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## ARCHITECTURE

Architectural Trends - The Architect ..... 7
Haldeman \& Jacoby - Archilectural Profile ..... 8
University of Hartford - Moore \& Salsbury, Architects ..... 16
Construction Progress - Blue Cross-Blue Shield ..... 20
St. Mark's Chapel - Huntington \& Darbee, Architects ..... 22
Radio and Television Station WHDH - LeLand, Larsen, Bradley \& Hibbard - Architects ..... 24
Nordblom Transforms Boston Landmark ..... 27
Bertram A. Kilgore - Architectural Sculptor ..... 28
Science of Seeing ..... 32
Bulletin Digest ..... 30
New Products ..... 34
New Literature ..... 40
Contracts Awarded ..... 46
Consumer Classified ..... 54
FEATURE

Signed Articles. As one object of the "New England Architect and Builder, lllustrated" is to afford a forum Signed Are expression of matters of importance relating to the building trade and architectural profession, and as the widest range of opinion is necessary in order that different aspects of such matters may be presented, the editors assume no responsibility for the opinions or facts in signed articles.

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## E D I T O R I A L

Remarks about New England weather are common-just as common are the remarks that have been taken for granted about New England's progressiveness in construction. All too often we hear about a building under construction in New York or California or Texas, and the New Englander pacifies bis envy with "well, we are always years behind everyone else" or "if it works out elsewhere we may give it a try in a few years."

In the future issues of "New England Architect and Builder Illustrated," we shall try to prove that this type of vocal opinion is not a true picture of the architectural and construction trend in our part of the Nation. Quite the opposite is true-the only reason New England is not recognized for what it really stands for in the Building profession is because it has been sadly ignored by the national magazines and newspapers. There has never been a public relations factor to point out the many progressive standards produced by New England Architects and Engineers.

We, as a publication, intend to at least point out a few prominent examples in the hope that the national opinion may eventually change.

The Architects and Builders in this area have a lot to gain by giving lip service to a campaign of this type.

New England is recognized for its progress in the Medical and Educational fields, as well as a number of other professions. We can and should regain a well deserved reputation for the same in Architecture and Building Construction. Agreed?

The Editors


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Jan Reiner, Architect

The word architect, like many words derived from the Greek, is made up of two parts: archi"chief", and tekton-"a builder." Thus the original meaning of the word explains a union of designing and building activities, a union which the architect maintained up to the middle of the 19th century.
At that time he was thought of more as a designer than as a builder.

Architecture was seen as a "fine art" and transferred from the outdoors to an inside atelier where it remained for nearly 100 years.
Today's interpretation of architecture places the architect somewhat nearer to that original meaning of the word. But the complex social and technical conditions of our highly industrialized society no longer make that original union of designing and building quite possible.
An architect is a composite personality made up of three basic ingredients: the artist, the technician, and the businessman. The degree to which he excels in any one of them is determined not only by the social and economic conditions of his day, but also by his personal makeup. And his makeup stems from the often "long forgotten" experiences of the formative years of his childhood. It was there that the foundation for his interests was laid, which may have determined whether he would grow up to become a man concerned with matters of beauty (an artist), a man dedicated to solving structural
problems (a technician), or that practical man, who, for an appropriate measure of wordly rewards, can "get things done."
Seldom does an architect-simul-taneously-succeed equally well in all three roles. Of course, his roles are not necessarily static. During the course of life, an architect may shift, say, from accent on business toward the arts, or economic exigencies may force him to concentrate on the money aspect of his work.

That is why quick judgment passed on one example of the work of an architect may be misleading; the circumstances under which the building program was set up, the extent to which the original design was carried out and the construction executed may not be fully known.
As an artist, the architect possesses qualities which artists have possessed through the ages: an extraordinary imagination, and a keen awareness and expression of feelings. As art always deals with emo-
(Continued on page 48)


## Specify <br> actually bleaches exterior woodwork <br> - can be used on any kind of new wood <br> - gives raw shingles and siding a delicate gray tone when first applied <br> - changes in 6-12 months to a lasting, natural weathered effect <br> - has a high creosote content prevents decay <br> - provides both beauty and protection with a minimum of upkeep <br>  <br> A quality product from Cabot Laboratories ...manufacturing chemists since 1877 <br> 

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S. TYSON HALDEMAN

## Haldeman \&

ARCHITECTS BROCKTON

MASS.


The International background of this architectural firm certainly offers an interesting framework for our readers. The principals, S. Tyson Haldeman and Eric Jacoby, both members of the A.I.A. and the Massachusetts State Association of Architects were drawn together from different parts of the globe to form their present team.

Mr. Haldeman, a graduate of Cornell University School of Architecture, is a veteran of both World Wars and featured in the 16 million dollar reconstruction of the Port of Cherbourg, France, the Baverstock Air Base in England as well as many hospitals for the U. S. Army. For 30 years Mr. Haldeman has had his own practice in Philadelphia, Pa., and in Brockton, Mass.

Mr. Jacoby, a graduate architect of the Polytechnical University of Munich, Germany, was born in Finland and moved to the U. S. in 1946. He was trained in architecture in the office of his father who was an architect in Europe. In the latter part of World War II Mr. Jacoby worked as a special representative of the U.S. Counter Intelligence Corps in Germany. For several years he was an instructor of architectural design at the Boston Architectural Center

Listed as associates of the firm of Haldeman \& Jacoby are Edouard N. Dube and Francis J. Linehan, Jr. both Professional Engineers.

The following pages provide a partial cross section of the work carried on by this firm in recent years.

## MARSHFIELD SENIOR HIGH SCHOOL , MARSHFIELD . MASS.



General Contractor
Grande \& Son, Inc., Malden, Massachusetts

Engineer (Heating)
Francis J. Linehan, Jr., Boston, Massachusetts

Engineer (Electrical \& Plumbing)
Edouard N. Dube, Boston, Massachusetts

Among the more recent large projects completed by the office of HALDEMAN \& JACOBY, this $\$ 1,685,000$ senior high school is an outstanding development. Designed for 600 students with future expansion up to 1000, it contains all the modern facilities for modern education plus athletic items such as four tennis courts, football field, hockey field, track and baseball fields. The auditorium and gym as well as many other rooms are adaptable to serve many adult groups and town activities.


HALDEMAN \& JACOBY

MANSFIELD HIGH SCHOOL

Structural description includes reinforced concrete foundations, exterior walls of hard burned clay brick, interior walls of pumice block. The floors are mainly asphalt tile and vinyl with an iron bound maple floor in the gymnasium. Ceilings are acoustical Flexicore, prestressed, precast, reinforced concrete panels.

The building area covering approximately 97,000 square feet includes ten classrooms, a cafeteria and kitchen to feed 300 students per shift, teacher's quarters and dining facilities also general offices, school department offices, health and guidance rooms and a student activity room.

The auditorium pictured below has a full stage and a seating capacity of 600 .


## MARSHFIELD SENIOR HIGHSCHOOL

HALDEMAN \& JACOBY, ARCHITECTS


The above divisable gymnasium with folding bleachers to seat 800 is complete with coat rooms and toilets for pupils and public plus locker rooms, showers, team room and a corrective gym. Left is a typical science laboratory (one of four) and a typical classroom. The wide corridor and lobby arrangement below ensures easy traffic flow between classrooms and the wings which surround an inside garden type courtyard.

Rounding out a very complete set-up are two home making rooms, one art room, two shops, one library and three specialized commercial classrooms.

Principal Sub-contractors and Suppliers:
Heating - J. L. SULLIVAN \& COMPANY, Structural Steel WAGHORNE \& BROWN, Plumbing - ROYAL PLUMBING \& HEATING, Electrical - WARREN H. BENNETT, Painting H. W. ELLIS, INC., Tile - RINALDI TILE COMPANY, Roofing COLUMBIA CORNICE COMPANY, Metal Windows - W. F. CANNON COMPANY, Acoustical Tile - ACOUSTICAL CON. TRACTORS, Doors - W. H. CROOKS COMPANY, Boilers H. B. SMITH COMPANY


HALDEMAN \& JACOBY PROFILE

UNIVERSALIST-UNITARIAN CHURCH BROCKTON . MASSACHUSETTS

## General Contractor

T. F. Crowell \& Sons, Brockton, Mass.

Engineer (Heating, Plumbing \& Electrical)
Edouard N. Dube, Boston, Mass.

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                CH
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gold leafed ornaments, built by Harry S. Cook of Mansfield, Mass, and finished by Eugene Lehr. Pews were built by parish members from the old pews taken from the old church. At the rear of the church, the classroom wing and bell tower have brick exteriors and colored pumice block interior walls.



BROCKTON SAVINGS BANK BRANCH : BOSTON, MASS.
General Contractor J. L. MARSHALL \& SONS, Pawtucket, R. I

Engineer EDOUARD N. DUBE, Boston, Mass


HALDEMAN \& JACOBY P R

Because of a location which is slightly removed from a busy west side shopping section, a prime requirement for this Branch Savings Bank Building called for a design which would definitely call attention to itself and also endeavor to improve the location. This was well accomplished with a high block design using native Dighton stone for facing on the reinforced concrete walls of what is actually the vault on the lower level. Fenestra steel panels, acoustical ceilings, aluminum and glass windows and doors are the pure features in a generally brick wall (interior and exterior) structure. The interior consists of a general banking area for 6 to 8 tellers, an office area for not more than 2 offices, a conference room for a maximum of 10 people and an expansion area on the second floor. The building is fully air-conditioned and incorporates a drive-up teller's window. $\$ 90,000$ was the approximate total cost of construction including all vault equipment and furnishings.


NORTH ATTLEBORO JUNIOR HIGH SCHOOL, NORTH ATTLEBORO, MASS.
General Contractor - Not Yet Awarded


The above rendering pictures a 400 pupil Junior High School with expansion to 600 consisting of 10 regular classrooms, two special classrooms for handicapped students, an art room, a home making room, two science rooms, a library, an auditorium with seating for 250 plus stage for musical instruction. The cafeteria can feed 200 per shift complete with kitchen and related facilities. The divisable gymnasium has no seating but does have attached locker rooms with showers. The one story building will include an attractive inside
courtyard on a rather pleasant site. The total appropriation of $\$ 991,000$ covers an estimated construction cost of $\$ 794,000$, site development of $\$ 20,000$ with furnishings and equipment estimated at $\$ 100,000$. The total floor area will be 52,000 square feet. Haldeman \& Jacoby, architects, report that the structural description will be similar in most aspects to the Marshfield High School as described on pages 9,10 , and 11 of this issue.


## RESIDENCE FOR

MR. \& MRS. MAYNARD WELLER, NORWELL, MASS.

## General Contractor

Harry S. Cook, Mansfield, Mass.
It is quite apparent that the office of Haldeman \& Jacoby has devoted as much proportionate effort and talent to the design of this $\$ 40,000$ home as to any of their million dollar projects. This writer can best describe his impressions by stating a definite desire to abide in a residence of equal design. Well situated on a knoll overlooking the Marshfield Hills, the building is of Bates quarry stone walls, as shown. Remaining walls are of stud construction and red color clapboards. The ceiling is cathedral type with heavy timber supports exposed and red cedar tongue and grooved decking. The interior consists of living room, dining room, kitchen, utility room, two bedrooms, two bathrooms, and a den. There is also a two-car garage and a basement.


The University of Hartford today is a sprawling, scattered institution, its classrooms separated by distances that can be measured in miles. The campus is a campus in name only, for it encompasses nine different locations in Hartford alone where students and faculty conduct the vital processes of education.

## BIRTHPLACE OF THE UNIVERSITY OF HARTFORD

Main Street at century's turn was site of Hartford Art School's first classes in Cheney Building, now Brown-Thomson.


As a cure for this ailment and as a giant step toward the future, an imposing, carefully designed series of buildings will soon rise on a tract of land located on Bloomfield avenue-the new location of the University of Hartford.

Heads of the University's three schools, Hillyer College, Hartford Art School, and Hartt College of Music have been forced to make drastic changes to keep up with the ever-increasing number of students enrolling each year.
Plans call for the construction of five buildings in the
i mmediate future, with the ultimate expansion program including some twenty school buildings. To underwrite the cost of the more than $\$ 50,000,000$ project, businessmen, officials of church and state, and educators from various points throughout the State of Connecticut formed a founders fund which has already raised a substantial amount.

In the fall of 1960 University of Hartford students may look forward to using the General Classroom Building-first to be built on the 150-acre campus. The building's ground floor will house the Department


## BIRTHPLACE OF THE

 UNIVERSITY OF HARTFORDModest house at 220 Collins Street was first home of Julius Hartt Musical Foundation, including Hartt College of Music and Julius Hartt School of Music, when formed in 1920.




BIRTHPLACE OF THE UNIVERSITY OF HARTFORD
Hillyer College moved from rented quarters to YMCA building, Ford and Pearl Streets, when it was built in 1890s.
of Education, reading, demonstration, practice, lecture and seminar rooms; also a methods laboratory, reading clinic, tests and measurements laboratory, clinic laboratory and offices.
Other first phase buildings will include the Business Administration Building, Science Building, Art School Building, Music and Auditorium Building.
Ultimate construction will include an electronics building, exhibition building, faculty club, behaviorial sciences building, life sciences building, amphitheater, chapels, library, and other related buildings.



## STATEMENT OF

Ostrom Enders, president, Hartford National Bank; Charles J. Lyon, president of the Society for Savings; Lester E. Shippee, chairman of the board, Connecticut Bank and Trust Company.

The decision of the state construction industry to underwrite costs of the engineering and mathematics wing in the University of Hartford's new Engineering and Science Building is a very great service to the people of Connecticut.

We in the field of banking are in daily communication with every phase of manufacturing, construction, insurance, commerce and all other segments of the business and professional world.

From each area of the economy, we hear of the need for more engineers, scientists and skilled technical personnel.

The construction industry's proposed gift of a wing in the University of Hartford Engineering and Science Building, with the 16 laboratories, lecture halls and other units estimated to cost $\$ 300,000$, is an investment in Connecticut.

It will be a memorial to the foresight of the construction industry-general building, home builders, electrical contractors, construction equipment dealers, sub-contractors and suppliers.


In the University of Hartford Development program plans call for the Three Faiths Chapels to be built on a small island as in the photograph above.

FOUNDATION FUND COIMMITTEE


Here are the co-chairmen with Mr. A. I. Savin, president of the Edward Balf Company. From left to right: Ture B. Holmes, Sr., president of T. B. Holmes \& Sons, Inc.; Sydney R. Pomer, secretary-treasurer of Associated Construction Co.; Mr. Savin; Theodore D. Bross, president of Theodore D. Bross Construction Corp.; and Irving R. Stich, president of I. R. Stich Associates.

MASSACHUSETTS BLUE CROSS-BLUESHIELD BUILDING BOSTON, MASSACHUSETTS


Rising to completion in the heart of Boston is the Blue Cross-Blue Shield Building. In reporting the progress of construction our attention was immediately drawn to a unique precast facing material, commercially known as MO-SAI, which was being installed on the poured concrete columns.

ARCHITECTS:
ANDERSON, BECKWITH \& HAIBLE and PAUL RUDOLPH

GENERAL CONTRACTOR:
GEORGE A. FULLER COMPANY

Upon investigation we were informed that this structure is the first of its kind in New England in which this material has been extensively used, together with a new method of anchorage.
The building was obviously designed and specified with this material in mind. Therefore, the forms for precasting were constructed to precise architectural detail drawings. The MO-SAI slabs are $2^{\prime \prime}$ to $21 / 2^{\prime \prime}$ thick, and the carefully thought-out anchor system consists of steel straps welded to the wire mesh reinforcing. The straps are then ramset to the concrete columns, holding the slabs firmly in place. All joints are then caulked with Thiokol compound and neatly pointed and finished.
The fabrication and installation of the MO-SAI slabs is being done by CAMBRIDGE CEMENT STONE COMPANY of Allston, Mass., in joint venture with the DEXTONE COMPANY of New Haven, Connecficut.





Our visit to the Cambridge Cement Stone Company Plant proved to be extremely interesting. We learned the precasting work was accomplished in rigid forms and the slab sections are composed of white cement over galvanized wire mesh.

The translucent quartz aggregate is surface exposed by an etching process to provide a very beautiful, sparkling finish.

The etching process also minimizes the cement exposure and according to the manufacturer this adds a highly self-cleaning and weatherresisting result.

One of the most unusual design factors apparent to us is the flexibility of these slabs which allowed the heating and ventilation duct work to be hidden within the facing material. The detailed section drawing with the accompanying series of photographs helps to explain this method of floor to floor duct work installation. This method certainly opens an entirely new concept in concrete construction.



## ST. MARK'S EPISCOPAL CHAPEL

University of Connecticut, Storrs, Connecticut

$\bullet$

## ARCHITECT:

HUNTINGTON \& DARBEE, Hartford, Connecticut

ENGINEERS:
Structural-A. J. MACCHI, Hartford, Conn.
Mechanical-FRED S. DUBIN ASSOCIATES, Hartford, Connecticut

GENERAL CONTRACTOR:
JOSEPH KOVAROVICS, Mansfield, Connecticut


This chapel designed to serve the Episcopal students at the University of Connecticut was built on a low swampy site and fill was brought in to carry out a split level scheme. Tapered side walls accent the attractive built-in bell tower as illustrated in the night-time photograph. The spread cantilever type canopy over the front entrance completes the streamline feeling brought out in otherwise simplified design.


The roof of dark green tile is studded with plastic skylights and 6 -inch glass was set between the vertical members of the steel trusses, all adding up to an unusual natural daylight effect. Artificial lighting is supplied by fluorescents set below the rail plus overhead downlights on the catwalk and indirect reflector lights at the base of each truss.

The set-out brick design and the elongated crucifix at the altar wall provides just the right amount of eyecatching detail. Black rubber tile flooring coupled with white painted ceilings and walls supply a dramatic color scheme to the interior.

A total of 5800 square feet includes the chapel with a seating capacity of 180, sacristy and chaplain's office on the upper level. The lower level contains the auditorium, lounge, lavatories, and kitchen with the narthex on an intermediate level. The rectory shown in the floor plan is to be added as an east wing.

## MATERIALS

Roof tiles-LUDOVICI-CELADON. SkylightsWASCO FLASHING COMPANY. Steel-KILPATRICK IRON WORKS, Manchester, Conn. Bell ringing mechanisms-I. T. VERDIN COMPANY. Roofer-SOUTHERN NEW ENGLAND ROOFING COMPANY, Hartford, Connecticut



## WHDH RADIO \& TELEVISION BUILDING NEARS COMPLETION

General Contractor: M. SPINELLI \& SONS COMPANY,
Cambridge, Massachusetts
"Ultra modern" is the word for the new WHDH-TV building now rising to completion on Morrissey Boulevard in Boston. At a cost of over $\$ 1,000,000$ the popular Boston HeraldTraveler newspaper is constructing what will undoubtedly be the most up-to-date housing for combined radio and TV broadcasting facilities in all New England. Consisting of a basement level and two floors the structure will contain two large TV studios and four radio broadcasting studios.


SECOND FLOOR PLAN -

Numerous control rooms, a restaurant and lounge for employees, programming directors and sales offices, technical laboratories and work shops for art and music


- FIRST FLOOR PLAN.
departments are located in strategic spaces for well planned traffic flow. Reinforced concrete foundations on piles support brick and glass exterior walls backed by cinder block. Interior partition walls are of cinder block, brick, concrete and steel. All ceilings and walls of broadcasting and TV studios are acoustically treated.

For further prevention of outside sound transmission the roof was designed of concrete plank and insulated. All air conditioning, ventilating and lighting was specially designed for radio and television use. The operation will move to their new quarters in late October of 1959.

WHDH-Principal Sub-contractors and Manufacturers: Structural steel, miscellaneous metal, non-ferrous mefal-WEST END IRON WORKS, Boston, Mass. Waterproofing, dampproofing and caulkingA. BELANGER \& SONS, Cambridge, Mass. Glass, glazing and aluminumSALEM GLASS COMPANY, Salem, Mass. Ceramic tile, marble and ferrazzo-ZANI TILE \& TERRAZZO COMPANY, Chelsea, Mass. PainfingH. PIKEN \& COMPANY, Boston, Mass. Plumbing-FRANK SULLIVAN COMPANY, INC., Boston, Mass. Heating, Ventilating, Air ConditioningTHOMAS G. GALLAGHER, INC., Somerville, Mass. Resilient Flooring -APPALACHIAN FLOORING COMPANY, Somerville, Mass. ElectricalM. B. FOSTER ELECTRIC COMPANY, Boston, Mass. Enamel PanelsBETTINGER CORP., Milford, Mass. Soundproofing \& Acoustical-JOHNSMANVILLE SALES CORP., Boston, Mass. Cinder Block-MASS. CEMENT BLOCK COMPANY, Medford, Mass.



The Holy Imperial Prince, Kung Fu Tsze, known today as Confucius. A philosopher of rare attainments, he believed that the virtuous would be rewarded and the evil punished. He sits in majesty just beyond the foyer of the Salada Building.


The foyer of the Salada building, which exhibits some of the finest oriental casting in existence. Shown here are the famous FooDogs which originally guarded a Peiping Temple and are said to be the largest pieces of cloisonne ware in the world. Standing seven feet high, they were made during the Ch'ien Lung Dynasty in 1736-1796 A.D.


NORDBLOM TRANSFORMS

## BOSTON LANDMARK

One of Boston's best known landmarks, the historic Salada building, located at the corner of Stuart and Berkeley streets, will be transformed into a modern office building, it has been announced by the Nordblom Company, Boston Realtor.

The 10 -story building was purchased by Thomas H. Diab \& Son, of 153 Berkeley street, Boston. Although the result of the transformation will offer clients a "modern working office," the structure's unique old-world charm will not be forsaken. The building's great bronze doors, designed by the noted English sculptor, Henry Wilson, will be retained. Formerly headquarters for Salada-Sherriff-Horsey, Inc., one of the leading manufacturers of tea in this country, the building boasts one of the finest collections of oriental masterpieces.

The new office building will provide a 10th floor Penthouse for exclusive business luncheons and conferences; year-round air conditioning and humidity control; high-level, low-glare fluorescent lighting; acoustic ceilings, decorative tile floorings, electronic control elevators, attractive service units, constant control heating, complete sprinkler coverage, and conscientious maintenance services.

Architectural and decor consultants will assist the individual client in planning layout design to fit particular needs and desires. In addition, the building has access to the subway, intra-city artery, parking garages, and is close to downtown Boston. Salada-Sherriff-Horsey, Inc. has moved into its new facility on Route 128, Woburn. Remodeling on the original building has already been started.


Hubert M. Tibbetts, Vice President and General Manager of the Salada-Junket Division of Salada-Sherriff-Horsey, Inc., explains the origin of the company's famous Buddha to, from the left, Rodger P. Nordblom, Vice President of Nordblom Company, Boston Realtors and brokers in the sale of the Salada building, Thomas A. Diab, new owner, his son, Thomas J. Diab and Ernest T. E. Griffith, Director of Operations of the Salada-Junket Division. The Buddha is claimed by experts to have come from a temple at Lo-Yung, an old capital of the Sung Dynasty. The statue is made of fossilized wood and though obviously made many centuries ago, the exact date is still in doubt.


Sculptor, Bertram A. Kilgore

## S C U L. P T O R

## Bertram A. Kilgore

HINSTON ROAD , WOBURN, MASS.


The relationship between architecture and sculpture is very close in that they are both concerned with common technologies. Both are engaged in an effort to develop an environment which is not wholly utilitarian. In order to balance this equation, collaboration must exist.

For the architect who is concerned with this matter, there are sculptors interested and qualified to do work of an architectural nature. This requires, in addition to proper technology, an attitude towards service to the community rather than individual expression.

There is a desire among architects to use the services of qualified artists, yet a reluctance among building committees and others concerned with the financial responsibility to support his attitude. The prevailing belief that these services are costly is erroneous when considered in proportion to total construction cost.

We constantly need to remind ourselves of the fact that in any truly collaborative effort there are no individual stars-each has an important function to perform and that the absence of one from the others becomes obvious.


WILLIAM J. TARKY ELEMENTARY SCHOOL Woburn, Mass.
Edward Tedesco, Architect

This is an example whereby through the use of materials already used in the construction of the building, a decorative and meaningful design was brought forth.
It may be noted that the brick projections read as non-objective formations at first glance, then after further study develop into a group of children at play.
The necessary collaboration between Architect, mason and sculptor is evident here.

MANCHESTER BOYS' CLUB
Manchester, N. H.
Koehler \& Isaak, Architects
MATERIAL: Steel $1 / 2^{\prime \prime} \times 2^{\prime \prime}$ Bar Cold Rolled Steel, 2" projection from wall The three rectilineal figures contained within the keystone (which is the emblem of the Boys' Club of America) provide a note of identity to this building.
The foresight by the architect to light this area, and the fact that this area was planned with the same consideration as the inside wall with the basketball net, is responsible for the effectiveness of the sculpture and its relationship with the building.


CONTRACTORS
Boys Club
DAVISON CONSTRUCTION COMPANY
Manchester, New Hampshire
1 st Congregational Church, Chapel Addition
L. H. SHATTUCK COMPANY

Manchester, New Hampshire
U. N. H.

HARVEY CONSTRUCTION COMPANY
Manchester, New Hampshire
Tarkey School
D. GUSCHOU COMPANY

Boston, Massachusetts


FIRST CONGREGATIONAL CHURCH
ADDITION
Manchester, N. H.
Koehler \& Isaak, Architects
MATERIAL: Copper Sheet and Bar, 6" projection from wall.
The descending dove, an old and meaningful symbol of peace, has been shown here descending from a cloud dispensing its intent to the seven different continents symbolized by the seven rays of the nimbus. This side street area with surrounding willow trees lends itself to contemplation.

NEW LIBRARY
University of New Hampshire
Durham, N. H.
Tracy \& Hildreth, Architects
MATERIAL: Aluminum Bar Extrusions
The six panels on this library are the result of proper planning. An ideal situation existed here. Most important, the University desired sculpture and provided for it financially.
The architect wanted sculpture and designed areas conducive to sculptural application. The results are produced by the efforts of the sculptor with the cooperation of the building committee.

# Bumen DIGEST <br> AS COMPILED BY M. PATRICIA WILLIAMS, ASSOCIATE EDITOR 

## CONSTRUCTION PACES ALL U. S. INDUSTRIES

It's a pretty safe bet that if the average American were asked to name his country's biggest industry, he'd guess at one of the following: autos, farming, petroleum, textiles or electronics.
And would he be right? Not by a long shot. For the nation's number one industry is the construction business, a $\$ 60$-billion a year colossus which may skyrocket to $\$ 250$ billion by 1975 .
The construction industry is a phenomenon unto itself in the U. S. economy. It is basic, yet it is varied. No industry can function without it. What'll it be? A 60 -story skyscraper or a suburban five-room house? Clawhammer or giant crane? Simple plan or pounds of elaborate blueprints? No project is too small or too large. Construction workers adapt to the job at hand.
And there have been plenty of jobs. Since World War II, for example: - The construction industry has handled $\$ 400$-billion in projects. Another $\$ 150$-billion went into maintenance and repairs.

- Construction workers have put up more than 13-million homes, built half-a-billion miles of highway, put the finishing touches on $\$ 100$ billion worth of business facilities. - The construction industry has used 400 -billion board feet of lumber, $35-\mathrm{million}$ tons of fabricated structural steel, almost four-billion barrels of cement.
In any given year, the construction industry accounts for 15 per cent of all goods and services produced in the United States. It employs sixmillion people, provides off-site jobs for another 20 -million.


## Prospects Are Good

Construction is one of the most rapidly changing industries - an industry which reflects techmological progress and changing patterns of life and employment. Thus it has adapted itself from building railroads to building streets, from building roads to building networks of national super-highways and jetage airports.
What about this year's activity? From all indications, the bulk of construction will be in residential, highway and utility projects.

In 1958, highway construction cost $\$ 5.3$-billion. By 1965 it should reach an annual volume of $\$ 11$ to $\$ 12$ billion.
Single family homes are expected to decline slightly percentage-wise, but will be more than offset by sharp gains in multiple family dwellings.
Buildings demolished to pave the way for new highways must be replaced. The same highways must be served by yet-to-be-built projects. New residential areas are going to need utilities and water supplies.
These are but a few of the reasons why the construction industry looks ahead with confidence. Things look bright indeed for the nation's biggest, most dynamic business.

## GORHAM STATE TEACHERS college

Concrete roof and floors of Gorham State Teachers College are being lifted into place hydraulically after previously being poured one atop the other on the ground. This is called "lift-slab", construction. These $62 \times 80$ foot roof and floor slabs weigh about 600,000 pounds each, including 30,000 pounds of reinforcing steel. That's about 5000 square feet of nine-inch-thick concrete apiece. Yet the operation is controlled by the turning of a few valves. This is a revolutionary method of construction and has spread throughout New England and the rest of the country. Architect, Stanley S. Merrill, Auburn, says the big savings comes in not having to build conventional forms and beams and pour concrete aloft. Doing the work at ground level is easier and faster. The Lift Slab Corporation of New. England is doing the slab hoisting for ANTONIO CIMINO, Portland, general contractor.

## EXPANSION

ALDERMAN \& MacNEISH, Architectural firm, is expanding its office in West Springfield, Mass. A $\$ 12,500$ addition will be made to the rear of the present building. Among the buildings designed by this firm is the present Holyoke High School and the new South Hadley High

School. The firm recently received a contract to plan two new elementary schools for the western part of Holyoke.

> Ambrose A. Browne, 64 , for 45 years an architectural engineer in the offices of Krokyn \& Browne and for the past two years with his son, W. Chester Browne, died July 25 , at his son's home, 379 Atlantic Avenue, Cohasset. Mr. Browne was graduated from Wentworth Institute and the Boston Architectural Center.

## DODD JUNIOR HIGH SCHOOL

The Bertram F. Dodd Junior High School has been accepted by the building committee. A final inspection showed that the site work has been completed, including planting, and seeding. Interior construction has been finished according to the contractor. Final cast figures presented by architect Gordon MacMaster of Cheshire indicate that the total cost of the project is $\$ 840,000$. The costs were kept to $\$ 11.93$ a square foot compared to an average of $\$ 14.37$ for other public secondary schools throughout the state. The capacity of the school is 724 pupils. The contractors are MASSACOE BUILDERS of Simsbury.

## BUILDING CODE APPROVAL OF PLASTIC DESIGN

The Institute, through its representatives on the committees of the national codes such as BOCA and NBFU etc., has started the formalities of acceptances by those codes. Many smaller towns, particularly in Connecticut, are governed by the national codes.
Portland, Maine; Springfield, Massachusetts; New Haven, Connecticut the code automatically accepts recommendations for design procedures which have been made by nationally recognized authorities. Plastic Design is accepted in these cities.
Boston, Massachusetts; Providence, Rhode Island the code accepts recommendations for design procedures which have been made by nationally recognized authorities subject to the approval of the building commissioner. Plastic Design will be accepted on a job to job basis upon submission for approval and after a review by a competent engineer retained by the building commissioner.

NEW HUSSEY PLANT

Plant Expansion - Fast progress is the keyword in the construction of a new 16,000 square foot warehouse, paint shop, and garage for Hussey Manufacturing Company, Inc., of North Berwick, Maine. The building of steel and concrete construction is expected to be in use by late July. Work on the project began in April. The building will enable more efficient production of fabricated structural steel products.


## FURNITURE WINS DESIGN AWARD

 AWARD}Judged "outstanding for its good design, as based on its form, function, originality and good value," Steelcase 1300 line desks and reception room tables were recently cited as winners of a 1959 Design Award by the National Industrial Design Council of Canada. Also selected for "excellence in design" was a 1231 Flight Line secretarial chair.


The awards were presented to General Manager Fred A. Bell, of Canadian Steelcase, by Alan Jarvis, Director of the National Gallery of Canada, at the annual award dinner held in Toronto on March 23.
Design awards are made each year by the Council, whose membership includes manufacturers, retailers, designers and representatives of consumer and government organizations devoted to encouraging good design in Canadian products. Business Equipment Corporation recently installed the new Steelcase No. 1300 series furniture in the Godfrey L. Cabot, Incorporated offices in the new Travelers' Insurance Company building at 125 High Street in Boston. The Interior Architect was Rodgers Associates of New York City.
This furniture is also on display in the Business Equipment Corporation showroom at 153 Federal Street in Boston.

## DIED

Mr. Patrick T. Jackson, 87, retired textile executive and founder of the American Sisalkraft Corporation, Attleboro, Mass., died June 22 at Boothbay, Maine.
After graduating from Harvard College in 1893, Mr. Jackson was associated with the Bay State Cotton Corporation and the American Tire Fabric Company. In 1920, he founded the American Reenforced Paper Company, which merged with its sales subsidiary, The Sisalkraft Co. in 1954. He served as President of the paper company until 1946 and as Chairman of the Board until his retirement in 1958. During his term of office, he sponsored the establishment of manufacturing affiliates in England, Australia and New Zealand.

## NEW COMPANY FORMED

The D. H. Eskin Co., Inc. has recently been formed for the sale and distribution of builders' hardware and specialties. This company is composed of all of the former personnel of the contract hardware department of the Reliable Hardware Co. It will be located at 1255 Tremont St., Boston 20, Mass. The telephone number is HI-2-8700. The D. H. Eskin Co., Inc. has assumed all of the obligations and contracts of the contract department of the Reliable Hardware Co.
David H. Eskin, A. H. C., is president and Waller W. Elliott, Jr., A. H. C., is vice-president. Ralph E. Rodin is sales representative. Jack Rusk and Robert Andrews are also in the sales department. All of these men have had a great many years' experience in servicing architects and contractors.
The D. H. Eskin Co., Inc. will continue to distribute the same lines including Yale, Stanley, Von Duprin, Glynn-Johnson, etc.

## CARPENTERS SET FOR 1961 MOVE TO WASHINGTON

WASHINGTON, D. C.-The nation's capital is adding yet another handsome building to the galaxy of public and private structures that have enhanced Washington's reputation as "one of the world's most beautiful cities."
It's the new national headquarters of the United Brotherhood of Carpenters and Joiners of America now under construction practically within the shadows of the Capitol.

## Monumental Design

The building when completed early in 1961 will be monumental in design, faced with Georgia white marble on all sides, the traditional outward appearance of most of Washington's finest structures.
Wood or wood products, in keeping with the heritage of the Carpenter's Union, will be used wherever possible in the new building. The grounds surrounding the edifice will be suitably landscaped.
Purchase price of the 60,000 square foot block on Constitution Avenue was approximately $\$ 2$ million, according to Maurice A. Hutcheson, General President of the Brotherhood. Architect for the building is the firm of Holabird, Root and Burgee, Chicago.
The union's national headquarters has been in Indianapolis, Ind., since 1903. Reason for the upcoming move to Washington, Mr. Hutcheson says, is "to, establish closer liaison with government officials on labor relations matters."

## THE STRANGE SCIENCE OF SEEING

Through telescopes, it's now possible to see stars that are millions of billions of miles away. Through microscopes, we can take pictures of particles so tiny that a million billion of them, clustered together, would be invisible to the naked eye. We've devised electronic eyes, even supersonic eyes, but in spite of all the progress, one great question is still not fully answered: "How much light is required for seeing?"
Architects and interior decorators have to guess at the answer all the time. How much light, for example, should come from the fixture on the kitchen ceiling? With too little light, things become somewhat harder to find. The likelihood of dropping a dish or knocking over a bowl increases. Without the full amount of light she needs, the housewife subconsciously becomes annoyed - and her annoyance rises to the level of consciousness if she stays in her kitchen long enough.
But too much light can be just as bad-and have the same effects. The room takes on the appearance of an excessively light photograph. There's too little distinction between light and dark. Glare rankles the nerves. Those who plan lighting for store windows face the same problem. Use too little light, and people won't notice the wares; too much and the wares will be hard to see.
A major advance in the seeing science came with the development of the foot-candle, today the most widely accepted unit of light measurement. A foot-candle, logically enough, is the amount of light produced by a standard candle at a distance of one foot. So -how many foot-candles do you need? "As much as you can get without burning your hair," was the answer in days when the fire was the sole source of indoor illumination. A variation of this answer applied

to the gaslight and early electric days. But soon, when it became possible to get more than enough light, seeing scientists answered the question based on the size of the detail to be seen. Knitting, for example, is a small detail relative to washing clothes.
A major breakthrough in the science of seeing came in the late 1920's when the team of Cobb and Moss recognized that, in addition to size of detail, other factors had a bearing on the amount of light you need:

1. How much contrast is there between the detail and the background? You need somewhat more light to wash white clothes in a white tub than you need for blue jeans in the same tub. If you're knitting a black sweater, you need more light if you're using black needles than you need if you're using white ones.
2. What's the time interval of seeing? The red traffic light may be bright enough now, but if it were to flash on for just an instant - instead of remaining litit would have to be far stronger.
During the years since Cobb and Moss stated their findings, many other men contributed to determining optimum illumination levels. Names like Luckiesh,
(Continued on page 35)

## revolutionary new structural * masonry units...

Structural - Edward True, Cambridge, Massachusetts; Mech. \& Elec. - Thomas Worcester, Boston, Massachusetts; Sanitary Morgenroth \& Associates, Boston, Massachusetts.


## ELEMENTARY SCHOOL READIED FOR ACCEPTANCE



GENERAL CONTRACTORS: BRICK \& CONCRETE CONSTRUCTION CORP. DEDHAM . MASSACHUSETTS

It is expected that the Town Building Committee will accept the 20room Acton Elementary School in the very near future. The school will be used for the education of fourth, fifth, and sixth graders. It is believed that 16 of the 20 rooms will be occupied when the school opens in the fall. The school was originally authorized at the regular town meeting held in March of 1957. The archifects were engaged and the bids were open in the Fall.

The low bidder was BRICK AND CONCRETE CONSTRUCTION CORPORATION of Dedham, Mass. In addition to the 20 rooms, the new
school has a play-room, auditorium, cafeteria, kitchen, and the usual administration rooms.

This " $A$ " unit is unique in its planning and the design of the roof structure, which consists of two independent folded plate reinforced concrete slabs. The folded plate slabs are supported on both ends by means of structural steel $Y$ frames, the columns of which bear on footings. The folded plates are cantilevered on both ends and sides imparting to the viewer the feeling that this roof slab is floating over the enclosed space of the building as defined by the walls.

The " $B$ " unit is a two-story building with twenty classrooms. The walls consist of Brick and Glazed Tile. Fenestration consists of Aluminum Windows, and Porcelain Enamel panels have been employed in a number of locations.
Linking the two buildings together is the bridge. This structure consists of a reinforced concrete slab supported on beams and lally columns, with a metal roof deck over.
Curtain walls of metal and glass, with a combination of Porcelain Enamel Panels give this structure a truly handsome and distinctive appearance.


## KAWNEER

The Sealair line of aluminum commercial windows manufactured by Kawneer Company, Niles, Michigan, has been completely reengineered and expanded. The line now includes projected, casement, classroom, top hinged and pivoted windows.
In the new line of Kawneer Sealair Windows, all vents have double
weatherseals. Vents and fixed lights can be wet or dry glazed with vinyl from either inside or outside. All windows have flush interior and exterior surfaces and are available in either solid or tubular sections. Hardware is solid white bronze or stainless steel with no exposed fasteners. No screws or fastenings are visible on entire window.
Standard finish is etch and lacquer, with famous Kawneer Alumilite and lacquer finish as an option at very slight additional cost. This is possible because of Kawneer's extensive alumiliting facilities and high volume production.
All Kawneer Sealair Aluminum Windows are specially designed for use with curtain wall systems as well as conventional masonry openings.
Product literature is available on Kawneer Sealair Windows.
For further information, specifications and descriptive brochure on Kawneer Sealair Windows, please contact R. A. Mattson, Kawneer Company, Niles, Michigan.

ARCHITECT - L. W. Briggs Associates, Inc. Worcester, ELECTRICAL ENGINEER - Francis G. Shephard, Worcester, general Contractor - John Capobianco, Boston, Mass., ELECTRICAL CONTRACTOR - Ostrow Electric Company, Worcester, Mass.


Shown in the rendering above: Shrewsbury Junior-Senior High School (largest in Central Massachusetts) is presently nearing completion.

Entire Electrical Installation by Ostrow Electric Company


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## UNIVERSAL-RUNDLE

The new Universal-Rundle Cathleen is of true vitreous china and was designed for cabinet or built-in installations.
The Cathleen features a deep basin with anti-splash rim. A safety-edge extends around the entire rim. It also has a concealed overflow drain and twin integral soap dishes.
This new lavatory is available in U/R's Arctic White and $\operatorname{six} \mathrm{U} / \mathrm{R}$ decorator colors. Available in two sizes, $20^{\prime \prime} \times 18^{\prime \prime}$ and $21^{\prime \prime} \times 18^{\prime \prime}$ and with either $4^{\prime \prime}$ or $8^{\prime \prime}$ centers.


The vitreous china of the Cathleen is, of course, colormatched, and of the same high quality as other $\mathrm{U} / \mathrm{R}$ vitreous china fixtures. U/R's patented "Hi-Fired" process assures super-hard surfaces that are highly resistant to chipping and scratching, as well as extra easy to clean.
The new Cathleen is a welcome addition to U/R's popular line of counter-top lavatories.
More and more plumbing contractors, architects, and builders are designing bathrooms with U/R countertop lavatories. Home owners and buyers want the convenience of counter-tops for better grooming comfort. For complete details on the Cathleen and other $U / R$ lavatories, write for catalog to Advertising Department, Universal-Rundle Corporation, New Castle, Pa.

## CARLYLE QUARRY TILE

Ancient cypress trees form the background for this modern structure with its open stairs and quarry tile walls. The Student Union Building at Southwestern College, Lafayette, La., was designed by Burk, LeBerton \& Mantia, Architects \& Engineers, to retain its classic beauty with minimum maintenance. Outstanding feature shown here is the use of Carlyle quarry tile on exterior walls. The $9^{\prime \prime} \times 6^{\prime \prime} \times 34^{\prime \prime}$ tiles are set vertically, with a random placement of Cinnamon and Russet colors giving a soft contrast to the sharp lines of white concrete.

(Continued from page 32)
Weston, and Blackwell became well known as experts. Recently, Dr. H. Richard Blackwell, Director of the Vision Research Laboratories, University of Michigan, developed a new method for determining the illumination required for various seeing tasks. At the core of his method is his "Concept of Visual Capacity"a concept that takes into account, in figuring out how much light is needed for a given task, how long the eye must rest on the thing being seen. If an eye can see and recognize something in a second, it has the capacity of assimilating four bits of information in one second. One APS (assimilation per second) means that the eyes take one full second to see the task, and 10 APS means that it can see the task in one-tenth of a second (or, to put it in another way, the eye can see a succession of ten of the things in one second).
Thanks to Blackwell's concept, it is now possible to be much more accurate in determining how much light is needed for a given seeing task. Blackwell found, for example, that reading the writing of a group of sixth graders who used a \#2 pencil required 63 foot-candles for five APS. To read the writing of a stenographer who uses a \#3 (lighter than \#2) pencil, Blackwell found that 76 foot-candles are needed. And to read a fourth carbon copy of a letter requires 133 foot-candles.
But these seeing tasks are easy compared with some tasks. To notice a brown stain on a gray cloth, for example, took 1100 foot-candles. A brown spot on a red necktie required 2400 foot-candles! And in a textile mill, spotting a broken thread on a spinnerbobbin required light equivalent to that of 2900 candles one foot away!
Who cares about these findings? Almost nobody. Yet, almost everyone will benefit. Schools will be better lighted, thus promoting education and saving youthful eyes. Factories will also have more correct levels of illumination, boosting both safety and production. Stores will be more attractive and sell more goods. Offices will be disrupted with fewer errors, homes by fewer arguments due to eye-strain.
These predictions of better things to come are no pie-in-the-sky daydreams; applications are already under way. The Illuminating Engineering Society, for example, has already published the new, more accurate figures indicating required levels of illumination. And now that it's known how much light should be cast, for example, on the desk of a school child, science has even devised a method for maintaining that level of light constantly-automatically boosting the output of electric light when natural light declines, decreasing electric light as natural light increases. Designed by Superior Electric Company, the device is called a Lumistat and actually does with light what a thermostat does with heat! The complete system is known as the Luxtrol Automatic Light Controller.
Of course, much research work in the lighting field remains to be done. Still unanswered are such questions as how much extra light is needed for older eyes . . . what's the best way to light our roads for peak seeing efficiency .. . how can we answer, with even greater accuracy, the question of how much light is required for a given task?
Of one thing, though, we can be sure! Thanks to Moss and Cobb's recognition of what determines how much light we need, thanks to Blackwell's concept and careful supporting experimentation, thanks to Superior Electric's ingenious Lumistat and Luxtrol Automatic Light Controller-and thanks to scientists, who will provide us with the advances of the future-we will soon be seeing more attractive sights . . . through eyes that are less often sore.


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## MAGNALUM "CLOSET BAR"

A new aluminum closet bar that has an entirely unique method of keeping clothes fresh and pressed has been introduced nationally by Magnalum Products, of Miami, Florida.
Simply called "Closet Bar", the new unit includes hidden nylon slides and aluminum hooks that eliminate snarling or binding of hangers. Clothes are automatically spaced evenly and neatly along the bar, and one hook may hold as many as three or four hangers.


Hooks are open on the side to allow easier hanger placement, even in the dark.
Operation of Magnalum's Closet Bar is completely quiet, due to friction-free movement of the nylon slides. The slide-and hook principle, introduced earlier by Magnalum on its nationally distributed Shower Bar, is used exclusively on that company's products.
The bar, itself, is made of heavy gauge extruded aluminum that will not rust, chip or split. It includes a new, attractive striated design for maximum eye appeal. For the builder's and consumer's convenience, Magnalum's single unit can be used for both major installation types:
A self-supporting Closet Bar which is held securely at the ends by aluminum flanges fastened to facing closet walls.
Or, where undershelf installation is desired, the company supplies aluminum brackets which fit securely over the main bar unit and fasten to the shelf above yet permit free travel of all hooks.
As an extra space-saving measure, Magnalum Closet Bars may be double-decked through use of a selfsupporting unit below an undershelf bar in the same closet. By placing shirts, blouses, or children's clothing on the lower bar, the closet's usable space is actually doubled.
The Magnalum Closel Bars come complete with bar, hooks, screws, and flanges or brackets. Sample sections and complete literature on the new Bar may be obtained by writing the company at 2460 N. W. 78ih St., Miami 47, Florida.

## MASONITE

Distribution of the Masonite Panelok system, a method of modernizing old walls and making them useful for display and storage, began in April through lumber dealers.
The system, a new concept for interior walls, consists of Masonite hardboard panels $2^{\prime}$ wide and $8^{\prime}$ high, held vertically against steel splines which are barely visible between the joints, and Adjust-a-bilt fixtures which fit into the splines to hold a variety of objects including desks, shelves, dressing counters, cabinets, magazine racks, pictures, closet storage items and other objects.

Four shades of walnut - Antique, Champagne, Rose and Misty - are offered in the grain-imprinted hardboard Royalcote line. They come with random grooves or ungrooved. In addition, plain, unfinished panels are offered. After installation, the grain-imprinted panels require only waxing, or a coat of lacquer, shellac or clear varnish to protect their finish. Natural surfaces may be primed and painted, enameled or lacquered.
Panelok is designed especially for modernization but may be used also in new construction. It received national attention recently in publicity on the NAHB Research-Masonite house at Knoxville, Tenn.
Sales in a midwest test area demonstrated that the Panelok system is ideal in residential and commercial installations, including offices, showrooms, various types of retail stores and businesses. The system is especially helpful in making available more room in closets. Proper arrangements of accessories can add 50 per cent more storage capacity to a closet, a Masonite spokesman said.
The accessories fit easily into the slots which appear at one-inch intervals in the splines. They may be moved at will from one wall to another, or from one location to another. Since the hidden splines extend from floor to ceiling, they offer a wide range of heights for the homemaker's or retailer's selection.
When applied over existing walls, Panelok is fastened to $1 \times 2$-inch horizontal furring strips of sound lumber spaced $16^{\prime \prime}$ o.c.
The start may be made at a corner or end of a wall by positioning a single wing lockstrip so it is plumb and fastening it with special nails provided. Slide the panel onto the lockstrip. Insert the next lockstrip into the panel, locating it $24^{\prime \prime}$ o.c. from the first one, and use a level to align the slots on the next lockstrip, which must be level for installation of accessories. Fasten the lockstrip and install subsequent panels. The Panelok panels are $237 / 8^{\prime \prime}$ wide to fit loosely between the steel splines. In new construction over open framing, the Panelok system may be used whether the studs are $24^{\prime \prime}$ or $16^{\prime \prime}$ o.c. Where the studs are $16^{\prime \prime}$ apart, extra studs should be positioned at the $24^{\prime \prime}$ locations so the lockstrips can be fastened directly to the studs at 24 -inch intervals. Otherwise, install horizontal furring strips. Care should be taken to see that all studs are true and in line.

## CARLON ANNOUNCES MOLDED PLASTIC SANITARY FITTINGS FOR SEWERS AND DRAINS

New, molded plastic sanitary fittings have been announced by Carlon Products Corporation, Aurora, Ohio. The new fittings are designed for use with the company's four-inch "D" sewer and drain pipe. They are made from the same high-

impact plastic formula developed several years ago by the firm's research laboratory especially for sewer and drain pipe use.
The four-inch fittings are available in Y's, T's, $45^{\circ}$ and $90^{\circ}$ elbows, and couplings. Each shape is a single piece, and is easily solvent welded to the plastic pipe with a brush and solvent cement to provide rootproof, leak-proof joints. The new fittings provide increased flow of efficiency because inside diameters remain constant even on turns. Like Carlon "D" pipe, the fully sanitary fittings can't absorb water, won't mush up, are immune to rust and electrolytic corrosion. The special compound from which they are made withstands all common household chemicals and detergents, sewer gas, and corrosive action of all types of soil.
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New Products - Continued

## SPENCER TURBINE COMPANY

The Vacuslot system, product of Spencer Turbine Co., Hartford, Connecticut, consists of a centrally located vacuum producer, dirt separator, piping and flush mounted floor inlet valves.


In schools and other buildings where large dry mops are used for cleaning, dirt and litter can be pushed to the Vacuslot. Debris is then whisked

away through the piped system to a dirt separator in the basement. Mops are vacuum cleaned simply by passing back and forth across the Vacuslot.
The system has many auxiliary uses, including wet pick-up; a light portable separator permits picking up water and suds used in floor washing. Also, attachment of hose to a Vacuslot valve permits vacuum cleaning of carpeted areas, stairs, entryways, walls, Venetian blinds and furniture.
Bulletin No. 153 D available from The Spencer Turbine Company, Hartford 6, Connecticut.

## PITTSBURGH CORNING

Economy and an abundance of natural light were the principal reasons for the choice of glass blocks as a major element in the design of this grocery warehouse for Lebensmittelverein of Zurich, Switzerland.


The building, constructed in 1954, has retained its trim lines over the years and presented the company with a minimum of maintenance problems. Architect was Werner Stucheli, Dipl. Architect BSA SIA of Zurich.
The glass blocks are products of the Pittsburgh Corning Corporation, Pittsburgh 22, Pennsylvania.


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## NEW OFFICE BUILDING PROJECT COMBINES GRID SYSTEM CONSTRUCTION WITH EXISTING STEEL FRAME

A 31-story office building project in the heart of New York City's downtown insurance district is utilizing a series of construction techniques never before employed in combination on a single commercial building operation, including the integration of Grid System reinforced concrete construction with an existing steel frame.
The new structure, known as 110 William Street, will be completely aluminum-clad. The window frames and mullions will be of polished aluminum while the spandrel areas will be sand-blasted dark gray aluminum. The ground floor facade will be of emerald pearl granite.
The basic structure before the new construction started was a 20 -story steel-framed office building, built prior to 1916. Grid System reinforced concrete construction is being used in the new L-shaped addition which will rise to a height of 31 stories and increase the floor space to 680,000 square feet. When completed this summer, the building will be the tallest reinforced concrete air-conditioned office building in the United States.
The pouring operation for the Grid System construction is unusual in the fact that pouring was completed between stages of steel erection rather than at one time. The steel work was divided into nine separate operations, with crews moving on and off the job while the concrete skeleton was poured. Steel Grid domes were used to assure the fastest possible erection and removal of forms, so that steel crews could stay on schedule for each operation. Removable and re-usable, the Grid domes offer great flexibility in utility layout. Although utilizing only a 3 -inch pour over the 8 -inch deep domes, the dead load of Grid System construction compares favorably with 7 -inch flat slab construction.


The 110 William Street building was designed by Sylvan Bien and Robert Bien, architects, and is being erected by Irons \& Reynolds-Snare, general contractors. The structural engineer is Charles F. Mayer. Owner is the 110 William Street Corporation, a subsidiary of Crum \& Foster, underwriting managers of a group of nationally-known insurance companies.

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SPruce 2-7481

Buck St. Bangor, Maine
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For rich, glowing beauty combined with strength and economy, try Unit CLEAR • PANEL Deck! Solid 4" $\times 6^{\prime \prime}$ or $3^{\prime \prime} \times 6^{\prime \prime}$ sections with permanently bonded clear, knot-free natural Oak or Birch facing. CLEAR • PANEL Deck placed directly over Unit glued laminated beams eliminates purlins, joists, sheathing, bridging . . . makes ceiling tile, plaster acoustical and insulating materials obsolete.

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STRUCTURES, INC. general offices PESHTIGO, WISCONSIN

Nem Seterature - Continued

## MAGNALUM

A new corner "Shower Bar" that allows the curtain to make a full 90 -degree turn has been introduced to the building field by Magnalum Products, Inc., of Miami, Florida.
Made of heavy gauge aluminum throughout, the ceilingsupported corner unit joins Magnalum's complete, regular Shower Bar line for residential and multiple unit construction, as well as remodeling.
The new bar is designed to fit any size or shape bathtub, and may be instantly adapted to other specialized installations such as hospital cubicles - where single curtains also are most effective.
With Shower Bar, the curtain is held secure by rustproof aluminum hooks which travel friction-free through use of self-lubricating nylon slides. The noiseless operation is completely hidden to give the unit an entire "clean line" design.
Installation is fast and simple. The new corner model, like Magnalum's regular Shower Bar, comes complete with all necessary parts, including bar, brackets, screws and hooks.
Standard corner Shower Bar sizes are $5^{\prime}$ and $51 / 2^{\prime}$ left or right hand, and 4 ' square.
The company's line is distributed from coast to coast through plumbing supply houses. Free sample sections of the new corner Shower Bar unit are available upon request by writing to Magnalum Products, Inc., 2460 N. W. j8th St., Miami 47, Florida.

## FERGUSON $\begin{array}{lllllll}C & O & M & P & A & N & Y\end{array}$

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## OWENS-ILLINOIS

The first hollow glass block to be made of colored glass is now being produced by Kimble Glass Company, subsidiary of Owens-Illinois. A blue-green color was selected for the new block because of its pleasant, cool appearance and its ability to reduce sun brightness and solarheat transmission.
According to E. P. Lockart, Kimble Vice-President, "This first in the glass industry is the result of several years of research by Owens-Illinois Technical Center experts who developed a process which permits both the new green glass and colorless glass to be drawn from the same glass-melting furnace at the same time."
Because the color helps screen the occupants of a room from bright sunlight, "Shade Green" was chosen as the trade name for the new glass. Its color tone may be compared to the translucent, cool, green glow of a still pool of water.
Shade Green glass block is manufactured in both the 8 -inch and 12 inch sizes in the functional SolarSelecting line. A decorative pattern, No. 30, is also available in the 8-inch and 12 -inch sizes. The No. 30 design in colorless glass has always been extremely popular for use in residential and commercial structures.

Users will welcome Shade Green in this pattern, because the color tends to reduce the sun brightness and solar-heat transmission without destroying its highly decorative appearance.

## DOW CHEMICAL

Three chemically-engineered building products are discussed in new technical sales bulletins of The Dow Chemical Company.
Subjects of each are:
Roofmate, foamed plastic boards designed especially for use under built-up roofs. The brochure presents data on size and packaging, compression, heat transmission and engineering as well as specifications and application recommendations. (Dow Bulletin No. 157-56.)
Polyfilm, Dow polyethylene film packaged in a new dispenser box. The discussion includes properties, uses and applications illustrations. (Dow Bulletin No. 157-64-59.)
Styrofoam Comfort Insulation, with discussion of applications as perimeter and slab insulation, cavity wall insulation, plaster base insulation and curtain wall panel core. (Dow Bulletin No. 157-60.)
The three brochures are available through Plastics Sales, The Dow Chemical Company, Midland, Michigan.

## ARMSTRONG

A range of eight colorings - four in this straight-grain design, four in a Spatter effect - are being introduced by Armstrong as the new Metallic Series in Excelon Tile. Gleaming golden accents highlight each pattern. The metallic portion of the design has the same high resistance to scuffing, soiling and scratching as the vinyl-asbestos tile itself. The new flooring patterns are available in a $9^{\prime \prime} \times 9^{\prime \prime}$ tile size, service gauge.



View of the new Westwood, Massachusetts, Senior High School cafeteria showing sanitary Natco Vitritile walls.

## Design complete sanitation into your next school cafeteria

Everything about the new Westwood, Massachusetts, Senior High School cafeteria reflects spotless sanitation. Not only the sparkling-clean food handling and processing and serving equipment-but the very walls themselves! That's because all walls are constructed of sanitary ceramic glazed Natco Vitritile. And, because Vitritile's facing is of a durable, moistureproof ceramic glaze, it's easy to keep clean all the time. It requires only occasional cleansing with common soap and water.

Vitritile comes in 22 different and attractive colors to fit any color scheme. The colors-and the finish-are permanent. Cannot stain or discolor. Never lose their original brilliant appearance.
For complete information on this-and other Natco structural clay tile products-write for a free descriptive, illustrated "full line" catalog.


Natco Vitritile is a completely fireproof, load bearing, genuine fire clay building material that is also ideal for hallways, stairwells, locker rooms, rest rooms, classrooms and many other uses in the modern school. NATCO CORPORATION


Here's everything you want in a roof deck!


CLEANER - Tri-Rib Roof Deck is always made from Wheeling's quality steel. Unlike decks made from other substances, Tri-Rib will not dust off and it cannot be attacked by fungus. What's more, Tri-Rib saves time and money because it can be installed in any weather . . . rain or shine.


## GREATER STRENGTH

- Some decks are made of ordinary commercial grade steel. But not Tri-Rib! It's always full-gauge structural grade. You get higher tensile strength and an extra safety factor. Tri-Rib fully complies with the latest A.I.S.I. Light Gauge Steel Design Manual.


UNIFORM - Every piece fits without forcing because Tri-Rib is made by one of America's most experienced steel producers. In addition to serving as a primer, Tri-Rib's specially formulated zinc chromate, iron oxide paint affords positive rust resistance during construction.


ONE FIELD COAT - TriRib's baked-on coating takes any good field paint regardless of color. One field coat does the job in nearly every case. Get the full story on Tri-Rib from your Wheeling representative. Or write Wheeling Corrugating Company, Wheeling, West Virginia.

## WHEELING CORRUGATING COMPANY • IT'S WHEELING STEEL!

Immediate delivery on all stocked items from these warehouses: Boston, Buffalo, Chicago, Columbus, Detroit, Kansas City, Louisville, Minneapolis, New Orleans, New York, Philadelphia, Richmond, St. Louis. Sales Offices: Atlanta, Houston
 stone. The color range is truly remarkable - from brilliant solids to delicate pastels.


## OROSTONE IN USE

On the left is the Countryside school in Newton Highlands, Mass. Here, an Orostone coating produced a cement-like exterior wall at less than half the cost of a brick masonry wall.
Architect: Hugh A. Stubbins \& Associates, Cambridge, Mass.
Plastering Contractor: Anthony Visalli, Belmont, Mass.
General Contractor: Louis Proia Construction Co.
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## AWARDED

This resume was compiled with the cooperation of GAINEY'S CONSTRUCTION NEW SLETTER of Boston, Mass. and represents a total of $\$ 24,329,491$ in building construction contracts awarded during the month of June, 1959.

## MASSACHUSETTS

## BOSTON

$\$ 150,985$
Parish Hall - St. John Damascus Church
Archt: Samuel E. Homsey, Wilmington, Delaware
Assoc. Archt: Anderson, Beckwith \& Haible, Boston
Contr: John F. Griffin Co., Cambridge

## BOSTON

\$500,000
Graybar Elect. Co. Warehouse \& Office
Archt: Samuel Glaser, Boston
Contr: Canter Constr. Co., Brookline

## CHICOPEE FALLS

\$709,652
2 Dormitories - Westover AFB
Archt: Hoyle, Doran \& Berry, Boston
Contr: M. J. Walsh \& Sons, Inc., Holyoke

## CONCORD

\$178,880
Concord Police \& Fire Station
Archt: Frederick H. Gagnon, Worcester
Contr: Donald M. Manzelli, Inc., Readville

## DALTON

\$1,858,000
High School Central Berkshire Reg. Distr.
Archt: Freeman, French \& Freeman, Burlington, Vt.
and Prentice Bradley, Pittsfield, Mass.
Contr: George E. Emerson, Inc., Pittsfield

## DANVERS

\$164,324
Great Oak Elem. School
Archt: Rich \& Tucker Assoc., Boston
Contr: Knut Swanson, Inc., Lynn
FALMOUTH
$\$ 721,335$
Otis AFB - Elem. School
Archt: Walter M. Gaffney, Hyannis
Contr: C. A. Batson Co., Brockton
FITCHBURG
\$124,950
Constr. Shop Hangar - Municipal Airport
Archt: Wendell T. Phillips Assoc., Milford
Contr: P. Madonia Co., Fitchburg

## FITCHBURG

\$188,888
Fitchburg Federal Savings \& Loan Assoc.
Archt: Thomas M. James Co., Boston
Contr: P. Madonia Co., Fitchburg

## FOXBOROUGH

\$349,950
Elem. School
Archt: S. W. Haynes \& Assoc., Inc., Fitchburg
Contr: Edward Goverman, Roxbury

## GREAT BARRINGTON

\$208,692
Searles High School Addn.
Archt: John H. Fisher, Pittsfield
Contr: Western Mass. Contrg. Engrs., Great Barrington

## LEOMINSTER

\$227,334
Armory - Comm. of Mass.
Archt: Wendell T. Phillips, Milford
Contr: Francis L. Piermarocchi, Inc., Fitchburg

## LEOMINSTER

Lab. Building - Foster-Grant Co., Inc.
Engr: Smith \& Norrington Corp., Boston
Contr: Wiley \& Foss, Inc., Fitchburg
LOWELL
\$822,150
St. Joseph's Hospital Addn.
Archt: Curtin \& Riley, Boston
Contr: John A. Volpe Constr. Co., Malden

## LOWELL

\$1,380,400
Lowell Gen. Hospital Addn.
Archt: James H. Ritchie \& Assoc., Boston
Contr: John Bowen Co., Inc., Boston

## LYNNFIELD

\$197,661
Public Safety Building - Lynnfield
Archt: George H. Sherwood, Boston
Contr: Frasca Constr. Co., Lynn

## MILLIS

\$1,313,000
Jr.-Sr. High School
Archt: Walter M. Gaffney Assoc., Hyannis
Contr: Park Constr. Co., Inc., Boston

## NATICK

\$268,122
Coolidge Jr. High School Addn.
Archt: Tekton Assoc., Natick
Contr: L. C. Blake Constr. Co., Quincy

## NEWTON

\$868,000
Warren Jr. High School Addn.
Archt: The Architects Collaborative, Cambridge Contr: Tocci Bros. Constr. Co., Newton

## NORTON

\$493,082
Dormitory \#3 - Wheaton College Archt: Rich \& Tucker Assoc., Boston
Contr: Grande \& Son, Inc., Malden
PITTSFIELD
\$151,097
Central Jr. High School Alts.
Archt: John H. Fisher, Pittsfield
Contr: Peter R. Palladino, Pittsfield

## REVERE

\$632,370
Elem. School Ward 4
Archt: Harold M. Turiello, Revere
Contr: G. L. Rugo \& Sons, Inc., Boston

## SCITUATE

\$1,229,000
High School (Senior)
Archt: Korslund, LeNormand \& Quann, Inc,, Norwood Contr: Brick \& Concrete Constr. Corp., Dedham

## SEEKONK

$\$ 390,500$
Elem. School
\$390,500
Archt: Israel T. Almy, Fall River
Contr: M. G. Allen \& Assoc., Inc., Warwick, R. I.

## SOUTH ASHBURNHAM

\$1,497,500
Oakmont Regional Jr. \& Sr. High School
Archt: James A. Britton, Greenfield
Contr: Granger Construction Co., Worcester

## SOUTH HADLEY

\$418,000
Health Center \& Infirmary - Mt. Holyoke College
Archt: Perkins \& Will, White Plains, N. Y.
Contr: George B. Macomber Co., Allston, Mass.

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All models are powered by heavy-duty industrial engines matched to the power requirements of the generator. Custom modifications to meet the needs of particular applications add to the versatility of the new Onan line. Automatic controls for standby installations are available for each model. All plants 100 KW and larger are Magneciter-equipped

> This new Onan generator with static exciter and voltage regulator has these advantages for both standby and primary power installations:
> - Simplicity - Eliminates hundreds of electrical connections, the commutator and its brush rig.
> - Constant voltage - Voltage dip is less than $20 \%$ with motor starting load. Stable generator operating conditions re-establish within two seconds after load is applied.
> - Lighter weight, more compact - Plants are shorter by a foot or more, lighter in weight.
> - Less maintenance, easier servicing - The static exciter and regulator are externally mounted and easily accessible.
> *Onan alternator with static excitation and static voltage regulation.

In Massachusetts and Rhode Island, the fine products illustrated above are sold and serviced by the J. H. Westerbeke Corp.
Here in Dorchester, we have a large stock of parts, engineers to help you on details of application and trained service personnel to assure that you obtain complete satisfaction from your purchase.

## J. H. WESTERBEKE CORP. <br> 35 TENEAN STREET, DORCHESTER 22, MASS., AVenue 2-9124

## The Architect...

(Continued from page 7)
tional and intellectual values, the architect-artist must be a mature and informed person who has something significant to say and is able to say it in his work.

Artists use different media of expression: a poet uses words, a painter uses line and color, a musician uses melody, harmony and rhythm, an opera composer uses music, singing, dance and stage settings, and an architect uses form, space, light, furnishings and landscaping.

The ideals of their culture are reflected in their works. Culture acts as an invisible force which subtly molds and correlates their work; it enhances a certain family resemblance called a style. The architectartist, then, is the interpreter not only of his clients' wishes and aspirations, but also those of his generation.

But unlike many other arts where the artist is his own boss, in modern architecture the work of the archi-tect-artist depends a great deal upon the understanding and money of the client and the skills of the builder. But the client and the builder may not be just two individuals. The client may be a corporation or a government bureau representing a variety of vague or conflicting views, and the builder may be an organization employing hundreds of workers whose interest in architecture may be zero.
Here the position of the architectartist is by no means a simple one. He has to extract the essence of his clients' thinking, coordinate it with existing building codes and available technologies, and transform it, together with his own ideas, into the "blueprint." At best, it means that the clients' personality, building program, and budget have been transmuted from everyday reality into that fertile matrix of feelings and thinking from which a piece of art can grow. It is in this matrix of inner meanings that the architectartist's keen awareness, originality and expression of feelings and forms come into play and produce buildings of lasting beauty.


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## CONTRACTS AWARDED - Continued

## SPRINGFIELD

\$385,000
Wesson Mem. Hospital, Service Wing Addn.
Archt: Leland, Larsen, Bradley \& Hibbard, Boston
Contr: E. J. Pinney Co., Inc., Springfield

## STOUGHTON

\$1,162,696
High School
Archt: Perley F. Gilbert \& Assoc., Lowell
Contr: C. A. Batson Co., Brockton

## SUDBURY

\$741,523
Two Elem. Schools
Archt: S. W. Haynes \& Assoc., Inc., Fitchburg Contr: Caputo Constr., Inc., Somerville

## WALTHAM

Northeast Elem. School Addn.
Archt: The Architects Collaborative, Cambridge Contr: Cardarelli Constr. Co., Waltham

WALTHAM
\$250,000
Lab. \& Office - Scientific Engrg. Inst. Archt: Hugh Stubbins \& Assoc., Cambridge Contr: A. J. Martini, Inc., West Medford

WAYLAND
\$133,361
Trinitarian Congr. Church Alts. Archt: Lange \& Lambert, Inc., Boston
Contr: Lord \& Miller, Inc., Melrose

## CONNECTICUT

## BRIDGEPORT

Control Tower \& Terminal Bldg. for the
Bridgeport Municipal Airport
Archt: Toby Vece, Bridgeport
Contr: John Zandonella, Inc., Bridgeport

## HARTFORD

\$6,500,000
Conn. Bank \& Trust Co. Building
Archt: Charles F. DuBose, c/o Contr.
Contr: F. H. McGraw \& Co., Hartford

## HARTFORD

North End Community Center for the city of Hartford
Archt: Louis J. Drakos, West Hartford
Contr: W. A. Mauser, Jr., Constr. Co., West Hartford
MERIDAN
Jr. High School Addn.
Archt: Gordon D. Orr \& Bernard Burg, Wallingford, Conn.
Constr: Ames Constr. Co., Hartford
STAMFORD
\$5,000,000
Apartment Building - First Stamford Corp. Archt: Phillip Birnbaum, N.Y.C.
Contr: Owner builds.

## SPRINGDALE

Office \& Lab. Addn. - Amer. Machine \& Foundry Co.
Archt: Caproni Assoc., New Haven
Contr: Frank Mercede \& Sons, Inc., Stamford

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## WATERBURY

\$180,685
Chase School Addn.
Archt: Louis R. Fucito, Waterbury
Contr: John Cantillon Co., Waterbury
WEST HAVEN
\$220,000
Commercial Bldg., 575 Campbell Ave., West Haven
Archt: Richards-Fellows Heyer, New Haven
Contr: Alpert Constr. Co., Woodbridge
WOODBRIDGE
\$681,400
Elem. School
Archt: Davis, Cochran \& Miller, New Haven
Contr: P. Francini \& Co., Inc., Derby

## RHODE ISLAND

## GLOCESTER

\$654,431
Regional Jr. \& Sr. High School
Archt: Charles A. Maguire \& Assoc., Providence Contr: Donatelli BIdg. Co., Inc., No. Providence

## PROVIDENCE

2 Dormitories - Brown University
Archt: Perry, Shaw, Hepburn \& Dean, Boston
Contr: J. L. Marshall \& Sons, Inc., Pawtucket
PROVIDENCE
\$685,769
Men's Dormitory - Bryant College
Archt: Creer, Kent, Cruise \& Aldrich, Providence
Contr: H. V. Collins Co., Providence

## QUONSET POINT

\$499,485
Standard A. U. W. Shops - USN
Archt \& Engr: Thomas Worcester, Inc., Boston
Contr: A. A. Salerno, 41 Relyea PI., New
Rochelle, N. Y.

## RICHMOND

\$815,881
Chariho Reg. Jr. \& Sr. High School - Towns of Charlestown, Richmond \& Hopkinton
Archt: Joseph M. Mosher Assoc., Inc., Providence

MAINE
BANGOR
\$204,100
Engine Repair Shop - Dow AF Base
Archt: Higgins, Webster, Pederson \& Tilney, Bangor
Contr: Edward R. Marden Corp., Brookline, Mass.
BATH
\$621,609
Bath Mem. Hospital Addition
Archt: James H. Ritchie \& Assoc., Boston, Mass.
Contr: Consolidated Constructors, Inc., Portland
BRUNSWICK
\$504,300
Junior High School
Archt: James Saunders Assoc., Portland
Contr: C. Profenno Co., Portland
FARMINGTON
\$588,711
Men's Dormitory - State Teacher's College
Archt: Alonzo J. Harriman, Inc., Auburn
Contr: C. Profenno Co., Portland
PORTLAND
\$208,000
Supermarket - George C. Shaw Co., Portland Archt. Engr: Engineering Services, Inc., Portland Contr: Allied Constr. Co., Portland


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Elem. School
Archt: Irving W. Hersey Assoc., Durham
Contr: S. E. LaPerle \& Son, Exeter

## VERMONT

BENNINGTON
\$830,000
Sewage Treatment Plant
Engr: Charles A. Maguire \& Assoc., Boston, Mass.
Contr: Gerald E. Morrissey, Inc., Bennington

## BURLINGTON

\$1,786,945
Mary Fletcher Hospital Addn.
Archt: Freeman, French \& Freeman, Burlington
Contr: Consolidated Constructors, Inc., 21 E. 40th St., New York City

## BURLINGTON

\$173,900
Convent - St. Anthony's Roman Catholic Church
Archt: Julian W. Goodrich, Burlington
Contr: Wright \& Morrissey, Inc., Burlington
BURLINGTON
\$627,900
Nursing Home - DeGoesbriand Mem'l Hosp. Archt: Julian Goodrich, Burlington
Contr: Wright \& Morrissey, Inc., Burlington

## NORTH CONCORD

\$585,500
Family Housing - Allen Air Force Base Contr: Beacon Construction Co., Allston, Mass.
ENOSBURG FALLS
$\$ 164,916$
Armory Bldg. - USA
Archt: Webber \& Erickson, Rutland
Contr: Reed \& Stone, Essex Junction

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EAST BOSTON plant servicing the East Boston area, and north to Revere - Chelsea - Malden.

BURLINGTON plant servicing towns in the Burlington area and north to Wilmington, north and west to Billerica - Bedford - Lincoln and general surrounding area.

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> ARCHITECTURAL DRAFTSMAN . . firm ( 31 employees) located in Boston suburb has position for experienced man with industrial and school construction background. Send resume. All replies will be held in strict confidence. Write Box $\# 4507$.

## OPPORTUNITY - SOUND EQUIPMENT SALESMAN

Experienced person to contact architects, engineers and contractors in New England Area. All replies will be held in strictest confidence. Send resume to Mr. Gardner Hanson at DEMAMBRO SOUND EQUIPMENT CO., 1095 Commonwealth Avenue, Boston, Massachusetts.

## EXPANDED METAL SHEETS NOW PORCELAIN ENAMELED

A method of porcelain enameling expanded metal sheets for architectural applications has been developed by Ingram-Richardson Manufacturing Company.
Applicable to either steel or aluminum expanded metals, the method involves the use of special enamels and new processing procedures which assure uniform coverage and durability. These expanded metals, which are strong yet light in weight, may be porcelain enameled in a wide range of colors.


Expanded metal sheets are normally supplied in $3^{\prime} \times 8^{\prime}$ or $4^{\prime} \times 8^{\prime}$ sizes and "Ing-Rich" can porcelain enamel them in any one of many patterns offered by leading manufacturers of the sheets. They are recommended for protective or decorative grilles, yentilator covers, sunshades or other types of partitioning screens, backgrounds for sign spectaculars, regular decorative panels and for enclosures.
Additional details on porcelain enameled expanded metals may be oblained from Ingram-Richardson Manufacturing Company, Beaver Falls, Pa.

## DAY-BRITE LIGHTING

Day-Brite Lighting, Inc. announces the FAIRVIEW series, a new line of fluorescent fixtures for surface or suspension mounting. The FAIRVIEW combines the comfort and quality of a completely enclosed fixture at a cost little more than exposed lamp units.


FAIRVIEW is available in both 4 foot and 8 foot models for rapid start and slimline lamps. The fixture has a clear, low brightness, prismatic enclosure of DayBrite's CLEARTEX, with translucent side diffusers to permit uplighting. The $8^{\prime}$ enclosure, like the $4^{\prime}$ model, has a single extrusion of new X-5 plastic, guaranteed for 5 years against discoloration.

The FAIRVIEW is easy to install, easy to maintain. The hinged enclosure is metal framed for rigidity, and light enough to be handled and installed by one man. The FAIRVIEW features externally fused ballasts for safety.
This fixture is ideally suited for low ceiling applications in schools, offices, stores, and general lighting areas.

## SUGGESTIONS FOR THE INSTALLATION AND CARE OF KILN-DRIED HARDWOOD FLOORING

CHICAGO, ILL.-Hardwood flooring, in common with any other lumber item, will absorb moisture, and as a valuable product deserves careful handling by all concerned after it leaves the flooring mill, according to the Maple Flooring Manufacturers Association.
In order to lay hardwood floors satisfactorily and without fear of trouble developing due to moisture problems, the association suggests certain precautions be taken as follows:

1. Do not lay hardwood floors until plastering, cement and tile work are thoroughly dried and woodwork and trim are installed.
2. The building should not be damp, cold or unheated. Summer months are no exception, particularly in areas where !high humidity occurs.
3. Turn on the heating system and open doors and windows, so that excess moisture can escape. Large fans also help in driving out damp air.
4. Turn on the heat at least ten days prior to laying the flooring. Keep the heat on at all times if there is a suspicion that the building is not reasonably dry.
The above mentioned precautions apply to any type of building-residence, school, commercial, etc., the association said. Further comment of interest to the building public offered by the MFMA follows:
"In large areas, such as gymnasiums, industrial plants and roller skating rinks, many experienced floor installation engineers do not consider it good practice to drive Northern hard maple flooring up too tight. In localities where high humidity and dampness are prevalent, it may be advisable to use metal spacers about $1 / 6_{6}{ }^{\prime \prime}$ thick between the strips at intervals across the entire floor area. This will prevent the flooring from being driven up too tight.
"It should be remembered that, in using the metal shims, slight openings are deliberately made between the flooring strips to act as safety factors when the flooring swells. Under normal circumstances, these openings will come together and remain closed after one season of swelling.
"School gymnasiums are often closed up tight during summer vacations. This is not good practice. Our highest humidity occurs in the summer, and the moisture in the room could cause the floor to swell enough to make it cup and buckle. The answer is to arrange for someone to keep the gymnasium ventilated daily. If high humidity or rain should continue for a week or more, heat should be turned on also, with doors and windows wide open until the dampness is dispelled."
A folder-"Please Don't", offering suggestions for the installation and care of hardwood flooring, is available free from the Maple Flooring Mfrs. Assn., 35 East Wacker Drive, Chicago 1, Illinois.


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## IGERB ADVErtisers index

Arber-French \&
Company, Inc.
Bancroft \& Martin Rolling
Mills Company
Boston Sand \& Gravel Company ...... 53
Samuel Cabot, Inc....................... 7
California Stucco Products of
N. E., Inc. .................... 45
Martin Cerel, Realtor................. 6
Commonwealth Roofing Company .... 50
Francis H. Curtin Insurance Agency, Inc.
.37

Company Inc Equipment
Company, Inc. . . . . . . . . . . . . 4th Cover
James J. Devine, Inc................... . . 46
Donovan Manufacturing Company .... 47
Durastone Flexicore Corporation . .... 54
Economy Forms Corporation . . . . . . . 36
Ferguson Company .................... 41
General Builders Supply Company .... 52
Gilfoy Distributing Company ......... . 47

## Grossman Lumber Company, Inc. . . . . . 1

Howe \& French, Inc.
.35
Hubbs Engine Company ..... 41
Johns-Manville ..... 5
Lilly Construction Company ...2nd Cover
Massachusetts Cement Block32
Mastic Tile Corporation ..... 49
Merit Paper \& Chemical Corp. ..... 46
Natco Corporation ..... 43
New England Insulation Company ..... 39
Ostrow Electric Company ..... 34
F. S. Payne Company ..... 56
Pitcher \& Company, Inc. ..... 42
Winston C. Porter ..... 38
Salem Glass Company ..... 51
Swing-Way Seat Company ..... 51
Unit Structures, Inc. ..... 40
J. H. Westerbeke Corporation ..... 48
Wheeling Corrugated Company ..... 44

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