

VOLUME XXXIII

MARCH 1916

NUMBER 3

### The Henry Ford Estate, Dearborn, Mich.

W. H. Van Tine, Architect

A BOUT three years ago, Mr. Henry Ford acquired a very large estate comprising several thousand acres of land at Dearborn, Mich., about twelve miles west of Detroit. The properties were gathered so that the tract was intact and not separated by other ownership; and it was here, on the banks of the Rouge River commanding a wonderful view of all the surrounding country, that he selected the site for his future home.

In February, 1914, Mr. Ford commissioned Mr. W. H. Van Tine to design and build, and carry to completion this large estate.

The entire proposition was handled by Mr. Van Tine, including the architectural designing and construction of all buildings, purchasing of all materials, handling of all accounts, and the full work carried out under his personal supervision, the desire of Mr. Ford being to throw the responsibility of the entire transaction into one channel.

Owing to the distance from supply points, a thoroughly modern woodworking plant was established on the premises, as well as a stone sawing plant, handling all materials in very large shipments and completing the work on the ground.

Work was started in February, 1914, and on June 2nd, 1914, the corner stone of the residence was laid by Mr. Henry Ford. On August 26th, 1914, the corner stone of the experimental laboratory and power plant was laid by Thomas A. Edison. From five to eight hundred men were constantly employed in the development of this enterprise, in all the different capacities of workmanship; sculptors, modelers, woodcarvers, and every branch of trade were handled at one time on the premises; and Mr. Ford occupied his new home early in January, 1916.

The surroundings have been kept in a natural and more or less primitive condition to afford the restful quiet and seclusion desired. Artificial lakes, extended trails, and the establishment of a natural forestry were being developed by Mr. Ford for some time prior to his building. Under these conditions the Architect devoted himself to the task of expanding the original scheme.

The residence was planned for ground gently rising from the water's edge on a site about 200 feet back from the river. The exterior is designed in early English, modified. The stonework is the Marblehead limestone, which is very hard with natural disfigurements, and it is laid up in old Scottish ashlar with the jackarch cutting, each stone supporting itself.

The roof is a special tile, deckle edge and rough face three-fourths inch thick by 9 by 14 and of a very deep red color.

All copper work, conductor heads, etc., fine examples of the old English pewter work, were made on the grounds. One of the novel features is the absolute protection from lightning by altogether invisible means, as any electric shock is directed, not by an unsightly lightning rod, but by a copper pan of water connected with a copper coil running to a damp cesspool some distance from the building, under which arrangement the entire copper work of the roof and all the cornices a become the direct conductor for any electrical current.

From the river or garden level, the entrance is into a garden hall, a delightful apartment which is convertible into a summer breakfast hall. The architectural treatment is formal in character; the walls of stone and marble floor, massive oak doors with unique hardware, and everything to produce a receptive though formal entrance. The whole represents a very high quality of design.

The large room to the left of the garden hall on the river level, known as the Field room and used as Mr. Ford's office, was walled up with cypress logs, very quaint worm-caten woodwork, and, when completed, was set on fire and charred and then scraped down with steel brushes, making a beautiful color scheme for a rest room. The drinking water well in one side of the room in a fragment or stone wall, the quaint hardware, the plank floor as laid in early settler days, all lend a most charming effect. The massive fireplace was built of brick and stone taken from the old "Ten Eyek Tavern," which was the first building in Michigan that housed a Democratic convention.

The insert cut in the shelf reads "Chop your own wood and it will warm you twice"—Thoreau. In the hearth there is an old English frying pan seal. Andirons, kettle, tongs and other primitive articles complete the fireplace setting. Mr. Ford finds great delight in cooking a favorite fish dinner and serving it to his friends with his own hands in his own room. One loves to linger in this atmosphere of hospitality where is felt the true heart of the man himself.

The architraves to the doors are deep cut insert carvings expressing forestry and primitive forms. The four brackets supporting ceiling beams are modeled from hunting scenes, cut out of solid cypress timber.

From the garden hall up to the main hall is a broad staircase of Levanto marble and soft hazel brown oak woodwork. In the main hall, from the porte cochere entrance, there is a rarely developed quality of carving executed in Elizabethan treatment. The furnishings are of soft old blue and the lighting fixtures of wood.

In the library, off the main hall, is an ornamental plaster ceiling taken from an old English manor house. Hazel brown oak is used for paneling. The cases accommodate 4,000 volumes. Full of the firelight glow and alive with welcome is the Khiva Bokhara rug of unusual size (14 x 23 feet). This weave is rarely found larger than 7 x 10 feet. It has a great variety of rare red color—barbaric in influence and splendor.

The large living room is finished in French walnut, inlaid in Marquetry of darker shade. The organ screen, covering one-third of the length of the room, is an exquisite masterpiece of wood-carving. No pipes, nor anything indicating the usual organ surroundings, are visible. On the floor is an exceedingly good specimen of Satouk carpet, one of the finest of Persian weaves. The town of Satouk is situated in the mountains in the province of Fereghan where no foreign influence has permeated. The rug is doubly interesting on account of its unusual size and the ground color of wonderful chony blue with irregular medallion of purely Persian design.

The corners and borders contain rich floral effects of delicate harmony, and the weave is very fine. The mantel is of gray Sienna marble.

At a grade about two feet below this room is the entrance to the music room, which is used as a lounge room. It is in American walnut and is of pure Jacobean treatment. The carvings in the vaultings over the ten windows and the organ screen are most unusual. The organ is placed to give its full value to the household: the large screen of the main organ in the living room, the chimes and Celeste organ in the upper main hall and the Echo organ in the ceiling screen of the music room. A Meles rup of ancient red with bold and severe medallion of indigo blue makes a beautiful fitting for this room. It is woven of wool from the south of Persia and is full of lustre.

The sun room and billiard room on the river front of the house, commanding an unobstructed view for some distance up and down the river, is treated in pure Chippendale style and cannot well be described nor expressed in a word picture. The head finish and ornamental work around the doors and windows and inserts are beautifully brought out in Chinese Chippendale lacquer work. Everything pertaining to, or suggestive of, the common features of a billiard room have been climinated, cue racks concealed, and the billiard table carried out in style and ornament after the woodwork of the room and covered with oyster gray cloth, the beautiful color scheme adopted in the decorative features of the room. The mantel of Famosa marble is a distinctly elegant feature in itself.

The large lounge porch, with its stone walls, beautiful Chinese rugs in Imperial blue and yellow, and its wicker furniture, makes a most inviting rest room and offers a pleasing vista of all the territory and river scene south of the home.

The dining room has been carried out after the pure Grinling Gibben style. The entire walls are of mahogany of an unusual marking of veneer. The game panels overhanging the serving board, and the delicate carvings in the architraves of all doors and windows, give a quiet grandeur. The mahogany is treated in a rich brownish tone, and the wood figured in what is known as the "Roseleaf" mottling and is notable for the fact that this rose variety has been obtainable in the American market only three times in the past forty years. On the floor are two fine Lavers rugs, semi-antique products of the Kirman country. In the main part of the room is one rug 22 x 24 feet and in the bay window another 11 x 17 feet. It is accurately asserted that both of them are the finest of the kind to be found in the world, being of unusual size and rare beauty. The wool is equal to that of the Cashmere goat and lustrous as pure silk. The Persians call it the gem of the loom. mellow tones of antique ivory, mulberry, taupes, blues and fawns in the medallions are especially harmonious and enriching to the woodwork of the room.

The Architect has accomplished a very gratifying result in his efforts in the swimming pool in the east wing of the house, which is far removed from the general athletic effect so often found in a residential pool. He has produced a most fascinating effect in that the main body of water which appears to be of uncertain depth, is a Mediterranean blue, while at the head of the pool there flows a fountain of sparkling green water, both from the same source of supply. The ceiling is decorated in a mottled blue sky effect, no ornamental or flower painting having been introduced to detract from the real character of the room. The walls are done entirely in washable

tion of flower boxes under the clere story windows and along the edge of the pool. The general atmosphere of this room, as well as the palm room adjoining, through which one passes from the corridor, is at once bright and cheery, peaceful and balmy, and surely most inviting.

Leading from the residence to the garage and power plant is a tunnel seven feet high by eight feet wide carrying every source of supply. The private power plant, garage and laboratory are probably the most elaborate and comprehensive of anything attempted on any private estate.

The power is supplied from a fourteen foot fall in the Rouge river and develops some 225 horsepower through vertical turbines. The turbine and generator rooms are as complete and efficient as can possibly be procured and reflect the last minute of products in mechanical devices. Mr. Ford's private laboratories in the third floor of the building, in a room 26 x 92, will be the finest and most complete laboratory in this country. The power plant comprises four levels, the lower level being 52 feet below the upper floor level. All pumps, böilers for heating, ice machinery, and general machinery equipment for the entire premises is in the lower level of this building.

The garage, which is the face of the building, is a room 36 x 92. The water through the turbine tubes is delivered into the Rouge river fourteen feet below the bed of the river. From a scientific standpoint, and as an engineering development, this building stands unique as a most complete conception not only of the full supplying of every adequate means of power, etc., for the house, but a most practical and complete experimental department for Mr. Ford's private use.

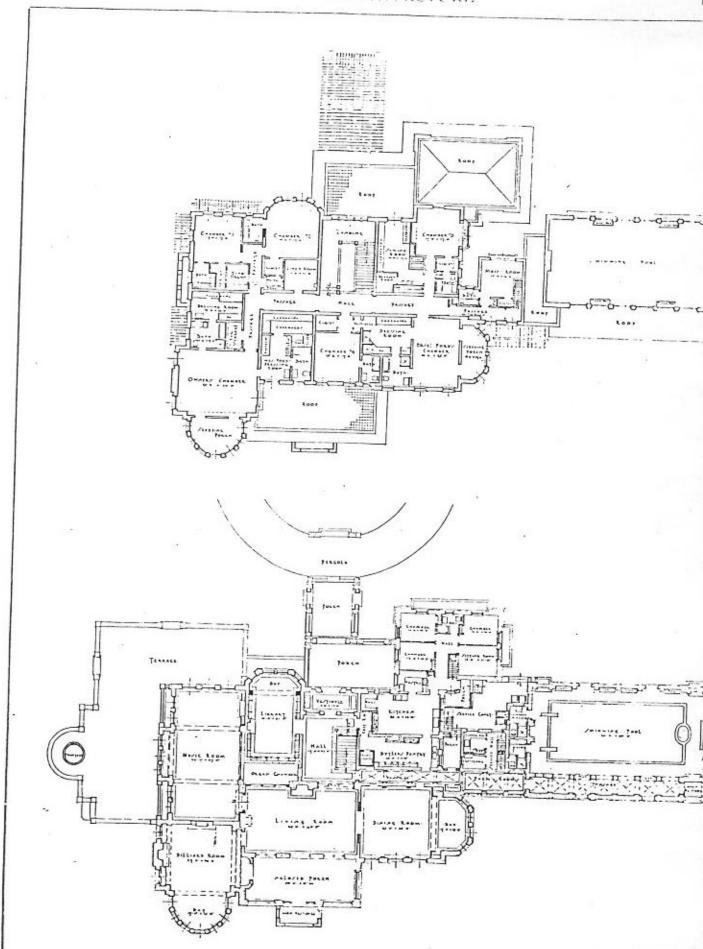
Over 135 miles of electrical conduit were used to carry the electrical equipment, with seven to twenty-four wires in each conduit. The intercommunicating telephone service is a very modern and up-to-date equipment, and does not call for the telephone operator in responding to calls,

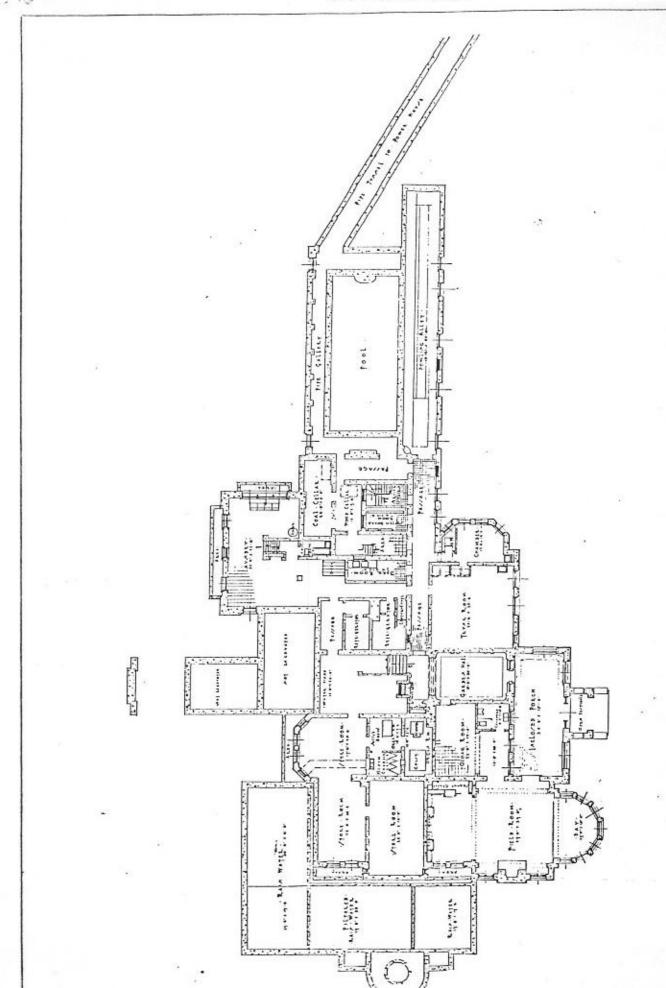
All of the plumbing and heating are carried in conduit through the tunnel to the residence. The plumbing stands alone as the second and largest installation of a third line independent pressure system in the United States. The pressure of 65 lbs. in the main line does not fluctuate with the opening or closing of any or all openings. The system is operative from one point in the basement in what is known as Van Tine's Water Piano. Over 40,000 feet of scamless brass tubing is used in the hot water line and third line plumbing.

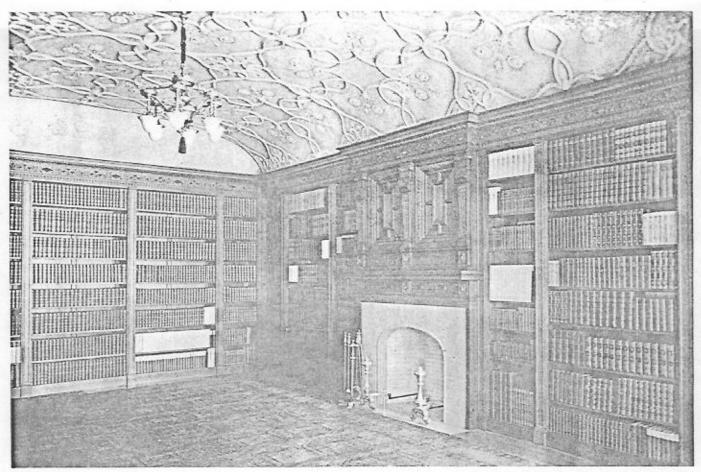
The refrigerating plant is unusual in residential work. Not only does it supply zero temperature in storage closets but in the butler's pantry automatically freezes inch units of ice for table use, all shapes and forms for desserts, and a refrigerating system to maintain and keep ice cream or puddings for several months in their original condition. The pastry division is for either hot or cold storage, having a cold slab for pastry and a hot slab for bread and biscuits, comprising an original and very important factor in the house.

In the drapery and furniture, rugs and general finishing touches of the house, a most pleasing result has been accomplished without any discord or clashing. In passing from one portion of the house to the other, it seems as though each formed a component part of the main unit.

In the very beginning it was agreed that the theme of expression must be "Home." About this has been woven a symptom of expertion, tone and color indicating the bone-





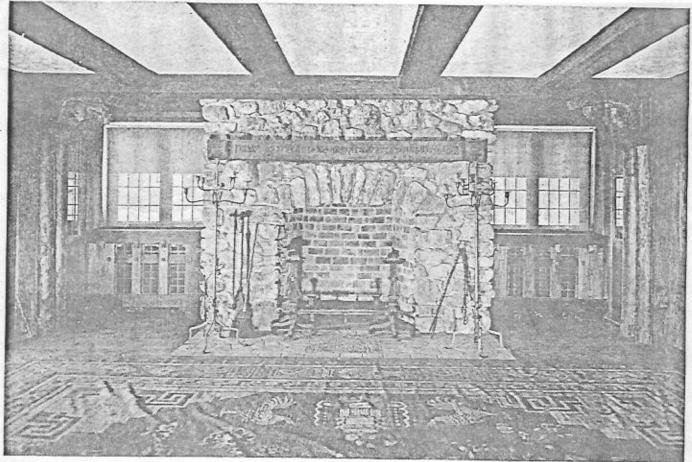


Library.

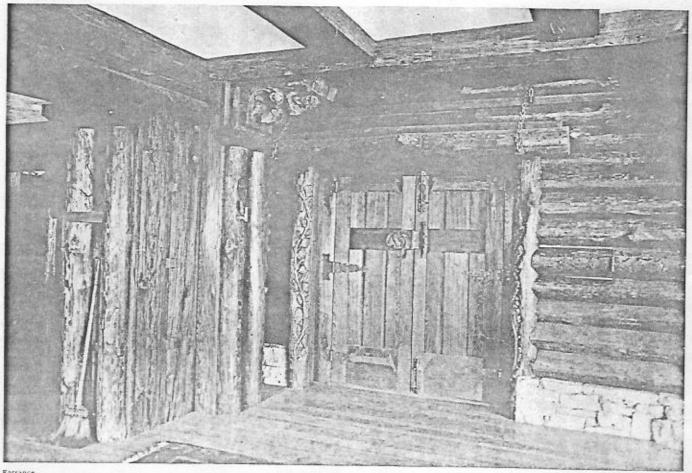


Dising Room. HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect. Architecture march 1916



Fireplace.

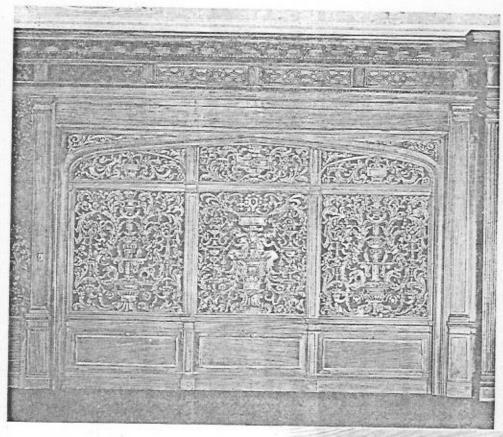


Entrance. FIELD ROOM, HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect.

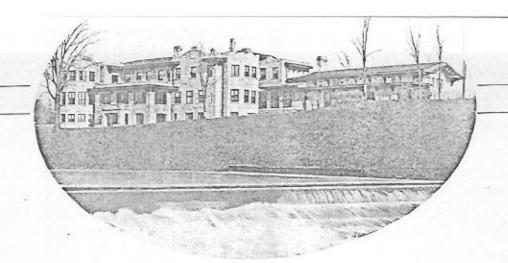
The Pipe Organ in the new home of Mr. Henry Ford, at Dearborn, Michigan was designed and constructed by the Estey Organ Company of Brattleboro, Vermont

An Estey Pipe Organ may be heard at any, of our studios: New York 25 West 45th St. Boston 120 Boulston St. Philadelphia 17th Walnut Sts.





The screen for the Estey Pipe Organ in the home of Mr. Henry Ford was designed by, Mr. W. H. Van Tine, Architect.



## Marblehead-Buff Limestone

Because of its hardness, durability and even color this stone was chosen for the residence of Henry Ford at Dearborn, Mich., W. H. Van Tine, Architect.

The quality of Marblehead-Buff Limestone adapts it particularly for work of this character where beauty, dignity and permanence are required.

Quarries at Marblehead, Ohio.

## The Kelley Island Lime & Transport Co.

Manufacturers of Tiger Brand White Rock Finish Cleveland, Ohio



## The Ford Residence

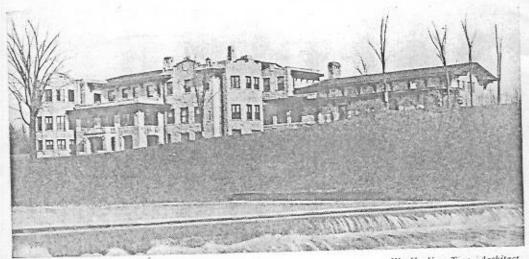
This is Mr. Henry Ford's new residence at Dearborn, Michigan. The power-house and all foundation and underground work, including two tunnels from the house and the river to power-house, were constructed with

#### Atlas Portland Cement

Mr. W. H. Van Tine, the architect, also used Atlas-White Cement for setting and backing the marblehead stone in the residence proper.

Atlas-White is a pure white, non-staining Portland cement—it will not stain brick, stone or tile—and is the most-used white cement for pointing and setting and for stucco.

The Atlas Portland Cement Company
30 Broad Street, New York Gorn Exchange Bank Bldg., Chicago
Philadelphia Boston St. Louis Minneapolis Des Moines Dayton

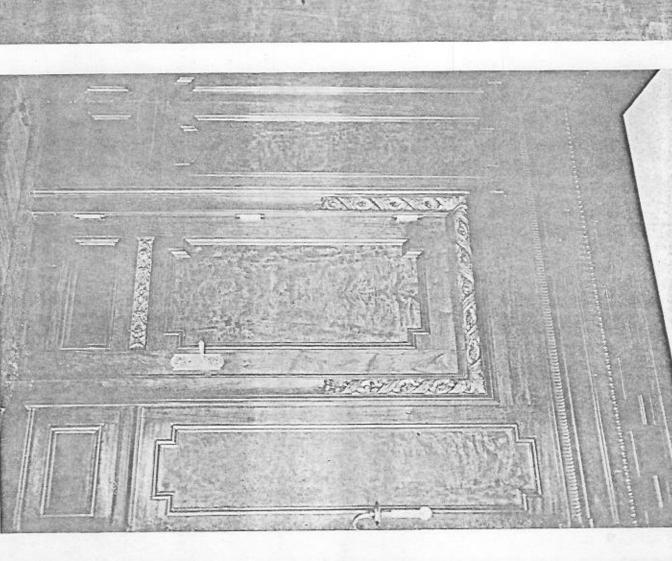


Henry Ford Residence, Dearborn, Mich.

W. H. Van Tine, Architect.



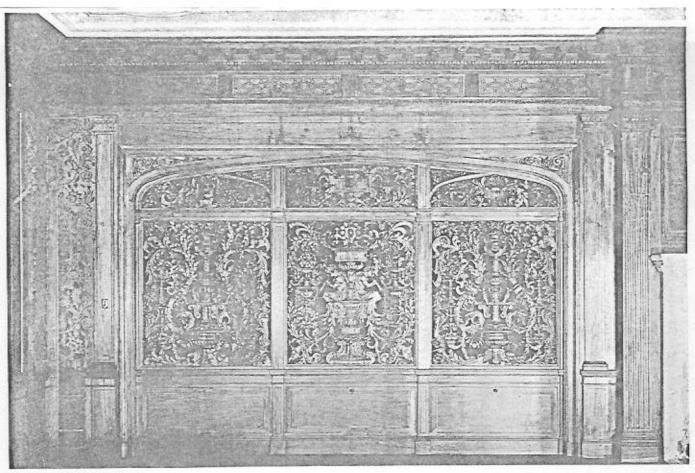
PLATE LI.



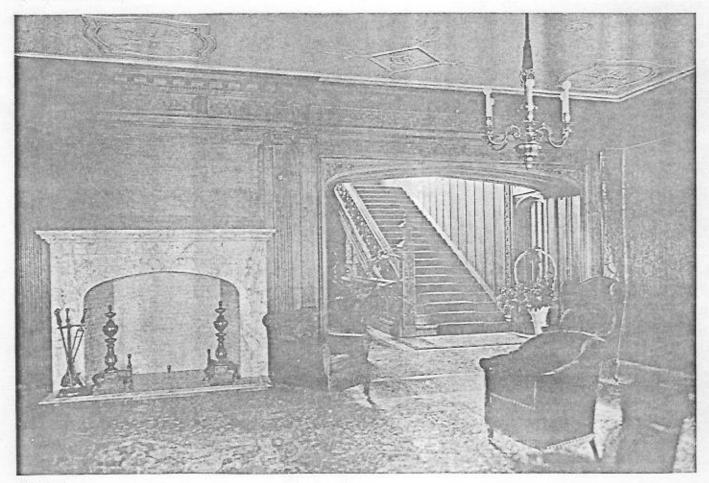


DETAILS, DINING ROOM, HOUSE, HENRY FORD, DEARBORN, MICH,

W. H. Van Tine, Architect.

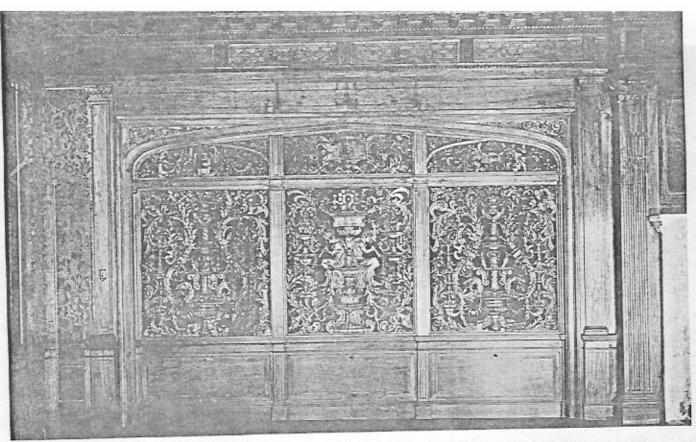


Organ Screen in Living Room,

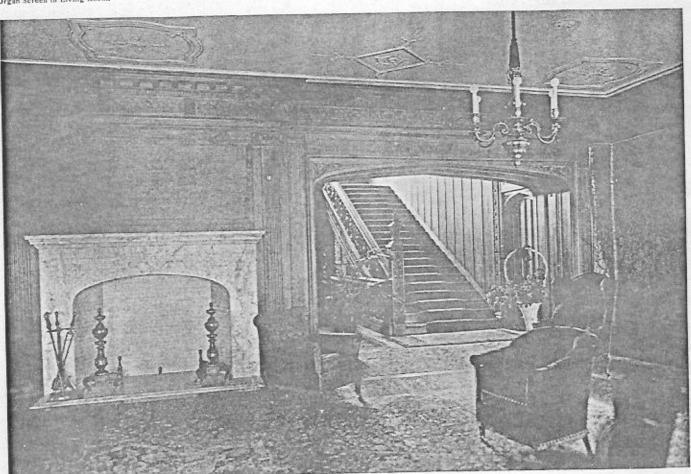


Living Room. HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect.



Organ Screen in Living Room.

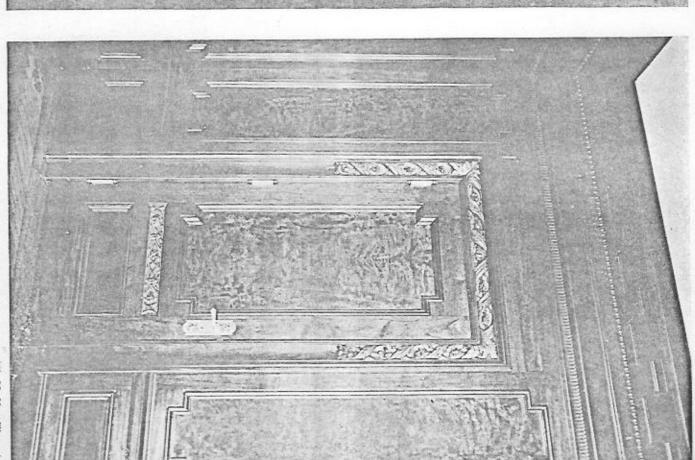


Living Room. HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect.

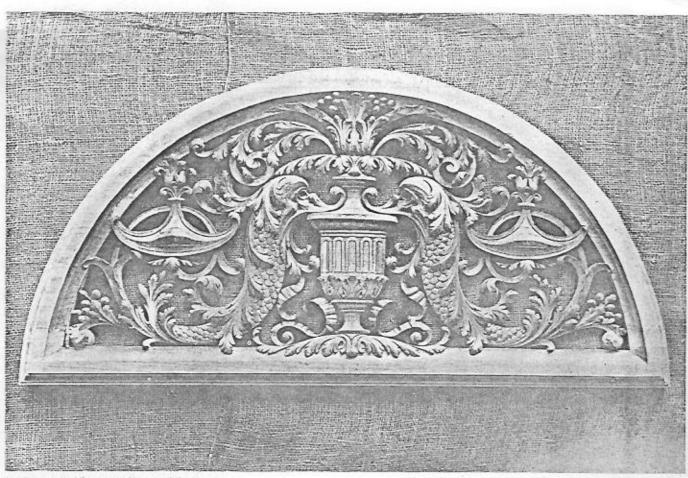




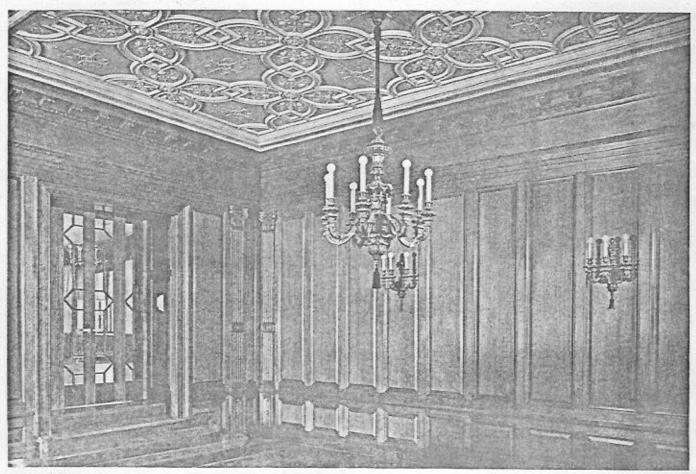


DETAILS, DINING ROOM, HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, A

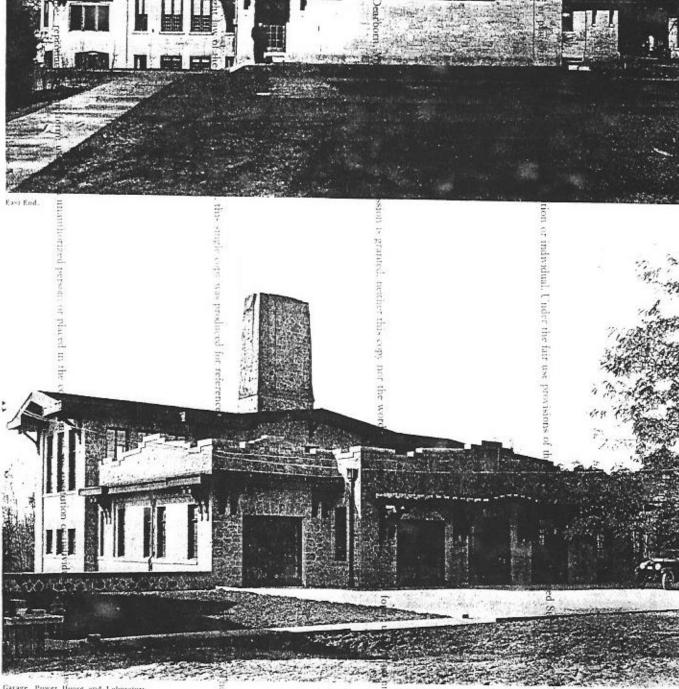


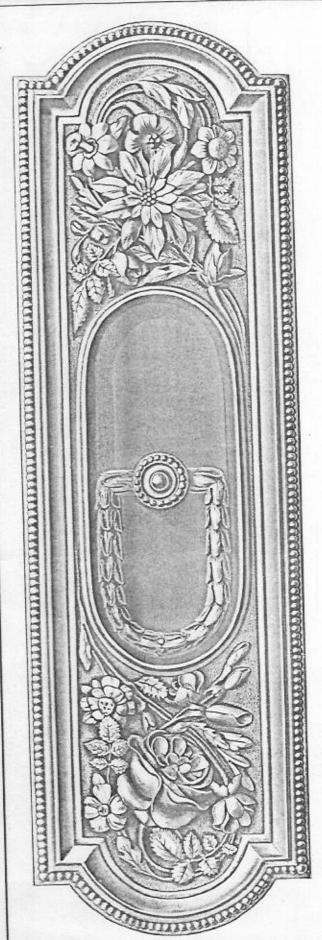
Carved Screen Vaulting over Music Room Windows.



Detail, Music Room. HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect.





## P. E. GUERIN (INC.)

MANUFACTURERS AND IMPORTERS

#### 21, 23, 25 JANE STREET

BETWEEN GREENWICH AND EIGHTH AVES.

NEW YORK, N. Y.

TELEPHONE CONNECTIONS

ESTABLISHED 1857

Manufacturers of special hardware of the various English and French Epochs. We have samples of the various hardware parts used in the historical French Chateaux and English Homes. We also design and model special hardware to suit odd conditions and where so desired or requested reserve as private special models for owners or architects

#### Also

In addition to the above we manufacture all forms of metal ornamentations for furniture of the various French periods and have the metal ornamentations of some of the noted historical pieces of furniture

#### and

We make to order all forms of metal with glass Vitrines to suit special spaces or sizes with or without electric lights including adjustable racks for glass shelves, etc.

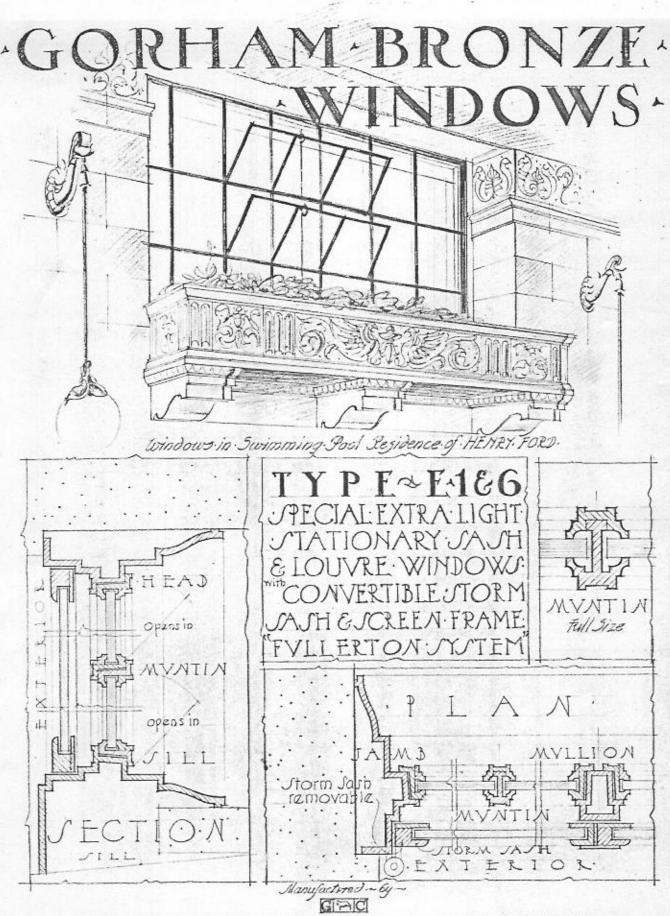
Endorsement received from one of the most prominent and practical architects in the United States.

#### GENTLEMEN:

Desiring a special expression and quality in Hardware in Henry Ford's Residence, Dearborn, Michigan, I wish to state that I am very much pleased with the results you attained in the work for me as to quality and proper application of

Thanking you for your prompt attention and consideration,

Yours truly,



THE GORHAM CO ARCHITECTURAL BRONZE FIFTH AVENUE NEW YORK



Y000759575757575

(0)

### The Exact Product for an Exacting Service

The prosperity of the commercial building can never become independent of the elevator service.

Any decline in the quality of the product supplying this service not only disastrously affects the individual building's prosperity, but tends to shatter the public's confidence in all elevators and elevator travel.

# OTIS ELEVATORS

always have been and always will be the exact elevators for the exacting service required of all elevators.

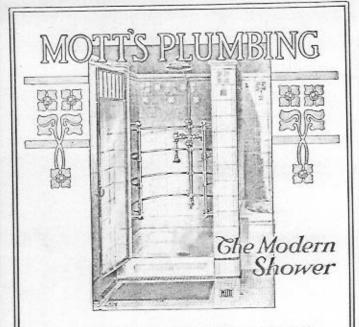
The welfare of all building activity, of the Architect and the Client, points to your recommendation of and insistence upon Otis Elevators.

#### OTIS ELEVATOR COMPANY

Eleventh Ave. and Twenty-Sixth St., New York Offices in All Principal Cities of the World

Jumel Garage—New York City Architect, J. P. Whiskerman Otis Equipment—2 Electric Garage Elevators

**FIGURE FIGURE (SELECTION OF THE PROPERTY OF T** 



Mr. Henry Ford's new residence, pictured and described in this issue of Architecture, is equipped throughout with Mott's Plumbing Fixtures.

A noteworthy feature is the tiled-in needle and shower bath with plate glass door and porcelain receptor as illustrated above. A special booklet of tiled-in showers will be mailed upon request.

Architects throughout the country specify Mott's Plumbing Fixtures for high-grade residence work because they combine in a wide range of designs, the essential qualities of beauty, utility and durability.

#### THE J. L. MOTT IRON WORKS

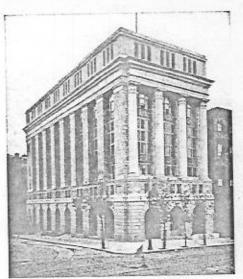
Fifth Avenue and 17th Street, New York

1828 Eighty-eight years of Supremacy 1916

fBoston 41 Pearl St., Cor.Franklin
Pittsburgh - Peoples Building
Chicago 104 S. Michigan Ave.
Minneapolis Builders Exchange
Atlanta Peters Bldg., 7 Peachtree St.
Philadelphia - 106 Filbert St.
Scattle - 406 White Building
Cleveland - 846 Leader-News Bldg.
Detroit - Penobscot Bldg.
Des Moines 205-211 W. Court Ave.
Toledo - 430-434 Huron St.

Portland, Ore., Sherlock BldgtWashington, D. C., Wondward Bldg. Columbia, S. C., 1533 Main St. New Orleans 622-630 Baronne St. Denver 1834 Blake St. San Francisco 135 Kearney St. St. Louis Century Bldg-Kansas City N. Y. Lile Bldg. Montreal Can. 134 Bleury St. San Antonio 431 Main Ave.

†Shewrooms equipped with model bathrooms.



PACKARD COMMERCIAL SCHOOL.

LEXINGTON AVENUE AND 35TH STREET, NEW YORK.

H. F. Ballantyne, Architect.

Electric Lighting and Power Equipment, Interconnection Systems, Installed by

#### DENNIS G. BRUSSEL

Electrical Engineering and Construction
39-41 West 38th Street, - NEW YORK

Phone 189-190 Greeley



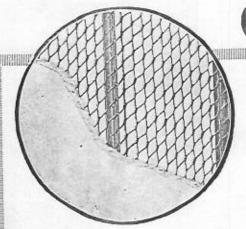
PORTICO, COUNTRY HOUSE, E. T. BEDFORD, GREEN'S FARMS, CT.
M. W. MORHIS, ARCHITECT.

Plain and Ornamental Stucco Work Executed by

#### H. W. MILLER, Inc.

Plain and Decorative Plastering and Cement Stucco Contractors.

654 WEST 51st STREET, - NEW YORK CITY



(HANELATH

New Product
that Combines
Metal Lath
and
Reinforcing



Chanelath, as a metal lath for ceilings and partitions, has as an integral part of it not only the lath mesh, but the necessary metal furring strips as well. As a reinforcing it furnishes forms for roof and floor slabs.

Think of the variety of uses to which this new expanded metal product can be applied and see for yourself how it excels in every one.

Investigate Chanelath at once. You will appreciate its efficiency and you will use it in your

work, just as architects that are familiar with it are using it now.

Send for booklet 64. You have not got it in your files, because it's brand new.

## North Western Expanded Metal Company

Manufactures All Types of Expanded Metal

906 Old Colony Building

Chicago, Ill.

# The HENRY FORD RESIDENCE

LIKE THE MAJORITY OF LARGE AMERICAN HOMES IS EQUIPPED WITH

# JEWETT REFRIGERATORS

We respectfully solicit inquiries from Architects interested in refrigerator equipment of individuality and embodying special features.

# The JEWETT REFRIGERATOR CO.

MAIN OFFICE AND FACTORY

BUFFALO, N. Y.

NEW YORK: 1135 Broadway CHICAGO: 38 So. Dearborn St. CLEVELAND: 345 Leader-News Bldg. MONTREAL: 609 New Birks Bldg

## AMERICAN BRIDGE COMPANY Hudson Terminal-30 Church Street, New York

Manufacturers of Steel Structures of all classes particularly BRIDGES AND BUILDINGS



#### SALES OFFICES

NEW YORK, N. Y., 30 Church Street Philadelphia, Pa., . Widener Building Boston, Mass. . John Hancock Bldg. Baltimore, Md., Continental Trust Bldg. PITTSBURGH, PA. . . Frick Building Rochester, N. Y. . . . Powers Block Buffalo, N. Y. . Marine National Bank Cincinnati, Ohio. Union Trust Building Atlanta, Ga. . . . Candler Building Cleveland, Ohio . Rockefeller Building Detroit, Mich., Beecher Ave. & M. C. R. R.

NEW YORK, N. Y., 30 Church Street
Philadelphia, Pa., . Widener Building
Boston, Mass. . John Hancock Bldg.
Baltimore, Md., Continental Trust Bldg.
PITTSBURGH, PA. . Frick Building
Minneapolis, Minn. . . . Wolvin Building
Minneapolis, Minn., 7th Ave. & 2ndSt., S. E.

Pacific Coast Representative:

Cincinnati, Ohio, Union Trust Building U.S.Steel Products Co. Pacific Coast Dept. Atlanta, Ga. . . . Candler Building SAN FRANCISCO, CAL., Rialto Building Portland, Ore. . . . Selling Building Detroit, Mich., Beecher Ave. & M. C. R. R. Seattle, Wash., 4th Ave. So. Cor. Conn. St.

Export Representative:

United States Steel Products Co., 30 Church St., N. Y.

On account of EFFICIENCY and Simplicity in Construction of machine

THE

# TUEC

**STATIONARY** 

VACUUM CLEANING SYSTEM

was selected for the

### HENRY FORD RESIDENCE

Awarded GRAND PRIZE, the Highest possible Standing, at the PANAMA-PACIFIC EXPOSITION

SAN FRANCISCO, 1915

Manufactured by

THE UNITED ELECTRIC CO.

LATEST BOOK ON APPLICATION



DETAILS, DINING ROOM, HOUSE, HENRY FORD, DEARBORN, MICH.

W. H. Van Tine, Architect.