It was Palm Sunday. My family and I were attending services in a church other than our own. The church had been established only a few years before, and the edifice itself was less than a year old.

The pastor had been a former associate pastor of our own church, was an excellent preacher and had built a fine congregation. This morning he had a particular message, and that it was being effectively received was evidenced in the faces of the congregation.

It is true that the studied staging of the proper setting is not always of paramount importance in effectiveness of a message. There have been effective speeches and messages delivered under the most diverse circumstances, many of which will live forever.

This morning, however, I couldn't help but reflect upon the setting from which this fine young pastor was delivering a wonderful sermon. The warm sunlight, made softer as it filtered through the rich, stained glass windows; the delicate, clean carving of the woodwork at altar and pulpit; the graceful wood arch, beautifully proportioned, framed the picture with the choir in the background. The raising and lowering of the lights at appropriate times, the well designed speaker system making the pastor's words clear and distinct, the right degree of air conditioned comfort, all contributed to the sense of well-being of the listeners. Few in the congregation realized that the wonderful atmosphere which they were enjoying had been created in part by a talented architect.

It seems appropriate at Easter time that we in the Architectural Profession pause to reflect on our contribution to the religious atmosphere of the communities in which we live. We are grateful for our talents that enable us to create places for religious expression, and thank God for the privilege of living in a country where we are permitted to do so.

Sincerely,

JACK CORGAN
There is often more to an object of art than the mere surface discloses. A man of discriminating tastes has an instinct for evaluating real craftsmanship. This is the kind of man who buys a house that has a new Built-In Gas Range in the kitchen. In appearance anyone can see its cleanness of line... glamour of design. Most ranges can claim this. But it's in Performance that a Gas Range achieves superiority. For here is a precision-engineered, automatically controlled instrument that removes guesswork from cooking.

More and more builders are discovering that an all-gas kitchen is one of the prime features that prospective buyers look for in the house they will choose for "home". That's because in every way—economy included—Gas gives more. And where the finest is truly appreciated... GAS belongs!

Consult your gas company for all the facts
Green Grows The Grass...

— with proper care!

By Eugene George, Jr.

One often dreams of the so-called perfect situation. Imagine, from the commanding vantage point of a comfortable lawn chair, a bounteous supply of luxuriant grass stretching in all directions. This imaginary grass would have imaginary characteristics all to the benefit of the beholder. There would be a rich, springy turf; yet this turf would remain slightly soft underfoot. It would need neither water in the summer, nor protection of any sort in the winter.

As you might suspect, it would be perennially green. This grass would grow just "so high" and no more. Also, it would have an aversion to spreading through nearby flower beds. Hence, neither mower nor shears would ever need touch it. Insects would find it unpalatable, fungus growths would find no sustenance, and weeds would be repulsed by its proximity. Naturally, one could enjoy this material in the most severe August sunshine as well as in the extremes of shade.

Such a strain of grass with all of these magic properties does not exist at this writing, of course. There is hope, however, since different types of grass do exist with some of these properties. Certain types of lawn grass are particularly suitable to conditions in Texas.

Advantages of lawns beyond aesthetic considerations are numerous. For various reasons, the surface temperature of a healthy spread of lawn is often as much as 30 degrees cooler than adjacent bare surfaces. Nor does grass reflect glare—a point of comfort worthy of consideration during summer months.

In contrast with harder surfaces, grass has acoustical advantages. It is a "noise-deadener" par excellene. Grass suppresses, which means that its leaf surfaces continually release moisture into the surrounding atmosphere. Evaporation of this moisture once released can in itself lower the adjacent temperature as much as five degrees!

Another delight of grass, especially in West Texas, is that it presents surface friction against the blowing wind. Much free dust is thus trapped or eliminated from the air. And even a ten per cent reduction in wind velocity can determine whether or not considerable soil is blowing.

A good lawn needs a good start and proper care later. Before obtaining the grass itself, the site should be prepared to receive it. One of the several items to consider is the porosity of the soil. The soil should easily carry water-borne food materials well down into the root system, yet should be of a consistency that makes the process a slow one. Soggy or boggy soils are not at all suitable for the growing of grass. The soil most satisfactory would be a sand-clay combination, as extremes in either sand or clay would produce either too much drainage or be conducive to boggy conditions. It is well during this early period to use organic materials in the form of peat moss, manure, or even well-rotted compost.

Once these materials have been fairly well mixed and are homogeneous in texture, it is good to have a soil test made. One source for this type of testing is the Soil Testing Service at College Station. With your help and a small fee, expert recommendations are made vital to your particular soil conditions.

After turning the soil either mechanically or by hand, depending on the size of the area considered, the area should be well disked or raked before the application of fertilizers recommended by the soil tests. Chances are, in the southwest, that your soil is high in alkalinity. Grass, in general, prefers a slightly acid condition, and the soil test probably encourage acidizing materials to be mixed into the surface.

There are other considerations as well. Most grass success is accomplished on an established lawn by the introduction of high nitrogen content fertilizers. One of the principal desires in establishing a new lawn, however, is the encouragement of a good root system. Hence, the first fertilizer employed should be a fairly balanced one to encourage overall growth, rather than the types with higher percentages of nitrogen.

In highly acid soils of east Texas and the southeastern United States, lime is sometimes introduced. Introduction of lime assists the fertilizer by breaking down the chemicals within the fertilizer—making them more available as plant food. It also breaks down for plant use the chemicals already existing in the soil.

Once fertilized and smoothly raked, it is time to plant sprigs (about 4 inches square and on 12 inch centers) or, in the case of Bermuda grass, seeds (4 lbs. of seed per 1,000 square feet).

The area should be well watered during its initial growth period, and it may be rolled to insure an even turf. Once established, watering periods should be gradually reduced until finally the lawn is watered at intervals of from ten to twelve days. More frequent watering tends to bring the roots to the surface where they are baked and dried out by an unrelenting sun; shallow roots thus encouraged also tend to be rather unproductive in their basic functions of feeding. An additional problem is that frequent watering tends...
HOME WITHIN A HOME

Here's a real 'Dream Home'—equipped so that its occupants can be sure of waking up!

EVERY architect is expected to design homes in which families can go on living happily and effectively; but one Austin architect has had to plan a house in which a family can go on LIVING, period.

James Crow's recent selection as architect for the "Dream Home" being built in University Hills subdivision (Austin) by Pat H. Stanford and Associates was an ultra-modern challenge. Crow's problem—as up-to-date as the atom: to lay out a home-within-a-home, an area that would serve as a family room for everyday activities and as an immediate radiation shelter in the event of atomic attack.

The two-pronged project is attracting national attention and bringing agreeable comment from top levels of the Office of Civil and Defense Mobilization. The building of the "Dream Home" with its dual-purpose room is an important "first" in nationwide defense efforts. Never before in this country has such a convertible shelter been built as an integral part of a home, available and attractive for daily family use.

Governor Leo A. Hoegh, national Director for OCDM, has expressed approval of the project and hopes to be present in Austin for the formal opening of the "Dream Home." According to Welcome Wilson, OCDM Director for Texas, Governor Hoegh has asked that regional directors throughout the country watch closely the progress of the convertible-room venture and has requested that "Dream Home"

FALLOUT SHELTER . . . Floor plan for Survival in "Dream Home."
builder-developers furnish packets of information detailing plans, specifications, suppliers, etc. Both national and regional OCDM authorities feel that this versatile "Family Room of Tomorrow" may well be the private citizen's best answer to the disaster shelter question.

According to Crow, there were two primary architectural problems involved in designing the "Dream Home" with its "disaster home" core.

The first, of course, was FOUNDATION: the necessity for getting foundation walls of sufficient strength to withstand various strains of normal and emergency situations and of completely waterproofing the structure. This is a common problem for architects; in this instance, however, it was enhanced by the fact that the family-room-shelter must remain intact and dry, even under circumstances which might be far from "Dream Home" calibre.

The second problem centered around UTILITIES: the shelter must be entirely self-contained; must have separate methods of waste disposal and water supply, as well as a separate power unit—and still have room for people! All in all, the "family room of tomorrow" must offer facilities for the family to eat and sleep, as well as play, all in entire independence of the outside world. It must fulfill all the functions of a complete home without any help from neighbors or community.

So much for the problems. What about the solutions?

FOUNDATION: OCDM specifications for a disaster shelter indicate that it must be covered by three feet of earth or the equivalent in concrete. Obviously the shelter which would also serve as a family room for daily use could not be covered by three feet of earth. So twenty-inch concrete topping was indicated. When this was added to the regular weight of the house above the family-room-shelter, much more depth of structure was involved than would ordinarily be used in basement construction.

OCDM specifications maintain that a shelter must contain 12½ square feet for each person—roughly an 8 x 6½ minimum area for a family of four. The "family room of tomorrow" is 9 x 12 feet on the inside, not including the kitchen and bathroom; adjacent to it in the "Dream Home" is a combined utility-and-play-room, making a total basement area of 12 x 25 feet.

The shelter, as planned by Crow, is completely under the house, which is on a sloping lot that makes the back wall at the shelter area two stories high. Since added strength was needed to prevent the house's caving in, side walls are of eight-inch concrete. All these side walls are underground, with earth fill up to the top of the shelter on three sides. On the fourth side are three eight-inch concrete walls, with baffle arrangement for entering the shelter room.

Planning for entrances was, in itself, a special requirement. The architect felt that, for such a dual purpose room, access from both inside and out was essential. If catastrophe, either man-made or natural, should come and the house above should be destroyed, exit through the house might be impossible. An additional outside method of egress could, then, be a real life-saver.

OCDM states that a proper shelter must give consideration to the behavior of radiation which, according to experts, travels in a straight line. An entrance path must turn at least two right angles. This entrance path makes not two, but three right angled turns into the shelter room and all masonry in the shelter area is to be of some kind of concrete or concrete block.

UTILITIES: Crow's selection for waste disposal was a Butane pump which will pump waste out and into the regular sanitary sewer system. Soil conditions at the site of the "Dream Home" made a septic system impractical.

A small generator for wiring in connection with the shelter is located on the outside.

Water for kitchen and bathroom facilities is furnished by a tank located inside the shelter so it can be shielded and protected from fall-out contamination.

Actual equipment for a source of air and an exhaust system has not (Continued on Page 14)
A Houston architectural firm has given Trinidad something besides oil and asphalt to brag about...

TRINIDAD, an island six miles off the coast of Venezuela, is smaller than Delaware but ranks as the world's greatest source of natural asphalt and one of the British Empire's largest producers of petroleum. It also exports sugar, cacao, copra, grapefruit and limes—and can count among its other distinctions the ability to pose some nightmarish problems for architects.

Bolton and Barnstone, the well-known Houston architectural firm, encountered many of these in designing a unique, imaginative "company house" in San Fernando, Trinidad, for Schlumberger of Latin America.

The architects' solution to these difficult problems led to a plan that has been chosen to appear in the 1961 Edition of Encyclopaedia Britannica as an example of outstanding architecture.

The house was one of eight projects, ranging from local staff housing to large regional repair...
shops and executive offices, designed by Bolton and Barnstone in the South American countries of Peru, Venezuela and Argentina in addition to Trinidad.

Trinidad, with an area of 1,862 miles, is located near the mouth of the Orinoco River and has an oceanic climate with a small temperature differential both daily and seasonal, and an average mean temperature of 80 degrees. It’s a pleasant climate —providing you can take advantage of the almost constant breeze from the east.

In this instance, the site sloped sharply from west to east. That made relatively simple the task of capturing the soothing easterly breeze but offered an offsetting complication in the matter of privacy, for the site is bounded on the east by a busy, four-lane highway bypassing the town of San Fernando.

The architects attacked this particular problem within the realm of the broad general requirements: a plan sufficiently standard to be suitable for company personnel of different family status, such as a bachelor engineer who might be followed as the occupant of the house by a married man with three or four children. In addition, the Company also required some standardization of facilities and character psychological factor in transferring engineers from one location to another.

How effective was the solution to these problems?

Featuring the Bolton and Barnstone design in its April issue, *Arts & Architecture* Magazine commented: “This house reflects considerable credit on a company that was willing to experiment and unwilling to accept the local, standard, expensive solution.”

**T**he steepness of the site led the architects into a two-story plan with the ground floor cut into the slope, making the second floor the entry level from the west. The upper level includes three bedrooms, living room and entry hall. The master bedroom is separated from the other two by the living room and entrance hall, allowing privacy for the parents and quiet for the children when there are guests in the House. This also solves the problem of daytime sleeping and sound control.

This upper, or entry, level is connected by an open-well, spiral stairway with the lower level, which includes the living room, kitchen, patio, garage and servant’s room.

Perhaps the most distinctive feature is the wide overhang running the length of the house on the east, supported by seven vertical columns which are connected by wooden louvers on the second floor level.

The overhang was designed to protect the rooms against rain that sometimes is whipped almost horizontal by the wind; it made possible the opening up completely of every room to the easterly breeze, with only mosquito screening to separate the rooms from the exterior. The louvers direct the view away from the arterial highway and toward the hills in the distance, in addition to giving added privacy to the occupants of the house without sacrificing the cooling breeze.

This unique combination of unusual features not only solved a knotty series of practical problems but also made the Schlumberger Company House an architectural showplace—one that seems likely to run second only to asphalt and oil in attracting attention in Trinidad.
The advantages of concrete curtain walls are well established. To these advantages Trinity White Portland Cement makes an added contribution—the beauty of purest white and truer colors.

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The advantages of concrete curtain walls are well established. To these advantages Trinity White Portland Cement makes an added contribution—the beauty of purest white and truer colors.
INSPIRATION UNLIMITED

Use Of A Distinguished Commuter Illustrates U. Of Houston Theories

EDITOR'S NOTE

Enslie Oglesby is serving as Junior Design Critic at the University of Houston but continues to operate his Dallas office, commuting via air between Dallas and Houston.

There is much to be gained by the students in this particular situation. Oglesby presents an experience background hardly equaled in this part of the country. Finishing his undergraduate days at Cornell, he went on to complete graduate work at M.I.T., and later entered the Royal Academy at Stockholm. At Stockholm, he worked in the office of Ralph Erskine and made field trips as far south as Italy. The summer work was good, too: for he went to Helsinki to work for Alvar Aalto.

January, 1949, found Oglesby in Dallas, working in the office of Art Swank. Some time afterward, he hung out his own shingle not far away.

The old restlessness caught him again, and he left for the Orient one day. Japan, Ankor Wat, India, Baalbek—then Greece and Spain loomed on the horizon to become further extensions of a background already developed beyond most acknowledged norms. Clients-to-be could not help but benefit from this sort of cultural exposure.

"How does Oglesby fit into your pattern?" we asked the University of Houston. We are pleased to present here the reply from Howard Barnstone, Associate Professor of Architecture at that institution.

THE foundation of the architectural program at the University of Houston is built on the concept that a school can insure top architectural training only if the program inspires students to want to be the very best architects anywhere. We feel that the student must be imbued with the idea of becoming one of the successors to the great men of architecture.

Once this idea has permeated, no inconvenience, no lack of amenity or facility—be it a library too far away to be usable or even a shortage of tuition funds—becomes very important. The student is inspired to do the best job that can be done and he will go to any means to do it. He will learn because he wants to rather than because he is forced to. He will go to other universities if that is necessary; he will go to work in a top architect's office for the experience he might get, and for the knowledge he craves rather than to satisfy a financial need.

How do we go about injecting into the students this inspiration to want to be at the top? Here are five important factors:

1. The permanent staff in the upper grades should be accomplished practicing architects first and teach-

ers second. The deep respect that the student feels for a "doer" cannot be stimulated; no amount of book learning or erudition is a satisfactory substitute.

2. The permanent staff in the upper grades should be free in their programming. At the University of Houston, no overall program is forced upon the upper instructors. They give any type of problem they desire. Frequently, it is one that they are working on simultaneously in their own office. The danger of a student not getting the full spectrum of architectural experience (for example, a student may never get a church or factory, if his instructors at the time do not see fit to issue such a problem) is offset by the liveliness and depth with which the class approaches those problems that are offered. Vigorous and rigorous thought analysis in any type of problem will serve the student better than a theoretical but shallow exercise in every type.

3. Do not try to fool, upstage or "lord it over" students. Be fair with them and, most of all, do not "make work." There is no point in "make work" assignments. Students are clever and cunning, and an unnecessary scrap-book assignment which is casually perused by the instructor for its weight and number of fancy illustrations is one of the quickest ways to mold an apathetic student, disrespectful of the instructor and the school.

4. A program of visiting "greats" to the school is the "salt" in the recipe. The feeling of closeness and personal contact to eminence apparently has no substitute. The suggestion that greatness is passed from master to student is not without historic example—Frank Lloyd Wright's nursing from Master Sullivan has been well chronicled. The relationship of Behrens to Mies, or even Bramante to Michelangelo suggests that there is truth and success in this method.

In our own time, with a hundred or more schools around, it's hard to come up with a hundred Bramantes

(Continued on Next Page)
to inspire students. But mass media has made teaching the basics of architecture easier, and for the good school, the device of visiting lecturers and visiting critics seems to be a practical approach in exposing students to "greatness."

In years past, the University has had as visiting lecturers most of the stellar names, be they Wright, Mies, Breuer, Eames, Saarinen, Johnson, Yamasaki, Ellwood, Chermayoff, Neutra, Fuller and many others. In the spring of 1960, the University has arranged for the great visionary, Frederick Kiesler, to be in residence for a week, and there are plans for a six-week visit by Peressutti in the fall of 1960.

5. Students should be encouraged to travel to see the great architectural monuments. The history of greatness among architects is a story of travellers. The wandering and sketching of Corbusier, in Venice, or the travels of Palladio and Wren are well known. There is the suggestion that mobility is not only the characteristic of our own age but that this was also peculiar to great architects in the past.

At this University, last year, the student organization took two major trips: first, to New Orleans, seeing along the way the ante-bellum plantations as well as Bucky Fuller's heroic dome in Baton Rouge; second, a trip later to Monterey. This month, the students have organized a trip for 37 to visit Mexico City, for a real view of Latin American influences and excesses. I wish they could visit Chicago next year with its Richardson and Wright and Mies. Hopefully, they can soon also visit Taliesin before all sense of the great, great man has been made tawdry by sentimentality and retrospect.

The Texas Architect has asked, "... how does Oglesby contribute to the overall educational program?"

On the criteria of these five ideas, we feel Oglesby has, in a few short weeks, already been a contribution of measureable and permanent proportion.

More uses for Monarch Tile in schools

Recently built schools have used Monarch glazed ceramic wall tile in corridors, classrooms, cafeterias (as pictured), kitchens, locker rooms, laboratories, gyms, shops and in toilet and shower rooms.

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sprout and set weed seeds, while on the cycle mentioned the weed seeds often sprout with one watering, but cannot survive until the next.

Gauge the watering by placing a shallow pan near the sprinkler. When the water reaches 1 1/2 inches in the pan, it's time to move the sprinkler. It's usually best to water before 9 a.m. and after 6 p.m., since losses by evaporation are less during these times.

Mowing schools of thought fall into two divided camps: the "clipping-gatherers" and the "clipping-leavers." Most agree, however, that the turf should never be reduced to less than 1/2 inches. Closer clipping will permit the sun to bake the soil at equal intervals. Such devices compaction and permitting easier passage of food materials, making conditions desirable for the formation of deeper roots.

There are several types of lawn grass suitable for the southwest, including:

CARPET GRASS (Axonopus compressus): In the event that one dwells in a region with a highly acid soil, Carpet grass is worthy of consideration. It enjoys sandy, or sandy loam soils where the moisture is near the surface most of the year. It is propagated either by sod or seeds and does well in either the full sun or shade. Often confused with St. Augustine grass, Carpet grass is distinguished by its two-edged flat creeping stems (round stems are characteristic of St. Augustine). Also, Carpet grass has blunt leaf tips while St. Augustine has acuminate, or sharp leaf tips. This grass is not good under alkaline conditions.

BERMUDA GRASS (Cynodon dactylon): Bermuda is a fast growing grass which can cover a bare area within two months' time. It performs well in the sun but not at all in the shade. Bermuda requires a slightly acid soil. It likes the heavier, dry soils, but grows well in sand. It is hardy in the winter but, to the discomfort of many, it encourages red bugs (chiggers) in the summer. Clippings should be removed with mowing as brown turf results otherwise. Bermuda is very easy to grow, has an excellent texture when well man-aged, and does well on sloping or pitched surfaces as a soil retainer. On the other hand, Bermuda runners are a continual nuisance in the adjacent borders, and it demands a rather high maintenance as compared with other types. It is not a grass for growing in the shade, and it won't permit neglect by the gardener. Further, it permits weeds much more than other types.

New strains of Bermuda have been developed which do not have some of the disadvantages of common Bermuda grass. U-3 Bermuda is a heat resistant, disease resistant, dry weather grass which requires little irrigation. In addition, there are several Tifton strains which have many advantages over the common Bermuda. Their turfs are denser, hence they tend to choke out weeds. They stay green longer and require less fertilizer. They are, in addition, drought resistant. The Tifton strains have many desirable characteristics; but since they have been developed for specialized conditions, they should
Home Within a Home
(Continued from Page 7)

Dream Home can be of equal protection during tornadoes or windstorms. Consequently, Architect Crow, Designer Beal and Developers Pat H. Stanford and Associates are offering their clients safety as well as beauty and comfort.

'Modern Church' Conference Set

"The Modern Church: Its Purpose and its Architectural Challenge" will be the theme of a Joint Conference on Church Architecture scheduled for May 5-6 in Minneapolis, Minn.

The conference will be sponsored by the Church Architectural Guild of America and the Department of Church Building and Architecture of the National Council of Churches of Christ in the United States.

Opening with a chapel service at 5 p.m. on May 5, the Conference will feature a number of nationally-known speakers and will be climaxed by an Awards Luncheon at noon May 5, to be followed by the Annual Dinner that evening.

Awards for outstanding church designs will be made in seven categories and all members of the American Institute of Architects are invited to enter this competition. Additional information may be obtained from Mr. Harold F. Wagoner, A.I.A., Suite 1700, Architects Building, Philadelphia 3, Pa.