THE FLORIDA TROPICAL HOME

AT A CENTURY OF PROGRESS 1933

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INTRODUCTION

WHEN A Century of Progress first approached me with the idea of decorating a house in the group known as Home and Industrial Arts, I toyed with the idea for some time and finally decided against it. Some of the houses did not appeal to me; others were sponsored by people and groups who had their own axe to grind. On the whole I thought that the "Palt was not worth its tanning."

Then I was told that a new house was added to the group and was sponsored by the State of Florida—the only state-sponsored house. I immediately got a set of plans as drawn by the well known architect Robert Law Weed and his associate Pat and Steward, all of Miami, Florida. I liked the plans; the distribution of space was made with a clear understanding of its use, and with some changes necessary for the convenience and the handling of the exhibition crowds, I could visualize the possibility of creating a home of contemporary design that would fully express the sunlight and play that Florida has to offer.

When I think of Florida, I forget the economic value of its truck farms, orange groves, lemons, mangoes, avocados and sugar plantations; I forget the gold mine in muck soil, four to five crops a year in the Everglades—ready for a government-supported irrigation and drainage project. But I do remember the magnificent coloring of the waters in the Bay of Biscayne where reflections in the clear clouds create the most
unforgettable sunsets I have ever seen, the glori-
ous phosphorescence of moonlight bathing; the
beneficial health giving rays of constant sunshine;
the fishing, boating and golfing—a land of play!
I grow “homesick” every time I think of a little
island—a man-made paradise at the southern
end of Lake Okeechobee. All I remember is the
semi-tropical beauty of the rolling lands, lakes and
orange groves around Sebring; the beauty of the
wildness in the Everglades, the heavy odor of
orange blossoms permeating the air; the pastoral
homes in Palm Beach and Miami Beach.

It is with this picture in mind that I
approached the problem of creating the interior
for the “Tropical Home.” Each room, light and
easy. Each room a symphony of color. Each piece
of furniture a part of coordinated design and a
constant study—an individual creation. Line—
Color—Comfort.

This “Florida Play Ground” approach called
for a house suited to the way of life to do and
who could appreciate the background for their
play indoors as well as outdoors. Everything that
went into this house had to be, apart from its
design, a thing of the highest quality and of
best manufacture.

This position narrowed down the list for my
prospective cooperators to a few firms in the
respective fields of home equipment. A “pivotal”
firm had to be found which would set the standard
of quality for the others.

The John Widdicomb Company set the pace
agreement to furnish and manufacture the furniture
for two bed rooms, dining room and the
furniture. The Mueller Furniture Company fitted
into this class with its type of upholstered furni-
iture. One after one followed in succession:
the McKay Company for all the metal furniture;
the Collins & Allam Corporation for carpets;
Kurt Versen lighting fixtures and lamps; Cappahart
Corporation—a radio phonograph the highest
grade musical instrument of its kind; Aluminum
Company of America—all aluminum; Hart Mir-
ror Plate Company, all the mirrors and Yahlite
Company, the bath rooms. This group of others
entered into the spirit of the enterprise with a
great deal of gusto and determination that left
nothing to be desired.

Even in the matter of “accessories”—the art
objects that express the personality of the indi-
vidual more than any other item of home deca-
tation—that care in selection has been expressed.
Again the question of unity between the
interior architecture and decoration has been

Without him this magnificent example of a con-
temporary home could not have been.

To him and to the cooperating firms I
express my deepest appreciation for their coop-
eration, as well as to the staff of hard working
draftsmen in Goodman’s office and to Mrs.
Edith Straus.

Through their efforts a home has been cre-
ated primarily for Florida living, but essentially

a home of refinement for any American in any
part of the United States. A home where every
place is not an accident or incident, but has a
definite function to perform and is part of a
coherent structure, each dovetailing and con-
tributing by its own form and color, to the
harmony of the “ensemble” as a whole. And I
sincerely hope that “The Tropical Home” is a
sound contribution to the Art of Living and to
Contemporary Design.

20th CENTURY ARCHITECTURE

ARCHITECTURE, of all the arts, most
clearly reflects the temper of a time.

The temper and tempo of this time (as
of all others) is based on the economic and this
structure rests ultimately on the tools man uses.

Five, earth, water, mankind’s basic tools, have be-
come increasingly doable under the attack of
scientific experiment. In other times, men, little
understanding his tools, feared them, surrounded
the use of them with superstitious awe. To ex-
tract use from them, the greater part of men
were held slaves to them. But today the mys-
teries of things have become known: in labora-
tory, factory, and field, men do not struggle
with their bare hands and the sweat of their
bodies, to subdue nature. But with switch and
precision instruments, we set forces infinitely
greater than ourselves in motion. Man’s new
place in the world is as leader, director, guardian,
brain. It is this place of man as brain which is
the mightiest force of the machine age and of
modern architecture.

It is fitting that the Century of Progress,
which shows the route over which mankind has
travelled—his tangible conquests and the tangible
products of these conquests—should also mark
the doing away of dead tradition not only in the
sciences, but in the arts as well. It is fitting that
at this century the schism between the arts
and sciences should be healed—for it may here
be seen that art and science are not two, but
one, inextricably bound together for man’s
service.

To many visitors at the Century of Progress,
the new architecture is seen for the first time—
and therefore a brief explanation is not out of
place. As this is the “Florida Home,” the main
stress will be on the home.

A century of scientific research has entirely
changed our manner of life. Radio, aeroplane,
electric light, cinema. Modern transportation
changing our notions of distance; modern com-
munication our ideas of time. The cinematic
and radio destroying provincialism. By the methods
of mass production: tractors for the farm, dis-
washers for the home—the elimination of
drudgery.

Such factors change our material life, our
habits, our thoughts, our reactions. We become
different people, demand different satisfactions,
It is natural, then, if we live differently from our forefathers, that our houses will be different from theirs.

Yet for 25 years our architects have tried to conceal this fact from themselves. They have reared, to the top of the pile, a house which is a bad copy of an Italian palace or a Georgian mansion or a Normandy cottage. "Good taste" meant living in a house but a Natural house; i.e., a house which was built as a container for intelligent, drudgery-loving things.

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In schools, architects were taught that people preferred living in dark, shabby, uncommercial houses and people somehow or other were forced to put up with such lodging, as if it were in the nature of things to have leaky roofs, impractical closets, stupid stairways and the constant (therefore unnecesary) irritation of bed-lighting and room-arrangement.

But slowly this condition of things is being dispelled; the American is creeping out of his ill-bred cowrend, his small-windowed, ill-ventilated dungeon. He is demanding that his home have at least some of the efficiency of his motor-car.

The American is beginning to see that the modern house that look so "crazy" are really livable, are really homes, whilst his old bed-chambers, be-gabled dream house is a dream and belongs in a fairy tale.

The modern home is built by an artist-scientist Scientist because he works with exact knowledge, having no use for traditional methods or materials, unless they have real rather than sentimental merit. Artist, because he takes cognizance of the art of living, not as something to be copied from another age, but something vital, in tune with all that is good in the century.

The modern architect takes into consideration not only how a house looks but how it runs. The home must function smoothly. Families have few or no servants, therefore there is need of labor-saving devices, of simple, easily-cleaned surfaces. It is expensive to build; therefore eliminate useless corners, crannies, attics, cornices, for each square inch of building paid for by the owner, must yield a return on the investment. By the study of housing utility, by the intelligent application of modern materials and methods, the modern home is inexpensive to build, economical to operate.

Modern architecture has two basic maxims and they are these: 1. the more closely an object fits its use, the more economical it is; and 2. beauty in buildings (as in everything else) is to be found in an elimination of the unnecessary.

THE HERITAGE OF QUALITY IN FURNITURE

JOHN WIDICOMBE Company, of Grand Rapids, Michigan, has brought to the American furniture industry a rich history in the art of cabinet-making. The company was founded by John Widdicomb in 1894. The story of the Widdicomb is one of continued effort to satisfy a fine conception of excellence in a chosen field. Their products have become a distinct type in American furniture production.

Schooled in thoroughness by a background of English experience, the life of the founder was one of precept and example. His constructive influence brought a new and higher sense to the chair and chair-making of the American home. With the passing of the founder, John Widdicomb, Ralph Widdicomb—the last of an old stock devoted for generations to cabinet making—remains to carry on.

A leaning toward culture and refinement in the essential properties of structure and design has been a heritage with the Widdicombs. For more than fifty years they have produced what is generally acknowledged to be the finest furniture known in the industry.

In this furniture has been mirrored the highest understanding of what constitutes cultural progress. It has reconciled with the best and the finest in past concepts of artistry and workmanship, and to that has been added what tradition and logically has met the highest requirements of the cultured American home. The Widdicomb makers of furniture have at no time indulged in vague, visionary or speculative expedients merely for the sake of producing furniture that would sell. Every piece of furniture conceived and constructed by John Widdicomb Company has been as nearly correct as a work of art, and as complete for the service for which it was intended as skill and experience can achieve.

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A native appreciation of English styles has given this firm a wide advantage in their interpretations of this type of furniture.

It must be borne in mind, however, that from the Sixteenth Century France has led the world in architecture and in the decorative arts, and consequently no traditional furniture, continental or English, without French influence can satisfy our cultured American people. Hence, much of the John Widdicomb furniture, particularly in the Louis XVI School, is based on the English conception of French design. The result has been French contour with English charm of color and quiet dignity of treatment.

Today, this background of tradition is being applied to furniture of the modern school, and the sponsorship by John Widdicomb Company of modern design has done much to steady the influence and trend of this new furniture in our country, and furniture made by John Widdicomb Company in the modern motif has enjoyed wide recognition and highly select appreciation.

In much of the finer Modern cabinet production one finds unusual woods cleverly employed to show to advantage the unique graining. Many of these exotic woods are from tropical forests hitherto unexplored. It is the attention to the selection of these woods, and a masterly use of them, that have given John Widdicomb Modern furniture a highly decorative enrichment, in contrast to the elaborate shaping and carved surfaces of other periods.

That the architecture and activities of the times call for a new type of furniture cannot be gainsaid and the furniture that most naturally and effectively harmonizes with our architecture and with the trend of our activities is the furniture that will live as a style and, undoubtedly, as a period.

It has been the aim of John Widdicomb Company in the building of the furniture emphasized in this volume, as well as the Modern pro-
ductions in its own line, to bow close to those precepts in architecture which govern correct design, form and adornment of furniture. With the wide range of thought now manifest in all the arts, with the many materials at hand, with an unprecedented public encouragement of a new freedom of expression, designers may give unrestricted rein to their talent rather than to be held down to the copying of traditional periods or styles that have little in common with our lives as we live them today.

Never having aspired to serve great masses but rather those who delight in the beauty of cultural contribution as represented by historic and present-day achievements, John Widdicomb Company continues, as present as in the past, to enjoy a following that is equaled by few in the furniture industry.
THE TREND TOWARDS MODERN IN FURNITURE DESIGN

FREDERICK M. MUELLER

Art in general is the physical expression of the culture and tastes of the period, as reflected by those best able in their particular field to judge.

In the past ages, paintings, sculpture, architecture, and furniture that qualified portrayed the spirit of the times. From the early days of Greece and Rome, to the renaissance of art in the Eighteenth Century, it is possible to judge the environment, tastes and culture of the particular period to which the work of art is attributed. This is especially so in furniture.

The sturdy bluntness of the Crowneillian period in England is honestly depicted in the large, massive, utilitarian design of the times. Later, influenced by excrescence of earlier culture, these became more and more refined, as the people became interested in the art of gentle living, with more elaboration of detail to please and intrigue the finer sensibilities. The peak was reached in the latter part of the Eighteenth Century, when Thomas Chippendale, The Adams Brothers, Sheraton and Hepplewhite, all contemporaries interpreted in fineness of line and detail the exquisite grace of those times. In short, furniture design is profoundly influenced by the habits and thoughts of the people.

The Twentieth Century has made more progress in mechanical arts than all the preceding ages. Our whole economic, social and aesthetic background is intensely interwoven with technological phenomena. Entirely new influences in our lives have been introduced, calling for originality of design and structure. Is it not only natural but right that these designs must be functional; must in their very essence depict the use to which that article is dedicated? The interjection of these functional designs possibly had their beginning in the modern skyscrapers. Necessity of strength and stability together with proper natural lighting, were the contributing factors in the functional design of this type of building. Even to the lay eye, the properly designed modern building looks right, gives that sense of proportion and stability that is true art.

These buildings, and I include all modern types of residences, with their plane surfaces and large severe windows, require furniture of a design which I prefer to call "functional." The interior treatment deserves the careful design of furniture that by its very form indicates its lusuroness, if upholstered furniture; that seems to the eye the very essence of restfulness to the busy individual.

The beautiful modified pastel shades, properly blended, bring life and cheerfulness, developing in the subconscious mind the sense of well being and propriety.

Dining room and bedroom furniture in modern design, utilitarian to the extreme, are nevertheless made pleasing to the eye by the decorative effects of rare and beautiful woods.

Instead of ornateness in rococo ornamentation of no practical value, the individual pieces are designed first from the standpoint of the use to which they are planned, and from this practical purpose pleasing proportions and colors are developed that complete an appealing ensemble. The designer is in reality an engineer who plans a functional article—who gives to that article character and style that harmonizes with its purpose.

So I predict, as a purely evolutionary principle, the trend towards modern in furniture design is natural—is harmonious with our mechanical development, and will become the outstanding furniture in the immediate future.

At A Century of Progress, the opportunity of seeing the work of progressive designers and manufacturers, and its adaptation to a modern home, is best exemplified in the Tropical Home. No matter how deeply one may be steeped in the traditions of the past, the promise of the tomorrows with all the joys of gracious living in harmonious surroundings cannot help but create the desire for modern furniture.
THE “IDEAL” MUSICAL TONE

F. X. GIGAX

QUALITY of tone is, perhaps, the most outstanding characteristic of Caphart instruments. We shall endeavor, first to define the “ideal tone” and then show how this tone is secured in Caphart instruments.

Scientists tell us that the ideal musical tone is one in which the fundamental tone is accompanied by its first twenty harmonics or over-tones; the fundamental being fifty percent of the total intensity and the harmonics providing the remaining fifty percent; the harmonics diminishing in intensity in direct proportion to their increase in frequency. It is the presence of these harmonics, or partials, which give tone quality or tone color, as it is often called. Thus, you will see that it is necessary to reproduce tones far above the fundamental if we are to get the ideal tone and the maximum of tone quality.

Sound is reproduced by means of vibrations and the number of these vibrations per second is called the frequency of the sound or tone. The lowest fundamental musical tone it is possible to produce, is 16 cycles per second (this by the 32 foot pipe in the world’s largest pipe organ). Therefore, if a musical instrument is to cover the entire musical range, it must reproduce this 16 cycle tone—Caphart instruments reproduce faithfully this 16 cycle tone.

In the higher register the highest musical fundamental is that of the piccolo, having a frequency of 4608 cycles per second. To obtain the true, ideal tone, it is necessary to reproduce not only the 4608 cycle fundamental note of the piccolo, but also its attendant harmonics which range entirely to the upper limits of hearing, 16,000 cycles. Caphart instruments alone have this range.

Therefore, because they will reproduce from the lowest fundamental tone of 16 cycles up to the highest of 4608 cycles, together with all required harmonics up to the limits of hearing, Caphart instruments reproduce true, ideal tones over the entire musical range. This is the reason Caphart instruments have a tone quality and color which is far superior to that of any other instrument.

This instrument is beyond comparison with any other phonograph-radio combination because it affords infinitely more in automatic features and musical quality than is obtainable in any other instrument.

The Caphart, therefore, is the only instrument which automatically plays entire symphonies, operas and albums of recorded music in their correct sequence. It is as easy to place the records in the instruments as it is to lay them on the table.

At the turn of a switch you have equal command of the entertainment on the air, with the almost limitless resources of a new specialty engineered and custom-built 14-tube Superheterodyne radio, which is unrivaled in its power and selectivity. Perfected Automatic Volume Control with inter-station noise suppression are features which you will appreciate.

THE MAKING OF BETTER UPHOLSTERY LEATHERS

L. H. PARTRIDGE

EVER since man began recording events and ideas, historians have dribbled barrels of ink over bales of parchment made from hides, telling us all about the stone age, the iron age, the brass age, the golden age, the dark ages and the dangerous age, but never a splash did they make concerning the leather age. Yet the manufacture of leather is as old as history itself—even older. The history of man can be told in one skin game after another. Fig leaves went out of fashion with the first frost, and from that time immortal man has depended upon the skin of some other animal to protect his own.

The making of leather is probably the oldest manufacturing industry of mankind. In China the manufacture and use of leather was known thousands of years ago. In Egypt leather has been found in the mausoleums of the ancients, who practiced in the art of tanning and depicted the process in hieroglyphics in their tombs. Even the mummies are examples of good tanning methods. In semi-mythological times the leather of Persia and Babylon was celebrated in the annals of contemporary civilization. The Persians and Babylonians passed the art over to the Greeks and Romans, and so on down through the different mediaeval nations to us.

Hides for upholstery leather come from different parts of the world, but the most uniform and best flayed are those from the big Chicago packers. Hides come to the Tanner in a salted condition which will preserve them for some time against decay. They are first trimmed in the Hide House and then washed in vats of cold running water to cleanse them and make them supple and easy to work through the subsequent operations.

The different cuts are completely tanned with strong liquors and softness, pliability and additional strength are obtained by paddling in vats of Sicilian Sumac and Sulphonated Cod Oil. The leather is then set out to remove the wrinkles, stretched and tacked on frames until it is com-
Leather is ready for years of service. Its original beauty will last almost indefinitely if properly cared for.

Many cases of stickiness or loss of lustre on upholstery leather are due to the use of polishes or cleaning preparations which injure the finish. Sufficient oil is incorporated in the leather during its manufacture to last as long as it is in use.

The proper care of upholstery leather is extremely simple. Following are the necessary directions:

1. Use lukewarm, not hot or cold water, and any mild soap, such as Castile or Ivory.
2. Work up a thin lather on a piece of cheesecloth and go over the leather surface.
3. Go over the leather again with a piece of damp cheesecloth using no soap.
4. Finish up by rubbing with a dry soft cloth. The soap and water may reduce the gloss but the friction of the dry cloth will restore it.

Never use furniture polishes, oils, or varnishes. They will soften the finish and cause it to become sticky.

ROWENA CHENILLE

THE Rowena Chenille displayed on several of the pieces of furniture in the living room, balcony and bedroom in the Florida Tropical Home is a Sundour guaranteed unfadable fabric and is the product of the Morton Sundour Co., Inc. at New York, original producers and distributors of guaranteed unfadable fabrics.

In the composition of Rowena only Sundour dyes are used and from these dyes Sundour colors are derived, colors which are fast to light and washing and which are guaranteed to be replaced if they should fail.

The discovery of these Sundour colors was announced thirty years ago after long and exhaustive research and painstaking analysis, and stirred the textile trade of the world.

For several decades colors used in practically all fabrics composed of vegetable fibres were notoriously base and fugitive, and color schemes which had been carefully considered changed so radically that they were scarcely recognizable after a week's exposure to ordinary sunshine.

Such reduction of color values completely upset the balance of decorative schemes and it was then that a resolution was made to find means of producing fabrics in any variety of coloring that could be declared really permanent. Could it be possible to get colors—even some colors—that would "stand anything" what a splendid triumph it would be and what a deliverance from the array of fugitive dyes that was obviously holding the field at that time.

Then began a long and constructive campaign that has left its permanent impression on the textile trade of the world.

The scheme was to arrive at a range of colors, even a small range, that could be absolutely relied upon and which could be guaranteed against fading from sunlight or from ordinary washing.

Many hundreds of colors were dyed in every conceivable way in the search for fastness. These were exposed and tested diligently week by week and month by month. After a certain number had given promise of the necessary qualities several sets of samples were sent to India to be exposed on the roof of a house in the Punjab and along side of these selected colors were placed corresponding shades of ordinary dyes with instructions they were all to be exposed uniformly and one of the sets was to be returned after the expiry of each month. Thus the behaviour of each group from one to several months exposure under the blazing sun of India was recorded, while similar tests were being made under varying climatic conditions elsewhere. The ordinary dyes went almost white within three weeks, while the Sundours stood firm at the end of their seven months exposure. From these tests the original Sundour palette was established and they were then introduced to the public with a guarantee that any good fading or failing to stand ordinary laundry wash would be at once replaced. That was the first time in the history of textiles that such a guarantee had been given.

The modest palette of those early days has developed into a full and modern range of colors till it embraces practically every known color in decorative use. Here today in Rowena are tones as varied as woolen greens, chartreuse, chocolate brown, lacquer red, citron yellow, beaver brown and modern blues, etc. all covered by the Sundour guarantee against sunlight and washing.

The textiles in which these Sundour colors are used are of an endless variety, from Rowena Chenille—a yarn dyed, stout wearing fabric—suitable either for furniture or draperies; the Crosby homespun rough texture material in lacquer red, also used in the tropical home, to delicate voiles and gauzes, unusual texture weaves in contemporary colors, and a wide range of semi-glossy chintzes.

They can be seen and obtained through the better class department stores and interior decorators.

The historians of modern textile science will record with rightful pride this epoch making achievement, laud, pursued, and brought to a triumphant success within this Century of Progress.
THE UTILITY OF METAL FURNITURE IN THE MODERN HOME

JAMES C. McKAY

T
hat America should be the last nation to recognize the beauty and validity of metal furniture is not strange. We, like most young people, are a bit shamed-faced about our doings and like young creators do not realize the importance or true value of our creations. So it takes the older culture to point out and make us realize the goodness and truth of what we do. It took the combined praise of the Germans, French and Russians to make us realize that our factories, our grain elevators, our bridges were Greek in their simplicity, Roman in their boldness and possessed of a new and strange beauty, vibrant with a tempo which in Europe has become a kind of fetish of what is right and proper in this modern world—the American tempo. This new dynamism, this new tempo, is in its essence a basis of a new art, of a new economics; an art of movement as contrasted with the static of an old art, an art whose expression depends on its utility as contrasted with the decorative or ornamental aspects of the older arts.

This new art grows out of bold lines, out of factories; hence it is not an art of an individual with the individual idiosyncrasies, but is an art truly classic: that is based in the very fabric of a living moving epoch, based on the hopes, ideals, realistic of a whole people. It is further a democratic art, if for all the people, for, economically, it is impossible to have mass production for the few.

This may sound digressive but to properly appreciate one phase of this art, metal furniture, it is important that these things be kept in mind.

Why the architects of America are pressing its claims? Firstly then, metal furniture has two obvious advantages. It is the only kind of furniture that can be made wholly by machine.

Furniture made of wood or reed is hand made furniture and if made speedily is made cheaply. Metal furniture, on the other hand, may be made speedily, may, must be, for that is the tempo of the machine. Secondly, it is durable, metal does not suffer from changes of temperature, dryness or humidity—there is no veneer to peel or roat, no glue to loosen. To these practical advantages which make for economy is the less palpable one of beauty.

Metal furniture has the beauty of modern things, of airplanes, of automobiles, it is smooth, glinting, slender.
A—Apparently the deck of an Ocean Liner, but in reality one of the decks of the real Florida Tropical Home.

B—Double “U” Table. Rubber bands go about their nonchalant duties on the glass and metal table.

C—Uni-Spring Chair. The disconnected back of the chair springs freely on the steel supporting band.

D—Taloned Sofa. Made to function as an interior piece as well as an exterior.

E—“Multi-adjust” Chairs. A “Chair of a thousand positions.”

F—Glider. Suspended by simple spring steel bands for easy “gliding” and curved arm for comfort and beauty.

G—The “C” Chair. A chair producing a “Swinging-in-air” sensation not found where ordinary springs are used.

H—Coffee Table. Bands of steel hide behind heavy chromium plate on this coffee table with wooden top and shelf.

J—Group Setting. Where else but on a sea deck would such a group as this be perfectly at home?
Since the war, "functional" designers of Europe have concentrated on the study of metal furniture. Their ultimate achievements may be seen in the work of such men as Marcel Breuer of Germany, and Le Corbusier of France. These men and others use metal in their designs well and honestly but not to its utmost, for their designs are based on a primary idea of metal—metal in itself, in compression. Yet it is obvious that one of the most real virtues of metal is that it is capable of bending, of flexion, of "springiness."

Metal and its uses have been the life study of our company. For many years we have manufactured automotive parts, including automobile bumpers. Hence we make claim along familiarly with machine production and with spring steel.

When it was voted that we make a study of metal furniture, we found ourselves well equipped to proceed, "engineered for comfort" was and is our principle. With this principle and our experience, we arrived at certain basic patents—the original McKaycraft Chair and Glider. In both cases the new application of spring steel played the dominant role. This new application was in the use of steel in flexion and in tension.

Now it is all very well to design good and useful things, but if they cannot be sold they are worthless. The machine technique requires mass production, hence it is necessary to have mass consumption. Therefore, if our furniture was to be useful, it would have to be kept within range of the average pocketbook. With which thought, we adopted a second principle, "engineered for economy," and went into production on the first line of McKaycraft furniture designed primarily for outdoor use, porches and the like.

The second line, designed to supplement the first, is now in the process of study. With this study, we have secured the services of J. S. Kuhn and Percival Goodman, whose experience and ideas help to complete the designing group in our Organization. The initial fruits of this study are being shown for the first time at the Tropical Home, Century of Progress, in Chicago.

It seems unnecessary to say that we are convinced of the future of metal furniture in America. We believe in it because it is practical, economical, and beautiful. We believe that it will find its place not only on the porch or terrace of a modern home, but in the living room and bedroom as well. By this we do not mean that we think it will, even in the future, replace fine wood furniture entirely, but we are of the definite opinion that metal furniture of the better type is here to stay.

In the spacious and convenient bathroom of the Florida House, the designers have created a strikingly original interior executed in the materials which were considered to be the most appropriate for their purpose. There is a delightful effect of coolness appropriate to a Tropical Home. The same striking contrasts of color and line that characterize the main rooms of the Florida House have been recalled in the floor and wall arrangement, yet there is no striving for forced effect, the demands of actual use having been kept uppermost.

The tubs are of plain white porcelain enamel, manufactured by the Crane Company. The Tornio tub is sunk into the floor, the rim being set about six inches above the floor and the edges trimmed with Vitrolite. At the end of the tub is a small built-in stand of black and white Vitrolite. The other Crane fixtures consist of a Conrith lavatory and a Hygienic-Sivelco watercloset. The floor of green faience tile with a red stripe introduced as a contrasting note to the rest of the room.

The tub is provided with a plate glass screen, which also serves as one side of the shower and avoids the closed-in effect characteristic of shower enclosures.

Messrs. Kuhn & Goodman have achieved a daring color arrangement thru the use of white, green and black walls, which are mirrored in subdued reflections in the black ceiling. The walls and ceiling are faced with Vitrolite, a modern structural glass material, which has come into wide use for this purpose during recent years.

Vitrolite has an impervious, highly polished surface of mechanical perfection, which will not absorb moisture or odors, and will retain its perfection of surface practically forever. It is easily installed with a plastic cement that permits adjustment to settlement, preventing the cracking of the walls from this cause. Vitrolite can be kept clean with the least effort and attention, so that it will always look as new as when installed. It will never become stained or discolored. The wide range of colors and sizes available permit its adaptation to practically any price range or design requirement, and it can be cut, hard and lustrous surface gives it an appearance that has met with favor among designers in the modern movement.

To secure the full effect of daylight, the Conrith lavatory and mirror above it are placed between two windows of ample size. The mirror conceals a medicine cabinet, in which an effective lighting arrangement is incorporated. This fixture, as well as the circular lighting fixture over the tub, were made by Kurt Veram.

A striking modern design is painted in red and green on the white shower curtain of rubberized fabric, supplied by the Kleinert Rubber Company.

For the window curtains, a dark green open weave fabric by F. Schumacher & Company has been used.

Altogether, the effect, while cool and restful, has enough of design interest to give a feeling of cheerfulness. It represents an important contribution to modern bathroom design.
The name "Florida" is symbolic of sunny skies, blue waters, colorful flowers, swaying palms, the odor of orange blossoms and vistas of attractive homes set in tropical bowers, a land of contentment, a place for rest and recreation. A land replete with pleasures, far and near to escape the enervating heat of the tropics yet extending farther into the tropics than any point in the United States and thus escaping the rigors of winter—cooled by trade winds in summer and warmed by the Gulf Stream in winter—the home site ideal—the American Riviera "Where Summer Spends the Winter."

To those who have passed the zenith of life, Florida offers an increased span of years: to youth, 365 days each year of healthful outdoor sports and recreations, unsurpassed educational facilities and an opportunity to participate in the development of the state's unlimited resources.

The great natural beauty of the state, while reproduced on canvas by great artists and described by able writers, must be seen to be fully appreciated. The productive plantations of north Florida, with fields of cotton, corn, tobacco and other staple crops overlooked by the colonial plantation homes of the owners, approached by long avenues shaded by giant live oaks festooned with Spanish moss, are typical of the old south, the south of ante-bellum days, the south which Stephen Collins Foster visualized when he wrote his immortal ballad "Old Folks at Home," here it is that the Suwannee River, famous in song and story, its name known to all the people of the world, its location known to but few, flows majestically thru the breadth of the state to empty into the Gulf.

The high rolling pine-clad terrain of central Florida is the home of the orange industry; here the pine forests are interspersed with orange groves, magnificent estates and progressive towns and cities. Fifty years ago but little known, today one of America's most productive areas with the March of Progress ever in evidence in both urban and rural development.

The famous Ridge Section of south Florida is replete with commercial citrus developments and winter colonies; the rolling highlands are covered with groves of bearing trees—oranges, grapefruit, tangerines and other of this lesser known varieties of citrus; the brilliantly hued flame vine reaches for miles along the highway and the chimes ring out upon the clear air of this attractive section as the famed carillon, Anton Brees, renders the evening concert from the "Singing Tower," gift of the late Edward Bok to the American people and now become an American shrine.

The west coast, where formerly the swashbuckling buccaneers of old Spain landed their pirate ships, now has seaports of great importance to world shipping, phosphate mines producing 75 per cent. of the world's supply of this mineral; the greatest cigar industry of the world at Tampa; marine industries and commercial fisheries; sponge fisheries providing America with the finest sponges marketed; magnificent resort cities; and at Sarasota, one of this continent's finest museums of fine art, the John and Mabel Ringling Museum of Fine Art, having many outstanding collections of the old masters, sunsets that rival and, to some, even surpass the gorgeous colorings of a sunset across the Bay of old Naples, said to be the most colorful in the world.

The east coast, bated to the attention of the American people by the late Harry M. Flagler thru his development of the Florida East Coast Railway and the famed Florida East Coast Hotels, is now the winter rendezvous of thousands of Americans who enter the state thru Jacksonville, the thriving metropolis, commercial, industrial and shipping center, and pass southward with a pause at old Saint Augustine where on every hand is carefully preserved evidence of Spanish occupation, the old Spanish fort of San Marco now Fort Marion, the slave market, the Spanish Governor's Mansion (now the United States Post Office), the narrow streets with overhanging balconies and names on the signs of mercantile establishments that induce one to believe that here are the descendants of Ponce de Leon and his brave cavaliers of old Spain; thence to Ormond and Daytona Beach, stopping at "The Causements" for a friendly greeting from neighbor John should he be taking his daily constitutional.

From Ormond we discard highways and ride on the world's most famous beach, where last winter the spirited English nobleman, Sir Malcolm Campbell, created a new land speed record of 272 plus miles per hour in his "Blue Bird."

Now we enter the Indian River section, home of the delectable orange of thin skin and fine flavor fame; hardwood hammocks of rare beauty and broad expanse of blue water dotted with ducks and other aquatic birds, sumptuous yachts serenely pursuing the channel in and out among islets and swaying to avoid the swails of fishermen taking Spanish mackerel and pompano, the most delicious of all salt water food fish.

Thence on to Palm Beach, goal of the socially elite, where fashions are set and Rolls Royce cars are as common as Fords in the average city; where cocoanut palm shaded walks are scenes of animation; whale trains propelled by lizards are propelled and where there are owners of names that crash the headlines of the nation's press who stroll nonchalantly along in white flannel apparently oblivious to the cares and problems of the great institutions, industries and perhaps nations whose futures are dependent upon the ability of their leadership. I am hesitant to
repeat the amount of America's wealth represented by the owners of the ocean front and lake front homes at Palm Beach—an astounding figure, however.

To the south, we see Fort Lauderdale and the new addition to Fort Lauderdale: the extensive development at Hollywood; and the great club at Boca Raton which resembles a great number of Spanish or Moorish castles built together in a harmonious manner.

And now we reach the magic city of Miami with its year-round population of 125,000, which, during the winter season is increased to treble this number, and with the adjacent cities of Miami Beach, Coral Gables, Coconut Grove, form the greatest winter tourist community on the Atlantic seaboard. It is asserted that Miami offers the visitor a greater diversification of sport and entertainment than any other resort. The fine new racing establishments are the magnet that draws many famous lovers of the turf: yachts of America's famous people line the piers and wherever dirigibles, auto-giros, and great clippers vie for public favor in the sky, and shipping is continually passing to and fro thru the inlet from the Atlantic to Biscaya Bay. The strategic position of Miami in connection with the development of Central and South American trade and its importance as an air base for established routes, both domestic and foreign, all combine to establish the stability of Miami both as a resort and as a commercial and shipping center.

The southern part of the state, in which Fort Myers is the principal city, is in reality: "Tropical United States" for here it is that the rare flowers and fruits are in evidence everywhere: bright colored tropical birds soar overhead and guard the shores of coastal indentations and cataracts. It is here that the little-understood Florida Everglades are located: a vast fertile area subject to drainage (in fact, much is already drained and under flood control) far richer than the famed valley of the Nile and at present the site of great agricultural development and the home of the thriving new American sugar industry. It is here that the dusty Seminole plays his slender canoe, carved from a cypress trunk, in and out of the almost invisible waterways as he hunts, fishes and traps with success.

Nowhere in America has architecture been so thoroughly adapted to local conditions as it has in Florida, and the "Florida Tropical Home" is the last word in the small home architecture of Florida.

Living conditions in Florida vary to meet the requirement of every purse. The citizenship of the state is largely made up of those from other states who came as winter visitors and who became so enamored with the climate, beauty and improved living conditions, that they established their permanent abodes in the "Land of Sunshine". The present-day Florida is made up of discriminating people.

Men who have the world to select from and who have the advice of great physicians at their disposal, have, after careful investigation, selected Florida for their residences and estates. Among this group are such names as Rockefeller, King, Widener, Doherty, Ford, Edison, Ringling, Packner, Bryan, DuPont, Fisher-Collier, Bok, Hartshor, Olds, Penny, Curtis, Firestone, Graham and others of like importance too numerous to mention, and with many new additions to this steadily growing list each year. Their faith in Florida's future is a guarantee of new opportunities and a permanent prosperity.

Florida's fame as a Winter Resort is wide spread: her greatest value to the American nation lies in that fact that Florida is the place to live—hence the "Florida Tropical Home".

**VENETIAN POOL at CORAL GABLES**

Bathing is one of the many recreations in which winter visitors indulge.

**MIRRORS**

The Mirrors shown in the Florida Tropical House were manufactured by the Hart Mirror Plate Company of Grand Rapids, Michigan. This company has been manufacturing mirrors for the most critical trade for over thirty years, and are splendidly equipped to execute orders for any high grade special work.

Mirror manufacturing differs from most other lines in that Mirror making is an art. All the elements of human application enter into the work. It calls to its aid the sciences of chemistry and engineering in their most approved and modern forms. It deals with temperatures and atmosphere conditions, and the Mirror must be made impervious to these. A reflection can be obtained by a novice by the application of silver on an ordinary piece of window glass, yet a Mirror of this kind will not endure nor give a true reflection, and the Mirror manufacturer who caters to the artistic clientele of today seeks to add some detail to the quality and contribute some added advantage to the service rendered if he can add to the brilliancy and length of life of his Mirrors.

Not only must the highest grades of Plate Glass be used but it must be properly prepared before applying the silver and thoroughly cleaned with distilled water. Silver, being one of the most sensitive of metals, requires the use of absolutely pure chemicals, and only the most skilled workmen are used in this work, and cleanliness is the keynote of this department.

After the deposition of silver on the glass it is then necessary that the greatest precautions be taken to protect it from climatic changes and foreign matters with which it might come in contact.

Science has recently given to the Mirror manufacturer the knowledge of applying a copper protective coating which adds years to the life of the Mirror. This in turn is followed up by specially prepared Mirror paint which is also damp resisting and offers further protection.

The contemporary trend calls for more and more for the use of Mirrors to obtain decorative effects. Mirrors are now made in Gold and Gun Metal shades as well as the old reliable Silver Mirror, and where formerly the only decorative effect on a Mirror was obtained from beveling the edge, now many beautiful designs are painted on the Mirrors, and Acid Etching, Engraving and Sand Blasting have all taken their part to make the Mirror highly decorative as well as useful. Artists, Architects, Designs and Decorators are endeavoring at all times to bring out new ideas to beautify the home, and many delightful effects are obtained in this way.
BEAUTY AND DURABILITY OF SEAMLESS CARPET

THE selection of carpeting for this house presented a very important problem. Neither time nor budget permitted the use of specially woven carpets. An expected number of ten to fifteen thousand daily visitors requires a covering of great durability—a covering, able to take a lot of punishment along with a daily removal of dozens of pieces of chewing gum left by as many visitors.

A very thorough investigation proved that only one floor covering could answer and meet the demand. This investigation and the personal experience of the decorator with the Collins and Alkman seemingly seamless carpet finally decided its use in the Florida Tropical House.

The secret of this new carpeting is in the back. Instead of ordinary sizing, a resilient material is used that penetrates the bottom of the weave and permanently locks in the pile tufts. Consequently, the carpeting forms its own sovage when cut and needs no binding or seaming. Thus, when two straight edges are pushed tightly together, the thick pile so meshes that the seam is scarcely discernible. A web of strapping on the back of the seam forms a strong, unyielding joint.

Therefore, broadloom carpet has been the chief resource of those seeking beauty and distinction in their homes. But even broadloom has limitations, for its greatest standard width is eighteen feet. In wider rooms, wall-to-wall floor covering can be obtained only by sewing narrow-width carpet together with ugly well-sewn seams. This sacrifices the very effect that is sought. In rooms of unusual shape or with an irregular floor plan, a similar difficulty is encountered.

But science has come to the aid of the artist and decorator. Now they can achieve in actuality the beauties they have long pictured in fancy. With Collins & Alkman seemingly seamless carpet any room, no matter how spacious or how unusual in plan, can be enriched with the effect of broadloom—a smooth, unbroken expanse of luxurious pile.

All the beauty of modern design and color is placed at the command of the decorator by this new carpet. Greater individuality than ever before is possible. The floor covering can now smartly reflect your individual tastes and preferences. Color contrasts and harmonies in designs, limited only by artistic ingenuity, impart to a room charm that previously was unattainable only with costly, specially woven carpets.

In addition to the advantages of seemingly seamless appearance and individual designs and color combinations, Collins & Alkman carpet establishes a new sanitary standard for floor coverings. Dirt and grit cannot penetrate the resilient back and, therefore, can be completely removed by a vacuum sweeper. The back is waterproof. Stains or burns, which would ruin old-fashioned carpeting, can be easily cut out and replaced so that the carpet again presents its original appearance.

Collins & Alkman seemingly seamless carpet has revolutionized the art of floor covering. Yet its cost is no more than that of old-fashioned narrow-width carpeting.
AT HOME ON THE HOUSE TOPS

A SINGING kettle and a purring cat may make a home where the north wind blows, but nothing under the tropical sun could be a home that had not spaciousness and airiness and coolness. Especially along the Florida coast where the Gulf Stream brushes the shore, is the old Mediterranean architecture most practical. Here life can be lived on the roof, away from the dampness and dust of the street, as it was in ancient Arabia and Greece.

All this beauty and economy, these comforts and conveniences have been considered in the Florida tropical home at A Century of Progress exposition where a house is made to serve as many functions as possible. Here the roof has been rediscovered and, after centuries of abandonment to the rain, has been made into living quarters that combine not only extra space but living space, too. An aluminum rail encircles the sun deck, the living and recreation decks; just as a real rain entwines the deck of a ship at sea, and in imagination the cobalt blue of the lake could easily be exchanged for the waters of the Gulf or southern Spain.

Rarely has a traveler not been charmed by the fascination of docks at sea and it is this enchantment which makes the sun deck with its sheltering wings and awning a magnet for visitors to the Florida Tropical home. Cool as an ocean breeze is the green shade of the concrete canopy overhanging the living deck. Here are lounge chairs on wheels for easy transfer to the coolest spot, with ingots of ice and decorative trays for icy drinks, modern swings that glide by some invisible mechanism, white cattails, yellow chains, shining fountains, all blackened but their blackened tone is checked off by aqua or shipboard tints of lawn, garden and ballroom. And throughout the entire roof, designed as carefully, are pots and boxes and borders overflowing with brilliant tropical flowers—the Hibiscus, lush vines of bougainvillea—a shimmering hanging garden that is connected by an outside stairway with the gardens on the grounds.

Entrance to the house from the upper decks is through a balcony study where a maple and maido desk overlooks the lake, and roomy bookcases line the wall. Leading down into the living room is the stairway which might belong anywheres but in a monastery. It is constructed of aluminum, shining, airy and amazingly simple, striking the note as staircases always do, for the design of the entire house.

At the foot of this entirely new stairway is the beginning of the white two-story living room which carries on the feeling of friendly aloofness, where white do not shut in but only form a background. Reflecting in the long gunmetal mirror, a giant's stride away, is the great west window, shaped to ceiling and floor and partially veiled by a soft beige and brown hanging, striped horizontally. Before this hanging stands a long table of Hungarian ash and Carpathian elm, part of a group upholstered in white leather and soft green fabric.

Directly opposite on the salmon-pink east wall are two port-hole windows looking out over the lake. Below is the fireplace of aluminum, the bookcases and Woodward of the same metal and a deep love seat of soft, green leather. A stout coffee table of Carpathian elm with a long lower shelf, a frosted stool like an immense sugar loaf and a squat bronze cat are all in this group. Elsewhere is a chair of white leather, a deep brown sofa and a symmetrical table surrounded by a tomato-red tray which is balanced on little brass balls.

Proof that a carpet can serve another purpose is found in the living room floor covering of the Florida Tropical house, for here it is part brown, part cream and tomato red, designed to enhance the far-flung feeling of this room where elbowroom is priced so highly.

At first glance the lamp beside the stair would seem to be only a methodical grouping of crystal rectangles, but when lighted the illumination is as bright as any table lamp without the glare of a direct light. Equally as stunning is its companion piece, a Hungarian ash table with one leg. Here again elm and ash are combined effectively through the use of a contrasting varnish on the table drawer.

Against the green and white of the north wall stands a Capehart musical instrument from which are connected loud speakers in other parts of the house. Above it is hung a modern painting, and directly before it is a huge yellow circle in the interesting carpet.

Once upon a time the recess behind the stairs was used for dripping umbrellas and doubtful coverings, but that part has been lived down effectively in the Florida home. Here a cabinet of Imbuia and Hungarian ash blends so beautifully with its wall background of brown that the behind-the-stair location is as much appreciated as the front door step.

"Where shall we eat?" Where else but in the dining room. But must it be an ordinary room with four walls and a bowl of fruit? Not at all, it might be a room of three walls like this dining room in the Florida Tropical home. It might have three walls finished in a lovely, hand-painted plaster with tomato-red chairs and a table top veneered in Awdere inlaid with varnish. The room might even be flanked with vermillion and yellow, and the fourth side might be a screen of thick plate glass behind which extends an aquarium in which tropical fish float their tails in saucy gyration among deep sea plants. Back of this there would be another screen of glass on which is painted an astonishing fish as only the Japanese can originate on their canoes. That is the dining room of the Florida home.

For a quick revival of humid spirits the frosting of the green and lemon-hung bedroom is one of the effective spots in the house. The feeling of space is augmented in this room by gamma mirror set in the walls. The furniture of Italian olive burl and walnut is pleasing in contrast to the coolness of the room, and the use of these ancient woods in a modern way connects, as does the roof, the future with the past.

In one corner is a tufted chaise lounge in yellow, and in another a commode with hardware of jade green on chromium plated plate. The twins beds repeat the same combination of woods.

Two blues that reflect the tones of the lake just outside the windows make the second bedroom, designed for a college girl, one of the high lights of the home. The softness of powder blue is touched up by drab olive, chromium plate and spots of varnish, and the lighter shade is repeated in the covering of the desk chair and dressing stool.

Something that has not been dared before is the combination dressers-dressing table in this room, which depends much upon good lines for its striking beauty. The walls are delicately patterned in blue and white.

Like childhood dreams of ice cream mountains and new red shoes, the feeling of luxury engendered by a sunken bath is almost universal, and unfortunately too often only a dream. The bathroom in the Florida home has not only a sunken tub, but a glass enclosed shower, and a lighting arrangement that approaches perfection. The walls are of a glass-like composition in white, pale green and black.

Marble and pillars, synonymous to many, are separated definitely in another tradition-splitting manner in the loggia. This time the pillars are aluminum, and carry on the feeling of space and airiness begun by the stairway in the living room. The furniture, although of metal, is upholstered in leather as furniture should be when placed in a room half indoor, half outdoor.

Among the firms that have cooperated with Mr. Kahne are The McKey Company of Pitts- burgh, all metal furniture; Collins & Atkins Corporation of New York; carpets: John Widdicomb Company, Grand Rapids; wood furniture, and the Muller Furniture Company of Grand Rapids; all upholstered furniture.

Altogether, the house should be the inspiration for another desert song, or for another northerner's home in the Southland.
SCIENTIFICALLY DESIGNED KITCHENS

Marvin Coppee

A DISCUSSION of Kitchen Equipment today implies not only the accepted items such as stoves, sinks, and storage places but conveniences only dreamed of a few years ago. Today a kitchen properly equipped has built-in cabinets, a refrigerator, stove, broom cabinets, dish cabinets, ironing board, ventilating fan, electric dishwasher, iridal linoleum, brightly colored curtains, comfortable chairs, wall racks for cook books, recipes, etc., porcelain top table, electric lights and power outlets properly placed, colored utensils, cake mixers, and fruit juice extractor.

Now that we know what a kitchen should contain and how it should look, we must analyze the problem from an economic and scientific viewpoint.

Modern kitchens, then, have already approached to the ideal point where the necessary work can be done with a minimum of effort. This has been the direct result of the scientific research and experimental work done by one of the large manufacturers of kitchen equipment.

The essential elements of a convenient kitchen divide themselves into five divisions. These are—first, the stove; second, the sink; third, the refrigerator; fourth, the work table; fifth, storage space.

Notable improvements have been made in recent years in all of these lines. Gas ranges have been improved. Cooking temperatures have been studied by the manufacturers and it is now possible to cook scientifically rather than by guesswork. Electric stoves also have been developed. The kitchen sink has been studied and improved with a view to convenient service. Even the chore of dish washing has been made less arduous by modern devices of force sprays and drying racks. The big development in the refrigerator field has been electric refrigeration.

Built-in kitchen cabinets have become more and more essential to the modern kitchen and in the improvements in this field have been great. They have become more and more practical and the time has already arrived where a kitchen is not complete without one. "In the planning of homes the space is laid out with chief reference to the kitchen cabinet."

All work in the kitchen begins with the work table and storage—or cupboard divisions. Recognizing this important fact, Nappanee manufacturers of built-in cabinets have engaged in kitchen research and developed their products through exhaustive domestic science tests are producing units of equipment that revolutionize kitchen methods. Their kitchen cabinets combine the three chief divisions of kitchen equipment mentioned above—not only a splendid, open work table but storage space all around, laid out for greatest convenience.

The placing of various units in a kitchen is highly important and should be given careful thought. The kitchen with its central sink and work table and surrounding storage space should be located on an outside wall, with a window in the center for the best results, while the range may be most logically situated opposite the cabinet. The refrigerator either in cabinet assembly or near by.

The Nappanee line is the most complete line of kitchen equipment in America. It offers you the greatest variety of possibilities in your kitchen plans—the greatest opportunity for originality and distinction in your kitchen layout.

Nappanee Kitchen Cabinet Units are tested and approved by Good Housekeeping Institute. They are scientifically designed by people who devote their lives to kitchen procedure. They organize work as no kitchen cupboard can. They revolutionize kitchen design.

No matter what the size and shape of your kitchen, whether new home or old, it can be completely and exactly fitted with Nappanee built-in cabinets.

Nappanee equipment introduces hardwood into the kitchen, as all Nappanee units are made from hardwood throughout. For color you have a choice of eight attractive shades, beautifully enameled.

The Nappanee Integral Sink, Table-Top and Splasher Unit is one of the greatest improvements ever introduced into kitchen equipment. It combines sink, work table top and splasher in one solid piece. There are no unsightly joints to mar the beauty of the finished installation.

HEATILATOR OPEN FIREPLACE

The open fireplace has long been one of the most important features of the southern home—a symbol of charm and gracious hospitality. From a practical standpoint, it has been equally important as a source of warmth and comfort during cool weather. In view of these facts, it is quite natural to find the Fireplace one of the outstanding features of the Florida House. And to discover that it is built around the Heatilator—the one sure way to guarantee smokeless operation and new circulated heat.

The secret of this improved method of construction lies in the scientific design of the Heatilator unit itself. Primarily, it serves as a complete fireplace frame including the firebox, damper, down draft shall, and smoke damper around which the masonry is built. But it is more than this. By applying the principle of the warm air furnace, engineers have made the Heatilator real efficient as a source of new heat and comfort.

In the old type of fireplace 90% of the heat is lost up the chimney. The only warmth is that radiated directly from the fire and even that is scarcely noticeable a few feet away. Not so with the Heatilator fireplace. For by saving and circulating the heat previously wasted up the chimney, the Heatilator extends the zone of comfort to every corner of the room and connecting rooms. In southern homes it is usually the only heating equipment required.

Cold air is taken into the double-walled heating chamber of the Heatilator through gridded openings at floor level. Here it is heated and then returned to the room through other openings higher in the masonry. The design of the fireplace or mantel is in no way limited. Any kind of masonry such as stone, brick, tile or stucco may be used. Construction has been simplified and standardized so that any mason can quickly build one of these improved fireplaces.
WALL PAPER
IN THE MODERN HOME

MANY conservative people complain that modern architecture, home furnishings, and all the new conveniences that make home management easy are all very well—but when put together they don't look home-like. They gripe that modern homes are like hotels that have given thought to the problem of disposing of used razor blades, or like modern restaurants where customers sit on "curved gas pipes." Nothing could be further from the truth, as visitors to Chicago's World's Fair well know.

One major item that goes far toward making the modern house home-like is the extensive use of wallpaper. There's an atmosphere about wallpaper that gives charm to any room where it is properly employed—and at the Fair it has been expertly chosen to supply the home-like motif.

"Think first of the walls," wrote William Morris. And no wonder! After all, the largest areas in a house are the walls. What goes on them—the dominating objects of decoration—can make or break the charm of a home.

Wallpaper can do wonders. It can lighten a dark room or subdue a bright one. It can enlarge a small room, or diminish the size of a large one. It can provide an ideal background to set off pictures and furniture to great advantage—or it can itself be pictorial or decorative dispensing with pictures. Recognizing this versatility the modern home utilizes wallpaper to produce just the required effects.

Great progress has been made to perfect wallpaper to its present excellence. Today wallpaper is made in thousands of different patterns and colorings. Embossing has reached such heights that practically any texture can be produced. Good wallpapers are made sun fast, and washable. Submit any problem of wall decoration—wallpaper has an answer.

Combining the smart sophistication of a Park Avenue pent house with the comfort and home-like atmosphere of "a little white cottage on a hill," the Florida Tropical Home represents a distinct departure from the small homes of our fathers. In wall decoration, the same departure is witnessed.

The wallpapers used in the Florida Tropical Home speak eloquently of the willingness of the wallpaper manufacturer to cooperate with the decorator and designer. In this case the Henry Bosch Company of Chicago—one of the leaders in the wallpaper industry—have given up two presses to develop the design and color required in order to achieve the desired success of the Florida Tropical Home.

The lines of the home are primarily horizontal. Planes and surfaces with solid colorings are part of the architectural plan. Therefore, Mr. J. S. Kuhn, whose skill as master of interior decoration is responsible for the exquisite effects, chose a cool green stripe pattern embossed with a pebble finish for the northwest bedroom. The wallpaper was applied in horizontal strips to carry out the scheme of decoration. The northeast bedroom is papered with a soft blue pin stripe pattern on a white ground with basket weave embossing. Here again the rolls are hung horizontally. The kitchen is similarly treated with a canary stripe wallpaper pebble embossed that gives a bright, clean-limitted appearance to this important room.

Here is wallpaper in an ultra modern setting. Here is wallpaper fraternizing with large areas of brilliant hues, joining with them to make the finished home exquisite.

Window shades in the Florida Tropical Home were carefully chosen to harmonize with the modern decorative scheme. White striped Bancroft Holland Shades were selected by Mr. Kuhn from the Harry Bosch Company of Chicago.

The choice was a happy one. The window shades are sunfast and washable—satisfying the modern home's demand of practicability. The clean white appearance of the shades, and the attractive faint striped pattern contribute generously to the feeling of airiness peculiar to the Florida Tropical Home.

THE HOOVER IN THE HOME

ELECTRIC cleaners were not one of the marvels of the World's Fair of '93. They didn't exist then.

It seems impossible to realize that all the development of electric cleaning for homes has taken place in the past twenty-five years—that a quarter of a century ago, women were still struggling with broom and dustpan, still taking up carpet's twice a year for beating on the line, still wearing themselves out in heavy cleaning tasks.

Then came the sensational vacuum cleaner—a completely new idea in cleaning. Suction drew the dirt from the floor coverings. This was followed by a new type of electric cleaner—a cleaner that added to suction a brush, either stationary or revolving, to dislodge some of the deeper-lying dirt as well as the surface dust.

And now, within the past few years, a still further improvement has taken place in electric cleaners. This new-type cleaner combines with suction (for surface dust) and a sweeping brush (for thread and lint) an Agitator, whose polished metal bars beat out embedded grit.

With the development of this new-type cleaner, woman had for the first time at their disposal a cleaner with three distinct cleaning actions to remove the three types of dirt that collect in rugs and carpets.

It was revolutionary!

Rugs now could be freed, not only from the light surface dust—they could be kept clean from top to bottom.

The grit that sinks to the bottom of the rug could now for the first time be completely removed. That means longer life for rugs—for it is this sharp, gritty dirt that wears rugs out.

This new and thorough removal of rug dirt means a cleaner home, too—for this gruey grit at the bottom of the rug collects millions of germs, which are removed when the grit is removed.

A more sanitary home—a more healthful place in which to live—this is the amazing result of the new progress in electric cleaners embodied in the cleaner with three cleaning actions instead of one.

There is but one electric cleaner of this type—The Hoover, the finest electric cleaner made. It is the cleaner chosen, as the highest example of electric cleaner development, for the Florida Tropical Home at A Century of Progress.
STRUCTURAL DESIGN IN THE FLORIDA TROPICAL HOUSE

THE major considerations in the design of the "Florida House" are the unusual climatic conditions of southern Florida. It is to be remembered that freezes are unheard of in tropical Florida. The year-round temperature is comparatively even. In the late summer and early fall months tropical storms of varying intensity may be expected. Seldom does a year pass without some comparatively high winds accompanied by heavy rains. Tropical showers, while of short duration, are usually very heavy. The summer sun is very hot in mid-day and shade during that time is welcome. Yet the value to health of the sun's rays in southern Florida is well known and has been considered.

The "Florida House," as far as is possible, is built of Florida materials. The State of Florida provides Portland Cement, Florida Travertine, Florida Limestone, and Quality Aggregates for concrete work and the manufacture of concrete products. Clay flooring and roofing tile is also manufactured in Florida.

The absence of quick changes in temperature and pressure makes reinforced concrete and concrete building tile practical materials for substantial construction in this climate. Therefore, the house was designed as a masonry house with integrally waterproofed floor and roof slabs, and bearing walls of concrete building tile. The projecting cantilevered slabs over all exterior openings are an integral part of the ceiling slab and are designed to take the place of ordinary attached overhangs. These project from the face of the building about four feet, and serve as a protection to windows and doors from the rain and sun. By inverting the beam over exterior openings, it is possible to place the heads of all windows directly against the ceiling, aiding natural ventilation. Windows may be left open during ordinary rains. The underside of ceiling slabs are finished monolithically, and all decoration is applied directly to this surface.

The roof area of the house is usable, being accessible by a stairway from within the house. The roof is divided into three parts: a covered area as a second floor loggia, a part as a deck for sun baths, and another portion as a recreation deck. All roof surfaces are insulated with a one-half inch thickness of "Celotex." The decks are finished with clay tile set in a setting bed placed on sand and graded to drain to leaders. The railings in connection with the roof decks are of aluminum, and are anchored securely to the beams which form the roof coping. To sum up the structural features of the "Florida House," it becomes one Masonry mass with no lifting, cutting, or joining of its various parts.
SELECTION OF ART SUBJECTS ON DISPLAY
AT THE FLORIDA TROPICAL HOME

PAINTINGS
NEGRO MASK (Oil)  NICHOLAI CIKOVSKY
FLAGS (Oil)  STUART DAVIS
YELLOW IRIS (Water Color)  CHARLES DEMUTH
FLOWERS (Water Color)  STUART DAVIS
WICKER BASKET (Oil)  KARL KNATH
A DREAM (Oil)  YASUO KUNIYOSHI

PRINTS
BANDAGED FOOT  ALEXANDER BROOK
PLACE PAS DE LOUP  STUART DAVIS
SEATED NUDE  ERNEST FIENE
HEAD & SHOULDERS OF WOMAN  ERNEST FIENE
HEAD OF WOMAN TURNED RIGHT  JOHN STORRS
PEWTER CUP  MAX WEBER

SCULPTURE
WALKING WOMAN (Wood)  DUNCAN FERGUSON
SIAMESE CAT (Bronze)  DUNCAN FERGUSON
EYE (Stone)  ROBERT LAURENT
FLAME (Wood)  ROBERT LAURENT
SEAL (Marble)  REUBEN NAKIAN
TORSO (Marble)  WILLIAM ZORACH
YOUNG BOY (Bronze)  WILLIAM ZORACH
YOUNG GIRL (Bronze)  WILLIAM ZORACH

THE many who have been thru the Florida Tropical Home and secured this booklet may, upon reflection, purchase some of the items in the Home or be desirous of building a similar house.

However, we will be pleased to give you complete information concerning all details of furniture and other items, in which you may be interested, together with prices on all articles, delivered to your station or postoffice. When writing, kindly give brief description of the particular things in which you are interested and the illustration number.

We can assure you that immediate attention will be given to your inquiries and the proper information sent.

Thank you for the courtesy of your visit to the Florida Tropical Home.

Address all communications to
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