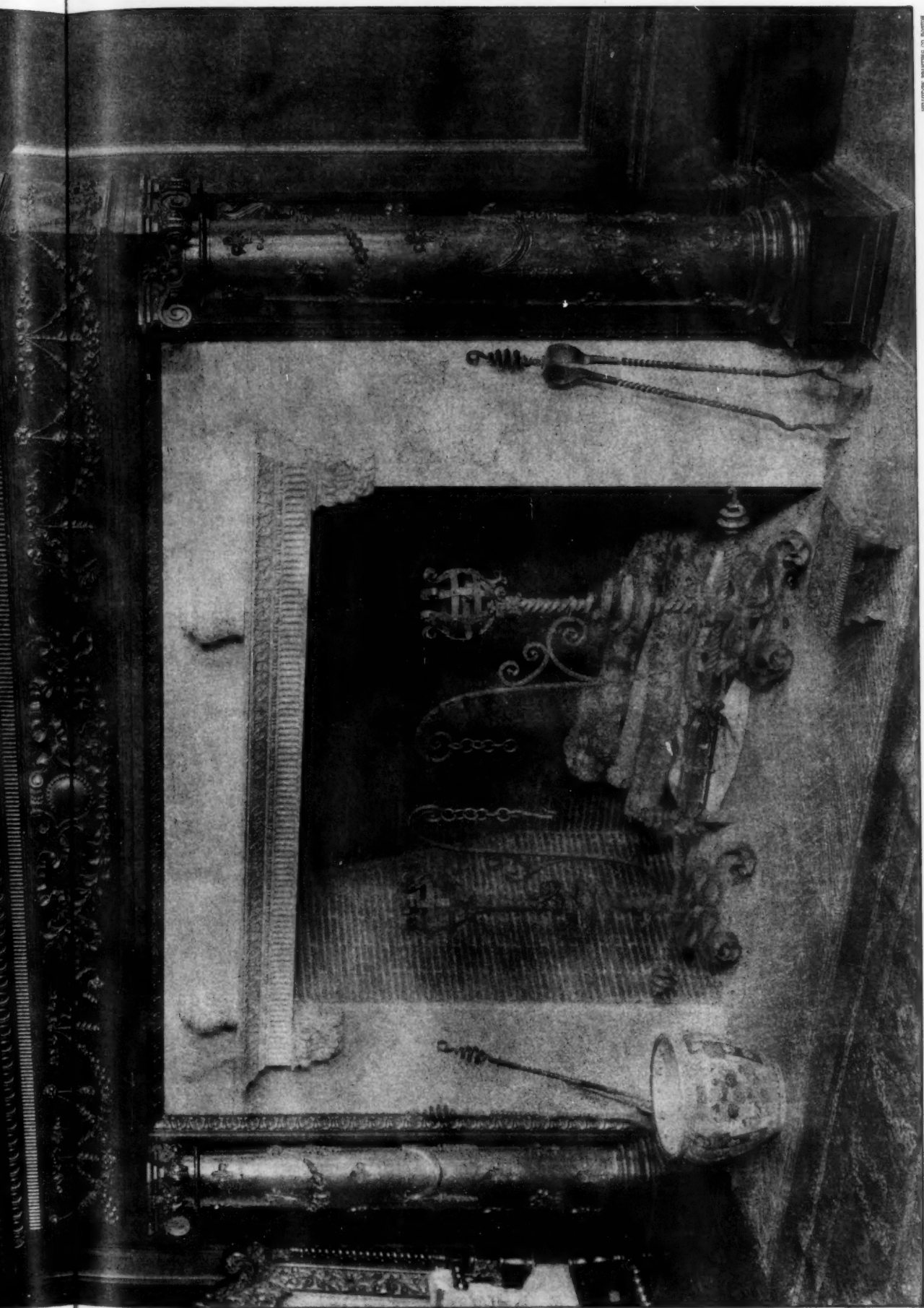
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DEPOT FOR THE AMERICAN ARCHITECT AND BUILDING NEWS CO.





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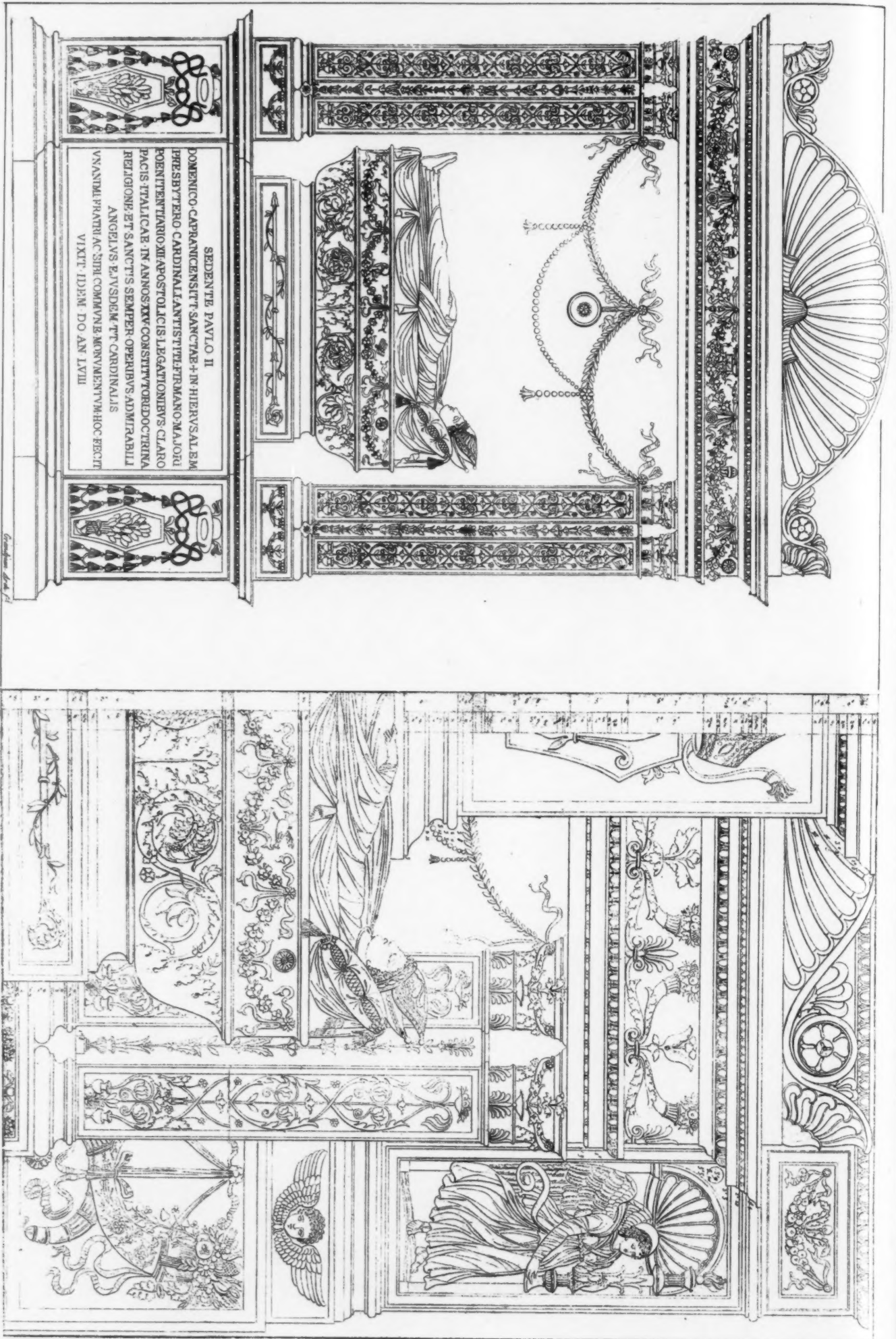
1. The first part of the paper discusses the importance of the medical profession in the United States. It points out that the medical profession is one of the most important and most respected professions in the country. It is a profession that has a long and honorable history, and it is one that has made many contributions to the health and well-being of the American people.

2. The second part of the paper discusses the various branches of the medical profession. It points out that there are many different branches of the medical profession, each of which has its own unique role to play in the health care system. These branches include the medical profession, the nursing profession, the dental profession, and the pharmacy profession.

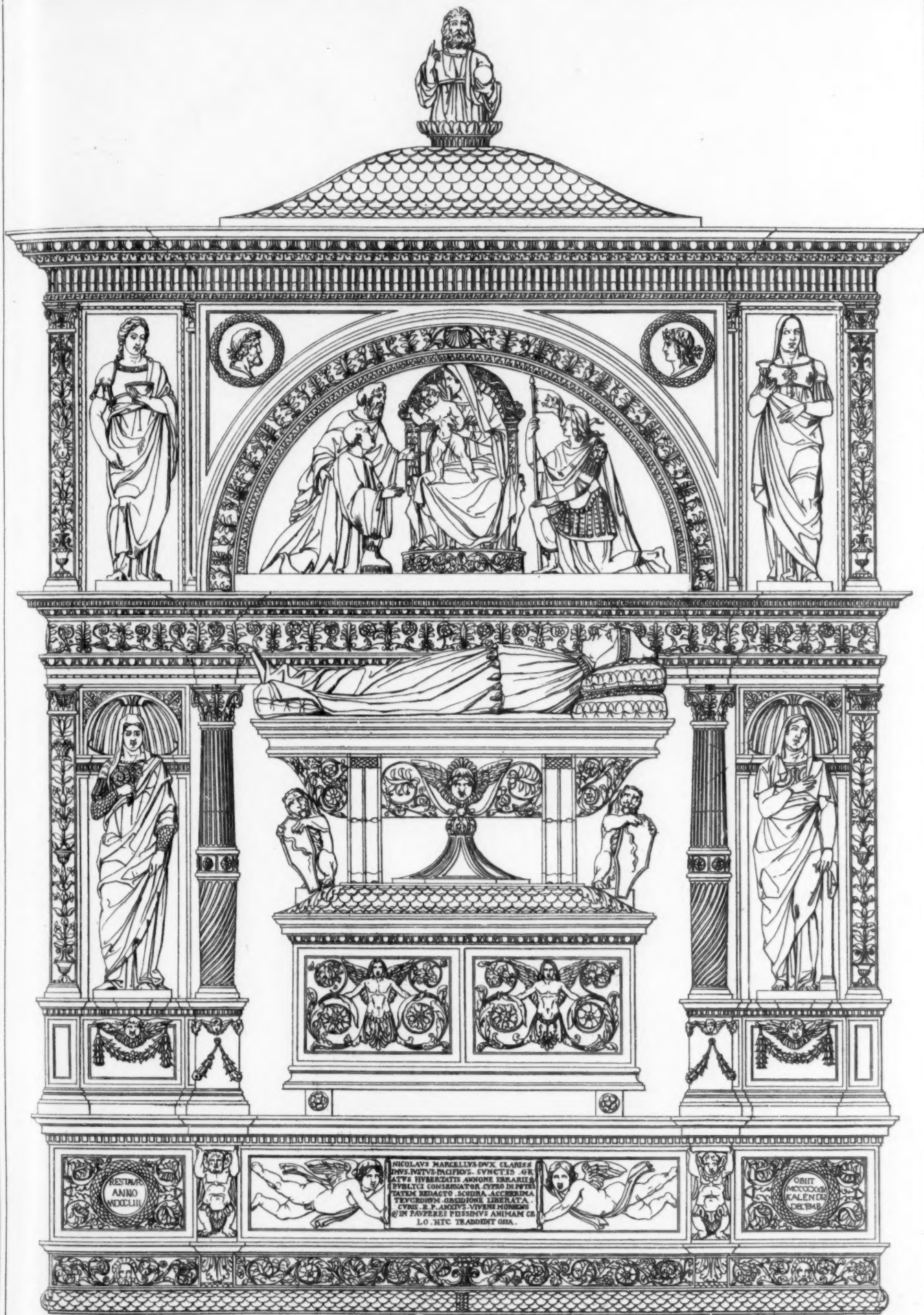
3. The third part of the paper discusses the various organizations that represent the medical profession. It points out that there are many different organizations that represent the medical profession, each of which has its own unique role to play in the health care system. These organizations include the American Medical Association, the American Nurses Association, the American Dental Association, and the American Pharmacological Association.

4. The fourth part of the paper discusses the various issues that face the medical profession. It points out that there are many different issues that face the medical profession, each of which has its own unique role to play in the health care system. These issues include the issue of medical malpractice, the issue of medical research, the issue of medical education, and the issue of medical ethics.

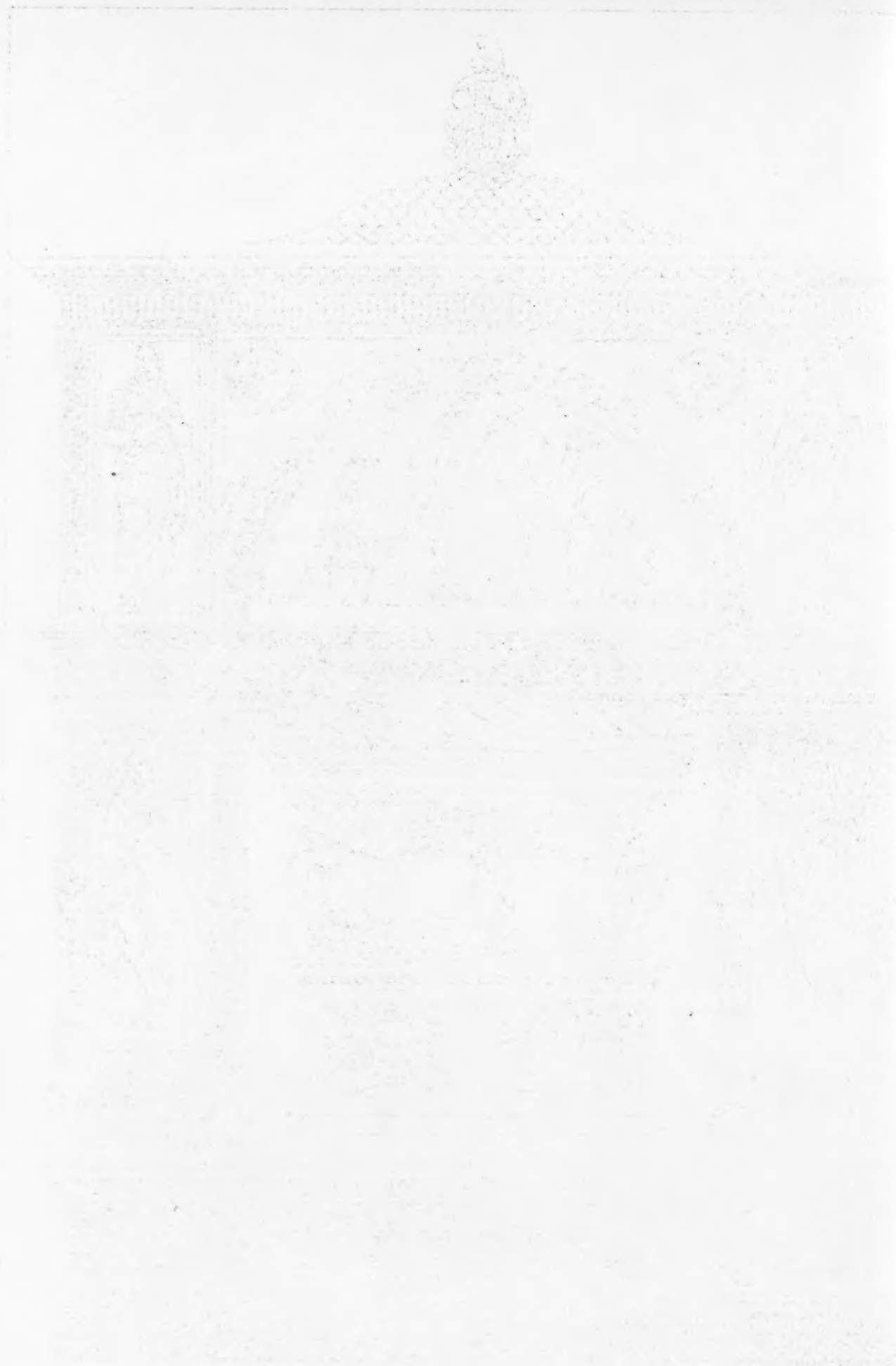
5. The fifth part of the paper discusses the various solutions that have been proposed to address the issues that face the medical profession. It points out that there are many different solutions that have been proposed, each of which has its own unique role to play in the health care system. These solutions include the solution of medical malpractice, the solution of medical research, the solution of medical education, and the solution of medical ethics.

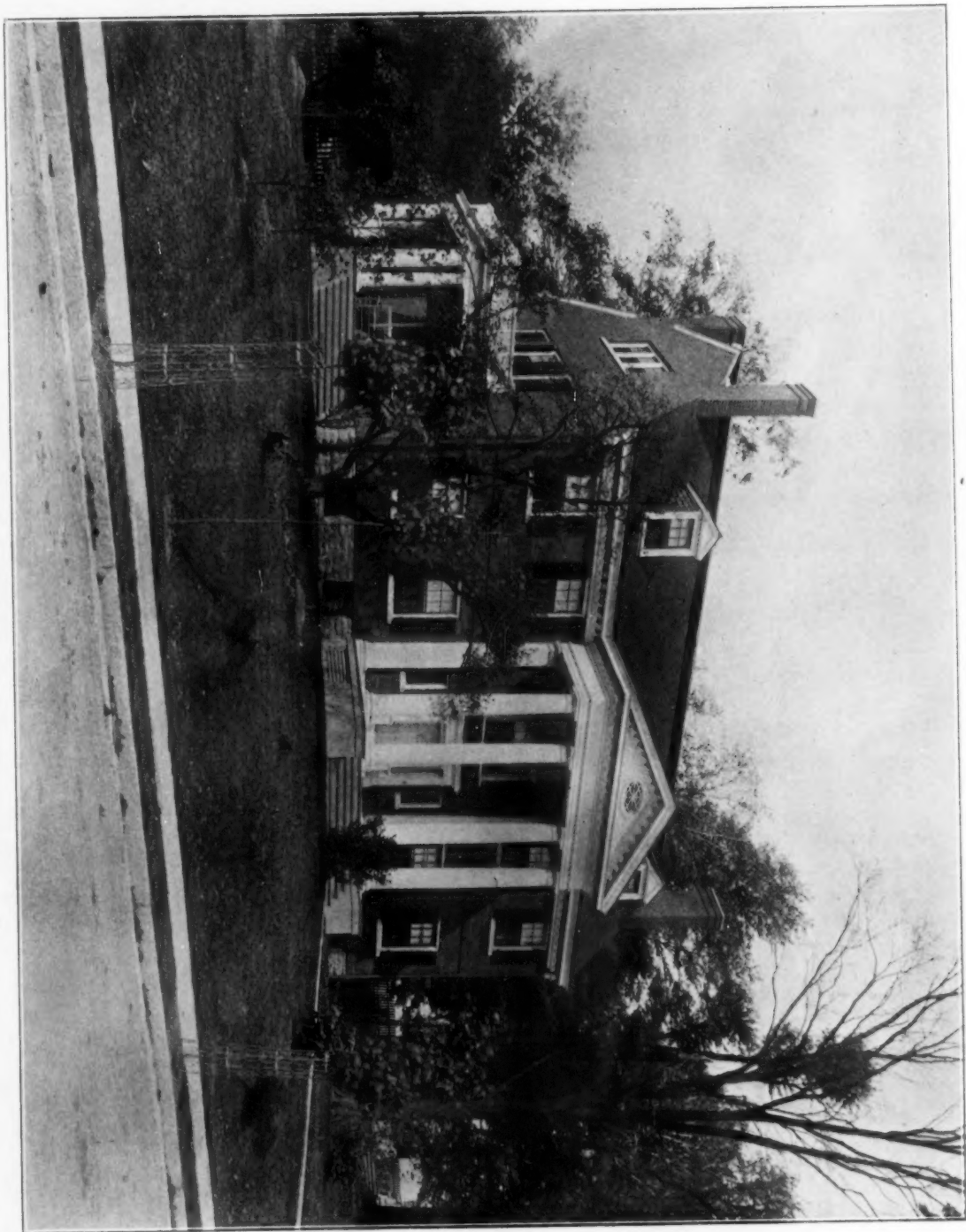


TOMB OF CARDINAL CAPRANICA, IN THE CHURCH OF STA. MARIA SOPRA, MINERVA, ROME.

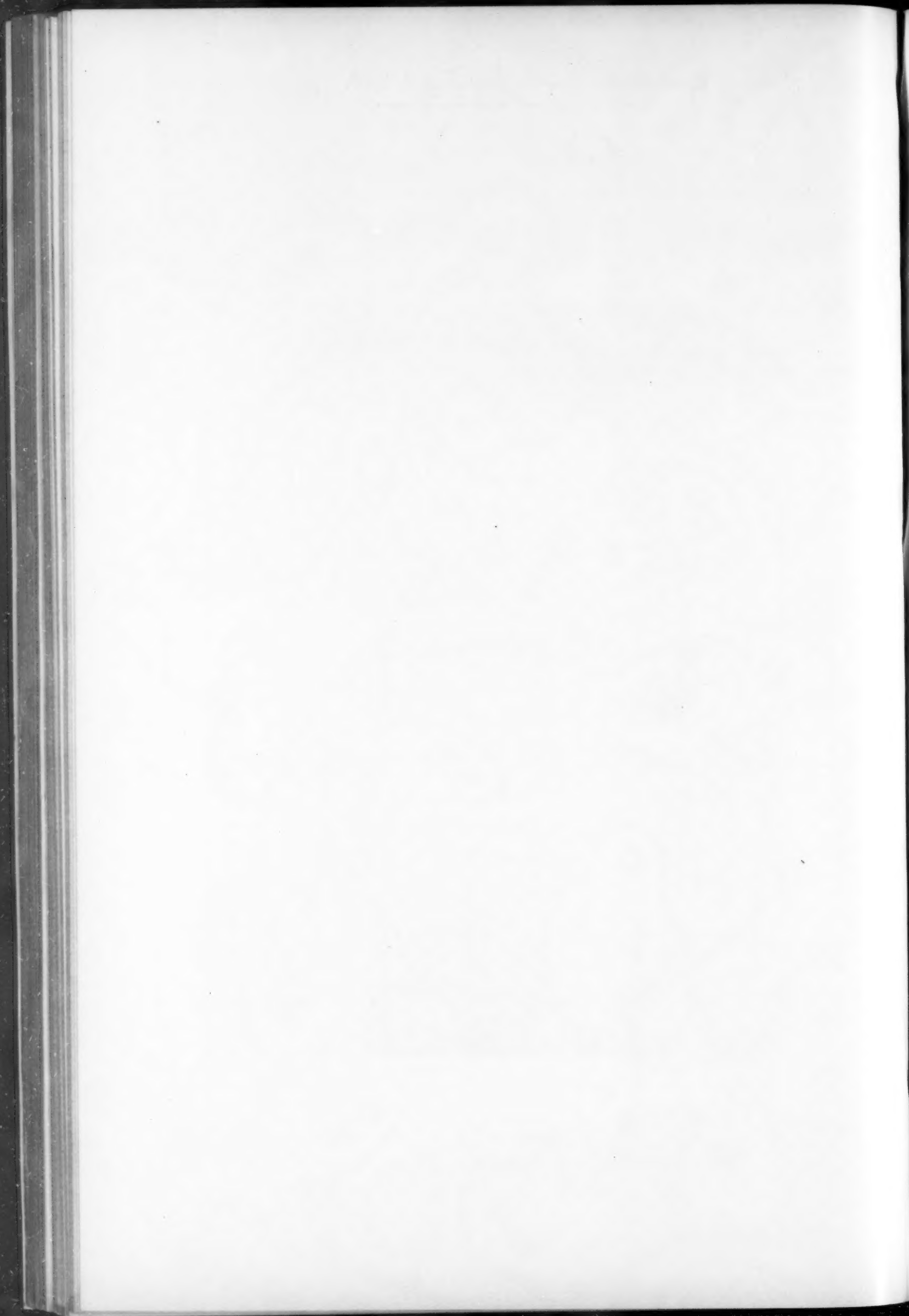


TOMB OF THE DOGE E. MARCELLO IN SS. GIOVANNI E PAOLO, VENICE.





HOUSE OF LARZ ANDERSON, ESQ., CINCINNATI, O.
ELZNER & ANDERSON, ARCHITECTS



THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

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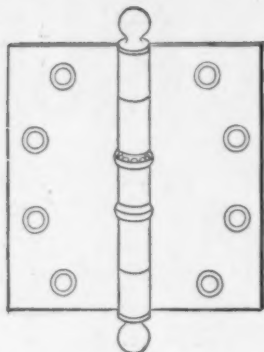
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	BUILDING MATERIALS	New York.	Boston.	Philadelphia.
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STONE. (Per cubic foot, rough.)				
Foundation:				
Dimension.....	500 00	500 00	500 00	500 00
Block.....	400 00	400 00	400 00	400 00
Rubble.....	125 00	125 00	125 00	125 00
Sandstone:				
Longmeadow.....	80 00	80 00	80 00	80 00
Kibbe.....	90 00	90 00	90 00	90 00
Brown (Connecticut).....	100 00	100 00	100 00	100 00
Amherst Ohio.....	90 00	90 00	90 00	90 00
Berea ".....	75 00	75 00	75 00	75 00
Berlin ".....	75 00	75 00	75 00	75 00
Belleville.....	80 00	80 00	80 00	80 00
New Brunswick (Dorchester).....	100 00	100 00	100 00	100 00
Potomac Red.....	130 00	130 00	130 00	130 00
Caen.....	100 00	100 00	100 00	100 00
Carlisle, English.....	105 00	105 00	105 00	105 00
Corse Hill (Scotch).....	105 00	105 00	105 00	105 00
Granite: (Maine)				
Limestone:				
Bedford.....	45 00	45 00	45 00	45 00
Joliet.....	100 00	100 00	100 00	100 00
Lemont.....				
Serpentine.....				
Bluestone: (Per sq. ft.)				
Sidewalk.....	30 00	30 00	30 00	30 00
Planned.....	50 00	50 00	50 00	50 00
Marble: (Per cu. ft.)				
Leo, Mass.....				
Rutland, white and blue.....	125 00	125 00	125 00	125 00
Sutherland Falls.....				
Glens Falls, black.....				
Italian, blue-veined.....				
" Sienna.....				
Tennessee, red.....				
" Knoxville.....				
Pennsylvania, blue.....				
Vermont, white.....				
Slate: Roofing (Per square)				
Green.....	500 00	500 00	500 00	500 00
" unfading.....	500 00	500 00	500 00	500 00
Purple.....	500 00	500 00	500 00	500 00
Red.....	500 00	500 00	500 00	500 00
Black, Lehigh.....	425 00	425 00	425 00	425 00
" Chapmans.....				
Genuine Bangor.....	435 00	435 00	435 00	435 00
Unfading black.....	600 00	600 00	600 00	600 00
".....	550 00	550 00	550 00	550 00
Tiles, Am..... Per M.				
N. Peach Bottom, war. unfading				
Fire Clay Roof Tile on cars at fac.	800 00	800 00	800 00	800 00
LUMBER.—Per M.				
Boards: (Ordinary dimensions.)				
Pine, 1st quality, clear.....	65 00	65 00	65 00	65 00
" 2d quality.....	55 00	55 00	55 00	55 00
" 3d quality.....	18 00	18 00	18 00	18 00
Spruce.....	25 00	25 00	25 00	25 00
Hemlock.....	20 00	20 00	20 00	20 00
Yellow pine.....	20 00	20 00	20 00	20 00
Cypress.....	20 00	20 00	20 00	20 00
Clapboards:				
Pine.....				
Spruce.....				
Framing Timber:				
Pine.....	14 00	14 00	14 00	14 00
Spruce.....	12 00	12 00	12 00	12 00
Hemlock.....	18 00	18 00	18 00	18 00
Yellow pine.....				
Laths:				
Pine..... Round Wood				
Spruce..... Slab.....	3 50	3 50	3 50	3 50
Shingles:				
Pine, shaved..... Per M.	5 00	5 00	5 00	5 00
Pine, sawed..... " "	4 00	4 00	4 00	4 00
Spruce, sawed..... " "	1 50	1 50	1 50	1 50
Redwood..... Per 125.	1 40	1 40	1 40	1 40
Cedar split..... Per M.				
Cedar sawed..... " "				
Cypress, Split..... 7 x 24 " "	18 00	18 00	18 00	18 00



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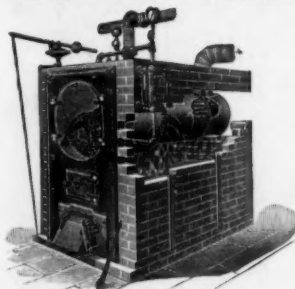
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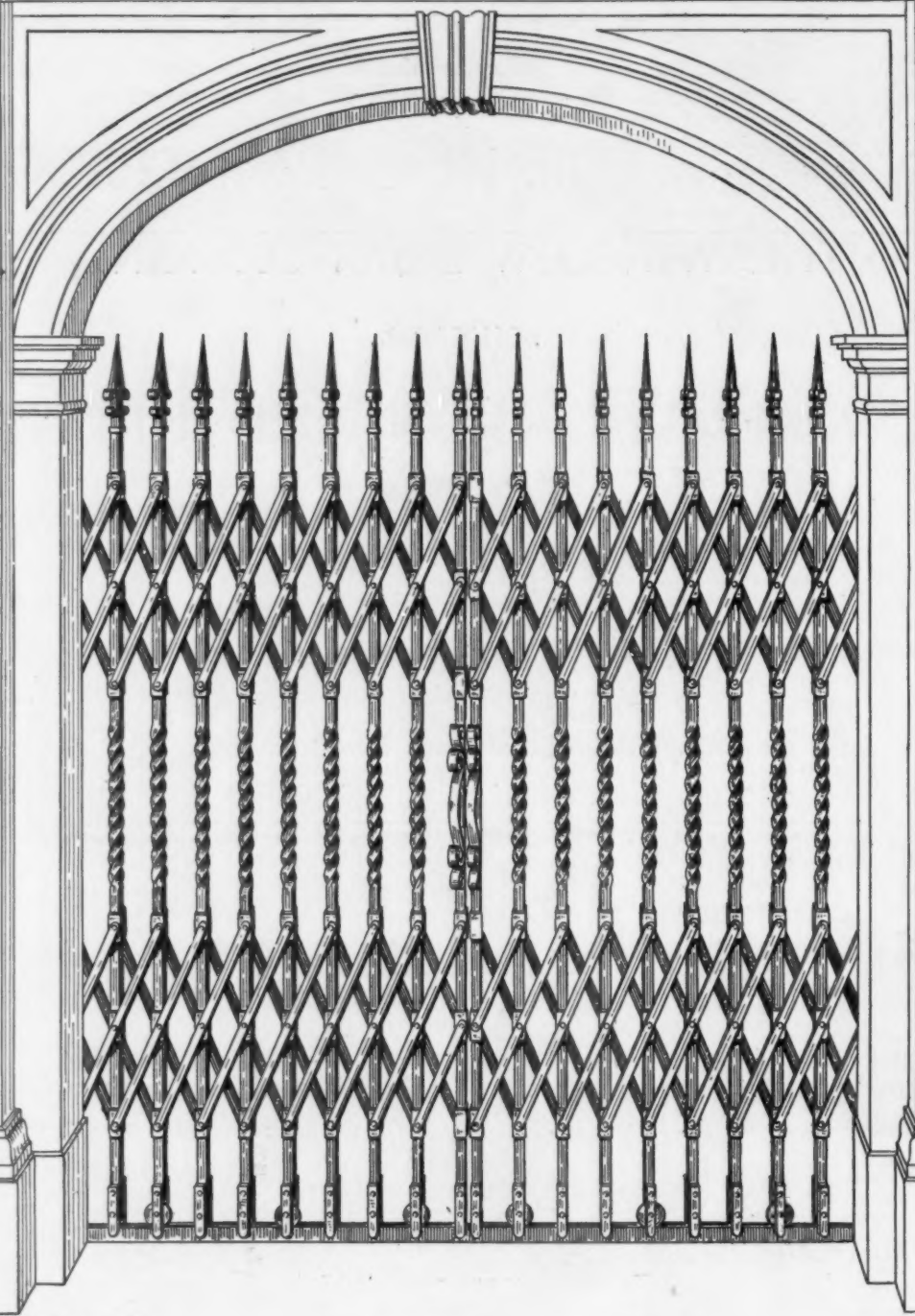
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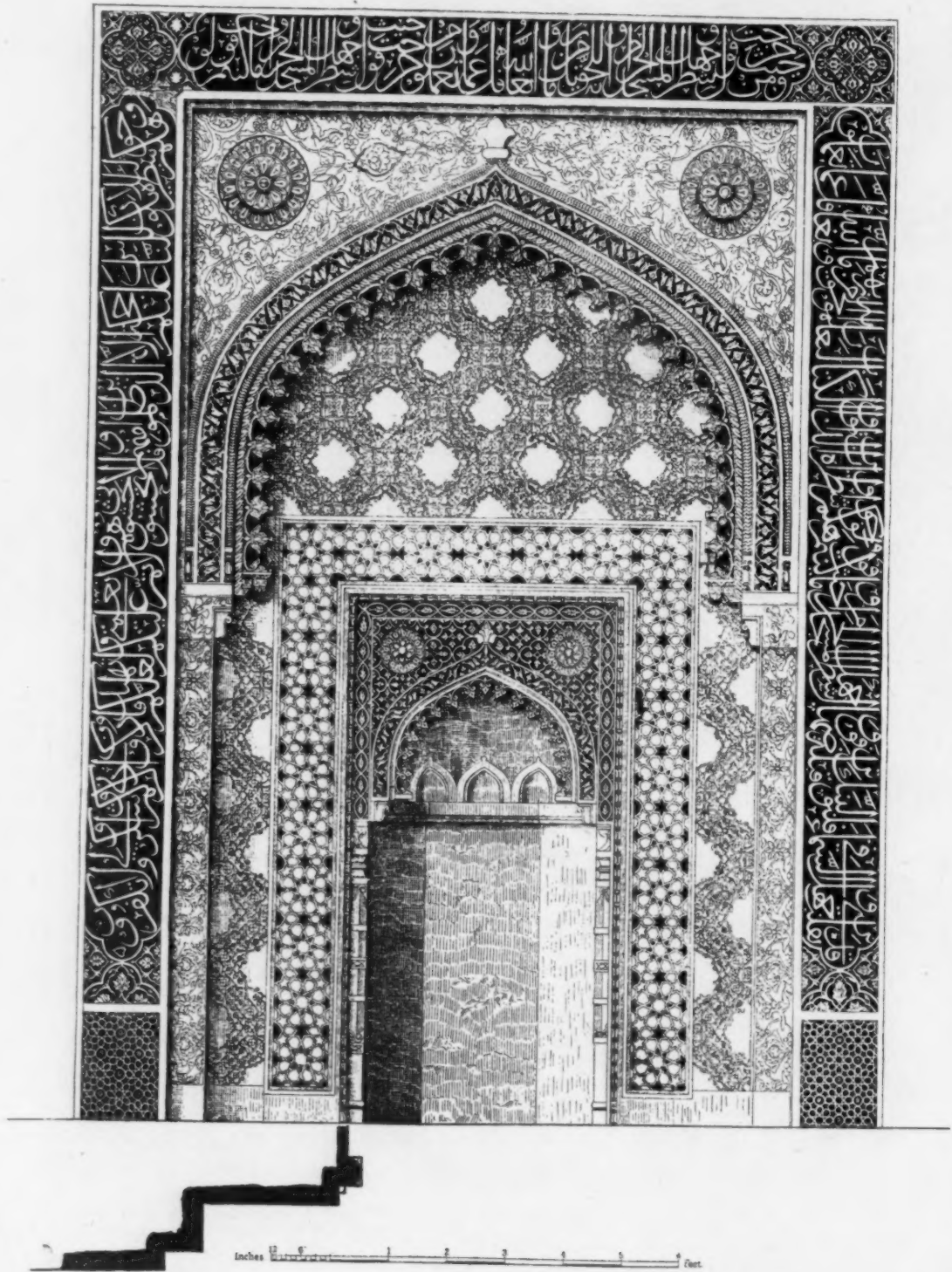
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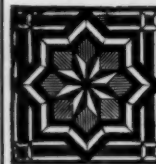
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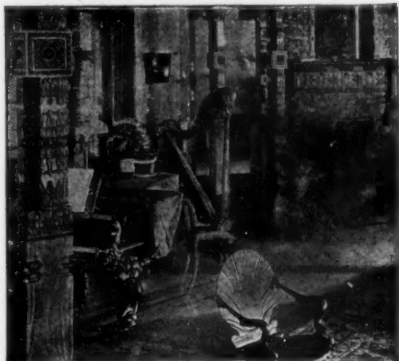
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Holyoke, Mass.—Architect W. B. Reid is drawing plans for a four-story brick block for John O'Connell to be erected at the corner of Chestnut and Lyman Sts.; cost, about \$25,000.

Indianapolis, Ind.—John H. Stem, Ingalls Block, has made preliminary plans for the convention hall which will be built in this city. The plans call for a building, 200' x 300', to cost \$150,000.

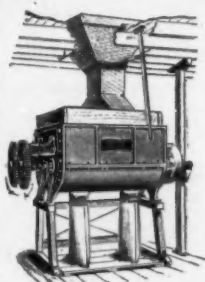
Architect Homer V. Place, 39 When Building, has prepared plans for a two-story brick and frame dwelling, 35' x 71', to be erected at 1515 Delaware St., for Mary Knight; cost, \$5,000.

Johnstown, Pa.—It is reported that plans are being made for an addition to be built to the Cambria Steel Co.'s plant, to cost about \$500,000, including machinery, etc. The offices of the company are at Philadelphia.

Kalamazoo, Mich.—M. W. Roberts, 122 Main St., has prepared plans for the \$10,000 building to be erected by the Knights of Pythias. Wm. Shakerpir, Jr., Secy.

Kansas City, Mo.—Schwarzchild & Sulzberger are having plans prepared for a six-story brick addition, 150' x 200', to be built to their packing plant.

Laconia, N. H.—The late Napoleon B. Gale, formerly of this place, left to the city by will \$10,000 for a new town-hall and \$10,000 for a new public library.



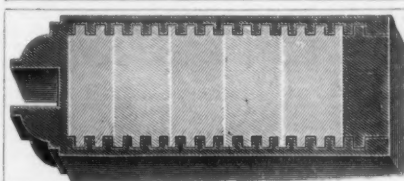
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Lansing, Mich.—A \$15,000 dairy building will be erected by the Michigan Agricultural College.

Lewisburg, Pa.—A \$30,000 memorial library will be erected for the Presbyterian Church.

Louisville, Ky.—Kenneth McDonald, 319 W. Main St., has prepared plans for a four-story brick addition to a tobacco factory, for Harry Weissinger; cost, \$25,000.

Luverne, Minn.—W. E. E. Greene, architect, is preparing plans for a county jail, to cost about \$10,000.

Lowell, N. C.—A cotton-mill with a capacity of 3,000 spindles is to be built here. A company of which S. M. Robinson is one of the principal promoters, is being organized for this purpose.

Manchester, Ia.—The Congregational Society will make extensive improvements to its church this season, to cost about \$7,000.

Mayfield, Ky.—The Baptist Society contemplates the erection of a new church at 8th and South Sts., to cost about \$15,000.

Millerville, Minn.—The Catholic Society contemplates erecting a church, at a cost of \$35,000 to \$40,000.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Minneapolis, Minn.—The Christensen Engineering Co. is having plans prepared by O. C. Uehling, architect, for a power-house to be erected on Bellevue and Park Pl., 38' x 100', two stories; cost, \$12,000.

Van Ryn & De Gelleke, architects, are preparing plans for a brick church for Clymann, Wis., 44' x 94', to cost \$8,000.

The Home for the Friendless will erect a new building on the present site of the institution, if the necessary funds can be raised. Plans have been prepared for a three-story building to cost \$10,000.

Harry W. Jones, architect, is preparing plans for a flat building to be erected on Hennepin and Lyndale Ave., on the ground now occupied by the Congregational Church. It will be 80' x 124', four stories and basement, of brick, stone and terra-cotta; cost, \$45,000.

The Gluck Brewing Co. has plans for additions to be made to their plant on Marshall and 20th Ave., N. E.; cost, \$50,000.

The Surprise Clothing Co. will build a new store on Nicollet and 4th Sts. in the spring.

The Metropolitan Music Co. is erecting a new store and studio building on 6th St.

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176 "	7 "	9 3/4 "		191 "	7 "	15 "	
291 "	8 "	11 1/4 "		116 "	8 "	17 1/2 "	
97 "	9 "	13 "		127 "	9 "	21 "	
116 "	10 "	15 "		114 "	10 "	25 "	
87 "	10 "	16 "		87 "	12 "	31 1/2 "	
110 "	12 "	20 1/2 "		62 "	12 "	40 "	
				101 "	15 "	42 "	
				175 "	15 "	50 "	
				42 "	15 "	60 "	
				160 "	20 "	65 "	

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Lowry Hill Congregational Society will erect a new church this spring in Sunnyside.
William Donaldson & Co. will make a large addition to their store, Nicolet and 6th Sts., early in the season.
Moline, Ill.—The Moline Plow Co. will erect an eight-story warehouse at 14th St. and 3d Ave.; cost, about \$100,000.
New Orange, N. J.—The International League of Press Clubs' Benevolent Association has come into possession of a tract of land here on which at a recent meeting it was decided to build a \$20,000 home for aged and indigent newspaper men.
New Orleans, La.—Diboll & Owen, 137 Carondelet, are at work on plans for the annex to be built to the Home for Incurables, at a cost of about \$30,000. An ordinance has passed directing the city engineer to prepare plans and specifications for a public market to be located on a plot of ground bounded by Orleans, St. Ann., Broad and White Sts.
Newport, R. I.—Architect Ogden Codman, Jr., of New York City, has prepared plans for a three-story summer residence to be erected on Brenton Ave., for Alfred M. Coates; cost, \$30,000.
New York, N. Y.—Mr. Driggs, of this city, has introduced a bill into Congress appropriating \$30,000 for the purchase of a site and the construction of a building for post-office uses in the 29th Ward of Brooklyn, comprising the old town of Flatbush.
North Deering, Me.—Myron E. Moore, of Deering, is drawing plans for a new church edifice to be erected by the Congregational Society in the spring.
Omaha, Neb.—The Thomson-Houston Electric Light Co. will build a two-story building on M St., South Omaha. It will be of brick and iron, fire-proof, and will cost \$8,000.
Paris, Tex.—The Gulf, Colorado & Santa Fe will spend \$40,000 in terminal improvements here this year. They will include a round-house and depot. C. F. W. Felt, chief engineer, Galveston.
Peoria, Ill.—Architect Herbert E. Hewitt, 22 Arcade Building, has prepared plans for a two-story brick warehouse, 48' x 170', for Kinsey & Mahlen; cost, \$7,000.
Philadelphia, Pa.—Lit Bros. are arranging to make extensive alterations and improvements to their six-story department-store building at 709-13 Market St.; cost, about \$100,000.
Petersburg, Ill.—Architect B. B. Babcock, 5th and Eureka Sts., Decatur, has prepared plans for a 50,000-bushel elevator, to be built for John Schroll.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Pittsburgh, Pa.—The Pittsburgh Brewing Co. will build a two-story brick engine-house on Sassafras St.; cost, \$25,000.
Portland, Me.—The Building Committee of the Woodfords Universalist Society have purchased a building site whereon they are arranging to erect a church edifice in the spring.
Providence, R. I.—At the annual meeting of the trustees of the Butler Insane Hospital held recently, definite plans were announced regarding the expenditure of the Weld Memorial gift of \$75,000. This fund will be expended in the construction of the Weld House, plans for which have been prepared by Architects Hoppin & Ely. Operations will begin in the spring.
Red Wing, Minn.—The Charles Becher Lumber Co. have decided to rebuild their saw-mill, which was recently destroyed by fire, at a cost of about \$35,000.
Richmond, Va.—Charles E. Hunter is having Architect Albert F. Hunt, 1301 E. Main St., prepare plans for a brick and stone warehouse, to cost \$12,000.
Rochester, N. Y.—The Almshouse Committee of the Monroe County Board of Supervisors will build a \$100,000 hospital on the site of the old one.
Rockford, Ill.—It is stated that the Rockford Brewing Co. have let the contract for a \$40,000 addition to its plant.
Rye, N. Y.—Bruce Price, 1133 Broadway, New York, has made plans for a building to be built at Presidential Park for the Marian Osborne Home for Women. It will be 60' x 300', four stories high, and will cost approximately \$500,000.
Salt Lake, Utah.—It is reported that the Oregon Shore Line Railway Co. will soon begin the erection of a new railway plant at Pocatello, Idaho. The plant will necessitate the erection of buildings costing about \$400,000.
San Francisco, Cal.—Architect G. W. Percy, 532 Market St., has prepared plans for an eleven-story fireproof office-building, to be erected at the corner of California and Montgomery Sts.; cost, about \$400,000.
Shrewsbury, Mass.—Architect Wm. H. Harvey, of Worcester, has prepared plans for a new almshouse. The proposed building is to be of wood, 32' x 40', with a large ell, the structure throughout being two stories.
Sioux City, Ia.—The Sioux City Brewing Co. will enlarge its stock house and bottling factory; cost, about \$200,000.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Spokane, Wash.—Our Lady of Lourdes Catholic Society proposes to erect a church on Riverside Ave., to cost about \$75,000. It will be in the form of a cross, 120' x 180', with seatings for 3,000.
St. Paul, Minn.—Architect William Kingsley is preparing plans for a three-story pressed-brick and terra-cotta store and flat building, 38' x 70', to be erected on 3d St. and Smith Ave., for George W. Beal; cost, \$18,000.
A. F. Gauger, architect, is preparing plans for a frame flat to be erected on Walnut St., for A. Schulz; cost, \$6,000.
Walla Walla, Wash.—The Interior Department at Washington is having plans prepared for new cells at the penitentiary; cost, \$24,000.
Wapello, Ia.—H. W. Zedler, architect, of Muscatine, will prepare the plans for the new building on the county poor farm; cost, \$10,000.
Waterloo, Ia.—J. H. Miller, of Cedar Rapids, has had plans prepared by Murphy & Ralston, architects, of this city, for a three-story pressed-brick building, 44' x 80'; cost, \$10,000.
E. F. Cowin has had plans prepared by Murphy & Ralston, architects, of this city, for a two-story frame dwelling, 46' x 65'; cost, \$13,000.
Watertown, Mass.—Charles Brigham is preparing plans for a new bank building for the Union Market National Bank. The structure will be erected on the site of the present building, than which it will be 20 feet wider.
Wilmington, Md.—It is stated that the Polish Catholic Society will erect a new church here.
Worcester, Mass.—Architect John P. Kingston is making plans for a two-and-one-half story frame dwelling to be erected on W. Boylston St.; cost, \$5,000.
Builders have begun to estimate on the proposed new brick, stone and iron high-school building to be erected at the south end from plans by Architects Frost, Briggs & Chamberlin of this city; cost, \$10,000.
J. W. Bishop Co. has been awarded the contract to put in new store fronts and make other alterations to the Walker Building from plans by Architect Geo. H. Clemence; cost, \$13,000.
Architect Geo. H. Clemence has awarded the contract for a two-and-one-half story frame residence on William St. for the West Side Land Co. to W. E. Putnam, 13 Cypress St.; cost, \$6,000.
Architects Fuller & Delano are preparing plans for a stable to be built in the rear of Dix St. for Otis E. Putnam. The stable will be of wood and about 38' x 64'; cost, \$5,000.
J. W. Chapman, Boston, is drawing plans for a brick building for the Woman's Club; cost, about \$75,000.
Architect J. W. Patston has finished plans for a new brick power-house for the New England Electric Ry. Co. at Templeton.
APARTMENT-HOUSES.
Brooklyn, N. Y.—Saratoga Ave., s w cor. Decatur St., 3 three-st'y bk. flats, 22' x 55'; \$18,000; o., Otto Singer, 671 Macon St.; a., W. B. Willis, 17 Troutman St.
Fifty-sixth St., nr. 4th Ave., 3 four-st'y bk. & st. flats, 30' x 70'; \$39,000; o., Rose Ulrich; a., Thomas Bennett, 198 Fifty-third St.
Detroit, Mich.—W. Fort St., three-st'y & base. bk. & st. apart., 53' x 130', slate roof, steam; \$25,000; o., Lathrop Estate, 14 Newberry Building; a., Jos. V. Gearing.
Newark, N. J.—Seventh St., nr. Springfield Ave., three-st'y fr. flat; \$5,000; o., Louis Mahi; a., Alfred Peter.
New York, N. Y.—First St., nr. 1st Ave., six-st'y & base. bk. flat & store, 25' x 144' 8"; \$40,000; o., B. A. Klein, 125 E. 120th St.; a., G. F. Pelham, 503 Fifth Ave.
Park Row, cor. Baxter St., seven-st'y bk. & st. store & flat, 30' x 85' 10"; \$80,000; o., David Finelite, 864 Lexington Ave.
Thompson St., Nos. 26-28, six-st'y bk. flat, 29' 7" x 82' 2"; \$40,000; o., R. W. Marasco, 278 Mott St.; a., A. G. Rechlin, St. James Building.
Thompson St., Nos. 170-172, 4 six-st'y bk. flats & stores, 25' x 87' 3"; \$100,000; o., Michael Rofrano, 71 James St.
First St., nr. 1st Ave., 3 six-st'y & base. bk. flats & stores, 25' x 111'; \$112,000; o., B. A. Klein, 125 E. 120th St.
W. Thirty-ninth St., No. 436, six-st'y bk. flat & store, 25' x 86'; \$25,000; o., B. Klein, 35 Nassau St.; a., Schneider & Herter, 46 Bible House.
W. Twenty-first St., Nos. 218-220, seven-st'y bk. & st. apart., 46' x 92'; \$75,000; o., Boehm & Boehm, 35 Nassau St.; a., Geo. F. Pelham, 503 Fifth Ave.
Madison St., No. 377, six-st'y & base. bk. flat & store, 25' x 94' 10"; \$23,000; o., Lowenfeld & Prager, 115 Broadway.
Grand St., Nos. 451-455, 2 seven-st'y bk. flats & stores, 31' x 72' 9"; \$70,000; o., Mandel, Maran, Makrowsky, 1015 Third Ave.
E. Thirteenth St., Nos. 243-247, 2 seven-st'y bk. flats, 33' 9" x 90'; \$100,000; o., Abraham Silverson, 236 E. 61st St.; a., Schneider & Herter, 46 Bible House.
Chrystie St., Nos. 145-147, six-st'y bk. flat & store, 43' 7" x 53' 3"; \$35,000; o., Adolph Schlessinger, 60 Rivington St.
E. Broadway, n w cor. Rutgers St., six-st'y bk. flat, 25' x 41'; \$25,000; o., Jacob Fischel, 216 Clinton St.; a., M. Bernstein, 245 Broadway.

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No. 585,375, May 25, 1897
No. 585,376, May 25, 1897
No. 591,258, Oct. 12, 1897

No. 620,588, Mar. 14, 1899
No. 601,426, Mar. 29, 1898
No. 608,540, Aug. 2, 1898
No. 608,572, Aug. 2, 1898

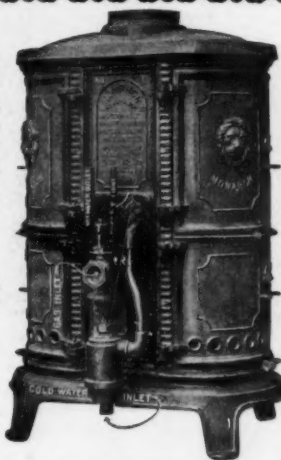
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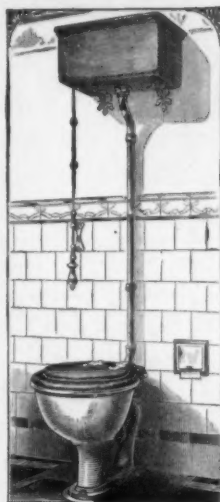
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BUILDING INTELLIGENCE.

(Apartment-Houses Continued.)

Richmond Hill, L. I., N. Y.—Jamaica Ave., 2 two-story bk. flats & stores, 25' x 65'; \$12,000; o., Richmond Hill Improvement Co.; a., Th. Engelhardt, 905 Broadway, Brooklyn.

St. Louis, Mo.—McPherson and Lake Sts., three-story bk. & st. flats, 50' x 65'; \$12,000; o., Charter Oak Investment Co.; a., A. B. Ridington.

Toledo, O.—Eight-story bk. apart., 60' x 150', asphalt roof, steam; \$100,000; a., Hall & Bellows.

Wilkesburg, Pa.—Callowhill and Mellon Sts., three-story & base, bk. & st. apart., 42' x 50', steam; \$16,000; o., Frank Stewart; a., L. A. Raisig.

CHURCHES.

Freeport, L. I., N. Y.—One-story fr. church; \$6,000; o., Freeport R. C. Church; a., Ingle & Almirall, 12 E. 23d St., New York.

CLUB-HOUSES.

New York, N. Y.—W. Eighty-first St., Nos. 15-17, five-story bk. club-house, 50' x 91' 8"; \$100,000; o., American Geographical Soc., 11 W. 29th St.

EDUCATIONAL.

New York, N. Y.—Broadway, 120th to 121st Sts., five-story bk. & st. school, 100' 6" x 201' 10"; \$350,000; o., Trustees of Teachers College, W. 120th St.; a., Josselyn, Howells & Stokes, 100 William St.

Brooklyn, N. Y.—Seventy-first St., s. e. cor. 2d Ave., three-story bk. school, 68' 9" x 172'; \$138,900; o., City of New York; a., C. B. J. Snyder, 59th St. & Park Ave., New York.

Meserole Ave., n. s. bet. Lorimer & Guernsey Sts., four-story bk. public school, 68' 9" x 200', slate & tile roof, steam; \$210,000; o., City of New York; a., C. B. J. Snyder, 59th St. & Park Ave., New York.

FACTORIES.

Brooklyn, N. Y.—Creamer St., n. e. cor. Otsego St., one & two-story bk. machine shop, 110' x 200', tar & gravel roof, steam heat; \$35,000; o., Philip H. Gill, 82 Third Pl.; a., L. H. Horman.

W. Fifteenth St., nr. Mermaid Ave., two-story bk. factory rear, 80' x 65', gravel roof; \$6,000; o., Ignatz Frischman, Surf Ave., nr. W. 11th St.; a., Oscar Lowman, 37 Cortlandt St., New York.

Tenth St., nr. 2d Ave., two-story bk. factory, 62' x 45', steam heat; \$38,000; o., John M. Huber, 291 Sterling Pl.

Bryant St., nr. Henry St., one-story iron shop, 73' 4" x 213' 3", cement roof; \$10,000; o., J. B. Robinson, 56 Beaver St., New York; a., Milliken Bros., 11 Broadway, New York.

Chicago, Ill.—W. North Ave., cor. Hayne Ave., three-story bk. office-building & factory, 50' x 100'; \$12,000; o., Paul Schulte; a., Benes & Kutsche.

Marietta, O.—One & three-story bk. & corrugated-iron wagon-factory buildings, asbestos roof, steam; \$35,000; o., Ohio Valley Wagon Co.; a., E. C. G. Holmboe.

New York, N. Y.—Suffolk St., cor. of Delancey, six-story bk. shop, 22' 3" x 50'; \$16,000; o., I. Smith, 81 Suffolk St.; a., Fred. Ebeling.

First Ave., Thirty-eighth and Thirty-ninth Sts., to East River, three-story bk. & st. power-house, 197' 6" x 272' 6"; \$809,000; o. & a., Edison Electric Ill. Co., 55 Duane St.

W. Fiftieth St., No. 211, two-story bk. factory, 23' x 96'; \$6,500; G. G. R. Wendel, 121 E. 83d St.; a., F. M. Wright, 149 Broadway.

E. Forty-seventh St., Nos. 303-307, four-story bk. brewery, 50' x 70'; \$50,000; o., H. Clausen & Son, Brew Co., 309 E. 47th St.

Water St., Nos. 673-79, three-story bk. & st. wagon-factory, 70' x 71'; \$17,000; o., J. Kramer & Son; a., Charles Rentz, 153 Fourth Ave.

E. Eighteenth St., No. 10, eight-story bk. factory, 24' 6" x 88'; \$160,000; o., J. J. McCaffery, 412 E. 52d St.; a., Henri Fouchaux, 162d St. & Broadway.

E. Eightieth St., No. 223, five-story bk. factory, 22' 4" x 92' 2"; \$18,000; o., Thos. Nugent, 321 W. 64th St.; a., Neville & Bagge, 217 W. 125th St.

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BUILDING INTELLIGENCE.

(Factories Continued.)

Jamestown, N. C.—Two-story bk. cotton mill, 75' x 200', tin roof; \$10,000; o., The Alpha Cotton Mills Co.

Philadelphia, Pa.—Helen St., Nos. 3083-85, one-story bk. ice-plant, 28' 10" x 67'; \$9,000; o., Samuel Berryman's Sons.

Thirtieth St. and Schuylkill River, bk. & iron planing mill, 82' x 85', boiler-house, 15' x 80'; \$6,000; o., Franklin A. Smith; b., Armstrong & Printzenhoff.

HOSPITALS.

Newberry, Mich.—Two two-story bk. hospital buildings, 40' x 80' & 40' x 50', metal roof, steam; \$40,000; o., Insane Asylum; a., Charleton, Gilbert & Demar, Marquette.

(Continued on page xiv.)

COMPETITIONS.

LIBRARY.

Plans will be received by the Building and Grounds Committee of Duluth Public Library until February 15th, for a library building, to cost \$50,000. W. M. HUBBARD, Chmn.

[At Duluth, Minn.]

SCHOOL.

Plans are invited until February 10th, for a new school-building, to cost \$42,750. BOARD OF EDUCATION.

[At Rutherford, N. J.]

PROPOSALS.

COURT-HOUSE.

Bids will be received by the County Commissioners until February 25, for the construction of a \$40,000 court-house. COUNTY COMMISSIONERS.

[At Port Washington, Wis.]

GYMNASIUM.

Bids will be received by the University of Nebraska until February 15, for a stone and brick armory and gymnasium, to cost \$25,000. G. H. ELLSWORTH, Supt. of Construction.

[At Lincoln, Neb.]

COURT-HOUSE.

Sealed proposals will be received until March 1st for the erection of a court-house building. T. G. WILSON.

[At Blue Ridge, Ga.]

SANITARIUM.

Sealed bids will be received until February 6th, for a sanitarium to be erected at Hot Sulphur Wells Park. ALFRED GILES, 114 W. Houston St.

[At San Antonio, Tex.]

HOTEL.

Sealed bids will be received until February 10th, for the erection of a hotel and store building. SAENGER BROS.

[At Shreveport, La.]

CHURCH.

Sealed proposals will be received until February 15th, for a church for St. Columbia's parish. W. F. GINTHER, Akron, O.

[At Youngstown, O.]

Treasury Department, Office Supervising Architect, Washington, D. C., January 18, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 1st day of March, 1900, and then opened, for the construction (except heating apparatus) of the extension of the U. S. Post-office Building at Columbus, Ga., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at Columbus, Ga., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

Treasury Department, Office Supervising Architect, Washington, D. C., January 18, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 28th day of February, 1900, and then opened, for the erection and completion of a toilet out-house for the U. S. Post-office, Custom-house, etc., at Jacksonville, Florida, in accordance with drawings and specification, copies of which may be had at the discretion of the Supervising Architect, by applying to this office, or to the Custodian of the building. JAMES KNOX TAYLOR, Supervising Architect.

CHURCH.

Bids are wanted until February 15, for a church for St. Peter's Catholic Society; cost, about \$22,000. REV. N. M. ZIMMER, pastor.

[At Beaver Dam, Wis.]

DESKS, ETC.

The Military Governor of Cuba invites bids until February 15th, for supplying one or more lots of school-desks, book-cases or closets, chairs, teachers' desks, clocks, etc., for the public schools of the island. ADNA K. CHAFFEE, Chief of Staff.

[At Havana, Cuba.]

OFFICERS' QUARTERS.

West Point, N. Y., January 13, 1900. Sealed proposals, in triplicate, will be received here until February 13, 1900, for construction of officers' quarters, as per plans. Address Q. M., U. S. M. A.

[At West Point, N. Y.]

HIGH SCHOOL.

Sealed bids will be received by the Board of Education of the Independent School District of Fremont, Nebraska, until February 6, 1900, for the erection of a high school building. M. E. REYNOLDS, Sec. of Board.

[At Fremont, Neb.]

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71 Broadway, New York.

BUILDING INTELLIGENCE.

HOTELS.

Brooklyn, N. Y.—Bushwick Ave., cor. Conway St., three-st'y fr. hotel, 60' x 100', steam; \$30,000; o., Springfield Breweries Co., 409 High St., Holyoke, Mass.; a., F. Holmberg, 1153 Myrtle St.

BUILDING INTELLIGENCE.

(Hotels Continued.)

Indianapolis, Ind.—N. Delaware St., three-st'y st. & bk. Young Ladies Home Building, 44' x 100', asphalt roof, steam; \$25,000; o., W. H. Ballard; a., D. A. Bohlen & Son.

BUILDING INTELLIGENCE.

HOUSES.

Boston, Mass.—Commonwealth Ave., nr. Chestnut Hill, 24-st'y bk. dwell., 47' x 67', pitch roof, steam; \$25,000; o., W. A. Stetson; a., E. L. Clark.
Ricknell St., No. 9, 24-st'y fr. dwell., 36' x 48', pitch roof, hot water; \$8,500; o., Grace E. Churchill; a. & b., Frank E. Churchill.
York St., nr. Glenway St., two-st'y fr. dwell., 26' x 50', pitch roof, furnace; \$6,500; o., J. S. McLaren.
Hancock St., No. 225, 24-st'y bk. dwell., 23' x 50', pitch roof, furnace; \$5,500; o., W. W. Whittemore; b., J. A. Cruickshanks.
Centerville, Ia.—Two-st'y fr. dwell., 41' x 54', pitch roof, hot water; \$5,000; a., G. W. Payne & Son.
Chicago, Ill.—Paulina St., nr. Sunnyside Ave., two-st'y bk. dwell., 33' x 46', pitch roof, hot water; \$7,000; o., T. F. Washburn; a., John Morrell.
One Hundred and Thirty-seventh St., nr. 7th Ave., 6 three-st'y bk. & st. dwells., 18' x 67' & 19' x 67'; \$120,000; o. & b., Charles D. Pickens; a., John Hauser.
Eighty-fourth St., n s, 100' w West End Ave., 6 five-st'y bk. dwells., 17' & 18' x 58' 8" & 55'; \$90,000; o., Matthews & Eppenstein, 442 Columbus Ave.
Douglas Park Boulevard, nr. 12th St., two-st'y st. & bk. dwell., 37' x 60', hot water; \$10,000; a., Frank Randak.
Hermitage Ave., nr. Wilson Ave., two-st'y bk. & st. dwell., 32' x 50', pitch roof, hot water; \$8,000; o., D. G. Ramsay; a., Morrison H. Vail.
Columbus, O.—King Ave., 24-st'y bk. dwell., 38' x 47', slate roof, furnace; \$5,000; o., E. G. Blakistcn.
Danbury, Ia.—Three-st'y fr. dwell., 32' x 40', pitch roof, hot water; \$5,000; o., M. D. Card; a., W. J. Keith, Lumber Ex., Minneapolis, Minn.
Detroit, Mich.—Eleventh St., two-st'y fr. dwell., 32' x 58', pitch roof; \$13,000; o., Chas. B. Ward.
Concord Ave., two-st'y fr. dwell., 60' x 65', pitch roof, furnace; \$5,000; a., Thomas B. Coughlan.
Dixon, Ill.—Two-st'y fr. dwell., 40' x 62', pitch roof, hot air & water; \$5,000; o., Dr. O. B. Blockman; a., M. H. Vail.
Dubuque, Ia.—Two-st'y redst. & fr. dwell., slate roof, steam; \$6,500; o., Miss Porter; a., J. Spencer.
Florence, Ala.—Two-st'y fr. dwell., 45' x 60', slate roof, furnace; \$12,000; o., Paul Hodges; a., Golucke & Stewart.
Flushing, L. I., N. Y.—24-st'y fr. dwell., 40' x 46'; \$5,000; o., Robert Jacob; a., S. Edson Gage, 8 Union Sq., New York.
Grant Park, Ill.—Two-st'y fr. dwell., 32' x 49', pitch roof, hot water; \$8,000; o., G. M. Bennett; a., Morrison & Fuller.
Jersey City, N. J.—Boulevard, two-st'y & base. bk. dwell., 20' x 40'; \$4,500; o., Mr. Perino; a., Geo. A. Flagg.
Clifton Ave., 24-st'y fr. dwell.; \$5,000; a., John T. Rowland.
Ninth St., nr. Jersey Ave., five-st'y bk. dwell., 25' x 86'; \$17,000; o., J. Reed; a., Albert Beyer, 2d National Bank Building, Hoboken.
Kansas City, Mo.—Eighteenth and Summit Sts., three-st'y bk. & st. dwell., 40' x 62', slate roof, hot water; \$12,000; o., J. M. Byrne; a., Stroche, Brown & German.
Lawrence, L. I., N. Y.—Two-st'y bk. & fr. dwell.; \$25,000; o., H. Herbert Porter, Jr., 31 Nassau St.; a., Barney & Chapman, 44 W. 34th St., New York, N. Y.
Mamaroneck, N. Y.—24-st'y fr. dwell.; \$12,000; o., Mr. Clark; a., Geo. A. Freeman, 27 E. 20th St.
Marshalltown, Ia.—Two-st'y bk. & st. dwell., 32' x 50', hot air; \$5,000; o., H. B. Miller; a., Prescott & Co.
Milwaukee, Ill.—Two-st'y bk. dwell., 40' x 150' x steam; \$9,000; o., Buening & Dick, 1201 Fabst Building.
Minneapolis, Minn.—Harvard and Sixth Sts., 24-st'y bk. & st. dwell., 36' x 42', slate roof, hot water; \$10,000; o., Christopher Birkhofer; a., Carl F. Struck.
New York, N. Y.—Southern Boulevard, nr. Decatur Ave., 6 three-st'y fr. dwells., 20' x 80'; \$60,000; o.,

BUILDING INTELLIGENCE.

(Houses Continued.)

Thomas W. Miles, Bedford Park; a., Arthur Boehmer, 751 Tremont Ave.
 Park Hill, 2½-st'y & base. fr. & st. dwell., 33' x 46'; \$8,500; o., Lloyd I. Seaman, 148 Reade St., New York City; a., A. J. Van Sustendale, New York City.

Ocean Side, L. I., N. Y. — Station Baldwin, three-st'y fr. dwell., 32' x 99'; \$10,000; o. & b., W. Humphrey, Freeport; a., S. Gifford Slooem, 156 Fifth Ave., New York City.

Park Ridge, N. J. — Ridge Ave., two-st'y fr. dwell., 27' x 52'; \$6,000; o., S. A. Avery; a., Chas. H. McAfee, 26 Charles St., New York, N. Y.

Philadelphia, Pa. — Woodbine Ave., nr. 59th St., 2 three-st'y st. & bk. dwells.; also Sherwood Ave., nr. Lancaster Ave., three-st'y st. & bk. dwell., 43½' x 44'; total cost, \$19,000; o., Wendell & Smith, Overbrook; b., Milton Young; a., Keen & Mead.

Pittsburgh, Pa. — Irwin Ave., two-st'y bk. & st. dwell., slate roof, hot water; \$15,000; o., F. Maul; a., Topp & Craig.

Rye, N. Y. — 2½-st'y fr. dwell., 40' x 50'; \$7,000; o., J. Douglass; a., Wallace & Gage, 3 Union Sq.

Southampton, L. I., N. Y. — 2½-st'y fr. dwell.; \$25,000; o., George Sard, Albany; a., Grosvenor Atterbury, 20 W. 34th St.

St. Louis, Mo. — King's Highway and Maple Ave., three-st'y bk. dwell., 20' x 36', slate roof, furnace; \$8,000; o., Kychlicki & Sage; a., A. B. Ridington.
 Arlington Ave., nr. Ridge, 2½ st'y bk. & st. dwell., 22' 6" x 38', slate roof, furnace; \$6,000; o., Hanford Investment Co.; a., A. Blair Ridington.

Thornburg, Pa. — Two-st'y bk. & st. dwell., 25' x 38' pitch roof, furnace; \$5,100; o., Frank Thornburg; a., E. M. Butz & Co.

Toledo, O. — Twenty-first St., nr. Jefferson St., two-st'y fr. dwell., 20' x 40', pitch roof, steam; \$8,000; o., E. D. Moore; a., L. H. Tachung.

MERCANTILE BUILDINGS.

Chicago, Ill. — Monroe St., Nos. 148-54, three-st'y fireproof st. bank building, 90' x 190', comp. roof, steam heat; \$200,000; o., Chicago National Bank; a., Jenney & Mundie.

Little Rock, Ark. — Three-st'y bk. business building, 75' x 150', metal roof; \$15,000; o., C. J. Lincoln; a., Mann & Gibb.

OFFICE BUILDINGS.

Fredericksburg, Va. — Four-st'y bk. office & store building, 60' x 100'; \$30,000; o., Enterprise Bldg. Association; a., M. J. Dimmock, Richmond.

Hancock, Mich. — Three-st'y bk. store & office building, tin roof, steam; \$20,000; o., Andrew Kouth; a., H. T. Liebert.

Montgomery, Ala. — Commerce St., nr. Tallapoosa St., three-st'y bk. office building, 80' x 160', metal roof, steam; \$30,000; o., J. B. Nicrosi; a., Lockwood & Smith.

PUBLIC BUILDINGS.

Barron, Wis. — Two-st'y bk. court-house, 68' x 94', slate roof, steam; \$40,000; o., Barron County; a., Fremont D. Orff, Minneapolis, Minn.

Boston, Mass. — National St., No. 13, fr. ambulance station, 28' x 69', pitch roof, furnace; \$7,000; o., City of Boston; b., Gifford & Lawrence.

Hudson, Wis. — 2½-st'y st. court-house, 60' x 83', slate roof, steam; \$40,000; a., W. T. Tower, St. Paul, Minn.

Moultrie, Ga. — Two-st'y bk., st. & terra-cotta court-house, 70' x 80', tin roof; o., Colquitt County; a., Andrew J. Bryan Co.

Philadelphia, Pa. — Fifteenth St., n.w. cor. Snyder Ave., two st'y fire-house & patrol station, 60' x 76'; also three-st'y bk. & st. front police station, 49' x 88'; total cost, \$63,000; o., City of Philadelphia; b., Harry B. Shoemaker & Co.; a., J. Franklin Stuckert & Son.

Twelfth St., nr. Wharton St., three-st'y bk. & st. hook-and-ladder house, 32' x 99'; \$27,000; o., City of Philadelphia; b., Harry B. Shoemaker & Co.; a., Charles Oelschlagel.

Twenty-sixth and York Sts., three-st'y bk. & st. police station, 49' x 99'; also Hager St., nr. 26th St., one-st'y bk. patrol station, 20' x 89½'; total cost, \$40,000; o., City of Philadelphia; b., Chas. Aughter; a., J. Franklin Stuckert & Son.

THEATRES AND HALLS.

New Rochelle, N. Y. — Main St., four-st'y bk. theatre & auditorium, 45' x 100'; \$40,000; a., Chas. A. Lupprian.

MISCELLANEOUS.

Chicago, Ill. — Sheffield Ave., Nos. 1197-99, two-st'y bk. & terra-cotta telephone station, 40' x 100', comp. roof, steam; \$25,000; o., Chicago Telephone Co.; a., D. H. Burnham & Co.

Forty-third and Halsted Sts., one-st'y bk. pavilion, 140' x 160'; \$50,000; o., Union Stock Yards & Transit Co.; a., Shepley, Rutan & Coolidge, Old Colony Building.

Homan Ave. and W. Forty-ninth St., one-st'y bk. elevator, 69' x 126', boiler-house, 36' x 71'; \$50,000; o., Grand Trunk Railway Co.; a. & b., John S. Metcalf.

S. Seely Ave., No. 22, two-st'y bk. station, 34' x 111'; \$27,000; o., Chicago Telephone Co.; a., D. H. Burnham & Co.; b., Jonathan Clark Sons Co., 6 Sherman St.

S. Rockwell St., No. 904, two-st'y bk. foundry, 60' x 100'; \$9,000; o., Henry H. Waker; a., James H. Moore; b., J. F. Kavanaugh.

Union Ave., Nos. 4122-26, two-st'y bk. station, 40' x 100'; \$25,000; o., Chicago Telephone Co.; a., D. H. Burnham & Co.; b., Jonathan Clark Sons & Co.

Seely Ave., No. 22, two-st'y pressed bk. & terra-cotta telephone station, 35' x 111'; \$15,000; o., Chicago Telephone Co.; a., D. H. Burnham & Co.

Des Moines, Ia. — Sixth and Park Aves., four-st'y bk. & st. laboratory, 133' x 133', flat roof, steam; \$100,000; o., Chamberlain Medicine Co.; a., Liebbe, Nourse & Rasmussen.

Philadelphia, Pa. — Front and Ellen Sts., two-st'y & base, bk. & iron blacksmith & machine shop, 52' x 96'; \$8,000; o., M. Morris; b., Macey, Henderson & Co.

Clearfield St., nr. Frankford Ave., two-st'y & base, bk. truck-house, 25' x 110'; \$14,000; b., Harry B. Shoemaker & Co.

Twentieth St., cor. Pemberton St., two-st'y & base, patrol house; \$7,500; b., Harry B. Shoemaker & Co.; a., Charles Oelschlagel.

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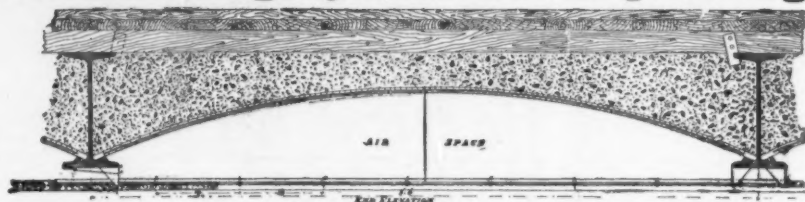
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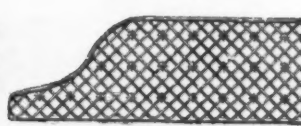
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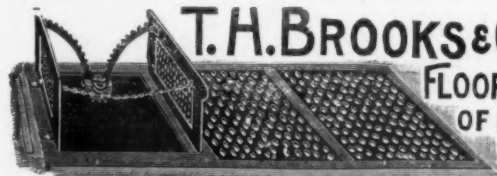
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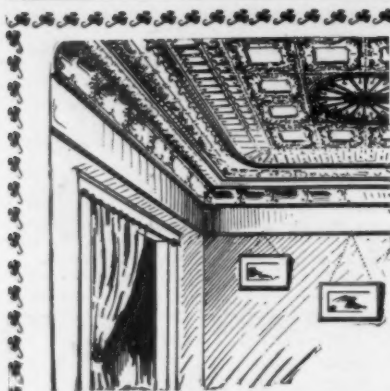
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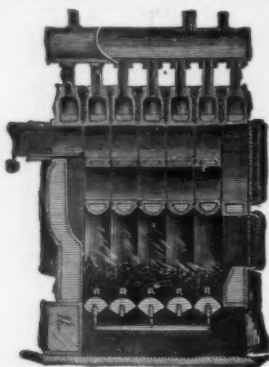
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