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The Architecture of Retail Stores

By WILLIAM LAWRENCE BOTTOMLEY

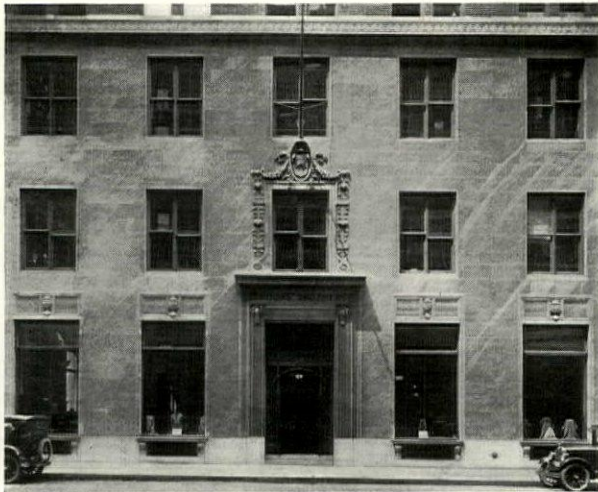
EVERY great city which is not merely a commercial center possesses some characteristic in a particularly marked degree. New York's chief characteristic is entirely its own, for there is no city in the world in which life is so driving. This is expressed by the constant struggle which goes on to keep pace with the thought and tendencies of the entire world, and the effort which the struggle costs is reflected in the sleepless, restless crowds and in the unsatisfied, incomplete, overstrained exertions of one city to rival the energy, intelligence and accomplishment of all countries.

New York, indeed, viewed in one aspect, suggests a World's Fair—one of those vast enterprises, international in scope, where there is presented a survey of the progress of the race and the achievements

which have been reached in all the arts and sciences. Many great cities of the world exhibit the varied industries and myriad interests which one associates with a World's Fair. New York, like a World's Fair, expresses the idea of infinite and boundless energy, but resembles it less than London or Paris, for New York was never essentially a manufacturing city, but a port, a Mecca, a city of extremes, that must be understood to be appreciated; yet the port turned itself into a market for the valuable industries it created. The actual building of the city itself has made a vast market for labor; the development of the decorative arts has formed another; but the practical and æsthetic adornment of the city's millions, their homes and their places of amusement and instruction, has been by far the greatest inspira-



A Parisian Shop Front of the Period of Louis XVI



Shop Windows, Brooks Brothers, New York

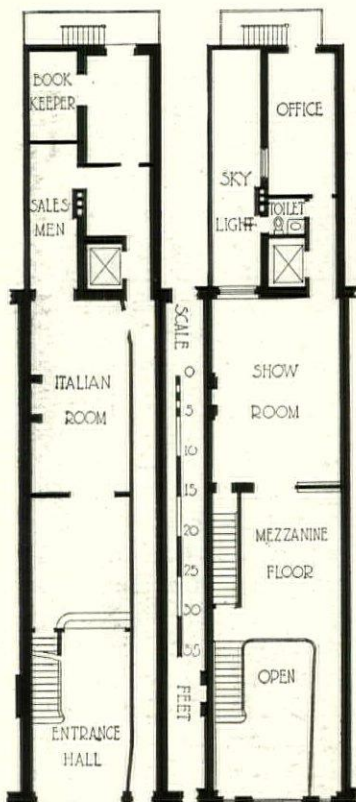


Cartier's, Fifth Avenue, New York

tion for its architectural and artistic development.

A certain portion of New York between the Pennsylvania Station and Central Park, rapidly centering nearer the park, is becoming a veritable World's Fair. Upper Fifth Avenue, Fifty-seventh Street, and to a certain degree the adjoining streets and avenues, present to the eye of the passer-by an endless variety of everything the human heart can desire from a lollipop to an Egyptian carving of the XVIII Dynasty. From examples of the whole range of art to the most fleeting whim of personal adornment is perhaps a wide range, but not too wide for our World's Fair, to which New York has been likened.

The problem of how to best show these wares to the public has not been well solved on the whole, and if one considers the matter from a broad point of view, there are but few examples to be seen that offer a perfect solution. It would seem patent to the most average mind that the show window of a shop should attract attention to the wares it contains. First of all, as one passes along the street, the building with its principal focus near the sidewalk should arrest the eye and create a feeling of interest and then a sense of attraction. It has been said that any advertising is good advertising, and that wide but unfavorable publicity is far better than none. It is



Floor Plans and View of Exterior, Shop of Barton, Price & Willson, Inc.

Fifth Avenue, 56th to 57th Streets
Duveen's at the Left

not proposed to either defend or attack this point of view, but it is self-evident that wide and favorable publicity is the ideal to be sought after.

The store front proper, as a next requisite, should so frame in the window display that it forms a becoming setting, definitely separating the composition in the window from its surroundings, harmonizing with its contents and cutting it away from any disturbing or competing forms and from any possible adjoining incongruities. The original framing of an Italian primitive or the bold decorative frames of a Spanish painting of the period of Velasquez illustrate this point to perfection. Seen at a distance, either arrests attention by the interesting outline and bold treatment of its color. Both are intrinsically beautiful, strong and command attention. They definitely separate their pictures from all others that surround them and, most important, they harmonize with them in scale, design and color. The same thing might be said of the beautiful gilt frames of the period of Louis XV which have been much used ever since they were invented, but which have been perhaps too much used, and so badly copied that they are now stale and commonplace, and for that reason fail to attract any attention or even to be noticed at all, the result of centuries of unwise use.

The framing of the show window should answer these requirements, but in addition should have its proper relation to the entire building, from both a structural and decorative point of view, and it is at this point that most of the designs fail. It is here that the design of the windows of Brooks Brothers (page 234) is so saliently successful. It is a con-

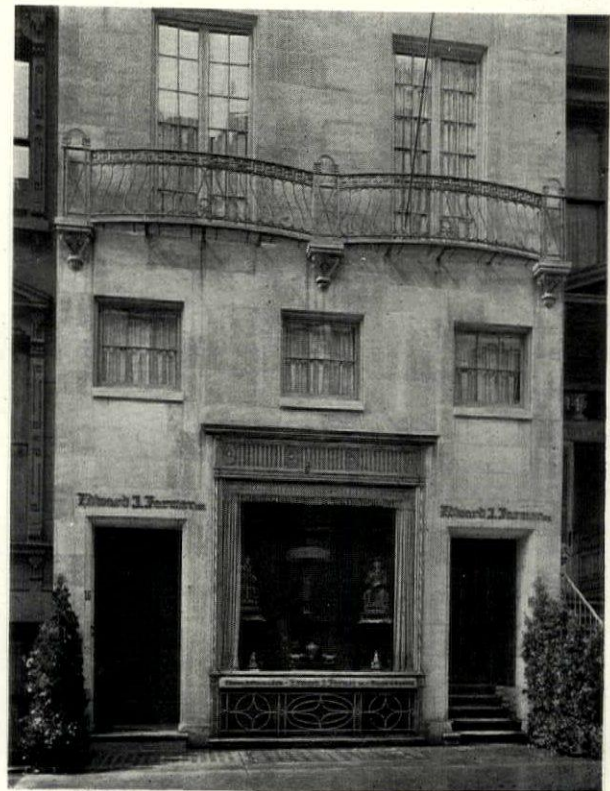


Maximum Window Area in Narrow Front
Montague Flagg, C. F. Rosborg, Architects

servative shop with an established trade. It does not cater to the mere passer-by. The windows are well proportioned, simple and admirably related to the upper part of the building, and while large enough to contain adequate displays, they are so reserved in size, in relation to the whole building,



Facade at 6 East 56th Street
W. L. Bottomley, Architect; A. P. Hess, Associated



16 East 56th Street, New York
Trowbridge & Ackerman, Architects



Excellent as to Scale; Admirable in Design
Kenneth M. Murchison, Architect

that they give an impression of distinction, restraint and aloofness well calculated to express the traditions of the establishment, now so long upheld.

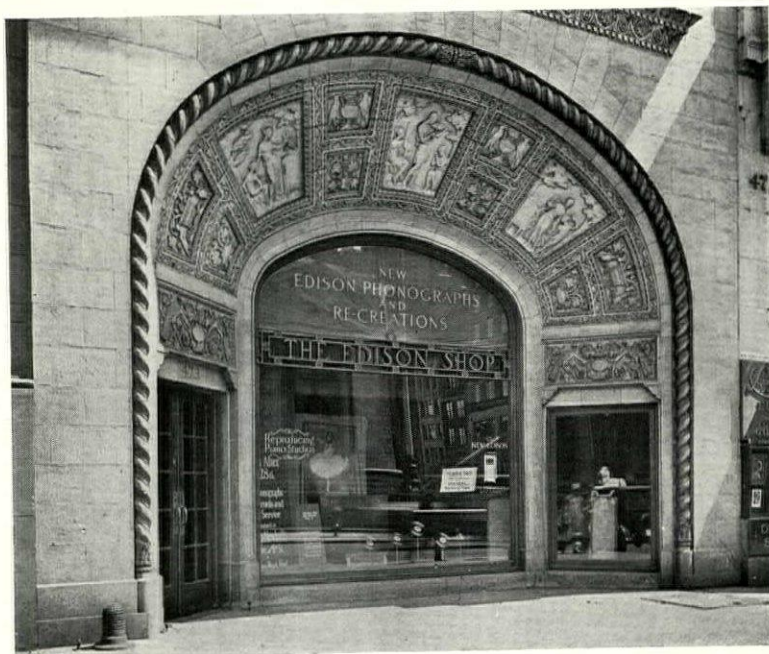
The windows of Cartier's jewelry store (page 234) are perfect in every respect except in the way they relate to the upper part of the building. It always gives one a shock to see the clash in scale and design between the classic and rather Italian palace type of the old house in the upper stories and the beautiful, delicate and decidedly French treatment of the lower story. The windows proper are very interesting with a frame of bronze and verde antique marble. The plate glass, which is certainly the most practical material for a shop window, is divided in such an unusual way that the commerciality of the material is entirely lost while the delicate scale and choice materials form a setting for a display of jewelry or bibelots which it would be hard to surpass.

Another consideration which should enter into the study of the design of a store is the relation of the style of the building to the merchandise which it sells. Of course the question of historic styles has been greatly over-emphasized in this country, and not enough good work is being done in our own idiom, but there are certain cases, as for example, that of Cartier's, to mention that excellent piece of work again, where on account of the renown of its headquarters in Paris it was appropriate to give it a distinctly French flavor. The show window of the shop of Elsie Cobb Wilson, Inc., on East Fifty-seventh Street (Plate 91),

which was very cleverly adapted by Mrs. Wilson herself from an old English shop front, is essentially American and Colonial in its effect, and while it is very quiet in color and restrained in line, it is one of the most interesting pieces of design that one knows of. The delicate wood arches, the pilasters, friezes and cornices, the complicated but beautiful design of the muntins are very closely akin to the decorator's art and further express in their delicate detail the charm and distinction of Mrs. Wilson's own work. The whole shop front has been painted a dark bottle green so that one has to be very alert to notice it at all, but when once seen it is well worth careful study. The arrangement of the show window and the entrance to the building and the first story shop are handled in a most able way, which is truly satisfying.

Since Fifty-seventh Street bids fair to be the most fashionable and popular

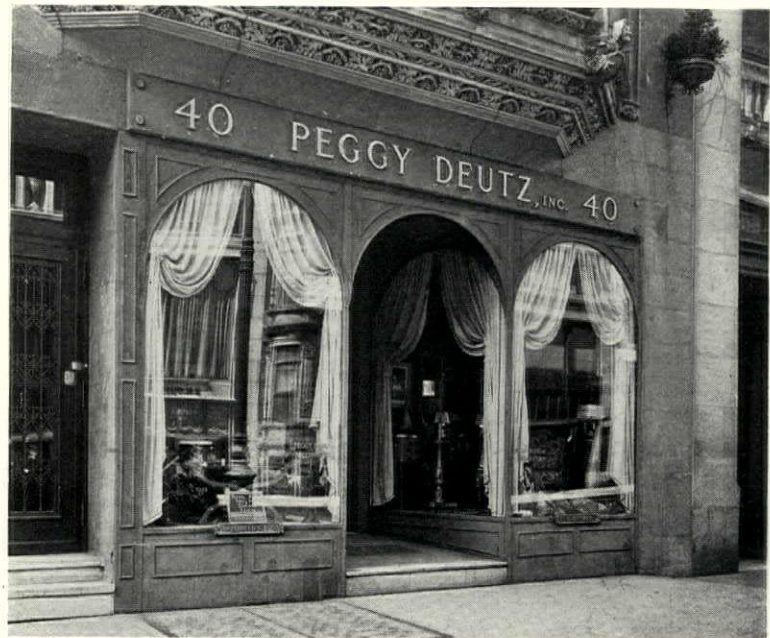
shopping street in town it is quite natural that many of the best shops are found there, and as the proprietors of these shops give more time and thought to their setting and surroundings, it follows that most of the well designed stores are found on that street. Barton, Price & Willson, Inc. (page 234), a firm of decorators have done over a whole building after the designs by J. P. Weir. The scheme is simple in its essentials and quiet in effect, as all good design should be, but it is very original in its plan and a decided departure from the conventional thing in its detail. The shop occupies the first two floors of the building and is arranged so that the front part extends



A Striking Use of Ornament in Relief
Shupe & Bready, Architects

up through the entire height of these floors for a distance of about 25 or 30 feet from the street. The show window, which finishes in a pointed arch, also extends up almost as high, and this throws a flood of light back into the showroom and at the same time provides a very dramatic and becoming lighting for all the objects inside. It will be noticed from the plan that the main entrance to the building passes under a balcony on the west side and back to the stairs and elevator in the middle portion of the building. The rear and both sides of the shop have a generous mezzanine balcony which forms a very picturesque feature of the interior with its delicate stairway and wrought iron railings. The store front proper, the whole facade of the building and the interior of the showrooms are carried out in a very harmonious way. The style is picturesque with a certain Gothic feeling that is at the same time free and modern and yet full of the robust romance of the old Gothic work. The color is restrained to a wide range of values in gray and varies from a buff through beige to a cool stone gray. The walls of the interior have been given an antique plaster finish which forms an excellent background for the works of decorative art displayed against them. From many points of view this is one of the most interesting retail shops that has been done in New York.

Another type of store that is diametrically opposite in its object and conception is being seen with increasing frequency. It has been developed from

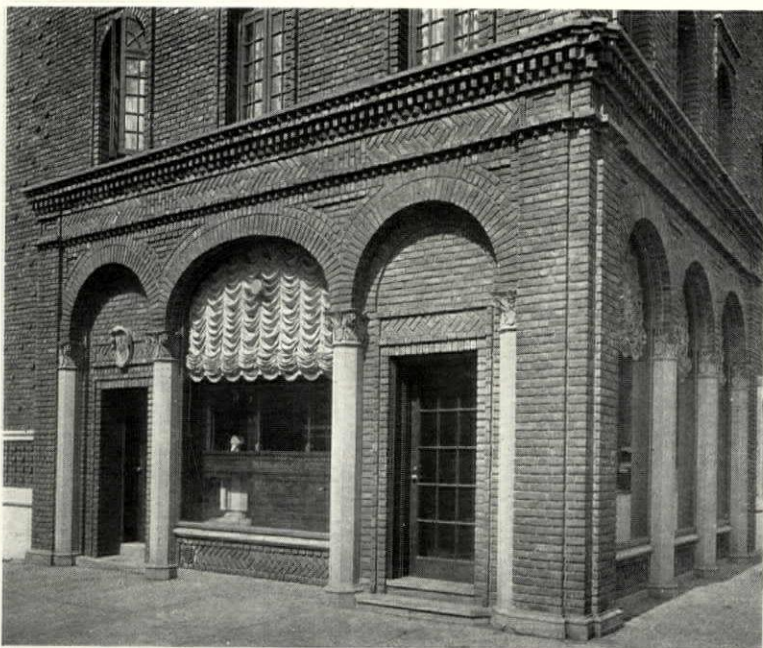


An Effective Use of Simple Architectural Treatment
The Utmost in Show Window Area

the need of large show window space in a limited front. The type is illustrated by the Avedon arcade at Fifth Avenue near 39th Street (Plate 84) which was done by Harry Allan Jacobs, who is said to have been the first to use this arcade plan in New York, and by the store of the Fain Knitting Mills near 42nd Street on Fifth Avenue, and a number of others. Here the center of the front opens through a short passage with show windows at either side into a circular or octagonal vestibule, also entirely surrounded by show windows and frequently with a show case in the center of this space, and the door to the shop opposite ends the short passage. The construction of all these windows and

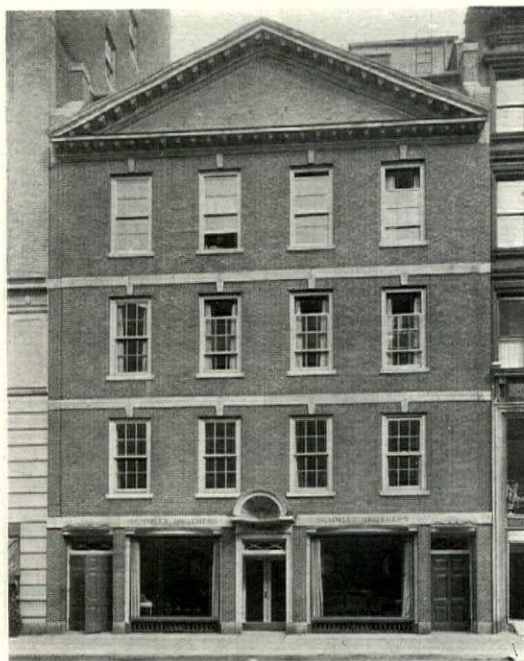
show cases is of the lightest possible, bars of metal holding the glass together, and with carefully placed displays lighted from above by colored "floods" and from the front and bottom by theatrical "strip" lights, the effect is at the same time attractive and inviting. The scheme is so original and so perfectly adapted to its ends that it is bound to come into far more general use. Among many advantages it makes possible an arrangement and a number of show windows, before the store is itself entered, which, if located on the street facade of the building would require a frontage many times the footage used for the arcade plan of entrance. Other advantages derived from this new plan are the comfort and convenience of the shoppers, who can examine articles displayed.

Architecture is the most conservative of all the arts. It requires a far



Excellent Use of Unusual Opportunities
Arthur Loomis Harmon, Architect

greater physical effort to produce a building than a picture, on account of the limitations of construction. The types of building change far more slowly in the development of design, than does style in painting and sculpture. The illustration shown here of an old Paris shop front built in the period of Louis XVI exhibits the contrast and at the same time the similarity of the work that we are doing today. This particular design is one of the most beautiful examples of a style which reflects the classic tradition, the careful balance and studied scale and proportion so characteristic of that time. The front, which is entirely of wood and glass, is in the Metropolitan Museum and forms a part of a collection brought to this country by the late J. Pierpont Morgan. The show window is framed in by Corinthian pilasters, modified as all classic detail was modified by the taste of that time. The scale is small, the carving is crisp and beautifully executed, and a certain restraint amounting almost to primness



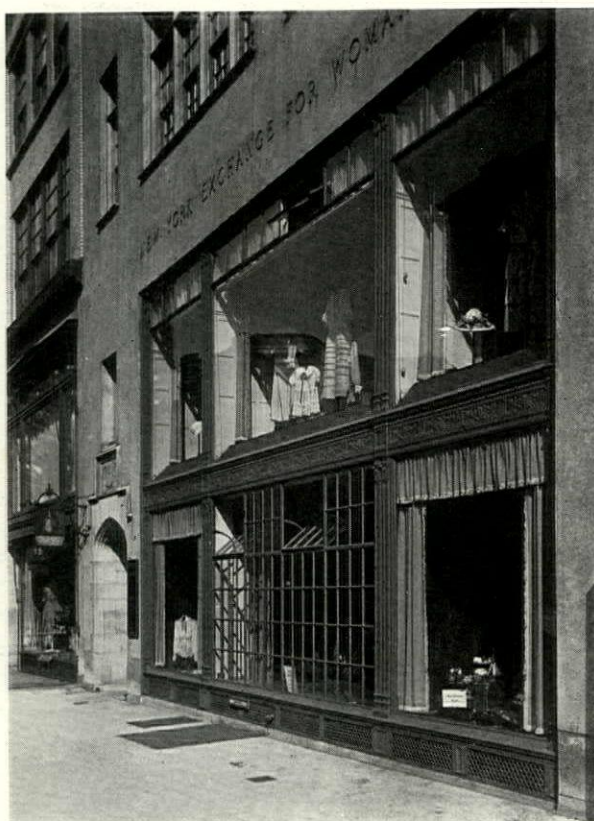
Shop of Madison Avenue Antiquarians
G. V. Smith, Architect

is felt throughout the work. Large panes of glass were not made at that time, so that of necessity the show window was divided into small panes held together by well moulded muntins. The design of the door and the transom, is, however, the most unusual part of the design and gives character and accent to the whole composition. It is bold but light, and while quite different in feeling from the rest of the work it still harmonizes with it perfectly. How fortunate it is that it has been preserved intact! Who in making a restoration of these motifs would have thought of doing them in this way? This small shop front executed in perish-

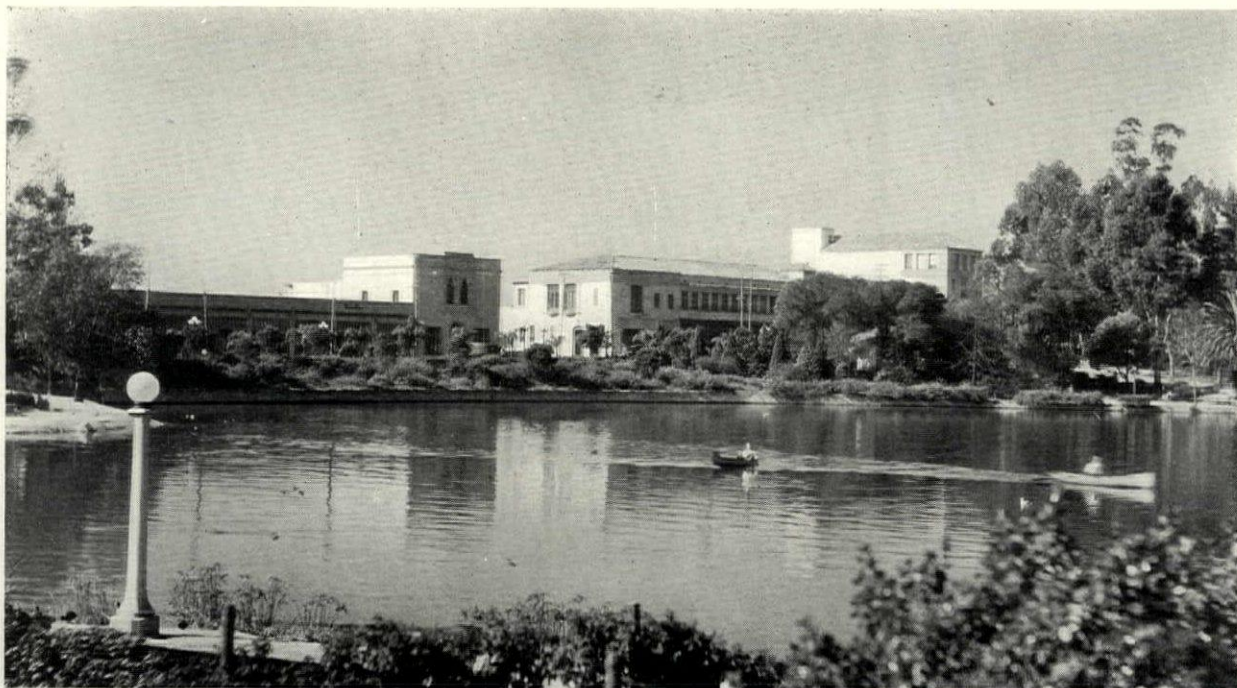
able material makes one pause to wonder if in decorative design we have advanced so very far in the last 150 years! As we still go back to such precedents as this French shop front, and to equally charming English examples, to design a shop front possessing refinement in scale and detail, it would truly seem that after all we are still very dependent.



Excellent Show Windows on Two Floors
Frederick Mathesius, Architect



Value of Small Panes Demonstrated
Butler & Rodman, Architects



Stores in The Spanish Style

ILLUSTRATING MODERN TYPES OF RECENT CALIFORNIA WORK

MORGAN, WALLS & CLEMENTS, ARCHITECTS

BUSINESS men long ago agreed that it is part of good merchandising methods to create for the exhibition and sale of their wares an environment or setting in which the merchandise would be presented to the prospective purchaser in its most attractive form. Evidences of the widespread prevalence of this attitude upon the part of merchants and shopkeepers are the increased attention which is being given to the character of their window displays, the thought and care with which the show windows themselves are designed, and in many instances the installation, at considerable cost, of special exhibition rooms in which merchandise may be arranged in ways which enhance its value in the purchasers' eyes and facilitate the sale of the wares exhibited.

The business world, moreover, now regards at its proper value the architectural character of the buildings in which business is conducted, and at its behest architects have drawn freely and heavily upon the store of architectural precedent which past centuries have bequeathed, with results which are always interesting and frequently successful from the viewpoints of the architects themselves and of the merchants who are their clients. Where the results have not been successful, the reason is often to be found in the fact that choice was not wisely made among the variety of types of architecture and decoration which exist, or that the adaptation of a type has been made with little regard to its being appropriate or to the needs of the locality where the shop is situated. Only too often have architects persuaded their

clients (or else have been coerced by them) into use of the stereotyped "bronze front" precedent which now prevails almost everywhere, to the neglect perhaps of other types which by reason of their particular suitability or by their association with the locality would be especially attractive to patrons, and which by appealing to their good taste and sense of the fitness of things would assist in the sale of merchandise, which after all is the chief aim of the shopkeeper. A merchant who evidently believes in having his business premises planned and designed by an architect rather than by a mail-order house is said to have remarked recently that "good architecture in everyday commercial work was not only a splendid investment but actually dropped dollars into the owner's pockets"—from which it would appear that at one and the same time the amenities of architecture were duly observed and the God of Commerce served.

The early Spanish Renaissance type of architecture possesses a number of advantages which have brought about its wide use upon the Pacific coast and particularly in southern California, a region with which it is historically identified. It is a type which offers many advantages which render it particularly appropriate for shop buildings of certain kinds, and California architects who have been quick in recognizing these advantages have in a number of instances created notable shop building groups. The style is used with particular success where structures are low in height and where there are wall spaces sufficiently ample to afford the contrast be-



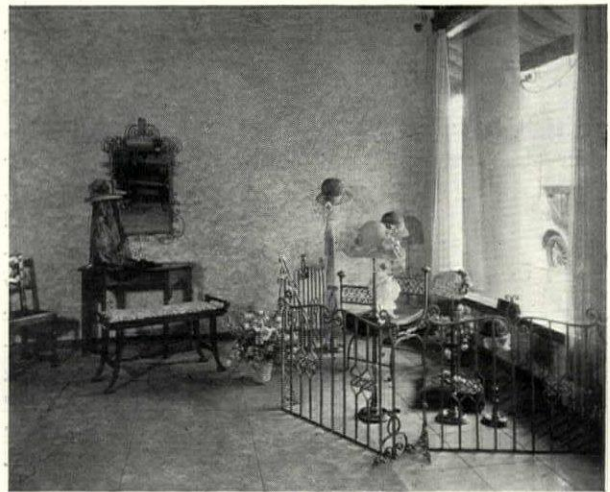
TIMBERED CEILING AND WALLS OF TEXTURED PLASTER AS BACKGROUND FOR FURNITURE



ONE OF A GROUP OF BUILDINGS IN SPANISH STYLE IN LOS ANGELES
MORGAN, WALLS & CLEMENTS, ARCHITECTS



Candy Shop, Westlake Park District, Los Angeles



Millinery Shop, Hitt Building, Los Angeles

tween plain stucco walls and the small areas of more or less elaborate ornament in relief which are used with such telling effect in panels and friezes or about certain windows and entrance doorways. Windows are frequently massed in groups. Opportunities for the use of ornament in other forms are not lacking, for ironwork is used in guards placed in balcony fashion at windows or in the grilles which often cover entire window areas, while color is used in soffits of different kinds, for the ceilings of vestibules which are practically loggias, upon shutters or

blinds, and sometimes for painting directly on the walls themselves, stenciling on the stucco surfaces.

The characteristics which render the Spanish Renaissance type so appropriate for exteriors of shop buildings are equally useful in arranging their interiors. The grouping of windows which is so effective from without is quite as successful within, and the broad, unbroken spaces of wall which afford opportunity for the effective use of exterior ornament are useful for arranging wall cases and shelving in shops of certain types or for the hanging of

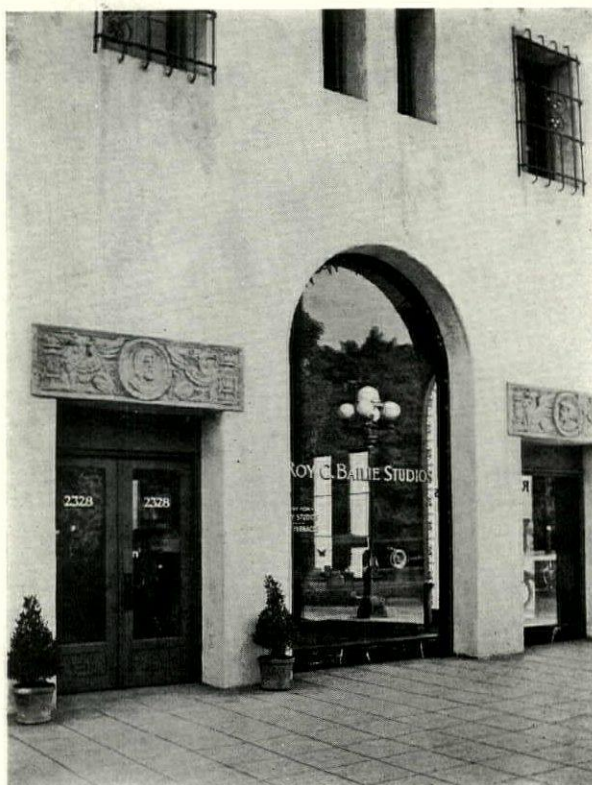


Hitt Building. Small Shop Buildings in Spanish Style Offer Opportunities for Beautiful Grouping

tapestries and paintings or for the arrangement of furniture in shops of some other kinds. So flexible is the type that it may be given a treatment which is highly ornate or severely simple, the aim being, as it should always be in planning a shop interior, to create a tasteful and attractive setting for the merchandise to be sold or the service rendered therein. The use of the Spanish style also presents unusual opportunities for employing accessories and furnishings which add materially to the interest and beauty of their surroundings. Tiles may appropriately be used upon walls and floors, wrought iron in countless forms such as lighting fittings and the grilles or screens about cashiers' booths, while the actual furniture, such as show cases and counters, and tables and chairs where they are used, may be equally "Spanish" when severely simple or, where a more elaborate treatment is desired, decorated with painting in gold and colors.

The illustrations included in these pages show the exteriors and interiors of a number of shop buildings and individual shops in Los Angeles. The architects, Morgan, Walls & Clements, have been unusually successful in obtaining an insight into the spirit of the style, and the buildings are in full accord with the Renaissance of Spain, and yet they are thoroughly practical and well suited to the purpose for which they are intended. Utility has been clothed with a garb of beauty without sacrifice of anything which good business methods demand, and inasmuch as purchasers are, without always realizing it, drawn to shops which are attractive and interesting, the keepers of these shops possess a certain advantage in offering their wares or their services.

The illustration at the top of page 239 shows a



Walls of Stucco; Cast Stone Ornament; Thorpe Building, Los Angeles

group of three shop buildings, that at the left being built for the Fifth and Broadway Investment Company, that in the center belonging to the Bilicke Estate, while at the right is the Thorpe Building. These three structures occupy corner plots with long frontages upon a prominent street and shorter frontages upon other streets, and they face a strip of parkway in which the edges of a lake are bordered with semi-tropical verdure. All the buildings have walls of brick coated with a rough, wavy-textured stucco, two buildings being a dark cream buff, while one is gray. In keeping with the Spanish style in which they have been designed, the buildings are low in height, partly but one story high, partly two, while a portion of the Thorpe Building is a rather narrow pavilion four stories in height. The structures are well grouped and composed, with low hip roofs covered with tile or with flat roofs surrounded with parapets which are themselves



Simple Fenestration, Giving Excellent Show Windows



Polychromed, Antiqued, Cast Stone Ornament

covered with tile. These roofing tile are of varied clay colors and are laid irregularly, doubled or tripled at the eaves, which gives an interesting shadow line on the wavy-textured wall surfaces. Windows of the upper stories of these buildings are attractively grouped and ornamented with plaster and cast stone decoration in high relief. Individual doorways and windows at the sidewalk level are treated in similar fashion, but where a number of shops are placed side by side, involving large areas of window and door space, the shop fronts have been treated as a single unit, their upper portions arranged as a continuous frieze and the entire composition drawn together by a uniform method of treatment. To prevent the marring of the appearance of the buildings by signs of many kinds, use has been made of the parapet above the shop facades for such signs as are necessary—not sign boards, but metal lettering of a nearly uniform style fixed directly upon the

walls. One of the illustrations of these Los Angeles buildings shows the interior of the shop of an antiquarian or decorator and offers an idea of the value of walls of somewhat rough and appropriately toned textured plaster as background for tapestries, fabrics and paintings. The ceiling with its timbers visible adds materially to the Spanish character of the room by exposing the construction, and the grouped windows high above the floor at one end of the shop admit necessary light without unduly breaking up the wall surface, a show window here being impossible owing to the space outside being used for parking automobiles.

Also characteristically Spanish, though of a somewhat different appearance, is the McKinley Building. This structure is not built upon a corner plot but occupies space about 50 feet in width in the middle of a block. An absolutely symmetrical facade has been used, the arched entrance in the center giving access to the two ground floor shops as well as to the offices on the second floor. The large show windows to the right and left of the entrance carry the arched treatment across the lower story of the building, while above are balconied French windows, each surmounted by elaborate decoration, and all the windows are connected by panels of ornament to give the effect of a deep frieze across the facade. This ornament, which is of cast stone and is high relief, has been antiqued and decorated in colors and affords a rich contrast with the wall surface of plain stucco. Added contrast is given by the placing of the metal window guards in balcony fashion between the highly ornamented jambs of the second floor windows, all this giving strong, satisfying accent.

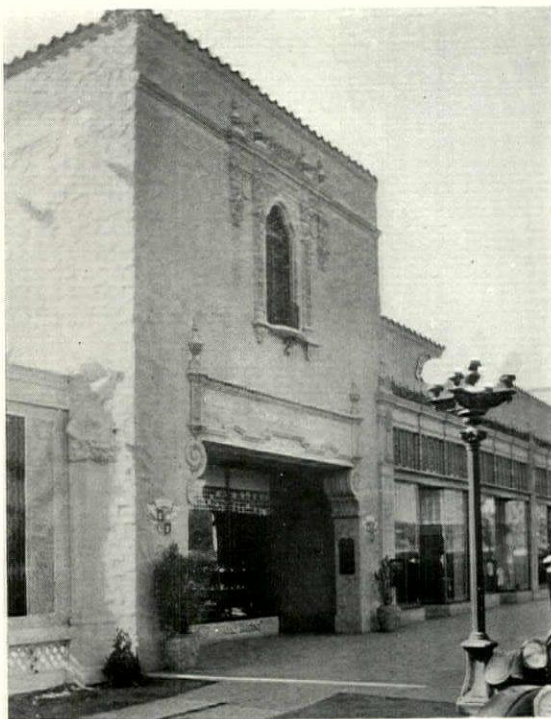
Of a still different order is the Hitt Building,



General View of McKinley Building, Los Angeles

which again occupies a corner plot and consists of a row of one-story shops with a second story only at the corner proper. The long one-story portion has been handled very simply as a colonnade, the shop fronts being recessed within the row of columns which support the entablature. Here again the exterior walls have been covered with stucco which is hand-textured, the color being a soft gray with a suggestion of green. The two-story portion of the building is covered by the familiar Spanish low hipped tile roof, and the coping or parapet of the one-story portion is covered with the same tile. Cast stone has here again been used for panels above certain important door-

ways. At the corner the building has been recessed 4 feet behind the one-story portion, the small area thus formed being partly paved with flagstones and partly planted with shrubbery. Two large show windows at the corner of the ground floor have been given the bold Baroque outline which one some-



Bold, Effective Use of Ornament

times sees in old Spanish buildings, and perhaps the crowning bit of ornament is found in the windows of the second story with their delicate bronze grilles arranged baluster fashion, elaborately wrought iron balconies or window guards, and polychromed wooden shutters. The entire exterior of the Hitt Building constitutes a study in color,—the polychromed shutters, the woodwork about doors and windows antiqued to a glazed moss gray, the metal tones of wrought iron, the tiles of roofs and parapet, and the striped awnings of the colonnade shops,—all this against the gray-green of the rough-textured stucco walls themselves.

The architects of these Los Angeles shop buildings

were fortunate in the fact that the structures are placed so closely together that they form a group or a series of groups, for the structures are not so disposed among other buildings of greater heights and of nondescript character that they are obliged to compete with them upon manifestly unequal terms.



One of a Group of Shop Buildings, Westlake Park District, Los Angeles

Essential Details in Store Designing

By ELY JACQUES KAHN

IN planning any store the type of establishment, the location and the desired effect are the determining factors that must guide the designer. It is also essential to bear in mind the fact that the purpose of the store is not only to display merchandise but to enhance its sales value, so that practical requirements must be considered in the design of the display cases or counters. An equally serious consideration is that most store owners are particular about the cost of their work and dislike unwarranted experiments in design that may prove unexpectedly and unreasonably expensive. It is fortunate that in recent years a clear recognition has developed of the actual value of a beautiful store, since the main difference between the attractive and the unattractive result lies in the direction that an intelligent designer can give to the work, and the cost is likely to be approximately the same. Let the solution be practical, and the owner will be interested in seeing a new arrangement of his goods in an attractive setting.

Inasmuch as the theory of the successful store is first to interest the customer by means of the show window, it may be pertinent to analyze a few characteristics of this portion of the shop exterior. An automobile salesman wants cars shown on the street level. Furniture display windows require the lowest elevation from the street. Dresses should be shown in the normal relation of the customer's eye to the model on which the dress hangs. Jewelry and similar small articles must be nearer the eye and not dwarfed by the scale of a large window setting. The design of the show window proper is not only de-

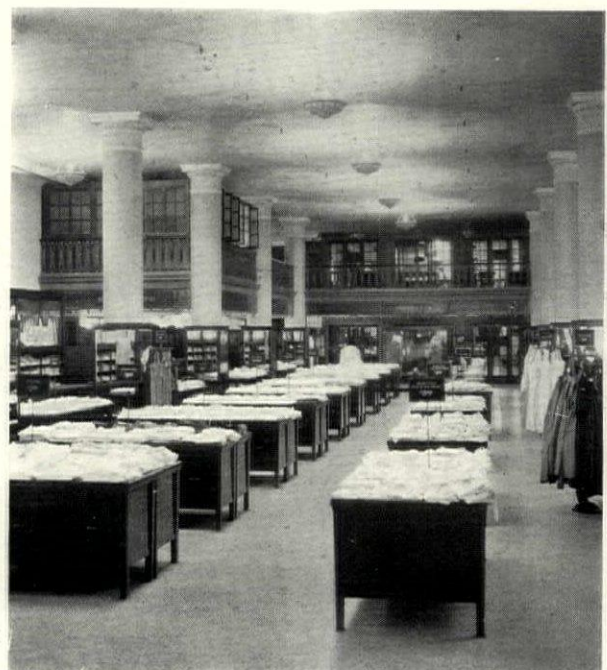
pendent on the height of its floor but also on its depth. This dimension is also determined by the character of the merchandise and has been standardized to quite an extent. Furniture, for example, requires a depth of approximately 12 feet, in which a reasonably interesting exhibit can be made. Department stores find 8 feet satisfactory for general display purposes. It is evident that where small articles are to be placed the shallow window with high floor is to be preferred. In the illustration of the Oppenheim Collins & Co. store in Brooklyn the arrangement and proportion of the show windows can easily be seen. Note that the floors of these windows on account of the type of goods to be displayed are almost on the sidewalk level. The design for this retail store shows a typical solution of the problem of securing scale in store facades. Had it been commercially expedient to carry down through the show windows the stone piers of the second and third stories of the design, a more perfect combination of architecture and commercial requirements would have been attained. The illustration of the interior of the main floor of the Oppenheim Collins & Co. store indicates the care taken by this firm in the arrangement of its show cases and counters.

It is interesting to note that the merchandising theory of an establishment has another important influence in the shop window design. A store specializing in low priced articles for popular consumption shows in its windows a great quantity of goods and little architecture, while the higher priced shop will carefully display a few well chosen objects.

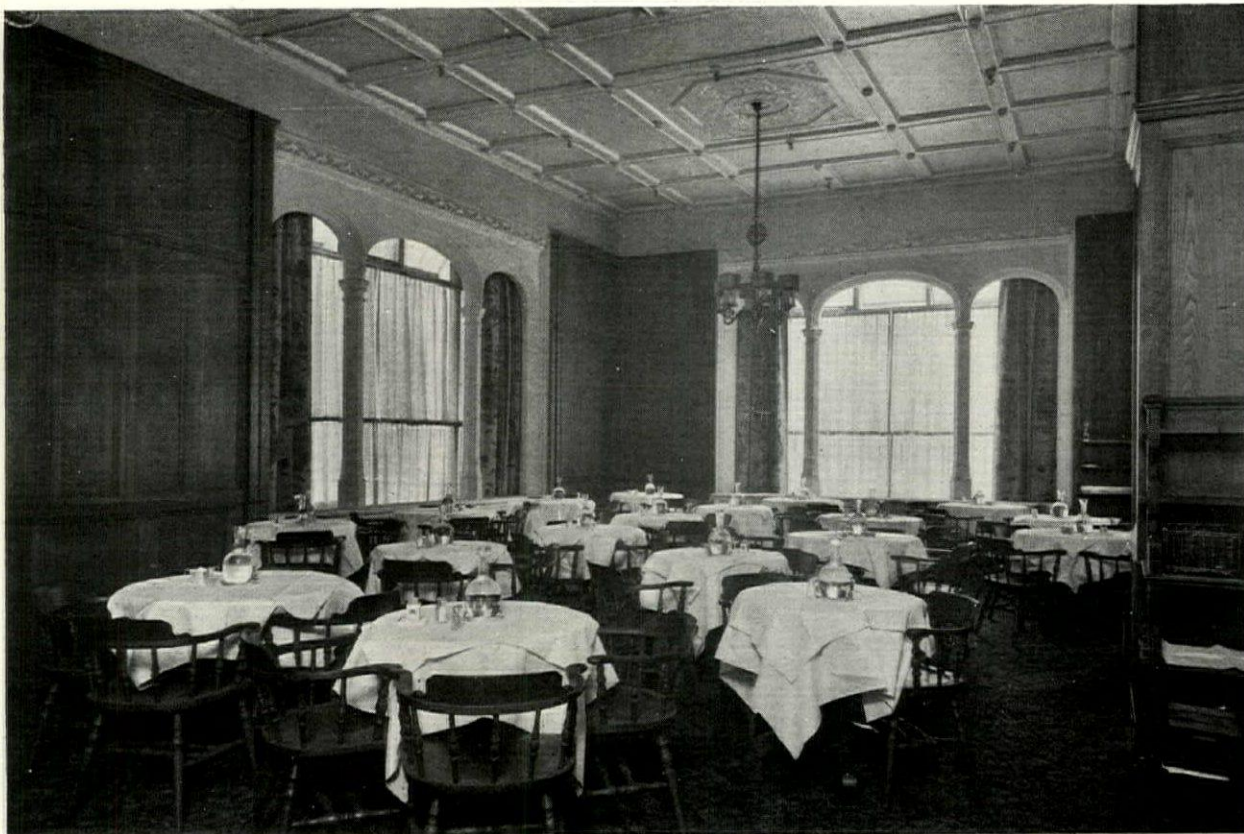
In the lighting of the show window, which is of



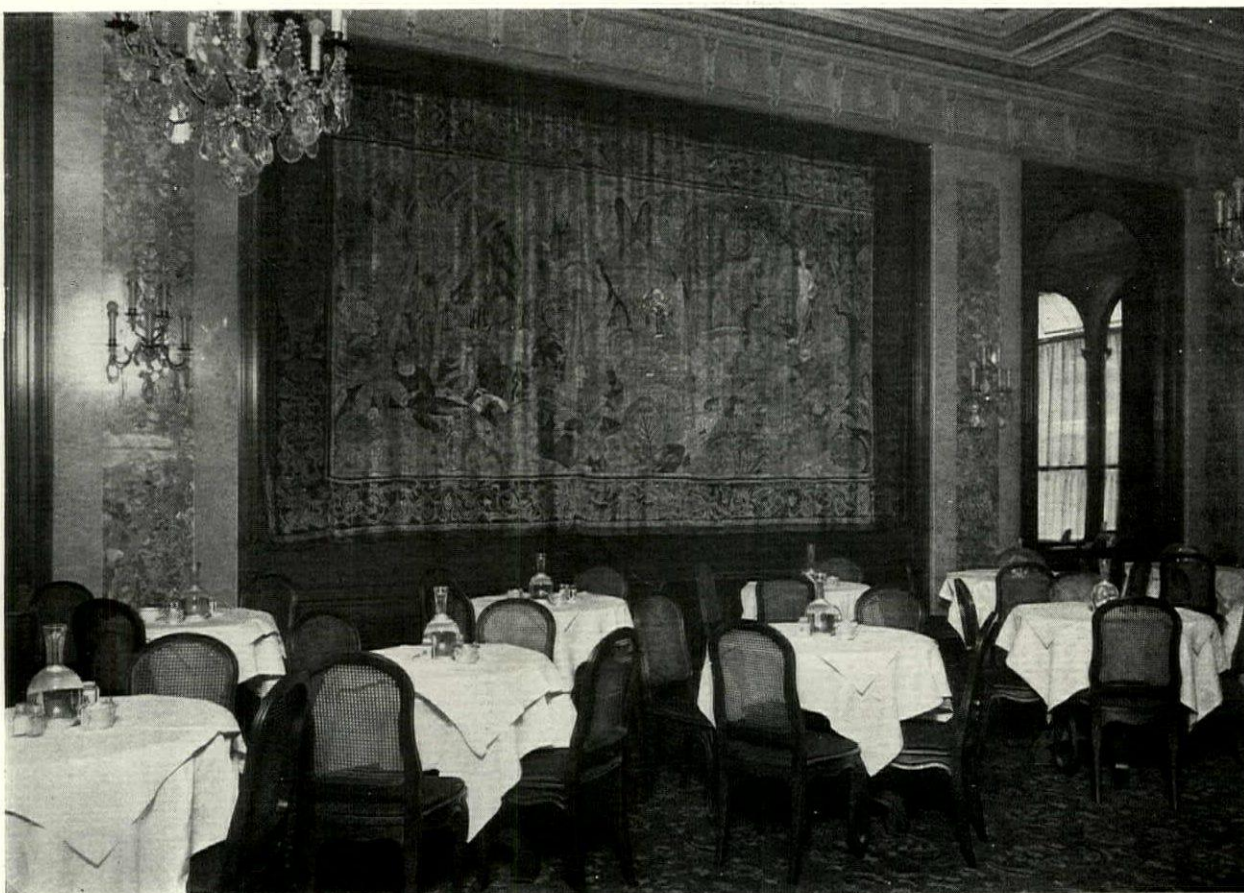
Exterior of a Women's Shop



Main Floor from Entrance



THE MEN'S CAFE



WOMEN'S RESTAURANT
INTERIOR OF MAILLARD'S, MADISON AVENUE, NEW YORK
BUCHMAN & KAHN, ARCHITECTS

great importance, the intensity and color of light are adjusted to the sizes and types of windows. The use of reflectors built in the cabinet work eliminates glare, and the judicious placing of spotlights gives most interesting variations of light and shade in successive displays. Since the intensity of light will be affected by the color of the show window's walls, it is important to determine first the main effect desired, remembering the character of the merchandise. Dresses, for instance, should not compete with their background. Furniture will look best against a neutral tone that will contrast with the richer color of the wood. It is a matter of experience that the orientation of the store on the street bears an important relation to the color of the interior of the window because the glare of light caused by the reflection of buildings in the vicinity can produce difficulties in obtaining a satisfactory window effect.

The doors to the store are among the details that worry the architect as well as the owner. They must not be too heavy to be handled by a woman leading a child. There are possibilities of customers or children being caught by badly placed hardware or by swinging doors. It is always of extreme importance that everything in a store be foolproof—radiators, drinking fountains, elevators, everything that can come into contact with a careless customer, for if anything does happen, the store is responsible. It is for this reason that a firm like Oppenheim Collins & Co., in its stores throughout the country watches



Maillard's; Entrance to Men's Cafe



Maillard's; Corner of Women's Restaurant

minutely the details of its buildings and constantly works to perfect the operation of its sales machinery.

In considering the interior arrangement of a particular store, the sales policy will direct whether it is advisable to hide merchandise in its setting or to show everything that can conveniently be laid out so as to tempt the customers. An excellent illustration of these different policies was evident in the arrangement of two large furniture establishments in New York. One specializing in high grade furniture had its floor space divided into rooms which were decorated in different materials and colors. In these rooms selected groups of furniture were carefully placed, surrounded by accessories that lent distinction to the pieces. The second institution built no partitions and showed great quantities of goods so as to impress the customer with an overwhelming assortment of furniture from which to make a selection. Both proprietors are convinced that they are right, and for their own classes of merchandise they are.

The care shown in interior arrangement is always instructive, even though the results are so simple that it is difficult to recognize their artistic merit. A store like that of Oppenheim Collins & Co. in Brooklyn is somewhat of a standard for its owners, in that apart from the general scheme, the details of show windows, floors, lighting and general utilities have proven sufficiently satisfactory to have become a standard to follow in their other buildings. The main floor is of marble, while the space back of the counters, for the comfort of the employes, is of wood. The lighting throughout is indirect, and the

store fixtures are so designed and arranged that at short notice they can be rearranged and readjusted for special sale purposes or other unusual uses.

Sometimes a store, becoming an institution, takes itself seriously, and the designer has an unusual opportunity. The Maillard store in New York carries on an old tradition, which made it important to be conservative in the design and in the use of material, but the owners were willing to permit well known craftsmen to coöperate in the work. It is encouraging to discover that it is economically possible to bring excellent craftsmanship into a commercial undertaking so that it may gradually develop a condition when the artist will welcome further opportunity and the store owner see the advantage of such coöperation.

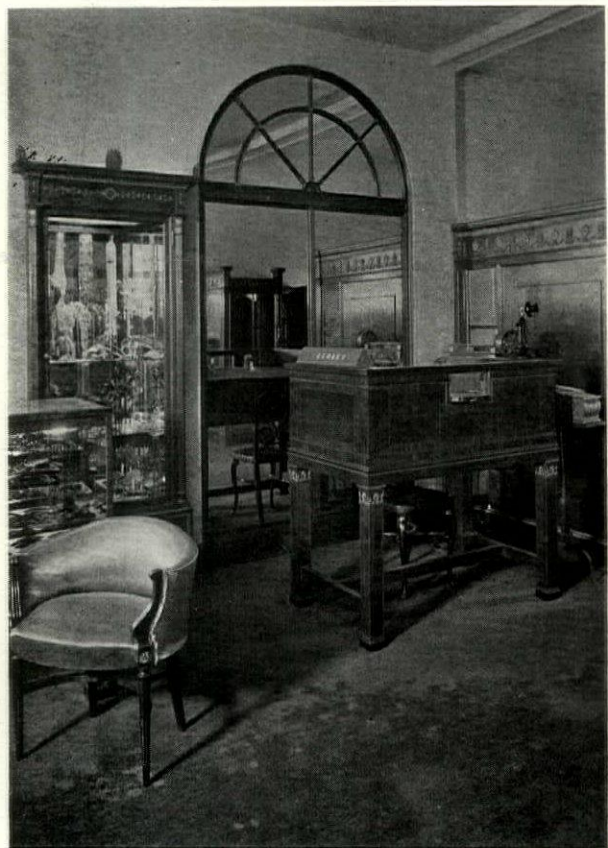
In the Maillard candy shop the counters have been kept close to the walls on either side in order to give adequate space as an approach or corridor to the women's restaurant which is directly back of the shop. The decorations of the entrance to this restaurant, although quite elaborate, form a transition from the simpler treatment of the shop itself to the richly decorated restaurant. An arcade treatment in three arches with finely detailed columns and pilasters forms this entrance, and repeats the arches used for the interior of the restaurant windows. Use of small arches was made in the windows and door openings to give a unity of scale to the entire interior decorative treatment. The walls of this room are divided by panels of two kinds of marble on which ornate lighting fixtures give a note

of interest. The principal wall space is decorated with a large tapestry to add color and variety to the decorative treatment. Smaller interior wall panels are filled with arched mirrors to help repeat the general scale of the detail. From the heavily paneled ceiling are suspended elaborate crystal chandeliers to add both elegance and gaiety to the interior design. The floors are covered with heavy carpets in rich colors, and the furnishings are carried out in walnut in a simple manner after the style of Louis XV.

A further variation in design is introduced in the entrance from the women's restaurant to the men's cafe, at the rear of the building. This entrance consists of a three-part opening, a large arch in the center with vertical openings on either side, suggestive of the Palladian motif; heavily embroidered draperies which fill these openings give seclusion to the men's cafe beyond. In this cafe, which has been executed in a simple adaptation of the Elizabethan style, colonnettes and arches have again been introduced to give scale to the large window openings by reducing their apparent sizes. As these windows are the ordinary large glass openings of a typical loft building, all effort to change their scale and character had to be incorporated in the design of the interior. Not only does the arched treatment of the interior of the windows give scale to the design but also the oak paneled walls and the plaster cornices and ceiling mouldings. In this cafe the furnishings are carried out in oak in a solid English style appropriate for a men's cafe. As in the women's restaurant, heavy, deep toned carpets cover the floor.



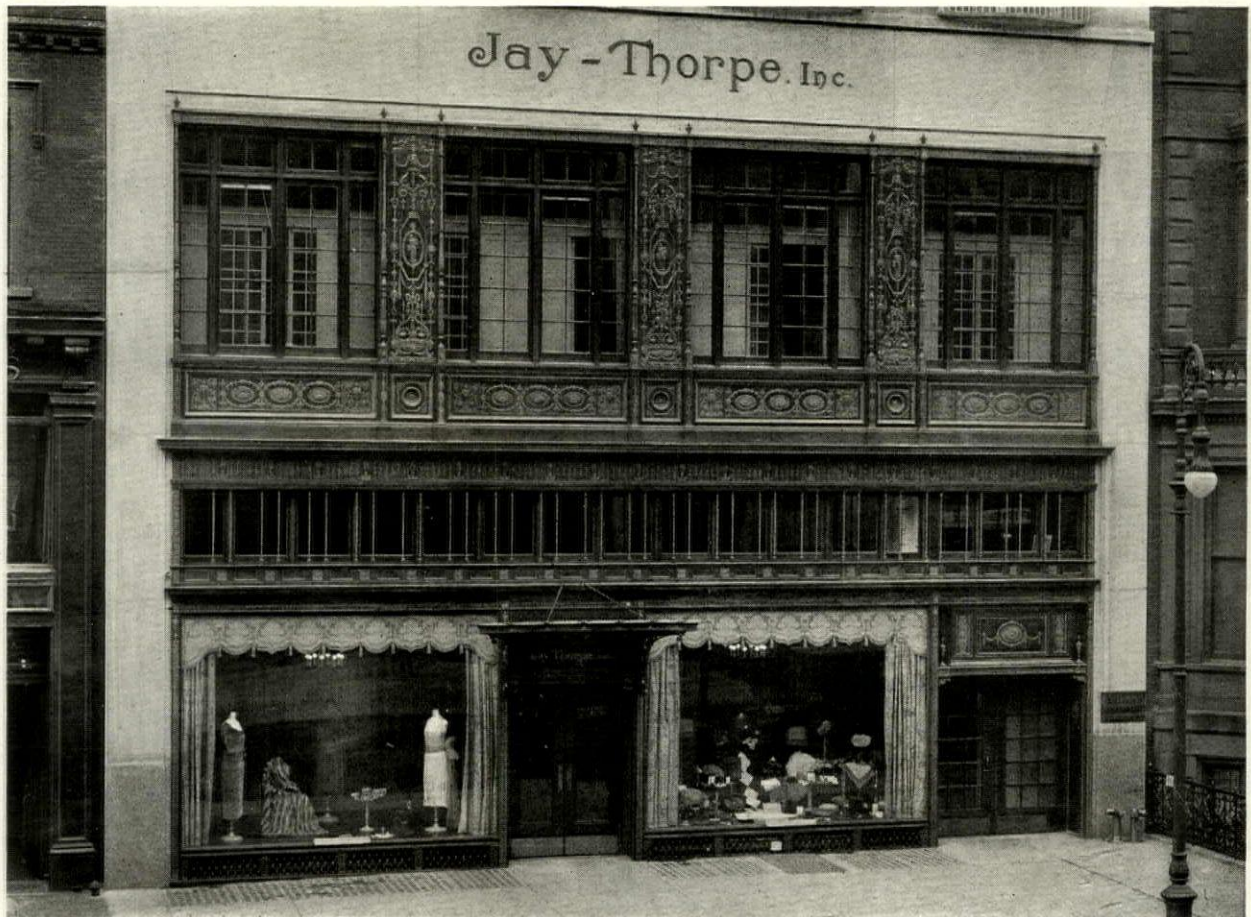
One End of Candy Counter



Part of the Candy Shop



RETAIL STORE FRONT IN PITTSBURGH
BUCHMAN & KAHN, ARCHITECTS



FRONT OF A SPECIALTY SHOP IN NEW YORK
BUCHMAN & KAHN, ARCHITECTS

OPPENHEIM COLLINS & CO.
PITTSBURGH

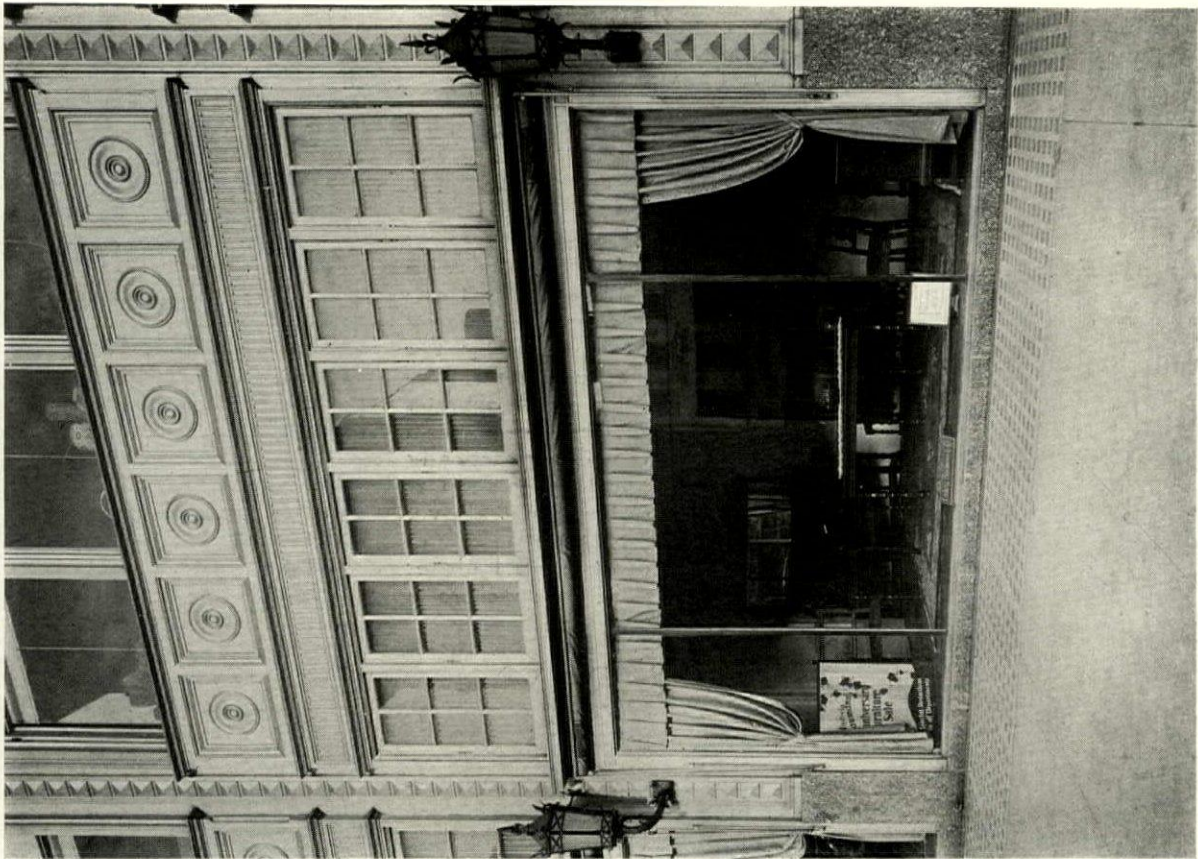
Upper Illustration, Plate 81

Where a retail store has many branches it seems to have become the custom, no matter how numerous or where located those branches may be, to employ a uniform type of architectural design for the entrance facades. Undoubtedly this custom must have commercial value because often a different or simpler design might better suit the local conditions. Although this store of Oppenheim Collins & Co. happens to be located in Pittsburgh, it is almost identical in appearance with their store on West 34th Street, New York. As the design for a large individual store front in two stories, it is interesting as meeting commercial requirements and yet having architectural detail. No shopkeeper could ask for larger or better placed show windows, more ample entrance doors, or a more imposing canopy—which so well serves to display the name of the firm both up and down the street. The height of the show windows above the sidewalk has been carefully considered for the proper display of both large and small articles of merchandise.

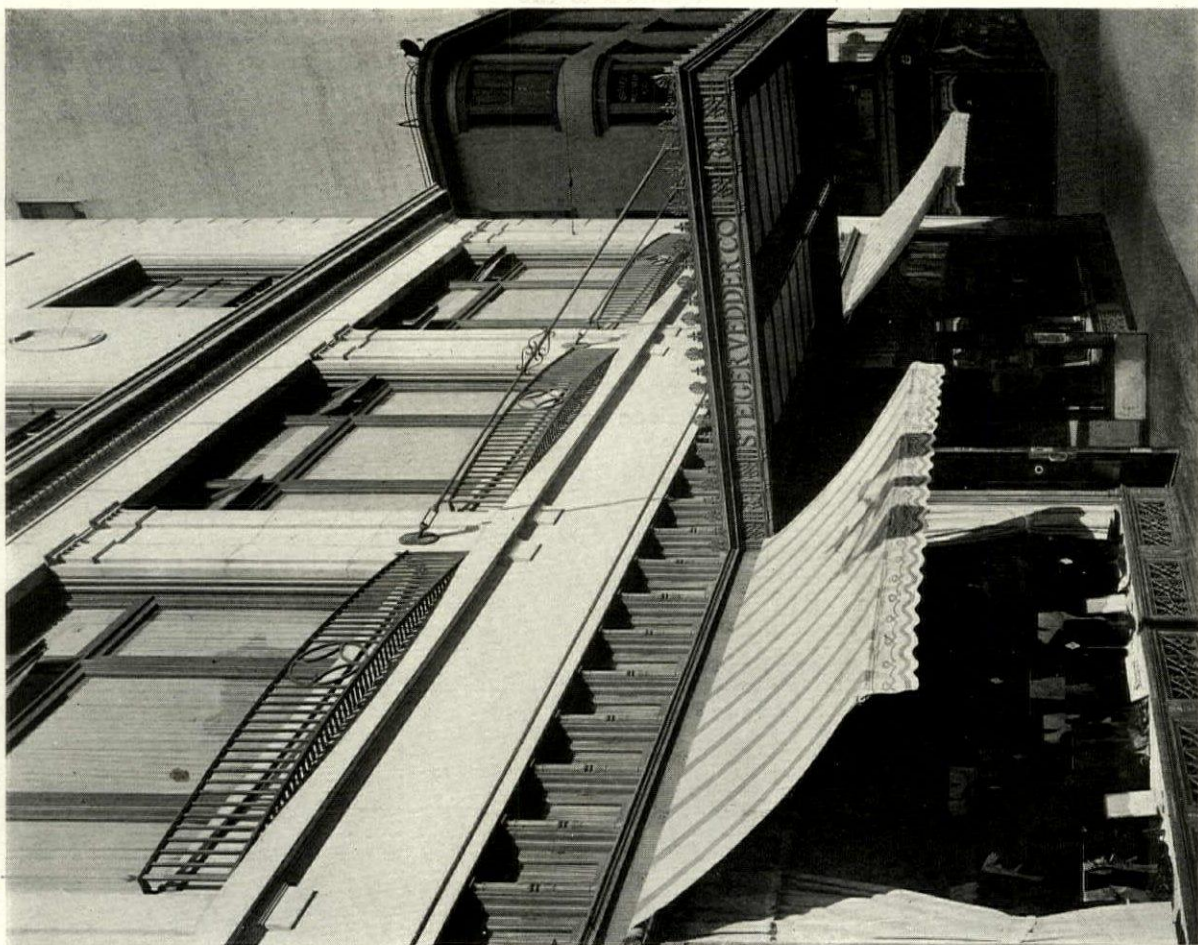
JAY-THORPE, INC., NEW YORK

Lower Illustration, Plate 81

Although enclosed in one large plain stone opening, the facade of the Jay-Thorpe, Inc. shop is really divided into two distinct parts. In the lower half are seen the entrance door and large show windows of the shop itself as well as the entrance to the elevators to the upper floors of the building. Above these essential street motifs is a long glass transom to light the store. The upper half of the design, on account of the use of the interior, which is fitted up for small display rooms, permitted the use of a much smaller scale of detail. Very ornate bronze panels and balusters surmounted by a delicate cornice surround the four windows which are given scale by the introduction of heavy mullions, transoms and muntins, dividing these openings into many panes of glass. The same well studied scale is carried out in the heavier cornice surmounting the lower half of the design, where slender balusters and small glass sashes continue the scale across the transom. As far as commercial requirements have permitted, the same refinement is observable in the details of the entrance door and windows.



SHOW WINDOW FOR LUDWIG BAUMANN & CO., NEW YORK
BUCHMAN & KAHN, ARCHITECTS



DETAIL OF A RETAIL STORE IN HARTFORD
BUCHMAN & KAHN, ARCHITECTS

LUDWIG BAUMANN & CO.
NEW YORK

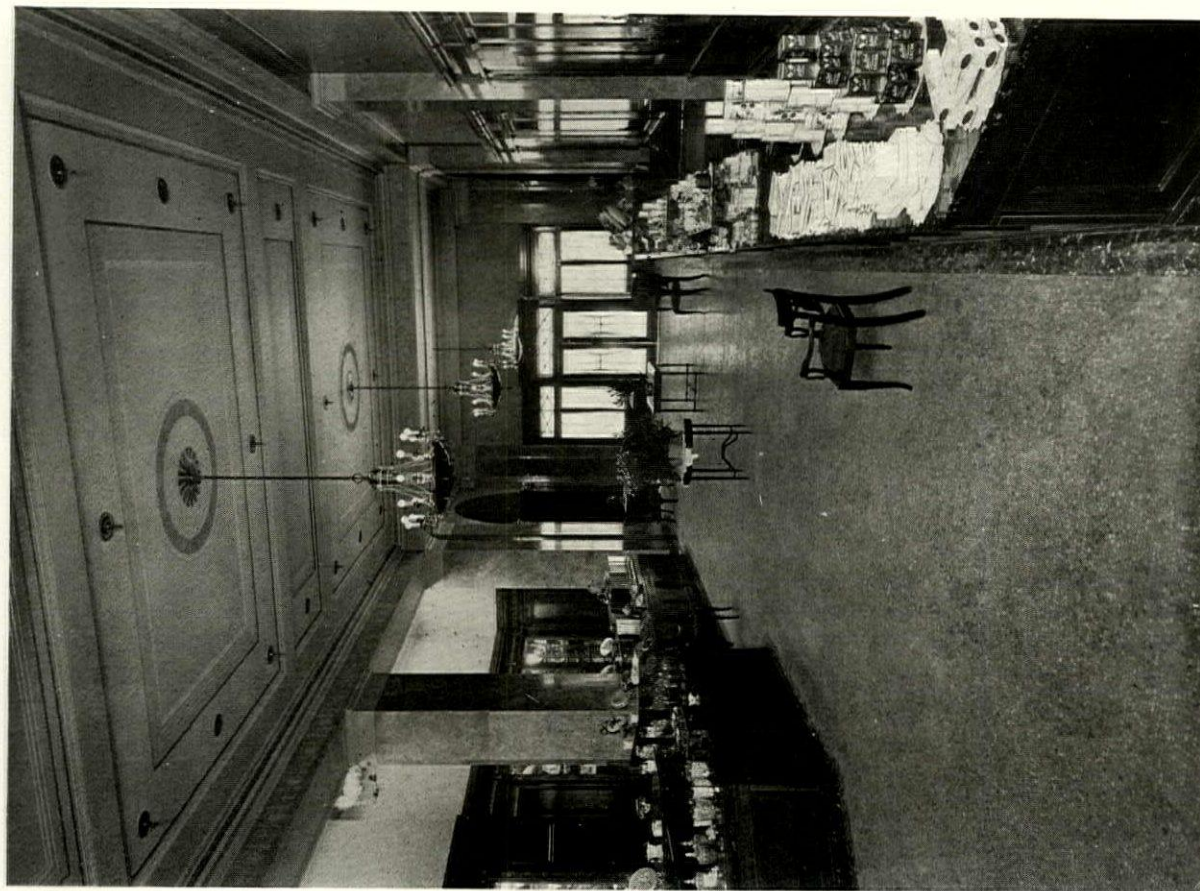
Upper Illustration, Plate 82

This large, low show window which is designed for the display of furniture is one of a series of similar windows in the new building of Ludwig Baumann & Co. It is shown here as an excellent example of a typical commercial window. Although divided into three divisions, the window necessarily shows no scale but is distinctly the open end of an interior room, protected by glazing from the elements. Any architectural treatment of such an extensive hole in the wall is practically impossible. To indicate any support for the architectural treatment above, it seems preferable in this type of design to frankly show the steel girder which makes possible so spacious a show window.

STEIGER VEDDER CO.
HARTFORD

Lower Illustration, Plate 82

In Hartford is found another interesting example of a well studied store front by Buchman & Kahn, Architects. The building itself is built of limestone in a simple adaptation of the Colonial style, the three upper stories showing well proportioned and well spaced fenestration to which sashes with small panes give scale. Unfortunately, in the two lower stories of the building architectural design had to be subordinated to commercial requirements, so that the usual large show windows and entrance doors with heavy canopies are found. The transom lights with their bronze baluster treatment give a continuous decorative note along both facades of the building. The triple arrangement of the design of the lower story has been repeated on the floor above.



INTERIOR OF CANDY STORE, MAILLARD'S
BUCHMAN & KAHN, ARCHITECTS



ENTRANCE FRONT, MAILLARD'S, NEW YORK
CROSS & CROSS, ARCHITECTS

MAILLARD'S, NEW YORK

Illustrations, Plate 83

This is one of several similar motifs which make up the design of the basement stories of the new building recently erected by Cross & Cross, Architects, on Madison Avenue. This particular bay serves as the front of Maillard's new candy shop and restaurant. A certain feeling of scale has been obtained by dividing this high opening with colonnettes, cornices, mullions, and panels of bronze, carried out simply in a style which suggests that of the brothers Adam. The recessed doorway gives added depth to the show windows on either side and a shadow value not found in surface doorways.

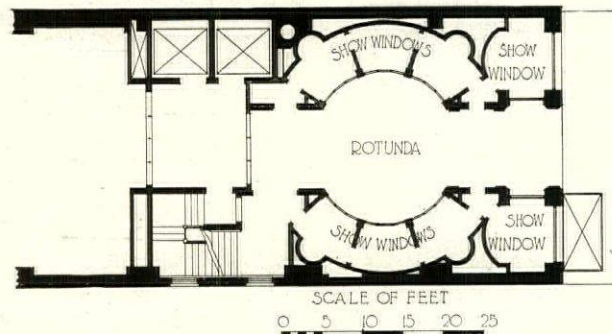


STREET FACADE OF A FIFTH AVENUE SHOP, NEW YORK
HARRY ALLAN JACOBS, ARCHITECT

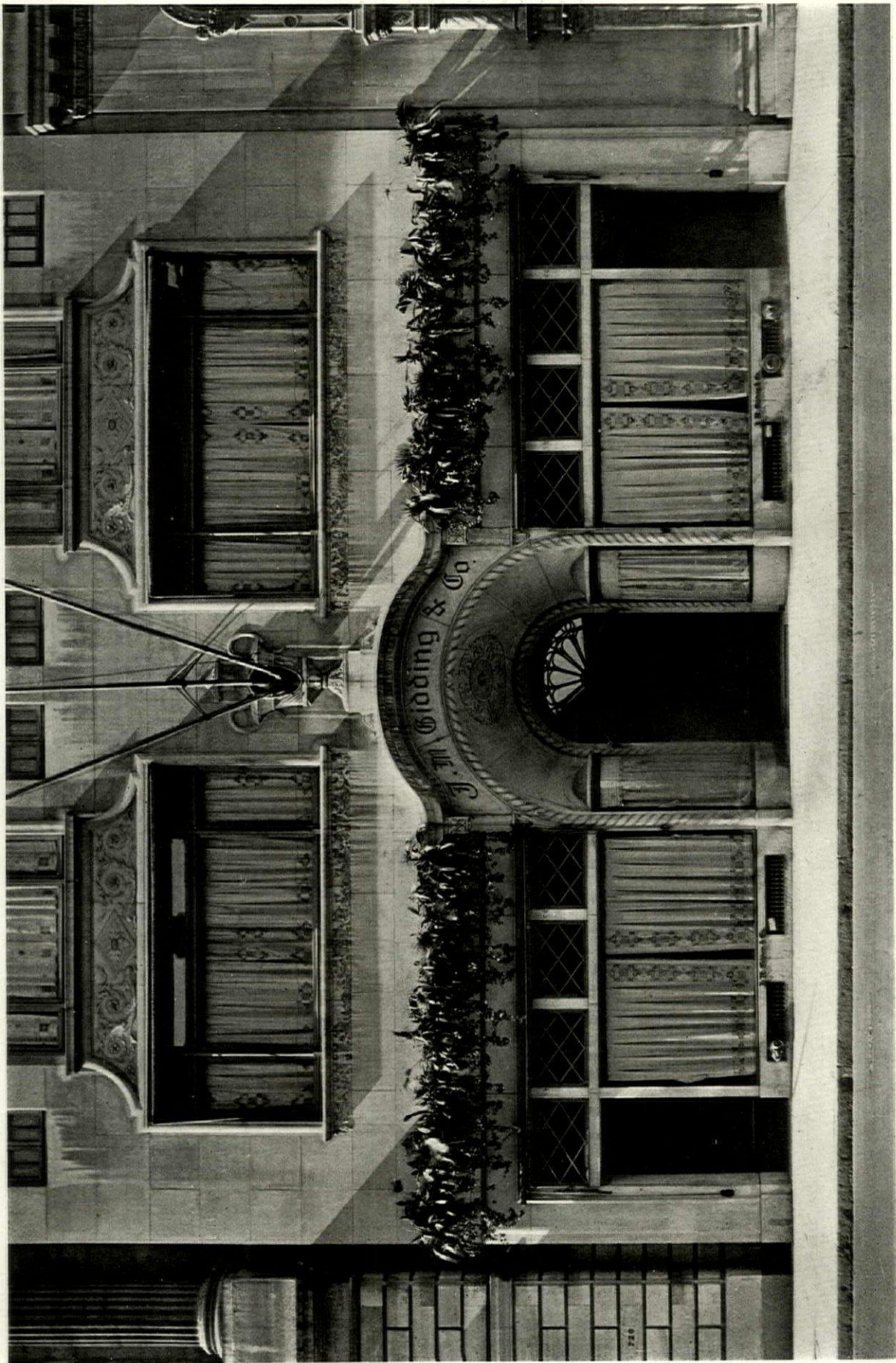
SHOP OF AVEDON & CO., INC.
NEW YORK

Illustration, Plate 84

In the design of the Avedon shop is found an example of the latest type of shop development, the "arcade," which is steadily becoming more and more popular, not only in cities of the East but in the Central and Far West as well. The "arcade type" has many advantages to offer, although few of them have been carried out with such architectural skill as in this shop where even the front show windows are an integral part of the architectural design. From the point of view of commercialism no type of shop front as successful has yet been designed. The would-be purchaser or "window shopper" may enter under the protection of the entrance arch and rotunda to examine, without annoyance from street crowds or solicitous clerks or inclement weather, the latest merchandise shown in the display windows. In addition to the two front windows, within the arched entrance there is a vaulted vestibule lined on either side with show windows. Thus with a comparatively small avenue frontage it becomes possible to provide a number of interior show windows sufficient for making at one time a complete display of the newest goods offered for sale within the store.



FIRST FLOOR PLAN



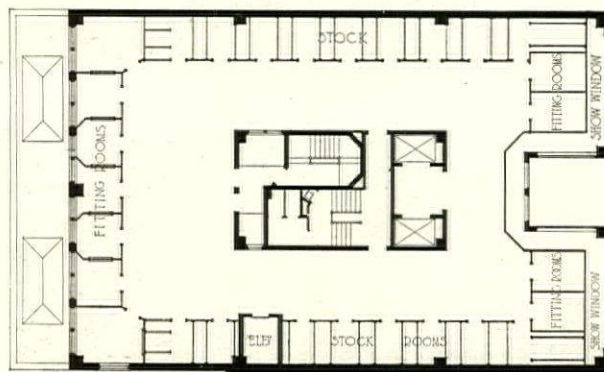
A RECENT STORE FACADE, NEW YORK
SEVERANCE & VAN ALLEN, ARCHITECTS

SHOP OF J. M. GIDDING & COMPANY, NEW YORK

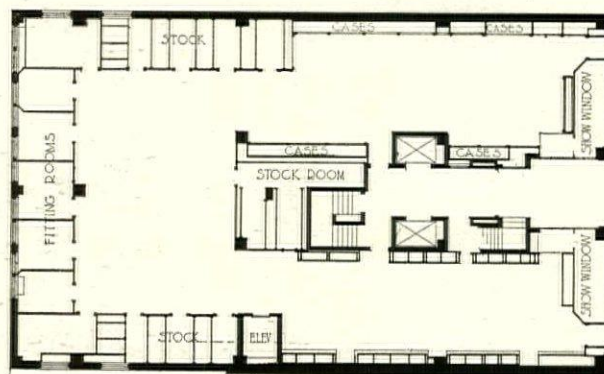
Illustration, Plate 85

Among the interesting shop designs completed within the last two years is that for J. M. Gidding & Company. The exterior shows a spacious recessed and arched entrance containing small show windows on either side. The location of the small side entrance gives balance and symmetry to the elevation of the store front proper. As so often happens in modern store fronts, there is little architectural relation or connection in spirit between the windows of the upper stories and the treatment of the first story. In spite of the lack of architectural unity and cohesion, the facade as a whole is interesting on account of the shape and location of the upper windows and the carefully placed and skillfully executed carved decorations.

The floor plans of the interior, shown here, have been logically worked out to meet the practical requirements of a firm specializing in one class of goods.

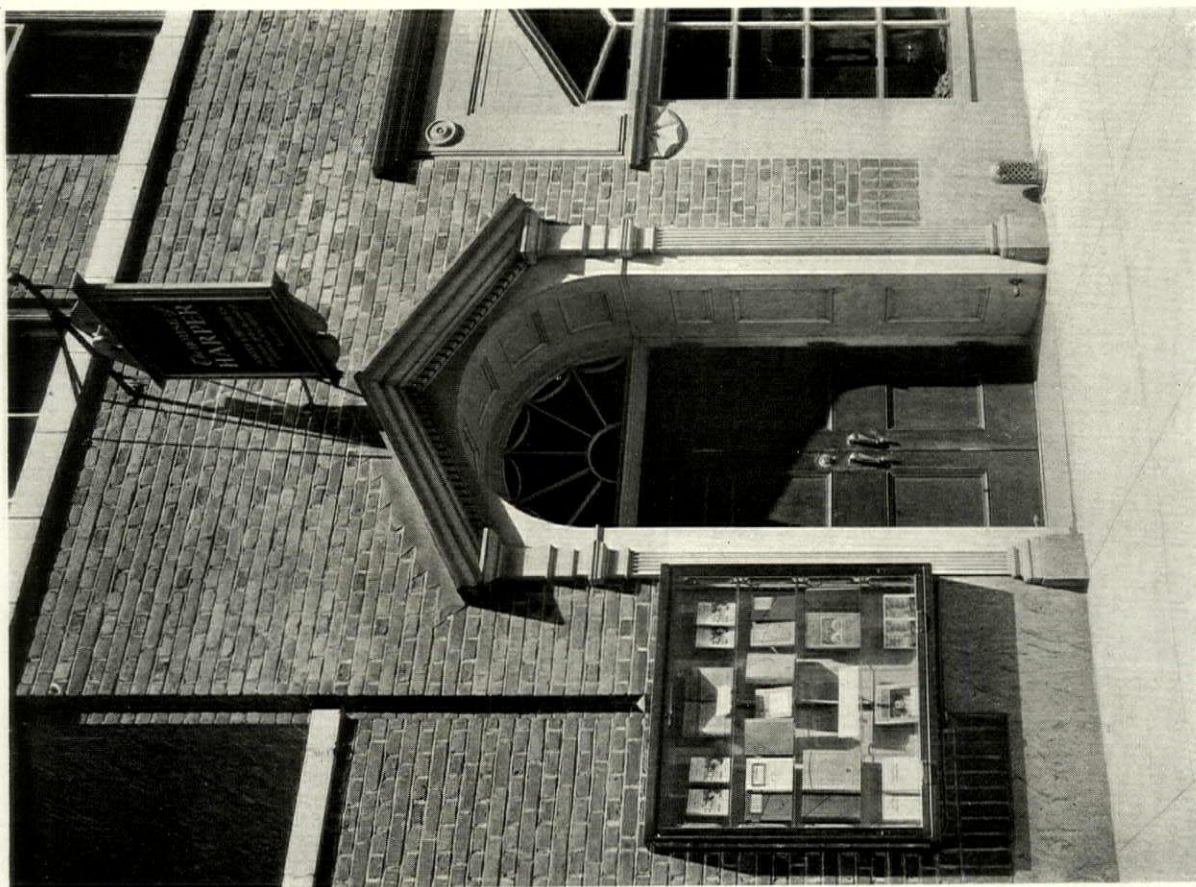


SECOND FLOOR PLAN

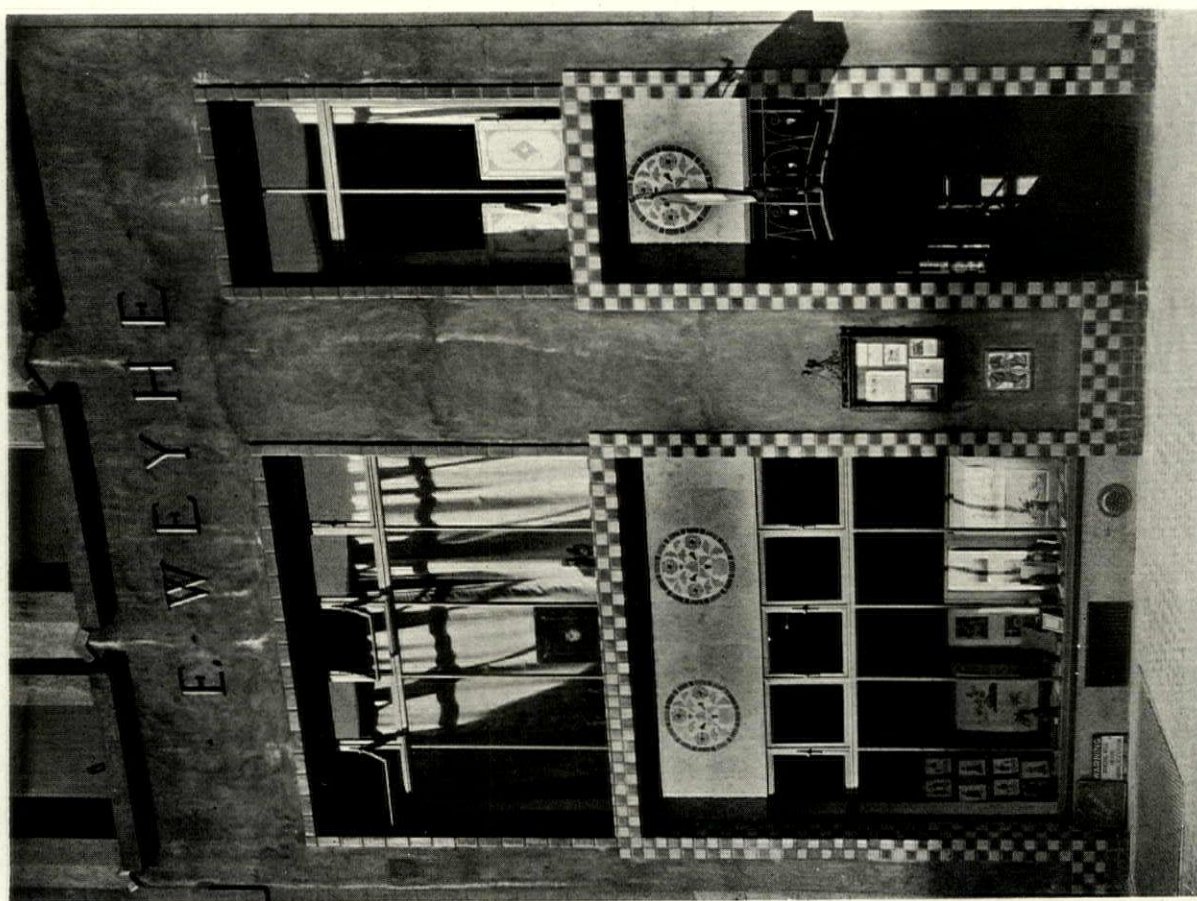


SCALE OF FEET
0 5 10 15 20 25 30 35

FIRST FLOOR PLAN



ENTRANCE DETAIL, HARPER BUILDING, NEW YORK
WARREN & WETMORE, ARCHITECTS



INTERESTING DESIGN FOR A BOOK SHOP
HENRY S. CHURCHILL, ARCHITECT

ENTRANCE DETAIL, HARPER
BUILDING, NEW YORK

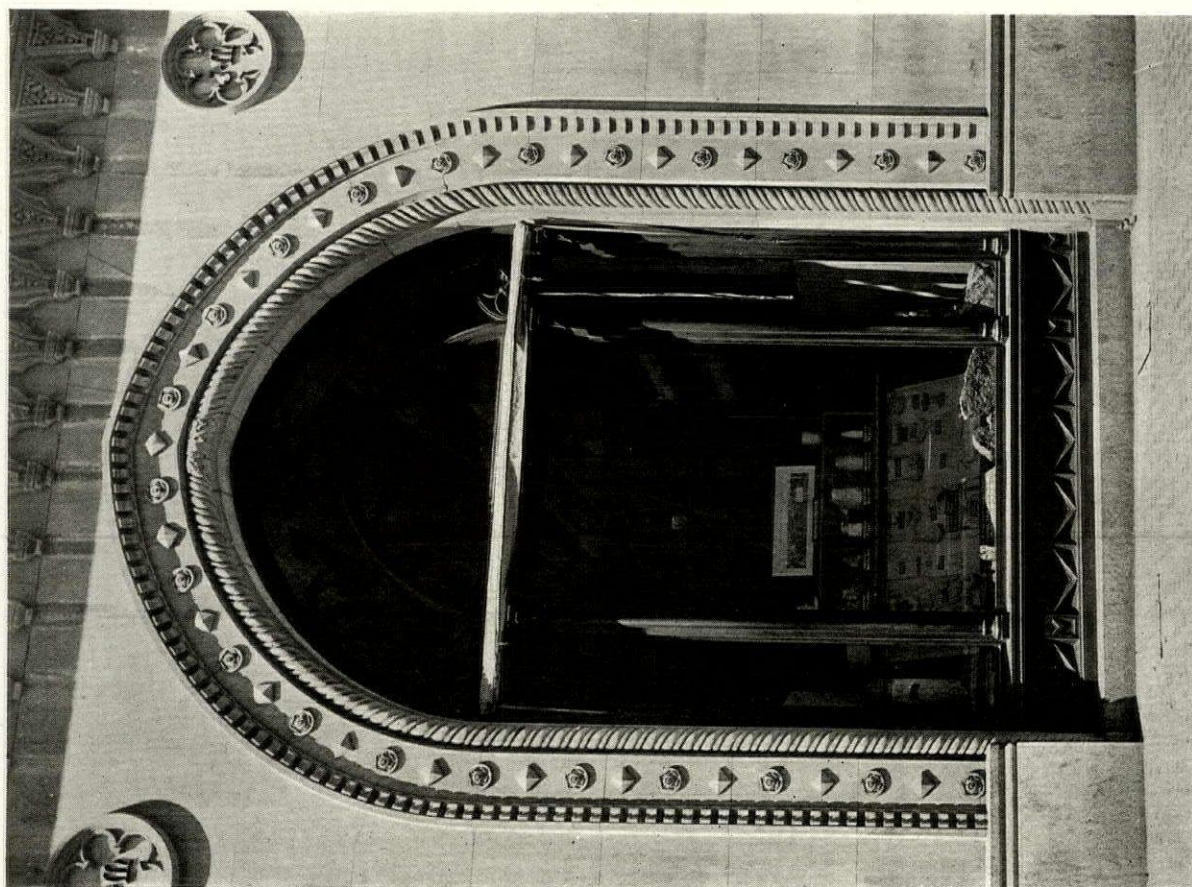
Upper Illustration, Plate 86

On East 33rd Street, Warren & Wetmore have recently completed a commercial building for the use of Harper & Brothers in which simplicity and straightforwardness of design are evident. The detail of the entrance door shown here is a particularly good example of the adaptation of Colonial precedent. The pilasters, pediment, mouldings and panels of this doorway are in excellent scale themselves, but do not seem to agree in either scale or character with the heavy treatment of the long, low show windows, in which horizontal instead of vertical panes of glass have given a strange effect.

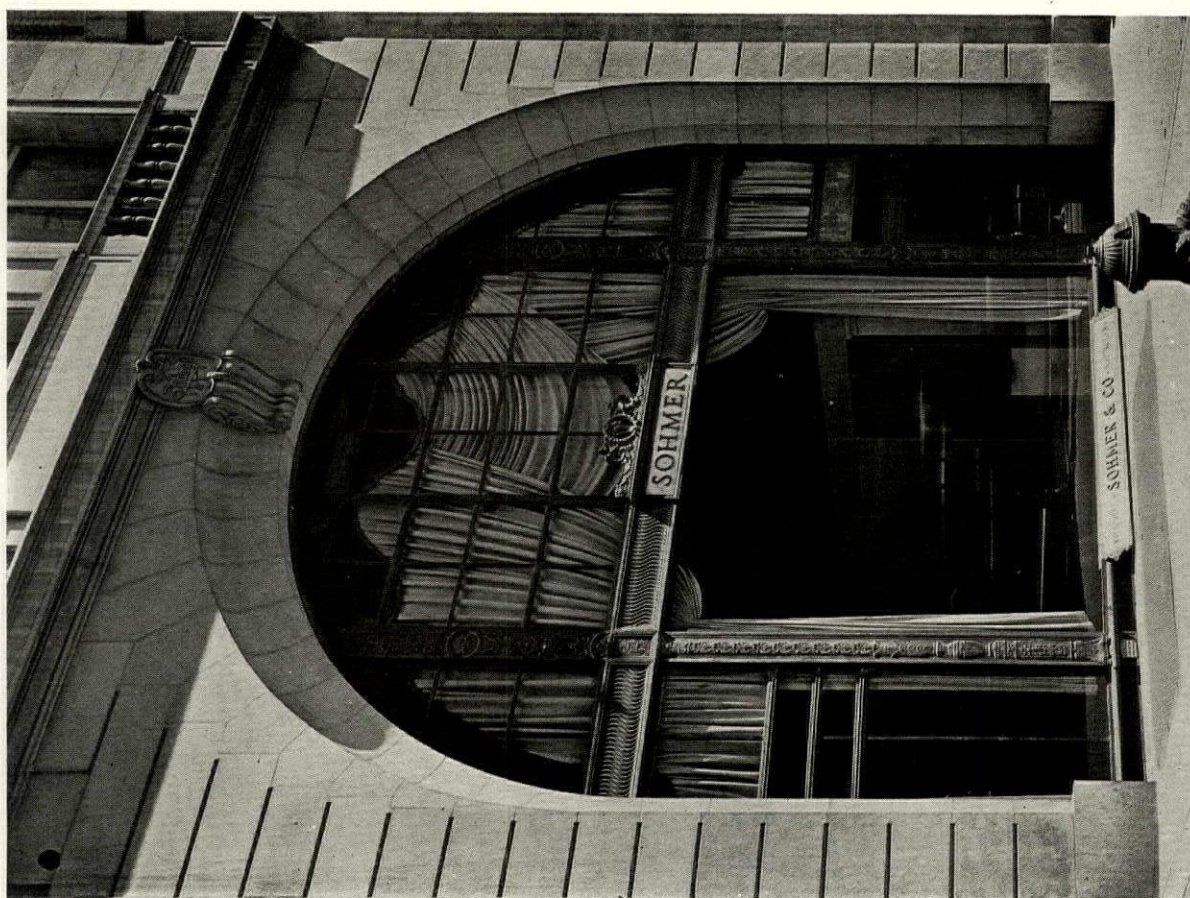
BOOK SHOP OF E. WEYHE
NEW YORK

Lower Illustration, Plate 86

It is unfortunate that in a black and white reproduction no idea of color may be obtained, for half of the interest or originality of this bookshop front is due to the strong colors combined. The walls are covered with deep terra cotta colored stucco which is relieved in the trim of the window and door openings by tile in rich blues and yellows. Over the entrance door and lower show window a further decorative effect has been secured by the introduction of medallions of decorative tile. In design the entrance and show windows are carried up into the second story in a somewhat similar treatment, giving an added height and dignity, which combined with the scale derived from the several divisions of each window produces a very original effect.



WINDOW DETAIL, JOHNS-MANVILLE, INC. BUILDING
LUDLOW & PEABODY, ARCHITECTS



RECENT FRONT FOR A PIANO SHOP
RANDOLPH H. ALMIROTY, ARCHITECT

JOHNS-MANVILLE, INC.
NEW YORK

Upper Illustration, Plate 87

This window is one of several which form the motifs of the basement story on the two street facades of the Johns-Manville, Inc. building. It has been selected as an excellent example of the combination of style and scale possible in a shop window. The design has been carried out in an adaptation of the Italian-Byzantine architecture found in Ravenna and many of the towns of northern Italy. The very character of this style has given an opportunity to use detail in small scale, which scale has been repeated in the unusually well designed bronze detail of the window frame itself. This detail consists in simple Gothic colonnettes supporting a delicate cornice upon which rests the transom of the window. The bronze framework of this transom sash continues the line of the colonnettes and introduces as decorative features quatrefoil designs in open bronzework.

SHOP OF SOHMER & CO.
NEW YORK

Lower Illustration, Plate 87

This shop front affords an interesting study in the relation of architectural design to requirements. To show off pianos to their full advantage, commercial needs seem to demand that there shall be at least one large show window of plate glass, so in this arrangement we find a stone arch enframingent suggestive of the latest period of Italian Renaissance. Bronze detail, executed with extreme delicacy, gives successful scale to this large opening and forms a perfect setting for a single show window. Not only do the bronze panels and muntins of the upper half of the window add interest to the entire design, but the window hangings themselves give a pleasing expression of unity and coherence to the entire building.



EXTERIOR OF NEW STORE FOR STEIN & BLAINE
RENWICK, ASPINWALL & TUCKER, ARCHITECTS



A SHOP FRONT IN THE RENAISSANCE STYLE
HARRY ALLAN JACOBS, ARCHITECT

NEW STORE FOR STEIN & BLAINE
NEW YORK

Upper Illustration, Plate 88

Executed as a simple adaptation of the French style of Francis I, this well studied design shows an interesting balance in detail and appreciation of scale. The center motif is a single high, four-centered arched opening in which a combination of small window panes in the upper portion and bronze panels in quatrefoil design across the center of the opening give a definite scale to the entire design. In the lower half of this opening, commercial requirements necessitated a single display window, in which the many folds of the draperies repeat the small scale of the details above.

HARDMAN, PECK & CO.
NEW YORK

Lower Illustration, Plate 88

Here is a design in two parts in which unfortunately there is little relation between the upper and lower stories. But the design as a whole shows a degree of study for an architectural effect which makes it worthy of consideration. The lower half is divided into a single show window sufficiently low and large for the display of pianos and a single entrance with elaborate carved ornamentation above. A long horizontal panel containing the name of the firm helps to tie together the design of the lower half of the facade. The three well proportioned arches which form the second story arcade make an interesting architectural motif replete with possibilities for use as a shop front design. Even here, although located on the second floor, a large show window is introduced a few feet behind the arcade. This treatment has recently been carried out in the heavier style of the Spanish Renaissance in some of the newer shops in Los Angeles.

Recent Shop Fronts in New England

By DANA SOMES

OUR *maitresse jalouse*, Architecture, is fast becoming the handmaiden of the shopkeepers, and with quickening pulse we note that she is more and more being made to serve the ends of Advertising,—goddess from the machine of business. The shopkeepers are seeing her value, and in these days of scarcity of domestic labor are becoming willing to pay the wages of this humble handmaiden. So in the larger cities, as the value of well designed shop fronts is becoming more appreciated, little oases in a desert of plate glass and cast iron are beginning to dot the streets with better shop facades.

It is also being recognized that all store front problems are not alike and that the functions of the store window may be widely dissimilar. Paradoxical as it may seem, the store window, with some exceptions, is no longer intended to serve as a real window. Occasionally the entire interior of a shop may be treated as show space, and under such circumstances the front does become window *per se*, through which the passer-by may glimpse a view of the whole interior. This is well illustrated in the case of the Thomas F. Galvin, Inc.

shop in Copley Square, Boston, designed by Elsie Cobb Wilson, where a charming vista of flowers and plants extending to the rear of the shop is disclosed. Usually, however, the function of the modern store window is to serve as a display place for wares for advertising purposes, and in such cases it is generally cut off by more or less opaque walls from the rest of the shop.

As a means of lighting, the shop window has ceased to function. The treatment of this sort of window may be roughly classified into three different types: The first type of treatment is that which by its general character identifies and advertises the store without placing particular emphasis on display. In this sort of design the architect may exercise considerable freedom. He may introduce orders and pilasters and small panes to his heart's content and still leave the proprietor confident that the front will serve its purpose and attract attention from afar. For the most part such types seem to be confined to candy shops, tea rooms and the like. Considerations

of display being secondary, it follows that these fronts are rather shallow, and the entrances are placed as near the sidewalk as is conveniently possible. New England cities and towns are favored by a number of good examples of this sort, of which a few of the most recent are here illustrated. For example, the front of Pollard's optical supply shop on Newbury Street, Boston, is of a character which unmistakably expresses the use of this shop and has been developed in a pleasing scale which focuses attention primarily to the nature of the business rather than to a prolonged inspection of the window display.

In view of the fact that in this type of business an extended display is unnecessary, the designer has sought for architectural character rather than for the brilliantly lighted arcaded front which might be required for other types of occupancy. A similar example is shown in the illustration of Sargent's candy shop in Providence on page 250.

The second general type is the most common and the hardest problem for the architect, and presents the greatest opportunity for a contest with the owner, for he will begrudge the use of



Exterior of Flower Shop, Copley Square, Boston
Designed by Elsie Cobb Wilson

a fraction of an inch for anything but plate glass, and unfortunately his attitude is absolutely reasonable. In this type the primary consideration is to provide the show window intended for the display of a large assortment of miscellaneous small objects without any particular attempt at grouping and often with no relation one to another. The proprietor justly claims that the number of objects shown bears direct ratio to the advertising obtained, and hence he must have the maximum unobstructed space. If the architect can squeeze out a few inches on each end of the front to satisfy his craving for some apparent support for several stories of solid masonry above, he may count himself lucky. Fortunately for him, however, it is difficult to attract the passing attention to a greater height than 9 or 10 feet, and above the transom line there is some opportunity to bring the plate glass below into some semblance of human scale and structural reasonableness. This has been done admirably in the Carl H. Skinner jewelry shop on Boylston Street, Boston, by Shepard & Stearns,



Optical Supply Shop, Newbury Street, Boston
Henry Bailey Alden, Architect



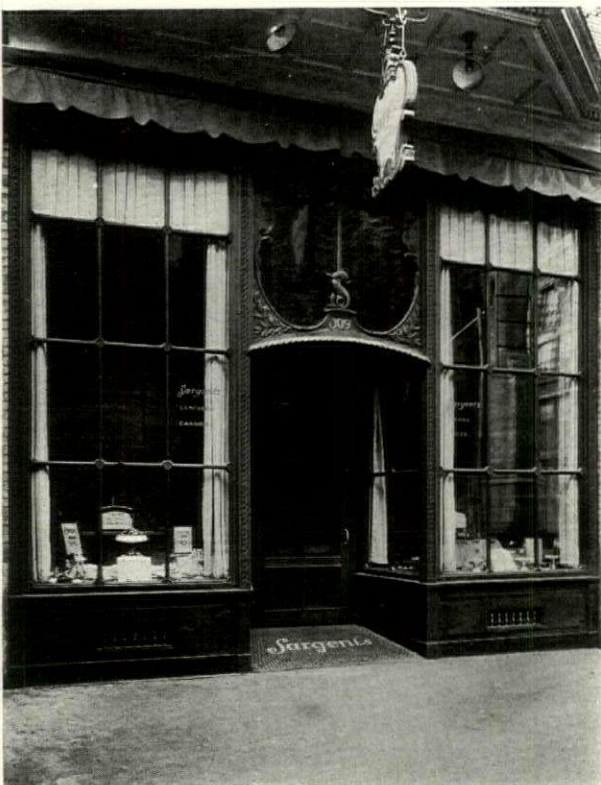
Scale Given by Well Designed Transoms
Shepard & Stearns, Architects

where black leaded glass with silver rosettes has an admirable sparkle, serving to emphasize the display. An equally effective recent example is the shoe shop by Strickland, Blodgett & Law, designed for "Queen Quality" on Tremont Street. Here much of the trouble from reflection has been cleverly overcome by making the front slightly concave. In the block on Charles Street a simple attempt has been made to bring the shops into scale with the rest of the building by colonnettes and small panes above the transom, small panes being used at windows above.

The third type of treatment is that in which each individual show window may be considered as a

framed picture to hold one or two large objects—manikins, automobiles, pianos, or what not. It is in this type that the architect has unlimited opportunities both in plan and elevation to exercise his ingenuity, and yet, with the exception of a few New York examples, the possibilities have barely begun to be developed. It is usual in this problem to devote a deep area of the front of the store to show space, with the result that the entrance door is recessed a long way back from the street and flanked by windows on either side. In the past these windows have been entirely of plate glass, and in consequence the unframed picture within has floated off into space, failing to attract the maximum attention. In the future such windows will have well defined frames for each object or group of objects, composed of architectural features or at least drapery. In such cases the approach is flanked as in an art museum by a series of pictures, each complete in itself and each leaving a definite impression on the mind. This idea is usually at first not within the conception of the proprietor of the store, but a little visual demonstration with framed and unframed pictures will usually convince him of its value. A further development of this idea is the setting of kiosk-like showcases in the midst of the entranceway, housing perhaps a single gown manikin visible from all sides. Of course, the practical effect of this deep sort of entrance is to greatly increase the linear footage of show front, and the plan may legitimately become labyrinthine with this object in view. In Boston there are few examples of this type as compared with other cities. The Dorothy Dodd Shoe Co. store shows a successful treatment of the deep entrance, although because of their use for display of small objects, the windows are not framed individually.

Bearing in mind the pictorial quality of such windows, careful attention should be paid to the back wall of the window in search of color and texture which will serve as effective backgrounds for its



Facade of Candy Shop, Providence
Strickland, Blodgett & Law, Architects

ever-changing display. With the recent development of texture paints, many interesting and inexpensive wall surfaces are now used in place of the conventional wood paneling. Often in gown shops or furniture stores the entire space is treated as the interior of a room and furnished as such,—the envious passer-by perhaps beholding an *intime* picture of family life at the breakfast table as it might become by the use of the "One Perfect Dining Room Set."

The discussion of the deep entrance leads us into the subject of the entrance door. In the normal 25- or 30-foot front, should there be a single entrance or side entrances? Each problem being different, it is difficult to lay down arbitrary rules, but in the majority of cases the single central entrance would seem to be the most desirable. Shoppers, like other human beings, are creatures of habit, and it has been established that the counter space on the right-hand side of the entrance for the first 20 feet is astonishingly more frequented than any other part of the store. This being the case, an entrance door at the right-hand side of the shop crowds this most valuable space. On the other hand, the left-hand entrance throws the customers toward the back wall of the show window and blocks the circulation of the emerging purchasers. In any case, this problem is determined largely by the character of the shop and the methods of sale. We need have considerably less worry over the opportunities for ample circulation for the occasional purchaser in a piano store than for the crowd of a "5 and 10."

Perhaps one of the most harrowing tortures that the architect has to experience is that of seeing his thoroughly satisfying facade, some weeks after its completion, blossom out with all manner of heterogeneous signs hung in sketchy disregard of cornices, entablatures and the like. The architect's guardianship terminated, the sign salesman has grabbed the owner, and "scientific salesmanship" has resulted in signs—red, green, blue, gold, silver and brass, not to mention the animated electric. The only reasonable, sure way of combating this menace is to provide amply in the original design for all necessary signs both by day and by night, and in the



Building Containing Shops and Apartments, Charles Street, Boston
Dana Somes, Architect

preliminary sketch season gently to convince the proprietor that his name legibly inscribed once is just as effective as if repeated 35 times in as many square feet of space. Having done this, the designer must resign himself to the almost inevitable additions. It follows that it is usually desirable to provide for lighting the signs effectively. This is usually best accomplished by flood-lighting from concealed lights in the cornice soffit. Often hanging brackets and lanterns can be used as attractive features of the design, particularly if they suggest the use to which the store is put. The lighting of the

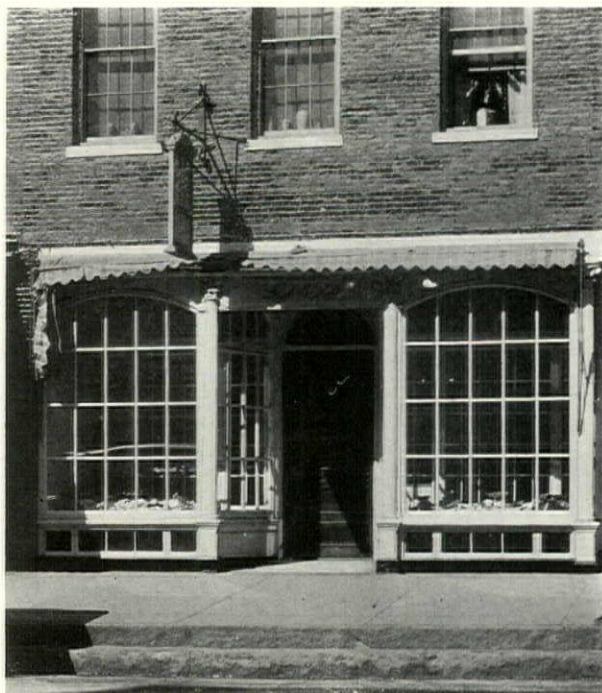


A Slightly Concave Front, Tremont Street, Boston
Strickland, Blodgett & Law, Architects

show windows is most important and is usually best accomplished by flood-lighting from behind the transom or jambs. As an exception to this method, the shaded hanging lamps in the Skinner shop, throwing all the light downward on the bits of jewelry below, are most effective and useful.

In their interior lighting, shops seem to be coming more and more to the use of artificial light at all hours. Probably this is due principally to the fact that the show windows have now cut off most of the light from the front. However, where these windows are not too deep, it has become generally customary to use various kinds of prismatic glass above the transoms to throw the light over the tops of the windows into the store. This is worth while not only for the light but for the opportunity it gives for a little variety in the design of even the simplest front, an opportunity which is generally limited at best.

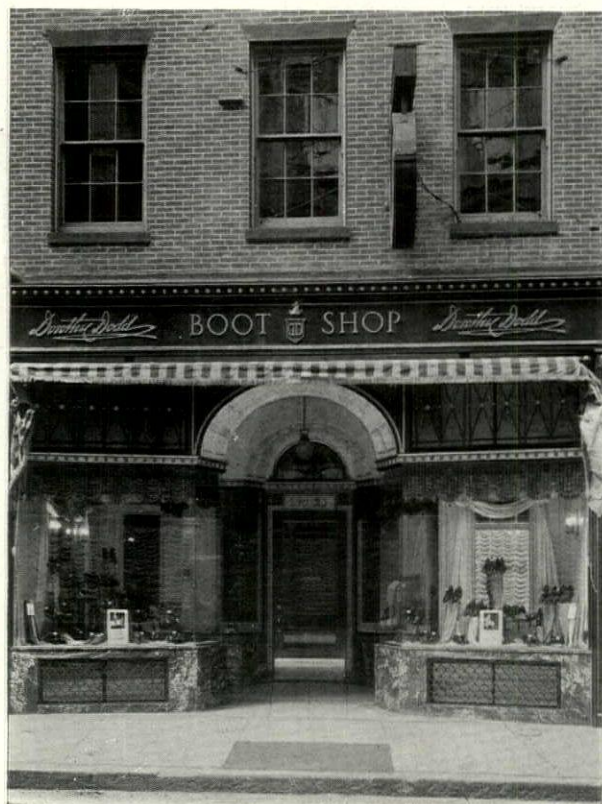
We may well be encouraged by the attention given



Well Designed and of Excellent Scale
Strickland, Blodgett & Law, Architects

to this subject among the shopkeepers, and we may look in the future for more and more interesting developments in this comparatively new field, particularly if architects will bear in mind that owners are paying a large percentage of their rent for frontage and that the function of every square inch of such frontage is to advertise the goods within and not to serve as a screen on which the architect may display his entire repertoire of technical knowledge. The possibilities for original ideas of treatment are unlimited and as yet almost entirely undeveloped. The problem is not unlike that of the

theater stage. We have only to contrast the stage-set of a decade ago with that of the present to realize its tremendous development under the inspiration of trained men. The creative imagination inherent in every architect can carry the display value of the shop in every way far beyond the point where shopkeepers and advertising men are now floundering.



"Deep Entrance" Front from Street
Strickland, Blodgett & Law, Architects



Effective Arrangement of Space in Vestibule
Note the Extent of Show Windows

Two Specialty Shops in Cleveland

WHERE A PERSONAL DESIGN WAS PERSONALLY SUPERVISED

By CARL W. BROEMEL

COÖPERATION is essential to every successful enterprise, whether it be building or business. For an architect to achieve success in any building he may undertake to design and construct he needs, first, the complete confidence and enthusiastic assistance of his client and, second, the hearty coöperation and intelligent support of his contractor. No matter how much time an architect may spend in his drafting room upon his drawings, if they are not intelligently and consistently carried out by the contractor his time in creating his building on paper has been wasted. Enthusiasm, like cheerfulness, is a contagious element of personal expression; it reproduces itself in all who come under its magnetic influence.

Enthusiastic coöperation between architect and craftsmen has made possible the artistic success of these two unusual shops, one a flower shop for the Jones-Russell Company, and the other a shop for the Mac Diarmid Candy Company, where have been demonstrated the theories that it is possible to interpret architecture in an artistic manner, and to increase the profits of business by housing it in attractive surroundings. In other words, it is good business to build a beautiful store, interpreting architecture from an artist's point of view. Personality plays an important part in architecture, quite as much as in sculpture or painting. But personality in design to be successful should be followed by the personal supervision of the designer in the execution of his design, whether he be architect or artist. Although the artist's viewpoint may be fundamentally different from that of the trained architect, the ultimate purpose of both is to create beauty. No design of the architect can be considered a perfect piece of architecture if it does not combine beauty with practical planning.

The side lights concerning the flower store and the candy shop are really of more interest than a description, inasmuch as the work delivers its own message. For instance, that a shoemaker should

attempt to design a beautiful interior is hardly fair to himself or to the owner; that an architect should do so is both fair and natural, but that an artist with a meager experience but great enthusiasm for such work should do so ought to be not only possible but a natural endeavor. For, as an artist, he will endeavor to be individual, and, unhampered by an architectural training, he is quite certain to attack the problem from an entirely different angle. So much for the designer, but much more depends on

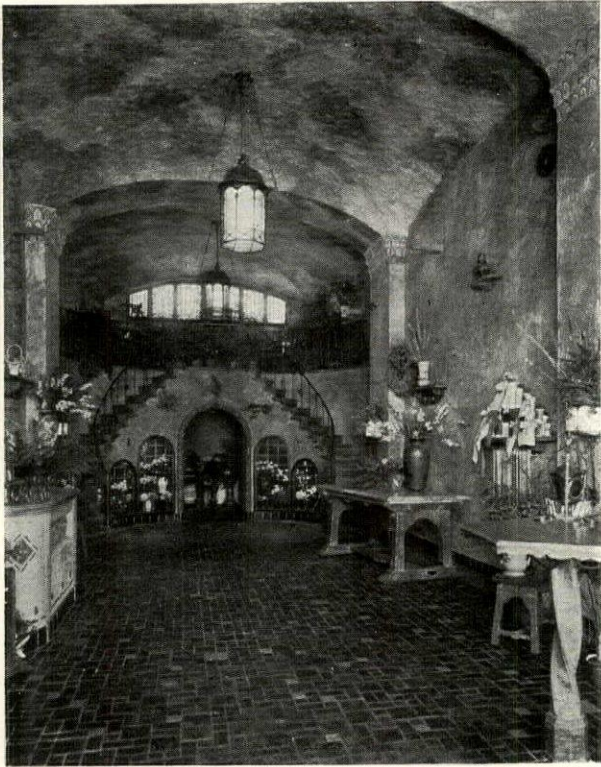
the clients, which we will make brief by saying that in these two cases they were the best of fellows, anxious that their stores be a great success. Before starting the designing of the flower store, shops in several large cities were investigated, and it was astonishing to find not only mediocrity in the stores themselves but also an utter lack of real ideas, combined not infrequently with poor planning. It seemed that the people who sold flowers were entirely unaware of the beautiful commodity they were handling and had all settled down in a rut, building stereotyped stores and laying much stress on white enameled



Entrance, Jones-Russell Company Flower Shop
Carl W. Broemel, Architect

woodwork and German silver. In short, the setting for an outdoor product, such as flowers, was wholly hard and artificial, having no relation whatever to nature's most exquisite creation. It seemed that from the time of the first conference on this flower shop in Cleveland, the idea as it finally stands was resting in the back of the architect's mind in sufficiently tangible form, and that almost from the beginning the main idea was established, and into it, of course, went all the enthusiasm of a novice, fancy free and unfettered by style or precedent. He could find nowhere an appropriate style other than perhaps the Persian and Spanish, and upon investigation he found that these two styles of architecture are largely influenced by semi-outdoor life and usually act as a natural background for flowers and shrubs. They seemed especially suited to the purpose.

If one can trace any influence in the design of the



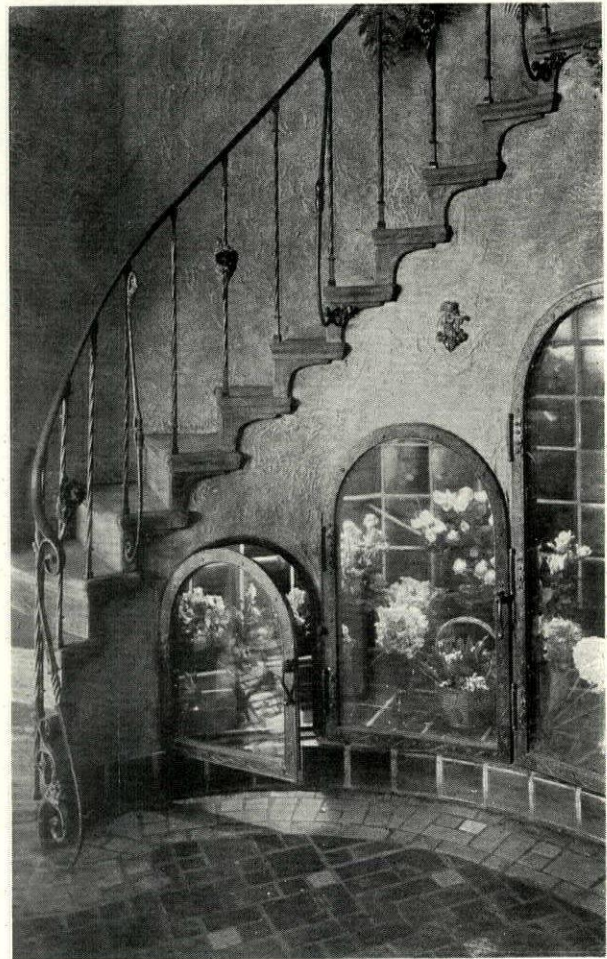
View From the Entrance

Jones-Russell Company flower store, it is from these two types of architecture and the drawings of Edmond Dulac. This was, of course, but half, and in the task of planning and adapting these ideas the architect put the cart before the horse by arriving at his idea first and adjusting the practical needs to it afterwards. Surely, not so bad either, to climb the pink cloud and then view the situation and its requirements from a lofty viewpoint.

The dimensions of the store were 18 feet in width, the same in height, and 60 feet long. With this space the architect was given a free hand, the only requirement being a specified demand for a good display refrigerator for cut flowers, and a mezzanine with an attractive stairway. The provision of either of these two things was not hard, but the two together, at first, seemed impossible, owing to the narrowness of the store. In the way it was finally worked out, the solving of the stairway problem immediately brought about a happy solution of that of the refrigerator. However, it placed the refrigerator in a precarious position under the stairway, which difficulty was overcome by suspending the stairway into the space below, thus allowing for a baffle wall of equal height to follow the curve of the mezzanine, which gives the hot air an equal distance to travel. This, it is believed, is the reason for the unusual success of this refrigerator. The system of refrigerating employed is the direct expansion ammonia with brine holdover tanks, the machine for which is installed in the basement, while the brine tanks are in back of the baffle wall. This baffle also forms an attractive background for the flowers,

for instead of being of the customary mirrors, it is of black tile 10 inches square with wrought iron inserts literally creeping out of the joints at intervals, from which are suspended vessels for orchids, etc. Inasmuch as the florist's refrigerator is usually the product of an ice engineer, and a white enameled affair but one step better than that used for storing meat, one will recognize its unusual character.

The first sensation upon entering the store is like that of entering a garden. The dark chocolate colored tile floor with its variegated inserts resembles the rich earth, while here and there warm lights glow behind ferns and plants. Nothing startles, while everything pleases, and at every turn one finds delightful surprises, maintaining interest through each succeeding visit. The furnishings are not like those of a store, with the exception of the cash register. There are no counters or show cases, but on the walls are many shelves of different lengths and designs, arranged as an artist would plan a composition, with no attempt at symmetry but much care for artistic grouping and placing. The walls and vaulted ceiling are of rough plaster; the ceiling, in tones of blue, green and tan, is darker than the walls which are warmer in various shades of sienna, gray and lavender. The walls and ceiling, which were treated in transparent fresco directly on the wet plaster, received the personal supervision of the architect, and



Curving Stairway to Mezzanine

the decorating was done simultaneously with the completion of the plastering. This is really the proper way of handling rough plaster walls. Furthermore, it is more durable and washable than oil paint, costs less, and as the process is one with that of plastering, no time is lost waiting for the plaster to dry, as the wet plaster receives but one immediate application. The work, however, must be done by an artist, as it requires spontaneous and artistic application of the colors. Most of the woodwork, which is all adz-finished oak, is carved in some form or other. The wrought iron is perhaps the best that can be seen in Cleveland. The cashier's desk and the work table, also the card desk, invite the visitor's immediate attention upon entering, the latter being a solid piece of oak carved into a twisted column, something like a mushroom, with a deep red, glowing lantern surmounting the top. Nothing has been slighted, from the outside to the rear of this store, and every detail seems to find its logical relation to the whole.

The MacDiarmid candy store is like the flower store in one respect only, that it is a fitting place for candy, just as the flower store is designed as a background for flowers. This store is almost next door to the other, but it is much smaller in length, and has an irregular depth. The interior has been confined to practically a cube of 18 feet in width, length



Toned Plaster Walls; Floor of Tiles; Woodwork, Adz-Finished Oak



Desk for the Cashier

and height. However, the rear of the store in reality runs at an angle, starting immediately back of the false door at the right and giving a depth of some 10 feet on the left sufficient, happily, for a stairway to the basement. In the main this interior is more like a jewel box, smaller but much finer and more elegantly fitted than the flower store. It seems a perfect setting for attractive boxes of bonbons, and this was constantly kept foremost in mind. In this shop again he was able to work fancy free. Such license, perhaps, leads to a certain lack of style, but withal a charming freshness and originality can be attained.

Upon entering the candy store one is immediately in the middle of the shop area, which has been confined to a horseshoe plan. The general color scheme is subdued in tone, the walls being a modified rough plaster in an old ivory shading toward a darker and colder tint as it reaches the intersections. The ceiling is several shades darker and more of a lavender cast, with a purple and gold glazed hollow cove moulding. Within this panel is a group of smaller panels, while centered down the middle are three low reliefs of fruits and flowers in rich color. The cornice, which by the way does not return around the room, is hand-modeled, not run. It has very little color other than a smoky warm gray, blending softly from the walls into the darker tint of the ceiling. The focal center of the store is the cabinet at the curve of the horseshoe, above which is a shallow shell decorated in low toned colors with a gold "M" surrounded by the Scotch thistle modeled in relief.

Directly in front of this ornamental cabinet, sur-

mounted on a pedestal, is a magnificent bronze, the work of Lucy Perkins Ripley. Much could be said on the merits of this dignified figure, and much more on the fact that a candy store has seen fit to favor art in commercial life to this degree. The woodwork of the shop is its main attraction, and here again one feels the luxury and richness which seem to harmonize so well with the odor of chocolate. It is of American walnut with some Circassian, and is a magnificent piece of craftsmanship, as it is rich in carving, curved panels and drawers, circular and curved mouldings, with ebony and rosewood inlays and applications. The glass and wrought iron are exquisite in workmanship, the former being quite free in cut form. The floor is not slighted, but is made up of an interesting pattern of golden travertine and special tile in soft gray-blue and ivory with



View from Entrance, MacDiarmid Candy Store
Old Ivory Walls; Woodwork of Walnut

black inserts and edgings.

Two features to be noted are the openings in the lower part of the counter and the four cabinets on the wall. These little display windows are accessible from the rear and have flooring of ebony and walnut. On the wall cabinets can be found applications of carved rosewood and walnut, some of it cleverly attached to the surfaces of the glass. The lighting fixtures are equal to the surroundings, and are made of pewter, polychromed in gold and red.

These two stores teach one lesson clearly—that the commercial type of better store interior will vanish,

and that the artist or architect will henceforth play a large part in the preliminary arrangement of stores, for as Frank Brangwyn claims, when artists give their minds to practical affairs, they show a range of common sense that men of trade cannot surpass.



Counter, Showcases and Wall Decorations, MacDiarmid Candy Store
Carl W. Broemel, Architect

Old English Shop Fronts

By JOHN TAYLOR BOYD, JR.

THE retail shop front is the legitimate child of Main Street. Its character is much the same throughout the country,—usually a small, intimate, and unconventional bit of architecture, its scale very small and domestic in character in contrast to the big proportions of the monumental business buildings in the large cities. In only a very few fashionable shopping centers, such as the Fifth Avenue district of New York, does the small shop express that air of luxurious worldliness which distinguishes the finest of the Paris shops in the neighborhood of the *Rue de la Paix*.

Since the shop front is really a type of the architecture of the small town, the designer of today will find much inspiration in historic English architecture, which is so preëminently an architecture of the small town, domestic in character and scale. He will find the type of small shop front fully developed by the time of the eighteenth century, when there were built many examples of the charming and beautifully rendered symbols of the ideal. They form a tradition which still has vitality today. Its modern significance is not a matter of perfunctory copying, but is founded on more solid ground, namely—imaginative design, perfection of scale, and the di-

rect, common sense use of materials, on the architectural side; and on the practical side, the similar character of the small shop to those of today, with the same structural essentials. It may, therefore, be worth while to trace briefly some of these points of resemblance between old shops and new.

Although the English shop front evidently first became widespread in the eighteenth century, an earlier ancestry is suggested in the mediæval town houses, such as may occasionally be seen in England, notably a fine old row along one of the streets of Chester. The houses are four or five stories high, generally of half-timber construction, located on narrow, deep lots—a custom which still obtains—and fronting on narrow streets, often no wider than alleys. This ancient half-timber construction easily allows the introduction of the shop front. The framed timber skeleton, with its heavy supports spaced wide, the intervals filled with large windows having light enframements and slender mullions or with panels of brick or clay and rushes plastered with stucco—is this structure so different from our buildings of today, except that we now use iron in place of oak, and are more likely (though not certain) to encase the structure with various materials



Part of the Facade of a Shop at Lewes

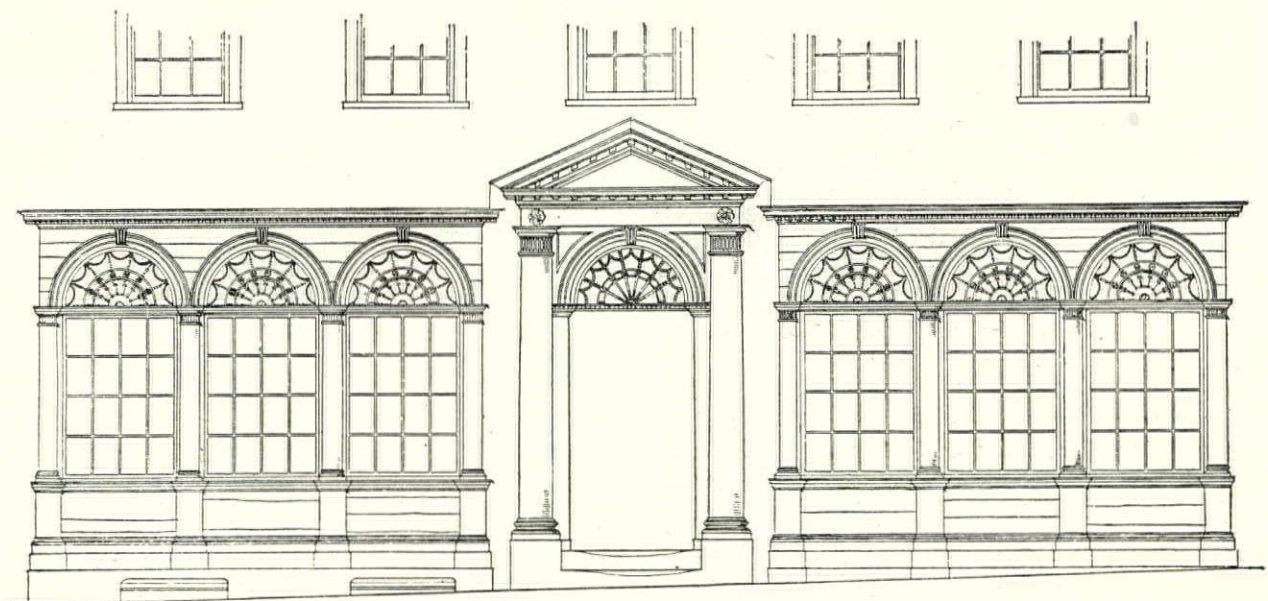


A Corner Shop at Cirencester

of finish, in metals, masonry, ashlar or marble veneer? However, notwithstanding this favorable architectural setting, it is likely that the turbulent social conditions of the Gothic towns, whose narrow streets were badly paved and poorly policed, deterred the burghers and craftsmen from displaying their wares too freely on the ground floors of their stores and workshops. But as the towns grew more settled, and were better planned, with wide streets, well paved and having sidewalks, the shop front came into its own under architectural and business conditions similar to those which are obtaining today.

The modern shop front is more varied than the older English prototype, because we have more kinds of shops in order to sell the greater variety of goods furnished by our material civilization. For this reason the English type is strictly defined, but nevertheless one allowing great originality and freedom of design within the type. Usually it is a simple flat screen of small glass panes thrown across the entire front of the building on the ground floor, often with a center door, the screen enframed with a slender architectural motif of wood. In some cases the doorway is merely an opening in the screen of panes, and, with glazed panels and transom above and slender strips of pilasters or mullions, is designed to break up the expanse of glass as little as possible. In other cases the doorway becomes a distinct feature of the design, with conventional architectural treatment, separate from the show windows on either side. Although the door was usually in the same plane as the screen of glass, sometimes it was recessed forming a tiny front vestibule, as in the case of the shop at Guilford, where the heavy carving around the arch continued as a broad band under the show windows, gives a design of unusual breadth and richness.

These illustrations show a variety of architectural treatments of the type, ranging from extremely simple designs—hardly architectural at all except for their fine proportions and scale—to the more sophisticated design of the shop at Lewes. In this latter the triple division into architectural doorway and flanking show windows, separated by wall piers, the tying together of the three divisions by the use of seven arches of approximately equal size and proportions and by transoms of the same decorative pattern, all characterize a highly coordinated architectural design. Another shop, at Cirencester, has a fine emphasis of the show windows by reason of the enframing of paired columns and entablature, as compared with the shop at Lewes. This emphasis



Detailed Drawing of Shop Front at Lewes

of the display window would appeal to the salesman.

Midway between these highly complex designs and the extreme simplicity of certain other shops is the shop front at Bath. In this example the door is an integral part of the glazed screen, and the screen itself is enframed by a light and very delicately proportioned motif of architecture. Many interesting variations of this scheme are seen, charming indeed in their wood details of tiny pilasters, columns, entablatures and decorative patterns of transom and fanlight, Georgian in style, with those attenuated proportions so familiar to us in our own Early American architecture. One motif particularly admired is the shallow curved bay window. It occurs often and always to good effect, as in the shops at Bath, Dorking and Wareham,—especially in the latter, where the whole front bows out in a fine wide sweep, contrasted against the single doorway at one side of the small but graceful facade.

It is interesting to note in how many points these English designs resemble modern examples. Just as today, the designer in many cases gave little



Bowed Front, Wareham, Dorset

thought to the relation of the shop front itself to the building above. Often it is clearly a case of an alteration to an older building, of the shop forced ruthlessly into a design not suited to it. The shop at Montpellier shows the unusual case of the shop front's forming an integral part of the design of the whole building, there being large rectangular openings between piers decorated with caryatid figures, which come under the columns of the order of the story above. This design recalls some of the best of the recent shop buildings on Fifth Avenue. At the other extreme is the shop at Guildford in which the pilasters of the wall of the upper story have apparently nothing to support them but a flat screen of glass. This again is entirely "modern," and its most flagrant example is a new building on Madison Avenue, New York, in which heavy stone free-standing columns—not light stucco pilasters—rest on a sheet of plate glass. To this structure the Fifth Avenue Association awarded this year its annual prize! It is an extreme example of its kind.

To what extent will the tradition set by these older English shop fronts answer the needs of today? This is a pertinent question for the designer who is seeking ideas and inspiration and who will not copy details blindly. As far as the general character of these old fronts goes—their vivacity and charm and variety, their fine proportions and scale and vernacular style, their skillful use of building materials in design—they have qualities as valuable today as ever. They express the ideal of the small shop, particularly the shops of smaller towns and of our suburbs ranged along the inevitable Main Streets, most of which offer fields for missionary work.

But, as has already been said, the small retail shop is now in the twentieth century a thing of greater variety commercially, and it must reflect the more complex and more specialized character of the shop business. We must have a wider variety of types to correspond with our many kinds of stores, and we have a further opportunity for diversification of each type in our more abundant choice of building materials. Not only that, but our shopkeepers have



Old Shop Front at Guildford, Kent

brought out a new idea,—new only since the World War,—one which in itself bids fair to open a new field in design. I refer to the custom of recessing the display front so as to provide not one or two show windows, but many more, a dozen or less, opening off a corridor or vestibule leading from the sidewalk into the store itself. Here the buying public may circulate and may view a large part of the tradesman's stock, excellently displayed, before entering the store to buy. This arrangement attracts the casual passer-by and it also saves the sales people's efforts. Architecturally, this change introduces a new conception. Instead of the screen across the front, we have an intricate series of parts. Design changes from two into three dimensions having endless possibilities.

To this architectural development into the third dimension are to be added modern conceptions of salesmanship, of "quantity production, rapid turnover, psychology of the prospect, sales push and sales pull," with the birth of the new minor art of show window display. The buying public is vastly



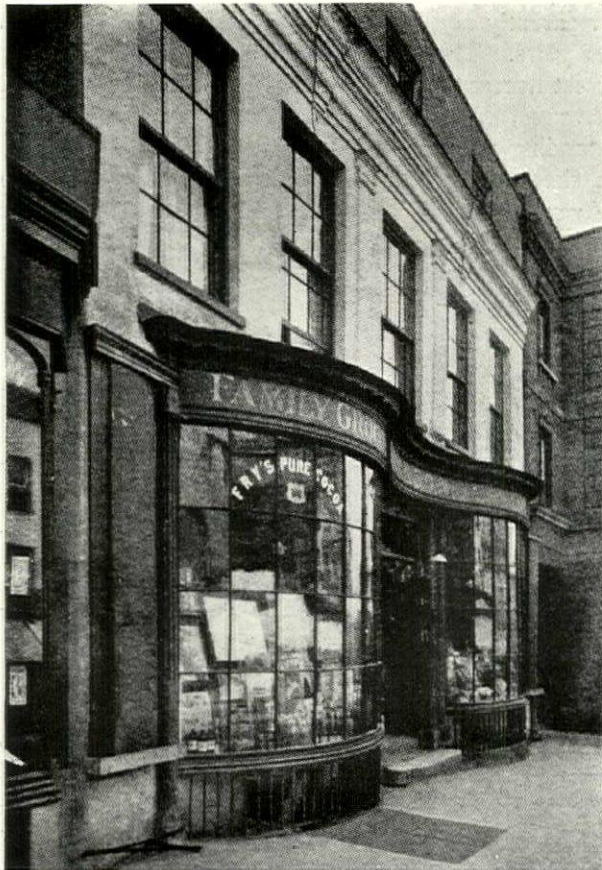
SHOP FRONT AT BATH
AFTER SKETCH BY HAROLD FALKNER.

An Old Shop at Bath

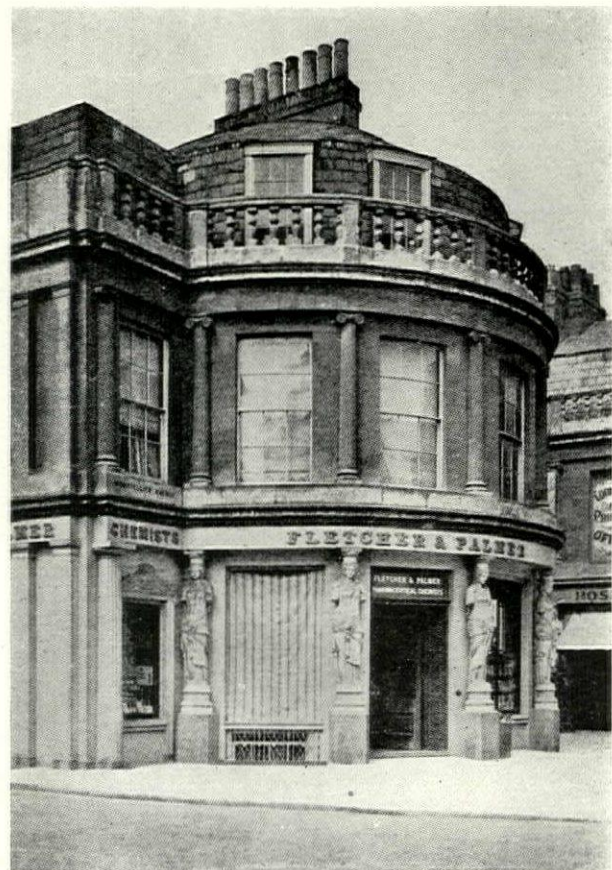
increased, and it extends to all classes with every difference in taste. The modern salesman contributes many new ideas which should create a new series of motifs in design, expressing the variety of retail trade, of the public taste, and, more especially, the endless differences in size, shape, color and in scale, of the wares in the show windows. Today the architect must interpret imaginatively the ideas of

the salesmen, in new motifs, patterns and ideas.

For these reasons I believe that shop front design is in its infancy. If the architect grasps the salesman's ideas and if he interprets them imaginatively, carrying them far beyond anything the salesman himself now conceives of, the architect will revolutionize the design of the small shop just as he has revolutionized every other type of building now in use. To that extent Main Street will be rescued from its present bleak, drab standardization. If in this promising development the architect can preserve the ideal of beautiful form and perfect taste symbolized in the historic English shop front, our shopping streets will be worthy of America.



"Double-bowed Front"; Dorking, Surrey



Montpellier, "Shop a Part of the Design"

Decorative Treatment of the Schrafft Stores

CHARLES E. BIRGE

IT is not surprising that this group of Schrafft's stores is presented as an ideal type of modern candy stores and restaurants. The motto of the Frank G. Shattuck Company which is responsible for this remarkable group of stores, has always been "The best is none too good." This motto is consistently carried out not only in the materials used to produce the merchandise sold but also in every detail of construction, design and equipment of its several shops and restaurants. No money has been spared to make the interiors as well as the exteriors of all these shops as artistically beautiful, practical, and commodious as possible. Appropriateness as well as variety of design marks the interior decoration. In the smaller shops simple artistic effects have been carried out, while in the larger and more pretentious shops and restaurants decorations of true magnificence have been successfully executed.

For instance, in the Schrafft's shop in Boston, combined with which is a spacious restaurant, the interior decorations are in Pompeian style; soft toned travertine walls and pilasters support a slightly vaulted ceiling which is richly decorated in highly colored designs of Roman origin. The black terrazzo-cloisonne floor with the high black and white marble sub-base gives a rich contrast with the splendor of the colored ceiling.

In the candy shop at 383 Fifth Avenue, New York, another very rich interior has been evolved in tones of old gold relieved with red. The floor is of white marble with a black and gold base. This treatment of the floor is quite different from that employed in the more recently constructed shops. The walls are divided by pilasters into broad panels where are placed paintings in Italian arabesque, the frames of which together with the heavy cornice and ceiling mouldings are decorated in polychrome. In pleasing contrast with the richly decorated candy shop the tea room at the rear is in the Colonial style. The walls are paneled in painted wood of a

deep ivory color. An ornamental stairway, which is the chief decorative feature, leads up to a tea room on the second floor, the walls of which are decorated in panels of gray silk. An interesting experiment was tried in the lighting by the use of one very large porcelain vase placed in the center of the shop from which powerful indirect light is thrown upon the ceiling. All of the counters and show-cases as well as the wall panels of the candy shop are of Circassian walnut embellished in gold. Decorative paintings set in the vertical panels between

the marble pilasters add great richness to the treatment of the walls. Another unusual feature is the use of very beautiful bronze vases for the soda water fountains.

In the little candy shop at 20 West 38th Street, a simple decorative treatment, Georgian in style, has been attractively carried out in gray and gold. Here again the walls are divided into panels in which at various intervals are set mirrors with dull gilt frames having above them decorative panels of flowers and fruit. This shop has a mosaic floor and simple furnishings. In the tea room on the second floor, which is decorated in gray and old rose, alcoves arranged along the sides give privacy for little

parties. The walls are relieved by elaborate mirrors in the Italian style, which give dignity and character to the whole interior of this tea room.

In the candy shop and restaurant completed a year or so ago at 13 East 42nd Street a more ornate type of decorative treatment has been followed. The black terrazzo-cloisonne floor gives a deep base for the lighter toned walls and rich ceiling. Suggesting an Italian effect, the walls have been built of travertine in pilasters and panels which carry a ceiling of plaster beams and panels, painted in imitation of walnut and decorated with polychrome application and design, with elaborate patterns stenciled in gold on the intervening ceiling surfaces between the beams. The northern half of this shop at the 43rd Street end is at a lower level, making it possible to



Interior of Schrafft Store, Boston
Travertine walls; Pompeian ceiling



Exterior, Candy Shop and Restaurant, 50 Broad Street, New York

have a much higher ceiling and more impressive treatment. The same Italian scheme of decoration has been used, but the recessed walls have been filled and ornamented by elaborate wrought iron framed mirrors. The height of this restaurant permits the introduction of a mezzanine gallery which has an effective wrought iron railing. The ceiling of this two-story restaurant is treated in an even more ornate rendering of the Italian style. The ceiling beams, which are massive, are supported on high ornamental consoles. The mezzanine gallery, which continues through the entire second story of this shop, is paneled in wood painted soft green and detailed after the Colonial style. The floors are terrazzo as are those below, and the space has been arranged so that part of the tea room is divided into alcoves for the purpose of privacy. This store has a third floor on which is located a men's grill, finished in American walnut in the Georgian style. Continuous benches line the walls in place of alcoves. Heather brown quarry tile are here used for the flooring material. The ceiling above the walnut paneled walls is treated in low beams without decoration. The design of the exterior of this store on East 42nd Street, which is typical of all the later Schrafft stores, shows a pleasing combination of black and gold marble pilasters combined with bronze for the bases, caps and other decorative detail finished in an antique gold color. The whole design is suggestive of the Italian Renaissance, which seems to be the prevail-

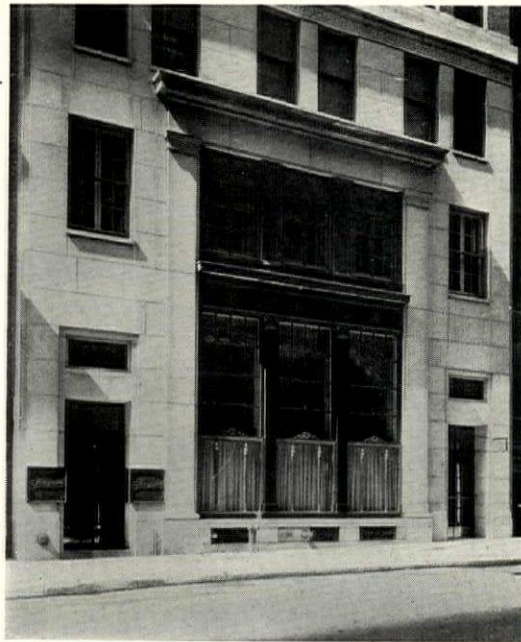
ing precedent for the decoration of recent stores built for the Frank G. Shattuck Company. The East 42nd Street facade of this store shows a large window running up two stories surmounted by a fine cornice. Again black marble combined with bronze details has been used for the architectural treatment. Fine bronze rosettes enrich the marble frieze of this facade, and beautifully executed bronze detail gives scale and interest to the large window.

At 141 West 42nd Street a new building for this company has just been completed. Although somewhat similar in plan and design to the shop at 13 East 42nd Street, and running through to 43rd Street as does this other shop, yet the interior has been carried out in an even richer and more elaborate decorative scheme. The treatment of the candy shop which is at the 42nd Street end of the building includes a floor of black terrazzo-cloisonne. All of the woodwork, show-cases and counters are executed in American walnut.



141 West 42nd Street, New York

The Italian style of decoration has been carried out in the travertine panels and fluted pilasters of the walls and in the low relief of the ceiling ornamentation in which the principal panels have been painted in Italian arabesque. This same treatment has been carried through the entire ground floor to the 43rd Street end of the building, where is located the restaurant. This room is carried up two stories and is treated with an ornamental mezzanine gallery and monumental staircase. Large mirrors have been set into the wall panels of the restaurant to give an effect of added space. In the mezzanine restaurant alcoves with benches executed in walnut have been built in along each wall. The decorative features of this restaurant correspond in general to those of the one-story candy shop at the 42nd Street end. The ceiling of the high two-story restaurant on 43rd Street is effectively treated with large coffered arches and groined vaulting elaborately painted in Italian polychromed arabesques.



"Suggestive of the Italian Renaissance"

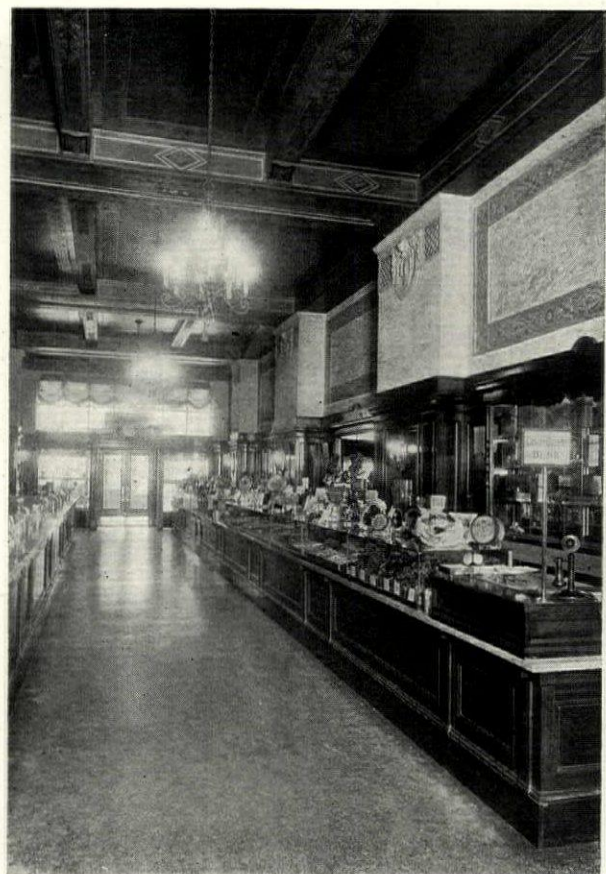
One large window two stories in height, looking out on 43rd Street, lights this restaurant and the mezzanine. The entire wall treatment is carried out in travertine relieved with decorations in Italian red. In the main part of the store travertine is also used, with wall panels embellished in gold and colors. In the lunettes over the two large doorways of the restaurant marble busts have been effectively introduced. As in the candy shop, the floor here is black terrazzo-cloisone. On the third floor is another restaurant finished in the Georgian style, with the ceiling of plaster simply paneled and

decorated with antique gold borders, and the walls of paneled and painted wood.

From these very brief descriptions and the illustrations of several of the New York Schrafft's stores, it is possible to appreciate the amount of care and study which has been employed in designing the richest and most effective architectural and decorative treatments possible for shops of this character.



One End of Candy Shop



Candy and Soda Counters

The Hanan Shoe Stores

By A. D. SEYMOUR, JR.

IN designing the various shoe stores for Hanan & Son the idea constantly kept in mind has been their practical and commercial use rather than their architectural effect. These shops are in existence primarily to retail a high grade shoe, and as such is their purpose it follows that they must be so planned that they will fulfill this function in the most efficient manner.

There is of course a certain advertising value to such a concern in having its various shops resemble each other, but where their situation varies as regards location in different cities, some modification in their layout is necessary. In the case of the shops in the restricted Fifth Avenue district, where a women's retail trade is catered to, the shops are designed especially for this type of trade. If the situation is, for example, on Broadway or any other street where the retailer finds mixed buyers, then the shop takes on a more commercial air, and quick service, seating and stock capacity are considered of chief importance.

Rather than employing a particular style or period design in the interior decoration of these stores, it has been deemed more appropriate to keep them modern in all respects, using the best of materials and construction. No attempt has been made to design an Adam, Louis XVI or Italian interior, nor has any attempt been made to conceal the purpose of the shop by removing the shoe boxes from the salesroom. While the period style shop has been avoided, there has always been careful thought given to the solution of the practical elements entering into the modern merchandising of shoes, such as window display, stock shelving, seating, hosiery display, lighting effects, offices and packing facilities. Special types of rolling ladders and mezzanine balconies have been installed, and where the shop is not of too commercial a character, due to its situation, special tables with chairs have superseded the long settees or benches. In some cases a semi-public or domestic character has been carried out in the design where the customers are principally women.

It has been found by a number of experiments that the show windows should average about 24 inches from the ground for the best display of fine shoes, and that a depth of $4\frac{1}{2}$ to 5 feet allows a good system of window dressing for such small articles as shoes and slippers. A plate glass front of about 9 feet with a false ceiling at that height gives a pleasing proportion and permits good overhead window lighting. Special attention has been given to the type of window hangings and display tables in the windows, as well as the floors of the windows themselves, which in nearly all cases are plain walnut panels, set off with small ebony borders. Any height available above the line of the window deck is used as a transom which, with a corresponding set of

interior transoms, makes it possible for the shops to have natural ventilation which in summer is desirable.

In the interiors of these stores a height of about 11 feet is all that can be readily handled from ladders, and the shops that require a larger stock on the sales floor employ mezzanine stock galleries, where the height allows of their use, which is the case in most ground floors in modern buildings. Where more than one floor is combined in the store, the men's department is always placed on the ground floor and the women's department on the second, with a good sized passenger elevator located near the main entrance and served by a lobby, which enables the women to reach their sales floor without passing through the men's department.

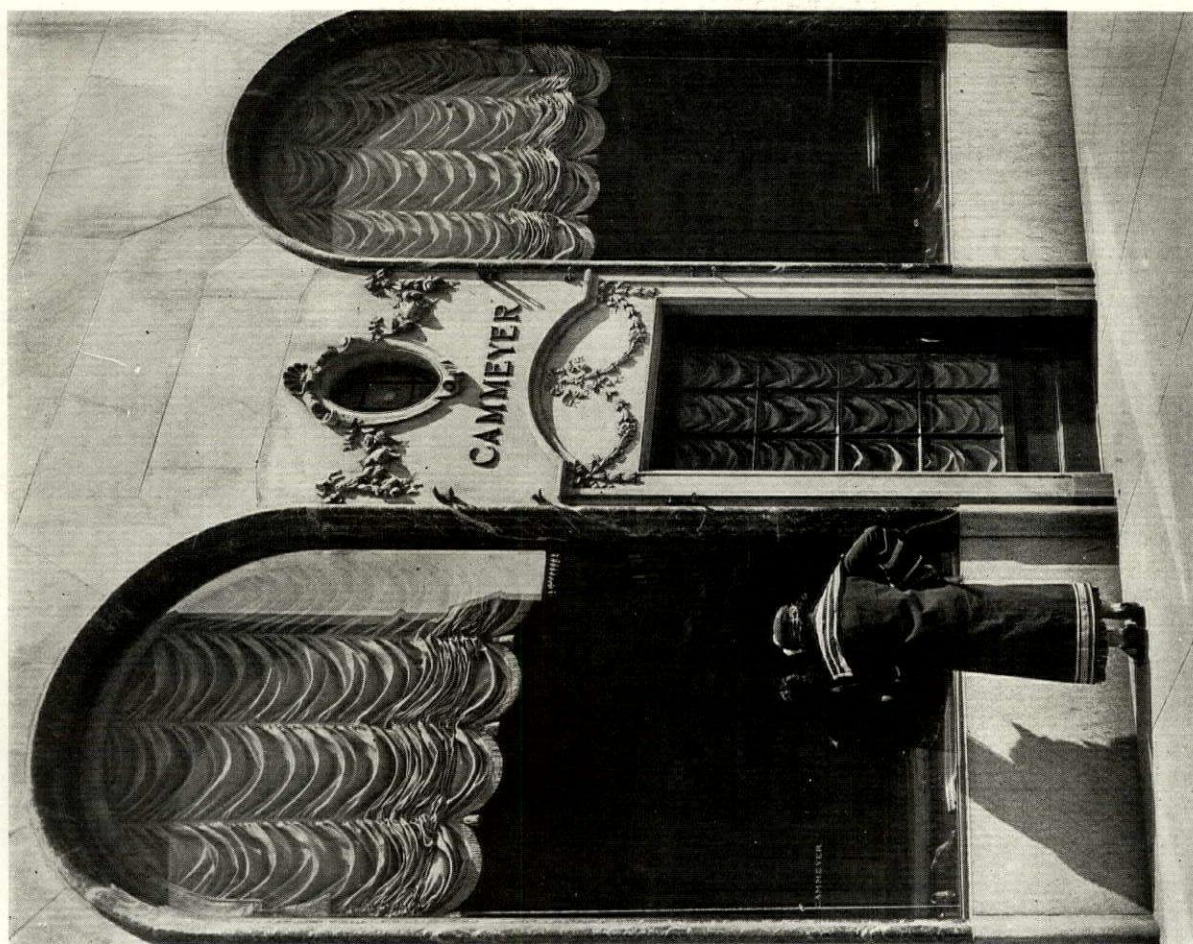
The display and sale of hosiery and shoe buckles have always been a feature of these shops, and special consideration has been given to the location and system of merchandising these items. In the shops catering almost exclusively to women, as for example the uptown Fifth Avenue shops, the hosiery display has been located in the center of the salesroom, where it is always visible to attract the customer, although generally this feature is located near the entrance, being passed by the possible purchaser on entering and on leaving the shop.

The lighting of the show windows and hosiery show cases, while always ample in quantity, is concealed from the eye. In cases of corner windows this necessitates using louvers in the overhead window lighting. The surplus stock is usually shelved in the basement and distributed to the various sales floors by means of dumbwaiters. The wrapping of shoes for delivery is taken care of in the rear of the shops, service to this department being by means of doors at the rear of the salesrooms.

The exterior treatment of the Hanan stores in most cases is dictated by the practical consideration of the problems already mentioned, such as show windows, transoms and entrances. Here again a modern commercial character is sought as the best expression for the architectural treatment of the front. Kalamein bronze frames and cornices used in conjunction with certain ornamental cast bronze members comprise the first floor exterior treatment. Where bronze is employed marble is also introduced as the base upon which the front rests, and the remainder of the exterior is either limestone, terra cotta or marble, depending on the relative importance of the shop, due to its location and the length of its lease. The name of the concern is in most cases displayed in classic bronze letters, and all ostentatious advertising by means of electric signs or large name plates is avoided. This idea of restraint might be considered the underlying characteristic of all these shops as expressed in their various elements, where quality of material is the main consideration.



SHOE SHOP OF FRANK BROTHERS, NEW YORK
ALFRED FREEMAN, ARCHITECT



A RECENT FIFTH AVENUE SHOE SHOP
ROUSE & GOLDSTONE, ARCHITECTS

SHOP OF FRANK BROTHERS
NEW YORK

Upper Illustration, Plate 89

Straightforward and simple in conception, the design of this shop speaks for itself. The architectural treatment of the lower floor is well adapted to the purpose of display windows and entrance. While not at all unusual, the design has been carried out with such refinement of wall surface, such delicacy of carved detail and such restraint in execution that a result has been obtained deserving of much appreciative consideration.

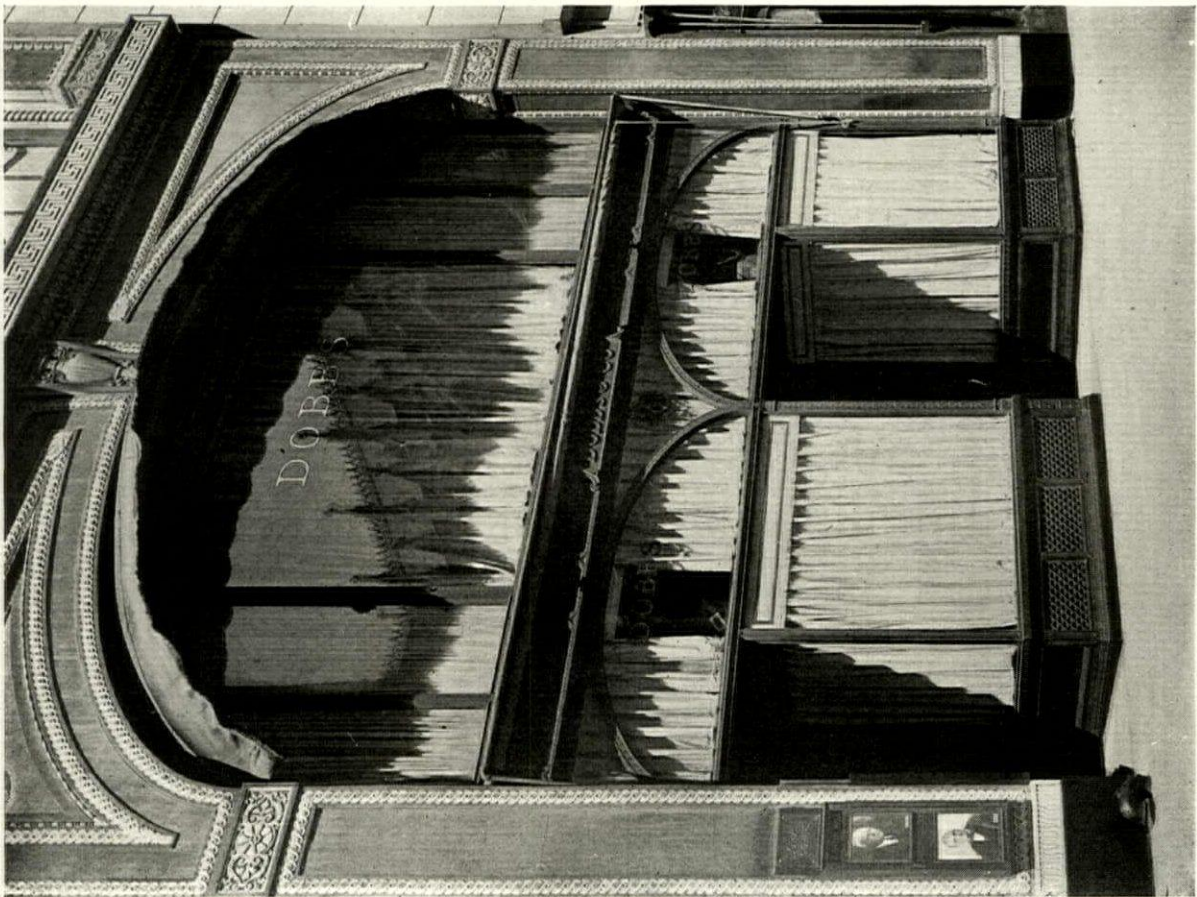
CAMMEYER, NEW YORK

Lower Illustration, Plate 89

In this illustration only one-half of this store front is shown, but this single motif is sufficient to indicate the dignity and restraint of the composition. Perhaps the arches of the show windows could have been slightly narrower in order to give more masonry strength on either side of the entrance door, but the design as a whole shows a pleasing compromise between architecture and commercial necessity. The well proportioned arch windows are enframed by heavy black and white marble mouldings of simple contour. In contrast to the strength of these mouldings, carving in high relief suggestive of Grinling Gibbon has been introduced. Unfortunately there is little scale in the design, since only in the entrance door was the architect allowed to use small panes of glass.



SHOW WINDOW OF THE NEW YORK BIBLE SOCIETY BUILDING
WILFRED E. ANTHONY, ARCHITECT



A TWO-STORY SHOP FACADE.
McKIM, MEAD & WHITE, ARCHITECTS

NEW YORK BIBLE SOCIETY
BUILDING, NEW YORK

Upper Illustration, Plate 90

Reminiscent of old English shop fronts, this show window for the New York Bible Society combined with the well studied entrance door is one of the best designs of recent execution. The bowed plan of the window as well as its unusual height gives appropriateness to its location between two of the heavy upright stone piers of the tall building which rises above it. The window itself is kept in good scale by dividing it into three tiers of openings filled in with small leaded panes. The same sized panes are used in the openings of the double doors and the mullioned window above, tying together all the openings in one scale.

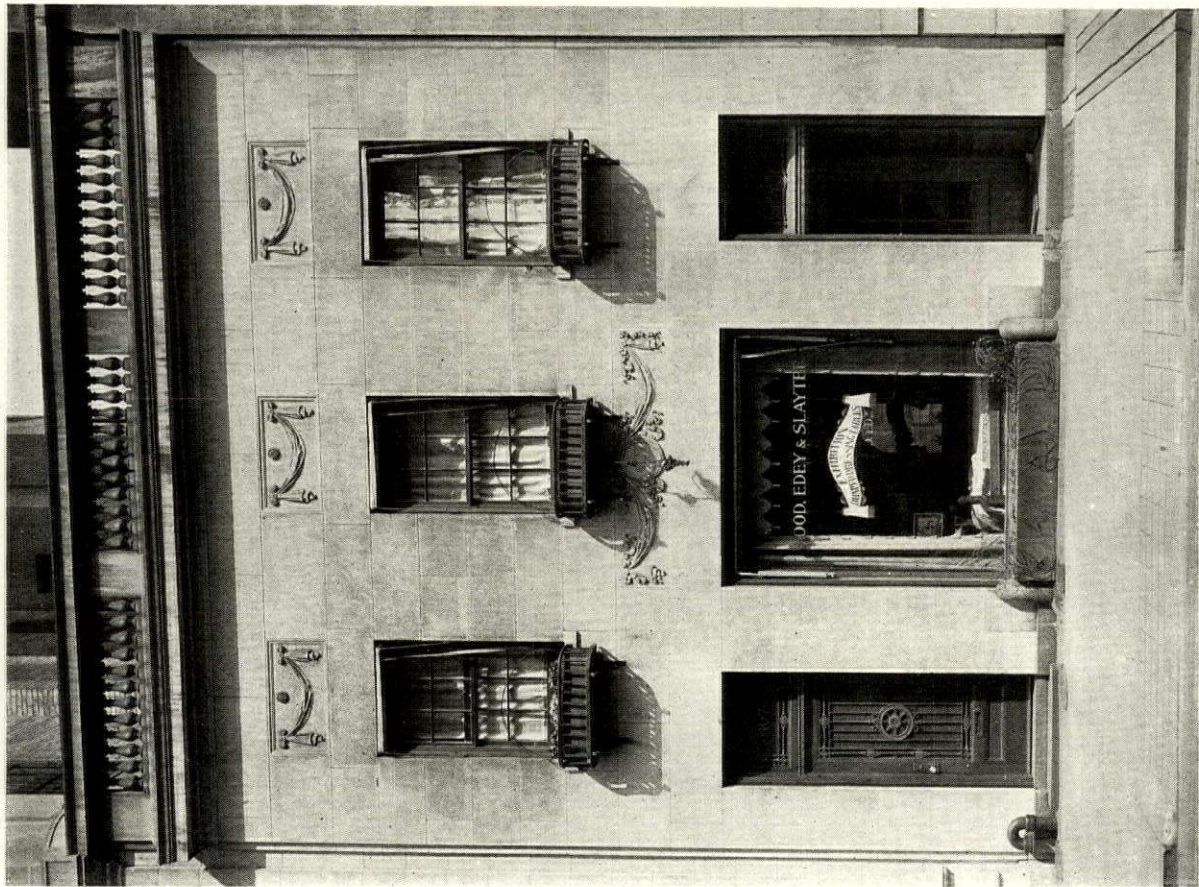
SHOP OF DOBBS & CO.
NEW YORK

Lower Illustration, Plate 90

620 Fifth Avenue shows perhaps the finest example of the modern type of shop front to be found. This design shows a masterly combination of architectural terra cotta and marble detail with bronze framework. The design satisfies the requirements of the average shopkeeper who insists that as much of the front of his shop as possible shall be plate glass for extensive display windows. The entire front is one large arch composed of pilaster panels of dark gray marble enframed with richly colored terra cotta mouldings, plinth blocks, and a very ornate keystone. The bronzework of the windows, entrance and sign frieze is extremely delicate in detail and execution. The unusual charm of scale found in this design is largely due to the intelligent architectural handling of the slender bronze framework.



A TWO-STORY SHOP FRONT IN ENGLISH STYLE
ELSGIE-COBB WILSON, DESIGNER



A LITTLE BUILDING FOR A FIRM OF INTERIOR DECORATORS
CROSS & CROSS, ARCHITECTS

WOOD, EDEY & SLAYTER
NEW YORK

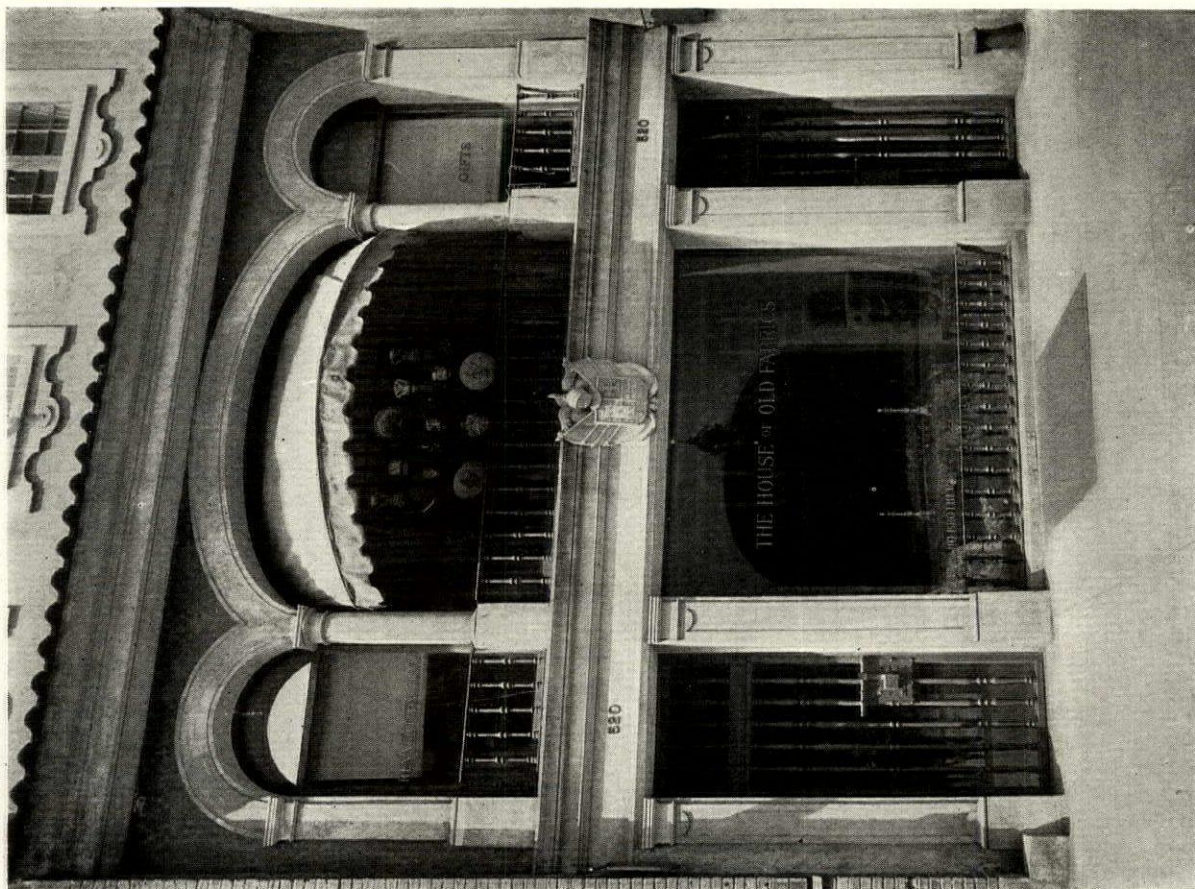
Upper Illustration, Plate 91

This little building, designed for the shop of an interior decorator, shows a pleasing simplicity and restraint in design. It is unfortunate that the space apparently required for the central show window should have necessitated placing the two doorways out of line with the windows above. However, the carved design in low relief above the show window serves as a note of division between the upper and lower parts of the design. What carved detail there is has been carried out in the style of the Adam brothers, and the small flower box balconies in front of each window further suggest English precedent. Small panes of glass in the show window would have better carried out the feeling of scale in the entire design, yet the small scale of the articles displayed, combined with the window draperies themselves, helps to save this show window from being a blank hole in the wall.

SHOP OF ELSIE COBB WILSON,
INC., NEW YORK

Lower Illustration, Plate 91

Perhaps the most attractive as well as successful shop front recently completed in New York is that of this two-story interior decorator's and antique shop. Inspired by the best English work of the Georgian period, this design is an example of good scale in both detail and arrangement. Although distinctly a two-story design, perfect cohesion has been obtained by the use of small panes of glass of uniform size in the windows of both floors, enframed by pilasters and a high entablature executed in Adam detail.



A TWO-STORY SHOP IN THE SPANISH STYLE
DAVID ASH, ARCHITECT



A STORE FRONT IN THE SPANISH STYLE
WILLIAM LAWRENCE BOTTOMLEY, ARCHITECT

THE HOUSE OF OLD FABRICS NEW YORK

Upper Illustration, Plate 92

In "The House of Old Fabrics" a simple design in two stories has been carried out, suggestive of the Spanish Renaissance. A legitimate architectural motif in three arches over three openings has been made to adequately serve the requirements of commercialism. The spacing of the pilasters on the ground floor gives sufficient architectural support to the rather heavy entablature, which carries the low arcade treatment of the second story. The feeling of the Spanish influence has been further successfully suggested by heavy wrought iron baluster grilles which protect the entrances and the several windows. The final touch needed to make the design complete and tie the whole together is found in the well-modeled armorial cartouche which centers the entire design.

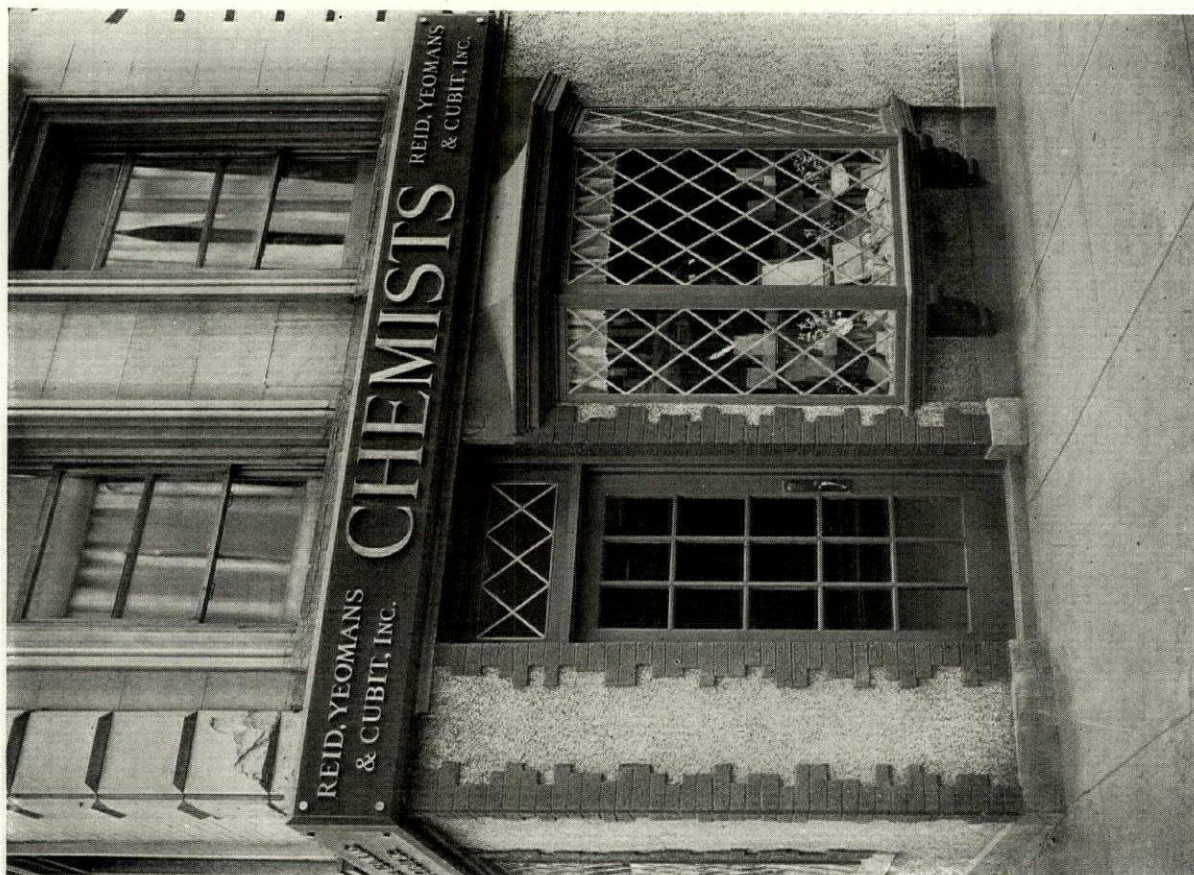
THE CLUB ROYALE, NEW YORK

Lower Illustration, Plate 92

Although this design is not particularly suggestive of commercialism, no better artistic expression for a shop devoted to the sale of Spanish and Italian antiques could be designed. The exterior perfectly recalls some of the smaller Renaissance houses of Madrid and Seville. The warm toned stucco walls, relieved by the painted iron grilles and window balustrades combined with the unusual quoin blocks, attract without the use of show windows the passer-by to enter. The character of the Spanish Renaissance is still further emphasized by the heavy projecting double cornice painted in browns, blues and reds, and by the broken pediment and large ornamental cartouche over the center window.



A TWO-STORY SHOP FRONT IN THE ENGLISH STYLE
WALKER & GILLETTE, ARCHITECTS



A CHEMISTS' SHOP OF SIMPLE DESIGN
BUFF PLASTER WITH BRICK TRIMMINGS

GEORGE D. SMITH PRINT SHOP
NEW YORK

Upper Illustration, Plate 93

In execution and in scale 8 East 45th Street, New York is an unusually good example of the adaptation to modern uses of an old Jacobean store front, yet it is unfortunate that the floor levels of this renovated building should have been such as to give the second story undue importance in the design of the whole shop front. It has been attempted to overcome the predominance of the second story by means of the high gabled entrance porch at the right of the design. Great consideration of scale has been shown throughout the entire design, not only in the uniform size of the window panes employed, but also in the detail of the excellent carved decoration carried out in dark stained wood.

REID, YEOMANS & CUBIT, INC.
NEW YORK

Lower Illustration, Plate 93

In these days when something new and different in every line of life is sought for, it is interesting to see what a pleasing effect has been accomplished in the simple renovation of this corner chemists' shop. The brownstone veneer has been stripped from basement walls of this old residence and use made of rough plaster of a deep yellow tone with red brick trimmings. Besides the introduction of color, to give particular zest as well as scale in all of the show windows as well as the door, small panes of glass have been used. The oriel window on brackets is a pleasing note of contrast to the flat show windows on the side street. There is something quite intimate and personal about this little shop, well worthy of study and emulation.



THE NEW YORK SHOP OF DUVEEN BROTHERS, INC.
HORACE TRUMBAUER, ARCHITECT



THE STORE OF M. KNOEDLER & CO.
CARRERE & HASTINGS, ARCHITECTS

DUVEEN BROTHERS, INC.
NEW YORK

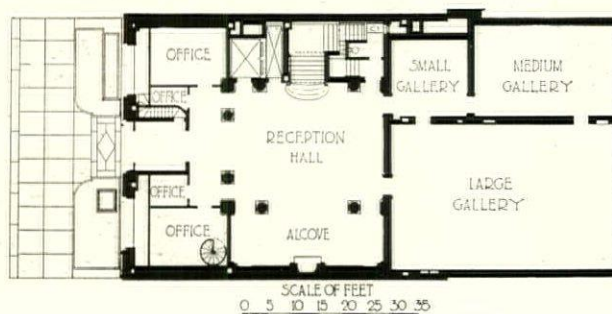
Upper Illustration, Plate 94

In the shop of Duveen Brothers the style of Louis XVI has been so closely followed that one might almost imagine the address to be *Rue de la Paix* instead of Fifth Avenue. Here again the demands of commercialism have been subordinated to fine architectural design. The show windows and the entrance door are formed by symmetrical arches in the front facade. The rusticated treatment of the stonework which is carried throughout the basement story is brought down in alternating voussoirs in the arches, typical of the Italian and French Renaissance. Banks of delicate mouldings which form the caps to the arched piers are carried across the three openings in heavy transoms, above which the arches are divided by curving and diagonal mullions, giving scale to the openings.

SHOP OF M. KNOEDLER & CO.
NEW YORK

Lower Illustration, Plate 94

There is little architectural similarity in the designs of these two New York art stores. The shop of M. Knoedler & Co., is an interesting example of the adaptation of palace architecture of the Italian Renaissance to modern commercial requirements. The three large arches, which in Florence would very likely have been enclosed with curtain walls of stone, here give ample open area for overhead light and lower show windows. The center arch is largely filled with a doorway well designed in bronze. The rustication of the piers and arches is of the "vermiculated" type which is frequently found in the architectural designs of Michaelangelo and gives an unusual play of light and shade to what might otherwise be quite ordinary stonework. Guard rails of delicately wrought bronzework protect the base of the large show windows.



FIRST FLOOR PLAN



INTERIOR OF THE CHICKERING & SONS STORE



A BOSTON PIANO STORE
RICHARDSON, BAROTT & RICHARDSON, ARCHITECTS

SHOP OF CHICKERING & SONS
BOSTON

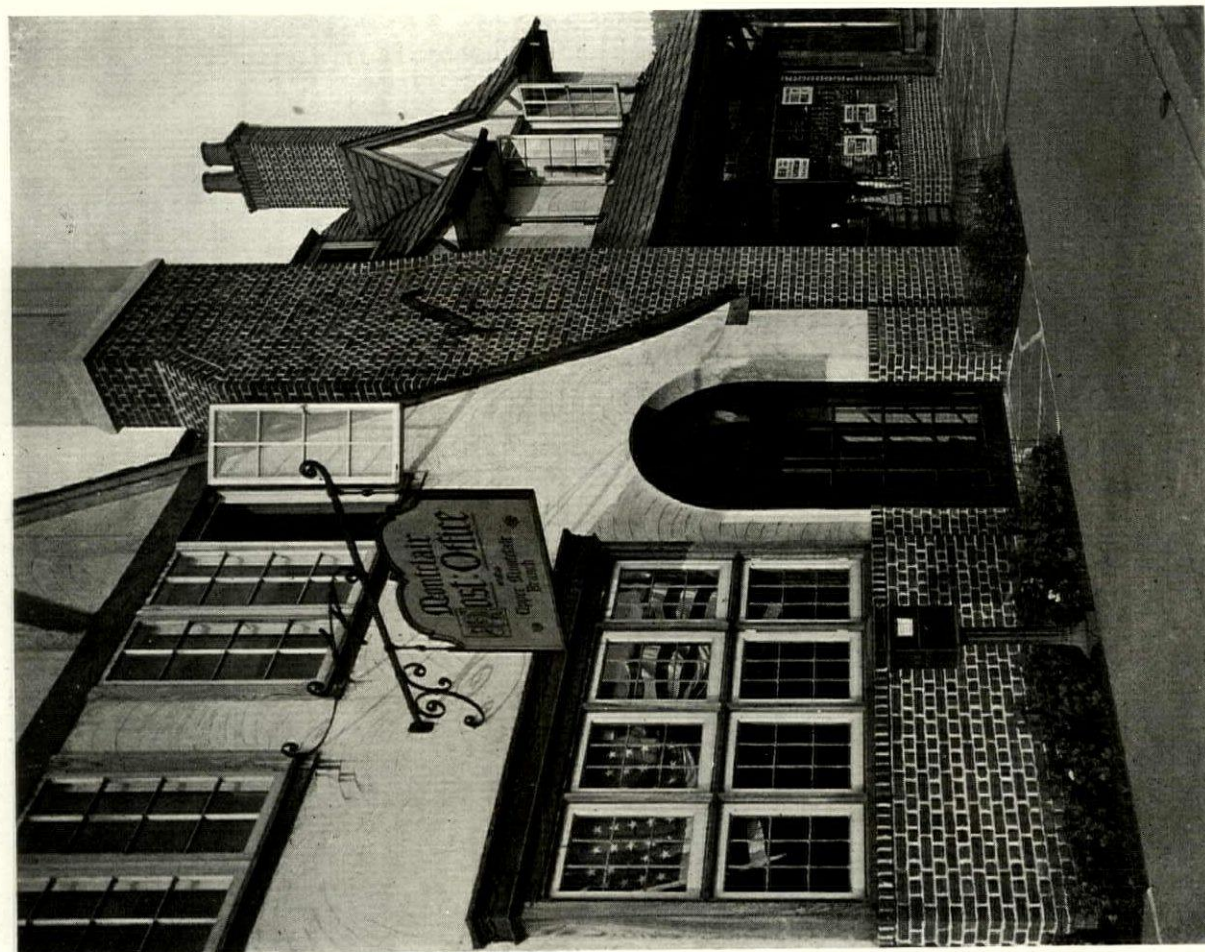
Illustrations, Plate 95

Among the best small shops built in Boston during the past ten years is the showroom for Chickering & Sons. The exterior design, which unfortunately has recently been altered in order to provide a large show window, was originally as shown here, a simple Colonial design in three arches enriched with a delicate portico of slender columns and light entablature. The whole design suggested some of the old house fronts on Beacon Hill.

The Colonial spirit was carried out with equal success in the interior where one large showroom was provided, having pilasters and panels for the treatment of the walls and a Colonial stairway in an open well at one side, while finely modeled columns and entablature defined the ceiling of the showroom.



A VILLAGE STORE IN CONNECTICUT
MURPHY & DANA, ARCHITECTS



SUBURBAN POST OFFICE AND SHOP
FRANCIS A. NELSON, ARCHITECT

A VILLAGE STORE IN CONNECTICUT

Upper Illustration, Plate 96

In this country shop Murphy & Dana, Architects, have combined domestic with commercial architecture in a pleasing manner. Slightly more emphasis on the commercial character of the design might be desirable, for the design is so restrained and domestic as to suggest hardly any commercial purpose. It might be called the country store de luxe, so finished and refined is the design; but the slightly bowed windows which are supposed to suggest the shop within and the delicate Colonial details of the entrance door with its granite steps and iron railings are all in perfect scale and form a pleasing contrast to the plain stuccoed walls of the building.

POST OFFICE, MONTCLAIR, N. J.

Lower Illustration, Plate 96

In Montclair, New Jersey, Francis A. Nelson, Architect, has been unusually successful in obtaining a rural quality in the Post Office and shop group recently erected. The group is well studied from points of view of both scale and picturesqueness, to say nothing of color. The small-paned mullioned windows, the numerous dormers and gables and several chimneys with chimney pots sound the note of domesticity and informality so essential to small town architecture. The care with which the various elements of the design have been grouped, as indicated in this one illustration, has given the picturesque quality which seems to be accidental and not intentional. The striking contrast of the red brick and the warm toned rough stuccoed walls gives a refreshing color note to this charming group of small buildings.

Ornamental Shop Fronts

By PARKER MORSE HOOPER

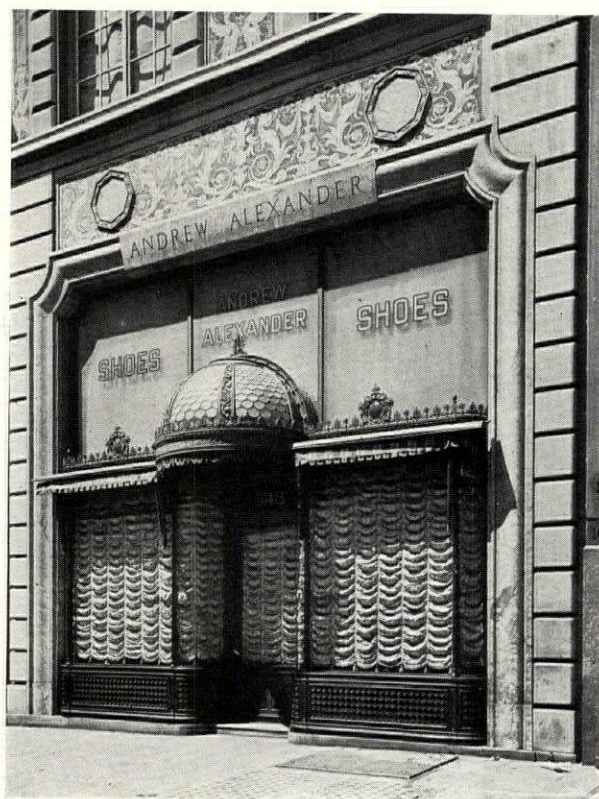
THAT the English shopkeeper is awakening to the commercial value of the architectural shop front is admitted in articles on the subject published recently by the *British Architect* and the *Manchester Guardian*. That the French shopkeeper with innate æsthetic sense and natural shrewdness has always known the business asset of an artistic shop front is evidenced by the care and study spent upon the smallest shop as well as the largest store to make it architecturally attractive and appealing. In fact it is from the French shop front that both English and American architects are seeking and deriving their inspiration in developing this new and distinct type of commercial architecture.

In this country during the last century little thought was given to the design and artistic effect of either the exterior or interior of the store. It was, as it always had been, simply a place for the display and sale of goods, from the general store of the village, where anything from pins to plows could be purchased around the social airtight stove, to the great department store of the city, such as A. T. Stewart built up half a century ago to the amazement and delight of the purchasing public.

The department store is only a logical development of the general store of the village; instead of there being one shelf for shoes and stockings, half a floor is devoted to them. As the goods sold have increased in variety and volume, so in proportion have increased the amounts of space devoted to the display of goods, not only within the shop but without as well. The windows, where the passing public sees at a glance the merchandise offered for sale, have been increased in size until they occupy every inch of space not required for entrances. In many stores these vast show windows of plate glass occupy the entire lower story, in some cases even the two lower stories of a street facade. The upper stories of such buildings seem to rest on a basement of glass, where architectural support and adornment, most

needed from the point of view of good design, have been subordinated to the commercial idea of utilizing all of that part of the facade nearest the sidewalk for the purpose of display windows,—an idea, which, still prevailing in ninety-nine stores out of a hundred, gives small opportunity for any logical architectural treatment. It is the hundredth store, large or small, which is worthy of appreciative analysis, but happily there are many good examples.

The gradual migration of the retail shopping district from Union Square, Broadway and 23rd Street, which started 20 years ago, gave the opportunity as well as the inspiration for the creation of a new and distinctive type of commercial architecture such as this country had never known before. Such designs as McKim, Mead & White carried out for Tiffany's and The Gorham Co., and Trowbridge & Livingston executed for Altman's, set the precedent, which every other well known retail store large or small, in one way or another, tried to follow,—designs where structural consistency and architectural consideration were made of paramount importance to commercial demands and traditions, where arcades and colonnades of stone or

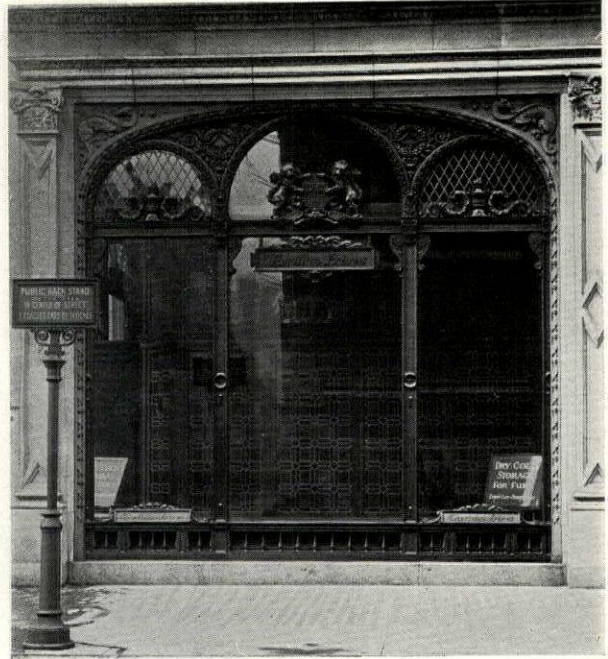


Excellent in Proportions, Scale and Design
Carrere & Hastings, Architects

marble gave ample space for show windows and entrances in facades of great dignity and beauty. Slowly but steadily as this migration goes on, one new shop after another springs up on Fifth Avenue above 34th Street or the adjacent side streets to show a new and varied treatment of the shop front or the store. Lord & Taylor's, at 38th Street and Fifth Avenue, ten years ago was hailed as a worthy example of the finest type of commercial architecture. Then followed, one after another, a succession of beautiful shop fronts, no two alike, yet all possessing the same rare qualities of studied scale and perfected proportion. The inspiration for their design was derived from every known architectural tradition, yet they show such originality of treatment that they cannot be called plagiaristic adapta-



Shop Front of Revillon Freres



One of Several Side Windows

Henry Otis Chapman, Architect

tions. Such a consistency and similarity of scale as are shown in all these recent shop fronts help to give Fifth Avenue an architectural uniformity, which even the variety of individual motifs cannot altogether prevent.

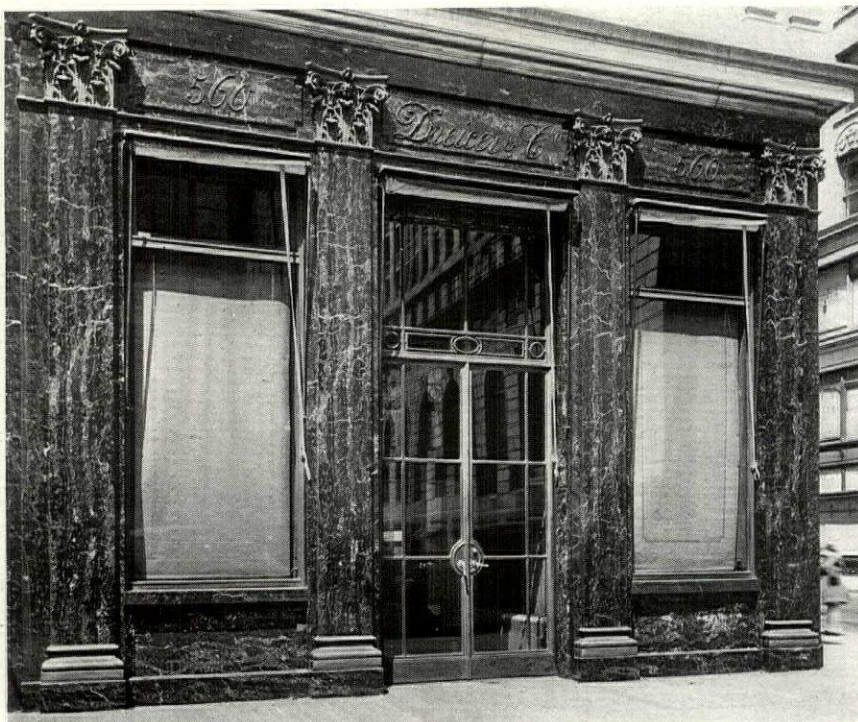
In the individuality of motifs two distinct types predominate. One type utilizes the older idea of making the entire front of glass, regardless of all principles of architectural design, while the other type limits the size of the show window to the re-

quirements of the architectural setting in which it is an indispensable element. Through this latter treatment it is possible to give a uniformity and consistency to the design of the entire building, which obviates the undesirable and non-structural effect of a masonry building resting upon a basement of glass, which is invariably unsatisfactory.

The material with which these two types of shop fronts are carried out has much to do with the individual charm and character which are so perceptible.

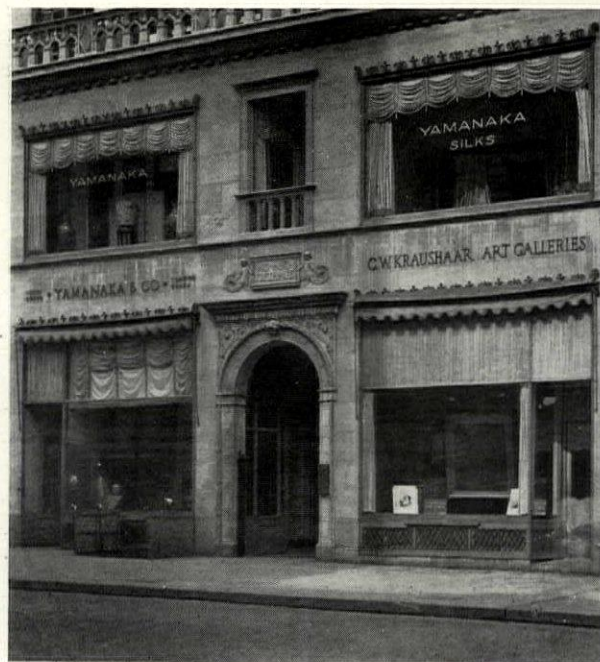
Bronze, marble and architectural terra cotta have been combined in many delightful designs, but they have been employed so frequently almost alone, that it seems desirable to consider each material separately.

It is in the attempt to give the large open shop front with its expanse of plate glass some sort of architectural scale and treatment that bronze has come into popular use. The structural frames which divide the front into entrances and windows, when constructed of bronze or wrought iron, are adapted to use of rich ornamentation. Often the upright members are designed as slender pilasters elaborately decorated in low relief in the styles of the French or Italian Renaissance, or as carefully turned balusters after

Effective Use of Black and Gold Marble and Gilded Bronze
Warren & Wetmore, Architects



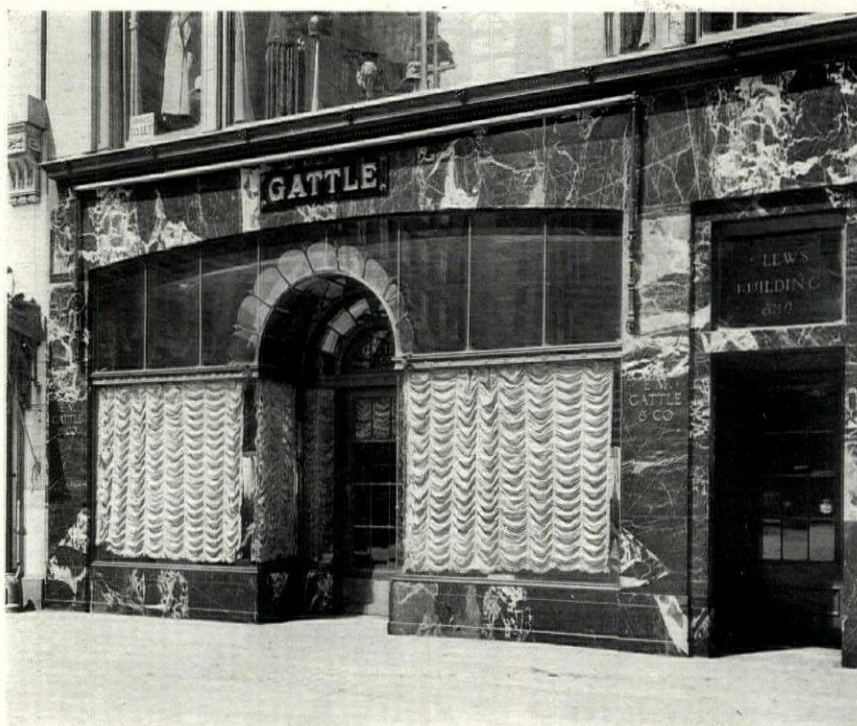
Interesting Use of Colored Marbles
G. A. & H. Boehm, Architects



Shop Front at 680 Fifth Avenue
Welles Bosworth, Architect

the Spanish style. The horizontal members are arranged sometimes as narrow cornices crested with delicate decorations of scrolls and small anthemions, suggestions of Greek and Roman ornament, or they are built up of slender mouldings charmingly chased and carved. Among the recent examples of elaborate bronze work are the fronts of Alexander's and Revillon's on Fifth Avenue, to mention only two. In the Alexander shop, Carrere & Hastings have combined in a masterly manner perfection of proportion and scale with refinement of detail and design. The restraint of the rustication of the basement and upper window trim, together with the soft coloring of the marble moulding enframing the shop opening and the delicate tints of the sgraffito decorations on the plaster wall surfaces above, suggest Italian influence in the design of this beautiful building. It is in striking contrast to the vigorous treatment of this shop facade as a whole that the most delicate designs in bronze have been used to ornament the tops of the show windows and the interesting domical glazed hood which protects the entrance door. In the Kirkpatrick shop a still more elaborate use of bronze detail is found in the balusters' supports and ornamental frieze band of the

windows, as well as in the entrance doors themselves, showing panels and over-decorations in low relief. The delicate decorations of the corner balusters and the cornice and finials above the door are worthy examples of the metal worker's art. In the two facades of the Revillon shop is found, perhaps, the most elaborate as well as the most successful use of bronze detail. Here the entire architectural treatment of each window has been carried out in bronze in a most interesting design slightly



Bronze Muntins and Black and White Marble
Starrett & Van Vleck, Architects

suggestive of the French style of Francis I. The large segmental arched windows have been given a splendid sense of scale by breaking them up with arches, pilasters and cornices of bronze.

Marble has many qualities to recommend it as a material for the decoration of shop fronts. First of all, because of the variety of tones and colors in which it may be procured and the innumerable contrasts and combinations in which it may be used it is desirable, and for a second reason, because the highly polished surface of marble gives protection and permanency to the color, where lasting color effects are desired. As the use of color in every form of architectural decoration is becoming steadily more popular, so marbles of every known hue, stone in browns, yellows, grays, pinks and whites, and the limitless range of colored terra cottas are being employed to an extent unknown before.

Perhaps the most successful use of marble is in designs such as the Dreicer shop front, where pilasters, base and entablature of black and gold marble have been combined with dull gilded bronze in pilaster bases and caps and in the trim of the windows and doors. The effect, which is both rich and restrained, makes a very pleasant contrast to the typical facades of limestone and light brick. Another example where marble has been used successfully, if less architecturally, is found in Gattle's shop front.

Here large polished slabs of black marble veined with white have been used to enframe the entire shop opening. With the marble has been combined plate glass held in place by thin bronze members and muntins in an unusually simple and straightforward design. Even the scalloped glass cresting which forms a sort of hood over the doortop is without metal decoration of any kind. At 587 Fifth Avenue a very striking marble store front was designed for Peck & Peck. This front is interesting on account of the combination of two kinds of marble used for the trim and the surface of the three lower stories. Although the effect is rather startling, the design as a whole would be quite successful had it been possible to tie together the upper and lower portions of the facade, which as shown have no architectural connection or conformity in scale or design. Even the pilaster divisions between the openings on the street level have no relation with the wall spaces between the five small windows on the second floor.

The shop front at 680 Fifth Avenue illustrates the use of the second story show windows which are now in wide use for the exhibition of objects which are fairly large in size. The design has been so handled and the openings so well grouped that notwithstanding the large proportion of door and window space the facade presents an appearance of strength, dignity and consistence.



Admirable Because of Its Good Proportions and Simple Design
A. D. Seymour, Jr., Architect

The Development of the Arcaded Shop Front

TODAY, as a person walks along the commercial thoroughfares of the nation, he finds store front after store front, almost continuous on both sides of the more important streets, designed so as to attract his attention, and present to him in the most appealing manner the merchandise that is for sale within. To the casual observer these attractive store windows and the artistic displays of goods they contain may mean only a general indication of tempting prosperity, shown by the style and success of the merchants, but to the architect who permits his mind to briefly reflect, they tell a story of real and rapid development of one branch of his profession's work.

Until about 50 years ago show windows in the stores of this country were made of small pieces of window glass. History tells us that plate glass was first used in large sheets for display window purposes by an American merchant in the 70's of the last century, and that it came about merely as an accident. In some way most of the window glass in one of the old wooden sashes of his single show window was broken. The weather being a bit chilly, it was necessary for him to close the opening. Rather than board it up, he scraped the silver from a French mirror, removed the damaged sash and put the large, clear glass in its place. Even in those early days the increase of his sales of articles displayed in the window, makeshift as it was, was noticeable, for it permitted people to see his goods better than they could before the accident happened. What was true of the sales power of this chance pioneer's show windows was even then, although not fully realized, true of all merchants' store fronts, for as said years later by Marshall Field, "goods well displayed are half sold." That fact, combined with the more open effect obtainable with the plate glass front, brought it into common use in a comparatively short time.

The first of what we now know as modern store fronts was not built until seven years after the Spanish-American war. That first group of show windows built as a sales asset for the merchant was erected about the time that the first two-cylinder

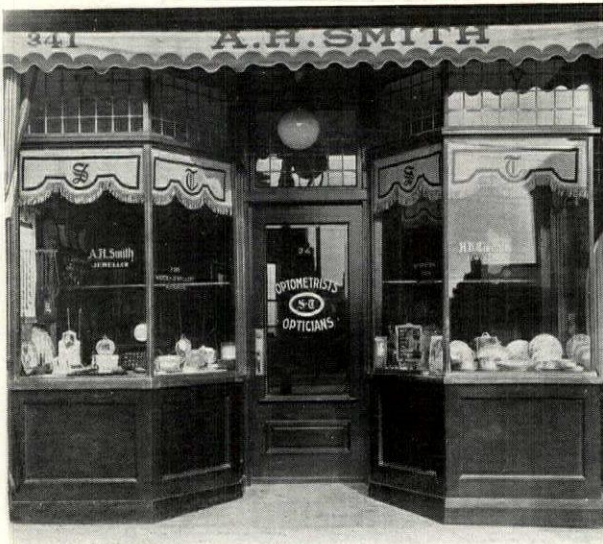
automobile was chugging its way on Fifth Avenue. Since then the development of the art of display of merchandise and the advances made in highway transportation have gone forward almost hand in hand. In the late '70's, and even during the early years of this century, the merchant who transacted his business behind dingy, dark and unattractive show windows was not considered particularly out of date, but today if that same storekeeper has continued in business, if he has progressed as is so essential for his own welfare, it is likely that the front of his building today has an appearance that "pulls" trade 24 hours of each day.

The store front of today was not a sudden development, but rather took form step by step. The development and more common use of structural steel made possible the elimination of supporting columns which formerly limited the width of single show windows. The bulky wood setting and corner posts which obstructed the view of passers-by and which were anything but permanent, were replaced by small yet sturdy sash and bars made of some indestructible metal. The mouldings of which these parts were formed were and are today small and inconspicuous, yet they are so shaped that they not only have beautiful curves and sharply defined corners but also hold the glass in a firm, resilient grip, thereby reducing to a minimum the possibility of glass breakage. The development might have stopped at this point, but it went on in order that the entire store front might be right and complete from sidewalk to cornice line and from corner pier to corner pier of the building. Head jamb, side jamb, transom bar and bulkhead coverings were provided, permitting any number of variations, and at the same time permitting the use of stock material with which every possible condition of new or remodeling work might be met.

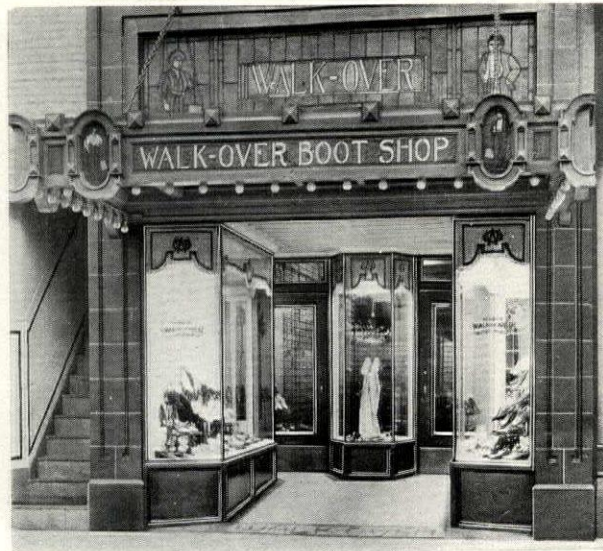
More complete education of the merchants in all lines of business activity throughout the entire country soon brought about a much fuller appreciation of the real sales-producing value of their glass window fronts, which formerly had been largely



An Excellent Example of the Modern Arcaded Shop Entrance. Every Advantage Taken of Unusual Width



Recessing Door Creates Deep Windows. Excellent Opportunity for Display



The Utmost on a Narrow Plot; Arcading Affords Window Space

neglected, having served mostly as a protection from storm and theft. The response, which was prompt, helped to pave the way for the neater and more profitable designs which this new material made it possible for architects to submit to their clients. The level of store floors came to be made about the same as that of the sidewalk outside instead of being two or three feet higher, thus making it much easier for prospective customers to enter the merchants' places of business. This may seem to be but a detail, yet it is a detail of importance for the buying public, which like the water of a river, to quite an extent,

follows the line of least resistance, so that all obstacles, however slight, which might deter people from entering and buying should be removed. The heights of window floors were made to conform to the kinds of goods displayed, for it was realized that furniture should be shown at nearly the level of the sidewalk, while rings and other articles of jewelry should be presented to the public in about the position a person naturally holds his hand. In this way came about the early application of the law, which was later formulated thus: "Merchandise to be displayed to the best advantage must be shown to the



Could More Attractive Window Display Be Easily Imagined? Result of Arcading, Keeping Floors of Windows Low

public in as nearly as possible the position in which it is intended to be used."

The early store fronts in which plate glass was used were of the most simple design, a straight front and a door, with perhaps a slight return at one side or the other. Advancing from this to another stereotyped design, the door, with a narrow and shallow return, for a while was commonly placed in the center with show windows at each side. But with the introduction of metal settings these two old fashioned types of fronts, although still occasionally used, were largely thrown into the discard, being replaced by layouts which were much more elaborate, more beautiful, and which also permitted a much greater display footage on lots of the same width. With the growth of our centers of population and corresponding increase in always high property values and rentals this feature has come to be of more and more importance. It is, of course, quite largely the power of property to produce sales that determines the return it will bring on the investment, while at the same time the power of a location to effect sales is to a greater or lesser degree dependent upon the footage of display it affords. It is this fact as well as the desire for the

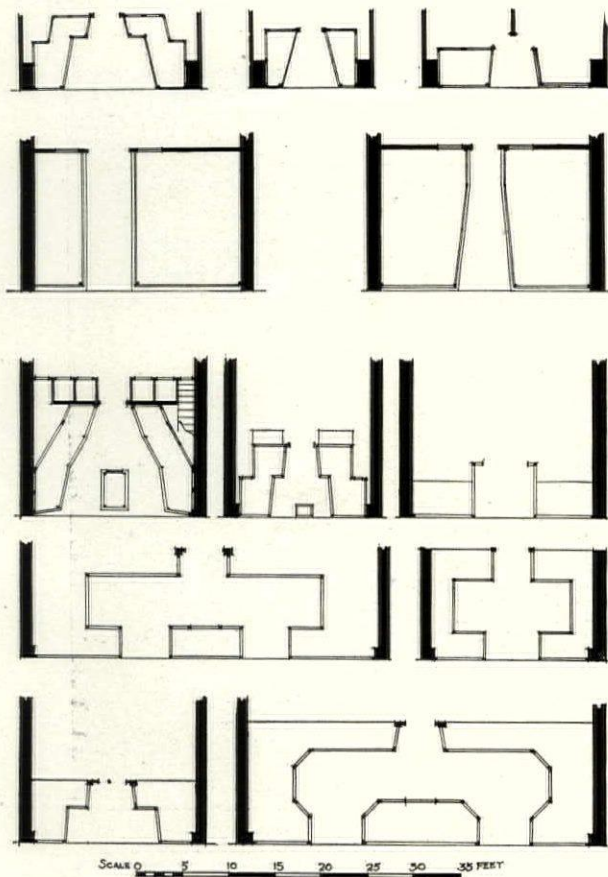


Arcaded Entrance to Men's Clothing Store. Windows Shallow But of Large Frontage

best possible appearance that has brought about the greatly increased popularity of the "arcade" style of front that is now so often used in New York, Chicago and other cities. By having store fronts of this type of design, with one or more "island" show cases, the display footage on a 50-foot lot may be easily made as much as that on a lot of 150 feet or even more. Although the financial returns are probably not in direct proportion to this increase of display footage, they are related to it to such an extent that the extra cost of the more extensive "arcade" store front has proved to be a good investment for thousands of merchants.

In the design, manufacture and sale of standard store fronts, the goal has been to give the architect the best possible material, and neither effort nor expense has been spared to accomplish this end. Manufacturers have striven not only for better appearance, but also for absolute permanency, making the store fronts waterproof, reducing glass breakage to a minimum, and very largely eliminating those two old time shopkeeper's bugbears, dust and frost. These ideals have been attained through years of study and experience. As buildings of today are built to stand for centuries, so the glass setting should be equally enduring. Realizing this, the manufacturers of modern store fronts make use only of metals that do not rust or deteriorate. All kinds of putty or cement, which in time is almost certain to harden and crumble when used for the setting of large plate glass, have been eliminated. By using solid copper or bronze for all glass-setting members, the demons "rust" and "upkeep" are eliminated so far as the store front is concerned.

Twenty years ago all merchants doing business in the northern states were confronted with the ever-present problems of frost during the winter and dust during the summer. The store front of today would



Plans of Several Arcaded Fronts

not do for the merchant what it ought to do unless it did its share to reduce the possibility of such troubles. For this purpose ventilation holes are punched in both the inner and outer members of the sash. During the winter these holes permit a circulation of cold dry air near to the inside surface of the glass so that the possibility of forming of frost or sweat is reduced to a minimum. In the summer these openings may be closed by means of a small slide which is a part of the sash setting. When these holes are closed in this way the front is as nearly as possible proof against dust.

Following closely after the introduction of metal setting for the plate glass of store fronts, there came many improvements and refinements in show window lighting arrangements, background construction, signs, awnings and other accessories that are essential to the attractive appearance of a store front. In the old days if show windows were lighted with electricity, in most cases the lamps were suspended from the ceilings in such positions that they threw a repelling glare into the eyes of anyone passing. This is all changed now, for it has been shown that the most efficient results are obtained when the lamps are hidden from view, the light being thrown onto the goods exhibited rather than into the vestibule or into the eyes of people who stop to view the merchandise displayed. Merchants have learned full well that light attracts and that properly illuminated show windows make many future sales during the evenings when the stores are of course closed.

When a marquise is not used, an awning in many

cases must be put up to shade the store front. The various types of frames and adjuncts now on the market entirely eliminate the necessity for the ugly vertical and horizontal braces that formerly were required to hold awnings in place. The awning crank box is now being used less and less, because its appearance is objectionable and there are other more satisfactory methods of rolling up an awning.

Many concerns have specialized in the manufacture of ornamental signs. Others have devoted their attention to the building of window backgrounds that are beautiful, yet not so elaborate as to detract from the merchandise displayed in the windows. Rich marble and bronze grilles have come into quite common use for bulkhead construction. Tiles of many different kinds and patterns are available for entrance and vestibule floors. Ceilings over entrances, instead of being flat and straight across, as was almost the universal custom until recently, are now often arched or vaulted to conform to the style of architecture employed throughout the building.

The result of all this activity and development in the designing of store fronts has given us in this modern day and age the most practical type of commercial store front in the world, with the best of the world's materials at our command. These facts, combined with the desire for "up-to-dateness" on the part of the modern business man, which in turn is founded upon the homely but basic truth "it pays," have made and will continue to make possible store fronts which are sources of pride to the architect, his client and to the entire community.



Large Extent of Show Window Space on Plot of Average Width. Area Left for Occasional Use of "Island" Displays

Showcase and Counter Arrangement

By HARRY F. SIPPLE

THE designing and planning of store fixtures are coming more and more within the sphere of the architect. In previous years the small merchant depended entirely upon himself and the store fixture salesman to plan and design his store, and as a result, if a competitor opened a shop in the immediate vicinity the design and general lines of his fixtures were in detail the same. Today not only the large department stores but the small merchants as well are retaining architects to lay out and design their display fixtures, which gives each store an individuality of its own. Last year in New York alone more than \$30,000,000 was spent by merchants in every kind of business for store fixtures. It is estimated that about \$90,000,000 worth of fixtures was used in the whole United States, but of this amount it is safe to say that only half was designed by architects.

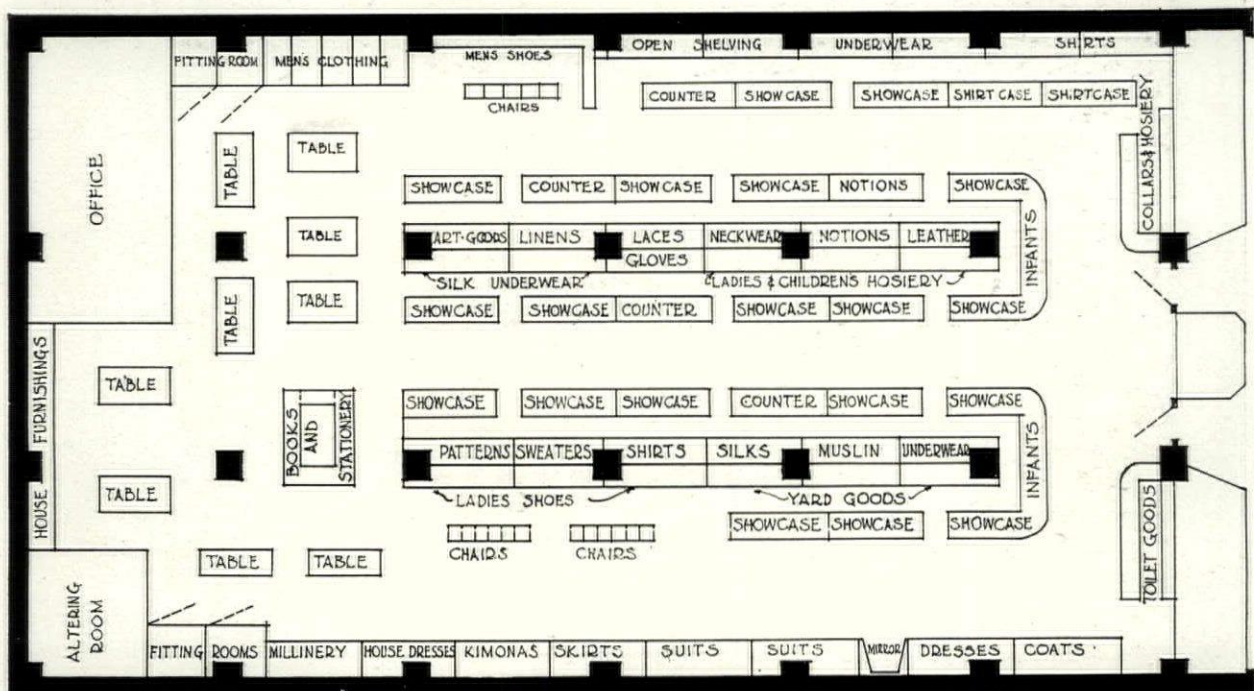
In laying out and designing store space it is always good policy for the designer to study the needs of the merchant. By this is meant consideration of the kind of people catered to, the amount of merchandise carried in stock, and the general character of the location. For instance, in fitting out a small department store, something like that the plan of which is shown herewith, the merchant did quite a large business in men's furnishings and devoted one whole side of his shop space to this line of goods, while another merchant in the same neighborhood, who had a store about the same size, devoted only one-quarter of the space to men's furnishings.

The accompanying plan is considered ideal for a small general store, as the various departments are

compact and all the goods are on display. As the visitor enters the store, his attention is attracted to the two large round corner showcases, each equipped with one plate glass shelf and electric reflectors. These cases, as well as all the other showcases in the store, are 40 inches high and 24 inches wide. The three aisles are sufficiently broad to give an unhampered approach to the rear of the store. On the right-hand side, directly back of the show window, is a length of shelving for men's hosiery and collars with a round corner showcase for the display of neckwear in front. Running along the wall are shirt and underwear cabinets. The purpose of these is that all the merchandise may be on display and assorted in various sizes. Adjoining the underwear cabinets is a length of open shelving for nightshirts, belts, etc. The men's shoe department comes next. The shelving used is spaced for two boxes in height. The men's clothing department is equipped with five clothing cabinets. These cabinets have pull-out hangers and are enclosed with glass doors, and adjoining the cabinets are two fitting rooms.

In the center aisle specially constructed cabinets are made for the display and stock of art goods, linens, laces and ribbons, women's neckwear, notions and leather goods. These cabinets have lifting, receding doors. The opposite side has open shelving for women's and children's hosiery, a glass front drawer cabinet for gloves, and a receding door section for silk underwear. Specially made floor showcases are used around this section for notions, ribbons, etc.

In the center of the store on one side are cabinets for muslin underwear, silks, waists, sweaters and



Suggestion for Planning a Small General Store (Scale: $\frac{1}{8}$ inch equal to 1 foot)



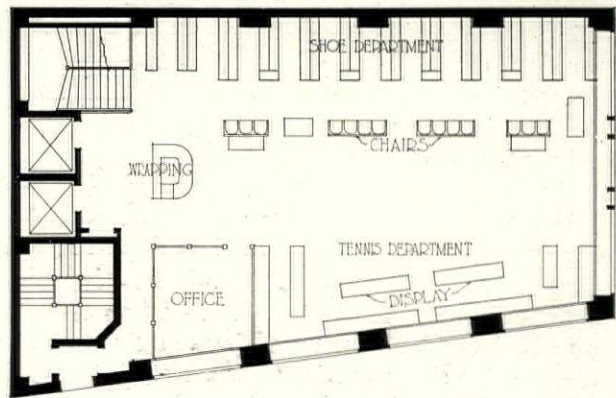
VIEW OF A SALES FLOOR, SHOWING COUNTERS AND WALL CASES



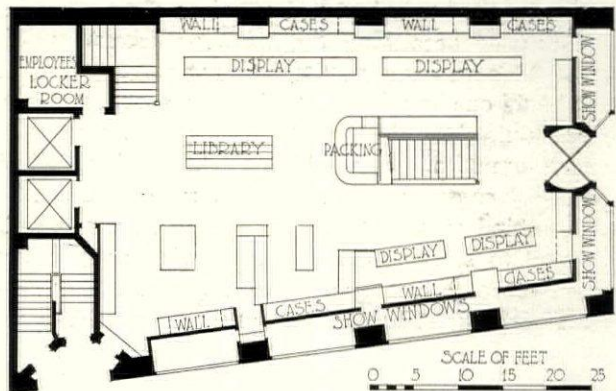
EXTERIOR, STORE FOR SALE OF SPORTING GOODS, NASSAU STREET, NEW YORK
BENJAMIN WISTAR MORRIS AND LOUIS S. WEEKS, ARCHITECTS

patterns, while the other side is devoted to yard goods and women's and children's shoes. Here also are specially built showcases and counters. Back of the window on the left-hand side of the store is located the toilet goods section. This entire side of the shop is given over to women's ready-to-wear garments, and millinery. In the rear of the store a center counter is provided for stationery and books. The house furnishing department, office and alteration room, also in the rear, complete the shop layout.

In designing a drug store, if the cornice line of the fixtures is carried around the entire room on an even line a very attractive effect is produced. In the accompanying plan, there is nothing shown on the right-hand wall except what is known as an "English buffet case" and telephone booths. The telephone booths are placed in the rear so as to compel the patron to walk the full length of the store, because if the cases are attractively arranged it may mean a sale before the person who came in only to use the telephone leaves. On the left-hand wall are a soda fountain, tobacco wall case, patent medicine section, cigar showcase, candy showcase and the wrapping counter. On the rear wall is open shelving with built-in sink and drain boards. The prescription section has a display front for perfumes, powders, etc., and is connected by arches to the telephone booths on the right-hand side of the store. The patent medicine section is on the left-hand wall. Soda tables in the center of the room complete the



Plan of Second Floor



Plan of Main Floor

Shop of A. G. Spalding & Bros., New York



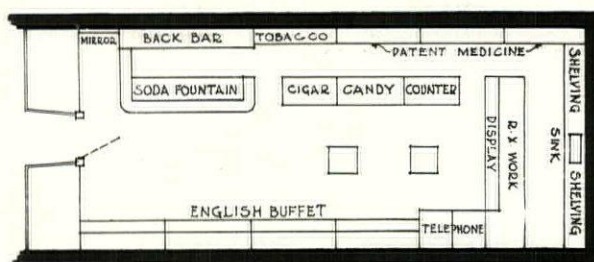
View of a Well Arranged Floor for Sale of Men's Furnishings

layout of the drug store.

If the designer is working on a jewelry store it is advisable, if the shop is a large one, to have a diamond room in the front on one side and a watch repairing department on the other. Showcases for jewelry laid out in horseshoe form in the center of the room make a fine appearance, and the silver and flat wear are carried in wall cases running on each of the side walls. Great care should be taken by the designer to see that everything in the store harmonizes, since poor taste in painting or decorating the walls or ceiling would spoil the appearance of the entire store.

Should one be called on to design a sporting goods store, unless the designer has had previous experience I am afraid he would have quite a job on his hands, since every article of any size requires a different kind of wall case to display it; so it would be well to secure as much information as possible from store fixture manufacturers who make this class of fixtures, before starting to lay out this type of store, in order to make it successful.

There has recently been completed by Benjamin Wistar Morris and Louis S. Weeks, architects, what is considered one of the finest sporting goods stores in the country. This is the store for A. G. Spalding & Bros., Nassau Street, New York. From the window backgrounds to the third floor it was designed by the architects and is thought to be the first store



Suggested Plan for a Drug Store

of its kind for which architects were employed to design all the display equipment. The basement of this store is devoted to baseball, football, skates and bargain departments. The first floor has specially built cases for sweaters, jerseys, bathing suits, cloth-

ing, etc. Specially built cases for the display of tennis racquets and shoes are found on the second floor. On the third floor the golf enthusiast will find clubs, bags and everything needed for this sport, also the gymnasium department, as well as polo and various other departments for sporting equipment.

It is suggested that when architects design store fixtures they pay particular attention to the window backgrounds, as the show windows are one of the merchant's best assets, and if attractive they will sell more merchandise than any salesman in the store. Attention must be given to the class of merchandise to be displayed, since a French designed window back which would be just right for a women's ready-to-wear department would not be the proper setting for the display of jewelry. Care and thought expended on the designing of fittings for shop windows and shop interiors are abundantly worthwhile since, in the first place such fittings when once installed are likely to be used as long as the shop exists, and also because nothing is more important to the appearance of the store than fittings which are so constantly seen. They can make or mar the entire shop.



Interior of a Jewelry Store; Wall Cases for Silver; Showcases for Jewelry

Heating and Ventilating of Shops and Stores

By EDWIN L. COLE

THIS is a widely varying problem, ranging from simple to complex with the character and size of the particular project. All stores of course require heat, but not all stores need mechanical ventilation. Generally speaking, the small or medium sized specialty stores, such as drug, men's furnishings, trunk stores, etc., need not be ventilated as they are rarely crowded; the area is large compared with the number of occupants assembled at any one time, and the entrance and exit doors furnish ample means in most cases for thorough airing out, this in contrast with stores of large floor area in proportion to the outside exposure, in which effective airing out is impossible, as in department stores.

The superiority of vapor heating over the old style low-pressure steam system is so well established that it needs little comment here. Assuming a choice of system that is durable and simple, vapor heating is much more economical, and is free from the limitations so frequently experienced with low-pressure steam. Overheating is one of the evils common to the haphazard treatment of stores, and one that is least generally recognized. It is a source of discomfort, a menace to health, and a deliberate waste of fuel. Therefore it is of major importance, in designing the plant, to give this proper consideration. It is necessary, of course, to have sufficient heating capacity for the severe cold weather, but this will overheat the store much of the time if not properly controlled. Therefore it is essential that all the heat provided should be adequately controllable in some simple way. In the small store, with few units of radiation, it is wholly practical to depend upon the modulating supply valves used with a vapor system to heat each radiator as much or as little as the outside temperature demands. It will be found very helpful and a worthwhile economy to display a number of thermometers in conspicuous places to give the clerks ample notification of the temperature or the need to control it, and to make some one person responsible for the prevention of overheating. During the war many firms practiced this fuel-saving measure, and savings in fuel consumption as high as 20 per cent were common, much to the surprise of those who tried it. In the larger stores, however, particularly department stores, hand regulation of temperature is impractical, and in all cases the cost of automatic temperature control equipment is fully justified. This should be as simple as possible and the best and most durable equipment obtainable. It is a good investment and not in any sense a luxury.

The location and type of radiation depend upon the character of the store and its equipment and fixtures. The cheapest and most efficient type is direct radiation installed as near the cold exposures as space will permit. In specialty shops with artistic interior treatment, where appearance is important,

an excellent arrangement is suggested in Fig. 1. This is a circulating, indirect stack, taking its air from the floor down to the indirect radiator casing, and discharging heated air through a duct built into some available space in a case, cabinet or shelving, the discharge outlet being through the top of the case, or if this is too near the ceiling, then out through the face well above the headroom. This method draws the coolest air in the room from the floor and brings the warmer air at the ceiling down to the floor.

The treatment of the main entrances of small stores is always a problem, as there is not always room for an ample vestibule. Revolving doors are a great assistance in preventing cold drafts and are economical of heat, as they admit a minimum of cold air. It is necessary that space be provided for ample direct radiation close to such entrances. In large department stores there is opportunity for providing deep vestibules and sufficient justification for them. They are a distinct economy from a heating standpoint and make possible the control of cold air currents. They should be at least the full depth of the show windows, and the sides form very effective show window space. It would seem that the tendency to take shelter in vestibules is encouraged by the management of many large department stores, as it insures inspection in comfort and at leisure.

With such an entrance several methods of heat treatment are possible that make all the air entering the store warm and fresh; this is particularly true where revolving doors are used. Circulating indirect stacks, located directly under the vestibule, discharge through large grilles in the sides of the vestibules in the space under the windows near the inner doors. The air supply to these stacks comes through grilles in the outer halves of the same spaces. This tends to draw the entering cold air into the downdraft grilles, to some extent working against its direct flow toward the inner doors; and the flow of hot air out into the vestibule near the inner doors, in large volume at high temperature, is drawn into the store at a comfortable temperature. This treatment gives insurance against freezing, always a possibility with direct radiation. The temperature of vestibules should never be controlled automatically, for the same reason.

In case the management objects to large vestibules, it is necessary to have a large amount of direct radiation in as close contact with the path of cold drafts as the arrangement of the store will permit. It will be a makeshift arrangement at best. One treatment that has met with some success in such cases is to construct a glazed partition in the aisle opposite the entrance doors, with a large amount of direct radiation on the side toward the doors. The cold air rushing in comes in contact with the hot radiators, and being forced to change its direction,

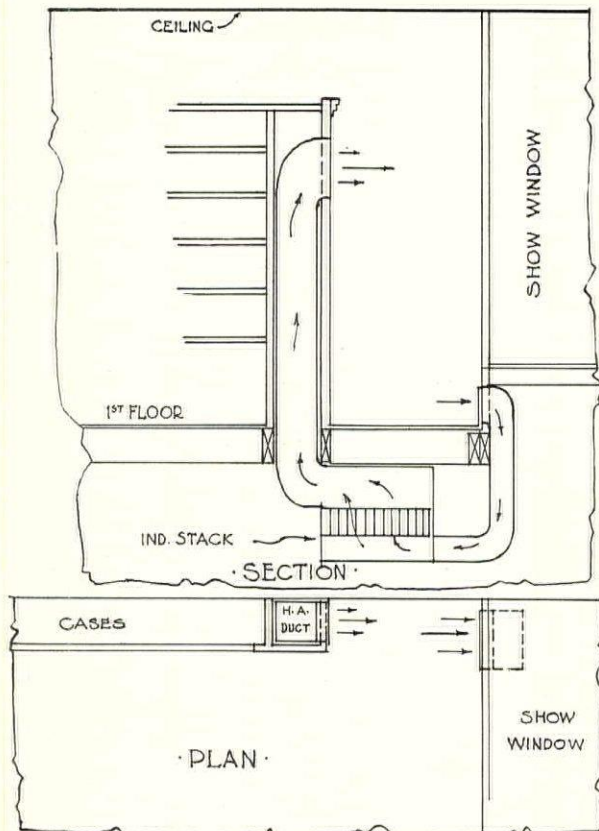


Fig. 1. Suggestion for Air Circulation

becomes to some extent mixed with the hot air in this space. In the case of small vestibules with outer and inner doors, space might be provided between the inside doors and banks of narrow, high wall radiators installed in these spaces. Revolving doors are almost an essential in the two latter cases. They are very effective mixers of hot and cold air.

It is important to prevent show windows from "steaming" and freezing when the show space is open to the store. Such a condition requires some effective heating surface as close as possible to the glass to evaporate the moisture in the air faster than contact with the cold glass can condense it. A number of methods have been successfully employed. Coils of pipe may be installed immediately below the floor of the show space with perforations or slots in the floor close to the glass line, permitting heat to come up over the surface of the window. Space may be provided for a large percentage of the radiation required for heating to be installed near the windows just outside the show space. If the show windows are partitioned off from the store and kept at a low temperature, there is less moisture in the air, as these spaces are little affected by the air in the store; and the more equal temperature between the inside and outside air prevents the cold glass from condensing what little moisture there may be.

The air conditioning of very large floor areas with proportionately small outside exposures, as in the large department stores, is a much more complex problem than in the small shop. There is the tendency to overcrowd. Also shoppers spend more time

in such stores and feel the effects of poor air conditions much more. There is ample testimony from both men and women shoppers to establish the fact that the condition of the air in the average department store is uncomfortable and enervating, tending to make shopping a wearisome ordeal despite its manifold fascinations. Without doubt, if the air in any large department store were kept fresh and stimulating, the contrast with the average condition would be so noticeable that it would occasion wide and favorable comment.

The first step in the solution of this problem is to determine what makes the air so uncomfortable, and having arrived at the cause, the remedy is at once simpler of solution. As previously indicated, overheating should be placed first on the list of causes. Most stores are much too hot for comfort and health. Nothing is more enervating than too much heat. Second in importance is vitiation. Stale or foul (un-fresh) air at any temperature is unwholesome and quickly affects one with a sense of discomfort, with good reason. Commenting on the first of these causes, overheating, there is no excuse for this, regardless of the fact that it is so general. No interiors of the character under discussion should ever be heated to over 68° , and even a lower temperature would be found more wholesome for the clerks and certainly for the shoppers if the temperature were kept uniform, not allowed to rise appreciably at times and then be cooled down again. The first step, then, is to control the temperature of the air to a minimum, comfortable for clerks who are lightly clad and must be the deciding factor of minimum temperature. It may be assumed that the system has been properly designed for a possible 70° in the average coldest weather. Automatic temperature control apparatus is the only means available for holding the temperature always at the desired point. Such equipment is indispensable to the effective solution of the problem. If the management of any department store could have demonstrated for it the saving in fuel consumption, through using only what is necessary to keep the areas constantly at the desired minimum temperature, and the effect on sales efficiency of the increased mental and physical alertness of the clerical staff, to say nothing of the effect on the public, it would consider such equipment a vital necessity. And it is quite simple to accomplish it with the highly developed equipment available.

The second cause is not so simple to treat. It is an accepted fact that the one great natural purifier of the air is the sun; that the sun's rays must shine directly through and into air to accomplish its purifying result. Vast areas in this type of building are never reached by the sun, and depend almost wholly on artificial light. Furthermore, the area of the floors in proportion to the area of windows that can be opened is so great that buildings of this class largely contain the same air day in and day out, there being only a slight natural air change as compared with other types of buildings. Morning finds the

same stale, contaminated air in the building that was left there the night before, particularly in the winter. Effective "airing out" is practically impossible. Nor can the sun get at this air except in a very small part of its area. This is particularly true in basements and even on street floors some distance from the entrance.

It is out of the question to attempt to describe in this article the various applications to such a problem of air handling equipment except in a general reference to a few of the possibilities.

Exhaust. Elevator shafts must be enclosed. This makes possible the provision of a separate enclosed space or shaft at one end of each battery of elevators, fireproof and extending from the basement floor to a point well above the roof. Its area must be ample for the work it will be expected to perform. Suitable openings into this at floors or ceilings or both, depending on the particular space treated, can be provided with a duct from each extending up this shaft a sufficient height to prevent communication between floors. The tops of these shafts should be provided with hoods suitable for the egress of air and the exclusion of weather. Such shafts could be made to serve an appreciable portion of the area. Whether they would be sufficient exhaust for the whole, or whether it would be necessary to provide additional mechanical exhausts for portions remote from them, are questions that can be answered only by the study of each individual case. If it were decided to use both methods, care must be exercised to avoid the possibility of one working against the other; this is another problem for individual study.

Fresh Air Supply. Two major methods of effective supply are available, but their application must needs be so diversified and so dependent on the design and arrangement of the building that suggested treatment must be general.

Central Fan System. A special room is required for the fan driving motor and heating coils. For large floor areas it may be necessary to have more than one fan, particularly if both the basement and the first floor are to be served. These apparatus rooms may be located anywhere in the basement that space can be allotted for the purpose, but it is some advantage to have them not too far removed from the boiler plant. This is not a difficult problem usually, as they can be located in parts of the building remote from sales space. The source of fresh air supply should be the roof, and one or more shafts provided to conduct it to the necessary points for warming and distribution.

Distribution Ducts. It is an entirely different matter to find suitable spaces for the trunk line and branch supply ducts through the rooms; unfortunately, many forms of building frames do not lend themselves to concealment of ducts. If it were not for this it would be a simple matter as a rule.

At this point let us understand clearly what is really required in the way of ventilation. For years it has been supposed that if the air in a room were

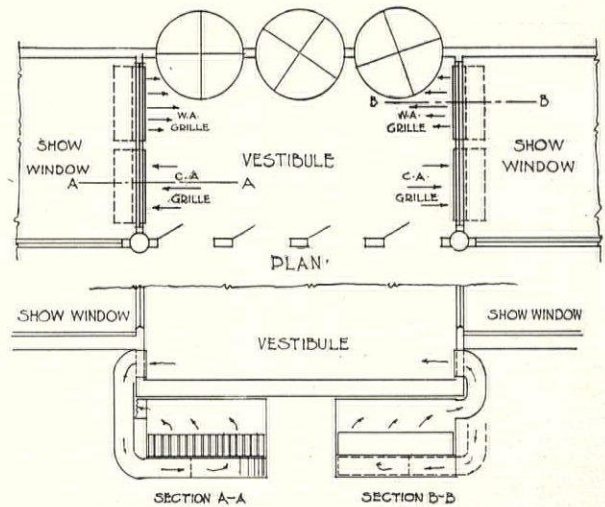


Fig. 2. Arrangement of Radiators and Doors

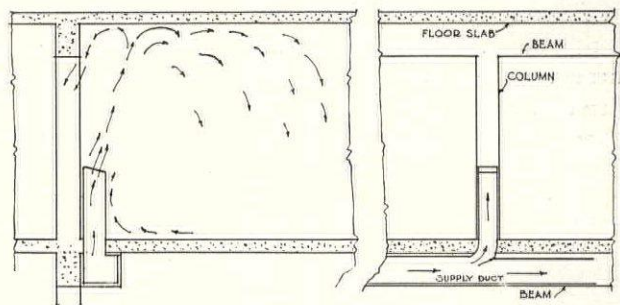


Fig. 3. Plan for the Diffusion of Air

changed so many times an hour all that was necessary or even desirable had been accomplished. This is a fallacy that is still clung to in many quarters, but it will never solve the problem of the large department store. While it is true that it is necessary to remove stale air and replace it with fresh outdoor air, that is but a small part of the problem. The important factor which is less commonly realized and usually neglected is circulation or movement and diffusion within the room. To be "alive," stimulating and refreshing, all the air in the room must be in active motion. Not in "paths" or currents that will cause uncomfortable drafts, but with a "breaking up" or mixing effect, the air in the room being sprayed constantly with the incoming air all over the room. This can be done successfully only by introducing the air at a high velocity in a vertical direction with the effect indicated by the arrows in Fig. 3. The inlet orifices must be distributed properly to avoid conflict; the velocity must be in proper relation to the distance of the inlet orifice from the ceiling, and all orifices just the right distance up from the floor to produce the aspirating effect shown in Fig. 3. The importance of this last feature cannot be overestimated. It makes the difference between success and failure.

To give a concrete example of one good method of designing and concealing ducts, we will assume a framing construction favorable to our purpose: mill construction of concrete slabs with supporting beams all running in one direction and spaced about 8 feet

on centers, with square columns under the beams. We will now attempt to describe the design of a supply duct system for a portion of the floor area. At some point available within this portion install a vertical main duct to supply all floors to be ventilated. On the ceiling of each floor install a branch from the vertical duct located beside one beam and furred in with it to give the appearance of a wide beam. From the top of this duct a vertical branch will be run up through the floor against each column above and furred in with it. Each of these branches will extend not less than 4 feet above the floor and terminate in an open end pointing up to the ceiling. Each of these supply outlets will be made to serve about 90 square feet of floor space. The velocity through each outlet will be proportioned to its distance down from the ceiling, possibly 800 feet a minute. Referring again to Fig. 3 we see the effect of this treatment on the air in the room. A slight air pressure is thus created in the room which steadily pushes air toward and out through all exhaust openings and tends to stop infiltration around windows. The temperature of the entering air is automatically controlled to prevent the room temperature from rising above the desired point, and volume dampers installed in the supply ducts should be set to maintain a uniform distribution of air in all outlets. Additional heating surface in the form of direct radiators may be installed, either exposed or encased, to provide for heat losses, these being automatically controlled as already suggested. This treatment, or a modification of it to fit varying conditions, would insure a wholesome, bracing atmosphere in the spaces treated.

Unit Ventilator System. Developments of recent years are the unit ventilators. These stand in the rooms they serve and can be installed against outside walls or against the shafts that conduct fresh air down from the roof. They take their air in at the back, and discharge it vertically as described for the other system. They give the same result in the room and eliminate the supply ducts altogether. They can be automatically controlled as to air temperature, can be operated together or separately, and by switching on a damper the air in the room can be re-circulated through them for warming up in the mornings and after holidays. They are compact, flexible and effective and an excellent solution of the problem wherever applicable. They are supplied with piping like a direct radiator.

Basement Sales Rooms. The "bargain basement" is an institution that has probably come to stay, and it has introduced a new problem to the ventilating engineer. It is wholly dependent upon mechanical ventilation, is often crowded to the limit of its capacity, and is an extreme air conditioning problem from every standpoint. Some heat is of course necessary, but this need is small in comparison with that of ventilation, and in the writer's judgment should be introduced with the fresh air. It is necessary to warm the entering fresh air sufficiently to prevent discomfort, and this heat alone will usually

be more than sufficient as the volume of air supplied must be large. Here again it is important to use automatic temperature control, as overheating is one of the chief problems in such basements. The thermostats should be graduated action type, generally cutting down or increasing the amount of heat introduced into the entering air as conditions require.

Basement Exhaust. Not only foul air but excess heat must be disposed of, and it is advisable to design the exhaust ducts with ample outlets at both the floor and at the ceiling, as at times the animal heat alone will cause overheating, particularly in mild or warm weather. The ceiling outlets should be fitted with dampers that normally will remain closed, but when opened will close off the ducts leading up from the floor outlets. These dampers should be automatically controlled from the same thermostats that control the heat supplied to the entering air, the thermostats being compound and arranged to first close off the heat and then, if the temperature continues to rise, to open the ceiling outlet dampers.

It would be a distinct advantage to have the main ducts run in trenches under the basement floor, with the supply branches extending up about 4 feet above the floor as described for the upper floors. But if this is not possible the ducts may be run on the ceiling with the branches so located (over cases, etc.) that they may branch down from the main duct at an angle of about 45° from the ceiling for a short length, and then sweep upward, discharging on a 45° angle toward the ceiling. Here again it may prove advantageous to use ceiling type unit ventilators and do away with the ducts. If the floor beams all run in one direction, the ducts can run beside them and not interfere with headroom, the appearance being the chief objection. But if the framing for the floor introduces cross beams cutting the ceiling into square bays, the ducts must be below these cross beams which will make them uncomfortably low. It will be seen that it is worth while to give careful thought to the ventilating design before determining the floor framing on any floor.

It seems appropriate to add a word here regarding the operation of the ventilating equipment. While the building is being cleaned the supply system should be shut down and the exhaust system operated to full capacity. At all other times, when the store is closed, the exhaust ducts should be closed tight to conserve the heat and prevent back drafts of cold air into the building. The entire system of supply and exhaust ventilation should be operated to capacity for at least one hour before the store opens for business every morning.

Little attempt has been made in this article to describe all the applications of heating and ventilating design that it might be possible to utilize. The writer's purpose has been more to bring out the fundamentals of these two problems, and to offer in some detail a description of at least one method of treatment that in his judgment is better than many others which are more or less in use.

Three Modern Parisian Shop Fronts

With Measured Drawings

By George Leighton Dahl



WITH the rumbling of steel and the groan of chains, the barricade is lifted; what appeared to be a cold and cheerless prison has now been transformed into an attractive shop front. Every morning and night the rolling steel shutters are raised and lowered to guard the merchant's shop. "Plate glass offers no protection," he says. Possibly the days of the Bastille are still in his mind. However, with the advent of modern business methods and advertising, the Nemesis of the rolling steel shutter seems to be near; in fact, its passing is accomplished, for as we promenade the avenues and boulevards we are attracted by the shop windows now relieved of the encumbrances of other days.

Paris, the city of fashion and art, is essentially also a city of individual exclusive shops, which cater to the thousands of visitors and buyers from all parts of the world. The shopkeeper is constantly endeavoring to invite their attention. In order to properly present his wares he well appreciates the necessity of creating an outward distinctive atmosphere, an architectural symbol, an index to his business.

EDITOR'S NOTE. Successful retail merchandising involves primarily a series of visual impellents which hold attention for a sufficient period of time to establish the dual connotation of attractiveness and dependability. With camera and measuring tape George Leighton Dahl here has interpreted and defined the subtle impulse which good architecture lends to the modern shop fronts of Paris.

ORIZA

L. LE

GRAND

LETTERS INCISED & GILDED

MARBLE

VENTILATOR

TINTED IN
DELICATE
COLORS

BRONZE-
ORNAMENT

ORIZA-L. LEGRAND

BRONZE-
ORNAMENT

RELIEF
GILDED

GLASS

GLASS

BRONZE-FRAME

MARBLE
HONED FINISH

TRAY-
PERFUME
DISPENSER

BRONZE-
PERFUME
DISPENSER

FRONT ELEVATION

PLAN

GLASS DOORS

DISPLAY CASES

GLASS LINE

BRASS WINDOW
SEALING

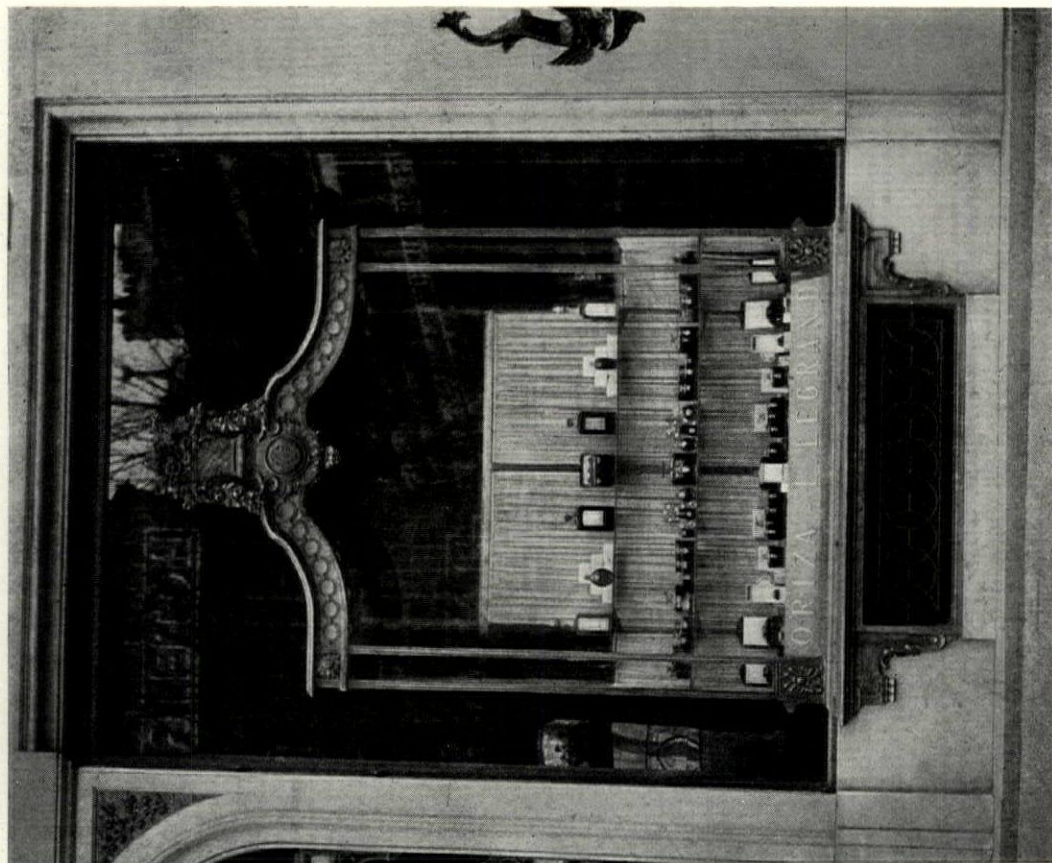
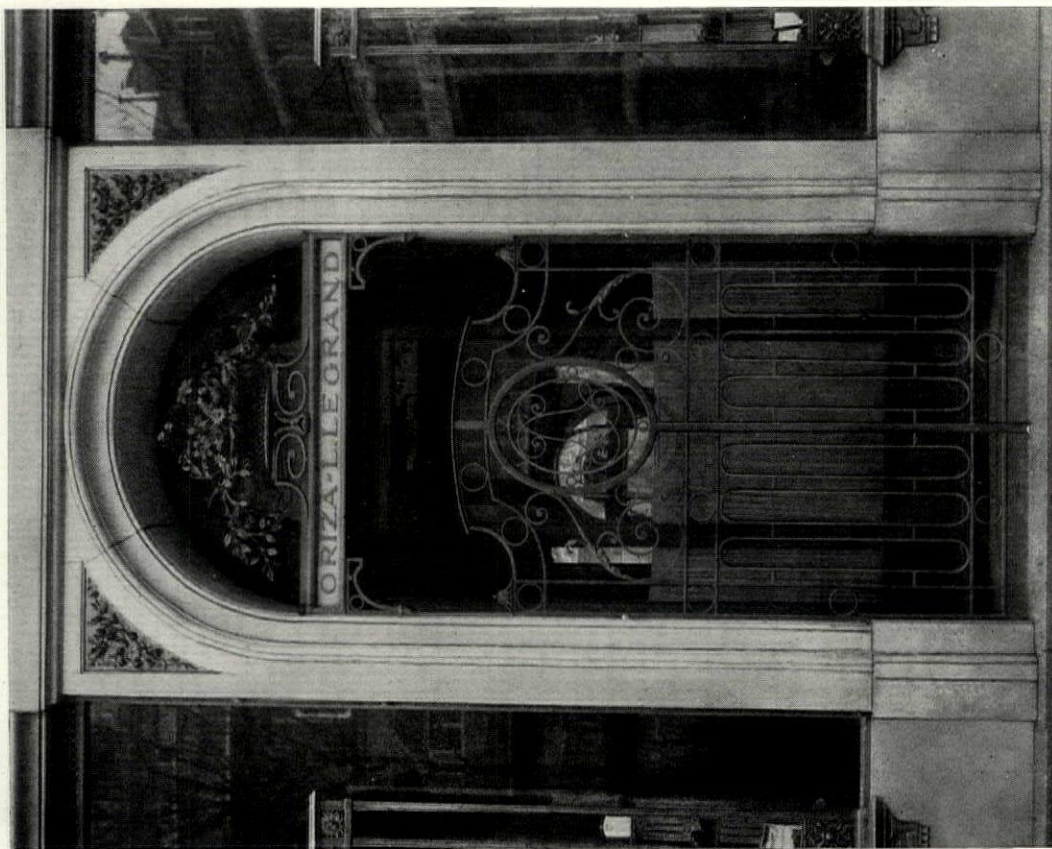
MARBLE

SECTION

SCALE OF DRAWING
3/8" EQUALS 1 FOOT
DETAIL 1 1/2" EQUALS 1'-0"

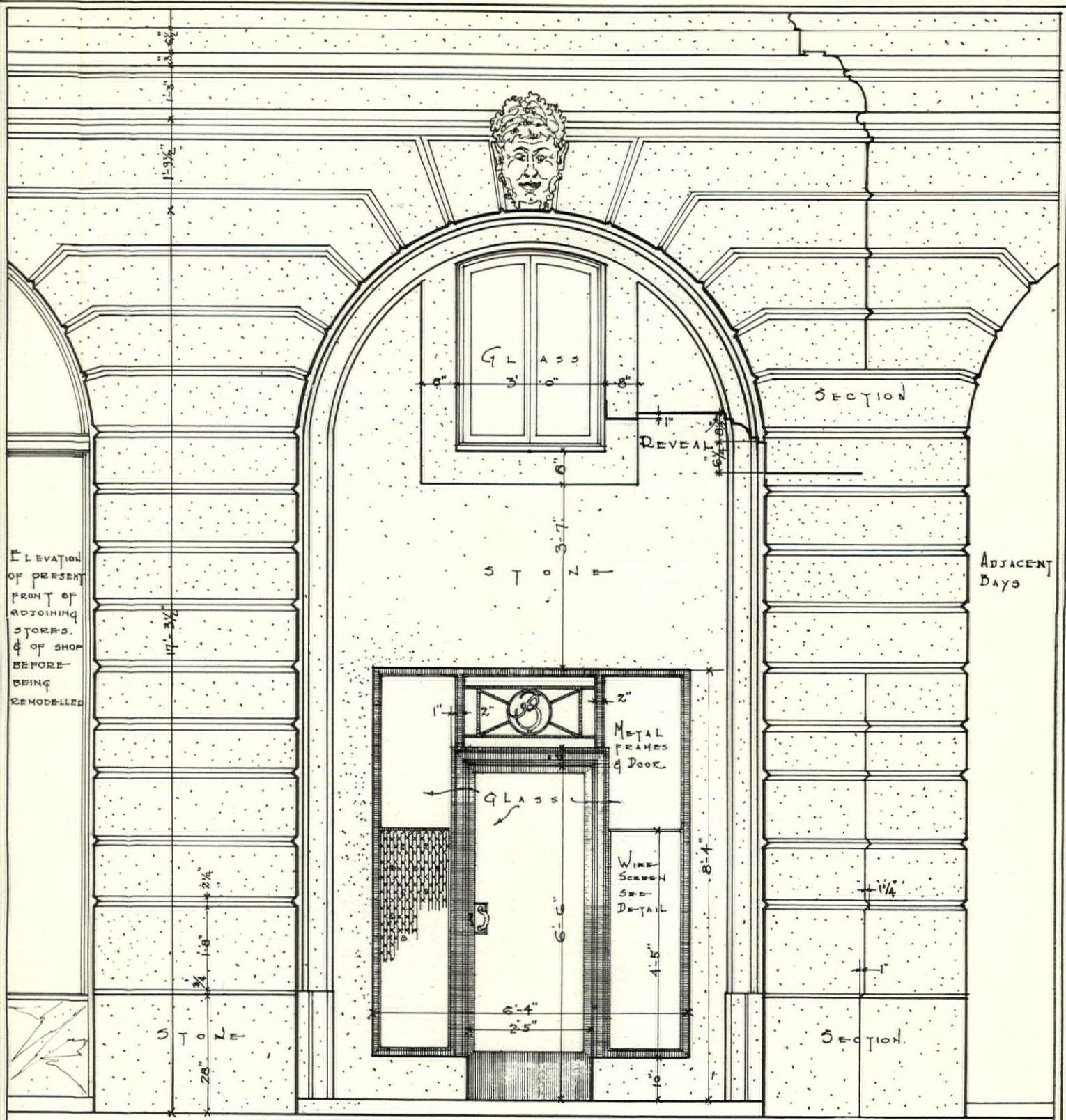
SHOP IN BOULEVARD MADELAINE- PARIS

MEASURED & DRAWN BY
GEORGE LEIGHTON DAHL
PARIS- FRANCE ~ 1924.

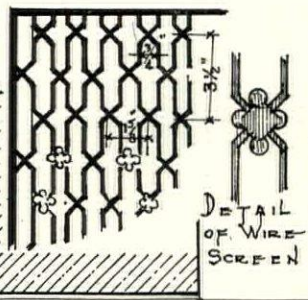
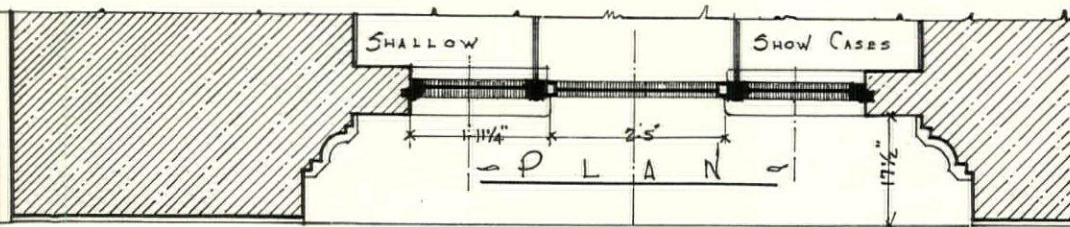


OF the newer shops that grace the *Grand Boulevard* possibly the most interesting is that of Oriza L. Le Grand, dealer in choice perfumes. It is a delicate little shop, an artistic creation where the handling in the combination of marble and metal is very successful. The material of the structure is a honed-finished siena marble with gold metal bronzework and hammered metal flowers, slightly tinted. The blending of colors and material, tempered by reserve in design, stamps this shop as distinctly expressive of its purpose. An interesting feature is the application on the pilasters of the facade of two bronze dolphins which dispense perfume gratis to the public. Incidentally, these dolphins are very busy.

The Perfume Shop of
Oriza L. Le Grand
Grand Boulevard, Paris
Text and Measured Drawings
by *George Leighton Dahl*



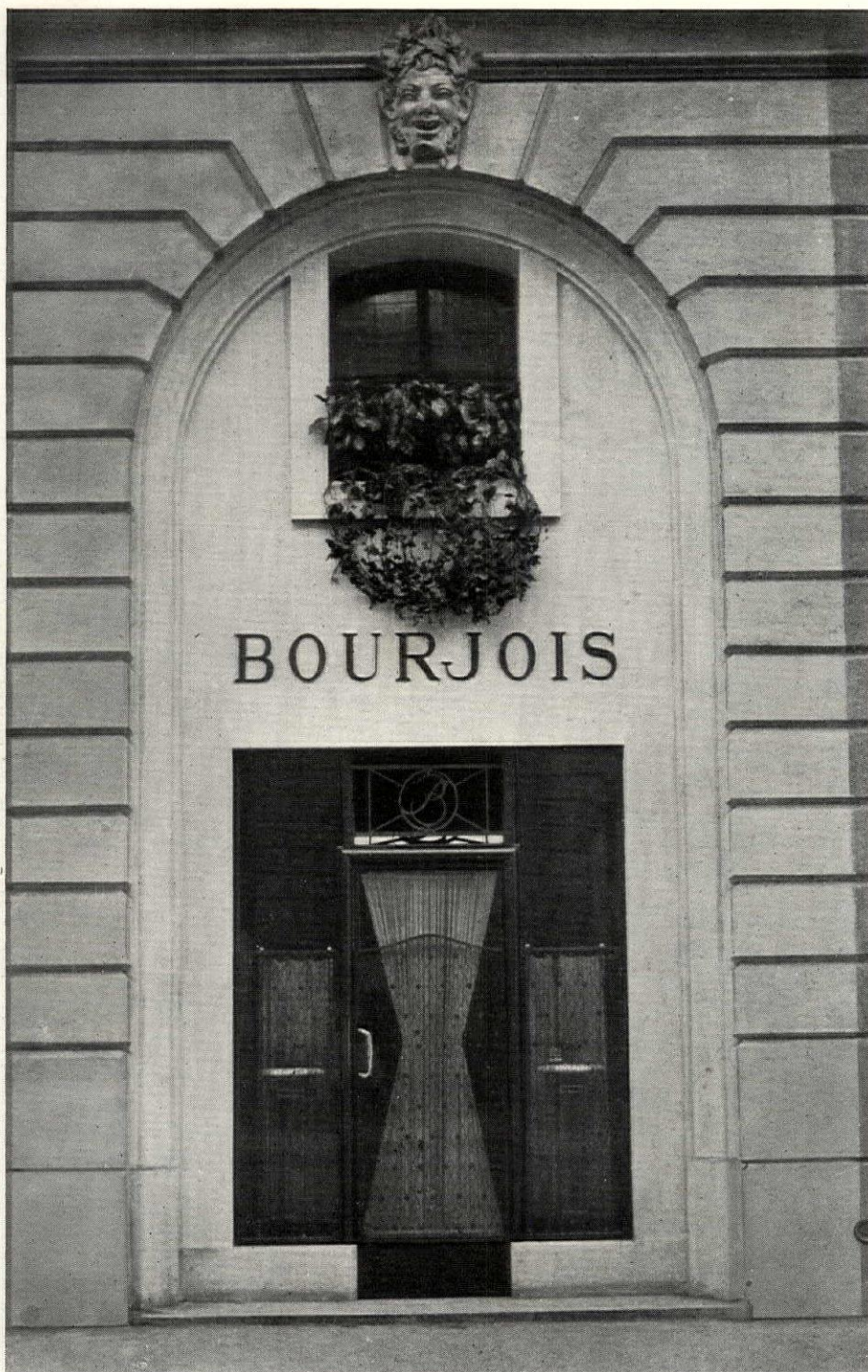
- ELEVATION -



REMODELLED FRONT
 SCALE $\frac{3}{8}" = 1'-0"$
 DETAIL SCALE $\frac{1}{2}" = 1'-0"$

SHOP IN RUE DE LA PAIX-PARIS.

MEASURED & DRAWN BY
 GEORGE LEIGHTON DAHL
 PARIS • 1924 ~

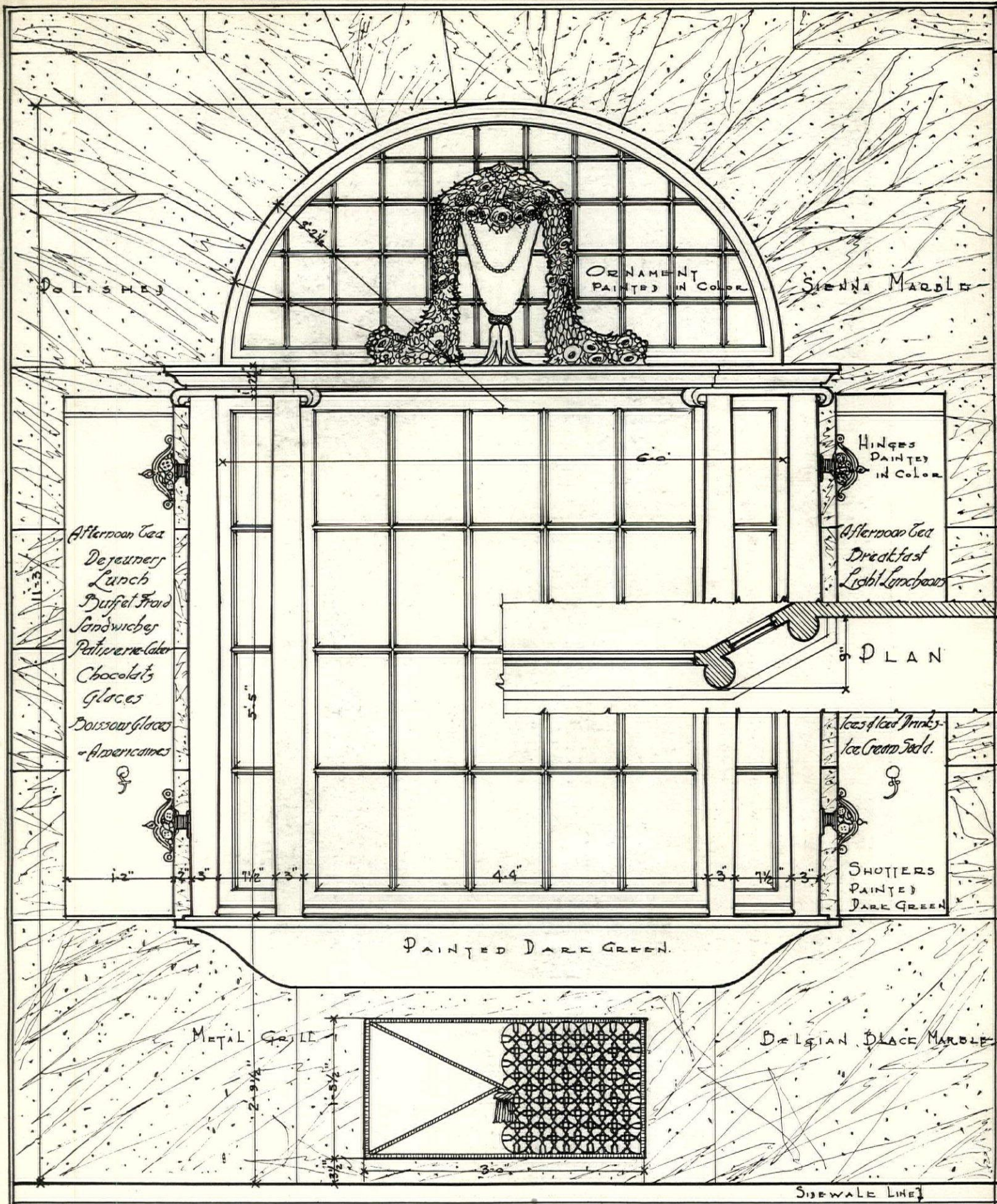


The Jewelry Shop of
M. Bourjois

27 Rue de la Paix
Paris

*Text and Measured Drawings
by George Leighton Dahl*

CONTINUING along to No. 27 Rue de la Paix, this fashionable avenue, long famous for its jewelers', perfumers' and dressmakers' establishments, is the shop of Bourjois, dealer in fine jewelry, occupying one of the arches of a continuous arcade adjacent to the *Place Vendôme*, designed by J. Hardouin-Mansart in 1708. In the designing of this shop difficulties were many, as government restrictions forbade the altering of the structural or outward appearance of this old *monument historique*. With these limitations the architect succeeded very well in surmounting the obstacles; as will be noted in the drawing, the structural and outward appearance is entirely intact. Attention was devoted to a simple dignified design within the arcade, of white limestone with black metal window and door frames. The whole composition is tied together by a series of jamb mouldings; the treatment is very flat, affording a pleasing contrast to the heavy pier and arch rustication. This shop is one of the most striking on the avenue.



MATERIALS —
POLISHED SIENNA
MARBLE ABOVE —
BELGIAN BLACK MARBLE

ELEVATION OF WINDOW

BASE & WINDOW WOOD
WORK, PAINTED; WHITE
COLUMNETTES; DARK GREEN
TRIM, ORNAMENT IN COLOR

SCALE 3/4" = 1 FOOT

SHOP IN RUE ROYAL-PARIS

MEASURED & DRAWN BY
GEORGE LEIGHTON DAHL
PARIS, FRANCE ~ 1924