White Lead for General Electric Demonstration Home

THE General Electric Home Electric competition has attracted home plans from more than 2,000 architects, and the General Electric Company is sponsoring the construction of a number of "New American" demonstration homes throughout the country from these and builders' own plans. The object is to provide economically planned homes of good construction making the best use of all modern facilities for the comfort and convenience of occupants.

Specifications Call for White Lead for Both Exterior and Interior Painting

One of the model homes erected which has proved most popular with builders is a Cape Cod Colonial type erected at Marblehead, Mass., by Angus MacDonald, builder, from plans by Royal Barry Wills, well known Boston architect. The cost of this house is reported to be $9,000. It includes air conditioning, scientific lighting, electric range, home laundry, dishwasher, kitchen ventilation, basement workshop and basement game room and other modern conveniences.

It is interesting to note that quality has been carried through to the materials in addition to providing the conveniences described, for good materials are essential if a home owner is to enjoy his home to the fullest and if he is to be free from undue maintenance costs which would nullify enjoyment of the things around him. As will be seen from the painting specifications provided for this house, which are printed here, pure white lead and oil paint is specified throughout except for special finishes. The value of white lead as a universal paint of highest quality for interior and exterior is recognized in this "New American" model home. With all the latest features which are provided, white lead remains the standard of quality for painting.

The painting of this house is an excellent example of the all-purpose nature of white lead. From the following sections of the painting specifications, it can be seen that white lead is used for exterior and interior wood, for metal and for plaster.

Extract from Painting Specifications for New American House

EXTERIOR PAINTING

Woodwork: All exterior woodwork shall be painted three coats of white lead and oil paint, except blinds which shall be painted in an approved shade of green, very dark. The above includes clapboards, matched boarding, doors, windows, trim, porch, dormers, and so forth.

Leaders: Toncan metal leaders shall be painted three coats of lead and oil paint, white.

INTERIOR PAINTING

General: The room side of all doors shall be finished to match the finish in the respective rooms in which they are a part.

Walls: Walls of bath and lavatory above tile dado, walls of kitchen, dado in living room, dining room, and hall, shall be painted three coats lead and oil paint, last coat part enamel, and stippled.

Closet walls shall be painted two coats lead and oil, stippled.

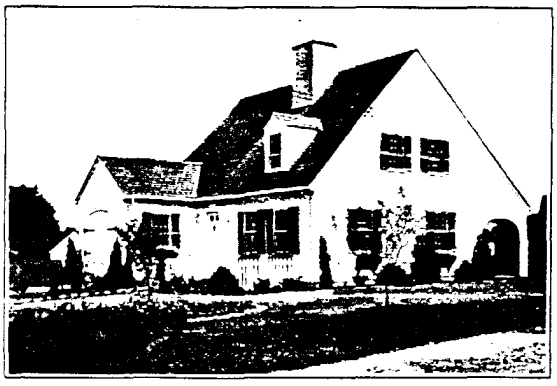
Basement walls shall be painted two coats lead and oil paint.

Woodwork: All woodwork on the first floor shall be painted three coats of lead and oil paint, last coat part enamel.

All woodwork on the second floor shall be painted three coats of lead and oil paint, last coat part enamel.

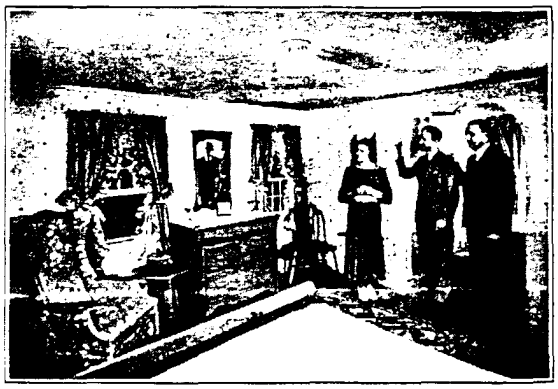
Floors: All pine floors throughout the house shall be painted two coats lead and oil floor paint, spattered in three colors.

Stairs: Risers to be finished same as woodwork. There shall be three coats of paint on the treads, with a strip of spattering about two feet wide up the stairs.



COURTESY GENERAL ELECTRIC CO.

The exterior of this General Electric demonstration home at Marblehead, Mass., is painted with white lead. Royal Barry Wills, architect.



COURTESY GENERAL ELECTRIC CO.

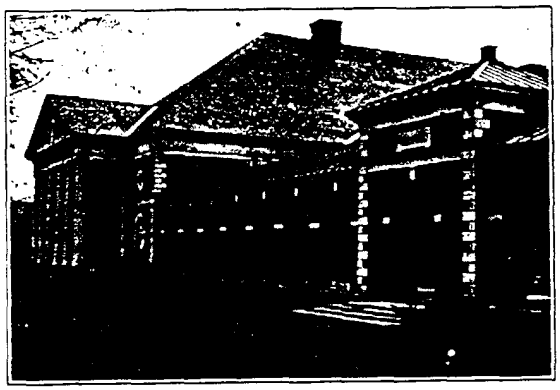
Interior woodwork is painted with three coats of lead and oil paint, last coat being part enamel.

Durable Hard Lead Roofs at Beautiful Saratoga Spa

Durability, Low Maintenance, Color Harmony and No Staining among Advantages of Lead Roofs

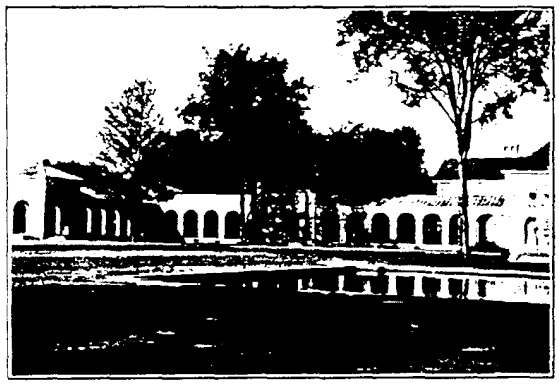
HARD lead was selected to roof the arcades and pavilions of the Administration Building, the Drink Hall and the East and West Baths of beautiful Saratoga Spa, one of the world's best equipped and most modern watering places, at Saratoga Springs, N. Y. The Spa, owned and operated by the State of New York, was described in the November, 1935, issue of LEAD.

In keeping with the fine construction of all the buildings, lead makes an ideal material for the metal roofs. It is the most durable metal that can be employed for this purpose, and its greater thickness gives added assurance of permanence and freedom from trouble. In color lead is most attractive and blends readily with other materials, in this case slate, brick, marble and limestone, and, since water running over lead roofing is not discolored by the metal, staining of adjacent materials can not result.



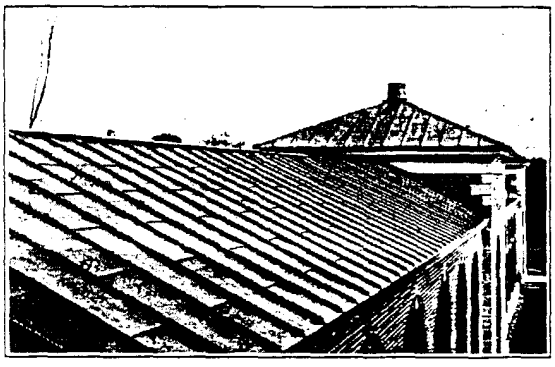
Another view of the Drink Hall at Saratoga Spa.

The lead roofs at Saratoga Spa are 3 lb. hard lead, installed with wood battens 21 in. apart and laid over pre-cast gypsum roof decks and a layer of 30 lb. roofing felt. All seams are loose-locked and filled with Vulcatex Non-Hardening Compound, and the lead is held in place by lead-coated copper cleats folded into the joints. Thus free movement of the lead resulting from expansion and contraction is permitted in all directions, yet the roof is securely fastened in place. At the eaves a continuous strip of 16 oz. lead-coated copper embedded in Vulcatex was installed under the battens and the lead roof pans were hooked over the edge of this strip to form a drip. Batten ends were closed at this point by inserting a lead-coated copper sleeve about 4 in. long over each and soldering a piece of lead to this sleeve over the end of the batten. This piece of lead was large enough to hook over the edge strip at the bottom. The lower ends of the roof pan upstands were beaten slightly around over this end piece and the lower end of the batten cap likewise turned down over it. At the hips and ridges, ridge battens were installed and roofing sheets turned up against them with corners folded and soldered. Ridge and hip batten caps were loose-locked to the upstand of the roofing sheets and to the upper end of batten caps.

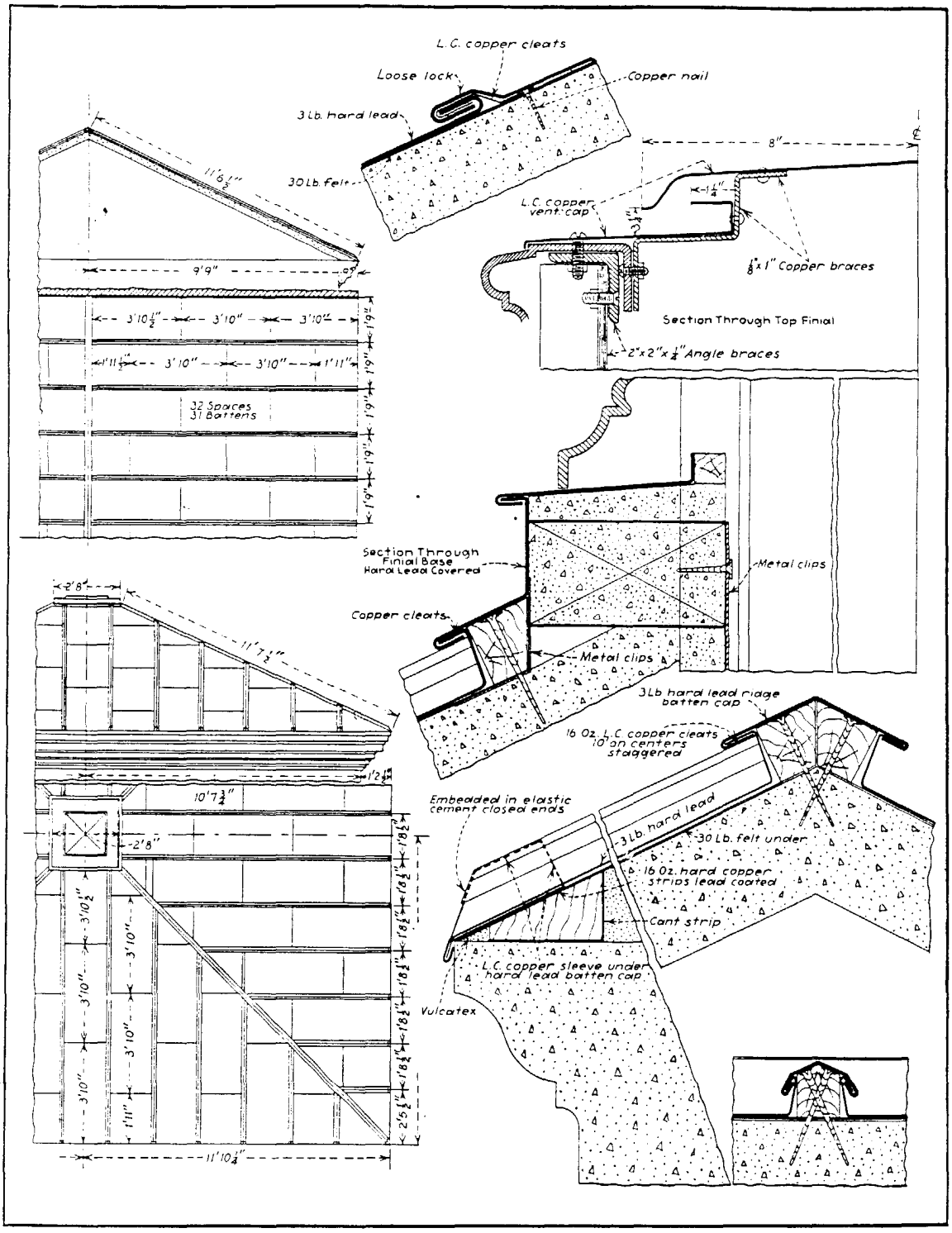


Lead roofed arcade of the new Drink Hall at Saratoga Spa. Joseph H. Freedlander, architect.

Virtually the same method was used in the center of pavilions where the roof finished with cast lead finials. Sheet lead at the base of the finial was joined to roofing and batten caps in the same way as ridge batten caps, and the cast hard lead finial, supported internally by 2 in. by 2 in. by ¼ in. angle braces, was installed over sheet lead which was run back under the base to prevent leakage.

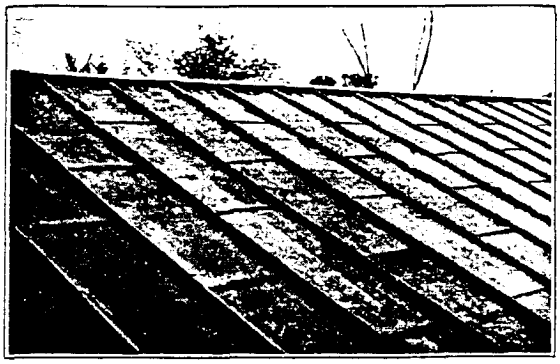


Lead roof on an arcade and pavilion of the Administration Building at Saratoga Spa. Note the cast lead finial.



DETAILS OF LEAD ROOFS AND FINIALS AT SARATOGA SPA.

At the top is a section through a typical cross seam and at lower right through a batten. At the left is the layout of the roofing and at the right methods of finishing at eaves and ridge. Installation of the finials is also detailed.



A section of a lead roof at Saratoga, showing the ridge finish.

A detail of the finish of the lead roofs at the eaves at Saratoga.

Joseph H. Freedlander of New York was architect for these fine buildings and Bushwick Cornice Works. J. J. Fisher Co., Sobel and Kraus, and Supreme Sheet Metal Works and Roofing Co., all of New York, were the roofing and sheet metal contractors. Mr. R. V. O'Brien is chief engineer for the Saratoga Springs Authority, the State body in charge of the Spa.

The rapidly increasing number of buildings on which hard lead roofing and flashing is being installed indicates the cordial reception given by architects to the new low cost of this material. Paradoxically it is true that the added durability and thickness of lead roofs can now be obtained at a cost little if any greater than good types of other metal roofs. Add to this their other advantages and increased use of them is not in the least surprising.

Lead Plaques Record Colonization of Pacific Islands

IN SURVEYING for Pan American Airways trans-Pacific route, weather observation parties of youths from a Honolulu school were established on uninhabited Howland, Baker and Jarvis Islands in the Pacific Ocean. These islands, which were originally discovered by Americans in 1821 and 1842, were frequently credited to Great Britain. In order to avoid any future complications as to the ownership of these islands due to their appearance as British on some world maps, the observation parties hoisted the American flag and on a stone cairn on each island mounted lead plates engraved with legends like the following:

HOWLAND ISLAND
LATITUDE 0° 49′ NORTH
LONGITUDE 176° 43′ WEST
THIS ISLAND IS COLONIZED
THIS 30TH DAY OF MARCH
1935 BY AMERICAN CITIZENS
IN THE NAME OF THE UNITED
STATES OF AMERICA
NO TRESPASSING ALLOWED.

Thus American colonization of the islands is established and recorded in a medium that will endure for centuries. Such a use of lead is far from new. Biblical quotations indicate that lead was used for writing to be preserved for a long time even in those days and in modern times it is often employed for memorial plaques, casket name plates and other similar purposes.

COURTESY BUREAU OF AIR COMMERCE.

Weather observation camp established on lonely Jarvis Island in the Pacific Ocean in connection with the new airway to the Philippines.

Lead Boot Illustrates Plumbing Skill

AN interesting example of the craftsmanship developed by lead work has come from St. Hyacinthe, in the Province of Quebec, Canada. It is the boot illustrated here, which was hand wrought of lead by Mr. A. Blondin, president of A. Blondin & Co., Ltd. It was made when Mr. Blondin, whose firm of plumbing contractors was established in 1879, was actively practising his trade.

Hand wrought lead boot so realistic one would almost want to walk away in it.

Mr. A. Blondin, who made the lead boot pictured on this page.

Good plumbers are proud of this kind of craftsmanship and many excellent pieces of lead work have been produced by plumbers, who are really lead workers. This is true even today (Lead, July, 1935; September, 1935; November, 1935), for lead work, which makes the best plumbing installations, is still a job for a skilled worker. No mere assembler can hope to install or repair lead pipe.

That is why forward looking plumbers stick to lead work and attempt to maintain a level of craftsmanship in their industry that sets it apart from others. The plumbing industry above all others demands a high type of mechanic because public health is so intimately involved. Lead work is the back bone of skill in plumbing which gives it the double advantage of providing the best, most durable job and of eliminating the incompetent mechanic and handyman.

It is interesting to note that the territory in which this lead boot was made many years ago has developed into a large community in which a considerable tonnage of lead products are used yearly.

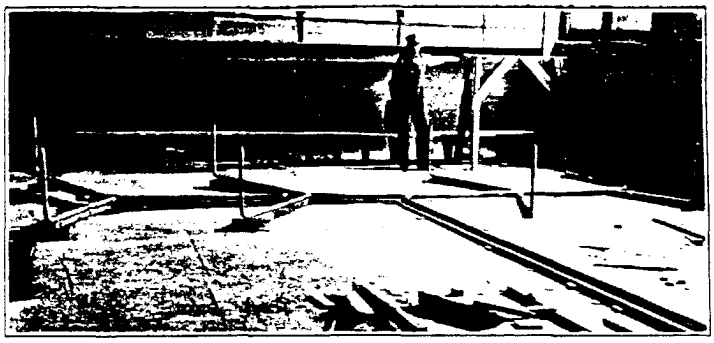
Lead Wastes in Laboratories of New Kansas School

LEAD waste lines were used in the chemistry and physics laboratories of the new Senator John J. Ingalls High School at Atchison, Kansas. Because lead is highly resistant to corrosion by such a wide variety of common chemicals, including sulphuric acid, probably the commonest of all, it is well suited for this purpose.

In the photograph a portion of the lead work in the chemistry laboratory is shown. In consists of a 2 in. waste line with 1½ in. branches, and serves eight student chemistry tables and one instructor's desk on the second floor of the building. Similar construction is employed in the physics laboratory on the first floor for dark rooms, an aquarium and other purposes.

The waste lines are supported on wood, feathered to provide for fall, and secured to the wood by tags and sheet lead straps. The wood protects the lead from the rough concrete. Outlet branches are unusually long to allow for an 18 in. false floor. Wastes from both the first and second floors are entirely of lead and connect through a 4 in. line to a brick manhole outside of the building. Each fixture is trapped with a 4 in. drum trap with spun connections and a lead sink plug.

Architects for the new high school building were Sayler and Owens of Kansas City, Mo., and the plumbing was installed by Hayes Plumbing Co. of Atchison, Kansas. The individual shown in the picture is J. E.



Lead wastes in the chemical laboratory of the new Ingalls High School at Atchison, Kansas. Sayler and Owens, architects.

Luce, one of the plumbing mechanics, who is serving his forty-fifth year as a journeyman.

In addition to its resistance to chemical corrosion and salt water corrosion, which makes lead so useful in laboratory and industrial installations, aquariums, ships, sea-shore hotels and homes, lead is more flexible than most other materials that might be used for the purpose, which prevents breaks in pipe lines resulting from settlement. A few of the common chemicals in contact with which lead has been used successfully are listed here:

Aluminum Sulphate
Ammonia Vapor
Ammonium Sulphate
Antimony Tri-Chloride
Bleach Liquors
Carbonates, soluble
Chlorine Gas
Hydrofluoric Acid
Mixed Acids
Phosphoric Acid
Phosphorus Chloride
Sodium Bisulphate
Sodium Chloride Solution or sea water
Sodium Hydrosulphite
Sodium Hyposulphite
Sodium Sulphate
Sodium Sulphide
Sodium Sulphite
Sulphur Chloride
Sulphur Dioxide
Sulphuric Acid
Sulphurous Acid
Zinc Chloride

Plumber Cites Sales Value of Craftsmanship

THE following letter has been received from Mr. H. W. Eckhardt, of Cleveland, temporary editor of the Ohio Master Plumber, official organ of the Ohio State Association of Master Plumbers:

November 20, 1935.

Lead Industries Association,
420 Lexington Avenue,
New York, N. Y.

Dear Sirs:

Your article on page 3 of your November issue of "Lead", entitled "Plumber uses Lead Craftsmanship to Attract Customers" was of special interest to me.

Years ago, I had an exhibit of my lead work which attracted the attention of Mr. Warner of the firm of Warner & Swasey Co., manufacturers of telescopes and machine tools.

Mr. Warner at the time was looking for a Master Plumber who was a mechanic, one who understood the working of lead to do the plumbing in a new home.

Mr. Warner knew the advantages that lead pipe had over iron or steel pipe.

Making a satisfied customer of Mr. Warner and Mr. Swasey gave me thousands of dollars worth of contracts for this firm.

I learned my trade of plumbing and lead burning from my father in 1891 and I have not regretted the fact that I have recommended lead pipe for good installations.

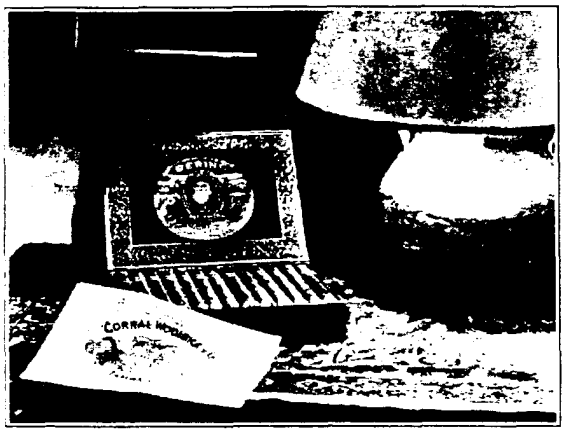
Yours very truly,
H. W. ECKHARDT

Mr. H. W. Eckhardt, temporary secretary of the Ohio State Association of Master Plumbers

This is another indication that plumbers can sell their craftsmanship and that it will be reflected in the profits of their businesses. It is not necessary for a good plumber to compete on price alone. He has skill for sale and by the application of a little salesmanship this skill gives him a competitive advantage.

Most property owners are intelligent people who can be made to see the value of buying good quality plumbing materials and good workmanship. They look for quality in clothes, automobiles, radios and other things they buy and are willing to pay for this quality. They know less about plumbing than about their other purchases as a rule, however, but the plumber can tell them about the requirements for good plumbing and sell them his ability to make a good installation. It is easy to sell on price alone, but that kind of business usually results in little or no profit and certainly does not build a reputation that will be reflected in future business. Plumbers capable of doing good lead work can sell their craftsmanship and thus build a list of satisfied customers.

Metal Foil Wrapping Adopted to Preserve Cigar Quality



WURTS BROS.

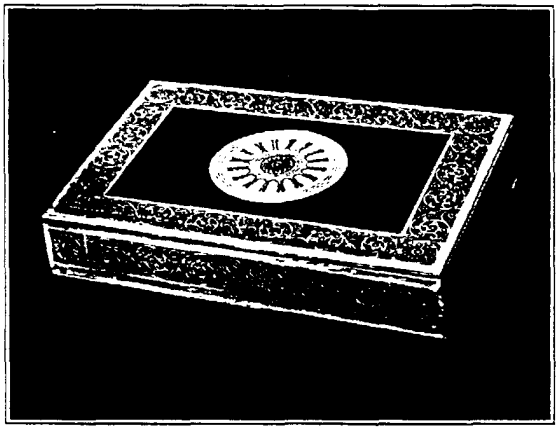
Wrapped in foil to protect against the harmful effects of light and to control humidity, these cigars are an addition to any library table or office desk.

CORRAL, WODISKA Y CA, prominent manufacturers of fine Havana cigars, recently announced an important change in the packaging of their 20 cent line of Bering Cigars. The change includes not only the replacement of individual transparent wrappers with composition metal foil wrappers, but also a complete re-styling of the conventional cedar cigar box.

According to the company, the new package represents the result of many months of laboratory and packaging research. Tests conducted by Gorral, Wodiska y Ca and others definitely prove the necessity for complete protection of cigars from light and for control of humidity to assure the maintenance of freshness and full flavor.

Important from the merchandising standpoint is the radically improved appearance of the cedar container. The new box is completely covered with embossed gold metal foil with a reddish brown background. Contrary to conventional design, the box bears no printing on the top or sides. Discreet end panels carry only the name and description of the cigars. The reason for this treatment, according to the company, is to provide a container that reflects the quality of the product, and second to stimulate box sales by providing smokers with a container that will harmonize with the appointments of the most distinguished home or office. It is felt that this will encourage a revival of that good old custom of "passing the cigars" to friends and associates, always man's most gracious gesture of hospitality. The new box, which also contains all the elements of an excellent gift package, contains 25 cigars and retails for about $4.25.

The inner gold box label carries the characteristic "Bering" trade mark, thus retaining all of the benefits of brand recognition at point of sale. The 25 cigars are individually wrapped in gold embossed composition metal foil, which is an alloy of lead with 6 per cent of tin. The box further carries a metal foil insert stating, "Scientists have discovered that light is harmful to cigar quality. These metal wrappings shut out light, control humidity and assure freshness and full flavor . . . You can taste the difference."



WURTS BROS.

The attractive box containing foil wrapped Bering cigars is a new and distinctive departure in cigar packaging.

Correction

In the November, 1935, issue of LEAD, the design of the leaded windows at the University of Washington Library was erroneously accredited to the C. C. Belknap Glass Company, of Seattle. These windows were designed by Charles H. Bebb and Carl F. Gould, prominent architects of Seattle, and were constructed by the C. C. Belknap Glass Company.

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