

JANUARY
1953

New Hampshire ARCHITECT

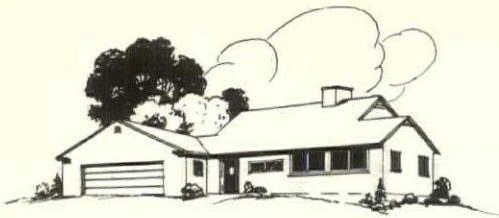


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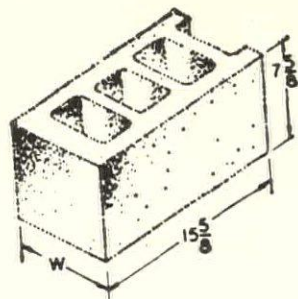
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Palomino Lane
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ON THE COVER

Manchester Water Works Office and Garage Building. Dirsra and Lampron, Architects, Manchester.

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ARCHITECT and BASKET WEAVER

This may be one of the first times a comparison of the above subject title has ever been made and probably the last, but here goes!

The Architectural profession down through the ages has been one of high ideals and attainment of the very best that is possible. To always attain perfection in what we do is, of course, the aim not only of the architect, but of all Society, even, let us say, the basket weaver.

Let us follow the work, for a moment, of the basket weaver and see how his work relates itself to the Architect. First he is a creative thinker and designer. He is a builder and sometimes may be classed as a master builder. He works with his head in selecting materials; and with his hands he begins to weave the various strands into the basket pattern, the design of which begins to take shape, just as the architect with pencil or pen in hand puts his thoughts and designs on paper.

As the weaver continues his inter-twining of the various strands which he depends upon so much for strength as well as beauty in the final design, he is using these strands as the architect uses all the various skills of engineering in weaving them into a pattern of his design to give it the ultimate strength and beauty that has been originally conceived.

Let us not overlook the importance in this modern day and age of these many skills and professions that the architect has come to depend upon. They, like the strands in the basket, must be sound and very much an integral part of the ultimate structure, as the outcome of the finished design is dependent upon the collaboration and interweaving of these skills with the proper coordination of the architect.

Upon completion of any building or structure, the architect can be very proud if he has chosen his strands with great care and he himself weaved them firmly into the final structure. So must the basket weaver be also proud, upon "topping out his basket", when he too can say, "It is built well and strong."

STEWART A. LYFORD, A. I. A.

There is a quality common to the good operas, the religions, the masterpieces of poetry, painting and architecture which may be called Loneliness. To have experienced both the relentless cruelty and the quiet softness of nature provides a capacity to appreciate shelter. A design concoction which sun-bleaches the innermost secrets of a home, leaving nothing private, can hardly be called architecture. There is really nothing very private about a jelly-fish, his whole plumbing system is exposed.



There is an intriguing mystery, common to poetry found within some colonial and some F. L. Wright's shelters which are neither easily created nor easily understood. For some time I believed that the "visit" required by F. L. W. of his prospective clients was a part of a "build-up"; I am now convinced that only when F. L. W. is sure that his client fully understands his philosophy will he agree to the commission. Now this may be important in that the tail does not wag the dog. Only in those shelters which encourage quiet thought and provide a feeling of kinship to the earth can the art of building successfully spin its web.



It is unfortunate that generally the architectural profession has not lent a hand to the "working man's" house. The penalty has manifested itself in prefabricated developments "guided" by government financing—and how lonely can you get in technics? how lonely in government financing? Is it that we the contemporary, are so mentally pressed in to standardized dress, so satisfied with cap-sulized news, and so morally rewound each Sunday that we have lost our last independence; personal responsibility and the forthrightness to make a stand?



It is the subtle reminder that he is related to growing things which stabilizes the har-

ried man of time schedules. Plan his home where either flower box or maple tree helps him to become conscious that other life is born, reaches its prime and dies—this can be a beginning. To see a boy and a tree grow together: each year the tree seems to add just one higher branch to be conquered, each year adds more sinew to both, finally high in the clouds is a tree-hut with a pull-up rope-ladder, there alone to dream as only Robin Hoods for years have done—a man would be quite a cynic not to get just a little lift in remembering the boy and the tree.



Much has been said and much has been written for Mr. Common Man, yet in substance he constantly poses: "Of the muck of life we know enough from you Mr. Architect, Builder, Engineer and Banker we need understanding, not in terms of wage scales, not material costs, but in translation of things we most need—where ya been Bud?"



It has been my good fortune to receive the following recipe from Mrs. M. E. Witmer. Mrs. W. suggests that this is a swell dessert to serve—WHEN—payments are slow—Mrs. Architect take note! The name of this cake fascinates me:

The Famous 3 Holer - Chocolate Cake
Sift together 1½ cup—sifted flour
1 cup sugar
½ teaspoon salt

1 teaspoon soda
3 tablespoons cocoa

In dry ingredients make 3 good size holes.
Put in 1st hole—1 teaspoon vinegar
2nd hole—1 teaspoon vanilla
3rd hole—6 tablespoons—cooking oil

Then pour 1 cup cold water over entire mixture and blend—do not beat

Bake in 8" x 8" pan greased and floured
350 degree oven—25 minutes

Serve with Whip Cream Frosting.

Put in pan on top of stove

½ cup milk

2 tablespoons flour

Cook—stir while cooking until thick.

While this mixture is cooling

Beat ¼ cup butter

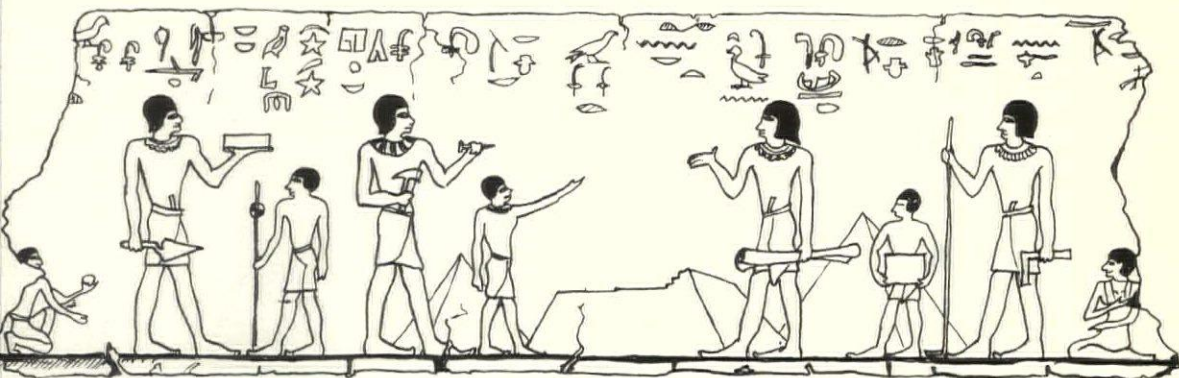
¼ cup shortening
for 4 minutes

Add ½ cup granulated sugar
beat 4 minutes

Add Flour paste
1 teaspoon vanilla
beat 4 minutes
½ teaspoon salt

Spread on cake and serve when desired—this frosting will not soak the cake and stays good for days and days.

I sprinkle coconut, nuts and what have you to add for decorations when using on other cakes.



— : *When You Think of Building . . . Think of an Architect* : —

New Store Front For Concord Natural Gas Corporation CONCORD, NEW HAMPSHIRE



The "before" and "after" illustrations show why an unsymmetrical entrance is usually better for a narrow frontage. The single large display is more attractive and more suitable for the large appliances sold by the Gas Company, than the two small windows which previously flanked the central doorway.

The store front works all day by opening up the whole store interior to view from the sidewalk. The aluminum awning can be rolled down to protect the interior from excessive glare. At night the lighted display, the back lighted ribbon sign letters and the special mirror lighted sign with the gas flame symbol in color, make the store front an equally effective advertisement for the Company's products.

Architects and Engineers — Anderson-Nichols & Co., Concord.

General Contractor—Foster and Bamford, Inc., Concord.

Terrazzo-Galassi Co., Inc., Boston.

Aluminum and Glass—Adams Glass Co., Concord. "Kawneer" entrance and mouldings.

Mirror Sign—Copley Appliance Co., Boston.

Electrical Work—Superior Electric Co., Concord.

Terrazzo—Galassi Co., Inc., Boston.



N. H. CHAPTER
WINTER MEETING

FEBRUARY 19, 1953

CONCORD, N. H.

JANUARY 1948

5th Anniversary New Hampshire
Chapter of the American Institute
of Architects.

JANUARY 1953

Names of Engineers

The Hartford Memorial School in the December issue of New Hampshire Architect, the names of the Engineers, Hubbard, Lawless & Blakely of Boston were omitted.

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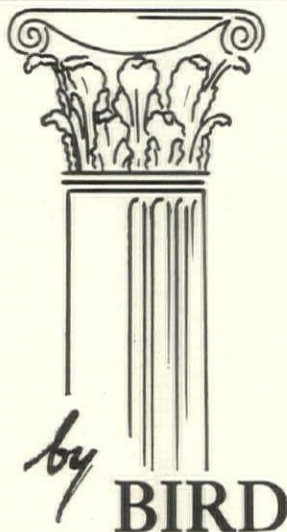
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ARCHITECTS of the MONTH

MITCHELL PAUL DIRSA, A.I.A.

JOSEPH FILIX LAMPRON A.I.A.

MANCHESTER WATER WORKS

Office and Garage Building



Mitchell Paul Dirsa, born in Beverly, Mass., July 11, 1913. Attended Exeter High School and the University of New Hampshire. Registered Architect in New Hampshire. Registered Structural Engineer in New Hampshire and Maine. Employed by Hussey Mfg. Co., No. Berwick, Me.; Corps of Engineers, Washington, D. C.; Gibbs & Hill, New York City before forming present partnership in 1946.



**Two Interior
Views of the
New Manchester
Water Works
Building**



*Joseph Felix Lampron, born in
Manchester, N. H., August 12, 1912.
attended Nashua High School
and University of New Hamp-
shire. Registered Architect in
New Hampshire. Employed by
Navy Department at Ports-
mouth and Brooklyn before
forming present partnership in
1946.*

The office building of the Manchester Water Works has two stories and a basement, and is of fireproof construction with the exterior of brick and limestone trim. The ground floor has offices for the superintendent, assistant superintendent, bookkeeping department and a special room for the bookkeeping equipment. The second floor has

Story and Pictures Continued on
Pages 10 and 11

offices for the engineers, a drafting room, a library, the Commissioner's meeting room, and a laboratory. The basement has a locker room and lavatories for the employees. All ceilings in the building are of acoustical plaster. The building is air conditioned with a cooling system serviced by means of an outdoor fountain.

The garage is 208 feet long and 55 feet wide. It was designed for efficient operation and maintenance with overhead doors in front and in the rear, obviating the need of turning around.

Both the office building and garage are heated with steam from the Manchester Highway Department incinerator.

GENERAL CONTRACTOR

LEON KEYSER, INC., Manchester, N. H.

Sub Contractors

Steel—Lyons Iron Works, Inc., Manchester, N. H.

Roofing—M. J. Murphy & Sons, Inc., Manchester, N. H.

Plastering—P. H. McGranahan Co., Inc., Manchester, N. H.

Garage Doors—Sundeen Lumber Co., Manchester, N. H.

Vault Doors—R. S. Sawyer Co., Manchester, N. H.

Glazing—Pittsburg Plate Glass Co., Manchester, N. H.

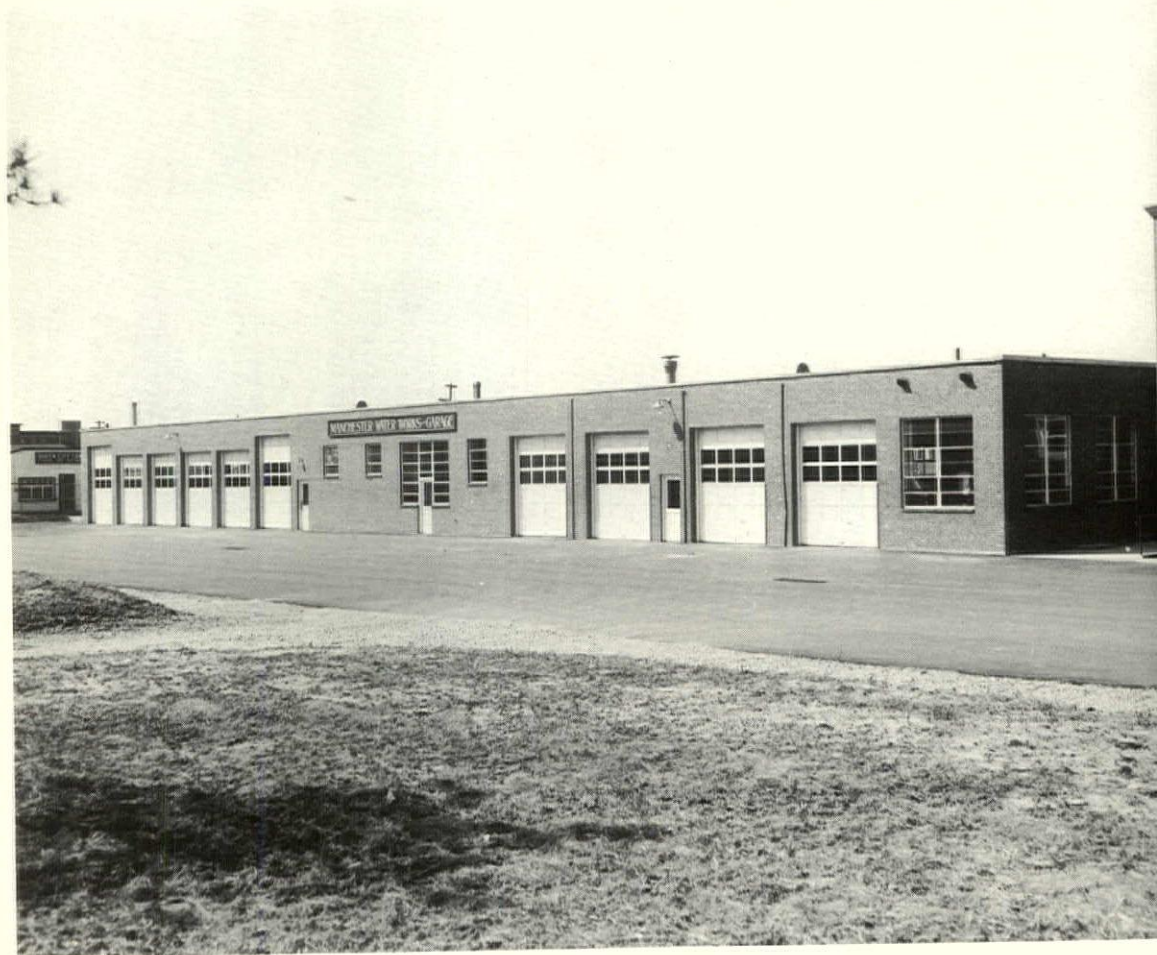
Painting—B. N. Perry, Manchester, N. H.

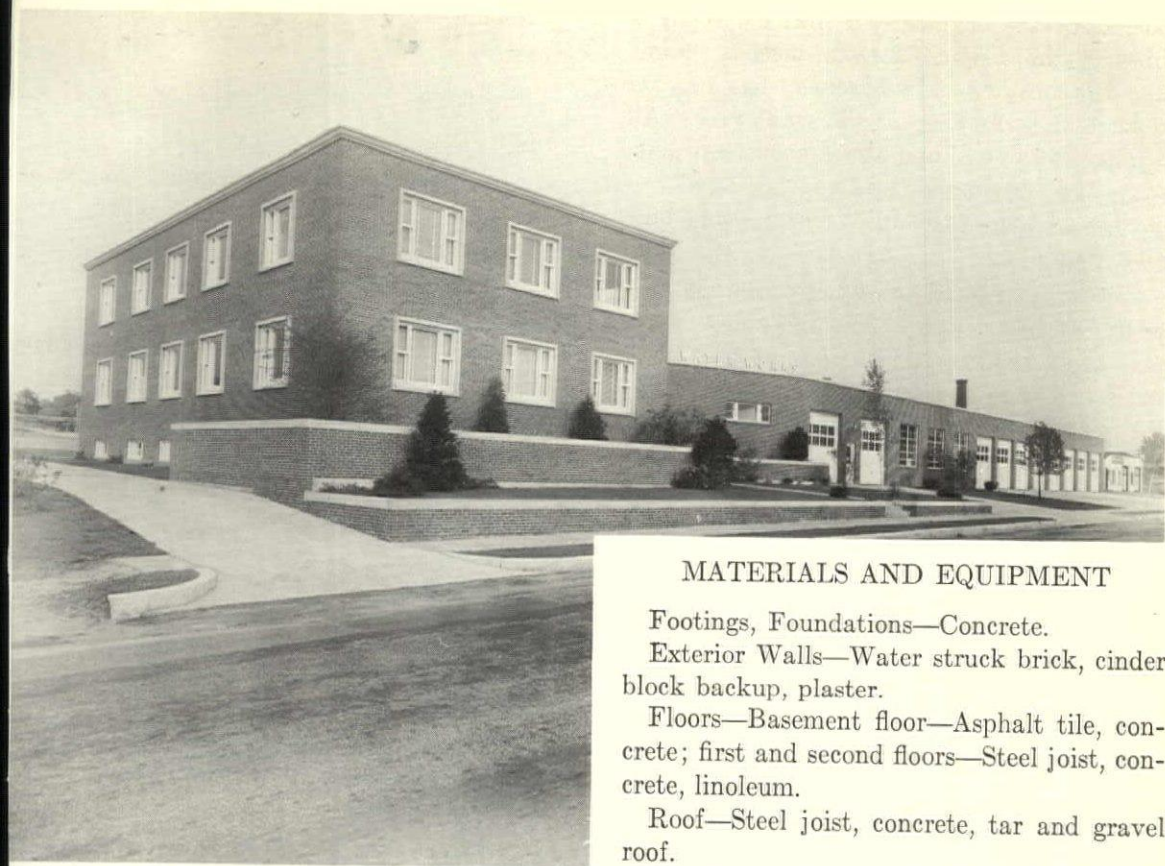
Plumbing and Heating—John H. Stevens Co., Inc., Manchester, N. H.

Electrical—State Electric Co., Concord, N. H.

Manchester Water Works
Manchester, N. H.

D. FRANK SHEA, *Chairman*
Board of Water Commissioners
PERCY A. SHAW, *Superintendent*





MATERIALS AND EQUIPMENT

Footings, Foundations—Concrete.

Exterior Walls—Water struck brick, cinder block backup, plaster.

Floors—Basement floor—Asphalt tile, concrete; first and second floors—Steel joist, concrete, linoleum.

Roof—Steel joist, concrete, tar and gravel roof.

Interior Partitions — Basement — Painted cinder block; first and second floors—2" solid plaster.

Ceilings—Acoustical plaster.

GARAGE

Foundation—Concrete.

Exterior Walls—Water struck brick, cinder block backup.

Interior Walls—Cinder block.

Floor—Concrete.

Roof—Plank sheathing, tar and gravel roof.

Heating—High pressure steam from municipal incinerator piped underground to heater room, converted to forced hot water system for office section and reduced to low pressure steam system for garage.

Water—High and low pressure water systems into meter room for testing of meters and for checking pumping station pressures.

Air Conditioning—Office only with package units with water circulated through pool fountain.

Fire Alarm—Tie in with municipal fire alarm system for necessary checking of water pressure throughout the city.

Repair Shop—Full automotive repairs; Weaver Air lifts; machine shop; car washing; overhead lubrication system; carbon monoxide exhaust system.

MANCHESTER WATER WORKS
OFFICE & GARAGE BUILDING
1950 - 1951

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Witmer Addresses Altrusa Club of Portsmouth

Maurice E. Witmer, A. I. A.

It is a long day since Icaros who flew with his father, Daedalos, from the Isle of Crete and whose dream of success in his flight as a bird was only thwarted because the heat from the sun melted the wax with which his wings were fastened. Then and now, men have ever sought the freedom of the birds and to fly with their grace and ease. Little did Icaros realize the spark of daring adventure which he and his father ignited would come to such an age as ours in which travel is fast becoming a commonplace and mankind is conquering the great overhead ocean of air as fast as scientific research and available funds will permit. We are learning to live, travel and when necessary to defend ourselves far up in the new sea.

Today we stand in awe as pilots carry their planes to the breath-taking altitude of 80,000 feet, 15 miles, well beyond the greatest height ever attained by any stratosphere balloon, experimental planes built to fly 1700 miles per hour, more than twice the velocity of sound.

That men have dared to accomplish these feats, whether or not you ever ride in airplanes, aviation is fast changing the world you used to know.

Even babies have already been born in planes of flight; business men living in suburbs hours away from their business by land, travel by air in minutes. Every minute of every day there are approximately 100 tons of mail in the air over the United States. Airplanes are being used in countless duties—transporting quickly seasonable vegetables, fruits, seeding denuded western lands, spraying swamps, forest and tree skirted lands, fighting forest fires, exacuating the wounded and carrying prisoners and armies to distant lands.

Topographical surveys are now being made with aerial photographs. It is estimated that various United States military and civil agencies alone have photographed 18 to 19 million square miles of the earth's surface from the air, one third of the total land area.

Bad weather, the old bugaboo of aviation, is being conquered. Most of the leading airports of this country will have equipment for enabling passenger carrying planes to land under conditions that previously would have halted flying.

There used to be a rueful parody on the famous Air Corps song, "Nothing Can Stop the Army Air Corps (except the weather)!" But that no longer is true. Almost daily for some time, pilots of the Air Forces All Weather Flying Project have flown the 750 mile round trip from their base at Wilmington, Ohio, to Andrew's Field near Washington, D. C., without ever seeing outside the cockpit. They have flown in all kinds of weather; every flight, including take-offs and landings, was made entirely with the aid of instruments.

Radar devices that penetrate fog and darkness to warn of ground below or mountains ahead are rapidly coming into use on commercial air-liners and soon will be a requirement.

Scientists now foresee the time when, flying in a plane powered by the lightning fast ram-jet engine, you may leave New York at noon, Eastern Standard Time, and reach San Francisco before noon, at 11:00, Pacific Time.

It was only 25 years ago that Rear Admiral Byrd first flew an airplane over the North Pole. Today, U. S. Air Force men fly over the North Pole three times each week. Only recently the Air Force announced its readiness to fly over the Arctic, "anywhere and anytime." Only 10 years ago few commercial airliners had more than two engines and could cruise only at 180 miles per hour. Today, 300 miles per hour is the cruising speed of most long distance transport planes with four engines that cross the continent in 2 to 10 hours. Ten years ago the fastest U. S. Fighter planes, still in experimental stage, did not fly more than 400 miles per hour. Now the jet propelled fighters zip through the sky at 600 or better and unpiloted jet driven craft have actually flown far beyond the speed of sound at 1,500 miles per hour.

It is hard to realize that one of the Navy's experimental jet planes can travel at the speed of a 45 caliber pistol bullet, or as fast as the earth turns at the latitude of Winnepeg Canada, or it could keep up with the sun flying around the world in one day if it could carry enough fuel. Scientist are now working on providing a means of using atomic energy. These advances are opening new doors o

great potential use in not only living and travel, but in knitting more closely together the far flung peoples of many lands, which will ultimately enable the more enlightened peoples to share their common knowledge in making this a more abundant world. The current magazines, newspapers, radio and now television, have brought to us in Portsmouth in the years past occasional insights of our air development. Now we are finding ourselves not only witnesses of these great developments, but participants in a measure with our Air Force as it moves abreast of the times. We will be not only aiding the construction of one of our great strategic bases for use of jet-propelled planes, but we will be ultimately more closely affected as our air men with their families become integrated to our community; we will, in a sense, be lifted upon a new understanding and appreciation of those who are making such great strides for development of this air age in which we now live.

What will this great air base result to us, and what will our good will and helpfulness result to they who will be living and working

in the base compound? Being only a lay passenger of the airborne world and limited in my knowledge to only that of the physical buildings used for operating such an institution as required in airports, I will endeavor to acquaint you so far as permissible under confidence with the Air Force, some of the essential buildings to be constructed, necessary for servicing these airmen of today.

Speed and co-ordination are imperative, so the Air Force has developed an "alert hangar" which represents a new concept of defensive preparedness in which fighter planes are airborne within 90 seconds. Such fast action imposes a number of requirements which in the first place necessitate keeping the alerted planes in hangars under cover so that they can be kept warmed up, manned, and ready to fly.

Actually, the planes must take off right from the hangar; there is no time in the 90 seconds schedule for wheeling them out. In the first place, the hangar must have quick operating doors to achieve full opening in 30 seconds, both front and back, so the plane

Continued on next page

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can move quickly and so its power will not blow the building apart. One pocket is provided for each plane, with walls fire-resistant, and heated. Compartments are provided for day and night crews, with baffles provided at door operators and personnel entrances to protect the men from air blast or jet blast. Sufficient of these hangars must be provided to care for the first line of fighter planes. As these first line fighters leave the alert hangar, another group will replace them from the readiness hangar as a second line.

These readiness hangars are the conventional form used in the last war, really a multi-purpose hangar. It provides a place where fighter planes and even large ones can be parked under cover, kept warm and be taken out with reasonable dispatch, either to use or to the alert hangar. This hangar is also a maintenance shop for anything short of a major overhaul.

One of the most interesting hangars is the new double cantilever type now being developed by the Air Force. In principle, it amounts to turning the structure sideways so that the distance spanned is toward the hangar doors. These cantilever trusses are supported on four interior rows of columns spaced in a grouping of four. Between these groups of columns are placed the various shops servicing the hangar, which permits the repair parts being where most convenient at the center of the structure. These cantilever trusses must also support not only the continuous elevation of sliding doors, but, also, five ton cranes which operate to very end of the cantilever overhang.

In the Air Force Technical Training Building is perhaps the major activity from the standpoint of hours spent. Here are the classrooms and briefing room in which instruction such as gunnery, radio, radar and in some instances such highly technical procedures as celestial navigation and flight simulators; here, also, are individual training spaces for link trainers and bomb training.

Since the Air Force uses ground vehicles just about as much as planes, the familiar service garage is seen everywhere and since the Air Force is used to maintenance on a scientific basis, it plans buildings for similar care of vehicles, these known as Motor-Pool Buildings. These are heated and serve for full automotive maintenance.

Aircraft maintenance becomes a highly

complicated procedure which includes everything from a routine tune-up to tear down and rebuilding—thus engine build-up shops are required in which fabrication, engine build-up, armament and electronics, parachute and dingby shop work can be provided.

Anybody who has ever been to the movies knows that military planes are loaded down with the most glamorous and complicated of wonderful equipment—electronic, guns, bomb sights and other wonderful secrets. All these have to be serviced. This is cared for in an Armament and Electronics Building which provides for varying small equipment repairs. The work in this department is on equipment taken out of planes. Crews from this building are ready for any service calls to various hangars to check and repair as could be done in place.

Communications makes up another category of highly specialized buildings. These are divided into three classifications; Receiving, Transmitter and Communications Center. These are strictly equipment buildings. The operations building of an air base corresponds to the terminal building of an airport. Here is the control tower from which is controlled all flying to and from the field, just as any other ordinary airport. This building is entirely aside from any other building on the base as that is its purpose aside from providing quarters for some visitors on tour of duty. Some briefing is done here along with virtually all functions for flights and personnel in transit.

Every base requires an office building which Headquarters. It is not unlike any commercial office building, where the president of a corporation might be located. In this instance, it is used by the Base Commander and his staff who operate the base. Here are located the purchasing, public relations, accounting, legal, statistical and other like functions. It might well be likened to a real city hall without any trace of monumental grandeur or architectural pomposity. Also, a Headquarters must be provided for the Air Base Group—being an entirety itself.

To be continued in February issue

If you do not have the capacity for happiness with a little money, great wealth will not bring it to you.

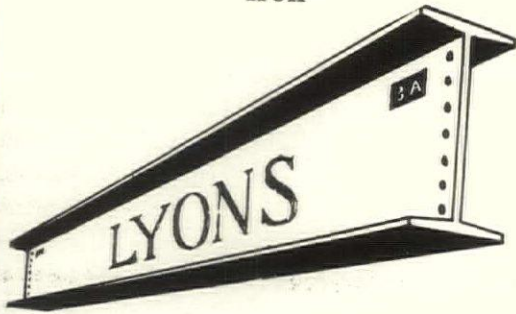
But it helps! !

William Feather

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