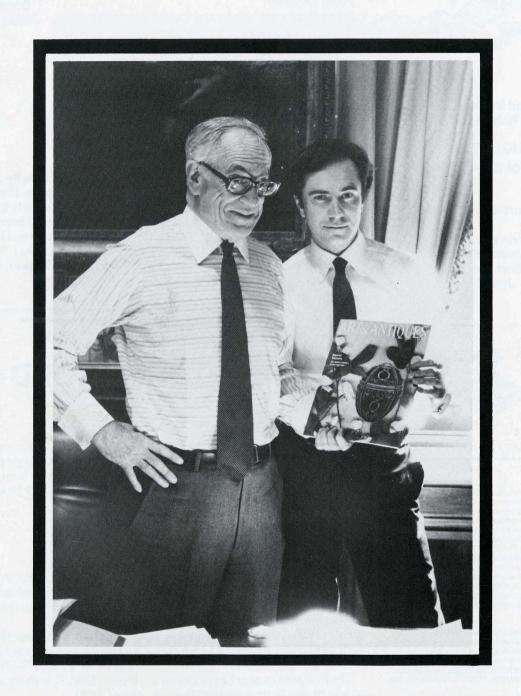
BRIDGE



Malcolm S. Forbes and son Christopher (See story page 10)



INTERNATIONAL EXECUTIVE COUNCIL

President Vice-President **Executive Secretary** Robert J. Kennerknecht Robert F. Arehart J. Robert Betten

INTERNATIONAL BOARD OF DIRECTORS

Irving Engelson David G. Mever

Donald S. Stoica James R. Rowland

Editor and Business Manager J. Robert Betten

> **AUGUST 1989** Vol 85-No. 4

Contributing Editors

Irving Engelson James Phipps Bert Sheffield Joan Spink

COVER PHOTO

Malcolm S. Forbes and son Chris- The special article by Bert Sheffield topher, holding a copy of Art & Antiques Magazine, with Christo-Schwarz

beginning on page 10 contains seven photographs which like the Cover pher's cover story chronicling the Photo are printed here with permisrediscovery and purchase of the sion. These pictures along with their Rosebud Egg. Photo credit: Bruce captions are from: The FORBES Magazine Collection, New York.



The BRIDGE is published by the Eta Kappa Nu Association an electrical engineering honor society. Eta Kappa Nu was founded at the University of Illinois, Urbana, October 28 1904, that those in the profession of electrical engineering who, by their attainments in college or in practice, have manifested a deep interest and marked ability in their chosen life work, may be brought into closer union so as to foster a spirit of liberal culture in the engineering colleges and to mark in an outstanding manner those who, as students in electrical engineering, have conferred honor on their Alma Maters by distinguished scholarship activities, leadership and exemplary character and to help these students progress by association with alumni who have

The BRIDGE is published four times annually-November February, May, August-and is published by Eta Kappa Nu Haywood Printing Company, 5th & Ferry Sts., Lafayette Indiana. Second class postage paid at Champaign, Illinois and additional mailing office. Eta Kappa Nu Association Subscription price: three years, \$7.50: Life Subscription, \$30.

Address editorial and subscription correspondence and changes of address to:

HKN BRIDGE, P.O. Box 2107 Rolla, MO 65401

Postmaster: Send address changes to: HKN Bridge, P.O. Box 2107, Rolla, MO 65401.

-FOR THE RECORD-

Dr. Robert Betten HKN Bridge P.O. Box 2107 Rolla, MO 65401

February 28, 1989 Dear Bob:

The Ohio Brass Company had an April 25, 1989 outdoor high-voltage laboratory at Barberton, OH, with three 1,000,000 volt transformers in stair-step fashion above ground. As part of the senior inspection trip from Ohio State in spring, 1928, I visited there and saw ground at 3,000,000 V.

The first sentence in Larry Dwon's article in the February 1989 Bridge is in error or needs further limitation. Besides there were other early experimenters with artificial lightning-Tesla?, Steinmetz, McEachron among others. Let us not unnecessarily distort our professional history.

The Ohio Brass demonstration was not from a surge generator but had 60 Hz power behind it.

Florida weather has much to recommend it.

Dear Bob:

In my letter of February 28 to you, I mentioned an outdoor high voltage laboratory at the Ohio Brass Co. Barberton, OH.

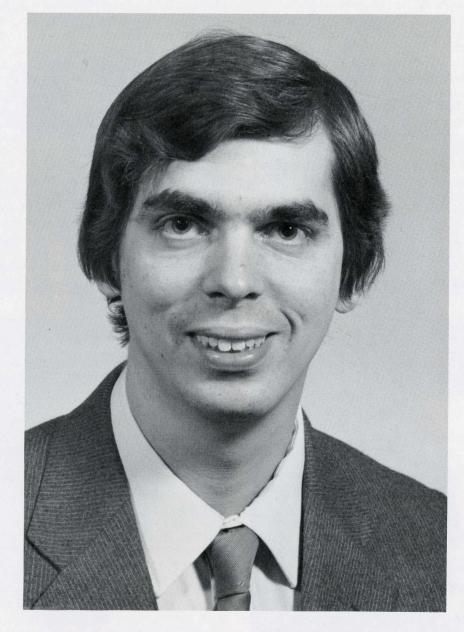
There is a photo of this laboratory lightning flashes to lines and to in the fly leaf of Tom Hughes, "Networks of Power"-John Hopkins Press, 1983. It is there acknowledged as of 1929.

> PS: The three 1 megavolt transformers appear in stair-step manner at the right center.

Yours truly, John D. Ryder HKN PRESIDENT, 1956

OUTSTANDING YOUNG EE AWARD

by Dr. Irving Engelson, Chairman, OYEE Award Committee



Ronald A. Spanke

The Eta Kappa Nu Outstanding Young Electrical Engineer Award is given annually to young electrical engineering graduates for meritorious service in the interest of their fellow men as well as for outstanding achievements in their chosen profession. The winner and honorable mention(s) of this prestigious award are selected each year through a well-defined process which has remained virtually unchanged since its inception.

The nominations process involves the initiative of the nominator and the participation of a number of references in support of the candidate. The dossiers of all nominees are carefully screened by the Award Organization Committee which selects up to ten finalists. These finalists are judged by a Jury of highly prestigious leaders of the profession for final selection of the winner and honorable mention(s).

The newsworthiness of the specific technical contributions for which the winners are honored does not play a role in the selection process. Some of the most significant technical contributions have not been publicized in the popular press at the time they were made. However, the technical contributions of the winners who are honored this year are subjects that were reported on widely, in various forms, in the general press.

Electro-optics, as applied to communications, computing or medical electronics, is often reported on by the media. The topic of adaptive control systems is closely linked to automation and robotics which is revolutionizing manufacturing processes. Much has been written on the development of advanced television systems in general, and HDTV in particular. Thus, the work of the young engineers who are honored by Eta Kappa Nu is very critical for continued industrial development and global competitiveness. American industry will not be able to survive in the increasingly competitive global environment without the creative contributions of young engineers such as these.

Ronald A. Spanke is the Outstanding Young Electrical Engineer of 1988. His award was presented at the 53rd Anniversary Eta Kappa Nu Banquet in New Brunswick on April 10, 1989. At the same ceremony, Tom T. Hartley and Michael A. Isnardi were awarded Honorable Mention for 1988.

Mr. Spanke is a Member of the Technical Staff at AT&T Bell Laboratories, Naperville, Illinois. He was named Outstanding Young Electrical Engineer for his "contributions to optical switching architecture, breadth of community activity and concern for youth."

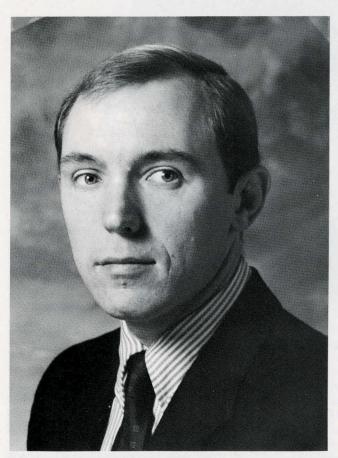
Dr. Hartley is an Associate Professor at the University of Akron in Akron, Ohio. He received his Honorable Mention for his "contributions to adaptive control theory and system simulation and involvement in church and youth activities."

Dr. Isnardi is a Principal Investigator at the David Sarnoff Research Center in Princeton, New Jersey. He received his Honorable Mention for his "contributions to advanced television systems and his community."

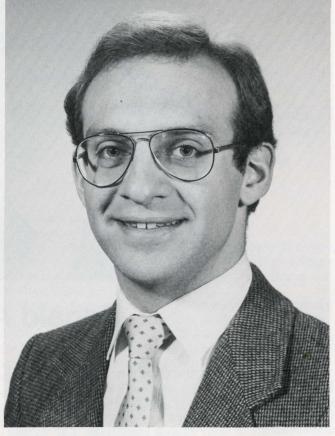
Four other engineers were recognized as first time Finalists:

- Christopher J. D'Ascenzo, General Electric Company, Philadelphia, Pennsylvania;
- Michael P. Gagliardi, General Electric Company, Advanced Technology Labs, Moorestown, New Jersey;
- Rathin N. Putatunda, GE Microelectronics Center, Research Triangle Park, North Carolina;
- Stanley M. Yuen, General Electric Company, Moorestown, New Jersey.

The award winners were honored for their contributions to electrical engineering and for their contributions



Tom T. Hartley
HONORABLE MENTION



Michael A. Isnardi
HONORABLE MENTION



The Jury of Award: 1988 Outstanding Young Electrical Engineer Selection

to society at large. Mr. Spanke was nominated by Mr. Karl E. Martersteck, Executive Director, Digital Switching Division, AT&T Bell Laboratories, Naperville, Illinois. Dr. Hartley was nominated by Professor C. S. Chen, Department Head, Electrical Engineering, The University of Akron, Akron, Ohio. Dr. Isnardi was nominated by Mr. John G. N. Henderson, Head, Television Systems Technology Research, David Sarnoff Research Center, Princeton, New Jersey.

The Eta Kappa Nu recognition is awarded to electrical engineers to emphasize that their service to mankind is manifested not only by achievements in purely technical areas but in a variety of other ways as well. Eta Kappa Nu holds that an education based upon the acquisition of technical knowledge and the development of analytical and logical thinking is a prerequisite to achievement in many lines of endeavor.

The Jury of Award consists of prominent educators, industrialists, or professional leaders. In 1988, the jurors were:

Dr. Jon K. Clemens, President, The Chronar Corporation;

Dr. N. Rex Dixon, IEEE Vice President, Technical Activities and Editor, IBM Journal of Research and Development, IBM Corporation; Dr. Virgil G. Ellerbruch, President, Eta Kappa Nu, South Dakota State University;

Dr. Allan C. Schell, Chief Scientist, U.S. Air Force Systems Command;

Mr. Willis (Pete) S. White, Jr., Chairman and Chief Operating Officer, AEP Service Corporation.

Nominations for the award are solicited each year through the Eta Kappa Nu Award Organization Committee. Nominations may be made: by any member, or group of members, of Eta Kappa Nu; by any Section or Society of the Institute of Electrical and Electronics Engineers, Inc.; by the head of the EE Department of any U.S. college or university; or by other individuals or groups, who in the opinion of the Award Organization Committee, are properly qualified to make nominations.

The nominations for the 1989 awards were to be submitted to the Chairman of the Award Organization Committee, or to the Executive Secretary of Eta Kappa Nu, by August 1, 1989. An eligible candidate is one who:

• has an electrical engineering degree (BS, MS, or PhD) from a recognized U.S. engineering school;

- will have been graduated not more than 10 years as of May 1, 1989 from a specified baccalaureate program; and.
- will not yet have reached his/her 35th birthday as of May 1, 1989.

Awards are based upon (1) the candidate's achievements of note in his or her chosen work, including inventions of devices or circuits, improvements in analyses, discovery of important facts or relationships, development of new methods, exceptional results in teaching, outstanding industrial management, or direction of research and development; (2) the candidate's service to community, state, or nation, such as activity in philanthropic, religious, charitable, or social enterprises, leadership in youth organizations, or engagement in civic or political affairs; (3) the candidate's cultural and aesthetic development, such as work done in the fine arts, architecture or the dramatic arts. Studies in history, economics, or politics are also highly valued as well as any other noteworthy accomplish-

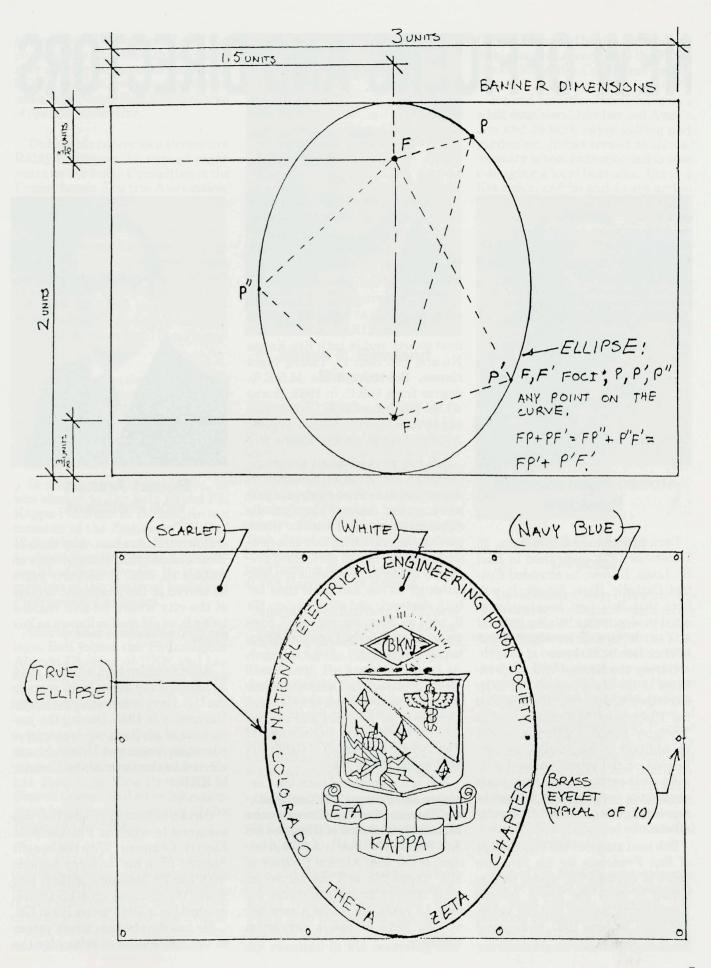
ments including participation in professional societies and other organizations.

The Award Organization Committee members are: Irving Engelson, Staff Director, Technical Activities, The Institute of Electrical and Electronics Engineers, Inc. (Chairman); Ralph J. Preiss, IBM Corporation (Vice Chairman/Secretary); Clarence A. Baldwin, Westinghouse Electric Corporation; Robert A. Bartolini, David Sarnoff Research Center; Donald Christiansen, IEEE Spectrum; James A. D'Arcy, General Electric Company; Larry Dwon, Consultant (formerly of American Electric Power Service Corporation); Anthony F. Gabrielle, Gulf State Utilities: Quayne G. Gennaro, Bell Atlantic; Willard B. Groth, IBM Corporation; Michael R. Hajny, Scientific Columbus, Inc.; James D. Hebson, Jr., Public Service Electric and Gas Company; William E. Murray, Douglas Aircraft Company; Berthold Sheffield, RCA Corporation (retired); Joseph J. Strano, New Jersey Institute of Technology; and Lawrence D. Wechsler, General Electric Company.

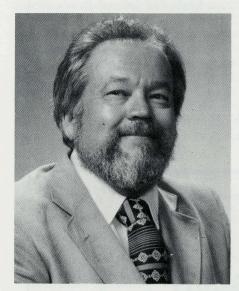
Theta Zeta Banner Design



Chapter President, Susan McDaniel helps Recording Secretary, James Phipps, display colorful chapter-banner which he designed. Photo was taken in 1987 at time of design. Adaptable line drawings by Phipps are shown on page 7.



NEW OFFICERS AND DIRECTORS



Robert Kennerknecht President

December 1931, and raised in East ior Engineer, he has performed pri-St. Louis, Illinois, he attended Cen-marily as a system dynamic analyst; tral Catholic High School. It was although he has had some time for here that Bob first became inter- both electronic and servo design. He ested in electronics helping to build is now an Engineering Staff Spea Van de Graaff generator for a cialist on staff to the Director of Sysscience fair in St. Louis.

During the Korean War. Bob enlisted in the Navy and served as an electronic technician. He attended Analysis and Design at General the Electronics Material School at Dynamics for 20 years and various Treasure Island. California, where courses in electrical engineering at in addition to his studies he per- Polytechnic University of California formed on the school's award win- at Pomona for 15 years. ning drill team. After three years aboard the destroyer U.S.S. Buck he porate and Pomona Division Speakmustered out as a second class petty ers' Bureaus and has served on the officer.

of San Francisco for his first two dent of the L.A. Alumni Chapter of years of engineering where he was Eta Kappa Nu and has served on active in both the newly formed their student award committee for Engineering Society and the Veter- over 15 years. He is also a member ans Club. In June 1957, he received of Tau Beta Pi and a registered his A.A. degree.

It was then on to Berkelev where he was inducted into Eta Kappa Nu. Mu Chapter and Tau Beta Pi. California Alpha Chapter in 1957. He received his B.S.E. from the University of California at Berkeley in 1959, majoring in electrical engineering. While at Cal, Bob was active in the joint IRE and AIEE student society and in both Eta Kappa Nu and Tau Beta Pi. Taking night classes, Bob earned his M.S.E.E. degree from U.S.C. in 1963. It was while attending U.S.C. that Bob began to work with the Los Angeles Alumni Chapter of Eta Kappa Nu.

Bob has worked as an electronic designer for Aerojet General in Azusa and as both an electronic and servo system designer for Consolidated Systems in Monrovia. Since Born in Indianapolis, Indiana, 28 joining General Dynamics as a Sentem Engineering.

Bob has taught Control System

Bob is a member of both the Cor-International Board of Directors for Bob next attended the City College Eta Kappa Nu. Bob is a past presiengineer.



Robert Arehart Vice President

Robert F. Arehart was born in West Philadelphia, Pennsylvania on August 19, 1926. In his early years he moved to the Northeast section of the city where he still resides today in an old section known as Fox

After finishing high school in 1944, he enlisted and served two years in the U.S. Navy before entering Drexel University in 1946. During the junior year of his five year cooperative education program at Drexel, he was elected to the Beta Alpha Chapter of HKN.

On two industry periods, Bob was assigned to work at Philadelphia Electric Company. With the benefit derived from his industry periods with the Philadelphia utility, Bob joined the company upon his Drexel graduation in 1951 with a BS in EE.

He has devoted his whole career to the application of relays for the

protection of all elements of the power utility. Just recently he retired after serving thirty-seven years with PECO, the last twelve of which he was a Supervising Engineer in charge of system protection.

During his career as a Protective Relay Engineer, he served eight years on the Relay Committee of the Pennsylvania Electric Association. the last two years, 1975-1977 as Chairman.

In 1979 he was selected for membership on the IEEE Power System Relaying Committee where he continued in an active role until December 1988. While on this committee he served as Chairman of both the Rotating Machinery and Line Protection Subcommittees.

Bob returned to the Pennsylvania Electric Association as Engineering Section Officer in 1981. He completed this assignment in 1985 after serving two years as Chairman of the Engineering Section.

In addition to Eta Kappa Nu, he was elected to Tau Beta Pi and Phi Kappa Phi while at Drexel. He is a member of the Engineers' Club of Philadelphia and a registered Professional Engineer in the Commonwealth of Pennsylvania. He is also a member of the National Society of Professional Engineers.

Shortly after graduating from college, Bob joined the Philadelphia Alumni Chapter of HKN and has been active in the luncheon group ever since. In 1970-71, he was the Chapter President.

Bob has served on the Council of his church for over thirty years, ten years of which he was treasurer. He has served as Vice President of Church Council and since his retirement has become Chairman of the Property Committee.

Bob married Helen while still in college and last year celebrated the 40th year of their marriage. All three of their children are married, two live close by in Philadelphia, one lives in Wilton, Connecticut. Four grandsons have joined the Arehart Family.



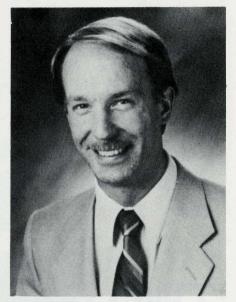
James R. Rowland **Director**

James R. Rowland grew up in eastern Oklahoma and received his BSEE degree from Oklahoma State University, where he had been initiated as a junior into the Omega Chapter of HKN. After earning graduate degrees in electrical engineering from Purdue, he began his career on the EE faculty at Georgia Tech, later moving to Oklahoma State and now completing a fouryear term as department chairman at the University of Kansas.

Jim has been active in IEEE over the years, having served as Education Society president and as Awards chairman for the Educational Activities Board. He has also served as chairman of the National EE Department Heads Association and continues to visit as an ABET program evaluator. His technical interests are in the areas of control systems and stochastic modeling, and he has authored a linear controls textbook.

Besides Eta Kappa Nu, he is also a member of Tau Beta Pi, Sigma Tau, Phi Kappa Phi, Omicron Delta Kappa, and Sigma Xi. He is listed in several biographies, including American Men and Women of Science, Who's Who in the South and Southwest, Who's Who in the Midwest, and Who's Who in America. His activities with the IEEE Education Society resulted in his receiving the IEEE Centennial Medal, the Society Achievement Award, and the Frontiers in Education Conference Award.

He and his wife, Jonell, have two adult daughters, Jennifer and Angela. Jim and Jo both enjoy golfing and gardening. Jo has served as an elementary school counselor and is now managing a local business. Jim is a Kiwanian, and he and Jo are active in the United Methodist Church.



David G. Meyer **Director**

David George Meyer received the B.S. degree in electrical engineering in 1973, the M.S.E. degree in electrical engineering in 1975, the M.S. degree in computer science in 1979, and the Ph.D. degree in electrical engineering in 1981, all from Purdue University, West Lafayette, Indiana. In 1982, he joined the School of Electrical Engineering at Purdue University, where he is currently an associate professor specializing in advanced architecture microprocessors, computer architecture, acoustics, digital signal processing, parallel processing computer systems, VLSI design, and educational delivery systems.

One of Dr. Meyer's primary goals while at Purdue has been to develop the "best possible approach" for teaching mainstream computer engineering courses and laboratories, particularly at the undergraduate

the "lecture workbook" approach to presenting material in class. Using this technique, students are able to "customize" a "skeleton" set of notes (copies of which are distributed at the beginning of the semester) designed to promote active encoding of important material while reducing the "scribbling stress" which normally accompanies notetaking.

Dr. Meyer has developed two new courses in the computer engineering area: a graduate course on advanced architecture microprocessors, and a senior-level lecture lab course on embedded microcontrollers. In addition, he has completely revised the introductory lecture/lab course on microprocessors and made major contributions to the introductory lecture/lab course on logic design.

Dr. Meyer has won teaching awards in 1984, 1985, 1986, and 1987. In 1987, he was the national recipient of the Eta Kappa Nu C. Holmes MacDonald

level. To this end, he has developed Outstanding Teaching Award. In 1986, he was one of 11 national recipients of Digital Equipment Corporation's "Incentives for Excellence" Award. This award has allowed Dr. Meyer the opportunity to improve laboratory facilities and to experiment with interactive laser videodisc instructional delivery systems.

> He has published over 30 technical papers on acoustics, parallel processing system design, audio system engineering, and educational delivery systems; he has presented his work at various conferences throughout the United States. He has authored book chapters on parallel processing and advanced architecture microprocessors, and is currently authoring the book, Introduction to Microprocessor System Design: Programming and Interfacing, to be completed in 1989.

Professor Mever has received research grants from IBM for studies in parallel/distributed computing, from the Indiana Corporation for Science and Technology for development of advanced robot control hardware and software, and from Digital Equipment Corporation for development of computer-aided educational delivery systems. He has done consulting in acoustics for both AT&T Bell Laboratories and Electro-Voice,

Dr. Meyer is a member of The Institute of Electrical and Electronics Engineers (IEEE) professional society, the Audio Engineering Society (AES), the Association of Computing Machinery (ACM), and the American Society for Engineering Education (ASEE). He is also a member of the Eta Kappa Nu electrical engineering honorary society and the Tau Beta Pi engineering honorary society. He has served as a Faculty Advisor for the local student chapters of both HKN and IEEE.

TWO GALVANIC EVENINGS AT THE GALLERIES OF **MALCOLM S. FORBES**

by Bert Sheffield **HKN Publicity Chairman**

Editor's Note: All photos and captions are from: The FORBES Magazine Collection,

Superlatives in my vocabulary seem inadequate when I speak of the FORBES GALLERIES. "Of course," you may sigh, "the fabled Easter Eggs by the House of Fabergé." I too had read about them, but had never dreamed of what I was privileged to experience on this eventful balmy early Spring evening in bustling New York. To be invited to inspect at close range, Fabergé items valued in the millions of dollars and many other magnificent rarities in the Forbes collections. And an almost incredible discovery: Anyone may retrace my steps! The Galleries are open to individuals and groups. Admission is free! More about this later.

It began with a formal invitation from "FORBES and AMERICAN HERITAGE" magazine to the opening of two new exhibitions in the renowned FORBES GALLERIES. The invitee, Muriel Freeman, a Cultural Affairs Writer for The Gannett Groups' Courier News (Somerville, NJ), graciously asked me to escort her. An exciting invitation, a once-in-a-lifetime-opportunity!

Guests, many distinguished celebrities, were welcomed in the atrium by members of the dynamic Forbes



Eastman Johnson (1824-1906)

THE WOODCUTTER'S LUNCH Oil on paper board: 13½ × 10¾ inches

Johnson's broad handling of color and light creates a richly luminous setting for this portrayal of a woodcutter eating his lunch. Unlike the peasant of the European genre tradition, the woodcutter is a specific individual, not a type. Without resorting to sentimentality or exaggeration, Johnson has imbued the figure and task with Photo: Otto E. Nelson a quiet dignity.



The world's largest collection of Imperial Easter Eggs, created by court jeweler Peter Carl Fabergé for the last two Czars of Russia, highlights an exhibition of his art at The Forbes Magazine Galleries. Over a period of more than thirty years, the House of Fabergé fashioned a series of jeweled eggs, usually containing an imaginative surprise, to delight his Imperial patrons on Easter morning. On display are over 250 Fabergé objets d'art, including an even dozen Imperial Easter Eggs. Pictured left to right, in addition to the recently rediscovered Rosebud Egg (1895) (third egg in first row from left) are: The First Imperial Egg (1885), Resurrection Egg (1889?), Spring Flowers Egg (before 1899), Renaissance Egg (1894), Coronation Egg (1897), Lilies of the Valley Egg (1898), Cuckoo Egg (1900), Chanticleer Egg (1903?), Orange Tree Egg (1911), Fifteenth Anniversary Egg (1911) and Cross of St. George Egg (1916).

family, the famous chairman, Mr. Malcolm S. Forbes and several of his sons, Robert, Timothy and Christopher.

The eager crowd of visitors propelled us to an exhibit of letters, documents and campaign memorabilia entitled "And If Elected. 200 Years of Presidential Elections". There were rare notes of Lincoln, Harrison, Eisenhower and other Presidents; and lifelike miniature rooms, executed by Eugene Kupjack, of the interiors of a Washington headquarters, of John Adams' kitchen law office, and of Jefferson's and Grant's homes. On the wall of a narrow hallway were election posters of yore.

The second new exhibition was titled "Chairman's Choice. A MISCELLANY OF AMERICAN PAINT-INGS". There were 44 works, thoughtfully catalogued in a memorable color folder. We were mesmerized by John Steuart Curry's vivid "Battling the Storm", and returned again and again to ruminate about Edward Hopper's mysterious "Hotel Window". As we

returned to the paintings Muriel greeted radio host John Gambling and his lovely wife Sallie who joined us in enjoying Wiggin's painting "The Silvery City, First Presbyterian Church", reminiscent of snow-covered historic Trinity Church in New York.

Of course we scrutinized the Fabergé Easter Eggs. They were ingeniously highlighted, most delicate and awe inspiring. At one time they could be seen only by their creators and the Russian families. We visited also "Ships Ahoy" with hundreds of toy boats and models of the five Highlander-yachts owned by FORBES over the past three decades. Close by, naval battles are depicted with miniatures of warships and realistic battle sound effects. And in still another exhibit are thousands of miniature toy soldiers shown in their historic environment.

Because of my enthusiasm for the Forbes Magazine Galleries, I was asked subsequently to attend the open-



TWO CENTURIES OF PRESIDENTIAL ELECTIONS AT THE FORBES MAGAZINE GALLERIES

"... And If Elected: Two Hundred Years of Presidential Elections," a new exhibition at The FORBES Magazine Galleries, marks the bicentennial of the presidency in this 1988 election year with a showing of more than fifty historic manuscripts and photographs, and a treasury of presidential memorabilia documenting America's electoral history. The exhibition features letters of Thomas Jefferson, Abraham Lincoln, FDR and other former chief executives, campaign souvenirs such as a dress printed with an "Ike" pattern, a copy of the Chicago Daily Tribune with the premature headline "Dewey Defeats Truman," rare broadsides and photographs, and a multitude of campaign buttons and badges.

Photo credit: Otto Nelson.

ing of the exhibition "The Roosevelts". Presented in conjunction with FORBES' American Heritage Magazine are rare vignettes of the political careers of Theodore and Franklin Roosevelt in illuminating and thought-provoking detail.

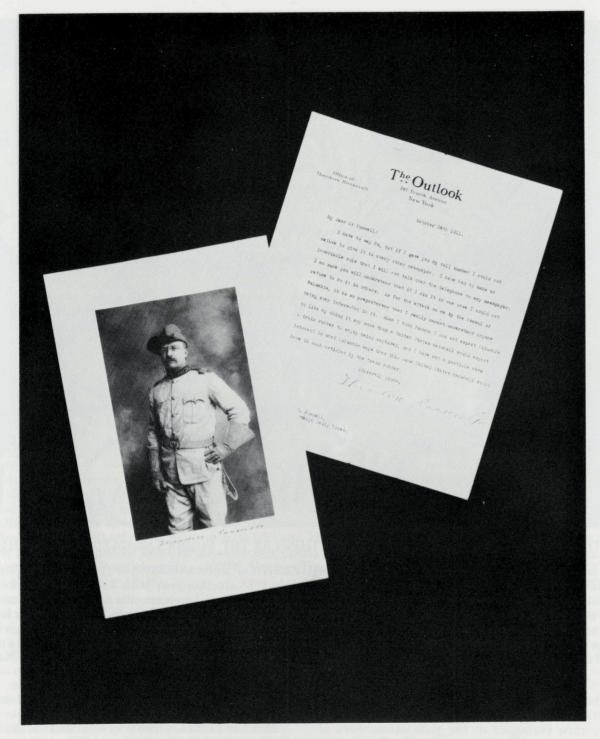
The Forbes family, once again, welcomed guests as they arrived. To celebrate the opening, Theodore Roosevelt's grandson, Archibald Roosevelt and his wife, Selwa, and a selected group of distinguished guests were present.

Among those we saw conversing with the Roosevelts were Mr. and Mrs. Thomas Pickering: He is the United States ambassador to the United Nations; authors Jerzy Kosinski and Fran Lebowitz, and Mrs. Ronald

Lauder, wife of the announced New York City mayoral candidate.

Malcolm Forbes, asked why he added the Roosevelt Gallery to his mini-museum said, "The timing seemed appropriate. . . . A good deal of attention is still focused on this generation of Roosevelts."

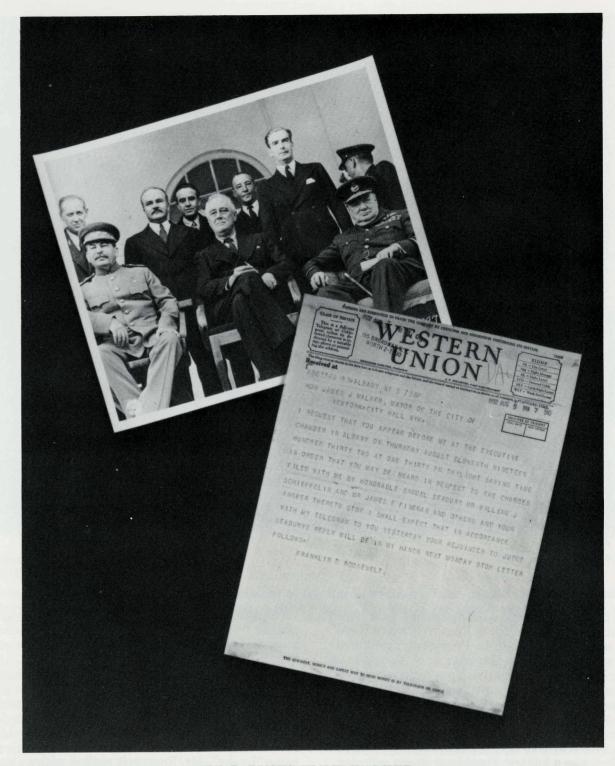
Exhibited are more than 60 historic manuscripts chronicling the presidential years from 1901-'09, of Theodore, and from 1933-'45, of Franklin. Displayed also are photos of Theodore Roosevelt, including one of him in his Rough Riders uniform, designed by Brooks Brothers, the men's clothiers who are still operating in New York today. Among other mementos is an engraved silver frame Franklin Roosevelt presented to his wife Eleanor on his inauguration as governor of New York.



TEDDY REMINISCES: "WHEN I TOOK PANAMA..."

Bombastic as ever, President Theodore Roosevelt defends America's strong-arm tactics against Colombia in securing the Panama Canal Zone, a feat he clearly considered a personal triumph: "When I took Panama I did not expect Colombia to like my doing it any more than a United States marshall would expect a train robber to enjoy being captured, and I have not a particle more interest in what Colombia says than this same United States marshall would have in such articles by the train robber..." This letter, along with the portrait of the former Rough Rider in his Brooks Brothers uniform, are among more than sixty manuscripts, photographs and memorabilia on view at The FORBES Magazine Galleries exhibition, "The Roosevelts."

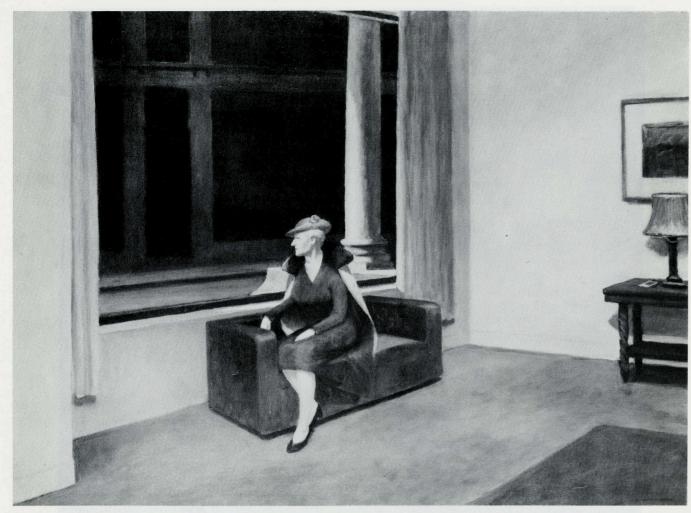
Photo credit: Larry Stein



F.D.R. BUSTS JIMMY WALKER

This telegram from New York Governor Franklin D. Roosevelt summoning Mayor Jimmy Walker to Albany on corruption charges is one of more than sixty historic manuscripts on view at The FORBES Magazine Galleries exhibition, "The Roosevelts." Through personal correspondence, a treasury of memorabilia and rare photographs such as this portrait of President Roosevelt with Winston Churchill and Joseph Stalin, the exhibition traces the political careers of Theodore Roosevelt and F.D.R. from their New York beginnings to the White House.

Photo credit: Larry Stein



Edward Hopper (1882-1967) Hotel Window Oil on canvas: 40 × 55 in.

The political differences of the cousins were barely evident. President Theodore Roosevelt was a Republican, and a fifth cousin to President Franklin D. Roosevelt, a Democrat. However, they shared many similarities. Both were native New Yorkers, and both had served as assistant secretaries of the Navy and as governors of New York. Both had faced severe crises—Theodore became known as "Trust Buster"; and Franklin bore the awesome yoke of leading the nation in World War II. Their main hobbies differed. Theodore was a hunter; Franklin a stamp collector.

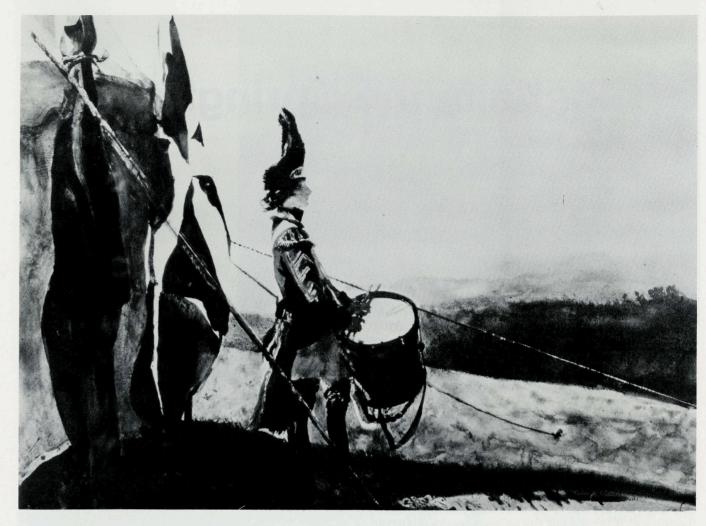
Our attention was centered on the living representatives of the Roosevelt family: Archibald Roosevelt and his wife Selwa. Archibald, a slender, trim gentleman, graciously reminisced about his youth in Cold Spring Harbor, Long Island, not too far from his grandfather's famous house, Sagamore Hill in Oyster Bay. "I don't remember my grandfather at all," he said. "He died when I was one year old. My grandmother never changed a stick of furniture and used all the old-fashioned things such as speaking tubes and a dumbwaiter till the day she died."

"My grandfather once received an offer of a vacuum cleaner from a manufacturer, but he was opposed to accepting gifts and besides, there was no electricity at Sagamore Hill until 1917."

Archibald Roosevelt said he now lives in Washington, D.C., spent his career as an intelligence officer and is now in banking. His recent book "The Lust of Knowing", deals with the Islamic World and what he termed "the ghost of Sagamore Hill." It is published by Little, Brown. When he was queried about his wife's nickname "Lucky", Mr. Roosevelt replied with a chuckle, "She'll probably kill me for saying this but I think it originated when she always won playing poker as a student at Vassar."

"Lucky" Roosevelt, a vibrant brunette, born of Lebanese parents in Kingsport, Tennessee, described her most recent venture into the diplomatic world as Chief of Protocal for the White House and the State Department in the Reagan administration.

"The job calls for planning the schedules of all official visitors, entertaining and arranging for much of the vice-presidential activities, granting diplomatic



Andrew Wyeth (b. 1917)

ROLL CALL Watercolor: 21 × 29¼ inches

This watercolor was painted at the reenactment of the Battle of Brandywine in 1982. Wyeth has made the solitary drummer boy a symbol for this costly British victory. The battle was fought near Chads Ford, where the Wyeth's family home is located.

privilege and deciding along with the president and first lady what gifts should be presented to foreign dignitaries. We only give American-made presents." She added "I am writing a book based on my experiences; and on the fourth of July I am looking forward to being the Grand Marshal in the Kingsport holiday observance."

Both affairs at The FORBES Magazine Galleries were orchestrated in keeping with the efficacy of the ubiquitous Chairman. At the very first alcove was a fully stocked table with liquid refreshments, served graciously in large crystal goblets by two friendly staff members. Others, also in immaculate white, circulated unobtrusively, offering colorful delicacies in a variety of dainty shapes devised by the Chairman's innovative personal chef, Mr. Christopher Long.

If you visit the galleries, do not expect to be received personally by a member of the Forbes clan. However, be assured that you will sense their presence. I understand that every one of the myriad prized items in the FORBES collections was personally selected by a member of the family. And all of them are shown with the same sentiments that Chairman Forbes expressed about the paintings: "What's on these walls is one fellow's joy. And we'll enjoy them even more if you do too."

For a first visit it is advisable to allow two to three hours. The folder "The FORBES Magazine Galleries" summarizes all the exhibits and some relevant publications including "Masterpieces from the House of Fabergé", "Highlights from the FORBES Magazine Galleries", and "Around The World On Hot Air And Two Wheels", the chronicle of Malcolm S. Forbes' global adventures in hot air balloons and motorcycles. The folder gives directions, museum hours, and offers guided group tours. It may be requested by phoning (212) 620-2200, or writing to Mrs. Mary Ellen Sinko, Assistant Curator, The FORBES Magazine Galleries, 62 Fifth Ave., New York, N.Y. 10011.

Iberia in the Springtime

by

Joan Spink

Our trip to Spain had started out as a late Winter vacation but thanks to several unexpected glitches in the system, turned into a wonderful Springtime Journey. You hear a great deal about "Paris in the Spring" and I am certain that it is lovely, but if you could visit some of the romantic old cities of Spain at this time of the year you might want to rewrite that old adage. So come along with me and savor the Iberian peninsula at its best—

Our gateway city was Madrid, and like all cities it is alive and bustling. Unlike cities in our country though, this one is a unique combination of royalty, religion and history, overlaid with modern suburbia. We arrived early in the day and while the rest of our tour was napping my husband and I decided to walk up to see the huge Royal Palace. We were lucky that we did too, because as it turned out the palace was closed for official functions for the rest of our stay in the city. This spectacular, 2800 room building, can be seen from most of Madrid. It occupies a lofty hill in the center of the city, surrounded by formal gardens and a large park. Needless to say we did not have a tour of all of the rooms, but the ones we did see were grand. One room in particular stands out in my mind—the porcelain room. This room was small when compared with the Throne Room, Drawing Rooms, formal Dining Room, etc., but oh my, it was breathtaking. The whole roomthe floor, walls and ceiling, as well as all the intricate decorations thereon, plus all the furniture, was made of porcelain. Can you just imagine an entire room made of this precious material? No wonder this palace is considered one of the finest in Europe.

After we had finished our tour of the palace, we encountered "siesta time". From our many trips to Mexico we were accustomed to the afternoon siesta, but not as it is practiced in Spain. Here, everything closes at 1:30 and does not reopen until 4:30 or thereafter. Our tour brochure told us that we would be "at leisure" during the afternoon, but it never said that we would be the only people awake in the whole country! This takes some getting used to and a bit of good old American ingenuity to overcome.

Our official tour started that evening with a welcome dinner in the old fifteenth century part of Madrid. The merriment began with the "Parade of the Baby Pigs"—accompanied by much squealing from the ladies of the group. It all ended very pleasantly several hours later, after we had consumed our share of the piglet, bread and wine—seemingly more of the latter than the former! On this "high" note we formed the friendships that were to continue for the next several weeks and even beyond.

The next morning, bright and early, we set out to tour the city. We saw so many interesting things that I will only be able to touch upon a few here. The old part of the city with its narrow winding streets was fascinating. These streets always lead to the famous Plaza Mayor, the heart of old Madrid. This huge open plaza has been used for centuries as a gathering place for the people. Here they have seen bullfights, hangings, coronations and, more recently, book fairs and concerts. My husband and I spent several free afternoons sitting in the Plaza enjoying the fine weather over a cup of Spanish coffee or a nice glass of sherry. All in all, a most pleasant way to spend siesta time!

I would also mention the many many churches that you see, each one unique and special in its own way. From the simple little whitewashed church that Francesco Goya loved and left with the enduring legacy of his art, to the great cathedral in all of its golden splendor, Madrid surely is a city of churches. It is also the city of the Prado Museum. We had a special guide for our visit here, but even so, were only able to see a small sample of the treasures that it contains. We could have, I am certain, spent several days in this enormous gallery of the arts.

Another treasure trove which is a few miles distant from the city is the great monastery of El Escorial. This fantastic structure was conceived and brought to life by one man, King Philip II, in the mid 1500's. It took only 21 years to build and includes a cathedral, several palaces, a monastery, library, cloisters, terraces, gardens and a crypt to end all crypts. All of these are lavished and adorned with the work of the great artists, sculptors and craftsmen of the Renaissance.

Royal Palace Madrid Spain

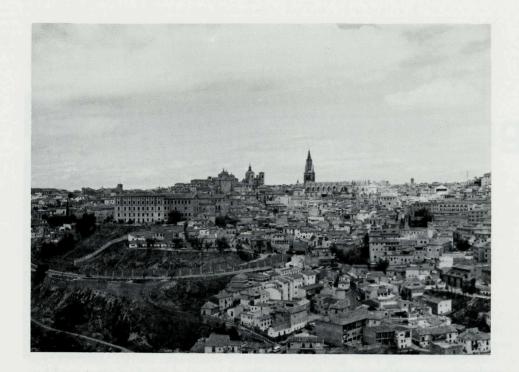




Ceiling of Library
"El Escorial"
Outside Madrid
Spain

For me, the "gem of the piece" is the library of El Escorial. The books and manuscripts here are considered one of the most valued collections in the world today, but you lose sight of this in the room itself. The entire ceiling of the chamber was painted by a magician. All of the figures are in 3D, they gesture to you, step out toward you, or rest their massive limbs on the gilded frames of the ceiling. They have substance and life. Words just cannot describe the impact that this has on the senses. The artist, Peregrin Tibaldi, was surely more than that, he did indeed have "magic" in his brush—

After spending several days in Madrid, it was time to leave and journey to the south. We all climbed aboard our new motor coach, were introduced to our driver, JuanHo, and off we went. I think that I must explain here a bit about Spanish roads. They are surely not super highways. In fact, they all seem to be built for one-way traffic. Every few hundred feet there is a hairpin turn with no visibility at all, no guard rails and to top it off, the inclines through the mountains are ladder steep. What makes the whole thing interesting though is your bus driver. Ours was very skilled, but in many ways he was more pilot than driver. You cannot imag-



View of Toledo Spain

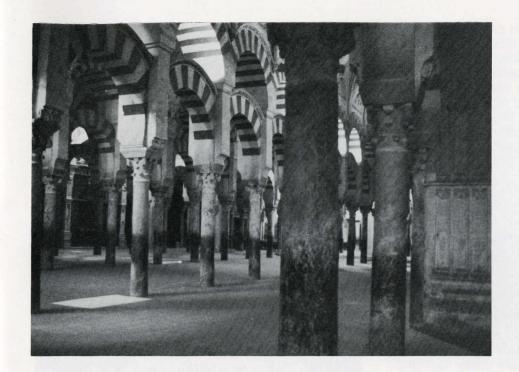


Olive Trees of La Mancha

ine where or how JuanHo maneuvered that bus, or at what speeds—I do belive that on this trip we bested the Concord's record for a cross-Spain flight!

At last we did arrive, safely, in Toledo. Much has been written about this old city, and I certainly will not try to compete with professional writers and historians in describing it to you. I might only venture to say that, to me, this small city seemed to have been enclosed in a time capsule. History has swirled around it for hundreds of years, but all during that time Toledo has remained in the 16th century. Everything is stone, the walls of the city, the buildings, churches, syna-

gogues and all the ordinary little houses that are still being lived in. The whole city seems to be one large "monument in stone". We did a good deal of walking here and it seemed as if the narrow, alley-like streets always lead up, ever up, to the great cathedral. In a country where cathedrals are commonplace, Toledo Cathedral is special. It was begun in 1227 and for the next several hundred years it continued to grow. The riches of many generations of wealthy royal families went into this building and its fabulous interior. The treasure chapel alone makes the trip to Toledo worthwhile, and this is only one of the many chapels in the cathedral, then there is the Sacristy with its paintings



Mosque of the Caliphs, Cordova Spain

by the great masters, the unbelievable choir stalls, etc. This is truly a national treasure!

There are also two very beautiful old synagogues left in the city, dating back to the 12th and 14th centuries. A little known fact about Toledo is its great tolerance during its early years, when tolerance surely was not a way of life. When the rest of the country, and the then known world, was separating its people into groups by race, religion or class, all the people of Toledo were living in harmony. For generations the Moslems, Jews, Christians, as well as the kings and ordinary working people, lived here together, in peace. Perhaps, just perhaps, that is why the city still stands, intact, as an example of what can be accomplished if we "love our neighbor".

After leaving Toledo behind we found ourselves headed further south through the olive groves of La Mancha. I do believe that of all the wonderful sights that we saw in Spain, it was the olive trees that most impressed my husband. We rode hundreds of miles through a countryside that, as far as the eye could see, was nothing but olive trees and an occasional small white village. It was really an amazing sight to see. We had thought our bus trips were going to be rather long, but found instead that we were actually looking forward to them. The Spanish countryside was not the brown and sere land that we had expected, rather, we were being treated to a Spain dressed in her lovely Spring attire, all green, vibrant and sweet smelling. We truly enjoyed every mile of our ride through this sunny landscape.

The next stop was the city of Cordova and its magnificent mosque. This you just had to see to believe. We had expected to find a very large building as it is the

second or third largest mosque in the world, but this was beyond any of our expectations. To give you an idea as to its size, consider this - after the Moors were driven from Spain the Christians decided to "convert" the mosque. They proceeded to remove several hundred columns from the building (there are over six hundred interior columns left) and in their place build a full sized cathedral. This in itself is extraordinary, but when you realize that the cathedral only occupies about a third of the building—it is then that you are overwhelmed by its size. I, at least, was so awed by size alone that I did not appreciate the splendor of either mosque or cathedral. I must someday return and spend time studying the carvings, especially the choir stalls in the cathedral, the gilding, and the art that is inside this remarkable "Mosque of the Caliphs".

It was here in Cordova that we had an unusual experience with Spanish electricity. Our hotel was rather old and parts of it looked a bit worn. For instance, our room, though it was clean and comfortable, had "tired lights". At least that's what I think they meant—you see, every time we went up to this room we found that we did not have any electricity. We would grope our way to the phone, call the desk and report the problem. They would say "Oh, Si Senor, your lights are resting"—then within no more than a minute, on they would come. Since no one else in our tour group was having that trouble with their lights I guess it was only our room that was tired! Also we had an antiquated elevator on our side of the building. We were never caught in it, but two elderly ladies who were traveling with us were. One evening they spent about fifteen minutes going up and down, up and down, in the silly thing. Of course for those of us who were in the lobby watching, the whole affair was hilarious. This elevator seemed to have a mind of its own. It was leisurely taking

our friends for "a ride", and as it did we kept seeing their faces peering through the elevator window and hearing their distant voices calling "where are we—which floor is this"? After the fourth or fifth time we were laughing so hard that we could hardly stand. Oh—it doesn't sound very funny to you? Well, I suppose you just had to be there!! Of course our ladies eventually landed safely on their own floor, and all was well, but I might add that none of the rest of the crowd dared venture into that recalcitrant elevator for the balance of our stay in the hotel—

From Cordova it was only a short drive to Granada and the one place in Spain that I had always longed to see-the Alhambra. I am at a loss to describe it, but instead will try to convey a little of the "feeling" of it for you. Great thought and care went into making this mountaintop an idyllic retreat from the extreme heat and the concerns of the day. The very heart of the great complex is its marvelous Moorish palace. This palace was built to please the senses, all of them. Here you will find that every inch of the interior walls are wrought with the most exquisite arabesque designs in the world. The vaulted ceilings are unlike anything I have ever seen. Several are masses of delicate stalactites making you feel as if you are in a cool cavern, others look like finely tooled leather, some are painted, while some are fashioned of richly carved wood. The most outstanding one is all set with precious little crystals that sparkle and change color, giving the illusion of movement to those who gaze at it from below.

Since the Moors had been desert people they found particular pleasure in water, and in their gardens. Thus we found pools, fountains and small man-made rivers flowing through the many rooms. This water was not only a respite from the heat but also provided for the delightfully fragrant gardens in and around the palace. We were told that if you had visited here during the 14th century when the palace was occupied, you also would have heard the soft music that was always being played by the many, unseen, musicians. So, you see, the Sultans had provided beauty for each of their senses—and ours as well—

I must admit that I was reliving an early romantic dream on that day. One that had been peopled with handsome Moorish princes, sensuous dancing girls, murmuring water and exotic fragrances. A dream, yes of course, but as I stood surrounded by all of this, I fancied that I could faintly hear the music and **almost** see the fleeting shadows of people long gone. Would you blame them for wanting to return once more to the glory that was—"the ALHAMBRA"?

By this time we were getting tired and were looking forward to a nice rest on the famous Costa del Sol—the Coast of the Sun. Where it had been Spring before, now here on the Costa, it was Summer. Since we were staying at a lovely resort hotel right on the beach we naturally spent our first day relaxing and sunbathing. At least I was relaxing, I'm not certain that my husband was though. We had not realized that all the

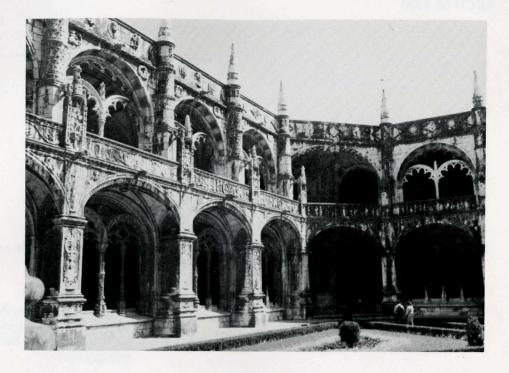


Gardens at Alhambra, Granada Spain

beaches of this coast permit topless sunbathing and swimming and so were very surprised to find that we were the only fully clothed people there! Soon after we sat down we found ourselves in the midst of a group of young sun worshipers. It seems that in order to perform this "worship" properly there must be two people and they must each take a turn lavishly oiling his, or her, partner. They all told me that this was to prevent sunburn-huh-I wonder if I look as if I was born yesterday? At any rate, shortly, my husband decided that he needed a little exercise and so, eyes straight ahead, he proceeded to walk down to the water's edge. He then began to stroll along admiring the scenery. He walked that beach for almost an hour and I never once saw him turn his head toward the beautiful blue Mediterranean—ah well, I guess men also have their fantasies-

We spent several days on the Costa. During the day we sunbathed (the water was still a bit cold for swimming), took short trips or shopped, and in the evening we dressed up and strolled into town to sample the local cuisine. We even went to the Spanish version of a casino—two gambling tables and about ten slot machines in an otherwise empty room! This was quite

Cloister of Jeronimos, Lisbon Portugal



amusing to the people in our group who were used to Las Vegas or Atlantic City casinos, but they did have a great Flamenco show there and so we all had a fun evening anyway.

All too soon it was time to leave, and so with JuanHo at the controls we bade goodbye to Torremolinos and headed for the fabled Rock of Gibraltar. It isn't easy to get into Gibraltar from Spain but finally, after several long delays, we cleared the border and drove into—Great Britain. Since this little piece of the Iberian peninsula is an English possession it provides you with a bit of a cultural shock, but we recovered quickly enough and had a most enjoyable time being mini-bused around the old fortress city. We explored St. Michael's Cave, fed the legendary Barbary Apes, and passed time and time again through "the Rock".

It was on the way out of Gibraltar that we had one of those unforgettable moments. The bus had stopped for a red light and we were all wondering why it remained red for so long. Suddenly, out of nowhere, this very large British cargo airplane swooped down and landed on the runway which, we discovered, **crossed** the main highway. We couldn't believe it, but we had just stopped at a red light for passing planes!!

Once back in Spain we had a lovely drive through her Sherry country and within a short time arrived at the border of Portugal. Here we had no problem at all and in a few minutes our passports were stamped and we were on our merry way. By now we were all good friends and so we joked, sang and laughed as we rode along. Alas though, our time was growing short and as we neared the city of Lisbon we suddenly all began to feel a bit sad, our Iberian adventure would soon be at an end.

We had to squeeze a number of tours into the next few days and therefore I have only fleeting impressions of our stay in Lisbon. The enormous Jeronimos Monastery is one of them. It was here, in the great cathedral of the monastery, that many of the early explorers of the new world had come to offer prayers before setting out on their long and perilous voyages. Here also we were able to sit for awhile in the sunlit interior cloister (the most impressive one we had seen in our travels) and contemplate the remarkable history that the old world has to pass on to us newcomers. Would that we would learn from it!!

Another fascinating tour was of the oldest area in Lisbon, the Alfama quarter. This was the one place that was not destroyed by the devastating earthquake of 1755 and so its buildings and history go all the way back to the period of Visigothic domination. In contrast, the rest of Lisbon seems quite new and though it was rebuilt in the late 1700's, it was designed with great forethought and so appears to be very modern with its wide avenues, great parks, etc. We finished our tour that day in the wonderful carriage and coach museum. The coaches of several centuries of royal families and of the affluent merchant class are displayed here. How grand it must have been to have ridden about in those great golden coaches, pulled by six white horses, with coachman and footmen in full livery—ah ves. fantasy again-

On one afternoon we drove up the long Atlantic coastline of Portugal and into the mountains to the little town of Sintra. I wouldn't have missed this tour on a bet, but you'd also have a sure bet that I wouldn't risk my life by going back again. Why the kings of Portugal decided to build several palaces up on the top of those awful mountains I will never understand, but build they did, and tour I did. As a matter of fact I was the only



Author Joan and husband Bob at the Pink Palace of Queluz.

one on our bus who took the tour of the National Palace. Could it be because it was only being given in Portuguese at the time? I was very touched though because as the tour progressed the guide began to translate, just for me. It was because of his courtesy that I was able to appreciate the very colorful history

of this 15th century castle. This was so very typical of the treatment that we received all during our trip. Little things maybe, but very important to a visitor in a foreign land.

After the rather gloomy castle of Sintra, it was sheer pleasure to drive back down to the coast and visit the Palace of Queluz. This one is usually referred to as the Portuguese Versailles, and it is certainly a charmer. There is a lightness about it that we hadn't found in any other palace, and—wonder of wonders—the whole outside is painted a lovely soft **pink**. Quite a relief from the massive stone buildings that we have been seeing up to now.

That evening we had our farewell dinner. It was supposed to be something very special, and it certainly was! My husband will long remember the night that he ate two loaves of bread and drank a whole bottle of wine for his supper. Maybe I should explain—Our dinner that night was all fish, 6 courses of it, topped off by a very large unknown variety of same that had been baked whole under a four inch layer of salt. First of all my husband really does not like fish, but most especially the kind that is presented with its large glassy eyes staring up into his—hence, the meal of bread and wine. By the way, the next day I must admit that he felt better than I did, that will teach **me** to eat up all the fish in Portugal!!

When I now think back on our trip there are many wonderful memories, but of course a few that are most vivid. Watching the sun rise on the Mediterranean of the Ancients, my fantasy palace the Alhambra, hearing the Fado singers of Portugal and the **miles** of handset mosaic sidewalks in Lisbon, these will always be uppermost in my mind. Most vivid of all though is the indescribable thrill that I felt as we drove up the coast of Portugal, looked out over the ocean and thought, "there, way out there somewhere is my country". I guess that no matter how much one enjoys Madrid or Granada or even Paris in the Spring, there really is no place like "HOME".