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has the advantage of more established fashion. It is here, therefore, that the palaces of the Vanderbilts, and Astors, and Huntingtons, and Carnegies and others have been built, and, for many years to come, this will be the region to secure a foothold in which the millionaires from all over the country will pay almost any price.

MASSACHUSETTS and Maryland are the only States, out of the thirteen which originally formed the Union, which have preserved their original State-houses nearly unaltered. Massachusetts, rather than pull down or enlarge the building of which it is so proud, has spent six million dollars in providing an extension which is far larger than the original structure, but is so arranged as to change the effect of the latter as little as possible. Following this good example, the Legislature of Maryland has adopted a plan for adding to the State-house at Annapolis, which is far too small to accommodate the State business, an extension, about twice as large as the original building, but arranged to harmonize with it, and to change its character as little as possible. Annapolis is famous for its beautiful Colonial buildings, and it is a satisfaction to think that the architectural traditions of the place, as well as the historical associations of the State Capitol, are to be respected.

THE New York *Evening Post* says that a house on Fifth Avenue, thirty-five feet wide, in process of erection as a speculation by a well-known firm of builders, was recently sold, when barely roofed-in, and, of course, without partitions, plastering, decorations or fittings of any kind, for five hundred thousand dollars; and it moralizes on this circumstance, to the effect that the modern millionaire dislikes the trouble of selecting a lot, having plans made for him, and going through the vexations, and, perhaps, delays, of building-contracts, and is coming to prefer a simple inspection of the assortment of ready-made houses offered by speculating builders of good reputation, from which he can make a choice according to his purse and his tastes; and says that, to meet this demand, the firms which make a business of building houses for sale have increased the magnitude of their operations, producing and offering dwellings ranging in value from two hundred thousand to five hundred thousand dollars, where, fifteen years ago, their maximum investment in a single house was usually not more than a hundred and fifty thousand dollars, and most of their buildings sold at forty to sixty thousand.

THE New York Superintendent of Buildings has stopped work on the new hotel for the Astor Estate, on the ground that wood was being used in finishing which, while intended to be fireproof, as the law of New York requires in all buildings more than one hundred and fifty feet high, is not satisfactorily so. While all architects will uphold Mr. Stewart in enforcing the law, a good many of them would like to know by what treatment wood can be made fireproof to his approval. The whole subject of fireproof wood is in a condition of deplorable uncertainty. Architects are showered with circulars and descriptions of "absolutely perfect" processes for making wood fireproof, alternating with "official reports," furnished by rival concerns, showing that these "absolutely perfect" processes do not fireproof the wood at all, but merely impart to it objectionable qualities. The tests made by the United States naval officers upon fireproof wood for use in ships of war have had, as they deserved, much weight with architects, but doubts have been cast upon the efficacy, or, at least, the permanency, of the results of the processes once favorably regarded. In this state of uncertainty, architects will be grateful to Mr. Stewart for an exact definition of what he considers an efficient process for fireproofing timber, and we do not doubt that the managers of the Astor Estate will be grateful also.

PRICES, however, have risen in New York within a decade or two, and it is fortunate for the building-firms that the number of very wealthy purchasers has increased also. Twenty years ago, sixty-five dollars a square foot was considered a high price for a corner-lot in the best residential section of Fifth Avenue. Now, one hundred dollars a square foot is the average price paid for lots in the middle of a block in that portion of Fifth Avenue which fronts Central Park, between Fifty-ninth Street and the Lenox Library. If we are not mistaken, this is by far the highest price for residential land in any city in the world. In London, there are so many places where fashionable people can live with credit, from the gloomy but aristocratic streets and squares of Mayfair to the pleasant regions around the parks, that land is not extravagantly costly in any of them; and, in Paris, there are so many beautiful streets within a radius of a mile or so from the Arc de Triomphe, all, practically, equally fashionable, that prices of lots do not average more than fifteen to twenty dollars a square foot. In New York, on the other hand, the area of desirable land for dwellings is small. The ever-present foreign element has long ago taken possession of the shore of the East River, and of the region immediately adjacent to it, and the border of the Hudson, up to the beginning of the Riverside Drive, is also mainly occupied by foreigners. Those who are rich enough to live where they like, and wish to be secure against disagreeable neighbors, are obliged, therefore, to take refuge in a comparatively small territory, of which the Central Park occupies the middle. Naturally, the land fronting on the Park itself is the most desirable, and, of the two avenues bordering the Park, Fifth Avenue, although less attractive in many ways than Eighth Avenue, on the other side of the Park,

THE management of the St. Louis Exposition of 1904 announces a competition for a design, emblematic of the purchase of Louisiana by the United States from France, which can be used for a seal, medal, letter-head, poster or other purpose in connection with the Exposition. The designs may be in relief, or in black-and-white, or color, according to the preference of the artist, and must be delivered to Messrs. W. S. Budworth & Son, 424 West Fifty-second Street, New York, between Saturday, November 1, and Wednesday, November 5, 1902. They will be judged by a jury consisting of Messrs. Frederick Dielman, President of the National Academy of Design; John La Farge, President of the Society of American Artists; J. Q. A. Ward, President of the National Sculpture Society; Lorado Taft, President of the Society of Western Artists; C. F. McKim, President of the American Institute of Architects; Wilson Eyre, President of the Philadelphia Chapter of the Institute, and Professor Alcée Portier, President of the Louisiana Historical Society; and a prize of two thousand dollars will be awarded to the design placed first, which is to become the property of the Exposition management. Designs in relief must be, if circular, twenty inches in diameter, and if not circular the greatest dimension must be twenty inches. If artists prefer to submit a design for a poster, the drawing must be twenty-four by thirty-six inches, with a margin, increasing the full size to twenty-eight by forty-two inches. The style of lettering, if any, should be shown, and a design intended to be used for one side of a medal should show

also the other side. No designs will be received by the Exposition authorities in St. Louis, but competitors, who are to send their designs to New York only under motto or device, are required to send to Mr. Walter B. Stevens, Secretary, Louisiana Purchase Exposition, St. Louis, a letter, marked on the envelope "Emblem Competition," advising him of the submission of a design, and enclosing in a sealed envelope, a card, with the artist's name and address, and the device or motto with which the design is signed. A portion of the designs will be publicly exhibited, and these will be returned at the expense of the Exposition authorities, unless acquired for the Exposition. Those not exhibited will be returned at the expense of the owners.

ACCORDING to the newspapers, the fever for huge railway stations is at its height in Germany just now. The municipality of Leipsic, in connection with the Government railway administration, has entered into contracts for the construction of a station at Leipsic which will cost twenty-four million dollars; and enormous stations are said to be projected in other German cities. It is not likely that officials so enlightened and careful as those of the German railway administration would take such a step rashly, but experience in this country indicates that mere vastness in railway stations is anything but a desirable quality. The South Terminal in Boston, the largest railway station in the world, while it has, probably, no more track-room than is required for the various roads entering it, includes a large amount of other accommodation for which there is no need. The so-called "Midway," for example, which serves simply as a promenade, is far too vast. Even with its capacity practically diminished by one-half by the newspaper stands, soda-water bars, cigar-booths and miscellaneous structures scattered over it, most of the remaining space in it might have been transferred to the sidewalk outside, with advantage to the comfort of the public, as well as to the pockets of the stockholders. In the same way, the long and imposing range of ticket-offices is simply an expensive obstruction, only two windows, out of a row of something like a dozen, being used, even during the busiest hours of the day; and the vast waiting-room, also encumbered with flower and candy stands, would accommodate ten times as many people as are ever seen in it. Apart from the cost of enclosing and covering these useless spaces, they serve simply to fatigue and perplex travellers, and to provide a comfortable harbor and place of business for swarms of tramps, thieves and swindlers, who prey upon those who are entitled to the use of the station.

WE are so accustomed, in this country, to thinking that only "big men," such as "coal barons," "lumber barons," "iron barons," "beef barons," and "kings of finance," are capable of undertaking anything in the way of industry or commerce, that the idea of a Congress of ordinary mortals, to study the methods by which people who are not millionaires can own ships, and sail them profitably, seems almost dangerously disrespectful to the monarchs of the Trusts; yet such a Congress is to be held at Düsseldorf this year, beginning June 29, and continuing until July 5, the members of the Congress joining, after the sessions are over, in an excursion to the Kiel Canal and the cities of the Hanseatic League. The Congress is divided into two sections, one for ocean navigation, and the other for internal navigation, and in each branch technical and economic questions relating to it will be discussed. Among these questions are the deterioration of coal and coke by shipment; the dredging of harbors, and their flushing by tides or otherwise; the arrangement of docks; the employment of lighters; signalling in fogs; and, in the section of inland navigation, the mechanical propulsion of vessels on canals; the utilization of waste power at weirs, and the surmounting of great ascents. As usual in German Congresses, the proceedings are relieved by several incidental excursions, for which the situation of Düsseldorf is particularly favorable. For the afternoon of Tuesday, July 1, excursions are arranged either to Duisburg or Elberfeld; on the following Thursday there is to be an excursion up the Rhine to Cologne and the Seven Mountains; on Saturday members can choose between visits to the Krupp works at Essen, to the great dam at Remscheid, and to the Dortmund-Ems Canal. Saturday evening the three-day excursion to Kiel begins with the night journey to Bremen. Persons interested in the subjects discussed, although not members, may be admitted to the sessions of the Congress, under certain conditions, under the guidance of a member.

THE Rotch Travelling-Scholarship in Architecture has been awarded this year to Mr. J. F. Clapp, of Boston, and the second prize, given by the Boston Society of Architects, to Mr. Benno Janssen. Mr. Clapp is a graduate of the Architectural Department of the Massachusetts Institute of Technology and will go abroad well prepared for the work which he is to do.

THE *Russisch-Deutsche Bote*, a weekly journal, published in Berlin, with articles in Russian and German, gives an interesting account of the Trans-Siberian Railroad, on which continuous tracks are now laid from Moscow to Port Arthur and Vladivostock. It will be remembered that, for several years past, the line has been interrupted at Lake Baikal, across which passengers and freight were transported by steam ferry-boats. During the summer this transportation was easy and agreeable, and an attempt was made to continue it through the winter, by keeping the path of the ferry-boats clear with an enormous ice-breaker, the most powerful steamboat in the world, which could make its way through ice five feet thick; but this experiment did not prove very successful, and it was found advisable to continue the railway around the lake. This work has now been accomplished, and some difficult mountain engineering is so far complete that provisional tracks can be laid, although it will be two years before the permanent construction is finished. Meanwhile, however, the road is building up a large business, and developing the country through which it passes with great rapidity. Three years ago, the town of Novo-Nikolaievsk, near the crossing of the Obi River, had three thousand inhabitants. It has now sixteen thousand; while the village of Sretensk, not far off, has increased in the same period from seventeen hundred to eight thousand inhabitants, and new villages, which will soon be towns, are springing up around the stations. Coal-mines have been opened at three widely-separated points on or near the line; rich copper and gold mines are in process of development; agriculture is flourishing, and, next year, two beet-sugar factories are to be erected, besides flour-mills and oil-refineries. The total cost of the road, thus far, has been about four hundred million dollars, and the completion of the permanent way will add considerably to this sum. It is not surprising that the receipts from traffic do not yet pay the operating expenses of the line, much less interest on the cost; but the Russian Government looks at the development of the country, rather than immediate profit, and a line of this kind, connecting, practically, all Europe with all Eastern Asia, which has nothing to fear from competition, is sure to bring in a revenue sooner or later. When the permanent way is finished, passengers can be carried from London to Hong-Kong in about one-third the time that is now required for the trip by way of Brindisi and the Suez Canal, and at a much smaller expense; and the most inveterate British prejudice cannot prevent passenger-travel from taking that course. Whether freight will also be diverted from the water route remains to be seen, but it is probable that the steamers will continue to carry at least the bulky goods. So far as this country is concerned, the building-up of a great civilized community on the other side of the Pacific is a matter of the utmost importance. It has always been a question whether our trade in coarse cottons with China, in competition with England, was worth making great sacrifices for, but the trade which would naturally follow the development of Siberia, and which would include, probably, the exchange of copper, coal, wool, furs and oil for machinery, fine silk, woollen and cotton goods, canned fruits and provisions, and the other products of our varied industries which would be absorbed by a prosperous and civilized community, must ultimately be enormous.

THE lovers of nature will, we fear, experience another shock at learning that the highest waterfall in Europe, if not in the world, has just been made artificially, by digging a ditch from a mountain lake to the edge of a precipice, for the purpose of lighting a village, and driving the machinery of a factory. This cascade is situated at Vouvry, in Switzerland, in the Valais, on the edge of the lofty range of mountains which includes the Great Saint Bernard, Monte Rosa and the Matterhorn, and is more than three thousand feet high. It is, however, invisible to tourists, being enclosed in iron pipes, and manifesting itself only at the lower end, where it flows away through a set of turbines, which drive the ordinary dynamos used for converting energy for transmission to a distance.

DOMESTIC ARCHITECTURE IN ENGLAND DURING THE MIDDLE AGES.¹—VIII.

THE architectural features of the "Tudor" style are very distinct, essentially "Perpendicular" in character, but further developed, modified and enriched with added decorations.

In the earlier period we find turrets, octagonal in plan, highly ornamented, finished with ogee-shaped domes, the angle-ridges covered with crockets, surmounted with coronets as finials, or lions rampant supporting bannerets as vanes. Also expansive bay-windows extending from base to parapet, as may be seen at Henry VII's Chapel, the Augustine monasteries at Canterbury and Ipswich, at Oxford, Cambridge, Exeter, Haddon, Kirby Hall, etc. These are replaced later by the oriel-window, not less beautiful in detail, but much reduced in size and limited to one story.

Pinnacles are introduced in the gables, the roofs increase in height and pitch, as may be seen at Hampton Court, but in the time of Elizabeth we find the turrets disappearing altogether, the gables become moulded and diversified in outline, retaining the pinnacles; moulded and carved brick and terra-cotta become prominent substitutes for stone, in which we may see further Italian influence.

Permanent fireplaces having come into general use, we find a wonderful development in the prominence given to chimneys; they were built of brick cut, stamped and moulded in fanciful forms, many of extreme beauty, twisted reeds, zigzag and lozenge work, decorated with the fleur-de-lis, rose, crown and other ornaments in great variety of design.

Brick-making had greatly improved and brick with stone dressings formed the usual mode of building in the more important houses, and

later we find the window-mullions, the strings and cornices executed in moulded brick. In the more ambitious works, like Hampton Court, we find beautifully carved heads of the Kings and the leaders of the times in circular panels executed in terra-cotta in the most perfect manner.

We also find the introduction of black or discolored brick in diaper patterns. These fire-stained bricks had, no doubt, been previously used in the hearting of the walls, but, as another evidence of the tactfulness and originality of the architects of the time, we find them converting apparently blemished materials into an effective

means of decoration, many very striking examples of which exist at Hampton Court, in Bermondsey, and in the county of Kent, generally. These are in various forms of lozenges, diamonds, cross-keys, intersecting triangles, globe and cross, arcades, balustrades, dates, etc. The effect is most marked and picturesque, and shows the same tendency to enrichment by surface-decoration that, in more pretentious buildings, is secured by panelling.

The prevailing use of the four-centred, or "Tudor," arch is another salient feature, as distinct in fact as the two-centred Gothic arch itself, becoming more and more depressed as the period advanced. Not infrequently semi-elliptical or three-centred arches are met with, till, finally, in the later buildings of the Elizabethan age the arched form in the lights of windows was replaced by the horizontal head and transom, the lintel of pre-medieval times supplanting the arch. These many-storied windows were filled with rich stained-glass in leaded lights of more or less intricate design, emblazoned with the crests and armorial bearings of the founders or owners. This is called heraldic glazing, the idealization of adjuncts deemed necessary in preceding ages; the stern emblems of the wars in which their forefathers had won renown and broad domain were now trophies of the past and features of decoration. Much of this is preserved at Hampton Court, Windsor, Warwick, and in many private chapels and chantries and other notable buildings.

In referring to examples of the grandest specimens of the windows of this period, it is impossible to avoid reference to buildings of more

or less ecclesiastical character, as private chapels, etc.; and as one of the most marked features of the period is the "fan-groining" of its stone roofs in close juxtaposition with its grandest windows and glorious open-timber roofs, it seems not out of place to call attention to it as contemporary architecture.

In Henry VII's Chapel, contiguous to Westminster Hall, we have the most striking and magnificent example of this distinctive vault (erected between 1503 and 1512), the climax of stone groining. The vaulting-surfaces are hollow conoids, covered with a mazy network of fine ribs and serial panelling, from which depend fan-shaped pendentives of great size and richness. This is well shown in ordinary illustrations, but neither words nor illustration can convey an adequate idea of the beauty in execution of this wonderfully distinctive characteristic of mediæval architecture in England during the Tudor period.

The doorways are very pronounced, similar in general design to those of the Perpendicular period, more ornate with the pride of the time—heraldic devices, mottos or legends. The two-centred pointed arch had gradually become more and more depressed and was replaced by the Tudor, or four-centred, arch peculiar to the period; the outer and "label" mouldings were carried up square above the springing-level of the arched opening and across the head; the spandrels thus formed were filled with panelling enriched with carvings of the Tudor rose, crowns, portcullis, monograms, etc. These doorways were often projected and flanked by small semi-octagonal turrets with open panelling across the top.

Perhaps, however, one of the most characteristic features of Tudor architecture is the tendency to uniformity in external treatment as distinctly at variance with the spirit of earlier work. The central feature, usually the entrance-doorway, is strongly marked

and more or less elaborated, but in the extension of the front and wings, one side matches the other, window for window, bay for bay, tower for tower, even to the extent of replacing windows with counterbalancing blank panelling. To this is added the on-grafting of Classic forms copied from pre-medieval sources, which, however incongruous, produce effects of wonderful picturesqueness, as may be seen at Hatfield, Hardwicke, Wolterton, Burghley, etc.

We find, too, broad terraces with flights of stone steps flanked by ornamental stone parapets pierced with interlacing patterns, pedestals surmounted by grif-

fins carrying shields or finials, all of very characteristic and quaint design peculiar to the period. Spacious gardens with broad walks, parterres bright with flowers, shrubbery, etc., are now common. Beyond the low surrounding garden-walls and through the open gateways stretch long avenues of trees, with views over broad domain of park-land, clumps of elm, oak, beech, ash, sycamore, chestnut, etc., the glades peopled with fallow deer and the elms alive with noisy colonies of rooks.

Hatfield, Haddon, Panshanger, Compton-Wyngate, Brereton, Kirby, Audley and Houghton Tower, Woodstock, are typical examples of the period and are all readily accessible to the student and well illustrated in Gotch's "*Baronial Halls*" and other works.

England is, indeed, rich beyond all other countries in examples of the stately and picturesque mansions of the Tudor period. The ways of olden times have not yet quite disappeared, for we find so recently as December, 1900, that Lord Edward Cecil, on his return from the seat of war in South Africa, was received at his ancestral hall at Hatfield with the picturesque rejoicings of feudal times. His carriage was escorted by tenantry of the estate bearing torches, and the family group, headed by the venerable Marquis of Salisbury, awaited his arrival on the steps of the old mansion to bid him welcome home again.

Hatfield is, perhaps, the most magnificent example of the late Tudor or Jacobean mansion of its kind to be seen anywhere; certainly none is more perfect. It was originally the palace of the Bishops of Ely and by them rebuilt and enlarged at the end of the fifteenth century; was confiscated by Henry VIII and made a



St. Catherine's, near Bath, Eng.

¹ Continued from No. 1374, page 29.

Royal Palace and occupied subsequently by Edward VI and Elizabeth. It was exchanged away by James I and came into possession of the Cecils at the commencement of the seventeenth century and was by them partially rebuilt and altered in a style that may be termed Late Elizabethan or Early Jacobean. In 1835 a fire destroyed a portion of the west wing, but this was rebuilt "after the original design."

The buildings occupy a parallelogram of about 280 feet long by 70 feet wide, the extreme length along the south front being 300 feet. The design is almost exactly symmetrically arranged, with large windows and bays. The hall, which is 50' x 30', is a good example of the late Elizabethan hall with its grand screen and coved plaster ceiling divided by richly decorated beams on boldly carved corbels, and may be named as an early departure from the open-timber roofs which were one of the glories of the early Tudor period. The walls are wainscoted and decorated by carving attributed to Flemish artists. The grand staircase¹ is another bold and very ornate feature. The gallery is 163 feet long by 23 feet wide and 16 feet high; the chimneypieces are very massive, with fire-dogs to the grates. The walls are grotesquely panelled and the ceiling richly panelled in plaster. This gallery is full of works of art, coats of mail and rare old furniture, including Queen Elizabeth's cradle. King James's room and the Library are also very fine rooms.

The introduction of ornamental plaster ceilings, modelled and moulded by hand, is one of the salient features of the late Tudor period, and is well illustrated in Gatch's splendid work on the "*Baronial Halls of England*."

There is still another style of building that, though it took its rise in the previous period, became very general in certain districts, and is especially illustrated by the many well-preserved examples of the old half-timbered houses erected at this time. These houses are found scattered throughout western Lancashire, Cheshire, Shropshire and along the banks of the Severn, Wye and Avon, and again in Kent. (See illustrations from the *Builder* and *Building News*, drawn by Maurice B. Adams.) These half-timbered houses were built of



Old Houses, Warwick, Eng.

heavy oak framing, mortised and pinned together at the joints, filled-in flush between the timbers with brick or lath and plaster. The work of similar class in the Midland Counties is of earlier date. There are numerous fragments of these old houses dotted all over these districts, many of great interest, sometimes surviving in a picturesque gable or two, part of a more modern barn, that must be left to the inquiring traveller to discover. Many most interesting examples are illustrated in Henry Taylor's "*Old Halls of Lancashire and Cheshire*," in Gatch's "*Baronial Halls*," Nash's "*Mansions of the Olden Time*," "*Picturesque Europe*," and in the publications of the *Builder*, the *Building News* and other current works.

The growth throughout the country of these old halls and mansions marks the rise in the wealth and consequence of the "middle," that is, the professional and commercial, classes of the period, as distinguished from the old nobility of feudal times and other great landed proprietors whose wealth was inherited, on the one hand, and the laboring classes on the other. The style of building is altogether different; it has no connection with the feudal times, there is no family sentiment, no pride of ancestral tradition or historic reminiscence about them. They were erected by self-made men, merchants and others, at a time when architectural taste was decaying—in times of peace and commercial prosperity—to secure to themselves such comfort, ease and luxury as they could afford according to the manners and ideas of the time. It is still truly historic or evolutionary architecture; that is to say, it is not a copy from preëxisting work, but the bona-fide growth and outcome of the life of the times.

We find in these half-timbered houses the large mullioned and transomed windows of many leaded lights, in which plain shields or circles charged with simple devices replace the heraldic glazing of the houses of the older families; huge fireplaces and quaint chimneys devoid of ornamentation, overhanging stories, and gabled roofs covered with the split flagstones of the neighborhood, or sometimes tiles in

clay countries. Of these buildings we find beautiful and very perfect examples in Worsley Old Hall, near Manchester, erected in 1580; Alderley Edge, 1521; St. Peter's Hospital, Bristol; Butchers' Row, Shrewsbury; houses in Warwick; the Oak House, West Bromwich; Speke Hall, near Liverpool, moated, erected 1593; the "Hall in the Wood," Bolton, 1598; Agecroft Hall, Cheshire, wood and plaster, 1561; Bramhall Hall, Cheshire, 1521; Darcy Lever Hall, near Bolton, 1541; Hanover House, Tunbridge, Kent, 1620; Holford Hall, Cheshire, moated, 1560; Little Moreton, Lancashire, moated, 1559; Ordsall Hall, Retford, Notts., brick and timber with curious oriels, 1560; Windsor Castle, the Curfew Tower and Horseshoe Cloisters, 1540; Severn End, Worcestershire; hospitals at Leicester, Coventry, and many others easily accessible and well illustrated by photography and in works before named.

This style of building, like the more pretentious stone buildings before referred to, continued with more or less modification in remote districts well into the Stuart period, developing the Jacobean style; but practically the mediæval style of architecture died out with Elizabeth, the last of the Tudors.

During the civil wars in the middle of the seventeenth century, the time of Cromwell, a great many of the old castles, like Kenilworth, Woodstock, etc., were more or less dismantled, destroyed and laid waste and ceased to be used as places of residence. Their ivy-clad ruined towers alone remain to this day to tell us of the lofty grandeur of those venerable old castles, the magnificence of their lordly owners and the warlike times in which they were built, and, alas! also of that cruel, barbarous reactionary period, the period of religious frenzy, during which social and political England was convulsed, laid waste and blighted with internecine wars.

We have now traced the parentage and birth of domestic mediæval architecture in England; illustrated its growth and triumphs, its brilliant springtime, its glorious summer and its golden autumn. But could it ever have been more beautiful, more fascinating, more intensely lovable than it now is in its gray, solemn ruins, mantled with the ivy of centuries? We see them as they are; we can picture them as they were, and, by the light of these somewhat discursive notes, we can re-people them with their lordly owners, reenact the stately pageants, the gay tournaments, and the pomps and circumstance of the times during which they were built. These now silent towers and crumbling ruins are the sole remaining witnesses of what England was during the Middle Ages.

THOS. C. SORBY.

(To be concluded.)

THE INIQUITY OF THE ENGLISH LAW OF ANCIENT LIGHTS.¹



WILL not occupy your time with any preliminary remarks, but commence at once in *medias res* and say, my contention and conviction are that the state of the law in England to-day with regards to rights of light is little, if any, short of an iniquity.

The Prescription Act (2 and 3 Will. IV. c. 71, s. 3) enacts "That when access and use of light to and for any dwelling-house, workshop or other building shall have been actually enjoyed therewith for the full period of twenty years without interruption, the right thereto shall be deemed absolute and indefeasible, any local usage or custom to the contrary notwithstanding, unless it shall appear that the same was enjoyed by some consent or agreement expressly made for that purpose by deed or writing."

The result in practice being that if where two men own two contiguous plots of ground and one owner wants to build and does build at once and the other owner does not want to build, then notwithstanding that he may have every intention of building eventually—if owner number two postpones his operations for nineteen years he is unable to use his own land in accordance with his desire without being hampered by certain so-called rights his neighbor has acquired to access of light to his windows and other openings over number two land. In effect, my neighbor can dictate to me at what period I am to build on my own land by building on his own.

Again, if both owners build simultaneously, but A builds a more lofty edifice or a longer than B, B, if he is ever to increase the size of his building, must do so within nineteen years of A's completion or be practically debarred from so doing altogether, regardless of whether B has any need or wish or even whether he is able to extend his premises within that time.

One more illustration, this relating to old buildings. In an urban neighborhood, a large factory is required that will give employment to hundreds or thousands of hands, or a public authority wish to erect a town-hall, baths, library, workmen's dwellings or other institutions of public utility: both are hindered and harassed or altogether frustrated in their purpose because buildings not even on the same side of the road, and possibly the most wretched hovels, will be deprived of some light, ignoring the fact that the light which had been enjoyed was not provided for by the owner of the dominant tenement or at his expense or even by his forethought, but simply because the owner of the servient tenement had no need in the past to use his land in the same way or carry his building to the same height and extent as the owner of the dominant. Thus the most useful and necessary building we have imagined is curtailed in accommodation, marred in its usefulness and shorn of much of its beauty

¹ A good view of this staircase is given in Nash's "*Mansions of the Olden Time*."

¹ Portions of a paper read by Mr. Walter C. Williams, Solicitor, at the meeting of the Society of Architects on March 20, 1902.

for what, to my mind, is an inadequate reason. One could suggest innumerable cases of a kindred nature, but it seems needless to do so when speaking to an audience of practising architects who are, of course, acquainted with the salient features of the law on this subject and its practical results.

I cannot see the rule has any foundation in natural justice. I cannot see that it is defensible, either ethically or on the ground of expediency. Why should not a man have to make his own provision for the light to his building over his own land or over the public way? If he will not provide an open space on his own land to light his building, why should I have to provide one on mine for him, at any time, earlier or later? Now, how can an owner prevent his neighbor acquiring a right of light over his land? In one way, and one way only, and that is actual obstruction.

He may protest in the most emphatic and solemn manner, but it avails him nothing; he may give notices, but they give him no protection. No, wherever his neighbor has an opening in his building, overlooking his land or buildings, he must erect a hoarding (if he do not wish to build permanently) opposite to it.

The hoarding may have to be 60 feet high and 500 feet long, may be a hideous eyesore to the surrounding property, may be a most oppressive, even ruinous, expense, but up it must go, and must be retained there for a full year, for Section 4 provides that an interruption to be valid must be for one complete year. Hence you will see, gentlemen, that as soon as light has been enjoyed for nineteen years and one day there cannot be an interruption of one clear year before the expiration of twenty years from the time of its first enjoyment, though the owner cannot bring any action until the full twenty years have elapsed. It is obvious that in some cases this remedy may be as costly as the value of the land.

Even if expense do not stand in the way, in London (and, I believe, in many large provincial towns and cities similar rules are in force), but in London should such a hoarding be erected for the purpose indicated it becomes, under the London Building Act, an irregular or temporary structure, and requires the license of the London County Council or local town council for its erection or retention, and should this license be refused, as it well might, the owner is in this delightful position: he finds he is by one Act of Parliament precluded from doing the very thing which, by virtue of another Act, is the only thing he can do to protect himself from the encroachments of his neighbor.

There is yet another anomaly and hardship. A man may be entitled in remainder expectant on the life of a young or middle-aged tenant for life, say, stepmother or brother, only a year or so senior. During the life of the tenant for life rights to light may be acquired which the remainder man has no means whatever of preventing or resisting, because, as I have pointed out, he must actually physically obstruct the view of the poaching tenement; but, as tenant for life, he has no authority to enter on the land about to be affected to carry out the requisite work. It may be the remainder man was an infant, *non compos mentis*, or abroad; it may be the tenant for life has acted in collusion with the building party; all this notwithstanding, the remainder man has his inheritance depreciated in value by the acquisition of these adverse rights that he was powerless to prevent.

The same with a landlord whose tenant allows rights of light to be acquired over the demised premises. . . .

The easement of light, however, differs in its nature from other members of the family. Rights of way and rights of common may well be presumed to have been granted, as such easements may be almost of necessity, and, moreover, conduced to the convenience of the actual or supposed grantor as well as of those who enjoyed them. They are also always for the convenience of the many as against the strict right of the single owner, whereas the right of light is for the sole benefit of the single owner at the expense of all his neighbors.

Again, a riparian owner is entitled to the undiminished flow of a stream over or by his land, and if an owner up stream interferes with the flow in any way the property lower down is damaged, and that independently of any act on the part of its owner. But the claimant of right of light must himself have done in the past the very thing he now complains of in his neighbor, viz., have interfered by his own building with the access of light to his neighbor's property.

I contend that this judge-made rule is not founded on any consideration of natural justice or ground of public utility. On the contrary, the voice of justice seems to me to say that a man must light his premises over his own land or the public way; and public utility there assuredly is none, as the benefit is always to an individual at the expense of others. . . .

Before concluding I must refer to the laws of some foreign countries.

Now in Scotland our English rule has never been accepted. Erskine says, in his "*Principles of the Law of Scotland*": "This servitude cannot be constituted by prescription alone, for though a proprietor should have built his house ever so low, or should not have built at all for forty years together, he is presumed to have done so for his own convenience and profit, and therefore cannot be barred from afterwards building a house on his property or raising it to what height he pleases unless he be tied down by his own consent." Another writer says: "The theory in Scots law is that a proprietor is only bound to provide light for his own property, and any open space he may have is not to be reckoned on by his neighbor."

In Ireland also a man had to provide his own light as well for his

land. The Irish law, however, is now assimilated to our own by Lord Carew's Act in 1858.

In the United States in 1837, shortly after the Prescription Act was passed, an American judge — Judge Bronson — expresses himself thus: "There is, I think, no principle upon which the modern English doctrine on the subject of lights can be supported. It is an anomaly in the law since the English doctrine of ancient lights has been repudiated in our courts. It cannot be applied in the growing cities and villages of this country without working most mischievous consequences. It has never, I think, been deemed part of our law." And he then refers to Kent's "*Commentaries*."

In 1893 the New York Court of Appeal held that an owner of property may place his windows overlooking his neighbor's premises, but the neighbor may build to the extremity of his land nevertheless.

In France it is provided that a man may not have a straight view or a window for sight or balconies or other projections on his neighbor's estate unless there is a distance of 19 decimetres between the wall on which they are made and the said estate; nor a side or oblique view on the same estate unless there is a distance of 6 decimetres.

The Italian code is similar, but the distances are slightly less.

Lower Canada maintains the French rule.

In Sweden a man must not construct windows nearer than 7 feet 9 inches to his neighbor's land.

So you see in none of these countries can a man rely on his neighbor for his light, but must make suitable provision for himself. Hence we see another example of the isolation of our beloved country; whether it be a splendid isolation, however, is a matter on which a man may "have his doubts."

Now, having briefly considered the state of our law as to light, and briefly how that state came about, and having heard the opinions which some of our judges entertain of the doctrine, and having taken a cursory glance at the law of other countries, I ask you, gentlemen, are you satisfied with the law of your own? If not, there is one remedy, and one remedy only — legislation.

This legislation need not be fantastic or complicated; it could be simple but at the same time effectual, both practical and practicable.

I would suggest an enactment providing that no further rights of light across another's land should be acquired. That existing rights should be extinguished: —

1. As to freehold, at the end of fifty years.

2. As to leasehold, at the expiration of fifty years, or the existing term, which period should be the shorter.

This would entail no hardship on any one, would do an injustice to no one. The man who had built would still have all that he paid for, his land and the materials on it, and the owner of adjacent land would enjoy his own in his own way without being jeopardized by the operations of his neighbor.

I can conceive some objection to this in the case of abnormally high buildings, but this might be easily provided for by giving owner of adjoining building, over, say, 50 feet high, a right — which, indeed, I think they would have without special provision, under the maxim, "*sic utere tuo ut alienum non laedas*" — to compensation, not for obstruction to their light *per se*, but for any general damage that might be actually proved in each case by appropriate evidence, as in suits to abate a nuisance.

It now only remains for me to acknowledge my obligation to Mr. Blythe's paper, read before the Incorporated Law Society, for the references to some of the older cases and for information as to foreign law, and to thank the Council of this Society for having honored me by the invitation to open this discussion, and you, gentlemen, for the patient attention you have given to my remarks.

JOURNAL SKETCHES IN CHINA.¹—IV.

CANTON.

AS soon as the steamer made fast to the wharf a guide, who turned out to be a woman, was secured for me. Off we started in a drizzly rain through a maze of narrow streets to find the foreign quarter, where resided a few gentlemen to whom I had letters. A charming feature of the East is the unbounding hospitality of foreign residents; even the English become more like human beings when separated from their snug little island. Tempting as the proffered hospitality was, I had to decline, as my time was exceedingly limited and it was necessary that I should get as near the Chinese as possible. This was fully understood, and I was directed to a hotel on the other side of Pearl River which was in the midst of Chinadom and was kept by a Portuguese who had married a Chinese. I was also given a letter to Mr. Sampson, the Director of the Government school. Off we started again, my female guide appearing quite as masculine in her jacket as the other sex did with their smooth faces and hair-braids down their backs. A boat was engaged, literally the man's house, and he and his wife rowed us across the river. Opportunity was then offered for a further examination of this forest of boats that lined the shore in a deep layer for miles. It was interesting to peer into some of them and discover little domestic scenes; cooking, tinkering, children playing and, indeed, just those activities that one might see in a busy street. We finally reached the hotel, which was certainly all I could desire in the way of proximity to the Chinese. With the exception of the Portuguese landlord, I was

¹ Continued from No. 1377, page 53.

apparently the only foreigner in the region and the only guest at the hotel. I say hotel, for thus it was labelled on the outside. It was with regret that I gave up the comforts and quiet of European civilization in the Orient, with its tennis-courts, flower-gardens, whist, and the delights with which the English and Americans surround themselves. I use the word European, for the avoidable noises we



So-called Chair in which one travels.

produce in America are only equalled, not exceeded, by the Chinese with their fire-crackers, ear-piercing trumpets and gongs.

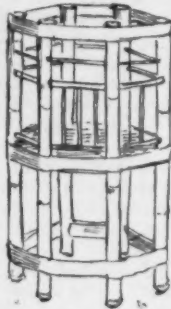
The landlord arranged for two palanquins, or chairs, as they are called, one being for my guide. Each of these was borne on the shoulders of three men, two in front and one behind. My first quest was for the Government school and Mr. Sampson, and away we went at a fairly rapid pace, through such sights, sounds and odors as one might expect to find on some other planet and a very added one at that. The city of Canton is much cleaner than Shanghai. The narrow streets are paved with stone or big square bricks, and the buildings, mostly of one story, are all of brick, with thick, solid-looking walls. Narrow shops, or cells, consist in front of a wide

doorway and a wide window through which one, without entering, may haggle for the goods displayed. The shops are rather dark within, as the streets are narrow, and overhead reed mattings, supported by wooden frames, provide a constant shade from the sun's rays, which in the latitude of Canton pour down with tropical fervor. The vertical signs with their gilt characters form a varied fringe on each side of the narrow, irregular streets, which in many cases are hardly wide enough for two palanquins to pass. The same activity is seen here, despite the heat, as in Shanghai. The crowded thoroughfares are still more congested by the various artisans carrying on their occupations in the middle of the streets, in fact, taking up both sides. The peripatetic carpenter, with his stock of tools and lumber, over which one has to step; the petty traders and fabricators, crowding the narrow lanes in a way that would not be tolerated in our country for a single moment; the hammering, planing, rice-pounding, the loud din of the coppersmith, the musical clink of the blacksmith's hammer, the multitudinous variety of weird street-cries, with the occasional rattling outburst of fire-crackers, all made up a perfect pandemonium. The three senses of sight, hearing and smell were incessantly assailed by interesting, ear-splitting, and disgusting impacts. It was all intensely absorbing and I had my eyes everywhere.

We had a long distance to go to reach the Government school, and the crowds through which we forced our way were anything but friendly. If the Chinese of Shanghai appeared rude and indifferent, the Cantonese appeared decidedly hostile, nor could I wonder at this attitude, for at the time of my visit the French were threatening their southern frontier and Manchu troops were passing through the city on the way to repel the expected invasion. Aside from this, there was not a man who was not more or less familiar with the history of the opium war and the calamitous horrors which accompanied it, when humiliation and death had come upon them in fullest measure from the hand of the hated foreigner.

On reaching the school I presented my letter and was received very kindly by Mr. Sampson, who at once conducted me to the recitation-room, in which were five students. They all rose and said, "Good morning," like a set of automatons. Mr. Sampson requested them to read in turn from an English history and this

foreign studies. I could not help contrasting this with Tokio, having the same population, with its great University, every student of which becomes well versed in English before entering; the great Medical College, every student of which has to understand German before entering; the College of Engineering; the Foreign Language School, where a knowledge of French, German, Russian and Chinese is required; the School of Chemical Technology; the Military and Naval College, all with their foreign professors and instructors, and the modern languages taught in the normal and high schools, and the Nobles' School, as well, and thousands upon thousands of Japanese students punctually attending the classes of these institutions until graduation. What a contrast! And yet many English writers regard this hunger for knowledge with contempt, and esteem the Chinese as superior, basing their judgment on their own leading characteristic as a nation of shop-keepers, which quality has dominated nearly all their foreign wars and their acquisition of foreign territory. Here in China they find their match in the astute Chinese merchant, who is equally honored and respected with them.



Baby's High Chair.

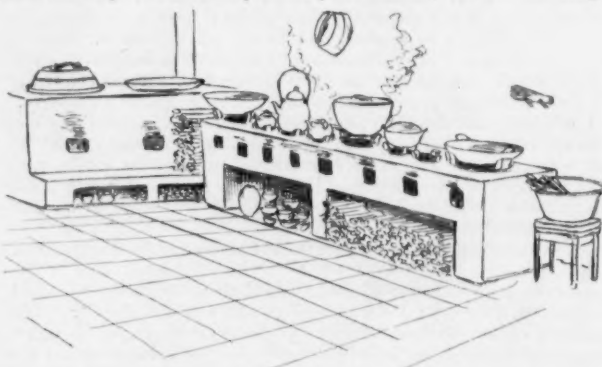
The school consisted of a few private dwellings which had been brought together into a series of connecting rooms by simply knocking a few holes through the thick partition-walls of the various houses allotted for the purpose. A plan of Canton with its houses would resemble a gigantic honeycomb, the cells being quadrangular instead of hexagonal. Mr. Sampson kindly permitted me to roam over the premises at will and I secured a number of sketches. Many of the features were quite unlike those of the Shanghai house, though the reception-hall was planned like the northern one and the minor details of work and ornament were somewhat similar. I may add in passing that the people are different, their language is different and a man from Shanghai is not only regarded as a foreigner, but is rather brusquely treated as one. In Shanghai I had acquired a few expressions such as "thank you," "good-morning," "good-by," etc., which had always been understood when I ventured to use them; here in Canton not a single expression was understood. I was told that the two languages were as different as Spanish and Portuguese or Italian. They all use the same characters in writing, however. These characters are conventional symbols, each one representing a word or an idea and hence called ideographs. Over this vast Empire, as well as in Korea and Japan, the written language is the same. Throughout the Chinese Empire there are a number of languages and hundreds of dialects. The characters, to the number of thousands, which have come down from the dim past have the same meaning. The Chinese must have had, early in their history, the example of phonetic writing on their western borders, but have persisted to the present time in using this archaic and cumbersome device in expressing their thoughts.

My first hunt was for the kitchen, for here is an ethnic feature associated with family life that persists without change for generations. It is this feature that is rarely described or figured in books, and for that reason I made a special effort to secure sketches when opportunity offered. The kitchen range was long and had accommodations for many cooking-pots. Each opening had three spurs, or supports, so that the vessel was held some little distance above, as in the little braziers in Japan. Here, also, I saw in an open place under the range a number of braziers or pottery cooking-devices in which charcoal was used for fuel; in another space wood was piled. The rice-kettles were large and somewhat shallow; the cover had the appearance of a shallow tub inverted. Mr. Sampson informed me that the Chinese often utilized the steam arising from the boiling of rice in cooking other kinds of food. In the rice-boiler range was a round chimney which conveyed away the smoke, but for the long



School, Canton.

they did fairly well. On my expressing surprise at the smallness of the class Mr. Sampson told me that one of his greatest difficulties was to impress upon the pupils the necessity of punctuality; some days there would be a dozen or more in the class and at other times none. Here, in a city of a million of inhabitants, was this one little school to satisfy the demands of the people for a knowledge of



Kitchen Range, Canton.

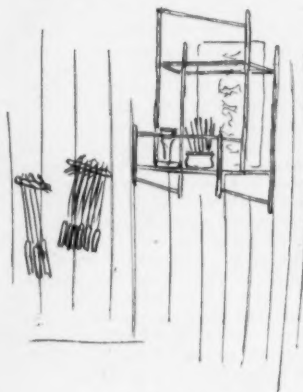
range I failed to note a chimney, if there was one. The walls of the kitchen were sufficiently blackened to indicate that no flue existed. At the end of the long range was a large jar in which were various wooden ladles for convenient use, and above a huge bamboo brush, or stirrer, was resting on two pegs. The materials used in the construction of these ranges were stone, brick and cement and appeared

strong and durable. Here, however, the differences ceased. The resemblances to the Shanghai kitchen were again seen in the same amount of dirt and disorder; the floor was grimy with dirt—street dirt tracked in—broken jars lying about and everything indicating a shiftlessness past belief. At the opposite end of the kitchen was a



Kitchen, Canton.

little shelter where sat the cook, who smoked his pipe while waiting for the kettle to boil. It was amazing to see the tumbled-down shanty provided with the most elaborately designed window-sashes, the details of which I had no time to sketch. The carvings over the door and the various intricacies had all to be omitted in these rapid memorandum outlines. The kitchen shrine was high on the wall near the rice-kettle. It was a rough bamboo framework capable of holding a device, in which candles were burning; near by were a number of candles made on long sticks. These were stained or painted red and at the ends of the sticks cross-pieces of bamboo were tied so that



Kitchen Shrine, Canton.

they could be hung on a peg, as shown in the sketch. A number of Chinese gathered about me curious to know what my purpose was in sketching, and Mr. Sampson, who spoke Chinese, asked them what they thought I was drawing, and they replied that the foreigner was about to build a house and was getting ideas how best to do it.

From the kitchen other rooms were visited. One room, evidently a study, had a very large window opening into a little garden. On the garden-wall opposite the window was a strip of paper on which were written four Chinese characters, which after some trouble were rendered into English as follows:

"May fortunate light illuminate the garden." The translation of these inscriptions in China always comes as a surprise to the foreigner. Many of them express the highest emotions—a love of cleanliness, exalted piety, tender compassion, etc.; and then one contemplates the people with their cruelty, their filth, their ignorance, the abject position of women, and it is realized that the inscriptions are words—empty words, conveying no more meaning to them than if they had been written in Coptic. I suppose it may be justly said that the moral teachings of Christ have in the same way lost their potency among Christian nations. Dr. Gustave Schlegel translated an inscription in a Canton gaudy boat which read, "Among pure breezes we enjoy the moonlight." It may be said with truth that the Chinese, in the cities and villages at least, are deprived of this enjoyment. I was shown a few bedrooms, and here, as in Shanghai, the bedsteads were ponderous affairs having a high frame with tester above and curtains pendent.

The sanitary arrangements were simply abominable. In the three thousand years and more that the Chinese have been a nation, natural selection has rooted out all those who could not survive these flagrant violations of all sanitary laws, the survivors being evidently immuned against microbes that would kill a European outright. The same curious selection has doubtless taken place in some of our older New England towns where the native can drink the well-water with impunity while the stranger is affected at once.

In no other part of the world, unless it be in Russia, can such depths of filthiness be found as in the cities of China. Mr. Arthur H. Smith, in his interesting work entitled "Chinese Characteristics," says that, "No matter how long one has lived in China, he remains in a condition of mental suspense, unable to decide that most interesting question, so often raised, Which is the filthiest city in the Empire? . . . The traveller thinks he has found the worst Chinese city when he has inspected Foo-Chow, he is certain of it when he visits Ning-Po, and doubly sure on arriving at Tien-Tsin, yet after all it will not be strange if he heartily recants when he reviews with candor and impartiality the claims of Peking!"

The curious custom of compressing the feet of women, thus in a way rendering them cripples for life, is always alluded to in books on China. In the Peabody Museum of Salem are a few casts of this peculiar deformation made by the late Dr. G. O. Rogers, formerly of Hong-Kong. By the accompanying figure of one of these casts it will be seen that the four smaller toes are made to partially bend under the big toe and that the heel is also brought forward. This is accomplished by tight bandaging and usually begins as soon as the child is able to walk. According to Williams (see "The Middle Kingdom," Vol. II, p. 38) this practice is not confined to the higher classes; on the contrary, all classes of society, even the poorest, strive to be in fashion. The Tartars, though becoming Chinese in most matters, have had the good sense to let their women's feet develop normally. As to the origin of this savage custom Dr. Williams says, "A difference of opinion exists respecting its origin, some accounts stating that it arose from a desire to pattern the club feet of a popular Empress, others that it gradually came into use from the great admiration and attempt to imitate delicate feet, and others that it was imposed by the men to keep their wives from gadding; the most probable accounts do not place its origin further back than A. D. 950. . . . The appearance of the deformed member when uncovered is shocking, crushed out of all proportion and beauty and covered with a wrinkled and lifeless skin like that of a washwoman's hands daily immersed in soap-suds."



Plaster Cast of Compressed Foot.

I was much interested in the archery methods of the Chinese, and an assistant in the school, a Manchu, illustrated their way of releasing an arrow from a bow, and also the manner of stringing a bow. The attitude of the hand in pulling the string differs greatly in different races. The Mongolian draws the string back with his thumb, the forefinger being bent over the end to strengthen the hold and the arrow being held in the crotch made by the junction of the forefinger and thumb. In this method a ring is worn on the thumb to engage the string and to prevent the thumb from being lacerated. That this method is very ancient is seen in the frequent allusions to the subject in the Chinese classics. In the "Shi King," or book of ancient Chinese poetry (translation of Legge), the thumb-ring is called a thimble and also a *pan chi*, or finger regulator: "With archer's thimble at his girdle hung," and, again, "Each right thumb wore the metal guard."



Stringing a Bow.

The Mediterranean nations draw the string with the tips of the first three fingers, holding the arrow between the tips of the first and second fingers. The very lowest savage races pull the string by holding on to the arrow with the thumb and forefinger; a little more advanced savage assumes this attitude supplemented

by bringing the second and third finger on the string and thus getting a stronger pull. I have dealt with this subject more fully elsewhere.¹ The stringing of the bow is somewhat peculiar. The bow when unstrung turns back upon itself and is so short when in this state that it occupies but little room and may be carried in a convenient case. In stringing the bow the archer places one end upon his left knee, the bow passing under the right leg, then by pulling up the right end of the bow he can slip the loop of the string into the nock; or, the bow is bent over the knee as in the attitude of breaking a stick and an associate slips the loop into the nock. Great care is taken of the bow and a box is contrived for it in which charcoal is turned to preserve the bow in a perfectly dry condition.

EDWARD S. MORSE.

[To be continued.]

¹"Ancient and Modern Methods of Arrow Release." *Bulletin of the Essex Institute, Salem, Mass., Vol. XVII.*



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

BRAMHALL HALL, ALDERLY EDGE, ENGLAND [1521];—WOLLATON HOUSE.

WORSLEY OLD HALL, MANCHESTER, ENG. [1580];—HARDWICK HALL.

ST. CATHERINE'S, NEAR BATH, ENGLAND;—SOUTH SIDE OF COURTYARD, KIRBY HALL.

BRERETON HALL, NEAR CONGLETON, CHESHIRE, ENG.:—THE QUAD: BRAMHALL HALL, CHESHIRE, ENG.

For this and the preceding plates, see references in the "Domestic Architecture of England in the Middle Ages," elsewhere in this issue.

DIVERS DETAILS IN PYRÉNÉES ORIENTALES, FRANCE.

This plate is copied from Baron Taylor's "Voyages pittoresques."

PAN-AMERICAN EXPOSITION, BUFFALO, N. Y.:—"THE FOOTBALL PLAYER." MR. DOUGLAS TILDEN, SCULPTOR;—"MICHAEL ANGELO." MR. PAUL W. BARTLETT, SCULPTOR.

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

PAN-AMERICAN EXPOSITION, BUFFALO, N. Y.:—VASE;—DIANA TRIVIA.



MYSTERIOUS FIRES IN TALL BUILDINGS.—A recent fire in one of the tall office-buildings in Chicago developed a feature which is worthy of consideration on the part of fire-department officials in the larger cities. Although in the case referred to not much damage was done it was noticed that the flames went up the elevator-shafts with extraordinary rapidity, considering that in this particular building there was nothing for them on which to feed. When an investigation was made it was found that the steam-pipes, instead of being covered with asbestos, as the law demands, had been covered with some inflammable material. There had been one thin layer of asbestos paper, then a thick layer of felt and, finally, a canvas covering. When a match was put to the felt it burned like tinder. This discovery explained at once several mysteriously rapid fires in "fireproof" buildings, and a thorough investigation of pipe-coverings all over the city is to be made. Possibly, it would not be a bad plan to have a similar investigation made in New York and other large cities where lofty "fireproof" buildings exist.—*Metal Worker*.

THE CUMBERLAND ROAD.—The most remarkable highway built in the United States early in the nineteenth century was the so-called Cumberland Road, which was to extend from Cumberland, Md., through southwestern Pennsylvania, over the Alleghany Mountains to the Ohio at Wheeling, W. Va., and then on to St. Louis. It was so well constructed that it is a good road to day. Henry Clay was its projector and chief supporter, and his services in its behalf are commemorated by a monument near Wheeling. We are told by letters written at that period that "there were sometimes twenty gayly painted four-horse coaches each way daily. The cattle and sheep were never out of sight, and canvas-covered wagons were drawn by six to twelve horses." On this great road, which eventually passed into the hands of the States through which it runs, the Government expended no less a sum than \$7,000,000. Within a mile of it on either side the country was a wilderness, but on the highway itself the traffic was as dense as in the main streets of a large town. Ten miles an hour was the usual speed for coaches. From Baltimore to Wheeling ran lines of freight-wagons, which carried ten tons, drawn by twelve horses and with wheels 10 feet in diameter.—*Pearson's Magazine*.

SUBMARINE ROMAN REMAINS OF THE ITALIAN LITTORAL.—The British Consul at Naples remarks in his report for the past year that it is strange that, in spite of all the interest taken in southern Italy, and especially in the neighborhood of Naples, in archaeology and exploration, no definite chart has ever been made of the important Roman remains beneath the sea, which stretch almost without interruption from Naples to Baia. It has been left to the British Association to undertake this task, and under its direction Mr. T. R. Günther, of Magdalen College, Oxford, has been engaged for some months in making a detailed survey of the Roman structures beneath the sea. From his notes it appears that the sea-level has risen about 20 feet since the era of

their construction, and has covered many villas and piers, and probably also a road, which seems to have existed along the coast of Posilipo. Mr. Günther's survey will be of great practical value, apart from its scientific interest, because many boats run upon those old foundations annually, and only last year a steam-vessel of the Italian navy struck on one of them. This danger, however, is chiefly to pleasure-boats, and owners of yachts need to be especially careful when running along the coast in steam-launches. No less than three of these crafts have had narrow escapes in recent years. A careful record of the tides has been kept for some time, observations being made several times a day. The figures show the rise and fall to be greater than has been generally supposed, and also that the level of the Mediterranean is less influenced by the action of the wind than has been supposed by some observers.—*N. Y. Evening Post*.

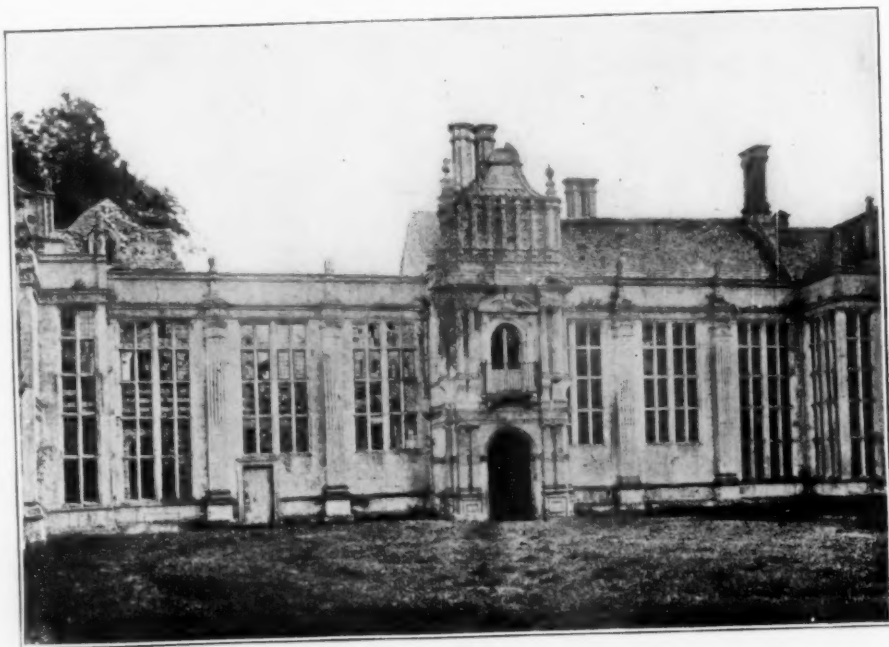
AN ELECTRIC-HEATING DEVICE.—A system of heating houses and cars which combines the hot-water and electrical systems has been devised by a New Haven inventor. It is claimed to represent high efficiency and to give a uniform and most pleasant heat. The heater itself is made up of but few parts and is yet durable and inexpensive. It is composed of castings which form the connecting-heads and circulating-flue or water-chambers, around which are placed the electric-coils of high resistance. The latter are perfectly insulated by lava and specially prepared cement. The heads of the castings are made to receive iron plates, which are held in place by screws, and form a casting around the coils. The heat is controlled by a switch made to use in connection with this heater, and with its use the current is reduced without the aid of any external resistance, thereby keeping all the heat within the heating-apparatus. In the application of this system the electric water-heater is placed in the cellar in place of the ordinary coal-burner, the rest of the plant being the same as with the ordinary water-heating installation. The controlling switch may be located in any part of the house that may be desired, from which point the temperature of the entire structure may be regulated. The convenience of such a system will be apparent to any one. There is no handling of fuel or ashes, and there is also the advantage of instant adjustment. The principle has been applied to the radiator with an expansion tank and pig and circulating-pipes, thus forming a portable electric-heating system with a flexible-cord connection with the electric-light bracket.—*Boston Transcript*.

PRICE OF LUMBER LIKELY TO RISE.—John S. Gildersleeve, of Cleveland, who had been one of the group discussing the meat situation, said recently: "Perhaps the same complaint will be made when the price of lumber goes up, as I am told that it will do before very long. The prices now prevailing are said to be in all probability the lowest of the year. I was talking to-day with a New York lumber-dealer who cuts each year 30,000,000 feet of lumber in the northern sections of the East. He says that, because of the peculiar conditions this winter, the early thawing of the snow and the heavy rains, which washed out the logging roads, most of this winter's cut of timber will have to lie in the woods until another season, and where he should have now, with his reserve, 40,000,000 feet of timber in the ways, he has but 15,000,000. This will cause what might by some people be unjustly called a corner. No more wood can be got out into the market, and he can make a higher price on his lumber, but it is a natural, not an artificial, corner. In order to supply his trade and meet the regular orders that are sure to come in, he will not sell out his 15,000,000 feet at once, as he could do, but will make his own price, and sell it as his orders come in. No one can justly blame him for doing this."—*N. Y. Tribune*, April 20.

"LLOYD'S REGISTER'S" NEW BUILDING.—"Lloyd's Register," the new building just erected at 71 Fenchurch Street, is beyond question the most gorgeous of the many palaces of commerce in the city of London. Its total cost, £100,000, is perhaps not particularly striking until its comparatively small size is remembered. In comparison with its size, the new building is perhaps the most costly in the Kingdom. "Lloyd's Register" must not be confused with "Lloyd's," the society of underwriters. The Register exists for classifying the ships of all nations. Here it is decided in which class to place a new vessel for insurance purposes, and it is in the power of the committee of this institution to award or withhold their highest diploma of "A1 at Lloyd's." Constructed of the finest Portland-stone, the building is a thing of great architectural beauty from the outside. The carvings on the porch and the bronzes between the pillars are by Mr. Frampton, R. A., and are executed in his best style. The weather "cocks" are two little ships of copper-gilt, one a modern liner and the other an ancient fifteenth-century sailing-boat. Valuable marbles, inlaid woods, mother-of-pearl, and even jewels have been utilized in the decoration of the interior. Mr. T. E. Colcutt, the architect, gave the writer some detail of his work, which in beauty of design and wealth of decoration is indeed a masterpiece. "Quite the costliest part of the building," said Mr. Colcutt, "is the frieze of Mr. Lynn Jenkins representing a procession of mediæval ships. The vessels are of bronze, the sky of mother-of-pearl, and the figures of bronze with ornaments of real sapphires. The supporting pillars are of polished marble. The mantelpiece is exceptionally beautiful carved marble. The fire-dogs, of old Italian work, stand 6 feet high, and are worth £500. Even the clerks' office is more suggestive of a palace than a business-house, for it is lined with marble, and the electric-light fittings are of beaten copper. The story of how the new luxurious building came into existence is rather interesting. For classifying ships "Lloyd's Register" charges certain fees. The income more than covered the expenses, and a large reserve-fund accumulated. For the disposal of this sum, outside the defraying of expenses, there was apparently no provision, so, finally, it was decided to expend it upon a building that should do credit to London and take a high place among the commercial palaces of the world.—*London Mail*.



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SOUTH SIDE OF COURTYARD, KIRBY HALL.

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The American Architect.
May 24, 1902.
No. 1378.



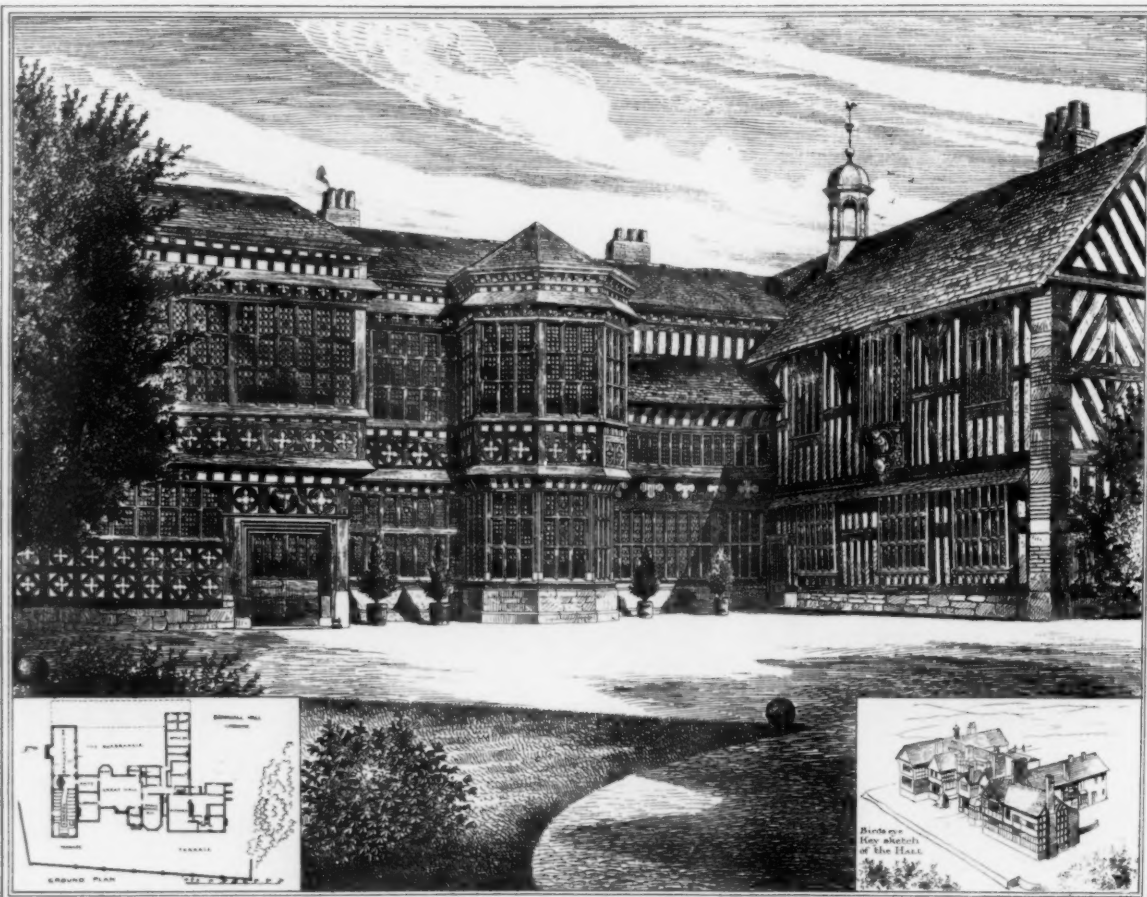
BRAMHALL HALL, ALDERLY EDGE, ENGLAND.
[1521.]



WOLLATON HOUSE.



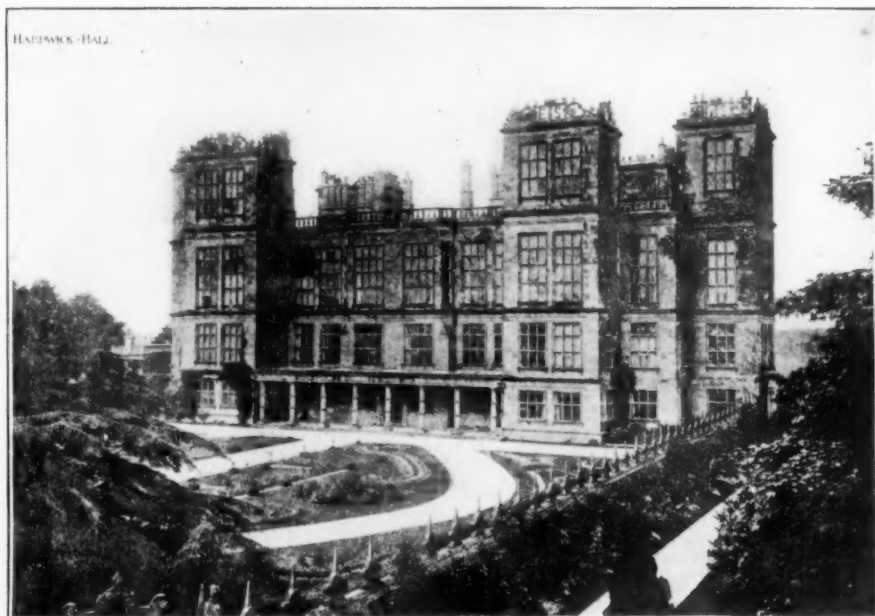
BRERETON HALL NEAR COMLETON CHESHIRE
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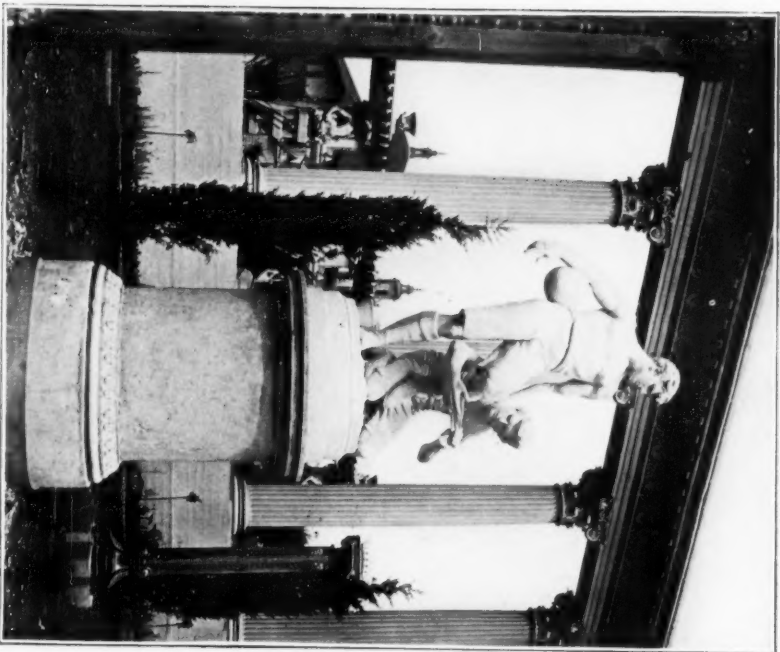
BRAMHALL HALL CHESHIRE QUAD.
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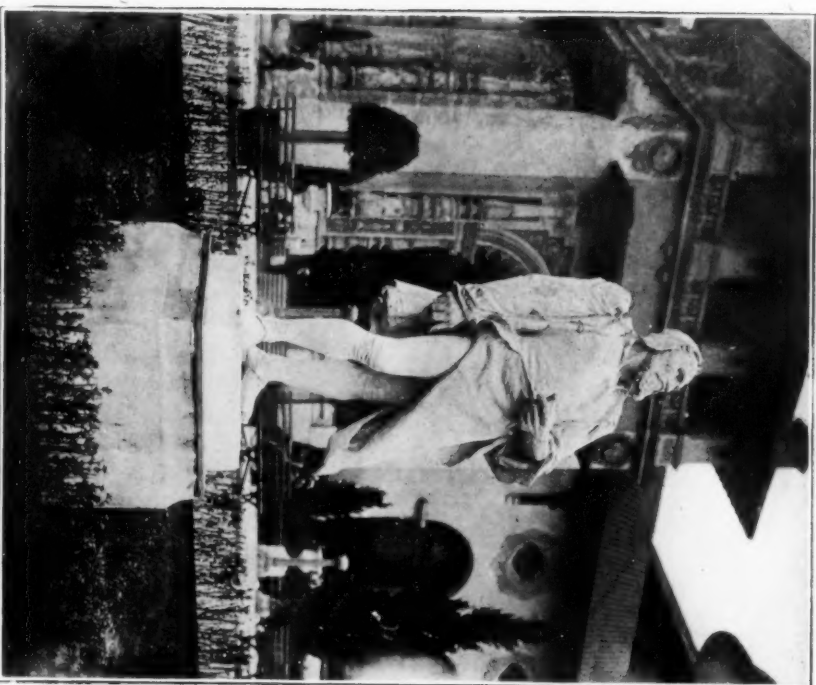
WORSLEY OLD HALL, MANCHESTER, ENGLAND.
[1580.]



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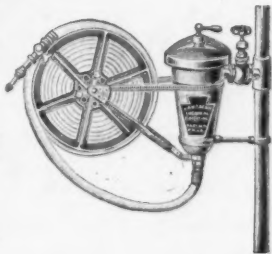
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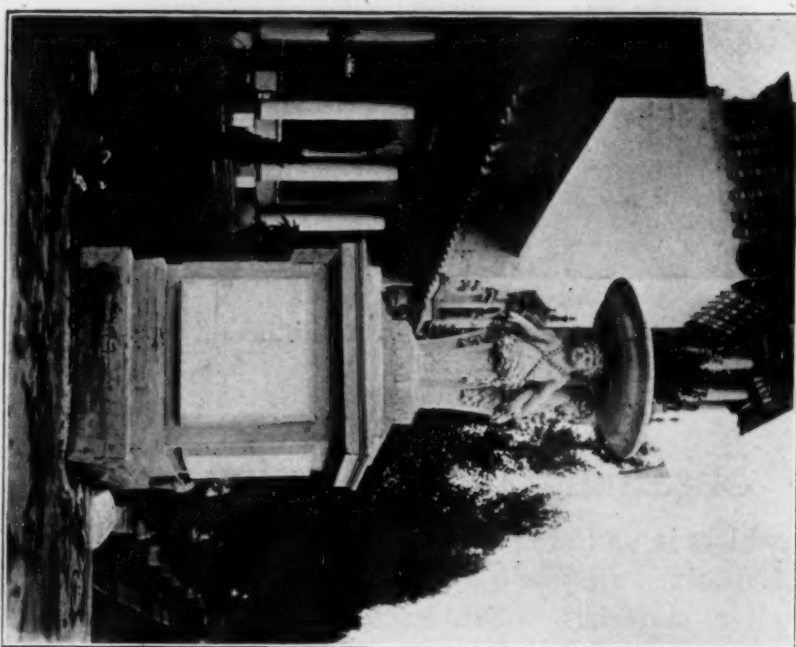
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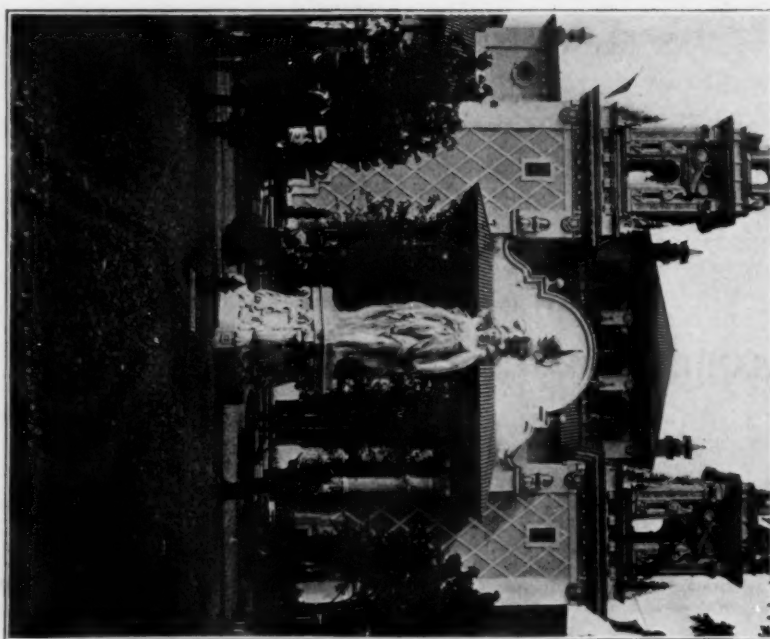
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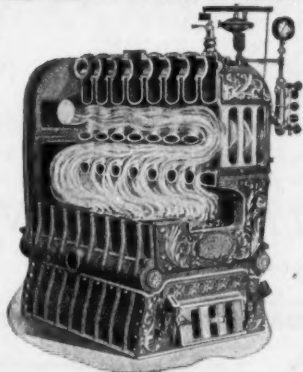
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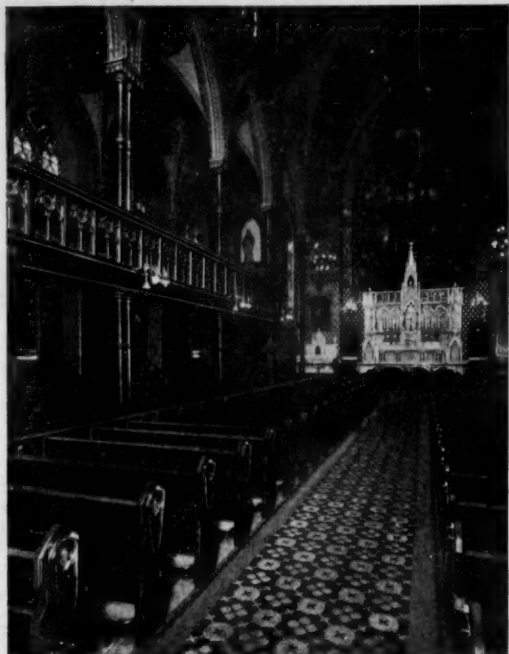
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New Advertisements.

MERCHANT & CO., INC. (Philadelphia, Pa.), Roofing Plates. Page vii.
NATIONAL FIREPROOFING CO. (Pittsburgh, Pa.), Fireproofing. Page xi.

See last or next issue for the following advertisements:—

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THE J. Riely Gordon Co. have removed their general offices and headquarters from Dallas, Tex., to new offices in the New York University Building, at 32 Waverly Pl., New York City.

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BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

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

ADVANCE RUMORS.

Ansonia, Conn.—The plans of W. H. Cadwell, of New Britain, have been adopted for a city-hall building. It will be constructed of Ansonia granite and granite colored brick, be 44 feet high, 56 feet in width and 110 feet in depth.

Augusta, Me.—Extensive alterations will be made in brick structure occupied as Kennebec County Court-house, from plans furnished by Arthur G. Wing. Work includes installing tile floor on main corridor and putting in brick arches, steel beams, etc., and making general interior alterations.

Birmingham, Ala.—The plans of R. N. Hunt, of Chattanooga, Tenn., have been accepted for a \$40,000 edifice for the First Baptist Church.

It is stated that J. G. Whitfield & Co., wholesale grocers, will erect a three-story brick building, 50' x 182', on 1st Ave. and 17th St., to cost about \$40,000.

Canton, Mass.—This town has accepted the gift of a public library from Augustus Hemenway, will raise \$1,200 for its maintenance, and spend \$200 for dedicatory exercises. The building will cost about \$70,000.

Canton, O.—The County Commissioners are reported to have adopted the plans of Guy Tilden, Schaefer Block, for the \$76,000 County Infirmary.

Chippewa Falls, Wis.—Fremont D. Orff, Minneapolis, is at work on plans for a public library building to be erected here. It will be a modern fireproof building of pressed brick and cut stone; cost, \$20,000.

Clarion, Ia.—A company has been formed to erect a hotel to cost \$30,000.

Clinton, Ia.—S. J. Osgood, of Grand Rapids, Mich., has drawn plans for a \$30,000 church to be erected by the M. E. Society.

Concord, N. H.—Report states that a three-story and basement brick factory covering 23,000 square feet first floor space, will be erected here by W. B. Durgin Silverware Co., at a cost of about \$75,000.

Council Bluffs, Ia.—State Architect H. F. Liebbe, of Des Moines, has prepared plans for 3 temporary buildings for the State School for Deaf to replace those burned; cost, \$27,000.

Dubuque, Ia.—The Dubuque Malting Co. is about to build an additional storage house, at a cost of \$50,000. Heer & Son, architects.

Duluth, Minn.—A deal has been closed to rebuild the Temple Theatre, making it into a modern theatre to seat 1,000 people, at a cost of \$35,000.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Duquesne, Pa.—R. M. Trimble, Ferguson Building, Pittsburgh, has completed plans for a three-story brick apartment-house to be erected on Main St. for the Oliver Estate, to cost \$60,000.

Fond du Lac, Wis.—The Council is reported to have decided to make an appropriation of \$35,000 for a new city-hall.

Holyoke, Mass.—There is a project to build a large mill here for making a fine quality of catalogue cover and book cover paper. Among the names mentioned in connection with the enterprise are E. P. Bagg, William McCorkindale and D. L. McCorkindale of the Parsons Paper Co., William Reardon, formerly superintendent of the Albion mill, and C. S. Hemingway, who recently resigned as treasurer of the Mittenage Paper Co.

Jackson, Miss.—St. Andrew's Episcopal Church has had plans prepared for a \$40,000 stone edifice. Address W. S. Hamilton.

Jamaica Plain, Mass.—The Jamaica Plain Real Estate Trust, which has recently been formed with a capital of \$70,000, has purchased property on Seaverns Ave., corner Brown Pl., and is preparing for the erection of 6 three-story brick and stone three-apartment houses thereon. It is expected to have the houses ready for occupancy by next September. John P. Campbell, architect and builder.

Jersey City, N. J.—The Directors of the Bergen & Lafayette Trust Co. have adopted plans for a one-story granite bank building to be erected on Brinkerhoff St. and Monticello Ave., to cost \$75,000.

Kansas City, Mo.—James O. Hogg has prepared plans for a \$30,000 brick warehouse to be built on Walnut St., between 15th and 16th Sts. for E. B. Dyer.

Lawrence, Mass.—The Council is stated to have passed an order providing for the erection of a \$75,000 school.

Leominster, Mass.—A two-story brick and stone bank building will be erected for the Leominster National and Leominster Savings Banks, from plans in preparation by Hartwell, Richardson & Driver, 62 Devonshire St., Boston.

Manistee, Mich.—Andrew Carnegie has offered \$35,000 to this city for a public library building.

Milton, Mass.—A one-story stone edifice is to be erected in addition to present observatory buildings at summit of Blue Hill for Prof. A. Lawrence Rotch, from plans furnished by Geo. T. Tilden, 85 Devonshire St., Boston. Contract has been awarded Chute & Constable, builders.

Milwaukee, Wis.—The Milwaukee Gas Light Co. will erect 6 brick and steel buildings in Menomonee Valley at a total cost of \$150,000. Architect, A. Eschweiler, Goldsmith Building.

Julius Leiser, Germania Building, has prepared plans for a \$40,000 brick flat, to be erected on Cass and Mason Sts., for J. Hunholz.

A \$40,000 brick and stone residence will be erected on Prospect Ave. and Brady St. for Mrs. V. Blatz. Architect, Otto Strack, Pabst Building.

Muncie, Ind.—The Commercial Club of this city has had plans prepared for a club building. J. C. Johnson, Pres. of Club.

New Britain, Conn.—A two-story brick church will be erected at a cost of \$150,000 on Lafayette St. for St. Mary's Roman Catholic Society, from plans by T. F. Houghton, New York.

New Haven, Conn.—W. F. Day is about to build a \$25,000 dwelling.

Plans have been prepared for an edifice for the First Baptist Church, to be erected on Edwards and Livingston Sts.; cost, \$50,000. Fred'k Ailing, Chmn. Bldg. Com.

New Milford, Conn.—A one and two-story brick and wood factory will be erected here at a cost of \$30,000 for the Bridgeport Wood Finishing Co., from plans furnished by H. Lambert, Bridgeport. Size of main building, 60' x 225'.

New York, N. Y.—Charles M. Schwab, President of the United States Steel Corporation, has purchased the property of the Richmond Railway Co. on Staten Island, and will establish there a great charity on original lines, which he has had in view for a long time. It is said that Mr. Schwab intends



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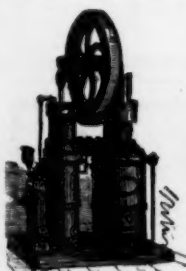
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(Advance Rumors Continued.)

to give to such people as he himself will select the benefits of this beautiful summer resort. A large sum of money will be expended at once in improving the buildings and grounds, and it is expected that no great time will elapse before the institution will be ready for use.

A permit has been issued for a three-story brick and stone seminary, 75' x 100', to be erected on 123d St. and Broadway, to cost \$75,000. Owner, Jacob H. Schiff, 27 Pine St. Architect, Rob't W. Gibson, 76 William St.

Northampton, Mass.—Work will start in immediate future on the three and four-story brick structure with ell, 22' x 25', to be erected in addition to present Northampton Insane Asylum on West St., and to be occupied as an infirmary building; cost, about \$50,000. Plans by Ellsworth & Kirkpatrick, architects, Holyoke.

The contract for the erection of the new students' building at Smith College has been awarded to J. L. Mather; cost, \$25,000.

Norton, Mass.—A three-story brick structure, 44' x 95', with marble trimmings, will be erected here for the Wheaton Seminary Corporation from plans by Geo. T. Tilden, 85 Devonshire St., Boston. Heating, steam. Slate roof. Building will be occupied as a gymnasium.

Philadelphia, Pa.—F. L. Hoover & Sons (Incorporated) have posted plans for an office-building and factory to be built at the northeast corner of 15th and Carlton Sts., for J. H. Johnson, Jr. & Co. It will be a three-story brick structure, 37' 6" x 36' 4". The Board of Charities and Correction have received from Architect Philip Johnson the completed plans for the eight new buildings of steel and glass to be erected at the Almshouse, and which will afford accommodation for 500 tuberculosis patients. The work of erecting these new buildings will be begun on June 1.

Pueblo, Col.—Chas. Henkel, Gen. Mgr. of the Henkel-Duke Mercantile Co., is interested in the erection of an office-building on 3d and Main Sts., to cost about \$300,000.

Richmond, Va.—It is stated that Noland & Baker, of this city, and Fry & Chesterman, of Lynchburg, will prepare plans jointly for repairs to be made to the Capitol, to cost about \$100,000.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Roxbury, Mass.—Architect P. A. Tracy, 923 Dorchester Ave., Dorchester, has completed plans and work has been started on a \$50,000 building to be added to the House of the Angel Guardian on Ruggles St., to be used as an industrial school. The structure will be three stories high, with a frontage of 69 feet on Ruggles St. and a depth of 145 feet.

Shirley, Mass.—A one-story frame church edifice will be erected for the Episcopal Church Society, from plans in preparation by O. K. Cummings, 1 Somerset St., Boston. Heating, hot air or hot water. Shingled roof. General contract not let and arrangements not yet made for any portion of work or materials.

Southbridge, Mass.—Norcross Bros. Co., Worcester, have the contract for the erection of the three-story brick addition, 35' x 40', to the American Optical Co.'s factory. The addition will contain offices and will cost \$50,000. Earle & Fisher, State Mutual Building, Worcester, architects.

Spokane, Wash.—Preusse & Zittel, architects, have plans for a church for Our Lady of Lourdes Catholic Society to cost complete \$75,000.

Springfield, Mass.—W. B. Reid has prepared plans for a four-story brick and limestone apartment block to be built at Oak and State Sts.; cost, \$65,000. Owner, J. La Liberte, Holyoke.

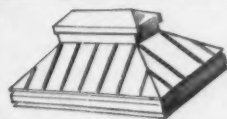
Springville, Ia.—Dieman & Fiske, architects, Cedar Rapids, have plans for a brick store and bank building, 100' x 203', for the Springville Building Syndicate, to cost \$40,000.

Stamford, Conn.—A three-story brick and wood school-building will be erected at a cost of \$35,000 for the Manor School Corporation from plans furnished by F. R. Comstock, New York City. Building will be occupied in part as a dormitory and contain large assembly hall, dining-room, laundry, etc. M. D. Baldwin, 71 Broadway, N. Y., president of school.

St. Joseph, Mo.—Albert L. France will erect a \$50,000 office-building on Francis St. Architect, E. J. Eckel, Com. Bank Bldg.

Tacoma, Wash.—John S. Baker will erect a \$60,000 building at Pacific Ave. and 15th St.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Wallingford, Conn.—Work has started on the four-story brick factory, 40' x 148', to be erected here at a cost of \$20,000 for the R. Wallace & Sons Mfg. Co., makers of silverware.

Washington, D. C.—President Roosevelt recently laid the corner-stone of the McKinley Memorial Ohio College of Government of the American University. When completed the building will be devoted to studies embracing diplomacy, municipal government, arbitration civics and international law.

Thos. F. Walsh will erect an office-building on 14th and G Sts., to be known as the Colorado Building, to cost about \$600,000.

Winnipeg, Man.—The Orangemen will erect Scott Memorial Hall on Princess St. at once; cost, \$30,000.

It is stated that the Northwest Commercial Traveler's Assoc. is considering the erection of a seven-story temple on Rorie and Lombard Sts., to cost about \$75,000.

ALTERATIONS AND ADDITIONS.

New Britain, Conn.—Two-st'y bk. addition to hospital, 52' x 105'; \$27,000; a., W. H. Cadwell, 213 Main St.; b., B. H. Hibbard.

New York, N. Y.—Fifth Ave., n.w. cor. 42d St., new elevator shafts, stairs, partitions & bay windows & interior alterations; \$60,000; o., Elbridge T. Gerry, 261 Broadway; lessee, Walter J. Salomon, 4 Warren St.; a., Davis & Shepard, 263 Broadway.

Lexington Ave., Nos. 739-741, four-st'y extension, 14' 4" x 20' & 11' 4" x 15,000; o., John Moje, 338 Third Ave.; a., Richard Kohn, 128 Bible House.

APARTMENT-HOUSES.

Boston, Mass.—Harvard St. and Stearns Road, three-st'y bk. & st. bachelor apart., 125' x 150', comp. roof, steam; \$150,000; o., Fulham Chambers Trust; a., T. E. Sheehan, Tremont Building.

Brooklyn, N. Y.—Ninth St., nr. Prospect Park West, 5 four-st'y bk. flats, 28' x 68', steam; \$50,000; o., C. Tritakes, 808 Broadway; a., W. Debus, 808 Broadway.

Holyoke, Mass.—Main St., four-st'y bk. apart. block, 40' x 63', gravel roof, steam; \$20,000; o., Stanislaus Ducharme; a., W. B. Reid.

New York, N. Y.—Forty-second St., nr. Broadway, twelve-st'y bk. & st. offices, stores & bachelor apart., 24' 6" x 94' 3", tile roof; \$90,000; o., Cornelius J. Ryan, 43 W. 33d St.; a., Bruce Price, 1133 Broadway.

One Hundred and Forty-first St., nr. 7th Ave., 2 six-st'y bk. & st. flats, 60' x 80' 11" & 82' 11"; \$150,000; o., Fleischman Bros., 1490 Fifth Ave.; a., Geo. F. Pelham, 503 Fifth Ave.

CHURCHES.

Brighton, Mass.—Two-st'y st. chapel & library, 30' x 35', slate roof, steam; \$15,000; o., St. John's Seminary; a., Maginnis, Walsh & Sullivan.

EDUCATIONAL.

Brooklyn, N. Y.—Schermerhorn St., nr. Boerum Pl., two-st'y & base, bk. school, 18' x 68' 6", gravel roof; \$26,000; o., trustees of Friends School, on premises; a., W. B. Tabby & Bro., 81 Fulton St., N. Y.

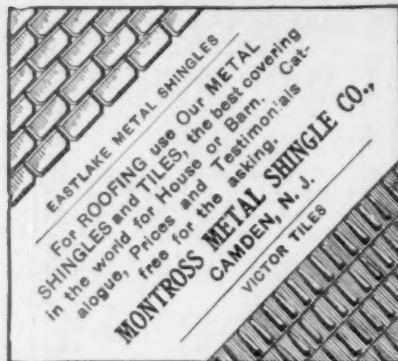
HOTELS.

New York, N. Y.—Eighth Ave., cor. 30th St., three-st'y bk. hotel, 25' x 64', gravel roof; \$25,000; o., Isidor H. Kempner, 626 Eighth Ave.; a., Buchman & Fox, 11 E. 59th St.

Portland, Me.—Congress and Park Sts., seven-st'y bk. & st. hotel, 70' x 170'; \$150,000; o., Jas. Cunningham; a., F. H. & E. F. Fassett.

HOUSES.

Boston, Mass.—Buckminster and Drue Roads, 24-st'y st. & fr. dwell., 60' x 75'; \$30,000; o., C. R. Talbot, 651 Washington St.; a., Kendall, Taylor & Stevens, 93 Federal St.



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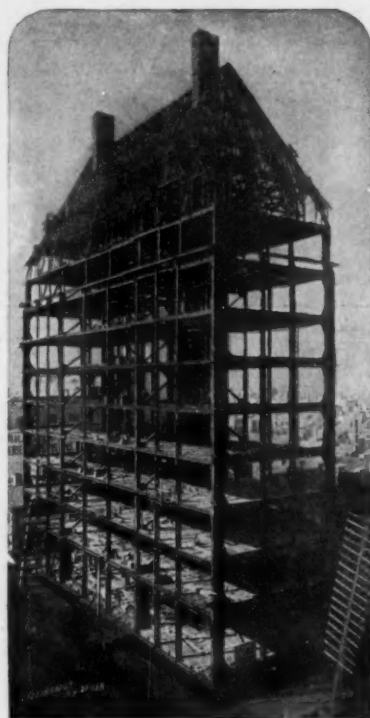
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BUILDING INTELLIGENCE.

(Houses Continued.)

Brooklyn, N. Y.—*Bushwick Ave.*, cor. Cornelia St., 2 three-sty bk. stores & dwells, 20' x 65'; \$15,000; o., P. Steingutter, 1143 Bushwick Ave.; a., W. B. Willis, 17 Troutman St.
Hawthorne St., nr. Nostrand Ave., 2½-sty bk. dwell., 20' x 46', slate roof, hot water; \$6,000; o., F. T. Anderson, 211 Hawthorne St.; a., C. Huntington, 41 E. 21st St., N. Y.
Cropley Ave., cor. Bay 10th St., two-sty & attic fr. dwell., 23' 10" x 40' 4", shingle roof, steam; \$5,050; o., G. W. Kerst, 402 Seventh Ave.; a., G. F. Morse, 141 Broadway, N. Y.
First Ave., cor. 55th St., three-sty bk. store & dwell., 20' x 54'; \$10,000; o., W. Ulmer Brewery, 21 Belvidere St.; a., B. Finkenselper, 134 Broadway.
E. Nineteenth St., nr. Beverly Road, two-sty & attic fr. dwell., 27' 8" x 46' 8", shingle roof; \$8,000; o., T. B. Ackerson Co., 266 E. 15th St.; a., A. W. Pierce, 1127 Flatbush Ave.
Jefferson Ave., nr. Throop Ave., 6 three-sty bk. dwells., 26' 8" x 67' 10", steam; \$48,000; o., S. Eisenbach, 716 Broadway; a., W. Debus, 808 Broadway.
Pitkin Ave., cor. Bristol St., 2 two-sty & attic fr. dwells., 25' x 36'; \$6,000; o., Seib Bros., Pitkin Ave., nr. Amboy St.; a., L. Dananacher, 256 E. New York Ave.
Kingland Ave., nr. Bennett St., three-sty bk. dwell., 24' 6" x 66'; \$6,000; o., F. G. Rustman, 62 Kingland Ave.; a., W. B. Willis, 17 Troutman St.
Dorchester, Mass.—*Blue Hill Ave.*, No. 682, two-sty fr. dwell., 28' x 70', shingle roof, hot water; \$6,000; o., Wm. Donaldson; a., S. J. Rantin & Son, 1117 Columbus Ave., Roxbury.
Holyoke, Mass.—*Northampton St.*, Elmwood, two-sty fr. dwell., 34' x 56', furnace; \$6,000; o., L. T. Beaulieu; a., W. B. Reid.
Lexington, Mass.—*Adams St.*, 2½-sty fr. dwell., 35' x 38'; \$8,000; o., Freeman J. Doe; a., Willard D. Brown.
Lynn, Mass.—2½-sty fr. dwell., 30' x 40', shingle roof, steam; o., B. V. French; a., Kilham & Hopkins, 9 Park St.
New York, N. Y.—*Ryer Ave.*, cor. Burnside Ave., 2 three-sty bk. dwells., 20' x 55'; \$11,000; o., Lochinvar Realty Co., 148th St. & 3d Ave.; a., Moore & Landsiedel, 148th St. & 3d Ave.
Bainbridge Ave., cor. 197th St., 2½-sty fr. dwell., 21' x 52' 6", shingle roof; \$5,000; o., E. Mooney, 2758 Bainbridge Ave.; a., Chas. S. Clark, 709 E. 177th St.
Prospect Ave., nr. Boston Road, 2 two-sty bk. dwells., 22' x 36'; \$10,000; o., Margarette Strese, 1405 Vyse Ave.; a., Chas. S. Clark, 709 E. 177th St.
Bristow St., cor. Jennings St., two-sty fr. dwell., 25' x 35'; \$5,000; o., Chas. Hoch, 1168 Forest Ave.; a., Wm. F. Schwanecke, 1155 Forest Ave.
Burnside Ave., nr. Anthony Ave., 4 three-sty bk. dwells., 20' x 50'; \$22,000; o., Lochinvar Realty Co., 148th St. & 3d Ave.; a., Moore & Landsiedel, 148th St. & 3d Ave.
Rosindale, Mass.—*Florence St.*, cor. Poplar St., two-sty fr. dwell., 28' x 30', hot water; \$6,800; o., Ann Mahoney, 2781 Huntington St.; a., J. G. Hutchison.
Roxbury, Mass.—*Wauwamack St.*, nr. Humboldt Ave., two-sty fr. dwell., 29' x 45', shingle roof, hot water; \$6,000; o., G. S. Haddock; a., C. A. Russell.
Walpole, Mass.—1½-sty fr. dwell., 40' x 50', with



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BUILDING INTELLIGENCE.

(Houses Continued.)

stable, shingle roof, hot air; o., C. B. Burrage; a., Kilham & Hopkins, 9 Park St., Boston.
Wilton, N. H.—2½-sty fr. dwell., 40' x 80', shingle roof, hot air; \$5,000; o., J. H. Houghton; a., Josephine Wright Chapman, 9 Park St., Boston.
MERCANTILE BUILDINGS.
Gardner, Mass.—Three-sty bk. & st. business block, 90' x 90', comp. roof, steam; \$35,000; o., T. T. Greenwood & Son; a., E. W. Maynard, 226 Tremont St., Boston.
Minneapolis, Minn.—*Sixth St.*, three-sty & base. bk. & terra-cotta building, 31' x 150', gravel roof, steam; \$30,000; o., Gluek Brewing Co.; a., Boehme & Cordella, 504 Kasota Block.
OFFICE BUILDINGS.
Minneapolis, Minn.—*Fourth St. and Fourteenth Ave.*, three-sty & base. bk. & st. office-building, 50' x 80'; \$20,000; o., Judge L. L. Collins.
New York, N. Y.—*Third Ave.*, cor. 149th St., four-sty bk. offices & stores, 42' 11" x 141'; \$60,000; o., Hy. Lewis Morris, 16 Exchange Pl.; a., Albert E. Davis, 2558 Third Ave.
STABLES.
Holyoke, Mass.—*Cabot St.*, cor. Park St., two-sty bk. stable, 26' x 60'; \$6,000; o., Louis Dupont; a., W. J. Hoves.
New York, N. Y.—*W. Forty-fourth St.*, No. 33, three-sty bk. & st. stable, 25' x 45'; \$25,000; o., A. V. H. Stuyvesant, 13 W. 21st St.; a., Warren, Wetmore & Morgan, 3 E. 33d St.
W. Eighteenth St., No. 424, three-sty bk. stable, 20' 5" x 86', tar & gravel roof; \$10,000; o., Pat'k H., Jos. B. and Mary L. Scott, 271 W. 126th St.; a., Babb, Cook & Willard, 3 W. 29th St.
One Hundred and Forty-second St., nr. Bradhurst Ave., two-sty bk. stable, 25' x 90'; \$5,500; o., Jas. Everett, 241 W. 107th St.; a., John B. Mooney, 103 E. 125th St.
Rye, N. Y.—1½-sty fr. stable, 50' x 200', shingle roof, hot water; \$10,000; o., Warner M. Van Norden; a., Josephine W. Chapman, 9 Park St., Boston.
Wellesley Hills, Mass.—1½-sty fr. stable, 29' x 40', shingle roof; \$3,500; o., A. C. Harvey, 115 Purchase St., Boston; a., J. C. Fowler, 68 Devonshire St., Boston.
STORES.
New York, N. Y.—*W. Twentieth St.*, Nos. 135-141, 2 six-sty bk. & st. lofts & stores, 65' x 85'; \$100,000; o., Anton L. Olsen, 469 Barretto St.; a., C. Abbott French, 406 W. 42d St.
TENEMENT-HOUSES.
New York, N. Y.—*E. Seventy-second St.*, No. 509, five-sty bk. & st. tenement, 24' x 40' 4", asphalt roof; \$15,000; o., Godfrey Knoche, 501 E. 71st St. or 516 E. 72d St.; a., Rudolph Moeller, 959 E. 165th St.; b., Colonial Construction Works, 516 E. 72d St.

COMPETITIONS.

BUILDING. [At Fall River, Mass.]
The County Commissioners will receive competitive

COMPETITIONS.

plans until June 16 for a building for the registry of deeds for the Northern Dist. GEO. T. DURFEE, Chmn. 1380

PROPOSALS.

PAVING BLOCKS. [At Washington, D. C.]
Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing vitrified paving blocks for the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

PORTLAND CEMENT. [At Washington, D. C.]
Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing Portland cement to the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

NATURAL CEMENT. [At Washington, D. C.]
Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing natural cement to the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

RED SEWER BRICKS. [At Washington, D. C.]
Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing red sewer bricks to the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

BRIDGE. [At Holyoke, Mass.]
Sealed bids or proposals indorsed "Proposals for Iron Bridge," will be received by the Board of Public Works of the City of Holyoke, Mass., at Room No. 2, City-hall, Holyoke, Mass., until June 2, 1902, at which time and place said bids will be publicly opened and read. Full information and blank forms for bidding may be obtained at the office of said Board. MICHAEL F. WALSH, Chairman. GILBERT POTVIN, JR., O. D. ALLYN, The Board of Public Works. 1378

MACADAMIZING. [At Eastchester, N. Y.]
Tuckahoe, N. Y. Sealed proposals will be received by the Town Board of the Town of Eastchester, Westchester County, N. Y., at the offices of said Board at

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PROPOSALS.

Tuckahoe, N. Y., until the 5th day of June, 1902, for furnishing all the labor and materials for regulating, grading, Telford macadamizing and otherwise improving about 3,800 feet of the highway in said Town leading from the White Plains Road at Teker-man's Corners, easterly to the Town line. Specifications and other information may be obtained at the office of the Town Clerk of said Town, at Tuckahoe, N. Y., on and after May 26th, 1902. HENRY J. SLOAT, Town Clerk, Town of Eastchester. 1378

BUILDINGS.

[At White Earth Agency, and Leech Lake Agency, Minn.] Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals indorsed "Alternate Proposals for Erection of One Brick or Frame Employees' Quarters at White Earth Agency, Minn., and One Frame Building at Leech Lake Agency, Minn.," and addressed to the commissioner of Indian Affairs, Washington, D. C., will be received at this office until June 3, 1902, for furnishing and delivering necessary material and labor to construct and complete one brick or frame employees' quarters at the White Earth Agency, Minn., and one frame building at the Leech Lake Agency, Minn., in strict accordance with plans and specifications and instructions to bidders. For additional information apply to this office, to the U. S. Indian Agent, White Earth Agency, Minn., or to the U. S. Indian Agent, Leech Lake Agency, Onigum, Minn. W. A. JONES, Com. 1378

BUILDING.

[At Columbus, Miss.] Bids will be received until June 3 for erecting a building for the Dept. of Music and a laundry building at the Industrial Institute and College. R. H. Hunt, archt., Chattanooga, Tenn. 1378

CELL HOUSE.

[At Louisville, Ky.] Bids will be received by the Bd. of Prison Comrs. until June 4 for constructing a concrete cell-house, consisting of excavating, concrete iron work, slate roofing and sheet-metal work, plumbing, electric wiring, etc.; also for heating the cell house. H. P. McDonald, archt., 217 Fifth St. 1378

MACHINERY.

[At Lewistown, Mont.] Local press reports state that sealed bids are wanted until June 1 by the council for the construction of a pumping plant to cost between \$30,000 and \$40,000. G. M. STAFFORD, Engineer, Chicago. 1378

SCHOOL.

[At East Liverpool, O.] Bids are wanted by the Bd. of Educ. until June 4 for furnishing all material and constructing an 8-room school: cost, \$20,000. WALTER B. HILL, Clk. of Bd. C. C. & A. L. Thayer, of New Castle, Pa., archts. 1378

CONSTRUCTION.

[At Fort Leavenworth, Kan.] Office Constructing Quartermaster, Fort Leavenworth, Kan. Sealed proposals will be received here until June 2, 1902, for the construction of one engineer storehouse and shops, two pontoon sheds, three hay sheds and one granary at Fort Leavenworth, Kan. Full information and blank forms of proposal furnished on application to this office where plans and specifications can be seen. CAPT. D. E. MCCARTHY, Q. M. 1378

SEA WALL AND BRIDGE PIERS.

[At Boston, Mass.] Contractors are invited by the City Engineer of the City of Boston to submit proposals to him at his office, 50 City-hall, Boston, Mass., before May 29, 1902, for building a sea wall and piers for Broadway Bridge,

PROPOSALS.

in accordance with plans and specifications to be seen at said office. WILLIAM JACKSON, City Engineer. 1378

SAND AND GRAVEL.

[At Washington, D. C.] Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing sand and gravel to the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

GRANITE CURBING.

[At Washington, D. C.] Office of the Commissioners, D. C., Washington, D. C. Sealed proposals will be received at this office until June 3d, 1902, for furnishing granite curbing to the District of Columbia. Specifications, blank form of proposal and all necessary information may be obtained at this office. H. B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1378

WATER SYSTEM.

[At Fort Revere, Nantasket Head, Mass.] Depot Quartermaster's Office, 170 Summer St., Boston, Mass. Sealed proposals will be received at this office until May 29, 1902, for furnishing all labor and material and constructing a water-tower and stand-pipe, and a pump and boiler house; also, furnishing and installing pumping machinery at Fort Revere, Nantasket Head, Mass. Blank forms of proposals and full information furnished on application. ALFRED M. PALMER, Depot Quartermaster, U. S. Army. 1378

BUILDING.

[At Mare Island, Cal.] Sealed proposals will be received at the bureau of yards and docks, Navy Department, Washington, until June 7, 1902, for constructing a brick and steel building at the navy yard, Mare Island, Cal. Appropriation, \$62,000. Plans and specifications can be seen at the bureau, or at the navy yard named, or will be furnished by the Commandant of the navy yard upon deposit of \$10 to secure their return. MORDECAI T. ENDICOTT, chief of bureau. 1379

HEATING.

[At League Island, Pa.] Sealed proposals will be received at the bureau of yards and docks, Navy Department, Washington, until June 7, 1902, for furnishing and installing a vacuum steam-heating system for a workshop and storehouse, Navy Yard, League Island, Pa. Appropriation, \$6,000. Plans and specifications can be seen at the bureau, or at the navy yard named, or will be furnished by the commandant of the navy yard named. MORDECAI T. ENDICOTT, chief of bureau. 1379

CONSTRUCTION, PLUMBING AND HEATING.

[At Fort Baker and Fort Miley, Cal.] San Francisco, Cal. Sealed proposals will be received here until June 6, 1902, for construction (including plumbing and electric wiring) at Fort Baker, Cal., of officers' quarters, barracks, administration building, and for construction (including plumbing, heating and electric wiring) at Fort Miley, Cal., of hospital, hospital stewards' quarters, bake-house and fuel shed. Information furnished on application to D. D. WHEELER, D. Q. M. general, C. Q. M. 1379

CITY-HALL.

[At Newark, N. J.] Office of the commissioners for the erection of a

PROPOSALS.

new city-hall, No. 934 Broad St., Newark, N. J. Sealed proposals will be received by the commissioners for the erection of a new city-hall in this city during a public meeting to be held at the council chamber in the present city-hall from 3.15 to 3.30 P. M. on Wednesday, the 15th day of June, 1902, for the construction of a new city-hall building and boiler-house at Newark, N. J., in accordance with the drawings and specifications, copies of which may be seen or obtained at the office of John H. & Wilson C. Ely, architects, No. 800 Broad St., Newark, N. J., where blank forms of the proposals and any additional information may be had upon application. Andrew Kirkpatrick, Gottfried Krueger, James E. Howell, Commissioners. JAMES T. NEARY, clerk. 1379

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 19, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 26th day of June, 1902, and then opened, for the installation of a conduit and wiring system for the U. S. Post-office building at St. Cloud, Minn., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at St. Cloud, Minn., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1379

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 19, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of June, 1902, and then opened for furnishing the steam heating apparatus complete in place for the U. S. Post-office at St. Cloud, Minn., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at St. Cloud, Minn., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1379

Treasury Department, Office Supervising Architect, Washington, D. C., May 19, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 7th day of July, 1902, and then opened, for the mechanical equipment (except engines and generators) including plumbing, water supply, steam power plant, etc., heating apparatus, mechanical ventilation, electric wiring and conduits, switchboard, elevators and non-conducting coverings for the U. S. Mint, Denver, Colorado, in accordance with drawings and the specification, copies of which may be obtained at this office, or at the office of the Superintendent of Construction at Denver, Colorado, at the discretion of the Supervising Architect upon deposit of a certified check payable to the Treasurer of the U. S. for \$100 which, upon return of the complete set of drawings and specification, will be returned. JAMES KNOX TAYLOR, Supervising Architect. 1379

BUILDING.

[At Columbus, O.] Bids are wanted June 2 for erecting a Y. M. C. A. Building in this city. F. D. PEABODY, Chmn. Bd. Trus. 1378

BUILDING.

[At Terre Haute, Ind.] Bids will be received by the Bd. of Co. Comrs. until June 2 for furnishing material and erecting the Virgo Co. Home for Dependent Children. JAS. SOULES, Co. Aud. 1378

CEMENT WALKS AND GRADING.

[At Denver, Col.] Bids are wanted May 31 for constructing cement walks and grading at Fort D. A. Russell. Address MAJ. J. W. POPE, Ch. Q. M. 1378

PAVING.

[At Jackson, Miss.] Sealed proposals for paving with vitrified brick

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PROPOSALS.

certain portions of State, Capitol, Pearl and President Sts., approximating 47,000 square yards, together with curbs and other accessory construction, will be received by the Mayor and Board of Aldermen of the City of Jackson, Miss., till June 3, 1902. Specifications and forms will be mailed on application and plans are on file in the office of the city engineer, Walter G. Kirkpatrick. A. P. LUSK, City Clerk. 1378

GUARD-HOUSE.

[At Fort Adams, R. I.]
Office Constructing Quartermaster, Newport, R. I. Sealed proposals will be received here until June 4, 1902, for constructing, plumbing, heating, and wiring brick guard-house, Fort Adams, R. I. Information on application. THOMAS H. SLAVENS, Q. M. 1378

HEATING.

[At Fort Getty, S. C.]
Sealed proposals will be received here until June 4th, 1902, for heating one double barracks, one single barracks, one commanding officer's quarters, five captain's quarters, and five lieutenant's quarters by hot-air system and heating of hospital by hot-water system, all at this post. Information furnished on application. DAVID PRICE, Q. M. 1378

PROPOSALS.

PUBLIC BUILDINGS.

[At Great Diamond Island, Me.]
Office of Constructing Quartermaster, 185 Middle St., Portland, Me. Sealed proposals will be received at this office until June 2, 1902, for the construction of barracks, officers' quarters, hospital, N. C. O. quarters, bake-house, shops, storehouses, stable, etc. (15 buildings in all) at Fort McKinley, Great Diamond Island, Me. Information, specifications and blanks on application. CAPTAIN A. W. YATES, Quartermaster, U. S. A. 1378

Treasury Department, Office Supervising Architect, Washington, D. C., May 10, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 18th day of June, 1902, and then opened, for the construction (except heating apparatus, electric wiring and conduits) of the U. S. Post-office at Wilkesbarre, Pa., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Wilkesbarre, Pa., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1378

PIPE SPECIALS.

[At Washington, D. C.]
Office of the Commissioners, D. C., Washington,

PROPOSALS.

D. C. Sealed proposals will be received at this office until June 7th, for furnishing 30", 36", 42" and 48" cast-iron flanged pipe specials. Specifications and blank forms of proposals may be obtained at this office. HENRY B. F. MACFARLAND, JOHN W. ROSS, JOHN BIDDLE, Commissioners, D. C. 1379

CONSTRUCTION, WIRING AND HEATING.

[At Des Moines, Ia.]
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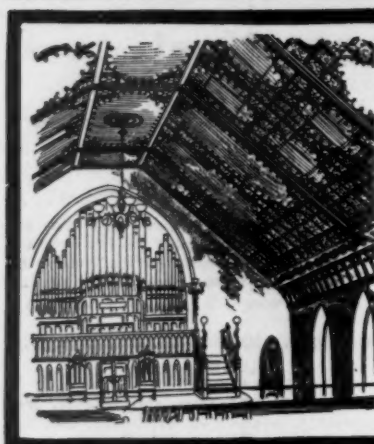
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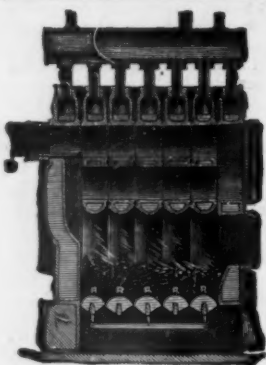
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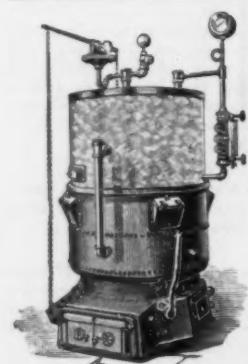
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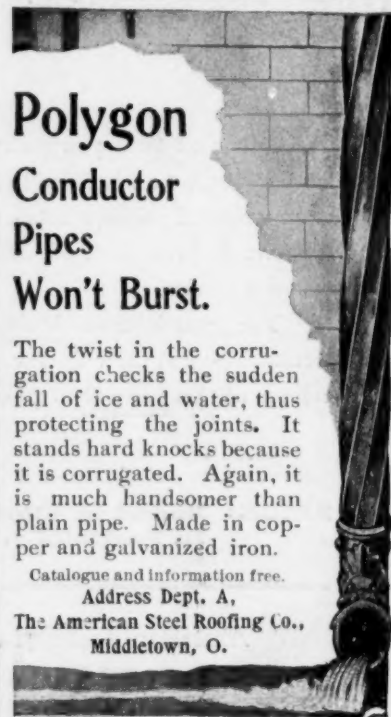
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