

PENCIL POINTS

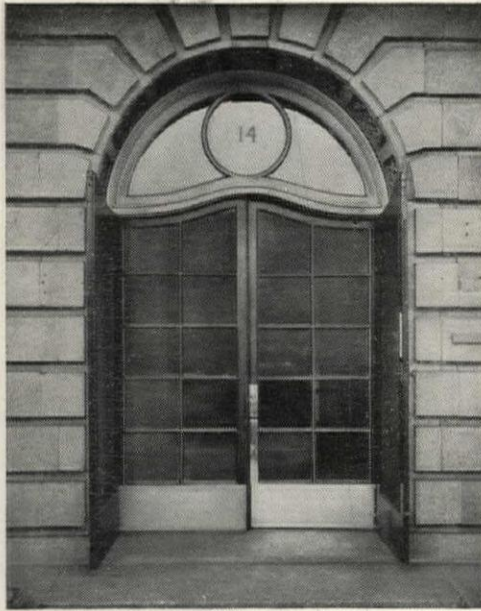
JANUARY

1941

TRANSFORMATION

with

Bronze



Designed by Mendal Waters, Architectural Engineer, Boston. Fabricated by National Store Fronts, Boston (Roxbury), Mass.



Modern as tomorrow, but traditional for its subdued beauty and unimpeachable good taste, is the new bronze front of the Hotel Canterbury, Boston.

WHEN ARCHITECTS and owners seek metal work of richness and distinction, their first choice, with few exceptions, is Architectural Bronze... Moderate in cost and readily adaptable to original design, Bronze gives lasting service. It is easily cleaned and retains its original beauty with occasional attention. Even when bronze

work has been long neglected, cleaning and polishing restore its natural lustre.

The American Brass Company is the principal supplier of bronze, copper and nickel silver in the form of extruded shapes, drawn shapes, sheets, etc., as used in ornamental metal work of every description.

4094

FOR ORNAMENTAL WORK



Anaconda Bronze

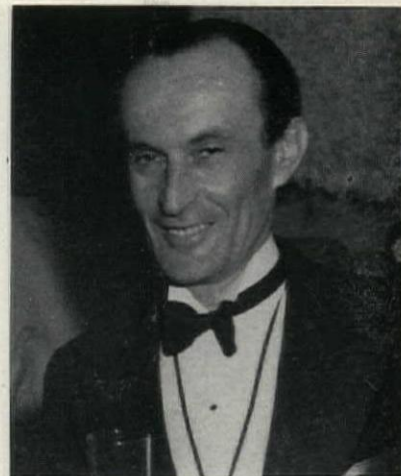
THE AMERICAN BRASS COMPANY, General Offices: Waterbury, Connecticut
In Canada: Anaconda American Brass Ltd., New Toronto, Ont. Subsidiary of Anaconda Copper Mining Co.

THE PITT PETRI SHOP IN BUFFALO

ANTONIN RAYMOND, ARCHITECT

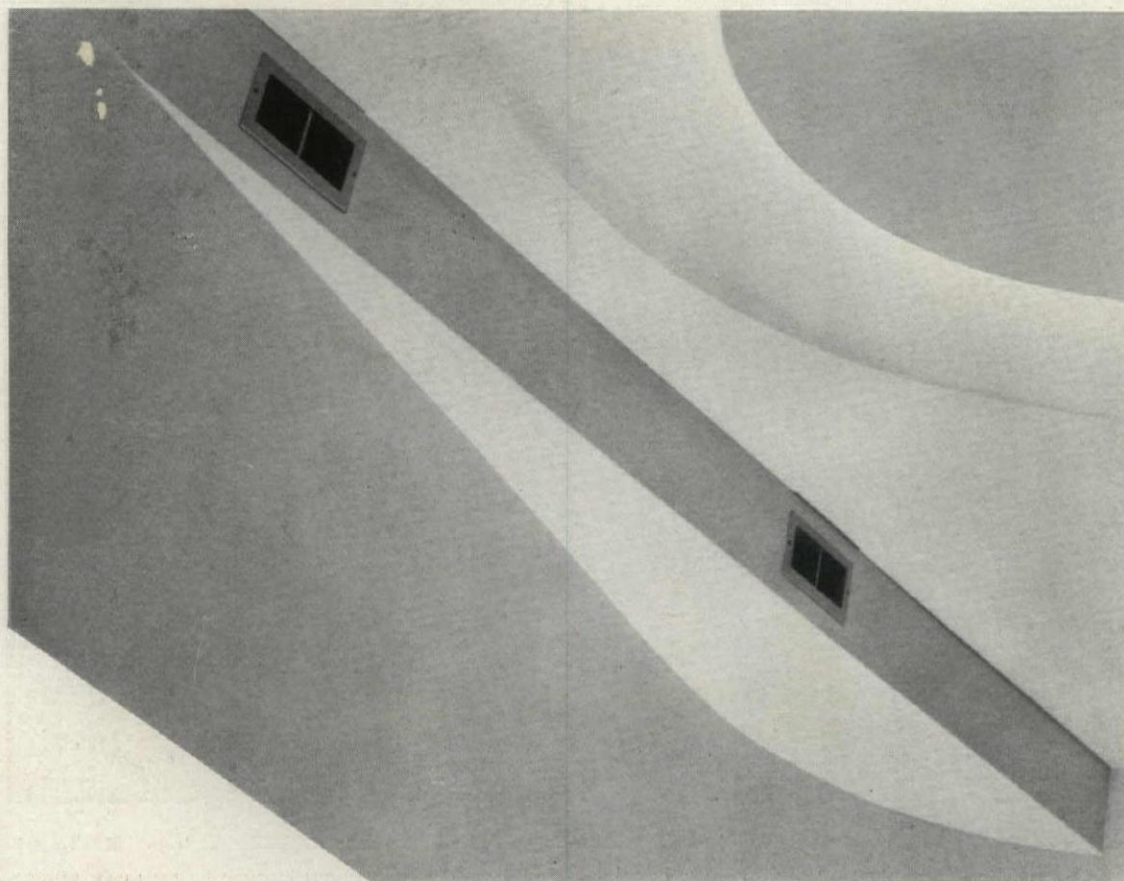
MAX ZIMMERMAN AND EDWIN HARRIS, JR., ASSOCIATES

A. EDWARD JOHNSON, CONSULTING LIGHTING ENGINEER



PROBLEM—INCREASE SALES BY ENLARGING THE SHOP AND BY SO EQUIPPING IT AS TO DISPLAY ALL THE MERCHANDISE TO THE GREATEST POSSIBLE ADVANTAGE

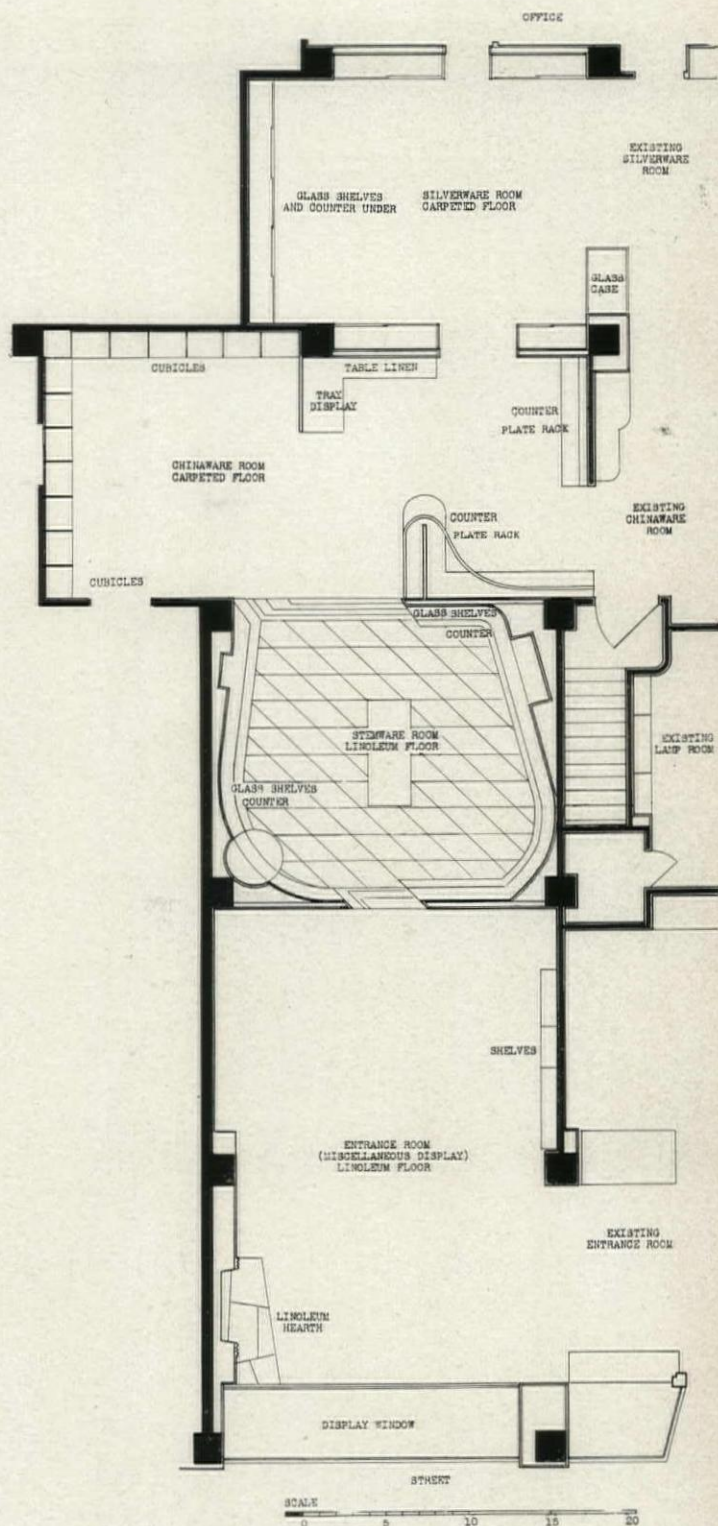
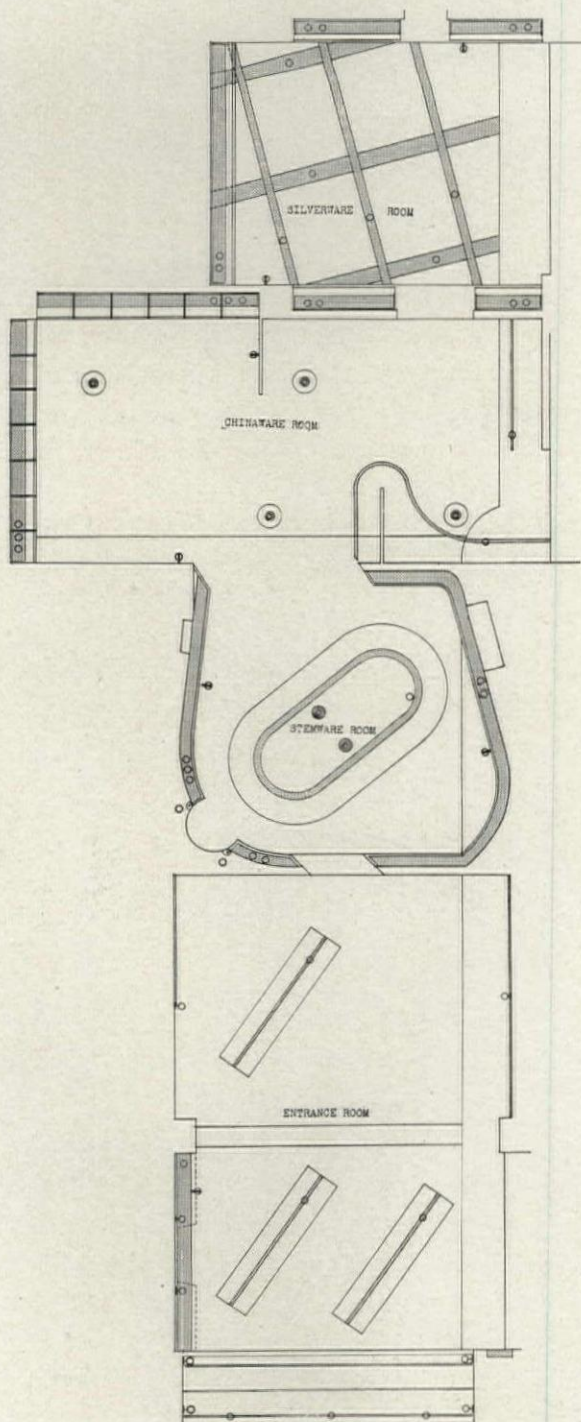
SOLUTION—BASE THE DESIGN PRINCIPALLY ON LIGHTING, USING BOTH INCANDESCENT AND FLUORESCENT BULBS, FINDING MOST SUITABLE BACKGROUNDS FOR THE DIFFERENT TYPES OF MERCHANDISE BY EXPERIMENTING WITH LIGHTS, COLORS, AND TEXTURES. OPEN UP THE PLAN, CREATING VARIED SPACES AND INVITING VISTAS. USE MECHANICAL FIXTURES, INCLUDING AIR CONDITIONING DUCTS, IN THEIR MOST EFFICIENT AND PURELY FUNCTIONAL FORM AND PLACE, COORDINATING THESE IN SUCH A WAY THAT THEY BECOME THE ONLY DECORATIVE ELEMENTS IN THE SHOP.





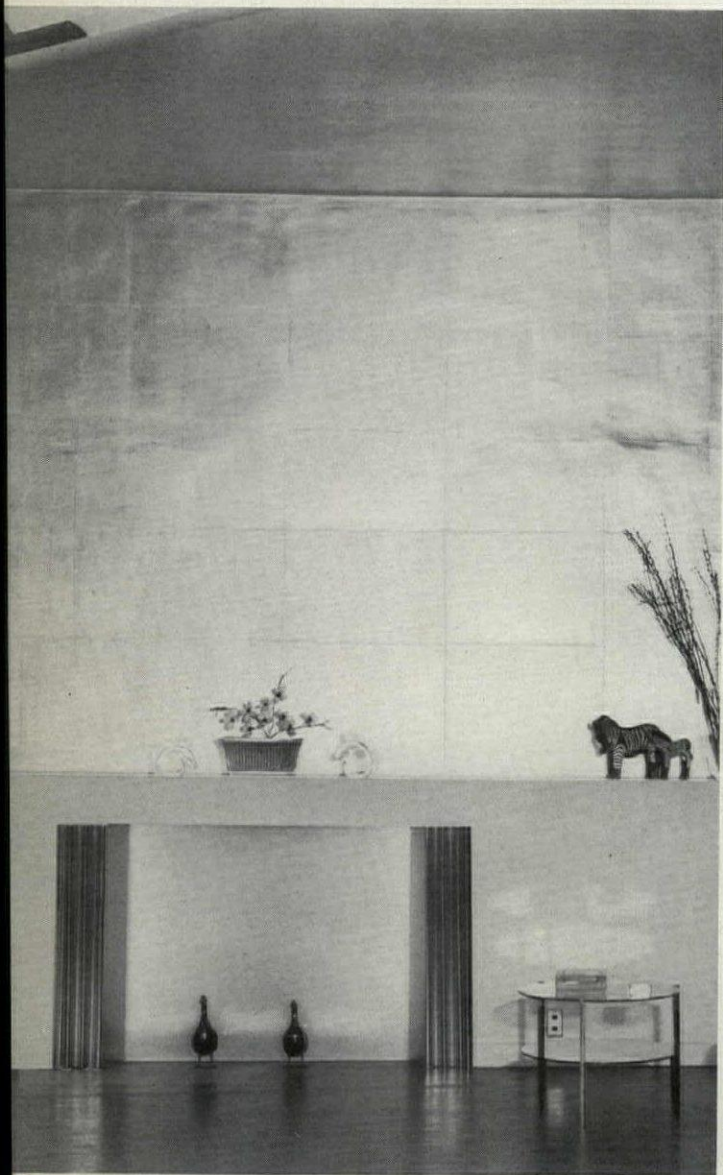
CHINAWARE ROOM—THE SUSPENDED LIGHT TROUGH DRAMATIZES THE SERPENTINE PLATE RACKS OF DARK GREY. THE WOOD USED FOR THE PARTITIONS IS NATURAL WALNUT, WITH GREEN GOLD-LEAF EDGES

THE KEY PLAN BELOW FOR ELECTRIC SPECIFICATIONS AND LIGHTING FIXTURES OF THE PITT PETRI SHOP, DESIGNED BY ANTONIN RAYMOND, ARCHITECT, OF NEW YORK AND NEW HOPE, PENNSYLVANIA, MAY BE COMPARED WITH THE PARTI OF THE SHOP AT THE RIGHT—WHICH IS ESSENTIALLY A REFLECTION OF THE LIGHTING SCHEME. PHOTOS OF THE SHOP ARE BY J. DEBUS, BUFFALO



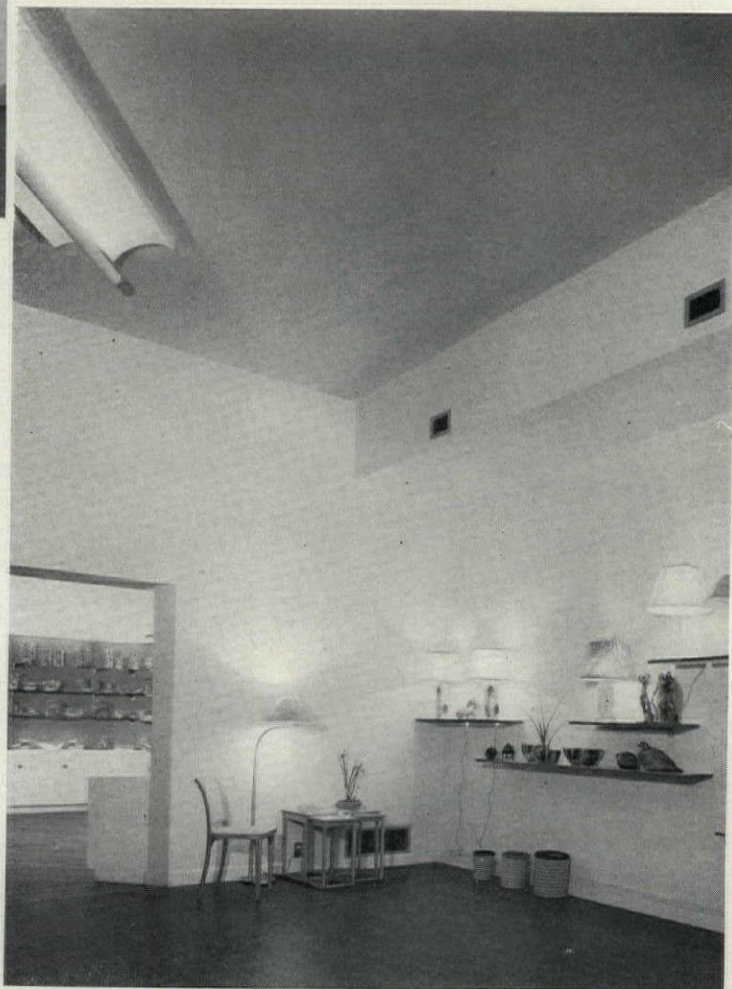
IN EXAMINING THE GENERAL PLAN OF THE PITT PETRI SHOP IT SHOULD BE NOTED THAT THE PORTION DESIGNED BY ANTONIN RAYMOND DOES NOT CONSTITUTE THE ENTIRE AREA OCCUPIED. THESE SHOWROOMS, HOWEVER, WERE BUILT TO PROVIDE A SYMPATHETIC MERCHANDISING BACKGROUND FOR THE SILVER, CHINAWARE, GLASSWARE, LINENS, AND OTHER PRODUCTS SOLD BY THE SHOP

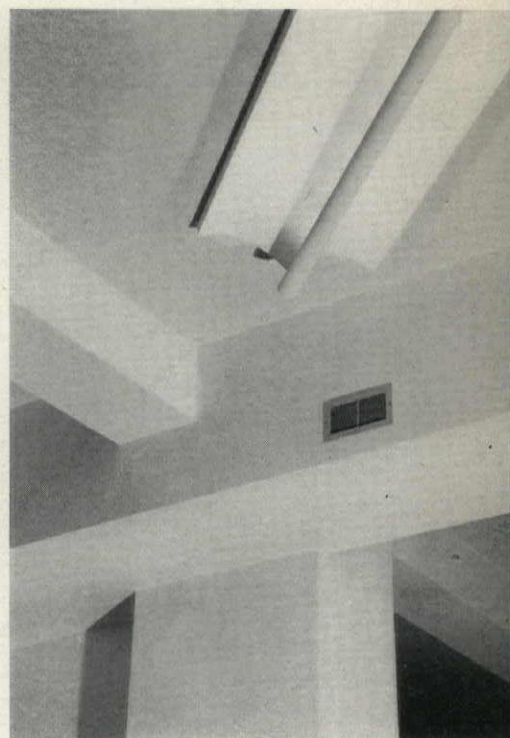
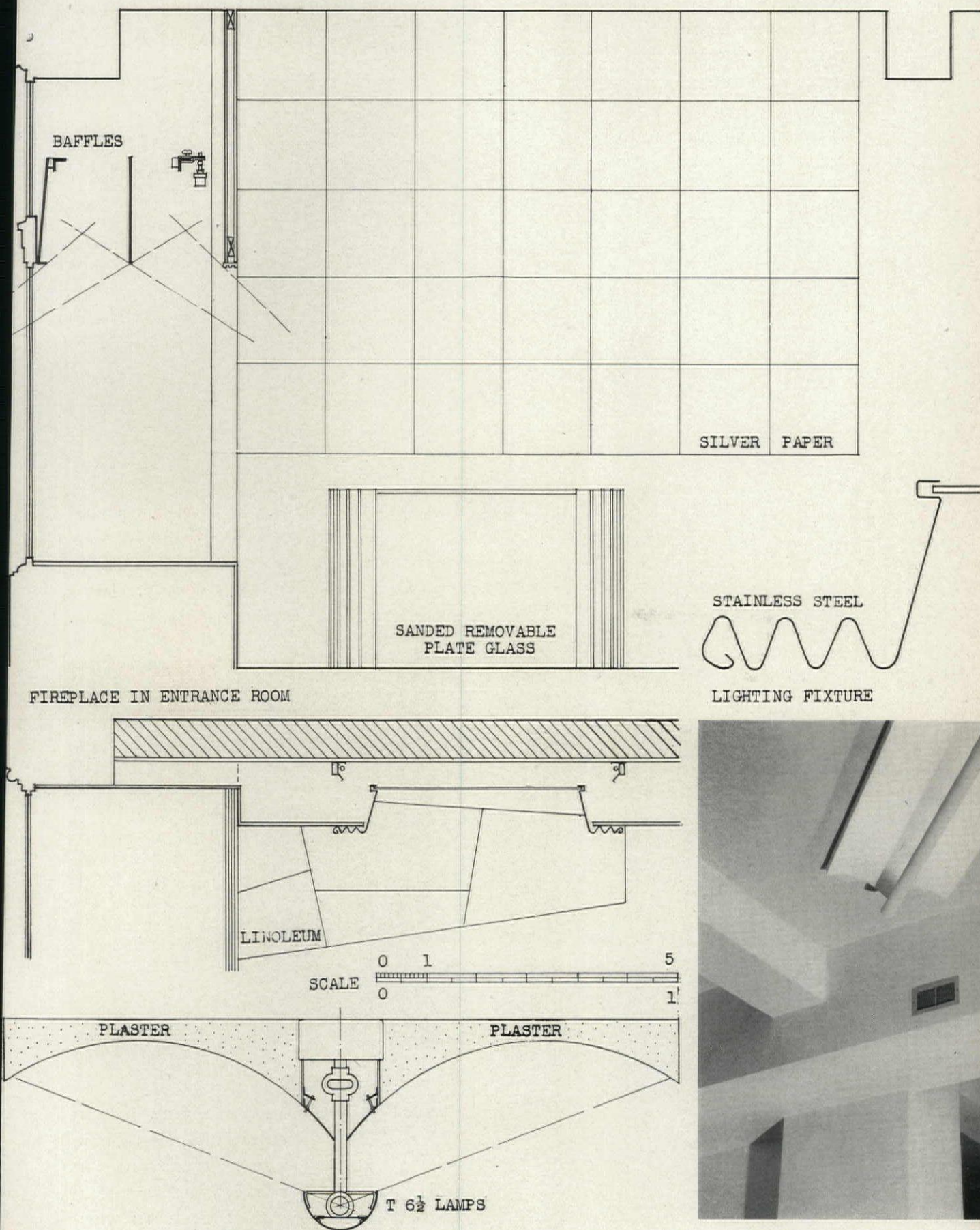
PITT PETRI SHOP, BUFFALO—BY ANTONIN RAYMOND, ARCHITECT



IN THE ENTRANCE ROOM OF THE SHOP THERE IS A SUGGESTION OF A FIREPLACE, WHICH SERVES TO DISPLAY FIREPLACE ORNAMENTS AND EQUIPMENT. THIS HAS AN ILLUMINATED GLASS BACK, STAINLESS STEEL PILASTERS, HEARTH OF COLORED LINOLEUM, AND OVER-MANTEL OF SILVER

ANOTHER VIEW IN THE ENTRANCE ROOM SHOWS THE FREE DESIGN OF THE SHELVES FOR DISPLAY OF LAMPS AND OTHER LIGHTING FIXTURES. WALLS ARE COLORED DEEP SALMON AND ROSE AND MR. RAYMOND DESCRIBES THE CEILING AS "SUMMER SKY BLUE." FLOOR IS LINOLEUM



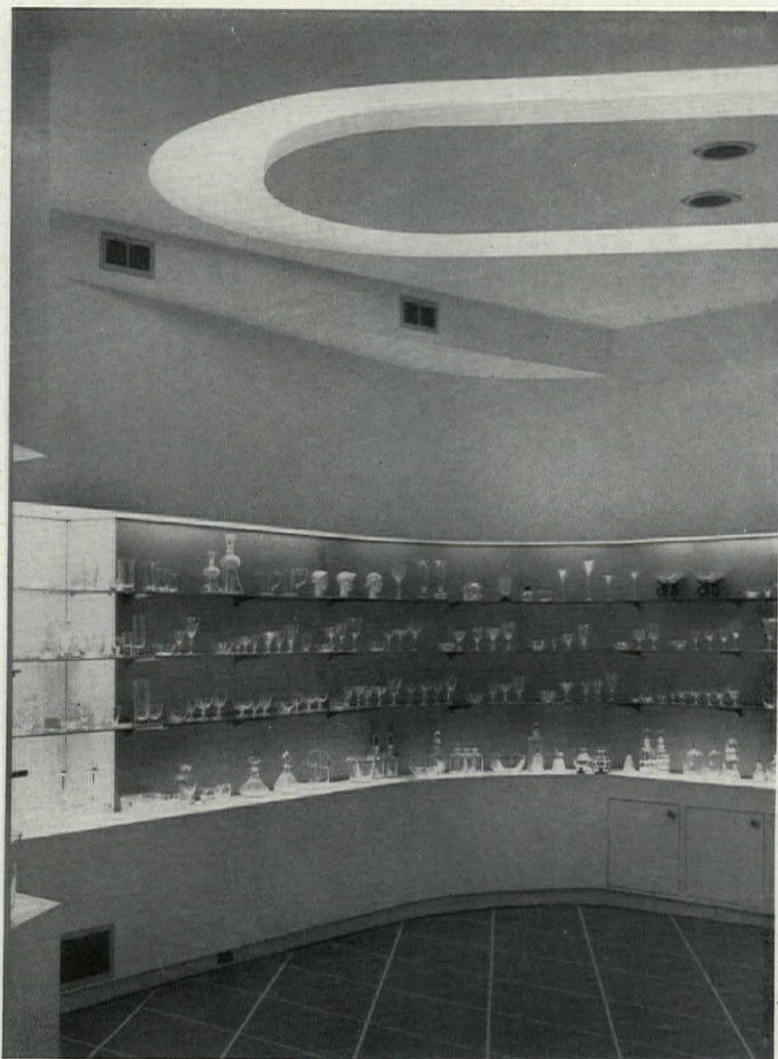


CONSTRUCTION DETAILS OF THE FIREPLACE SIDE OF THE ENTRANCE ROOM—DESIGNED AS A SUGGESTION RATHER THAN IMITATION, SERVING TO DISPLAY ORNAMENTS AND EQUIPMENT FOR THE FIREPLACE

PITT PETRI SHOP, BUFFALO—BY ANTONIN RAYMOND, ARCHITECT

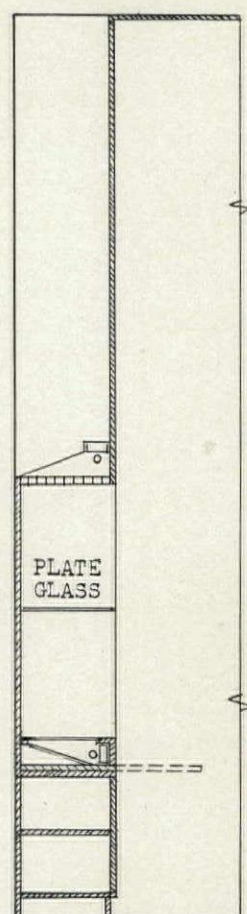
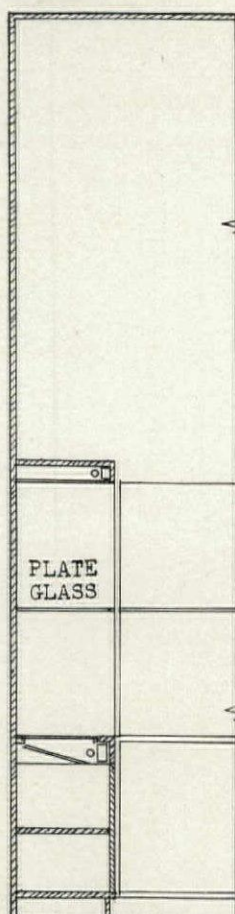
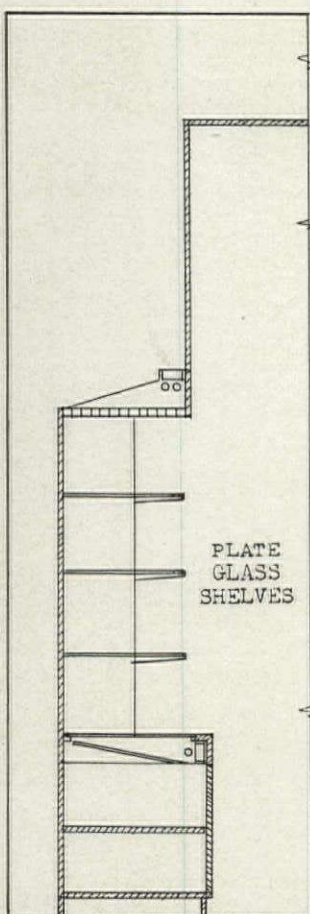
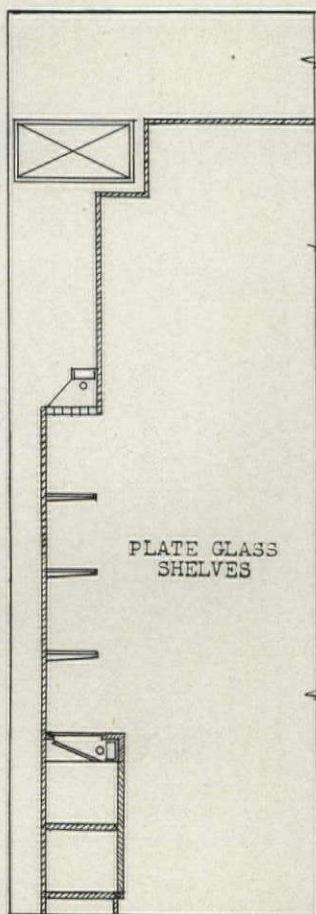
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STEMWARE ROOM.—THE FLOOR OF THIS ROOM IS DARK GREY LINOLEUM STRIPED DIAGONALLY WITH TAN AND WHITE. THE CEILING AND WALLS ARE OFF-WHITE AND THE BACKGROUND OF THE SHELVES IS COLORED A SOLID SLATE BLUE



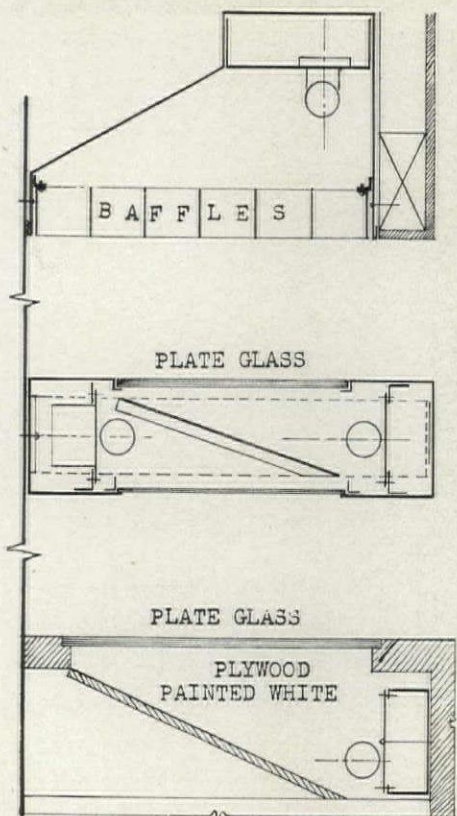
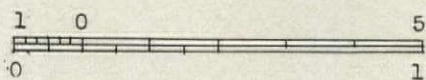
ANOTHER VIEW OF THE CHINAWARE ROOM SHOWS THE CONTRAST OF THE GOLDEN YELLOW DISPLAY CASES LINED WITH WHITE AND THE SOFT-HUED WALLS—TWO OF OFF-WHITE, ONE OF LIGHT GREEN, AND ONE OF GREY. CARPET IS GREY

PENCIL POINTS



SECTION THROUGH STEMWARE COUNTER

SECTION THROUGH CHINAWARE COUNTER



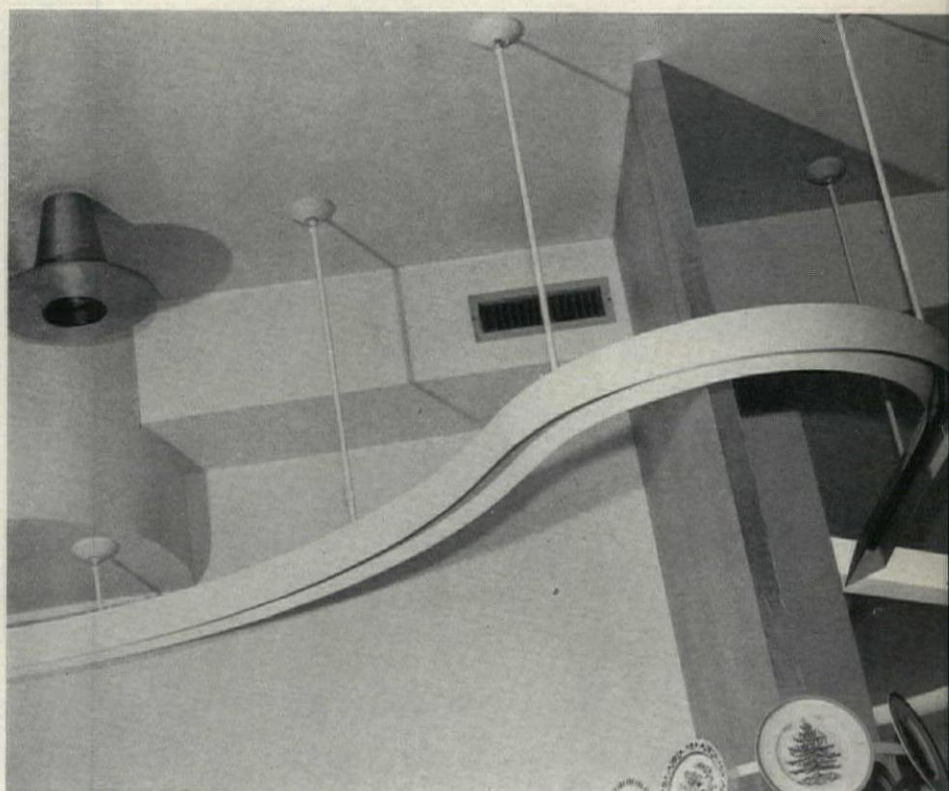
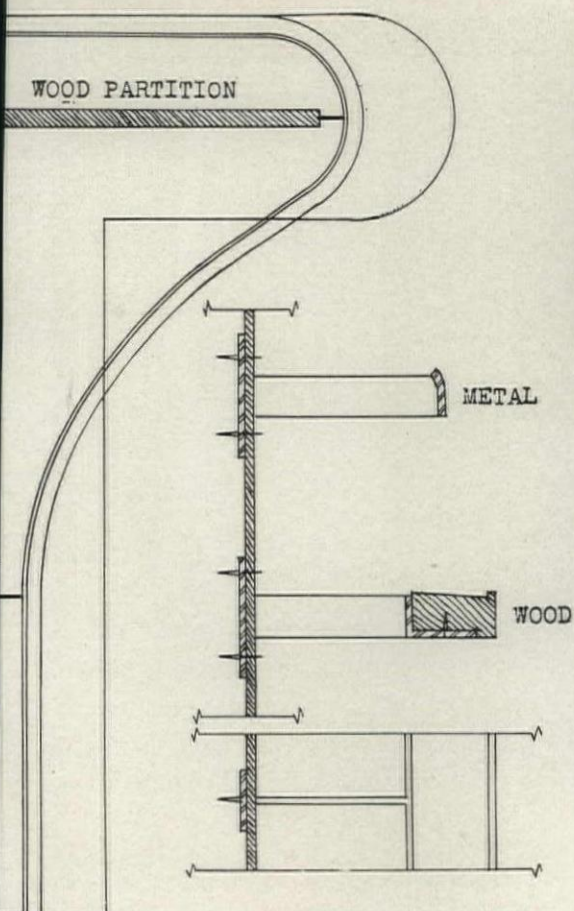
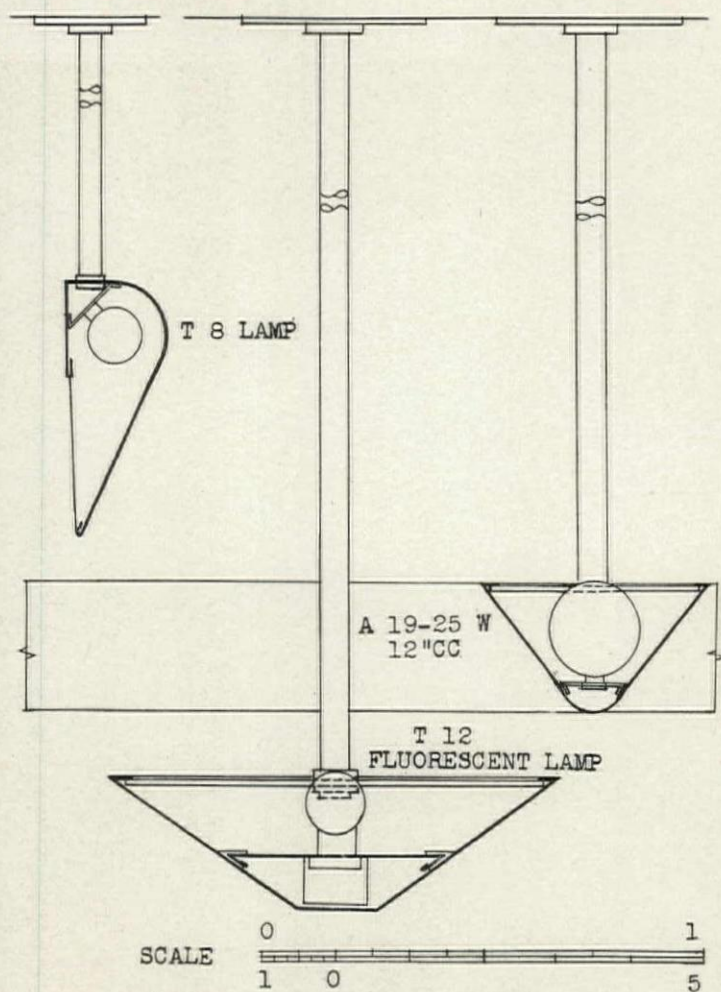
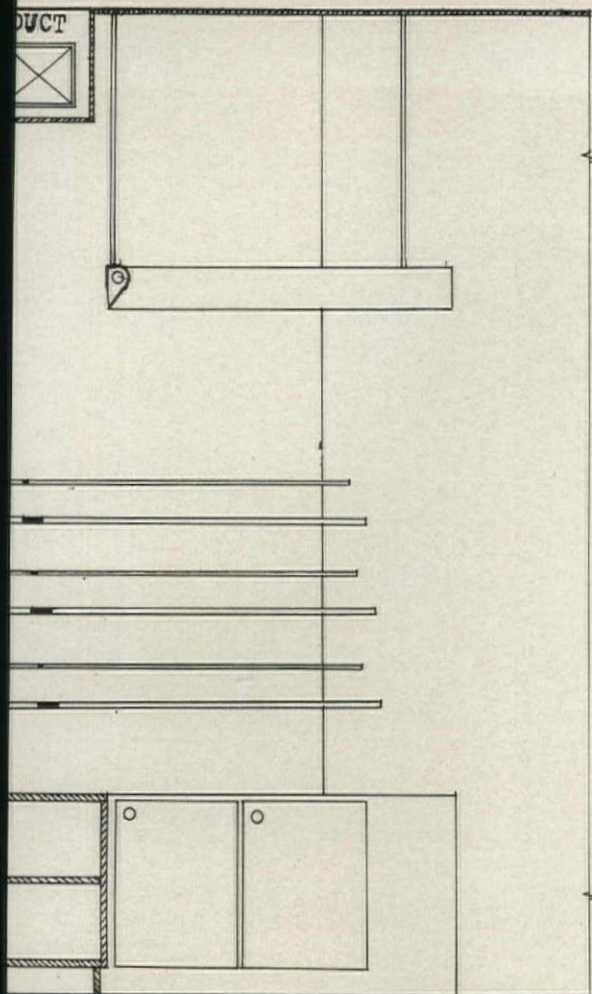
THE TRAY COUNTER AND TABLE LINEN COUNTER (WITH OPEN DRAWERS) ARE PRACTICAL FOR STORAGE AS WELL AS ATTRACTIVE FOR DISPLAY

PITT PETRI SHOP, BUFFALO—BY ANTONIN RAYMOND, ARCHITECT

THIS VIEW IS FROM THE
CHINAWARE ROOM TO THE
STEMWARE ROOM OF THE
PITT PETRI SHOP, BUFFALO



SILVER ROOM — THE BACK-
GROUND PROVIDED FOR THE
DISPLAY OF SILVER INCLUDES
DARK GREY CARPET, SNOW
WHITE CASES EQUIPPED WITH
COOL FLUORESCENT LIGHTS,
THREE WALLS OF OFF-WHITE
AND END WALL OF DARK BLUE,
AND A LIGHT BLUE CEILING

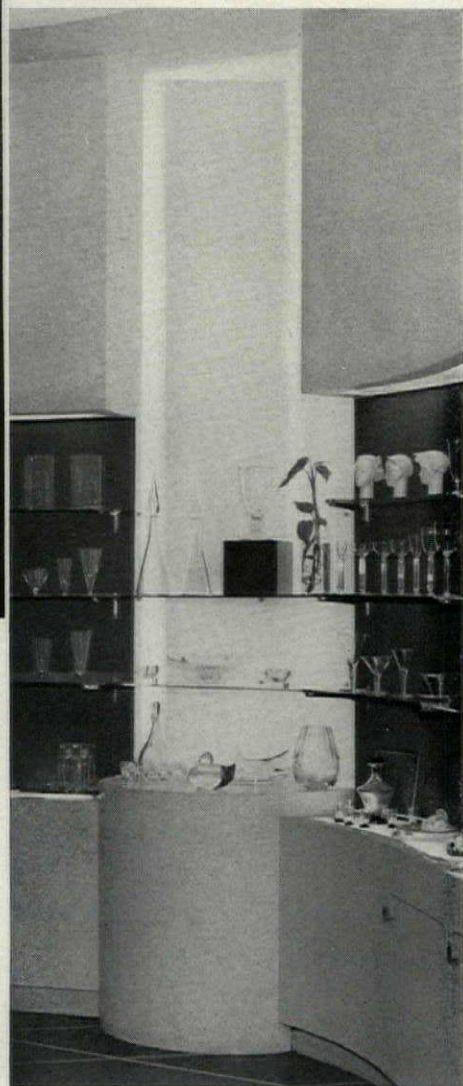


PITT PETRI SHOP, BUFFALO—BY ANTONIN RAYMOND, ARCHITECT



ANOTHER VIEW OF THE STEMWARE ROOM SHOWS THE
RELATION OF THE PLAN OF THE SHOP TO THE LIGHTING

DETAIL PHOTO OF THE HALF-ROUND
DISPLAY COVE IN STEMWARE ROOM

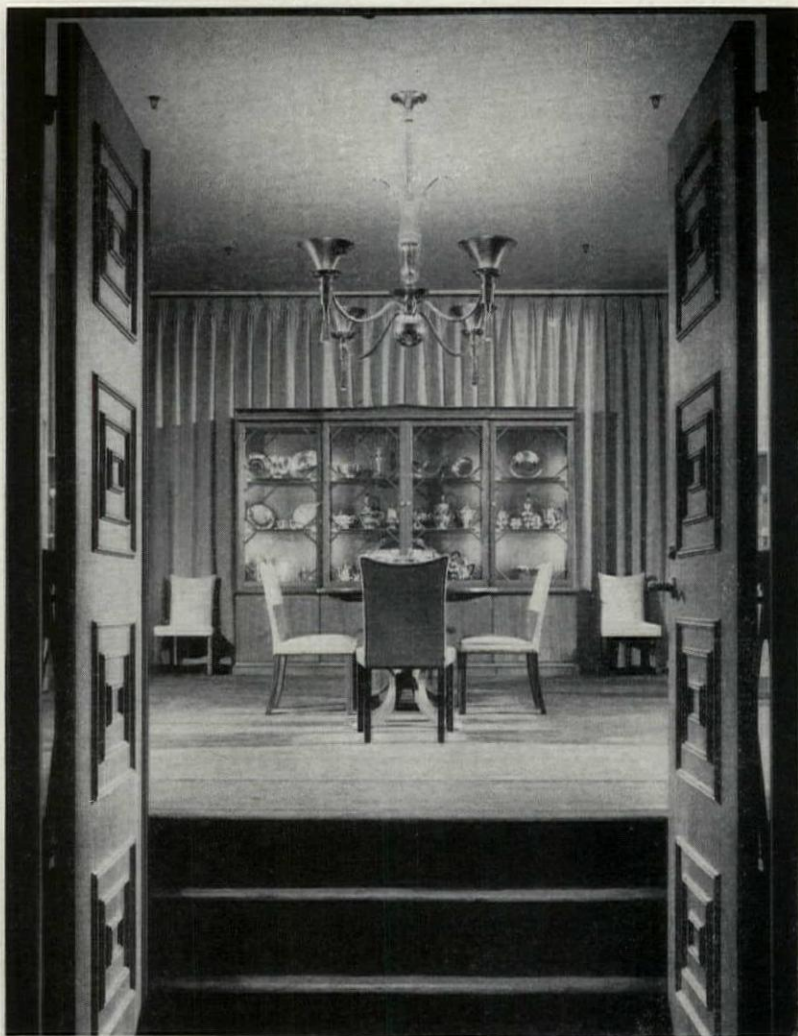


PITT PETRI SHOP, BUFFALO—BY ANTONIN RAYMOND, ARCHITECT

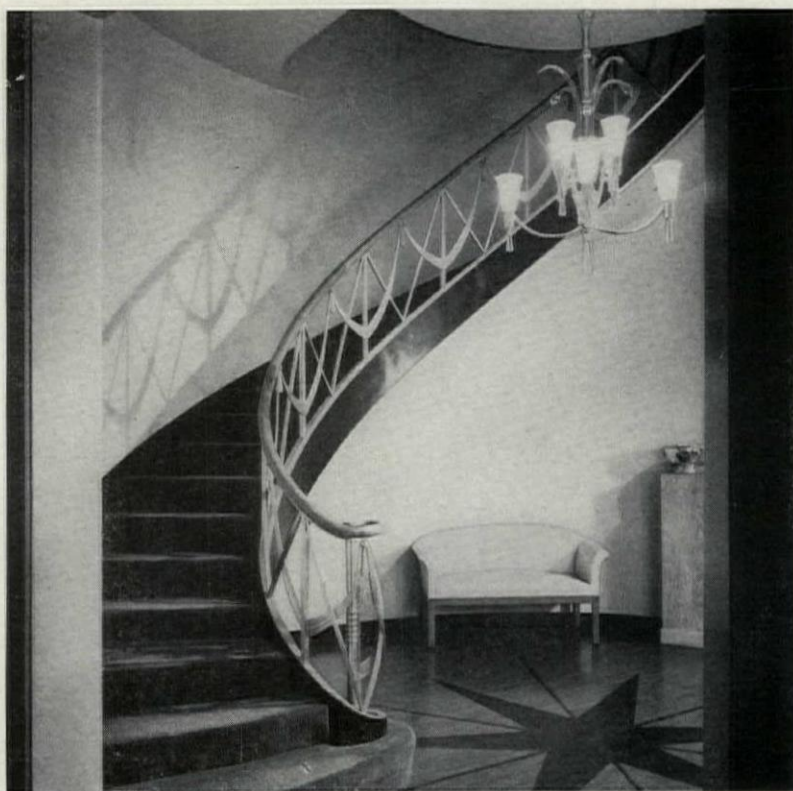


ENTRANCE LOBBY

GORHAM SHOWROOMS, PROVIDENCE, R. I. — BY ALBERT HARKNESS



THE SHOWROOMS DESIGNED BY ALBERT HARKNESS, ARCHITECT, FOR THE GORHAM COMPANY IN PROVIDENCE, RHODE ISLAND, ARE APPROACHED THROUGH THE ENTRANCE LOBBY (SEE PAGE 11) AND THE STAIR HALL (BELOW) AS THEY ARE SITUATED ON THE SECOND FLOOR. THE VISTA FROM THE TOP OF THE STAIR INTO THE PRINCIPAL SHOWROOM, WHERE STERLING SILVER IS DISPLAYED, IS PICTURED AT THE LEFT. THE STAIR BELOW, ALSO USED FOR THE EXECUTIVE OFFICES, HAS A SILVERED-BRONZE RAILING WITH GOLD-BRONZE SWAGS AND TASSELS AND A WALNUT HANDRAIL. THE METAL STRING IS FACED WITH EBONIZED FLEXWOOD. THE CEILING OF THE ENTRANCE LOBBY IS BLUE, INDIRECTLY-LIGHTED FROM THE CORNICE. PHOTOS ARE BY RICHARD GARRISON

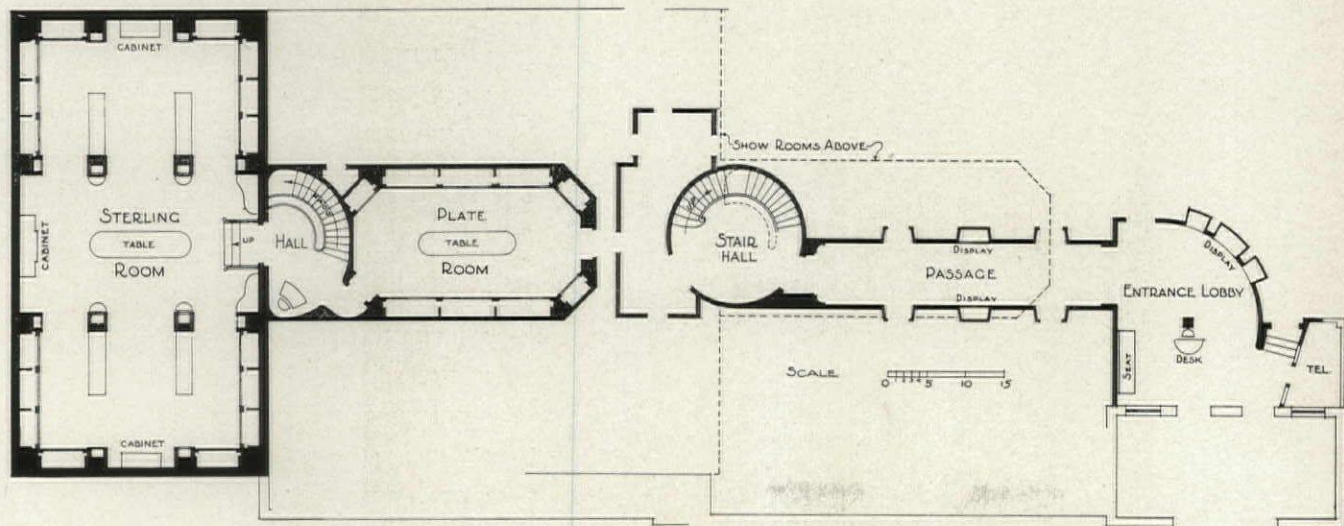


STAIR HALL

NEW SHOWROOMS FOR THE GORHAM COMPANY, PROVIDENCE, R. I.



THIS VIEW OF THE STERLING ROOM (SEE PLAN BELOW) IS LENGTHWISE ACROSS TWO OF THE BAYS. THE FURNITURE, OF WALNUT AND OF BUTTERNUT, WAS DESIGNED BY THE ARCHITECT AND ECHOES THE CHARACTER OF THE SHOWROOMS. WOODWORK THROUGHOUT IS BUTTERNUT WITH A CLEAR LACQUER AND WAX FINISH. THE STERLING AND PLATE ROOMS HAVE TAUPE CARPETS AND TAN WALLS AND CEILINGS



SECOND FLOOR

FIRST FLOOR

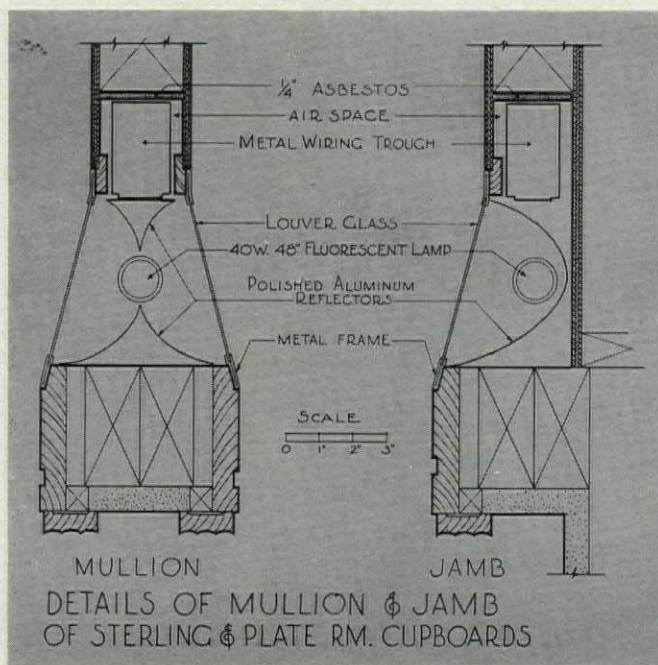
DESIGNED BY ALBERT HARKNESS, ARCHITECT, PROVIDENCE, R. I.

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THIS DETAIL PHOTOGRAPH OF THE WALL CUPBOARDS AND A CABINET IN THE GORHAM

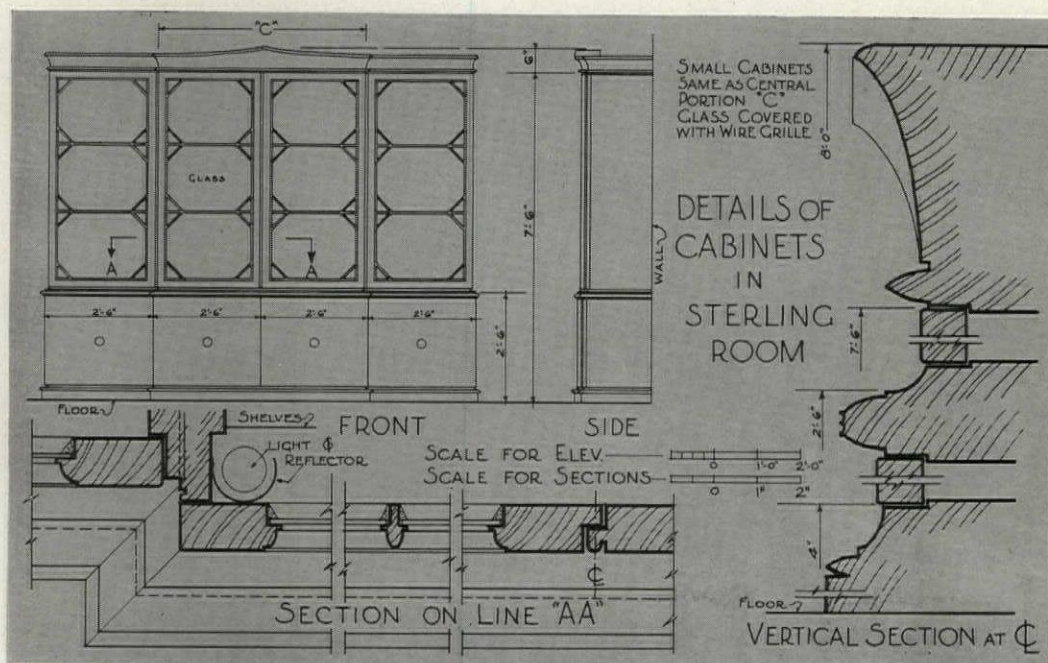


SHOWROOM FOR STERLING SILVER SHOWS THE EFFECTIVE BACKGROUND PROVIDED BY THE ARCHITECT FOR MERCHANDISING. THE SILVER PIECES ARE DISPLAYED IN RECESSED CUPBOARDS AND ALSO IN DECORATIVE CABINETS. THESE ARE LINED WITH PEACH COLOR TO ENHANCE THE APPEARANCE OF THE MERCHANDISE AND LIGHTED WITH FLUORESCENT LAMPS SHIELDED BY LOUVERGLAS. IT SHOULD BE NOTED THAT THE CASES IN THE COLUMNS AND PILASTERS ARE BLUE-GREEN

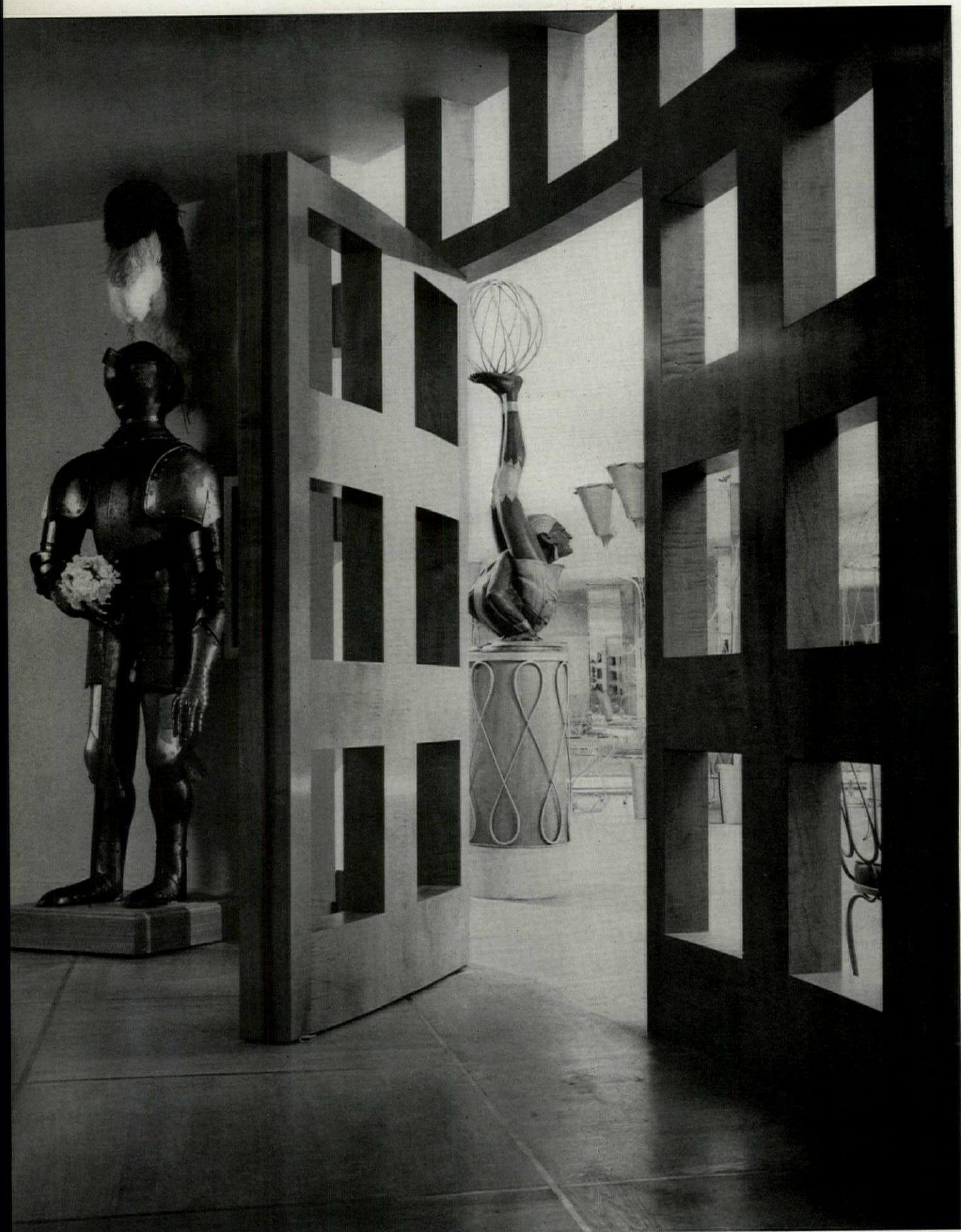
NEW SHOWROOMS FOR THE GORHAM COMPANY, PROVIDENCE, R. I.



PHOTOGRAPH AND DETAIL DRAWING OF THE DISPLAY CABINET IN THE STERLING ROOM

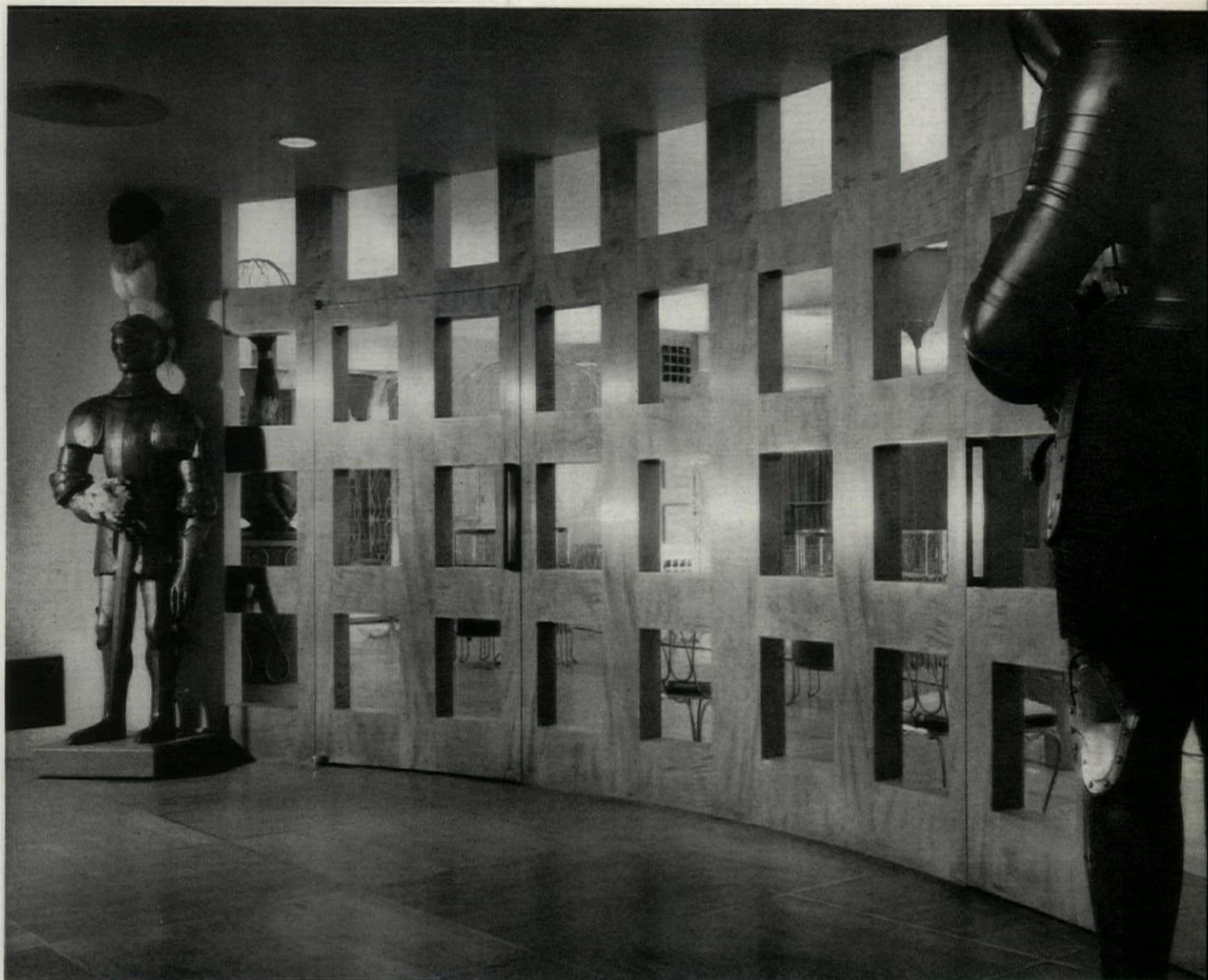


DESIGNED BY ALBERT HARKNESS, ARCHITECT, PROVIDENCE, R. I.



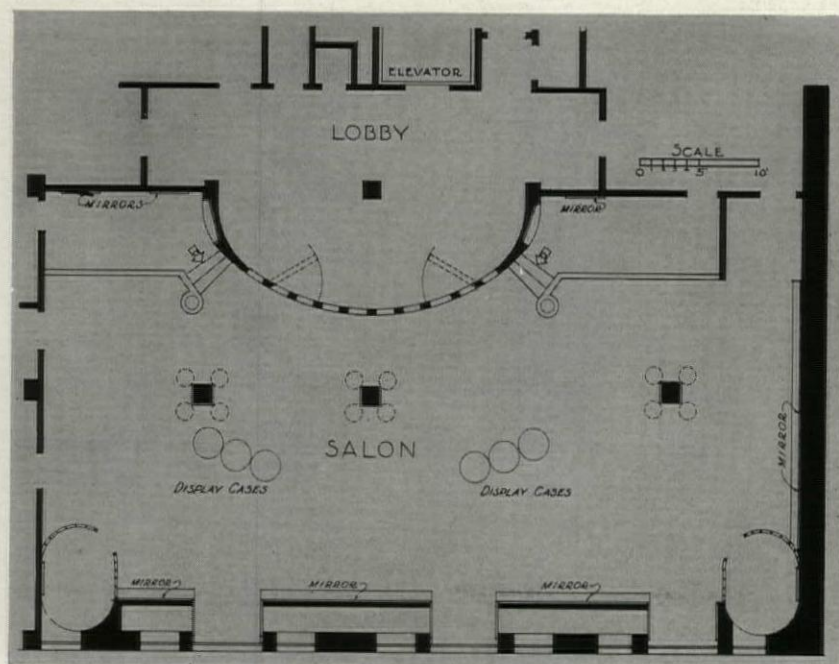
ELEVATOR LOBBY

SHOP FOR JOHN-FREDERICS—BY RENE C. BRUGNONI, ARCHITECT,



THE NEW YORK SHOP DESIGNED FOR DISPLAY OF JOHN-FREDERICS EXCLUSIVE MILLINERY AND COSTUME

ACCESSORIES IS APPROACHED THROUGH THE ELEVATOR LOBBY SHOWN HERE AND ACROSS-PAGE. THE PRINCIPAL DECORATION IS AN ARCHITECTURAL FEATURE — THE GRAY HAREWOOD GRILLE AND DOORS, CONTRASTING DRAMATICALLY WITH THE FANCIFUL TREATMENT OF THE SALES SALON. THE FLOORS OF BOTH ROOMS ARE OF GRAYED OAK, PATTERNED WITH ONE-INCH BRONZE STRIPS. PHOTOS ARE BY RICHARD GARRISON



AND T. H. ROBSJOHN-GIBBINGS, INTERIOR DESIGNER, NEW YORK



VIEWED FROM THE JOHN-FREDERICS SALES SALON, THE HAREWOOD GRILLE AT THE ENTRANCE IS FLANKED BY A DECORATIVE NEWEL TREATMENT ON THE STEPS LEADING TO OFFICES AT EITHER SIDE (DETAIL PHOTO LEFT). THE THREE MIRROR COLUMNS WITH THEIR FANTASTIC LIGHTS SUGGESTING FLORAL FORMS ARE PARTICULARLY APPROPRIATE IN THIS ROOM WITH MIRROR WALLS. THE PHOTOGRAPH ACROSS-PAGE SHOWS (ON THE RIGHT) ONE OF THE AMUSING "GILDED CAGES" PROVIDED FOR FAVORED SHOPPERS TO TRY ON HATS. AT THE SAME TIME, OTHERS PATRONIZING THE SHOP MAY GRATIFY THEIR CURIOSITY ABOUT THE PERSONAL IMPACT OF A NEW JOHN-FREDERICS CREATION BY SITTING BEFORE THE MİRRORED WALLS AT THE FRONT OF THE SALON (LEFT OF PHOTOGRAPH ACROSS-PAGE)



SHOP FOR JOHN-FREDERICS—BY RENE C. BRUGNONI, ARCHITECT,



AND T. H. ROBSJOHN-GIBBINGS, INTERIOR DESIGNER, NEW YORK

JANUARY 1941

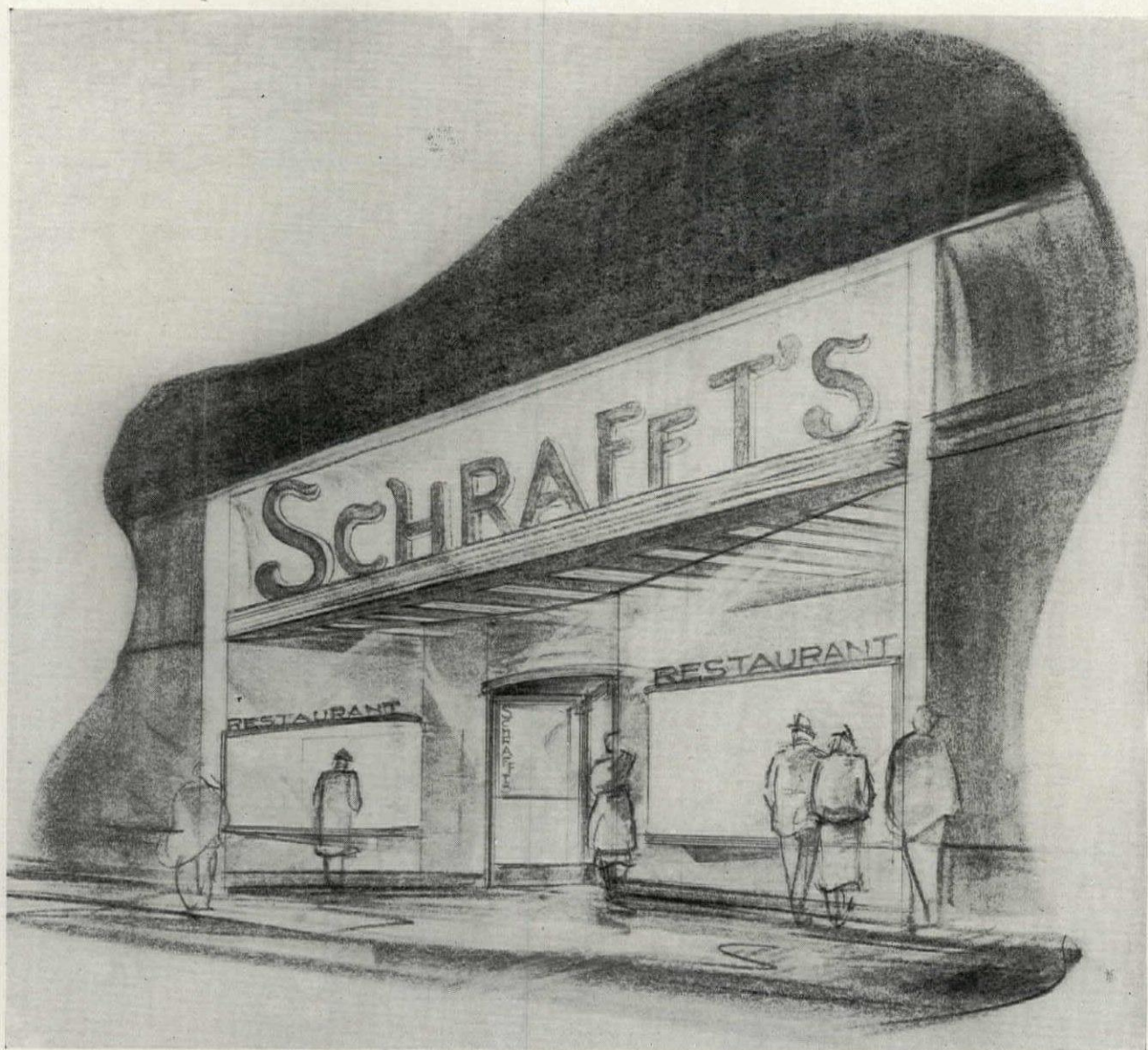
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ANOTHER VIEW ALONG THE FRONT WALL OF THE SALON SHOWS THE MIRRORS BETWEEN THE RECESSED WINDOWS (NOTE DETAIL PHOTOS). THE METAL FURNITURE WITH BRONZE SPRAYED FINISH WAS DESIGNED BY ROBSJOHN-GIBBINGS WHO COLLABORATED WITH BRUGNONI ON ALL OF THE DECORATIONS OF THE SHOP. ALTHOUGH THE FORMS USED ARE FANCIFUL AND INTENDED TO AMUSE THOSE VISITING THE SHOP, IT SHOULD BE NOTED THAT THE COLOR SCHEME IS CLEVERLY KEYED VERY LOW SO THAT THERE WILL BE NO COMPETITION WITH MERCHANDISE SHOWN



SHOP FOR JOHN-FREDERICS—BY RENE C. BRUGNONI, ARCHITECT



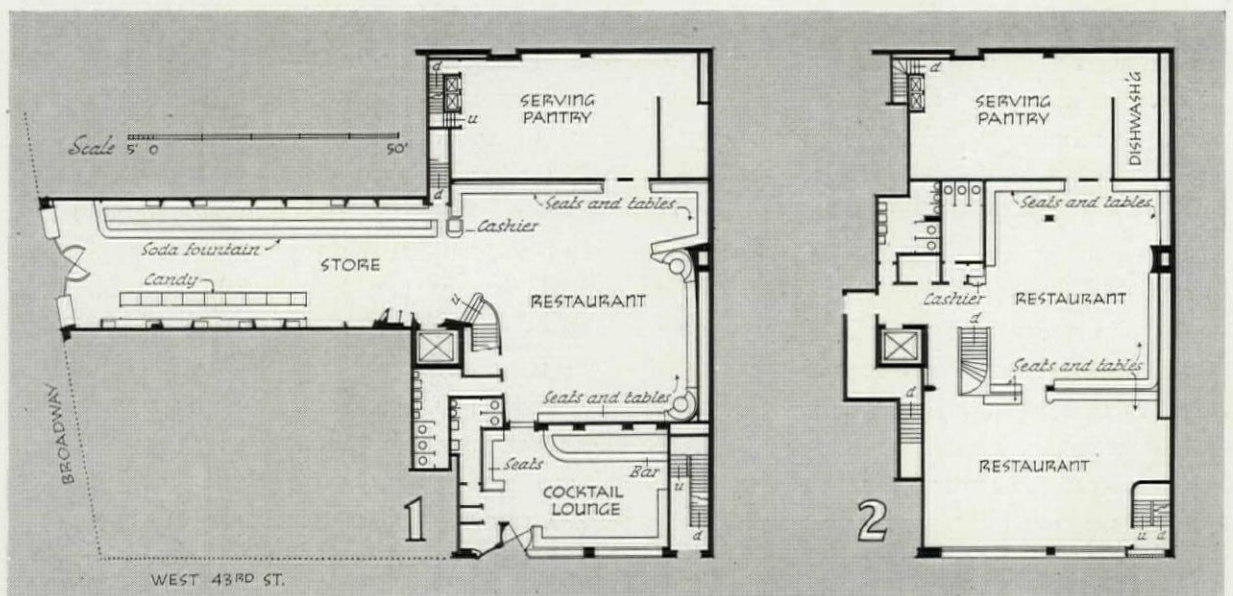
TIMES SQUARE FAÇADE OF SCHRAFFT'S RESTAURANT NEARING COMPLETION AT 43RD STREET, NEW YORK

AS ARCHITECTS FOR THE SCHRAFFT'S STORES, THE FIRM OF BLOCH & HESSE, OF NEW YORK, HAS BEEN ENGAGED FOR THE PAST SIX MONTHS IN A PROGRAM OF REMODELING AND RENOVATION AFFECTING STORES AND RESTAURANTS OF THE CONCERN IN MANHATTAN AND OTHER EASTERN CITIES. THE PROBLEM HAS BEEN TO GIVE THE EXTERIOR AND INTERIOR TREATMENT OF THESE ESTABLISHMENTS FRESH INTEREST—INTRODUCING THE MOST MODERN FEATURES AND RADICALLY CHANGING THE DESIGNS IN SOME CASES—WITHOUT DEPARTING FROM THE ARCHITECTURAL CHARACTER THAT HAS TYPIFIED THE SCHRAFFT'S STORES. AT THE SAME TIME, THE OPERATORS OF SCHRAFFT'S STORES AND RESTAURANTS ALSO DECIDED TO OPEN A LARGE NEW RESTAURANT, SO A SITE ON TIMES SQUARE AT 43RD STREET WAS SELECTED AND THE ARCHITECTS WERE COMMISSIONED TO DESIGN THE STORE WITH FRONTAGE ON BOTH STREETS (SEE PLAN, OVER-PAGE). IN THIS PROJECT THE ESSENTIAL CHARACTER OF THE SCHRAFFT'S STORES WAS TO BE RECALLED BUT THE PRIMARY DESIGN CONSIDERATION WAS TO CREATE A FAÇADE THAT WOULD NOT BE OVERPOWERED OR OBSCURED BY THE TOP-PRICED BLATANCY OF THE TIMES SQUARE ADVERTISING CIRCUS. THE ARCHITECTS CHOSE TO INSTALL A FRONT OF GLASS, HERCULITE AND BRONZE—MADE MORE DRAMATIC BY A SOFFIT OF VERMILION-STAINED METAL, STRIPED WITH FLUORESCENT LIGHTS

SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



THE 43RD STREET FAÇADE OF THE NEW SCHRAFFT'S RESTAURANT AND STORE AT TIMES SQUARE IS SHOWN IN THIS PRELIMINARY PENCIL-AND-WASH SKETCH MADE IN THE OFFICE OF BLOCH & HESSE, THE ARCHITECTS. THE ENTRANCES ON THIS SIDE WILL BE USED BY PATRONS OF THE RESTAURANT AND COCKTAIL LOUNGE AND ALSO THE DINING ROOMS ON THE SECOND FLOOR (SEE PLAN BELOW) WHILE THE ENTRANCE ON TIMES SQUARE WILL SERVE PATRONS OF THE CANDY STORE AS WELL AS THE RESTAURANT ON THE MAIN FLOOR. MOST OF THE SKETCHES AND STUDIES SHOWN HERE ARE BY JAMES ATKINS, DELINEATOR



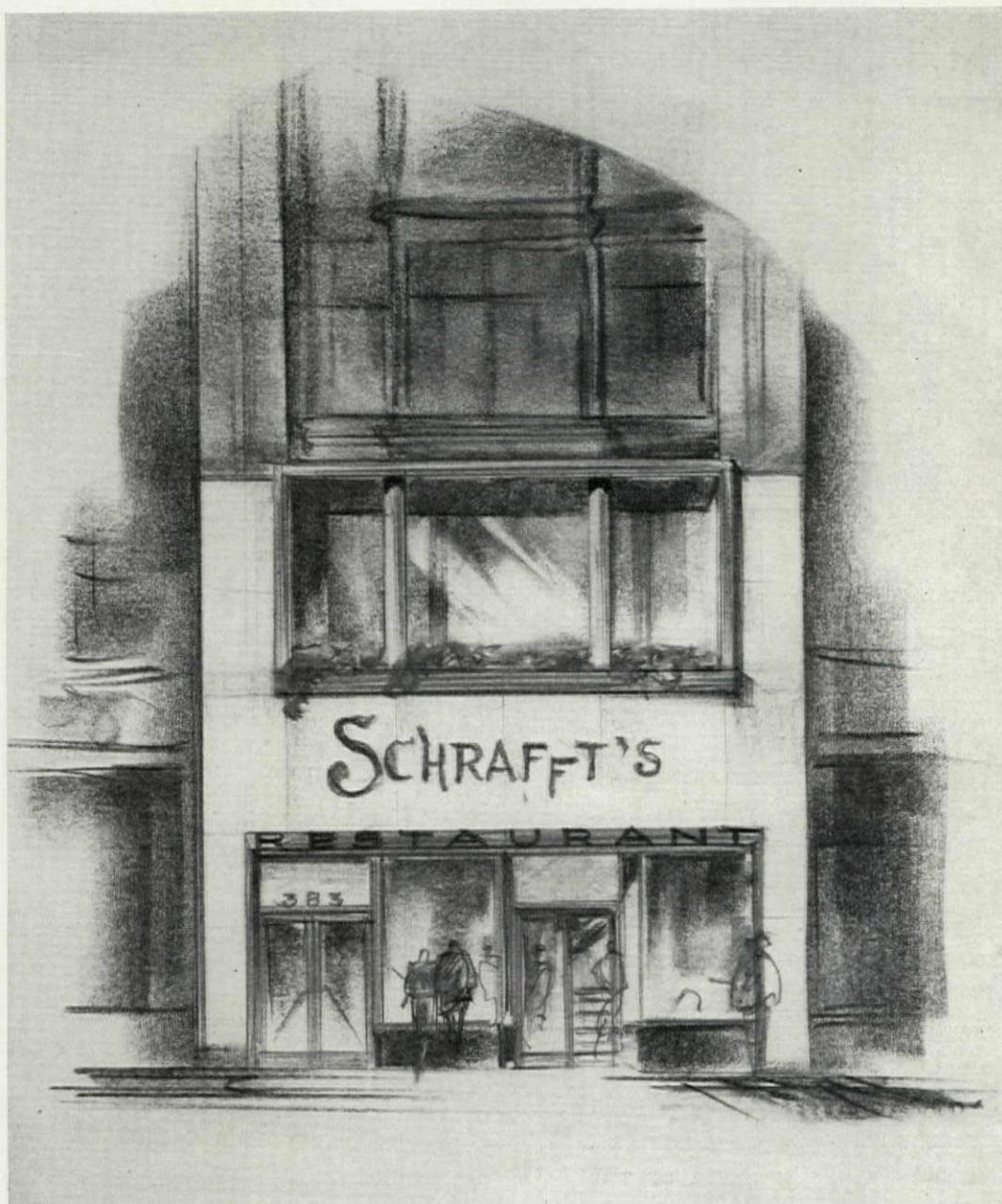
SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



MODERNIZATION OF THE FAÇADE OF ONE OF SCHRAFFT'S STORES, 386 FULTON STREET, BROOKLYN, WAS STUDIED AS INDICATED BY FIVE SKETCHES ON THIS PAGE WHEN REMOVAL OF THE "EL" IN FRONT OF THE STORE WAS PROPOSED. THE FREEDOM ENJOYED BY THE ARCHITECTS, ALSO THE INVENTIVENESS DISPLAYED IN DESIGNING FOR A CONCERN WHICH HAS ESTABLISHED ARCHITECTURAL PREFERENCES, MAY BE OBSERVED IN THESE SKETCHES. AFTER THE ARCHITECTS HAVE ARRIVED AT A DESIGN THAT PLEASES THE CLIENT, AND MATERIALS HAVE BEEN SELECTED, THE COORDINATION OF DRAFTING ROOM ACTIVITIES AND CONSTRUCTION WORK IS DIRECTED BY PIERO GHIANI WHO HAS BEEN ASSOCIATED WITH BLOCH & HESSE FOR A PERIOD OF YEARS. GEORGE C. HANNON, CHIEF ENGINEER OF THE FRANK G. SHATTUCK COMPANY, WAS CONSULTANT



SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



THE NEW FRONT OF THE SCHRAFFT'S RESTAURANT AND STORE AT 383 FIFTH AVENUE IS SHOWN HERE IN THE ARCHITECTS' PRELIMINARY SKETCH (ABOVE) AND IN A PHOTOGRAPH OF THE COMPLETED JOB BY SAMUEL H. GOTTSCHO, WHO MADE ALL OF THE PHOTOGRAPHS OF THE REMODELED SCHRAFFT'S FRONTS IN THIS SECTION. THE FAÇADE AT 383 FIFTH AVENUE IS OF WHITE MARBLE WITH A BRONZE AND GLASS FRONT AT THE STREET LEVEL, AND COLUMNS AND FASCIA OF JADE GREEN PORCELAIN ENAMEL WERE USED ON THE SECOND FLOOR

SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



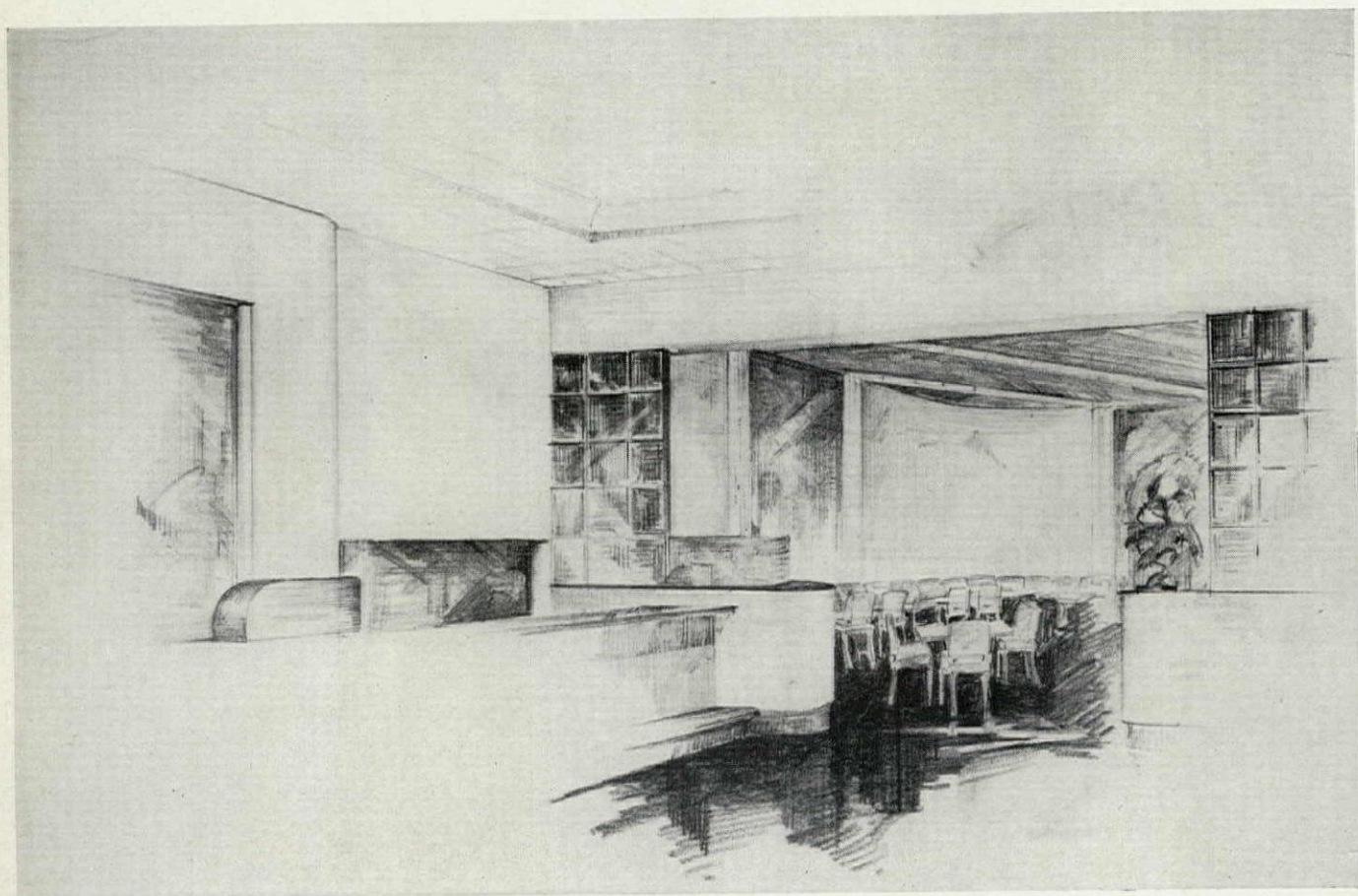
WHEN IT WAS DECIDED TO MODERNIZE THE 43RD STREET FAÇADE OF THE SCHRAFFT'S RESTAURANT EXTENDING FROM 13 EAST 42ND TO 18 EAST 43RD THE SCHEME SKETCHED ABOVE WAS SELECTED. THE PHOTOGRAPH AT THE RIGHT SHOWS THIS FAÇADE BEFORE MODERNIZATION. THE MATERIALS USED BY BLOCH & HESSE WERE BRONZE AND GLASS, AT THE STREET LEVEL, COMBINED WITH "COLORADO YULE" GOLDEN-VEINED WHITE MARBLE. PHOTOGRAPHS BY GOTTSCHO OF BOTH THE REMODELED FRONTS OF THIS RESTAURANT ARE REPRODUCED OVER-PAGE



SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



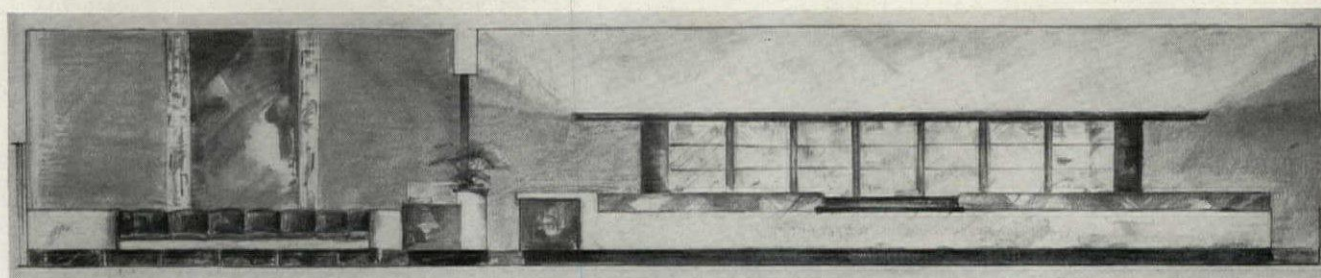
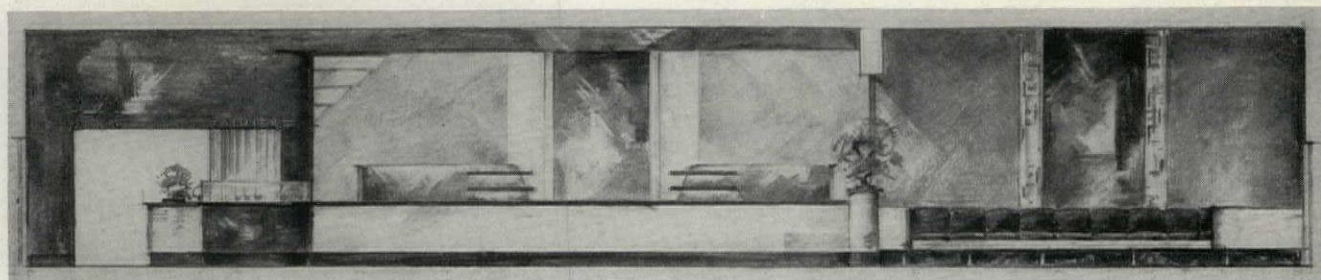
THE MODERNIZED FAÇADES ABOVE BELONG TO THE SAME STORE—18 EAST 43RD (LEFT) AND 13 EAST 42ND (RIGHT). THE PENCIL STUDY OF AN INTERIOR, BELOW, WAS MADE FOR THE SUMMER ST. STORE, BOSTON



SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



A SCHEME FOR A NEW SCHRAFFT'S SHOP CONSTRUCTED IN BROOKLINE, MASSACHUSETTS, COMBINING TRANSITE AND GLASS IS SHOWN ABOVE. INTERIOR STUDIES FOR THE BOSTON STORE ARE SHOWN BELOW



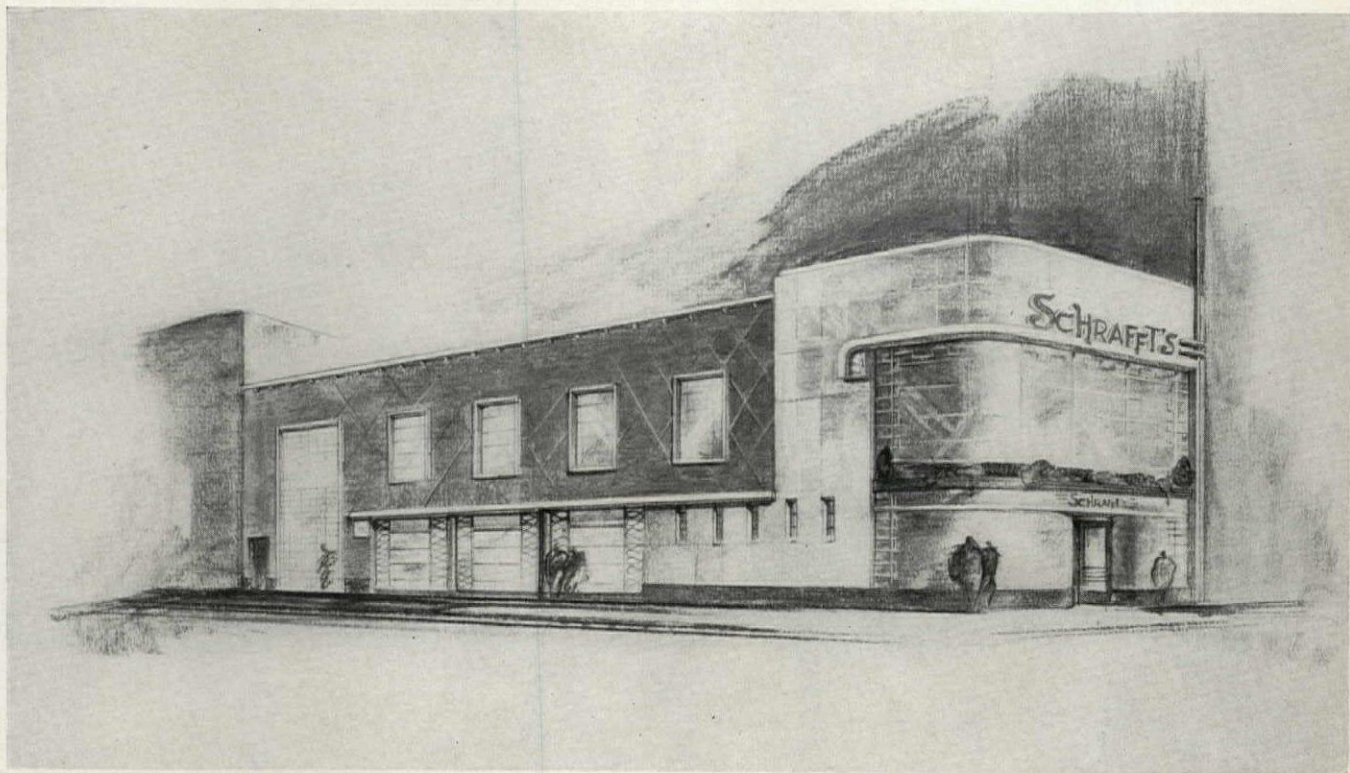
SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



A STARTLING "BEFORE AND AFTER" CONTRAST IS PROVIDED BY THESE PHOTOGRAPHS OF THE OLD FRONT AT 2285 BROADWAY AND THE NEW MARBLE AND ALUMINUM FRONT (RIGHT) BY BLOCH & HESSE. THE NEW FAÇADE OF THE RESTAURANT, STORE, AND BAR AT 220 WEST 57TH STREET IS SHOWN BELOW



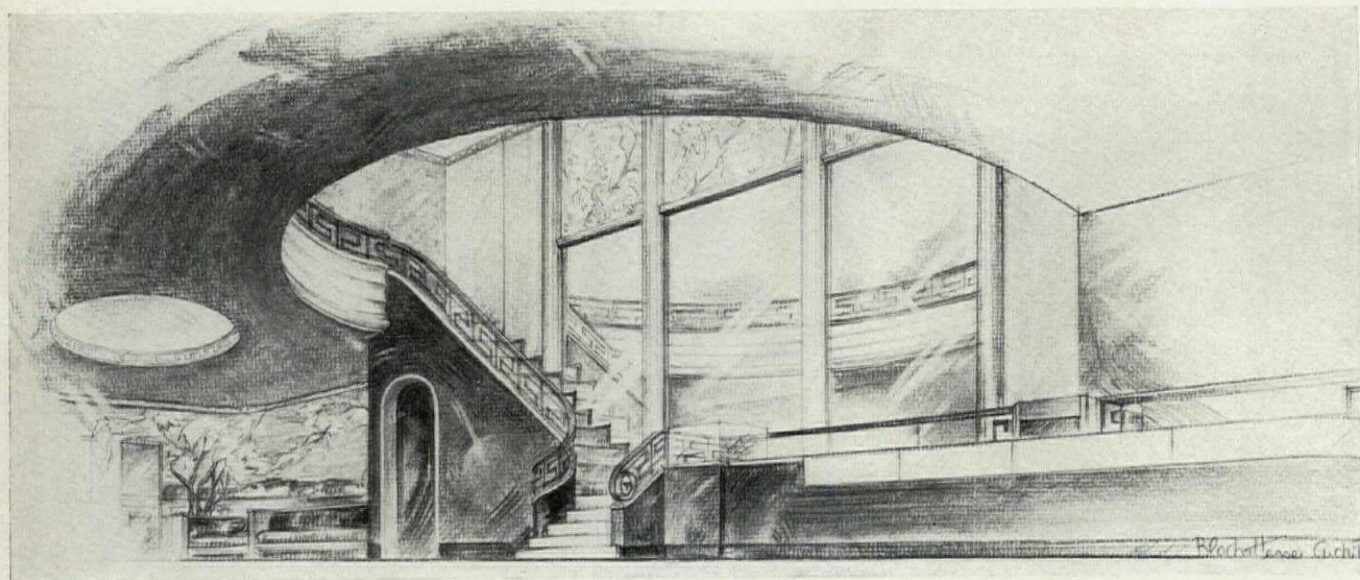
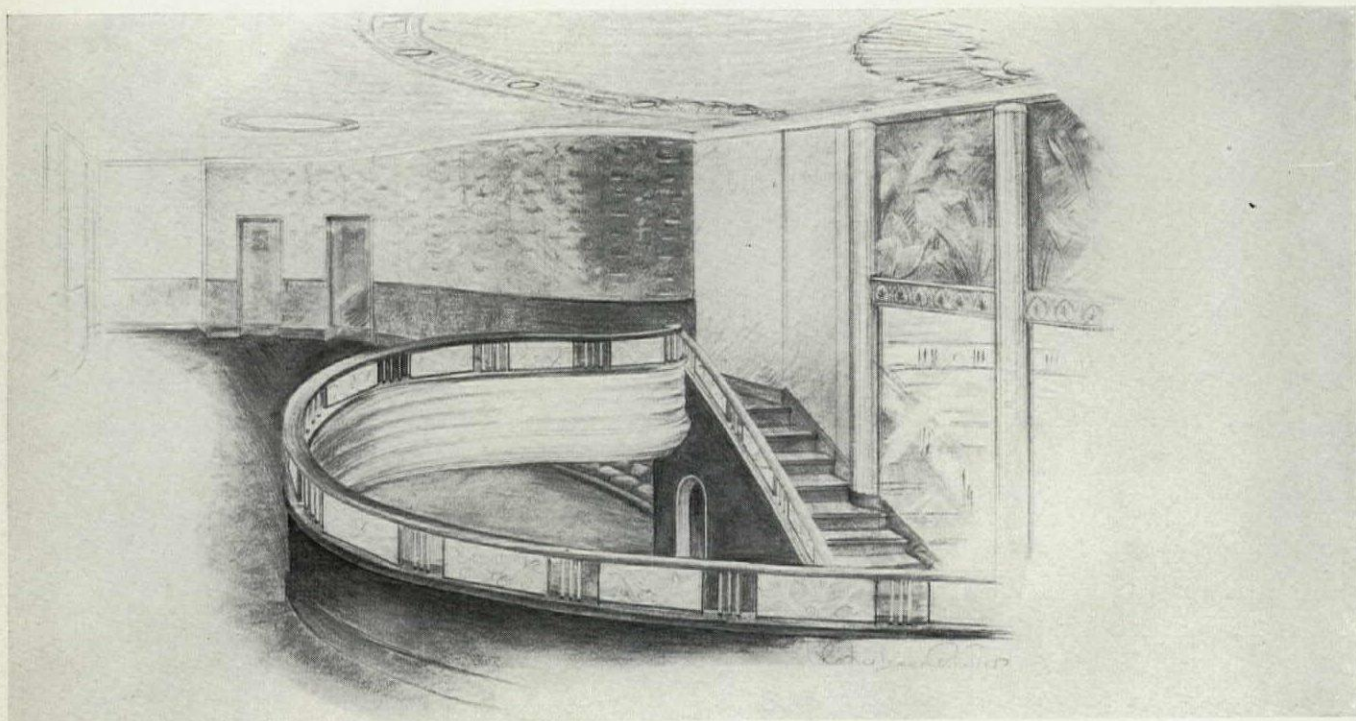
SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



THE FIRST STUDY MADE FOR THE SCHRAFFT'S STORE AT 61 FIFTH AVENUE IS SHOWN HERE, FOR COMPARISON WITH THE STORE AS BUILT (BELOW). ROSE BRICK, "SOUTH DOVER" MARBLE QUARRIED IN UPPER NEW YORK STATE, ALUMINUM, AND GLASS WERE USED. THE NEW PHOTOS ARE BY GOTTSCHO



SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK

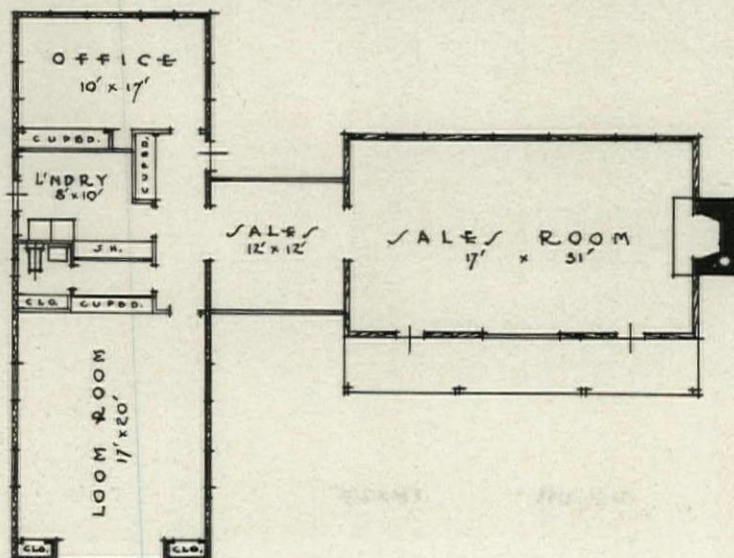


THE PRELIMINARY PENCIL STUDIES SHOWN HERE WERE MADE WHEN SCHRAFFT'S STORE AT 61 FIFTH AVENUE WAS BEING DESIGNED. THIS INTERIOR SCHEME LINKS THE DINING ROOMS ON THE TWO FLOORS

SCHRAFFT'S STORES — BLOCH & HESSE, ARCHITECTS, NEW YORK



THIS ATTRACTIVE ROADSIDE SHOP, KNOWN AS THE "SPINNING WHEEL," IS ONE OF SEVERAL BUILDINGS DESIGNED FOR A CRAFT GROUP LOCATED NEAR ASHEVILLE, NORTH CAROLINA, BY WILLIAM W. DODGE, JR.



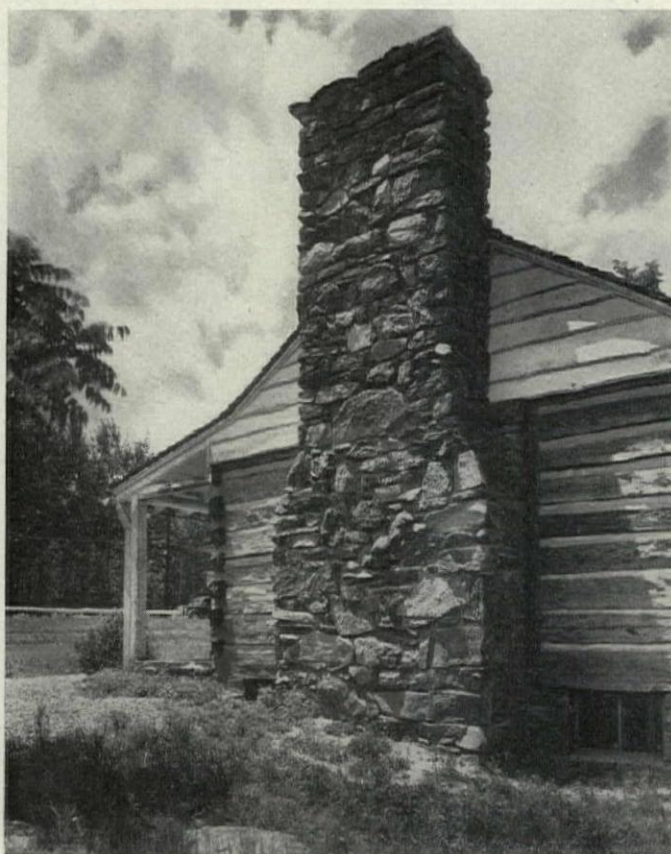
RURAL SHOP—BY WILLIAM W. DODGE, JR., ASHEVILLE, N. C.



THE PLEASANT STONE-PAVED PORCH IS USED TO DISPLAY BASKETS, LARGER POTTERY AND OTHER OBJECTS

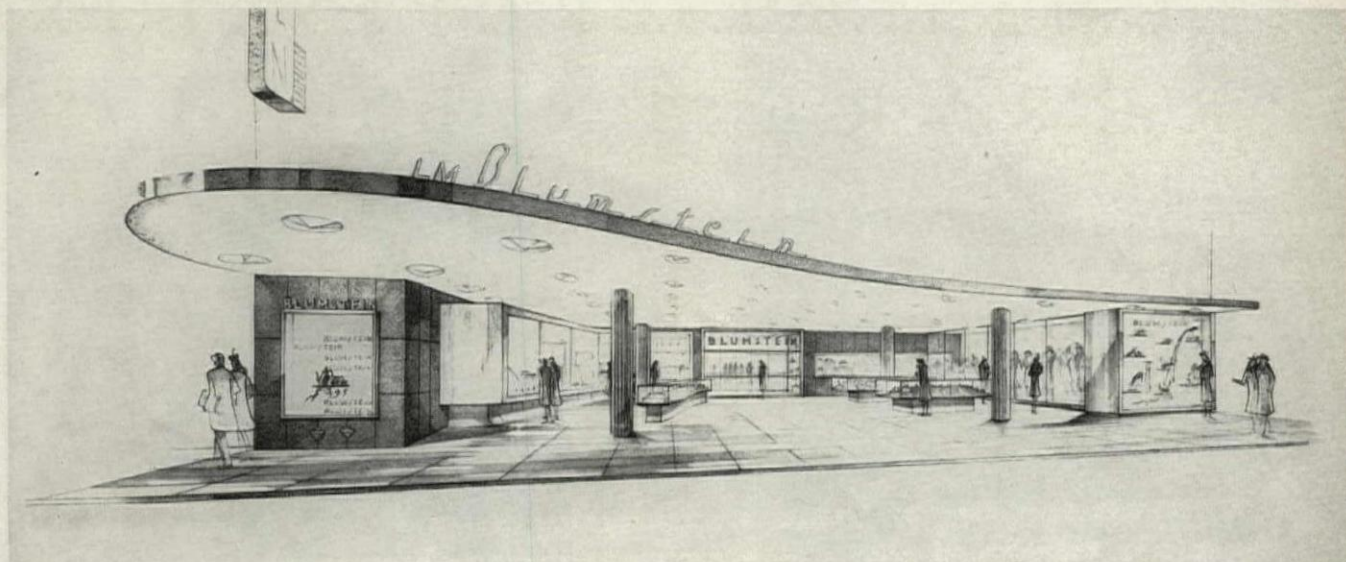


SALES ROOMS OF THE SHOP ARE LIGHT AND QUITE SIMPLE. THIS ONE IS BESIDE THE LOOM ROOM

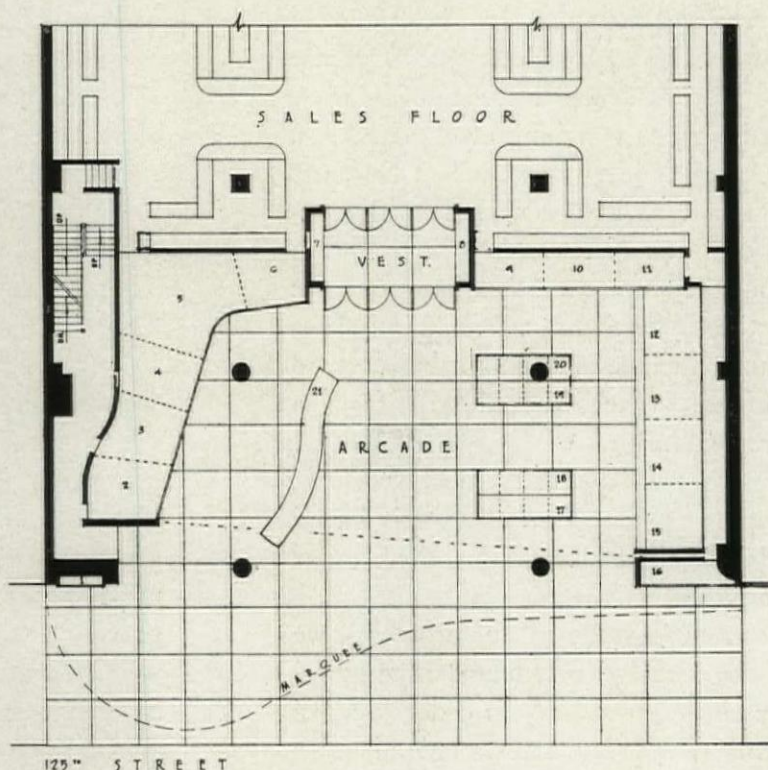


ADDITIONAL VIEWS OF THE EXTERIOR OF THE "SPINNING WHEEL" NEAR ASHEVILLE, NORTH CAROLINA, SHOW THE ARCHITECT'S CAREFUL ATTENTION TO DETAILS—SUCH AS THE HEWN SIDING AND THE BIG STONE CHIMNEY. THE LARGE WINDOW (ABOVE) LIGHTS THE LOOM ROOM OF THIS SMALL BUILDING AND THE PORCH BEYOND GIVES ACCESS TO THE PRINCIPAL SALES ROOM. THE FIREPLACE, OF COURSE, SERVES TO DISPLAY FIREPLACE EQUIPMENT AND ACCESSORIES AS WELL AS TO WARM THE SALES ROOMS IN WINTER

RURAL SHOP—BY WILLIAM W. DODGE, JR., ASHEVILLE, N. C.



DEPARTMENT STORE FAÇADE DESIGNED BY MORRIS KETCHUM, JR., ARCHITECT, OF NEW YORK, FOR AN 87-FOOT FRONT ON 125TH STREET IS SHOWN ABOVE, RENDERED BY ALBERT LOECHER, IN CONTRAST TO THE EARLIER FRONT OF THE STORE (BELOW). THE ARCHITECT'S PLAN (RIGHT) SHOWS HOW KETCHUM SOLVED THE PROBLEM OF PROVIDING A COMFORTABLE, SHELTERED, WINDOW-SHOPPING AREA WITH SPACE FOR THE WARES OF TWENTY DEPARTMENTS TO BE DISPLAYED. THE STREET IS CROWDED DAY AND NIGHT AND THE STORE EXPECTS MUCH OF WINDOW DISPLAY. WALL CASES ON THE LEFT OF THE ENTRANCE ARE FOR HOUSEHOLD ARTICLES, CLOTHING BEING DISPLAYED ON THE RIGHT, AND SMALLER ARTICLES IN THE SHATTER-PROOF GLASS FLOOR CASES BETWEEN THE ALUMINUM FACED COLUMNS. ALL METAL-WORK IS ALUMILITED ALUMINUM; WALLS ARE OF DULL-FINISH BLACK STRUCTURAL GLASS; THE MARQUEE IS PORTLAND CEMENT STUCCO; AND FLOOR IS DULL RED CEMENT, FROM THE CURB



REMODELED STOREFRONT — MORRIS KETCHUM, JR., ARCHITECT

TECHNICAL PROFESSIONS PREPARE IN BOSTON

REPORT OF COMMITTEE FOR CIVILIAN DEFENSE

The Committee appointed by the Boston Society of Architects, acting under The American Institute of Architects, for Emergency Defense preparation has broadened the scope of its work and is functioning as a Committee of Architects, Engineers, and Planners, for Civilian Defense. From contact which has been made with non-military and military sources, both local and in Washington, the Committee has been assured: (1) That the professional and technical skills which it can contribute and use for building up civilian defense is needed and will form a worthy contribution.

(2) That such work by us is most welcome, and is a type of pioneering, which it is hoped will spread and will be taken up by other similar organizations in other States.

With the continued study of our problems, we are again impressed by the amount of technical knowledge which is necessary in order to solve the problems of civilian safety and adequate living because of world conditions today. The success or failure of civilian safety will depend upon the adequacy and efficiency of the scientific and technical approach. Our work, which will function with a personnel of Architects, Engineers, and Planners, is peculiarly constituted to help in an effective way because of the technical skill and experience of its type of personnel.

The carrying out of any defense problem will involve appropriations, and the expenditure of sums of money, probably the greatest in history. As far as possible, it would seem reasonable that, because of this, there should be a guarantee to the people of the United States that the greatest social and economic values from the moneys appropriated and expended for defense planning

should be realized by the citizens, not only right now, but also in the future, through this spending under technical advice, which can help to bring about a better planned economic structure of society. The spending of money now, on hurried, ill-considered, and incomplete projects, is to be deplored both for the losses sustained in the present, and harmful future effects.

There are two phases to our work which we wish to stress: The first is the area to be covered.

In Massachusetts we are organizing by dividing the State into districts in order to cover the entire State. Beyond Massachusetts, we are also organizing the other States in New England. The area of the effects of war has become greatly enlarged in this war, compared with the previous war. In the previous war the areas most gravely affected were those where the armies were in combat. At present, with the aeroplane and the means of waging war by it, all areas are affected and those where civilians are and not the army, are liable to be the most affected.

The second is its usefulness during times of peace as well as war:

A great many of the elements of the work of our Committee are both vital and useful under conditions other than war. A large part of the work as organized will be equally beneficial to create better planned cities and towns, better organized facilities to meet emergency conditions such as the hurricane, and otherwise function to improve conditions under peace time operation. Therefore, the usefulness of our contribution is not dependent upon the eventuality of war by invasion. If, however, war does come, the items which deal with civil morale are as important as the military preparations.

DETAILED PROGRAM OF COMMITTEE ACTIVITIES

The work of the Committee, for its proper functioning, has been analyzed and broken down into eight main divisions. These vary somewhat from those given in our last report. The divisions of work are under sub-committees, headed by chairmen, and are as follows:

I. PROTECTION

This will cover a large field, including both civilian and building protection. The work is at present following these general sub-divisions:

A. Classification of Existing Structures

1. *Kinds*
 - a. Household
 - b. Schools and Colleges
 - c. Commercial and Business
 - d. Industrial
 - e. Institutions
 - f. Community
2. *Use*
 - a. Through safety against high explosives
 - b. Through safety against gas
 - c. Through safety from fire under bombing, or general conflagration
3. *Survey*
 - a. Safety value of existing construction
 - b. Safety value through altered construction
 - c. Hazardous for use
 - d. Dangerous for use and should be removed

B. New Type of Structures for Special Use

1. Survey of such structures as used in Europe
2. Consultation with Government and other authorities on such structures
3. Report on desirable locations for placing such structures
4. Consulting on their planning and design
5. *Kinds*
 - a. Casualty stations
 - b. Additional fire fighting stations

- c. Canteens
- d. Shelters
- e. Other structures for protection

C. Preparation of Map Data

1. Collecting of available maps for use
2. Consultation with Government and Local authorities as to conditions affecting map work
3. Classification as to map data with common symbols
4. Preparation of maps as directed, and drawn at a common scale agreed upon

D. Preservation of Historic Buildings, Art Treasures, and Records

1. Consultation with authorities as to work undertaken
2. Survey of conditions
3. Preparation of design and data for protection of buildings
4. Reports on suitability of temporary or reused structures for records and documents

II. CAMOUFLAGE

A. By Concealment

1. *By Massing*
 - a. By study of shapes and avoiding symmetry
 - b. By placing masses to take advantage of ground contours
2. *By Planting*
 - a. Natural plant forms
 - b. Use of plant forms through design and landscape architectural treatment

B. By Confusion

1. By actual change of form
2. By changing of the apparent form of objects
3. By imitation or repetition, destroying the value of single conspicuous objects

C. Lighting

1. *Absence of lighting*
 - a. Blackouts for the entire community
 - b. Blackouts for special areas
2. *Glare by lighting*
 - a. For reservoirs, or groups of buildings
 - b. For communities, by encompassing areas greater than the size of the community, allowing a different shaped area under glare each night, protecting the community, and obliterating vital objectives
- c. Special forms of lighting

D. Paint

1. Survey of paints now in use
2. Research concerning new paints
3. Color
4. Combination of use of color and form through painting
5. Color and chemical value

E. Coverings

1. Use of colored coverings over roads and other objectives
2. Use of sodding and other coverings on roofs
3. Covering of landscape with decoys, to make objective areas appear like pastures, graveyards, or similar units

III. CONSTRUCTION METHODS, CONTRACTORS, AND LABOR

A. Construction Methods

1. *Use of new materials*
 - a. For more permanent construction
 - b. For greater safety
 - c. For economical construction, to prevent shortages of the more commonly used materials

2. *Consultation*
 - a. With Government and military authorities
 - b. With other sub-committees on structural problems
 - c. Reports on special construction problems

B. *Contractors*

1. *Consultation and Services*
 - a. Inspection of damage to buildings
 - b. Debris cleaning
 - c. Assessment of damage to buildings
 - d. New and alteration work with reference to structures

C. *Labor*

1. Consultation with representatives of labor
2. Research concerning labor problems
3. Cooperation with labor on projects

D. *Special Construction Problems*

1. On Government work
2. On Military work
3. On special structures such as historical buildings
4. On structures involving rehabilitation construction

IV. HOUSING

A. *Survey and Fact Finding*

1. Population densities
2. Distribution of industries to housing, and housing to industries
3. Communications
4. Topographical Characteristics
5. Food and Sanitary Services
6. Type of Structures

B. *Evacuation*

1. Survey of existing housing in other than the evacuated centers
2. Survey of existing private or community buildings for temporary use under conditions of emergency evacuation

C. *Designing and Planning*

1. *Alterations*

2. *Additions*
3. *New work with reference to*
 - a. Houses
 - b. Schools and Hospitals
 - c. Recreational Buildings
 - d. Supply buildings and warehouses
 - e. Special use buildings under war conditions, such as training centers and barracks

D. *Government relations*

1. With reference to existing housing
2. *With reference to new housing*
 - a. Consultation on local conditions and needs
 - b. Appointment of Private Architects, Landscape Architects, and Engineers
 - c. Reports on solution of the housing problem
 - d. Consultation with other local authorities or units on housing

V. INFORMATION AND SURVEY

A. *Personnel Forces*

1. Architects, Landscape Architects, and Engineers
2. Contractors
3. Labor

B. *Building Materials*

1. Supply firms and data as to the materials handled

C. *Government work*

1. Information as to the work being contemplated or authorized or undertaken by Washington, or local Government groups
 - a. Correlation of this data
 - b. Reporting it to interested sources

D. *Fact Finding*

1. *Defense and Civilian Safety*
 - a. On results in Europe from similar technical organizations

- b. On results made available by Washington
- c. From local sources

E. *Bibliography*

1. *Consulting local libraries*
 - a. City
 - b. College
2. Creating a bibliography on defense problems and making it available to all sub-committees
3. Acquisition of pamphlets and other data for the use of sub-committees in their work

F. *New Work*

1. Government
2. *Private*
 - a. Recommendation as to available, competent firms
 - b. Assistance in obtaining the employment of Architects, Engineers, and Planners for the projects

VI. PLANNING, ZONING, AND REHABILITATION

A. *Town Planning*

1. Relative to new industries
2. Relative to existing industries
3. Relative to community life
 - a. For present conditions
 - b. For rehabilitation work under wartime conditions

B. *Zoning*

1. *For safety*
 - a. Removal of hazardous structures
 - b. Formulating requirements for necessary building clearance in cities and towns
 - c. Workmanship on areas such as reservoirs and power houses, concentration of oil tanks, etc., relative to better planning

C. *Building Code Changes*

1. *In cities and towns*
 - a. For better planning and appearance
 - b. For structural safety

D. *Rehabilitation*

1. Collaboration with Federal, State, and Municipal Authorities
2. *Data on rehabilitation processes*
 - a. For city and town planning
 - b. For divisional layouts
 - c. For buildings

- a. Within the organization of Architects, Landscape Architects, and Engineers
 - b. Outside the organization, through State or Regional assistance
2. For better organization of the various agencies to achieve the objects of the committee

3. *Construction Methods, Contractors and Labor*

This sub-committee will thoroughly consider the construction field, and will be available to consult and assist with construction problems.

4. *Housing*

The sub-committee on Housing will probably be headed by Mr. Joseph D. Leland. It particularly interests itself in the study of population groups and their use of shelters. It will endeavor to interest Federal, Regional, State, and Local groups as to the desirability of employing Architects, Landscape Architects, and Engineers for this work. Another study will be the effect of economy and Government Housing, versus private enterprise and local communities. They will primarily seek to develop the community toward more healthful and economical living.

5. *Information and Survey*

The committee on information and survey is headed by Mr. Felix Burton. This committee will play a very useful part in the proper operation of the other sub-committees. Already the Librarian of the Massachusetts Institute of Technology has started the formation of a small library containing bibliography pertaining to our work. This committee will keep in close touch with such movements.

6. *City and Town Planning, Zoning and Rehabilitation*

This Committee will work on rezoning, on building conditions, and on layout planning, both from the standpoint of architecture and landscape architecture. The whole field of city planning, taking into consideration the roads and routes between cities as well as the problem of rehabilitation in all its phases, will be considered by this sub-committee.

7. *Public Relations and Coordination*

This committee will specifically handle the problems of Publicity, Education, and Coordination between the sub-committees. Much of the success of the other sub-committees will depend on this Committee's work.

8. *Organization and Ways and Means*

This sub-committee, of Organization and Ways and Means, is headed by Mr. Walter Campbell, and will

VII. PUBLIC RELATIONS AND COORDINATION

A. *Publicity*

1. Compilation of data
2. *Dissemination of data*
 - a. Public Speaking
 - b. Newspapers
 - c. Magazines

B. *Education*

1. Through Publications
2. Through Maps
3. Through Plans and Illustrations
4. *Through Personal Contact*
 - a. To promote public awareness as to the problem of protective planning
 - b. To inform the public as to better self-protection
 - c. To cooperate with community leaders

C. *Coordination*

1. Between the Committee and the general public
2. Between the various sub-committees

VIII. ORGANIZATION AND WAYS AND MEANS

A. *Organization*

1. Research and Survey
2. *Preparation of Data*
 - a. Organization objectives
 - b. Charts

B. *Consultation*

1. With Committee Chairmen
2. With State and Regional Organization

C. *Ways and Means*

1. *For carrying on work*

For further information as to the progress of the Committee work, the following comments are added:

1. *Protection*

Mr. William Roger Greeley, Chairman of the sub-committee, has made the following report.

"From a map given to us by the military authorities, we have studied those areas of military importance. In each area we have tried to contact an architect or group of architects interested in beginning a fact-finding survey, upon which to base our work.

"In general we have received enthusiastic cooperation, and already a survey of Pittsfield is complete.

"In Boston a test survey by the students of the Harvard Architectural School has been started in the Charlestown area, and should be completed in a few days. From this survey we hope to establish a method of procedure applicable to other areas.

"It is encouraging to note the interest in this work. Several organizations other than the architectural profession have enquired concerning the work, and have volunteered their services. A volunteer secretary has made it possible to keep in touch with all local groups, and questions and suggestions have been exchanged.

"The coming week will find the survey of greater Boston under way. From this information, the data which we are accumulating will be the basis of our study of the various aspects of civilian shelters."

2. *Camouflage*

The sub-committee on Camouflage is headed by Mr. Marc Peter, Jr. It is considered that Camouflage is an extremely important item in the safety program, and calls for research and study of methods which have been used in Europe in the present war, and for the creation by us of new and effective methods.

concern itself particularly with the study and analysis of the various detailed functions of the other sub-committees, and as to how best we may divide work and have the sub-committees function as part of a whole, reporting back to the Executive Committee. Assistance on charts has already been given by this sub-committee toward the organization of the State Defense work and the set-up of the Public Safety Division of the State of Massachusetts. Charts have also been prepared on the organization of our committee and of its sub-committees and aims.

The Ways and Means of carrying on this work and of relating it to the proper State and Government Officials will also be a part of the work of this committee. This is also receiving consideration, along with the detailed efforts such contact requires.

The report of the functions of the above eight sub-committees, which is now carrying on or will carry on, as the case may be, gives a brief résumé as to how the work of the committee is covered. Such a set-up is functioning as a whole and we feel sure will bring effective results.

In order better to carry on this work in the State of Massachusetts, we have sub-divided the State into districts, with Architects in each one of these districts to head up the work. The districts into which Massachusetts has been divided at present are those surrounding these cities:

Greenfield	Lowell
Springfield	New Bedford
Worcester	Fall River
Lawrence	Boston

In our last report it was stated that arrangements were being formulated for our representation on the Defense Committee of Massachusetts, as appointed by the Governor of Massachusetts. We would then function as part of the State Committee as an Executive or Division Committee of Architects, Engineers, and Planners for Civilian Defense. This set-up is already in the hands of Mr. Channing Cox, the Chairman of the State Committee, and will be placed before his Executive Committee within a few days, for confirmation.

Our executive committee, in addition to the members previously ap-

pointed from the Boston Society of Architects, has been enlarged to include also in its membership a Landscape Architect, Town Planner, a Civil Engineer, and a Mechanical Engineer. A District Committee has also been formed, made up of members from district cities as listed.

The personnel of the Committee presented to Mr. Channing Cox, Chairman of the Defense Committee of Massachusetts, is as follows:

Chester Lindsay Churchill, Chairman; *William Emerson*; *H. Daland Chandler*; *Walter Campbell*; *William Roger Greeley*; *Marc Peter, Jr.*; *John T. Whitmore*; *E. C. Whiting*, Landscape Architect; *Frederick J. Adams*, Town Planner; *Carroll A. Farwell*, Vice President of the N. E. Section of A.S.C.E.; *Holcombe J. Brown*, President of Engineering Societies of N. E.

District Members as follows: *John F. Alter*, Lawrence; *James A. Britton*, Greenfield; *Carroll Coletti*, Boston; *Wallace E. Dibble*, Springfield; *Samuel T. Dubitsky*, Fall River; *Adolph Johnson*, Worcester; *Henry L. Rourke*, Lowell; *William Tallman*, New Bedford.

Since the last report, the Chairman of your Committee has visited the Maine Chapter of the A.I.A. at Portland, on November 14, 1940. The work of your committee was explained and also the organization and its relation to the State of Massachusetts. Previous preliminary work had been done through the efforts of the Regional Director, Mr. H. Daland Chandler. At our meeting, however, a committee was formed, headed by Mr. John Howard Stevens, and work is going forward on the basis of our organization and objectives.

On October 23, 1940, your Chairman met with the Connecticut Architect's Committee on Defense and attended with them a conference at the State House in Hartford, with General Wadhams, Chairman of the Governor's Joint Executive Committee on Defense. There was a discussion in great detail, of a program of activities, largely following those as outlined in our first report, and General Wadhams expressed his hearty accord with the movement. The Connecticut Committee, organized

along the lines of our Committee, through the Regional Director, Mr. H. Daland Chandler, is now functioning and is the most active of any State Committee outside of our own.

Both these Committees for the States of Connecticut and Maine have been organized by us and it is the intention that the States of New Hampshire and Rhode Island shall be similarly organized, forming the nucleus for a New England Regional Committee. Vermont will be covered by our Committee.

Work has already been started with reference to assisting the organization of the Rhode Island Chapter.

In addition to activities within New England as reported, the Philadelphia and New York Chapters have become interested. They have conferred with us and have received data on what we are doing, and are considering the matter of civilian defense, although along lines which may differ from ours as to organization.

With this organization as reported, and with other provisional groups, plus the obtaining by us of an official status as part of the State organization, we shall be in a position to further speed our progress. This progress, we feel, is a great necessity, as it is a fact that the country is already arming for defense. Concurrent with this arming for defense, is a dire need for the scientific and technical solution of the problems of civilian safety and defense which are confronting the whole people of this country, and it is immeasurably important. The Architects, Engineers, and Planners have established that they can make a vital contribution along these lines—a contribution, we again stress, which will help solve defense problems through an intelligently planned, long term program working toward the social betterment of the people of this country, and which will also aid the defense problem effectively and efficiently if the unhappy contingency of war does come.

We are looking forward to being able to report further progress along these lines in the near future.

Respectfully submitted,

CHESTER LINDSAY CHURCHILL
Chairman

SLOW PROGRESS IN HOUSING FOR SHIPYARD WORKERS

ALAN MATHER REPORTS ON FIVE EASTERN SITES

In the magazine talk of work which architects can do for national defense there is a concentration upon the "Buck Rogers" elements of warfare. Camouflage, air raid shelters, wire mesh nets for protection against falling glass, blinds for total blackout are crashing into the architectural press. These things like the capes and planet disintegrator of the hero of the funny papers are BIG, they are important—they have their place—particularly in those magazines interested in popular mechanics. But they *should not* have space to the exclusion of the less dramatic and perhaps more effective considerations related to city and regional planning. It is work in these fields which will help to *localize* air raid damage.

What is required to localize damage was pointed out recently by Ralph Ingersoll, editor of PM, a New York newspaper. He said: "To my own knowledge, the British have dispersed their industrial production lines with amazing efficiency and success . . . An airplane in England is no longer made in one factory. A carburetor is

made here, a tail wheel there, wings some other place. Not only that, but instead of having one carburetor factory, the production of carburetors is broken up between two or more factories. Ditto tail wheels, ditto wings, etc. So that the *total* destruction of no one factory can stop the production of an airplane." In shipbuilding also, dispersal is practicable. It could be effected in the United States by taking all operations except final assembly from the shipyards and placing them inland (as has been done for submarine construction in Germany). Creation of new yards along the Southeast and West Coasts with consequent reduction of the relative importance of the Northeast yards is another step in that direction.

These are general considerations against which the following local observations should be projected. Any thought on decentralization, to be effective, should avoid Broadacre-Garden City visions and get down to detailed observation of local groups which ally themselves with central financial interests to oppose decentralization.

QUINCY, MASS.

The greatest hurt to the largest aggregate of people with the finest economy of bombs seems to have been the purpose behind the blasting of the East end of London. The possibility—distant as it may be—that areas of concentration here may be bombed on the same principle should be kept in mind when picking sites for new housing. Certainly when a group of industries moves from the center of a metropolis to its suburbs, there should be an effort made to locate

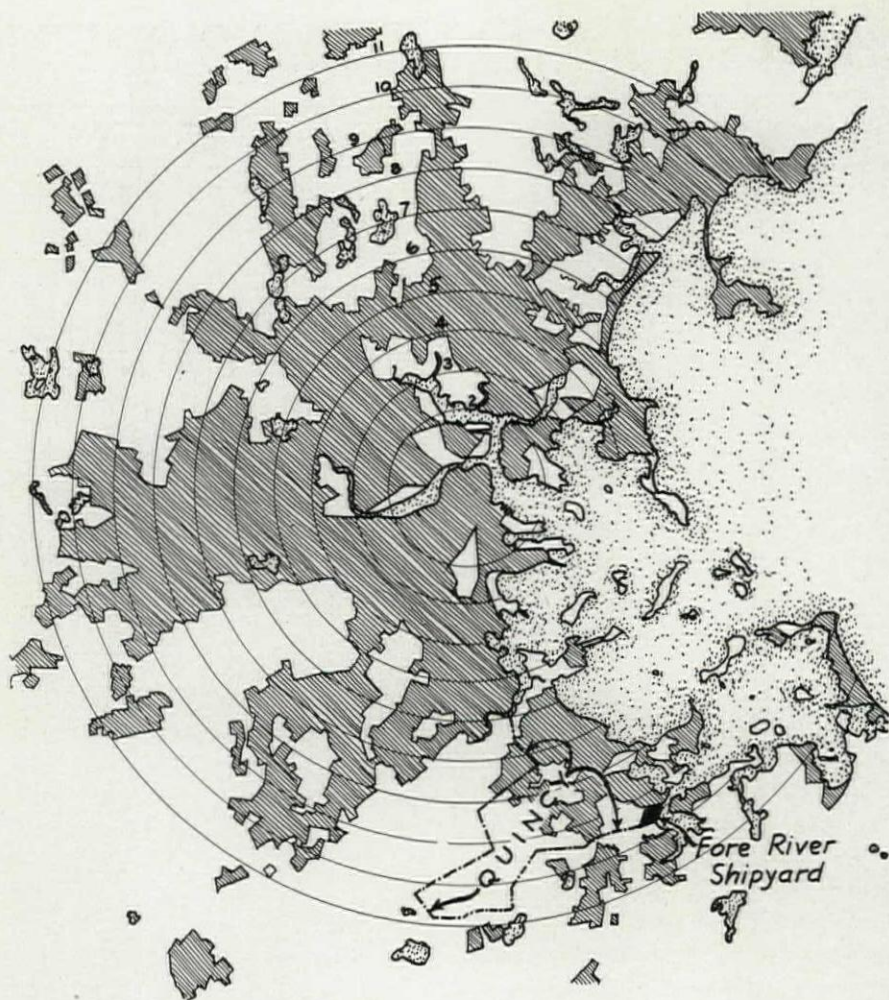
some low-density housing for it nearby. Socially and strategically — could there be anything worse than to build a new housing project for such a group back in the city center from which it had removed? Yet, it is this worst of ideas which is being put into practice in Quincy. There, the Fore River shipyard, nine miles from the State House, is to have housing for some of its employees built in the southern part of Boston.

Why is this happening? I interviewed a number of people up there

and got the answer to that one. A Mr. Edwin J. MacEwan, Secretary of "The Quincy Defense Council"—and of the Quincy Chamber of Commerce—plus some bank and savings and loan association representatives, stated flatly that Federally-sponsored low-rent housing was neither needed nor wanted in Quincy. This they said, and loudly, and with abuse of all opponents, at a hearing in the town hall and at an interview with Defense Housing Coordinator Palmer in Washington. The Quincy

Citizens' Public Housing Committee representing civic and improvement associations and labor unions stated that there *was* a need for this kind of housing and asked for a Housing Authority in Quincy. Both groups were earnestly listened to and a judgment of Solomon was handed down. Whereas, there is a shortage of housing at rents which defense workers can afford to pay; whereas, this shortage ranges anywhere from 500 to 2,000 dwellings; therefore it is recommended that private enterprise be assigned the task of providing 1,000 dwelling units, and, that the provision of 1,000 dwellings to rent for \$20 to \$30 per month be assigned to the Federal Works Administration *in conjunction with the Boston Housing Authority*—that is the Housing Coordinator's decision. In a magazine devoted to the finer things of life, it is perhaps a little out of place to discuss the Automat. But that decision is like going into an Automat where you can't see into the food compartments. You put nickels into the one marked *Swiss Cheese Sandwich*, the door springs open, and you get a bowl of *Boston Baked Beans*.

There being no Real Property Inventory in Quincy, I cannot point to any official statement of conditions there. At the Mayor's office I asked for the name and address of the Chairman of the committee of the City Council which had made an investigation. I was referred to Mr. MacEwan. Mr. MacEwan, the Secretary of the Chamber of Commerce, is not the Chairman of the City Council committee, but I did as was suggested — hunted for him at the Court House. The search for him there being fruitless, I went to the Chamber of Commerce. I did not find Mr. MacEwan there but I got the C. of C. reports. These say that there are plenty of existing houses and apartments for rent in Boston, Brockton, Hull, etc. 350 in Quincy. Nothing was said about rents in the reports, so when I dropped in at a bus terminal to get a route map I asked some assembled bus drivers about those. Three out of seven of these drivers, Quincy residents, had had their rents raised five dollars in recent months. With proper oratorical



Map of Boston with shading to show settled areas within the Metropolitan District. Radii of circles measured in miles from the Massachusetts State House at the center of the city. Proposed housing several miles from shipyard

gestures I said something like this, "Private capital has served adequately our community over the past few years and is amply equipped to serve it in the future. Any forced production of additional housing will drive away private capital and seriously injure not only our community but the defense program in our area." One of the drivers looked at me suspiciously and asked, "Are you from the government?" When I assured him that I was not, they all burst into a torrent of abuse against the real estate interests in the town.

BOSTON

At the office of the State Planning Board in the State House an old man said to me: "It's discouraging—you offer to do something—make a survey, take an inventory, but people say, 'The War Department has done that' or 'A Chamber of Commerce has done that.' Then when you go to look for what they have done and

you find nothing at all or something incomplete." It seemed to check with what I had seen in Quincy.

Boston and Massachusetts are well supplied with planning agencies, many of them doing an excellent job. The City Planning Board with WPA help is making a survey to determine how far actual use of properties has filled up the space allotted to them in 1924 when the city's zoning law was passed: it is thought that the areas reserved for industry represent the too optimistic ideas of expansion of the 'twenties. It is also making a Rehabilitation Survey to find out how much old housing is fit for renovation. The State Planning Board has proposed to take an inventory of available housing within a ten-mile radius of Quincy, Springfield, Worcester, Camp Edwards, Fort Devens, and Lynn. Architects from the local A.I.A. Chapter have made a thorough outline of the work

they can undertake as a subcommittee of the Governor's Public Safety Committee. I enquired about the Status of all this survey work for it seems to be in line with the recommendations of the Twentieth Century Fund in its report on *Housing for Defense*.

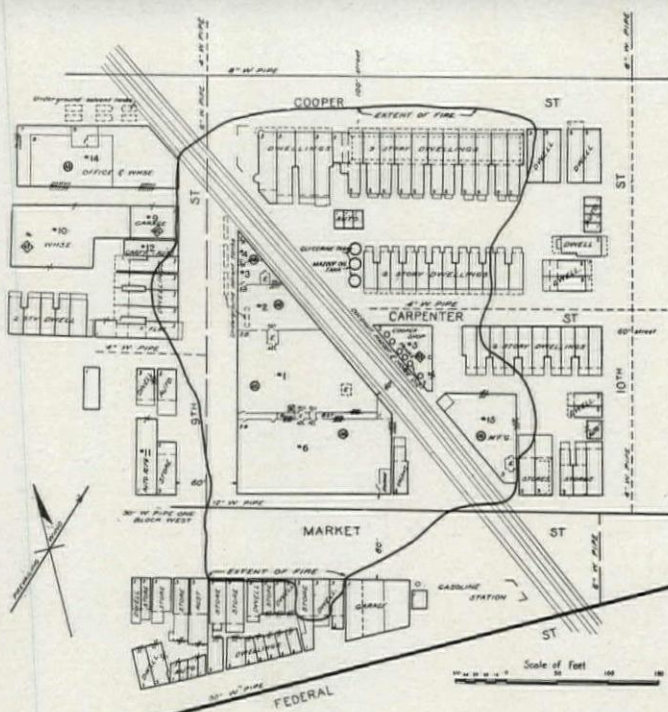
People and agencies are ready to do this necessary work but they are being kicked in the face by gentlemen like Mr. MacEwan. This is the fact. The sooner it is faced, the better for national defense.

PHILADELPHIA

Because of the lack of street signs there, I have had difficulties in finding my way in Philadelphia. But there is a trust company on every corner. So when I look up an address in the 'phone book, the print calls up in my mind a picture of the A, B, and C, or X, Y, and Z trust companies and then I know just where to go. Of course when I want to know the locale of some slum address I go to the National Republican Club on Broad Street. There an intense interest in the whereabouts of the common people, a recent development, proves most helpful. Philadelphia is just one big village again, I find.

But the business of establishing a proper location for schools, hospitals, and housing projects does not seem to allow such easy, gracious, and good-natured adjustments. At a meeting on December 10, sponsored by housing and labor organizations, and the Committee for Defense of the Philadelphia Chapter of the A.I.A., *Pope Barney*, local architect said: "There is no City Planning Commission with power, authority, and effective voice. This is one of the things which the City's charter would have set right and the adoption of the City charter is one of the things which we as advocates of housing for the general good of the city should support. Housing sites as we all know or readily agree should be properly related to transportation both now and in the future, to schools, stores, recreation, churches, and public services of police, fire, sanitation, water, electricity, etc. They must also be related to the industrial areas both now and in the future. This certainly presupposes the existence of some coherent city plan showing all of these

McLaughlin Air Service



Air view of fire at plant of R. M. Hollingshead Corporation in Camden, New Jersey, showing closely built residential areas affected. Plan of area below

things, modifications to which could only be made with the approval of some body having the power and the vision to coordinate all of the factors involved. No such plan exists and because of the difficulty of setting up such a plan and such an authority no steps are being taken to do so. As it is, the various departments of the City and the City Council constitute at present the only effective plan and the only effective city planning commission and if we do not like it we,

the people, should say so and continue to say so until we get action."

CAMDEN AREA

Camden needs a zoning law. This is one of the lessons to be learned from the disastrous fire of July 30, 1940, in the factory of the R. M. Hollingshead Corporation. Defense planning, too, requires zoning to segregate residential neighborhoods from factories like this which are likely to become targets. Segregation, when combined with dispersal, is the best preventive

medicine against air raids. The Hollingshead plant, in which inflammable liquids were used, stood in the midst of a densely populated area. One of its glycerine tanks stood at the side of a house. Obviously, in wartime, an aviator would drop one bomb on such a plant and let its explosive contents do the damage to the surroundings. The hint behind this disaster should be heeded now. That is, we should not wait until enemy airplanes are overhead before learning of all the disadvantages of unzoned communities. Of course this consideration requires zoning laws which work two ways, *viz.* to exclude houses from factory districts as well as to keep factories out of residence districts. At present most laws act only in the latter direction.

Recently, a writer in the real estate section of the *Philadelphia Record* commented that public and private housing in neighboring Camden seemed to be shooting ahead of what Philadelphia is doing. He's right, and he probably knows why. The City Council of "Trustville-on-the-Delaware" has fought public housing with everything in the armory. Now, not only housing but commerce is going across the river. In Camden, the shipbuilders' union has fought for private housing, public housing, any old housing just so long as it might provide enough roofs to prevent rent

gouging by real estate interests. At last they have got results. Ground-breaking for a five-hundred unit development near the New York Shipbuilding Corporation's yard is in sight. After having served for some time as technical advisors to the Camden local of the shipbuilders' union, *Joseph Hettel* and *Oscar Stonorov* were appointed architects. Another occurrence which forecasts increasing advantages of the Camden area over Philadelphia is the inauguration of a ferry service between the Philadelphia Navy Yard and National Park, N. J. Months ago, the Commandant of the Naval District asked "Trustville's" city council to cooperate in providing 1,000 houses for new workers at the yard. There being no response, the yard has pressed an old barge into service in order to ferry some of its employees across the river where they have been able to find homes. Incidentally, this expedient may suggest that the use of the Jersey shore as a permanent suburb of the Navy Yard instead of southern Philadelphia is, after all, sound policy. Certainly, any area around the collection of oil refineries and gas plants near the oily mouth of the Schuylkill River is no

fit place for housing. In winter the wind blows the fumes away from the territory—but when summer comes, the less said the better. So the Navy should get a substantial ferry boat and help to develop that National Park section in New Jersey. They had better buy some of that land cheaply before the real estate boys get wise in a wholesale way.

CHESTER, PA.

The people whom any housing emergency in Chester will afflict most severely are the negroes—and there will be plenty of emergency. Chester is like those visions of an ideal ribbon town. There are the industries strung along the river, then, inland come the railroad lines and the commercial districts and then, the residential areas in a ribbon stretched along the high ground. From the points of view of rail and water service to the factories and of reducing travel time from home to workplace, the ribbon arrangement is good. But the ideal vision ends there. Without legislation to limit overcrowding, the influx of Sun Shipbuilding Company workers into the ribbon will squeeze the lowest income people—which means negroes—even

Street front of Buckman Village houses. Wood-brick combination alternates with stucco for variety. Alley side shown opposite has noteworthy architectural quality. Project built by Emergency Fleet Corporation in 1917-18 for Chester, Pa., shipyard workers. G. E. Brumbaugh and Simon & Bassett, Architects





Old houses for workmen near shipyards at Chester have a dreary character

harder than they are being squeezed now. In Chester they are concentrated in the 5th Ward at the rate of 77 persons per acre. The density for the remainder of the city averages 25 persons per acre. It must be admitted that a small decentralized town such as Chester lacks the general fund of housing which, in metropolitan centers, permits adjustments as factories here and there increase or reduce their working force. State-wide legal action to relieve the pressure on the economically weakest group is the only way to correct this defect of the small decentralized town. In this connection Mr. John R. Helms, Technical Advisor of the Chester Housing Authority writes me: "Legislation, relative to overcrowding similar to the English and Dutch regulations would be of great value in correcting conditions of

overcrowding in industrial centers, and I would suggest that recommendations be made that such legislation be enacted in New York, Pennsylvania, New Jersey, and other population centers."

TREND TO SUBURBS

It is commonly argued that housing built near defense industry plants far from an urban center will be left behind as "ghost towns" when the emergency is passed. That may be true of places truly isolated. But from what I saw of housing projects built during the last war—"Fairview" in Camden, Buckman Village in Chester, an Emergency Fleet Corporation community in Quincy, all of them well removed from the center of things—talk of ghost towns comes from people in editorial offices gifted with obedience and strong imaginations. Let them produce a lot of U. S.

Housing Corporation or Emergency Fleet Corporation ghost towns and I will eat a *New York Times* editorial and die of ptomaine poisoning.

What happened after the last war is illustrated by statistics for Quincy, Mass. During the war years the number of wage earners there hit an all-time high. Then there was a decline from 12.6 thousand in 1919 to 4.8 thousand in 1929. Yet population kept going up from 40.6 thousand in 1915, 47.8 thousand in 1920, and 76.9 thousand in 1935. In short, the growth of Quincy as a suburb offset its sudden eclipse as a shipbuilding center. Colonial type single-family houses of good suburban standard were vacated by the shipbuilders and soon occupied by the new suburbanites. I walked through the village there built by the Emergency Fleet Corporation and saw but one house for rent, none for sale. The same is true for Buckman Village and Fairview.

You say that statistics show that population growth is leveling off, that therefore the suburban trek won't continue and that therefore housing built in decentralized pattern will be deserted after the war has begun and ended? Listen buddy, do you see that line of couples at city hall? As ever, in wartime they're getting married in bigger bunches than ever before. Even statistics can change.



MONTHLY WASHINGTON REPORT ON DEFENSE CONSTRUCTION

COMPILED BY A. D. TAYLOR OF CLEVELAND

NOTE—Since September, 1940, Dr. A. D. Taylor, President of the American Society of Landscape Architects, has been reporting regularly in PENCIL POINTS on developments in Washington affecting the technical planning professions. It is suggested that new readers turn to previous issues to acquaint themselves with information published heretofore over Dr. Taylor's signature, some of which is pertinent to full understanding of what he has to say here.

In that part of the Defense Housing Program for which funds are provided under the Lanham Bill, the Federal Works Administrator has assigned twelve projects as follows:

Public Buildings Administration

Indianhead, Md.	650 units
New London, Conn.	300 units
Vallejo, Calif.	950 units

United States Housing Authority

Jacksonville, Fla.	300 units
Pensacola, Fla.	100 units
Charleston, S. C.	600 units
Philadelphia, Pa.	500 units
Boston, Mass.	1,050 units
Bremerton, Wash.	800 units

Navy Department

Oahu, T. H.	1,000 units
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Office of Federal Works Administrator
Camden, N. J. 500 units

Local architects and engineers and landscape architects will undoubtedly be employed on the foregoing projects, with the exception of those assigned to the Public Buildings Administration and to the Navy Department. Detailed information concerning these projects is available in the December 7th issue of *Public Housing*, to which anyone interested in housing may subscribe through the Superintendent of Documents at Washington, D. C. (Subscription

Price \$1.00 per yr.). This is a publication of the Federal Works Agency, through the United States Housing Authority. This information is also covered in Release No. 57 dated November 29, from the FWA.

Rapid progress is being made in the Defense Housing Program of the War Department, for which the PBA is preparing plans, specifications and awarding contracts. Plans and specifications have been completed for approximately 20 projects, and an equal number of projects are now in the planning stage. Contracts for

these projects are being awarded on a cost-plus-a-fixed-fee basis.

NAVY DEFENSE PROJECTS

Many architects and engineers in private practice have been employed on the major defense projects being completed through the Bureau of Yards and Docks. A partial list of some of these more important projects (other than those concerned with housing) are included in the accompanying list, in addition to those major projects listed in the December issue of PENCIL POINTS.

MAJOR PROJECTS UNDER BUREAU OF YARDS AND DOCKS (NAVY DEPARTMENT)

Name of Project	Location	Estimated Cost
Pacific Naval Air Station	Islands in Pacific	\$14,600,000
Naval Air Station	San Juan, Puerto Rico	8,475,000
Naval Hospital	Norfolk, Va.	175,000
Naval Air Station	Guantanamo Bay	5,190,000
Naval Operating Base	San Diego, Cal.	3,666,000
Submarine Base	New London, Conn.	2,300,000
Naval Training Station	Great Lakes, Ill.	450,000
Housing Facilities	Long Beach, Cal.	1,263,000
Naval Operating Base	Norfolk, Va.	2,284,000
Norfolk Naval Hospital	Portsmouth, Va.	437,000
Additions to Naval Academy	Annapolis, Md.	1,780,000
Naval Base	Key West, Fla.	923,000
Housing Facilities	Newport, R. I.	1,655,000
Naval Ordnance Plant	South Charleston, W. Va.	1,527,000
Housing Facilities	Navy Yard, Washington, D. C.	1,900,000
Housing Facilities	Naval Air Station, Miami, Fla.	555,000
Housing Facilities	Orange, Texas	1,480,000
Housing Facilities	Corpus Christi, Texas	1,173,000

This list does not include those projects which were included in the October issue of PENCIL POINTS. Unless the program is expanded, it seems that the major portion of the defense projects to be constructed by the Navy are now under contract. There is likelihood of considerable expansion both in the Navy and in the War Department program.

Releases from the Navy Department revised to December 12, 1940, concerning contracts which have been awarded by the Bureau of Yards and Docks, and other releases containing projects for which contracts have not yet been negotiated are available upon application to the Bureau of Yards and Docks.

MAJOR PROJECTS UNDER CONSTRUCTION DIVISION, QUARTERMASTER GENERAL'S OFFICE (ARMY)

Information concerning estimated cost on this list of projects not immediately available.

<i>Name of Project</i>	<i>Location</i>	<i>Architect-Engineer</i>
Tent Camp	Abilene, Texas	<i>Freese & Nichols</i> , Ft. Worth, Texas
Atlanta General Depot	Atlanta, Ga.	<i>Robert & Co., Inc.</i> , Atlanta, Ga.
Edgewood Arsenal Cantonment	Edgewood, Md.	<i>Whitman, Requardt & Smith</i> , Baltimore, Md.
Replacement Center	Spartanburg, S. C.	<i>The Harwood Beebe Co.</i> , Spartanburg, S. C.
Wilmington Firing Center	Wilmington, N. C.	<i>W. S. Lee Corp.</i> and <i>Wm. C. Piatt</i> Charlotte, N. C.
Atlanta Small Arms Ammunition Plant	Atlanta, Ga.	
Chemical Plant	Morgantown, W. Va.	<i>Du Pont Co.</i> , Wilmington, Del.
Small Arms Ammunition Plant	Denver, Colo.	
Huron TNT Plant	Huron, Ohio	<i>E. B. Badger & Sons</i> , Boston, Mass.
Jefferson Proving Grounds	Madison, Ind.	<i>Russ & Harrison</i> , Indianapolis, Ind.
Kingsbury Ordnance Plant	Laport, Ind.	<i>Giffels & Vallet</i> and <i>Chas. Cole & Son</i> South Bend, Ind.
Lake City Ordnance Plant	Lake City, Mo.	<i>Smith, Hinchman & Grylls</i> , Detroit, Mich.
Milan Loading Plant	Milan, Tenn.	
Bag Loading Ordnance Plant	New River, Va.	<i>Hercules Powder Co.</i> , Wilmington, Del.
Sheffield Ordnance Depot	Dayton, Ohio	<i>J. Douglas Lorenzo</i> , Dayton, Ohio

MAJOR GENERAL HOSPITAL PROJECTS UNDER CONSTRUCTION DIVISION, QUARTERMASTER GENERAL'S OFFICE

<i>Location</i>	<i>Size of Hospital</i>	<i>Architect-Engineer</i>	<i>Estimated Cost</i>
Atlanta, Ga.	2,000 beds 128 bldgs.	<i>Cooper & Cooper, Inc.</i> Atlanta, Ga.	\$2,336,000
Charleston, S. C.	1,000 beds 80 bldgs.	<i>Lafaye, Lafaye & Fuir</i>	1,344,000
Ft. Benjamin Harrison, Ind.	1,000 beds 80 bldgs.	<i>McGuire & Shook</i>	1,580,000
New Orleans, La.	1,000 beds 80 bldgs.	<i>Favrot & Reed</i> New Orleans, La.	1,351,000
Santa Barbara, Cal.	750 beds 62 bldgs.	<i>Allison & Allison</i> Los Angeles, Cal.	1,100,000
Vancouver, Wash.	750 beds 60 bldgs.	<i>Whitehouse & Church</i> Portland, Ore.	936,000

It should be noted that six major general hospital developments have been announced. Each of these hospitals is in the immediate vicinity of a city of considerable size, and will care for those cases which are not normally the kind of cases for which the hospitals on army posts are being developed. The site planning and engineering problems in these major general hospital projects assume greater importance than the architectural problems because of the fact

that somewhat standardized types of building floor plan and general design heretofore prepared by the War Department are used for these buildings. Unfortunately it does not seem that, to date, adequate consideration is being given to the site planning and site development problems (which are the normal functions of the landscape architect) on these projects. Additional hospitals will in all probability be developed beyond this list now announced.

WORK FOR PLANNING PROFESSIONS

Many engineers in private practice should procure employment on defense housing projects being administered through the PBA. It is the general policy on each site to employ civil engineers in private practice to prepare boundary maps where new areas are being purchased, and to prepare topographic maps to be used as a basis for the site plans and other work.

The personnel of the Site Planning Section of the PBA now includes approximately 25 landscape architects engaged in Site Planning Work. A number of men from this technical planning profession have been employed and others will probably be employed. So far as the employment of architects is concerned, it has not been necessary to increase the number of architects employed in the PBA because of the housing program, for the reason that all other work not concerned with defense (relating to post offices and other public buildings) has been curtailed in order to give precedence to that part of the building program relating specifically to defense.

The extent to which additional projects may be allocated to the USHA, thus providing employment for representatives of the planning professions in private practice, continues to be uncertain. There is increasing indication that the USHA may have an important part in many of the defense housing projects.

AIR FIELD DEVELOPMENT

The work on air fields required by the army in the defense program has been taken over by the Corps of Engineers, and Releases are published from the Corps of Engineers office concerning projects on which work is being undertaken.

The Civil Aeronautics Authority through its engineering staff advises with other government agencies concerning the design and construction problems on the air fields but does not undertake any construction through its office.

A sum of \$40,000,000 has recently been made available for the development of municipal air fields throughout the United States. This

money is to be expended for new air fields, increasing the size of existing air fields and is available mainly for engineering construction required to develop air field space for the operation of planes. These funds are not generally available for any building construction. It is estimated by the Army that approximately 250 air fields of adequate size and with properly paved runway areas must be available in the United States under the present emergency program. The design and construction of these fields provide much work for representatives of the engineering professions.

JOINT ACTION BY PROFESSIONS

Through representatives officially appointed by their respective governing boards, these professions have been in joint conference on a number of occasions during recent months,

for the purpose of acting jointly in those matters of common concern, functioning in a collaborative relationship on problems concerning defense housing.

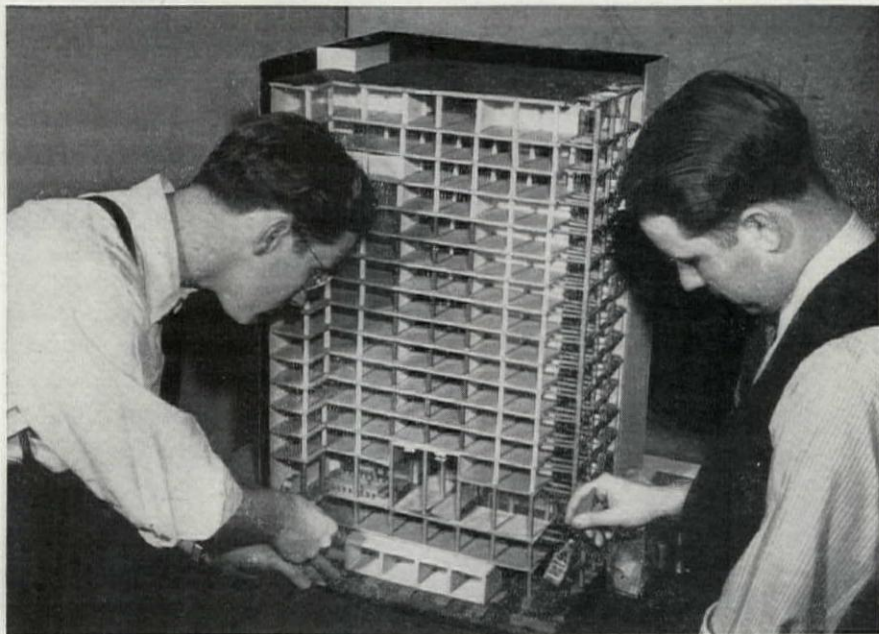
An effort is being made by the joint committee to develop a statement concerning the Division of Design Responsibilities and Scope of Work on Defense Housing Projects when these professions are employed in the normal way in which they should function, in collaborative capacities.

This joint committee is endeavoring to develop a form of contract for the employment of the services of architects, landscape architects and engineers on housing projects. Consideration is also being given, as a result of recent conferences with officials of the USHA, to questions of fees which the representatives of each

of these professions should receive for services on defense housing work. Heretofore the services of architects, engineers, and landscape architects have been performed for a lump sum fee, the amount of which has been determined in accordance with a schedule of fees mutually agreed upon between each respective profession and the Housing Authority. It is now proposed that the remuneration paid to representatives of each of these professions will be on a "cost-plus-a-fixed-fee" basis, under which procedure the planner would be paid a fee (as on other major defense projects) for his consulting services plus the actual cost incurred for drafting work, clerical work, and other items which normally are included as a part of the cost of any professional planning services.

A. D. TAYLOR

December 16, 1940



Joseph Shields and Gerard Granfield, architectural students at Pratt Institute, Brooklyn, with skyscraper model showing construction details and reinforcements designed to make center area safe in case of bomb attack. Bomb shelter is being put into place in basement. Pratt students are working under the direction of Erling F. Iverson, Rome prize winner in 1938, who spent the last two years in Europe studying air raid defense in Germany, England, Netherlands, Belgium, and the Scandinavian countries. Austin Mather, Instructor in Town Planning, and Richard M. Bennett, Instructor in Residential Architecture, are assisting Mr. Iverson in conducting the course in Defense Building

A POT POURRI FOR ARCHITECTS

BY TALBOT F. HAMLIN

FRANK LLOYD WRIGHT AT THE MUSEUM OF MODERN ART. There is one lesson for architects in the large, confused retrospective exhibit of Frank Lloyd Wright at the Museum of Modern Art; it is the lesson, which should be obvious to everyone, that the extraordinary quality and success of Wright's work has little or nothing to do with functionalism—it is based on qualities quite different. And this, I think, is true of all architecture which is great. To talk about functionalism and the success with which a building performs the practical job for which it is designed as though that were a guarantee of architectural success is like trying to judge a perfect lyric poem on the basis of pure logic. There are great poems, much loved, which, if they do not deny logic, at least are not susceptible to logical analysis; they transcend it. And, similarly, all great architecture must transcend its practical necessities. One might almost go so far as to state that the measure of artistic success in buildings is the measure of this transcendence. In other words, to an efficient solution of his problem the true architect adds the quality of creative beauty; and he becomes an artist. The functional analysis of architecture tends frequently to blind one to the importance of the architect's social function as artist. Naturally he must solve his problems in order to exist at all. But, whereas the efficiency of a building affects merely those who live or work in it, its artistic appearance will profoundly influence not only everyone who sees it, but perhaps even his children and grandchildren. Seen thus, it becomes from

any human point of view just as vitally important for an architect to be a creative artist as to be a good logician; and any functional solution becomes merely a diagram which the artistic creation must follow.

It seems to me that this is the reason why Wright's work has long been and still is an extraordinarily powerful influence. These buildings of his are never logical diagrams; they are never mere paper architecture, and no drawings or even photographs can give their quality. They are primarily the free creation of beauty in three dimensions, incarnated in definite building materials. They are primarily not service areas and entertainment areas and working areas; they are primarily colors and textures, light and shade, changing and alive. And, whatever one may think of the logic of their plans, of their practicability or the reverse, whatever one may feel about these buildings as places in which to live or work, one cannot help being impressed by this amazing creative sculptural skill which patterns light and shade obtained by wall and opening, recession and projection, with the colors and textures of building materials put together to form actual things to be enjoyed. Much of it may be "difficult," even obscure, as some great writing is difficult or obscure, at first sight; yet out of this complex whole eventually comes a richness of subtle harmony perhaps unobtainable in other ways.

Another quality easily apparent in the best of the Wright work is the discipline and rhythm of chosen geometric shapes as a basis on which the design is created. Sometimes

this geometric quality, especially in its earlier applications, may lead to overcomplication and even occasional absurdity; yet as Wright studies these geometric patterns more and more, and the solutions become more and more simple, the repetition of similar angles or similar dimensions gives to the final simplified expression a rhythmical richness that is unique. Even when this rhythmical repetition seems overstressed, as it occasionally does in Wright's work, it nevertheless is one of the qualities chiefly responsible for the beauty of his best work.

Thus the beauty that flowers in architecture is, even in the hands of as great and imaginative an architect as Frank Lloyd Wright, the result of imagination plus study. It is disciplined; and, just as the functional pattern of a solution will not of itself give architecture, so the mere choice of directing lines, of modules, or of geometric forms like circles and hexagons will not of itself give architecture. Yet, when the ideas have been sufficiently studied, when the self-criticism and the discipline have been sufficiently intense, beauty may be said to begin.

There is still another lesson, I believe, in the Frank Lloyd Wright work—the lesson of the necessity of being oneself. Question as we may any single work of Wright's, we cannot, I think, ever say of it that here the artist has compromised with his own basic integrity. Whatever it is, it is primarily Wright; and the astonishing revolutionary mass of it comes, I should say, largely from this fact. From it architects may learn not only that architecture is still, and must always be, an art, but also that architecture must be founded on a personality, a character. We should not, as we cannot, follow him by becoming Wrights ourselves, or by copying his own peculiar and personal exuberances. What we must emulate, artists in our profession, is the capacity to be artists, to be disciplined, to be ourselves.

VISUAL BEAUTY IN THE WORLD TODAY. Wright's work, with its emphasis on the creative, artistic side, leads one to think of the whole position of the ideal of visual beauty in today's world. I write this just as

Art Week has drawn to its close. Now Art Week is an attempt to put art on the map; its very existence is an indication that the authorities felt that it was necessary to put art on the map. Artists live by selling their work and their skills to the public. If in a prosperous country like ours this problem has become sufficiently desperate to warrant a Presidential Proclamation and all the artificial ballyhoo of an Art Week, the fact is of great importance not merely to painters and sculptors but to us architects as well. Are not many of our basic professional problems—our failure, for instance, to influence deeply the great mass of low-cost houses—or the comparatively low esteem in which the public holds us—the result of a similar condition? It is well, even at the danger of seeming or becoming pessimistic, to look at the realities. People no more buy pictures as they used to. Is not this indicative of a certain blindness today to the whole field of visual beauty? It is difficult, for instance, to go by a magazine stand anywhere without a violent shock to every æsthetic sensibility. Magazine covers in general are a carnival of bad composition, worse color, and futile content. They are, I believe, on a definitely lower artistic level than they were, say, ten to fifteen years ago. For then their ugliness was merely sentimental; now it is screaming, loud-voiced, and arrogant. Similarly, a great deal of book design today is less pleasant to the eye than that shown in books of thirty years ago; and advertising as a source of visual beauty, after a brilliant phase during the earlier 'twenties, has relapsed into almost universal confusion.

I open myself at once, of course, to the accusation of having an æsthetic sense hide-bound and insensible to newer values. There is perhaps a new and rationalized æsthetic of pulp magazine covers. It is necessary to define beauty, therefore. Beauty, in the sense in which I am using it, signifies an ideal of harmony and unity in composition and color, considered as a worthy end in itself and not as a mere means of achieving other ends—such as, for example, sexual stimulation or vulgar success. In other words, the ideal of visual beauty means, among other things,

that harmony of form and color are important enough factors in the sum total of human experience to warrant considerable sacrifice in their achievement. It is a serious ideal exactly as important as the ideal, say, of good manners or consideration for others. Sometimes it would seem as though the purveyors to popular taste considered that the public had only two ideals with any visual beauty content whatsoever: one the dazzle of shiny mechanical gadgets like automobiles, and the other the artificial prettiness of the latest Hollywood starlet. Visual novelty rather than visual beauty, visual shock rather than visual harmony—these ideals control much of what confronts the eyes of the average person, until his entire natural taste becomes vitiated. How else account for such a fact as this: that in an article on plastics in a recent number of an "art" magazine one of the objects shown with great *éclat* was an ill-designed Hepplewhite chair die-cast in transparent Plastics, and that another was a Plastic Jacobean stool with twisted legs? What greater visual blindness than to think that forms in an opaque, textured material could ever be used in a transparent, absolutely smooth material without losing whatever character they originally had?

I saw a footnote to progress the other day which interested me: the fact that the average speed of traffic through New York City is about the same today as it was in the 1880's; all our inventors and our factories, our commercial enterprises, our salesmen, working like mad in the transit field to keep us barely up to the average speed record of horses and carriages sixty years ago! Something perhaps somewhat comparable is true in the art world. Magnificent creative ability, an extraordinary command of techniques, a flood of processes of graphic reproduction, and the result seems to be that around the world today there is perhaps even less really serious idealism of beauty than there was in the 1890's and the period of the *Art Nouveau*. We perhaps may sneer at much of the art work produced at that time, but historically we must be aware of the fact that it was that vivid, alive, serious idealism in matters of visual beauty which,

working through men like Sullivan, Wright, Van de Velde, Berlage, and Otto Wagner, set going the whole great revolution which has produced the architecture of today.

There is one hopeful thing in the picture: the people of an age today to be the controlling powers behind our commercial and industrial life are people who were educated at a time when nonprofessional art education was at a minimum, and education did least to stimulate æsthetic sensitiveness and imagination. Outside of a few progressive schools, nonprofessional art education hardly existed; and, however good the training the colleges gave in languages and sciences, the æsthetic field was touched only in literature—the visual arts were completely forgotten. Now that has changed, and education in the visual arts is playing a large part in high schools and colleges. It is possible that in another twenty years, when the people now in schools and colleges have arrived at positions of power, the picture will be quite different and the accomplishments of our own age, except for the small amount of excellent work which seems to go on through all periods, will be looked back upon as evidence of a kind of dark age.

Certainly there is nothing to be gained by trying to return to the purple passages and exaggerated poses of the Naughty Nineties. We are of our own period, and we can work only within its framework, looking forward, not back. Each one of us must strive, as far as he is able, to see that art in design—that is, a serious and idealistic search for visual beauty—is produced to the uttermost of each one's ability. In our work and our thoughts we must do our utmost, it seems to me, to overcome that state of mind which considers the word "arty" as a sort of ultimate damnation and, instead, reestablish the ideal of creative art in a controlling position, so that the blessings of composed and harmonious visual patterns may flow out over all the people of the world.

DEFENSE HOUSING. The successive releases with regard to the defense housing program add, little by little, to the previous picture of a terrifically busy confusion. Under the gen-

eral ægis of the Public Buildings Administration—the architectural office of which was formerly the Procurement Division, and before that the Office of the Supervising Architect of the government — each department interested seems to be doing pretty much as it pleases. There is study and research going on; but of any attempt to correlate the various activities of the departments, to put before the designing offices of each, or the offices of private architects who may be called in, adequate standards of community planning, there is little or nothing. Every architect in government service has become overnight a housing “expert”; and all the carefully and painfully gained experiences of local housing authorities and the United States Housing Authority, of regional planning associations and trained specialists, seems to be, for the time being, wasted on the scene like music on the desert air.

It is not as if we knew nothing about community values. Adding together the knowledge available in organizations and individuals the country over, we know a very great deal, and we know too the tremendous value to morale of an adequate community life; yet, save in a few exceptional cases, the various government authorities engaged in the defense housing program seem to have made no real attempts to tap this fund of available knowledge. This is, to put it mildly, a most unfortunate state of affairs.

Economically, too, the program has certain features susceptible of extraordinary abuse. The arrangement by which the R. F. C. can loan practically the entire cost of a project to private individuals, and this loan may then be guaranteed by the FHA, might very readily develop into a racket and a scandal if not most carefully watched. The aims, of course, of the defense housing movement, beyond merely furnishing places where workers can sleep and eat, must be correlated with (a) existing city plans and transit facilities, (b) existing reservoirs of housing space (which are being rather carefully surveyed), (c) the most careful study of the problem of temporary vs. permanent houses, examined with regard to each particular project, and (d) the development of a community

pattern which shall be itself an inspiration to good work, an example to the rest of the country, an expression of the broad base of American democracy. This will necessarily require the most careful consideration of such matters as community recreation, schools, open space, and so forth. To achieve this correlation demands a special type of training, experience, and imagination — makes imperative the advice and services of acknowledged authorities.

Moreover, it appears that much of the actual design of these projects is to be done by the architectural office of the Public Buildings Administration, the members of which deem themselves to have become housing experts overnight, just as they are post office experts and courthouse experts. The problem, then, would seem to be something like this: Do we want defense housing which bears the same relation to the best housing elsewhere that the Washington Triangle and the stock post office designs of the P.B.A. bear to the best modern public architecture produced elsewhere? Do we want an architecture which looks backward or forward, which aims at the adequate or the best? If we do not wish to be saddled with a mass of stupid and standardized barracks, to become the slums of the future, we must make every effort to see to it that the best housing and community planning skill available in this country is used at once. This could be achieved by the immediate formation of a board of consultant planners and architects, to correlate the whole program, to set up standards, and to see that all projects follow them. Such a consultant board of the best planners and housing authorities in the country could go far toward making our defense housing more efficient, more useful, more beautiful. It was the existence of advisers of this type in the United States Housing Corporation and the housing division of the Department of Labor during the last war which gave us such developments as those of Bridgeport, of Yorkship, and many others — developments that have proved community assets ever since. Can we not say most confidently to the government, “Here is the knowledge and the skill; why not use it to the full?”

ARCHITECTS AND WELDING

BY VAN RENSSELAER P. SAXE

Those using welding for steel have found out that the method has merits—merits which are responsible for an increasing use among engineering organizations. Architects who have studied the subject of welded steel more often than not become enthusiastic over its advantages.

A careful analysis indicates that most of the present use of welding in buildings has been advocated by engineers. These men are employed by the large engineering contracting companies who make a business of factory and heavy construction. What are the advantages revealed by the experience of those regularly specifying and employing welding? The following points are worth consideration: *Economy, Absence of erection noise, and Design flexibility.*

Since architectural organizations control a large percentage of the nation's total building expenditure, the rapidity with which welding with its concomitant benefits is generally employed will depend in no little part upon general architectural acceptance. The architect instructs his engineer as to the use of concrete or steel for the structural frame of a building. In the same way he can stimulate the use of welding.

ECONOMY

The economy resulting from the use of reinforced concrete is due chiefly to the continuous moments which are developed in concrete beams. The economy of welded steel proceeds from the same use of continuous moments. Less steel is required, and the shop and field work require less labor than any other method of steel assembly.

An actual experience may be cited to illustrate the economy of welded work. One steel company has stated that by submitting welded alternates for multiple story buildings, they have been able to convert considerable riveted work into welded work. They offer a small part of the saving to the owner. Due to the economy of welding, this company has been able to make profits about twice what they would have realized by construction by the method required by the original drawings. Architects and their engineers are naturally conservative. However, welding is not new nor is it

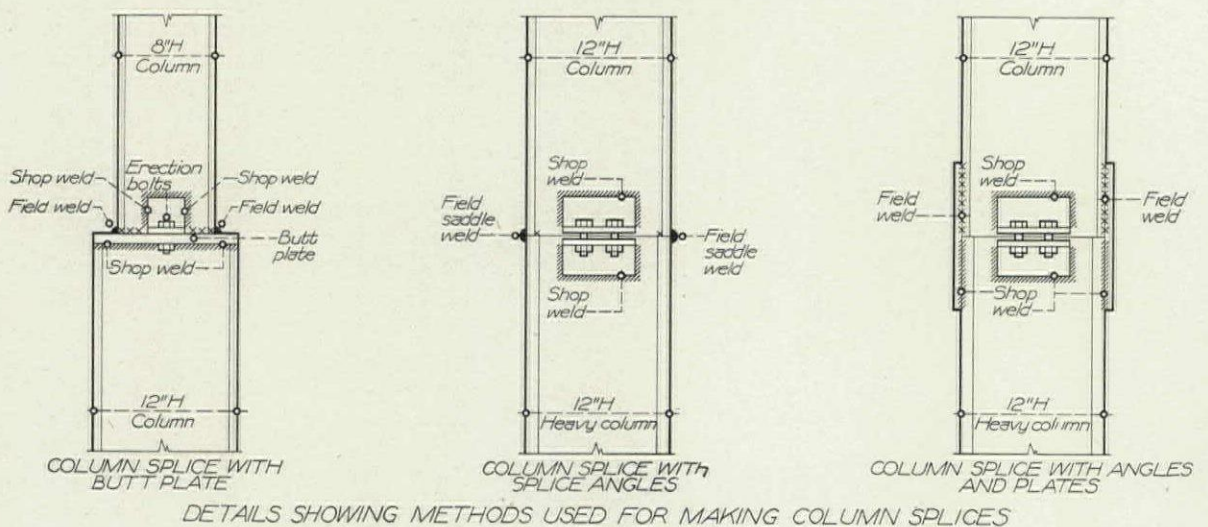
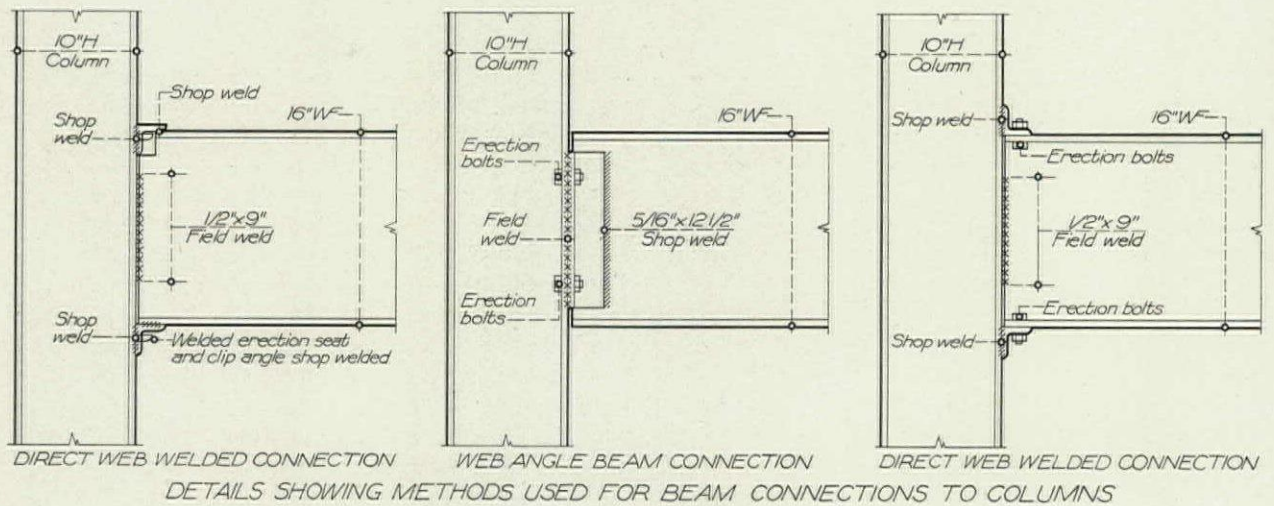
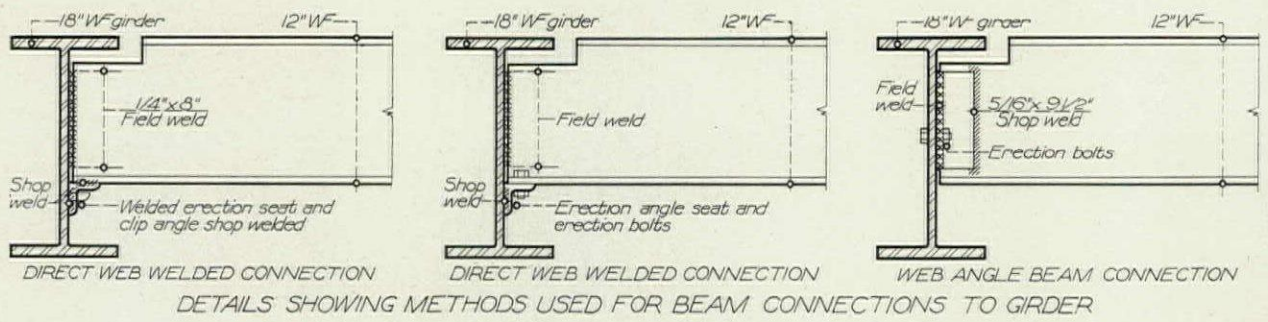
untried. It has been employed for many years in ship, car and tank building. Many welded buildings are in existence in this country and hundreds of welded bridges have been built in Europe. Complete methods of analysis (which are discussed in the second half of this article) are available for the test of welded connections—a much more conclusive evidence of strength than the usual inspection of riveted connections.

It is essential to construct good buildings at the most economical cost. Architects and their engineers should consider structural welding, for it now appears that its progress as a method for structural steel assembly will be even more rapid than the strides made in the general acceptance of reinforced concrete as a structural method.

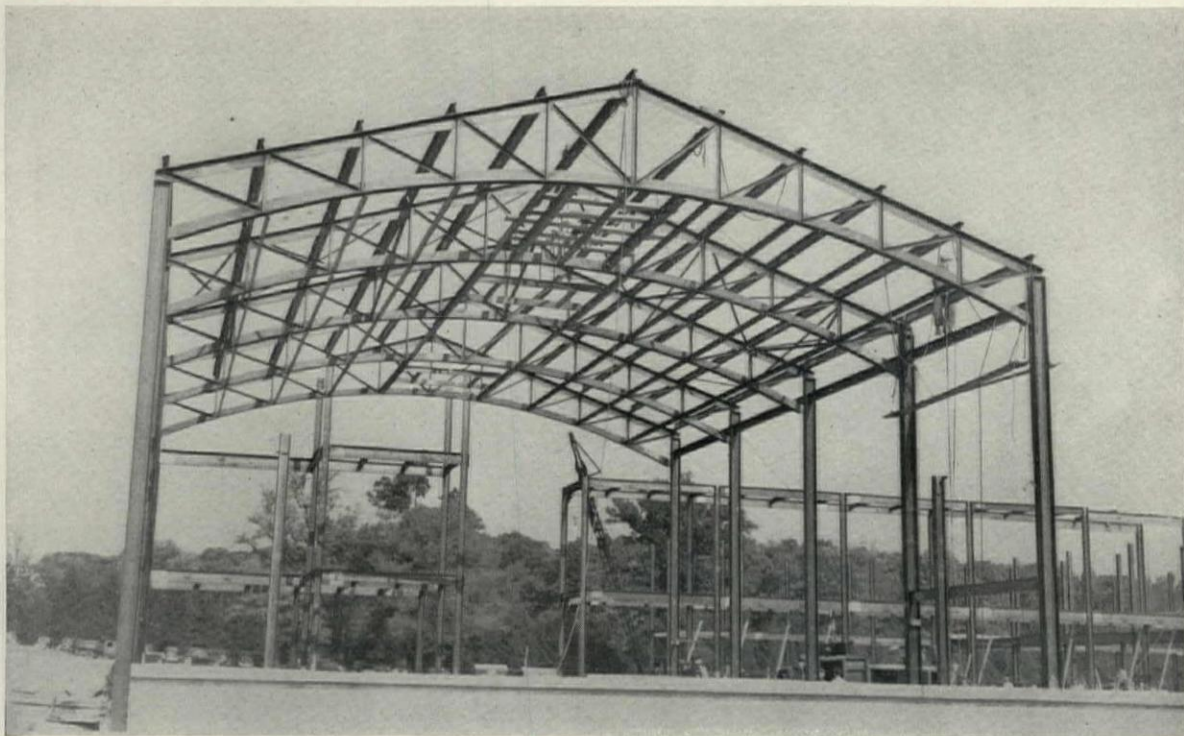
The economy possible in many cases with welding suggests that the architect can, without harm, instruct his engineer to prepare for welded alternates designed under American Welding Society Codes. Architects in the early days of reinforced concrete often had unsolicited alternate designs submitted on reinforced concrete by some enterprising contractor. Owners had no objections to the use of the reinforced concrete, especially as most building codes permitted its use. The low figures on the reinforced concrete had a strong bearing on the rapid acceptance of this material for structural work. The same thing is developing in welding today, but to a minor degree, because welding is just getting in its stride.

By putting out a welded structural design, in order that all steel companies might figure a job, would enable the owner to secure the savings rather than have some enterprising steel company, through an alternate, show a small saving to the owner and pocket a large profit for themselves.

Some engineers who started early using welded work, tried successfully, so it seems, to throw a lot of mystery around welding by handing out information that it required super-skill in design, fabrication and inspection. This was carried so far that I recite an incident on one of my early welded jobs done about twelve years ago. A self-styled welding expert actually wrote the owner of the building that by no means should his building be constructed under my design and supervision without having



SOME SELECTED EXAMPLES OF TYPICAL WELDED CONNECTIONS



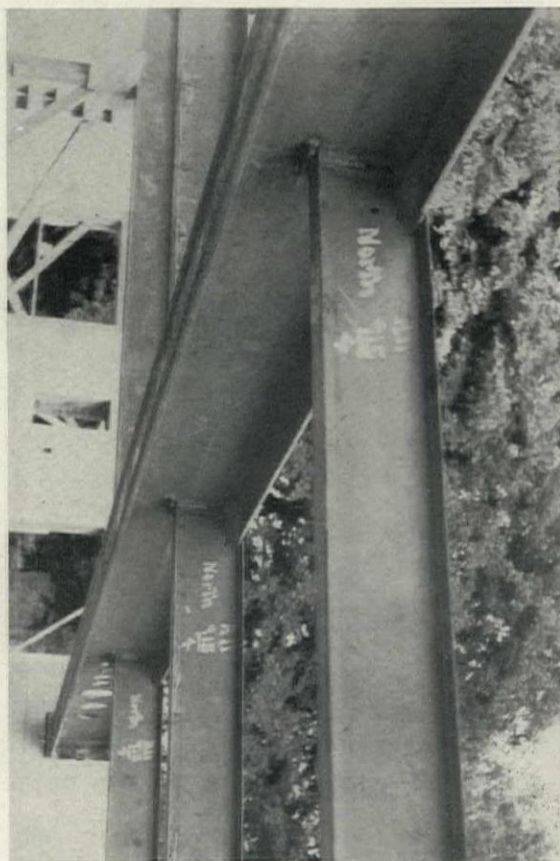
this expert called in as a consultant to examine and check my work. Unfortunately for the gentleman, I had already designed two welded buildings for the same owner—so the expert's letter went in the waste basket!

As one who has designed and supervised construction of over seventy large all-welded buildings, I can assure architects and their engineers that any mystery connected with welding is pure bunk. Today there is probably no large steel fabricating firm who, if the opportunity is presented to them to bid on such work, is not equipped to do high class welded work. Our last welded job, running slightly over seven hundred tons, was bid on by eight fabricators, all of whom were anxious to get the work and who were fully equipped to turn out a high-class welded job.

Most of our work has been union-erected. I believe that this refutes the common objection that union men do not like to work on welded jobs. Our actual experience is that the union steel erector has cooperated in every way to make a success of welded structures. Why should any mechanic object to getting away from the rivet hammer noise and the need for dodging stray hot rivets?

As evidence of savings in time of construction and money which can be made by use of welded connections, there is illustrated herewith the new Nemours Hospital at Wilmington, Delaware. Crisp & Edmunds of Baltimore were the architects, with Massena & duPont of Wilmington associated. The structural design for this building was originally issued as a welded design with an alternate allowed for a riveted structure. The result of this bid was a net saving of \$3.75 a ton in favor of the welded structure. There were a number of welded trusses in this building which remained welded under the riveted alternate. If these trusses had been redesigned as riveted to conform to the

WELDED TRUSSES OVER THE AUDITORIUM OF THE NEMOURS FOUNDATION HOSPITAL, WILMINGTON, DELAWARE, DESIGNED BY CRISP & EDMUNDS OF BALTIMORE, ARCHITECTS, MASSENA & DU PONT, WILMINGTON, ASSOCIATES. BELOW IS A TYPICAL WELDED BEAM-GIRDER CONNECTION USED IN BUILDING NOTRE DAME NOVITIATE, BALTIMORE, F. VERNON MURPHY, WASHINGTON, ARCHITECT





THE STRUCTURAL FRAME WAS ALL-WELDED WHEN THE ALLIED ARTS BUILDING IN LYNCHBURG, VIRGINIA (ABOVE) WAS BUILT. THE ARCHITECTS WERE JOHNSON & BRANNON, OF LYNCHBURG. THE WELDED FRAME PERMITS A CONSIDERABLE REDUCTION OF THE REQUIRED STEEL TONNAGE WHEN BUILDING A MULTIPLE-STORY STRUCTURE

riveted alternate, the net increase in the riveted ton price on the entire tonnage of the job would have been 60c a ton so that the actual net saving of the welded job over the same job riveted was \$4.35 a ton. This saving was approximately 7% on the cost of the structural steel.

A more complicated welded structure is the welded roof framing for the new State of Maryland Office Building at Annapolis, Maryland. Henry P. Hopkins and Lawrence H. Fowler of Baltimore, were the architects. The ridge of the roof along the longitudinal axis of the building had to be carried on two rows of welded longitudinal trusses, due to the fact that the ridge was not centered over the corridor columns. At the wings of the building the trusses act as cantilevers to support the valley rafters of the wing roofs. The entire steel tonnage of this roof as a welded job amounted to 151 tons. To produce the same roof as a riveted job required 28 additional tons of steel, about 3 tons of which would have been bent platework to make the connections required by a riveted layout. These were entirely eliminated in the welded layout by the use of direct web weld connections. The cost of the steel per ton under the welded layout was \$3.00 less than under the riveted layout, so that the net saving on this roof amounted to over \$3,000, or nearly 20% of the steel cost.

Many similar examples could be given of large savings to be obtained by use of welding, such as Auditorium Building and two Hospital Dining Hall Buildings in which considerable truss work was required. As welded jobs, these showed savings running as high as 16% on the contract price of the erected steel work.

While money savings are an important item in trying to secure all possible economy in building construction, there are many other items in the use of welding which should appeal to the architect and his client.

ERECTION NOISE

Because of the engineer's freedom to use continuous moment design in welded work, it is generally possible to use smaller depths of steel than required by other methods of design. This means higher ceilings or savings in building height.

It is a method that eliminates the noise of an ear-splitting air hammer—a feature of great value in constructing new buildings in the vicinity of hospitals, schools, offices, apartments and hotels. When constructing additions to existing occupied buildings it is particularly desirable.

DESIGN FLEXIBILITY

Trusses can be built without gussets so that an exposed truss can be shaped up to add architectural effect to the completed room. Notice the Nemours Hospital trusses. Welded plate girders used as balcony supports in some of our work have been left

exposed to blend in with the architecture. A welded plate girder being constructed of only plates with small vertical plates for stiffeners, lends itself very well to an architectural design.

In multiple story buildings where wind bracing may be required, the detail connections of beams to columns are of such simple nature that they do not cause unsightly breaks in architectural finish.

In remodeling old buildings, welding is indispensable. We have been able to reinforce old structures even to adding additional floors that, without the

use of welding, would have been impossible jobs.

Welding as a means for structural assembly has been successfully used in all classes of building work. Its use is permitted in every large city in this country. Information covering its design, fabrication, erection and inspection are available and fully developed. (See Andrew Vogel's *Design of Joints for Welded Structures*, American Welding Society.) It is easy to take advantage of this new process which has already started a lowering of costs and changes steel design and fabrication.



TYPICAL WELDED COLUMN CONNECTIONS

WELDING INSPECTION

BY HERBERT R. ISENBURGER

The foregoing article by Van Rensselaer P. Saxe has clearly stated the advantages of welding building structures. There is reason to believe that welding will ultimately replace riveting. Increasing numbers of architects will utilize welding in their designs. Some of them will have had much experience with this new tool. Others will be less familiar with the problem. In any event, the architect will want proof that the welded joints are sound, as the frame is being erected. Many architects are skeptical about the safety of certain welded joints and refuse to consider such structures in their designs. But with X-ray inspection available the soundness of the welds can be proved and their safety put beyond all doubt. No progressive architect need then fear to employ welded structures.

In every branch of industry the testing of materials is important. This is particularly true of weld inspection, where we are dealing with a relatively new development of the art and where so many things depend upon the skill and intelligence of the man who does the work. A number of testing methods have been developed to ascertain quality and uniformity as determined by the several physical, chemical and visual characteristics. Such tests are commonly conducted on selected representative samples which have to be destroyed during this procedure.

X-rays provide us with a means of seeing into and learning a great deal more about the interior of welded joints without destroying or in any way harming them. In welded structures, we are concerned primarily with the properties of differential absorption of wave energy in matter, and the

blackening of the photographic film. As with ordinary photographs, darker regions on the negative (or lighter regions on the print) mean that more X-rays have passed through the object at that point, which indicates that the object is more transparent there. Hence cavities will show up in the prints as light spots, whereas heavy impurities or more dense or thicker metal sections will appear as darker regions.

The method is so sensitive that defects as small as 1% of the total thickness under exposure can be detected in an exograph.

Modern X-ray equipment is sufficiently flexible to allow quick shifting from one joint to another. The cost averages about 1% of the cost for the building.

In welding practice there are three important applications of radiography: *Development of welding procedure*; *Shop control*; and *Field inspection*.

WELDING PROCEDURE

While other tests are needed to determine the strength, ductility and intrinsic properties of the weld metal, radiography has one of its most important applications in development studies to establish welding procedures. All these intrinsic physical properties are largely dependent upon the proper selection of filler metal with reference to the plate material, upon the method of welding and upon other factors that can be reduced to simple control. Although an exograph gives information only as to soundness, this evidence is highly important. The possible strength and ductility of the weld metal cannot be realized in service where extensive microscopic defects exist. In general, the procedure that gives the soundest weld gives also the best weld.

Where unsoundness is found in a weld that has supposedly been made by a method that should give a sound joint, it may be inferred that the developed technique was not followed, and that in consequence other weaknesses than porosity may be present. Pictures are made and the welding engineer analyzes revealed defects. Later he judges the efficiency of steps taken to correct defects by evidence obtained from negatives of the new joint.



FIGURE 1

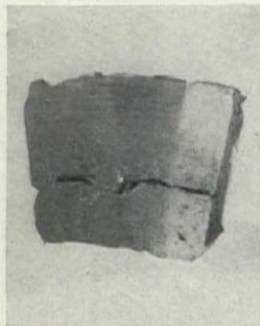


FIGURE 2

FIGURE 3—DOUBLE FILLET-WELDED TEE JOINT

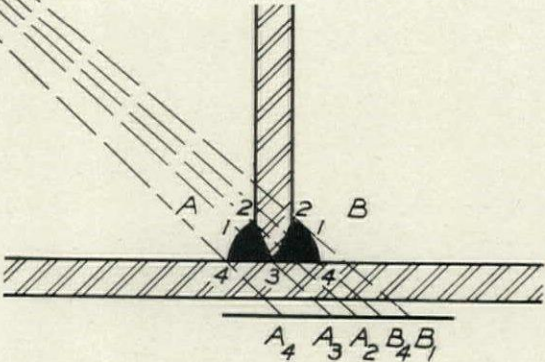


FIGURE 4—CROSS JOINT

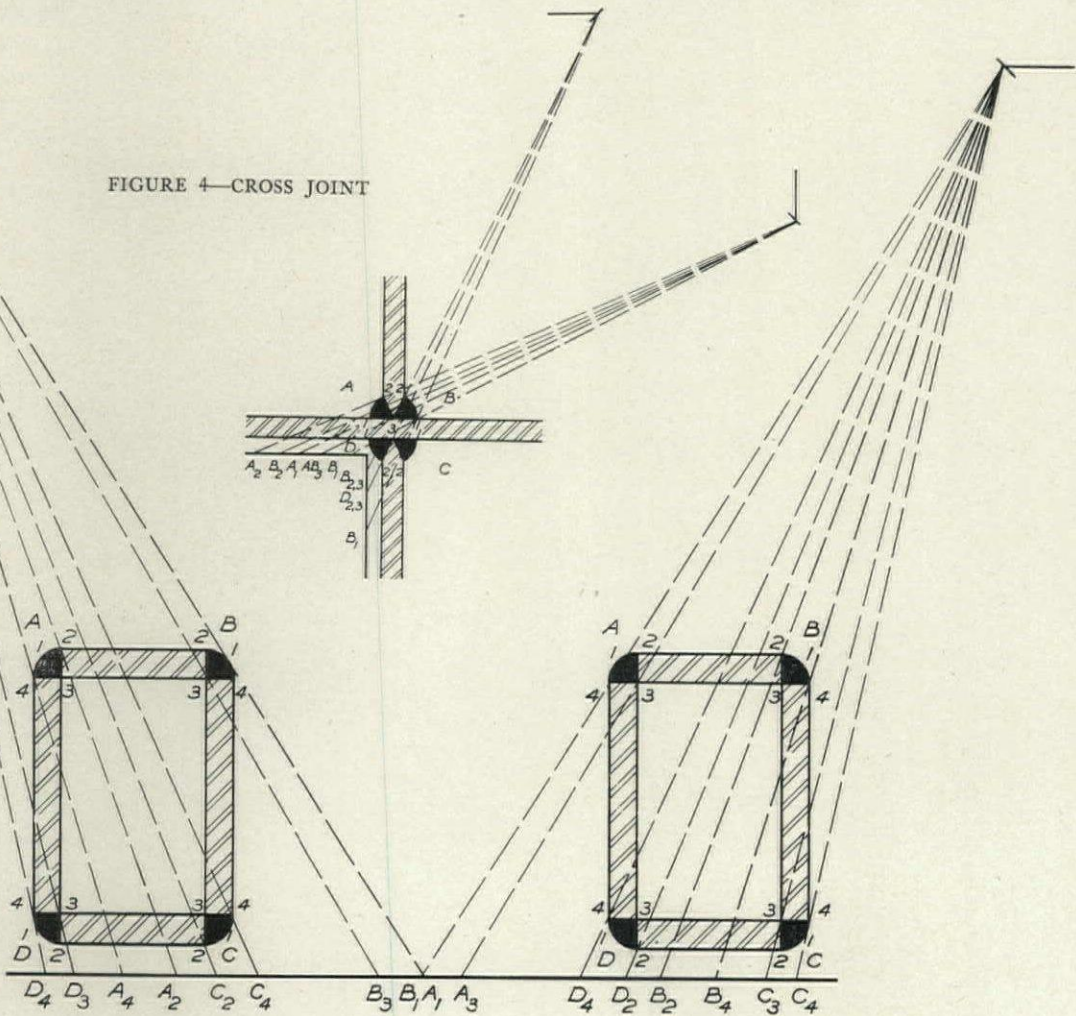


FIGURE 5—BOX COLUMN CONSTRUCTION

The development is empirical. The use of exographs permits considerable saving of time, partly because several possible welding factors may be studied simultaneously, and partly because the pictorial representation of defects is more easily understood and, therefore, better understood than is less direct evidence obtained by other methods.

Before a welder starts his job, he must submit test specimens made under field conditions in order to qualify for employment. These samples are X-rayed and if sufficiently sound, the welder is certified for the job. This does not mean that the man will not have his off days where he is turning out poor quality welds. The human element cannot be eliminated from welding practice. It is, therefore, necessary to check up on the finished work.

SHOP CONTROL

Where X-ray inspection is used in routine testing, the metallurgist, foreman, or other responsible party may use the exographs for the purpose of checking the work of individual welders and also the work of the shop as a whole. In this way weld quality may be kept to predetermined standards.

When a new welding rod has to be selected, welded joints made of the various rods under consideration should be made by one and the same welder, using identical technique. The soundest joint indicates the best suited material.

FIELD INSPECTION

If possible routine inspection of all welded joints should be made. It is preferable to do this work at night when no other work is going on. Under certain circumstances not all of the joints can be X-rayed. A very important point in favor of radiographic inspection is the psychological effect on the welder. If told that his work is subjected to X-ray inspection, he is much more careful and tries to do the best he can to produce sound joints.

The principal undesirable conditions in welded joints revealed by radiographic examination are the following:

- (1) No penetration, that is, improper fusion at scarfs between weld and parent metal. (This defect shows up as a fine line in the

exograph and corresponds to a hair crack.) Laps not fused between layers of weld metal. No penetration and laps are usually characterized by slag inclusions, which may be actually slag but are mostly a fine skin of oxide. (See *Figures 1 and 2.*)

- (2) Gas inclusions more or less numerous throughout the weld zone. Naturally, some minor defects are apt to occur. If they happen too frequently, they must be removed and the joint repaired.
- (3) Shrinkage cracks, developed during or after welding. Shrinkage cracks occur seldom.

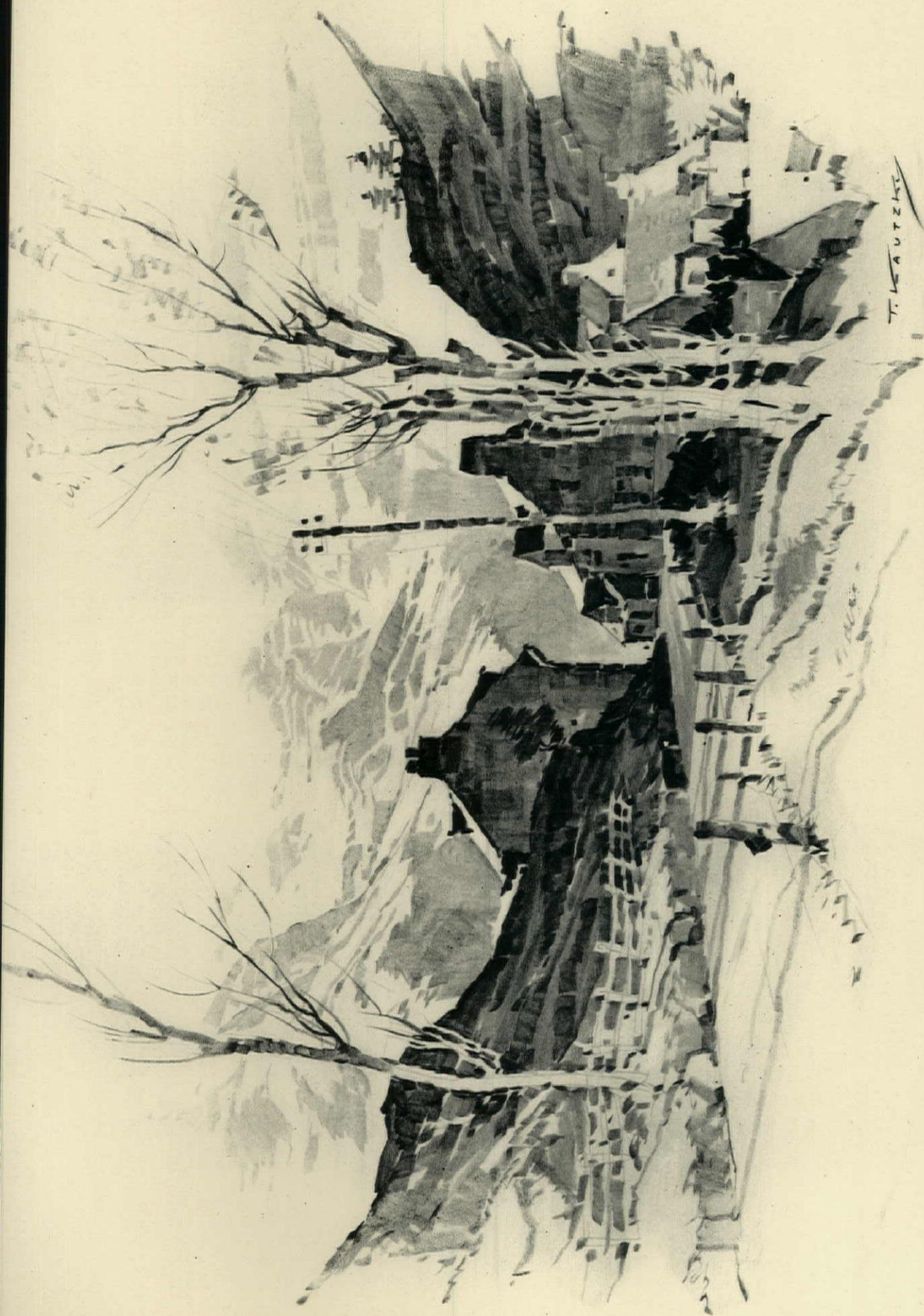
The matter of interpreting the results is probably the most important and at the same time the most difficult problem. Only long experience will assure the correct judgment. Just to give a few examples on how this work is done, we demonstrate the exposure arrangement on some typical joints.

Figure 3, a double-fillet-welded Tee joint. Two exposures are required, one for section A and another for section B. In each case the X-ray tube is on one side of the material under investigation and a photographic film on the opposite side. In the sketch the appearance of relative points in the weld are marked numerically and their respective position in the shadow picture indicated on the film. The second exposure which is not shown here would show up points B₄, B₃, B₂, A₄ and A₁. In that way we not only detect any possible defects, but will obtain two views from entirely different angles which is a help for locating the defects.

Interpretation becomes more complicated on a section as depicted in *Figure 4*. In this case two exposures are required from four different sections, or eight exographs on this one joint. Compared to this, a box column construction with four joints on each corner seems to be simple. *Figure 5* shows that only two exposures are required to cover.

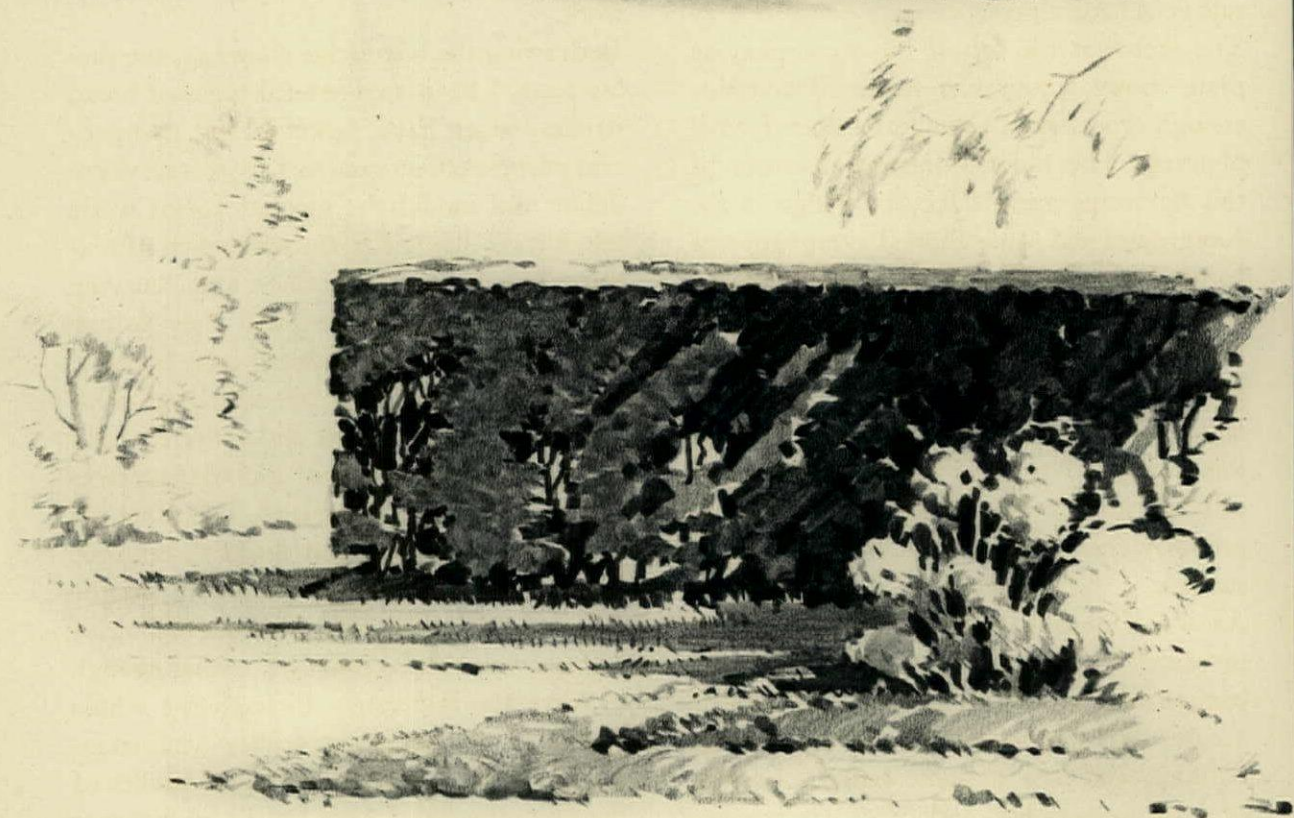
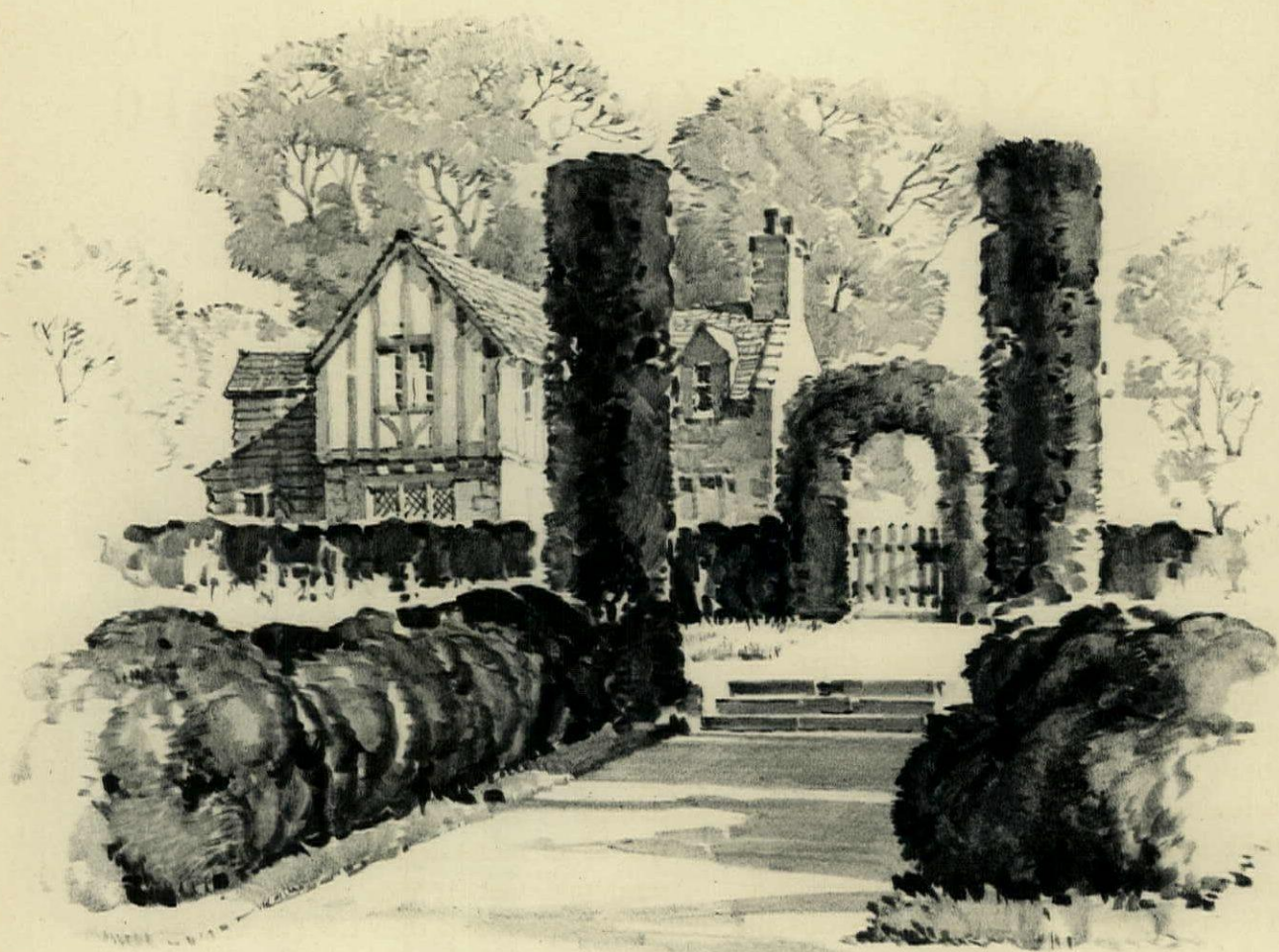
These few examples will be sufficient to prove the importance of X-ray inspection for the welding designer and the architect. An equally important point is the value of such a nondestructive test to the owner of the building to whom it is, indeed, a most instructive test.

It is predicted that in the near future butt-welded joints will replace fillet designs in most cases. This will facilitate not only the welding procedure but also our X-ray technique and will simplify the interpretation of exographs of welded joints.



T. LEAUTZ

VIEW AT GAVERNIE, PYRENEES



LESSON 10—INDICATION OF EVERGREEN SHRUBBERY

PENCIL POINTS

PENCIL BROADSIDES—10

BY THEODORE KAUTZKY

Dark accents in the landscape settings for architecture are frequently furnished by shrubs and hedges of yew, box, and other hardy evergreens. Sometimes these are clipped and sometimes they are left to take their natural forms but in any case they constitute a special problem for the artist or delineator. Their close, compact growth and their dark tones make them conspicuous elements in the picture in which they occur. They must therefore be drawn with care and sufficient naturalness.

The sketch at the top of the accompanying plate shows a suburban house of common enough type with a setting of rather formal planting. The most prominent features of this landscape are a thick box hedge in the foreground and some clipped evergreen tree forms which might well be English yew, or perhaps cedar. Nearer to the house is a hedge with an evergreen arch framing the garden gate. The dark values of these elements outweigh any other dark tone in the composition. To render them properly will call for heavy pressure with your 4B pencil properly sharpened to produce clean broad strokes.

As a preliminary to tackling the problem presented by this sketch or one of your own composition involving similar elements, I advise (as I have done before) that you go outdoors and look at some actual examples of box, yew, cedar, and other evergreens. Observe the bubbling forms of the box, its texture, the way the light falling upon it models its shape and reflects from the portions in full sunlight, making almost high-

lights. Notice in the cedars how there are occasional gaps in the otherwise close growth, through which you can see bits of branch, or even the sky. Mark particularly the silhouette, whether or not the specimen is clipped, standing with more or less irregularity against lighter areas beyond. See how the contrast of dark against light gives the illusion of an aura extending along the line of separation. Get all these impressions firmly in your mind and then come in and go to work.

In drawing the box hedge shown on the facing page, I have used several types of broad strokes, which have, however, but two general purposes. One group of strokes serves to define and model the general forms while the other is directed to the expression of texture. The former are rather long, curving strokes, sometimes wavy, and they follow the contours of the bushes quite clearly. Their variations in tone are calculated to indicate the play of direct and reflected light across the interlacement of globular surfaces which characterize this plant. The other set of strokes are short and multi-directional. They may be seen most distinctly on the nearest bush at the left. The suggestion of leafage which these convey is strong enough to carry the impression through the whole length of the hedge, especially when reinforced by the wavy or zig-zaggy strokes of the first category. I have let the white paper show through here and there to express the highlights that occur where the sun reflects from the shiny foliage at the proper angle. Note that, though the general tone of the

whole is dark, there is plenty of variety, as there would be in nature. Even in the blackest shadows the density is not complete.

The tall, clipped trees are modeled as cylinders, with reflected light bringing out the roundness of the shadow side. Here, too, I have used a number of short strokes running in many different directions and also have taken particular pains to accent and properly portray the irregular silhouette. The same remarks apply to the hedge and gate beyond. Note throughout the sketch that I have left a thin though irregular strip of white paper along the top and lighted sides of these evergreen forms. This helps the general sunny

effect of the sketch and accords with truth. The hedge at the bottom of the plate is intended to be privet, which may not be, strictly speaking, an evergreen. It is rendered with a great many short strokes, laid closely in all directions. I have been careful to define the silhouette in character with the plant and have left a number of irregular openings in the foliage through which some of the stems and twigs may be seen. This makes a more interesting and none the less truthful picture than if I had assumed a solid growth of leaves. Longer diagonal strokes, following the direction of light, were used for the shadows, as may be seen.