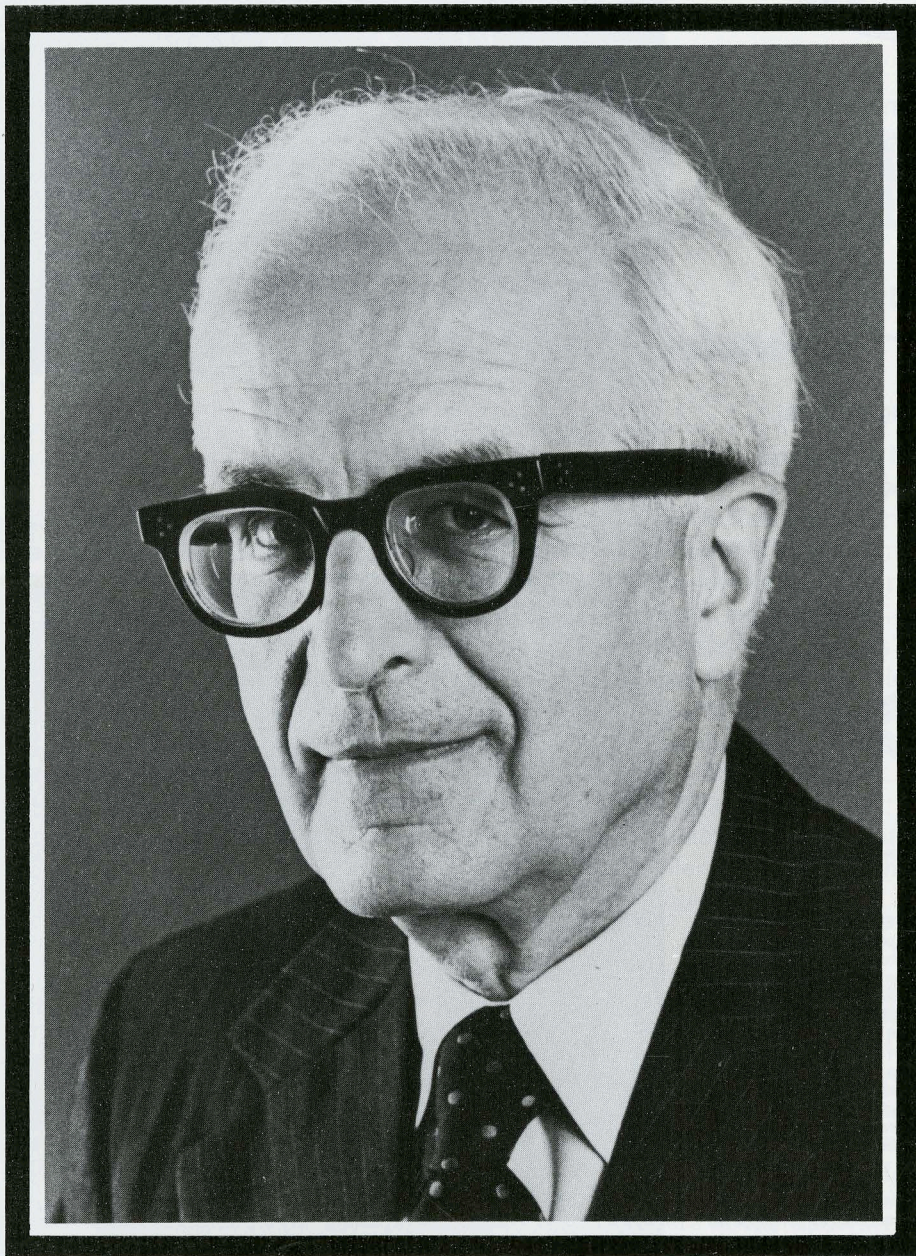
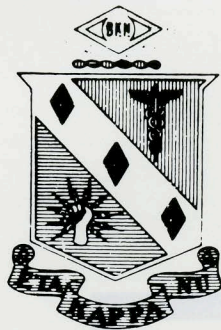


BRIDGE



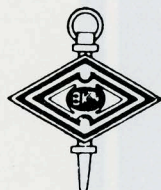
Larry Dwon



Editor and Business Manager
J. Robert Betten

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Contributing Editors
The Late Paul K. Hudson
Irving Engelson



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 attained prominence.

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At Top: Winner, James G. Frohlich is shown at the podium

At Bottom: Mr. Frohlich and wife hold the inscribed silver bowl upon which his name has now been placed with those of previous winners

Philadelphia...

OYEE AWARD DINNER

by Irving Engelson
Chairman Award Organization Committee

1987 marked the 52nd anniversary of the Outstanding Young Electrical Engineer Award. The awards banquet was held at the Union League in Philadelphia. William E. Murray, a member of the Award Organization Committee, was Master of Ceremonies. The keynote address was presented by Emerson W. Pugh, 1988 President-Elect of the Institute of Electrical and Electronics Engineers, Inc. (IEEE). Dr. Pugh's address, titled "Proud to be an Engineer," stressed the importance of technological currency and continuing education to engineers. He asserted that "the rapid pace of technology has forced engineers to expand their knowledge or to lose out to more recent graduates. International technological competition has made the market for technologically current engineers more attractive and in some cases made the opportunities for less current engineers less attractive." He also emphasized the significant role engineers must play in public policy issues as he said, "as engineers we are uniquely qualified to understand these issues. As citizens we have an obligation to participate in social activities and public forums to help correct these problems. I am optimistic that we can and will. My optimism stems in part from the enthusiasm, dedication, engineering excellence, and breadth of interest exhibited by so many young people who are entering the engineering profession. Exemplary among these are the young electrical engineers who are being honored today."

The Outstanding Young Electrical Engineer Award for 1987 went to James G. Frohlich, account development representative at IBM Corporation in Seattle, Washington. Mr. Frohlich was recognized for his "contributions in manufacturing technologies, his accom-

plishments in music and his contributions to meeting human needs." Honorable Mentions were awarded to Dr. Nader Mehravari for his "contributions to the field of communications and his participation in church activities and professional societies" and Mr. Stefan A. Siegel for his "achievements in electro-optics, his involvement in the arts, and his contributions to human welfare." Five engineers were recognized as Finalists: Mary C. Bertrand, Daytona Beach, Florida; Charles B. Dieterich, Princeton, New Jersey; Kenneth B. Donovan, Daytona Beach, Florida; Patrick R. Trischitta, Holmdel, New Jersey; and Matthew R. Wordeman, Yorktown Heights, New York.

The awards were presented by Dr. Harold K. Knudsen, 1988 President of Eta Kappa Nu. Mr. Howard H. Sheppard, a Past President of Eta Kappa Nu, acted as photographer for the event. Mr. Sheppard has demonstrated his excellent photographic talents during many past banquets. The banquet was expertly planned by the Recognition Dinner Committee under the Chairmanship of Michael R. Hajny.

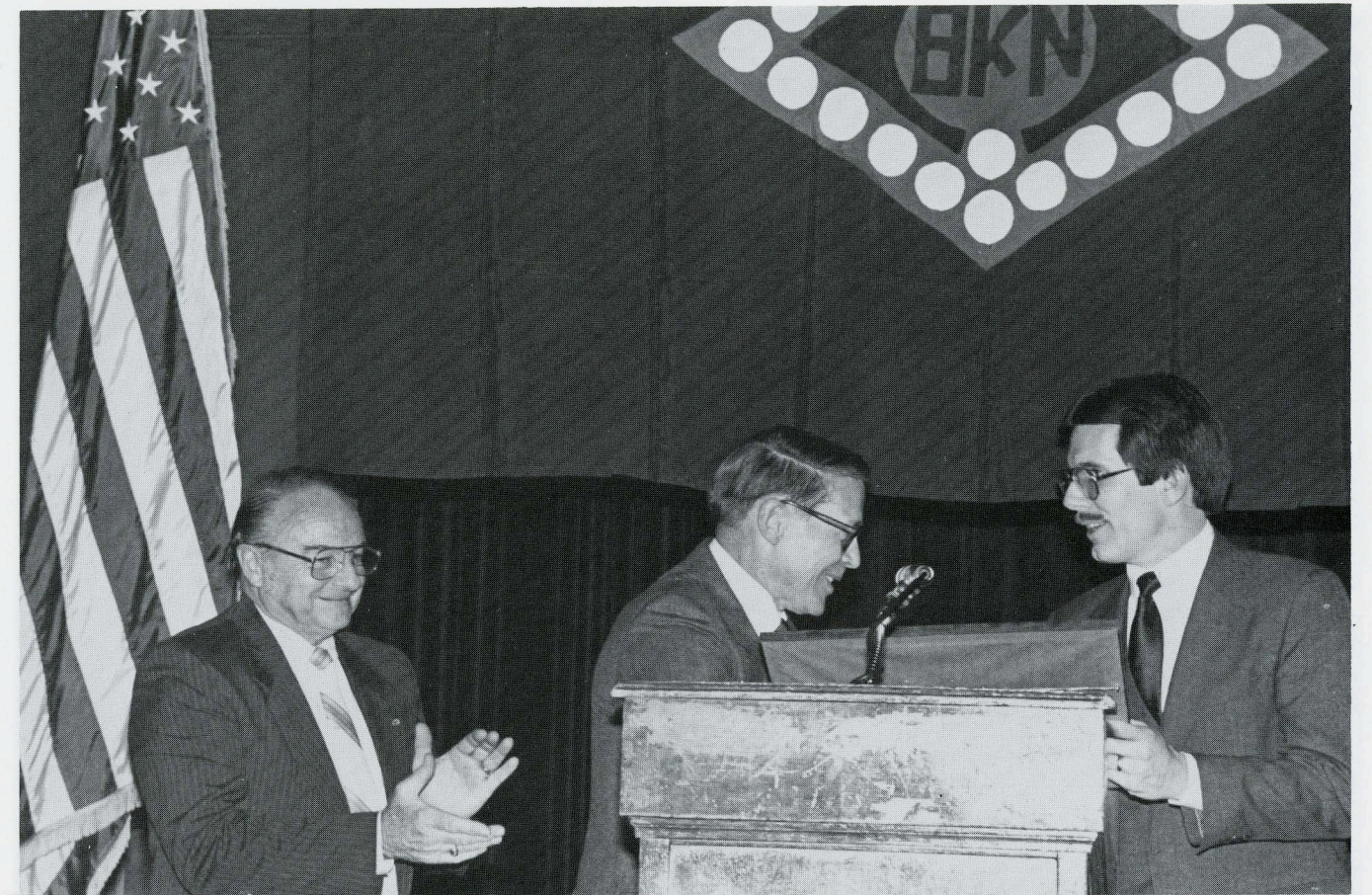
Other members of the audience were composed of the Eta Kappa Nu Board of Directors, leaders from industry and academe, and members and friends of Eta Kappa Nu. Included in the audience was Mrs. Ethel Williams, HKN staff member at its past Headquarters in Urbana Illinois and Mrs. Trudy Hudson, wife of the late Eta Kappa Nu Executive Secretary, Paul K. Hudson. Mrs. Hudson was presented with a certificate in honor of her late husband's contributions to Eta Kappa Nu and, in particular, the Outstanding Young Electrical Engineer of the Year Award.

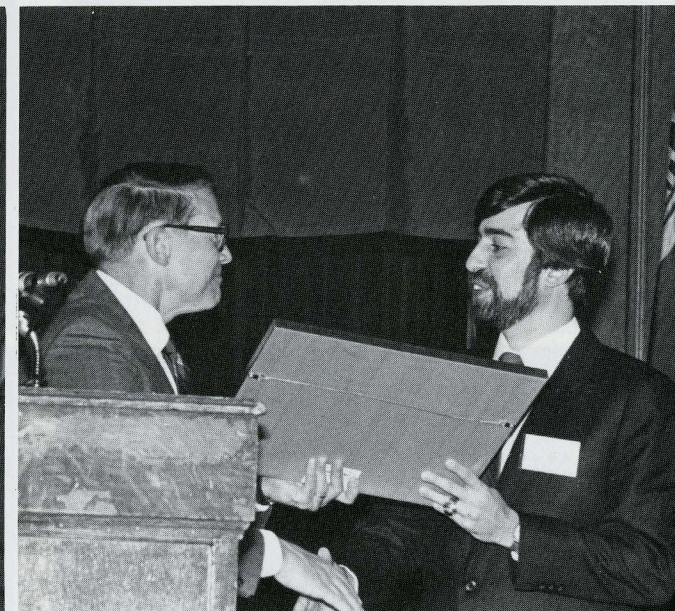


The Photo above shows Philadelphia's historic Union League which served as the site of the 1987 OYEE Award Program

At the top of page 5, HKN President Harold K. Knudsen congratulates Winner, James G. Frohlich while Eminent Member William Murray, Master of Ceremonies, applauds

At bottom of page 5, Mrs. Gertrude H. Hudson receives IEEE Certificate of Appreciation honoring her late Husband, Paul K. Hudson, who served as Executive Secretary, Eta Kappa Nu, from 1958 until 1988. The certificate is being presented by Eminent Member Donald Christiansen, Editor and Publisher, IEEE Spectrum



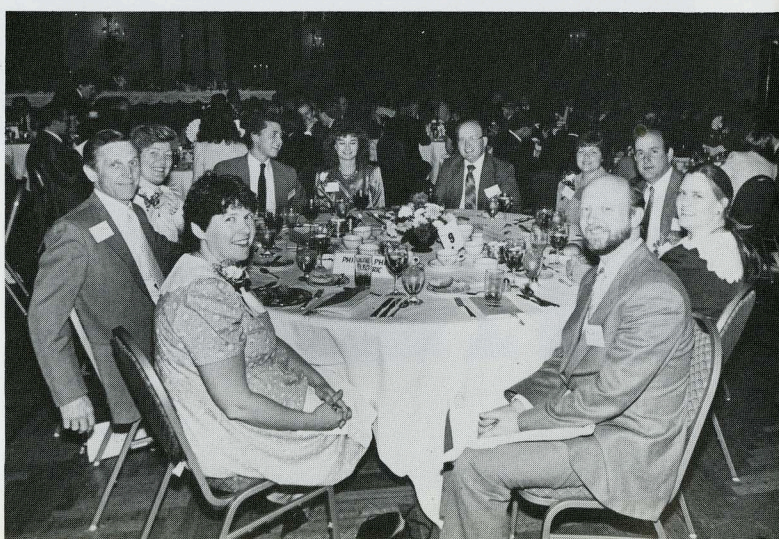
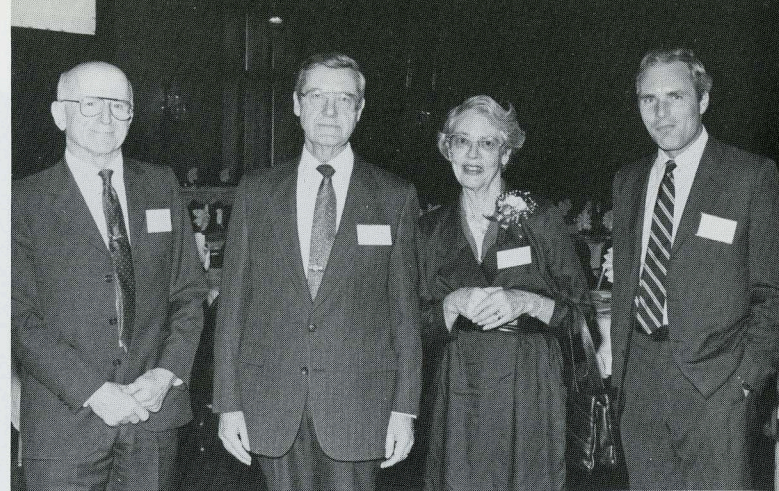
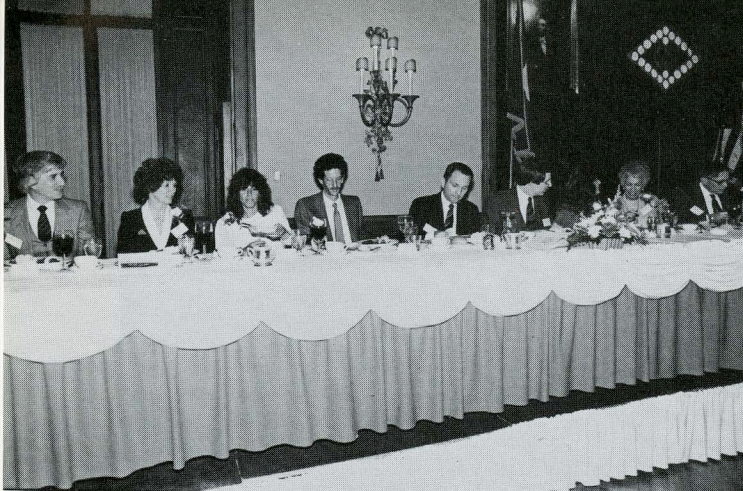


Photos on this page show Finalists receiving certificates from President Knudsen. At top left, Mary C. Bertrand. At top right, Charles B. Dieterich. At center left is Kenneth B. Donovan, and at center right Patrick R. Trischitta. At bottom right Dr. V. Sadagopa receives recognition certificate for Matthew R. Wordeman.

← Photos on page 6 show President Harold K. Knudsen with Honorable Mention Winners. At top, Mr. Stefan A. Siegel and at bottom, Dr. Nader Mehravari.

Photos on page 8 show a variety of scenes which illustrate the atmosphere of good cheer which permeated the entire OYEE event.





LARRY DWON . . . VOLUNTEER

by
J. Robert Betten



Editor's Note: This article has been written as a SALUTE to a man who has been one of the strongest volunteer workers for this Association that Eta Kappa Nu has known during the past fifty years and one of the most prolific contributors of articles appropriate to the BRIDGE. It is simply common knowledge, that if you need help or if you want something done that requires that extra-mile effort, there is definitely a man "out there" that you can count on: If you ask him, he will do it; and if he does it, he will give it his best. His name is Larry Dwon.

INTRODUCTION

Larry Dwon has dedicated his life to the service of others. Much, but not all, of this service has been through the workplace, the professional societies, such as IEEE, and through the honor societies, principally Eta Kappa Nu.

He has chosen to personally undertake a mission to improve the working environment of engineers, whom he describes as the nation's special class of knowledge workers. He has been pursuing this mission as a working technician, engineer, manager, teacher and consultant and also as a volunteer in many organizations. There is little doubt that Larry is widely known for both his written and spoken word.

For his long and dedicated efforts in behalf of his fellow engineers, it was announced in December 1988 by the IEEE United States Activity Board, USAB, that Larry had been selected as the first recipient of the new "Literary Award Furthering Engineering Professionalism." The citation states that he was chosen for his "Substantive literary contributions to power and utility-oriented publications as well as to IEEE, honorary society and other publications destined to be read by the engineering work force and students. His lifelong concern for engineering professionalism is reflected in his writing."

When the BRIDGE was made aware of this recent honor, it was decided that a feature article about Larry was in order. Although a touching earlier tribute to Larry was voiced in BRIDGE by Roger I. Wilkinson, the Founder of the Outstanding Young Electrical Engineer Award (OYEE), that article was printed over thirty years ago, when Larry was serving as Vice-President of Eta Kappa Nu. Some of the material here was gathered from Mr. Wilkinson's story about Larry, and some from Larry, himself.

If you ask Larry, he will describe himself as a maverick and a wavemaker in a world that would like to avoid waves, and he freely confesses that there are those who view him as a trouble-maker . . . to which those who know and love him smilingly reply in today's vernacular . . . "Naaah!"

In the pursuit of life and careers within its span, there have been many ethical and professional issues that have captured his interest and corresponding support. Few engineers have been as concerned about these issues as has Larry. He has taken interest in a historical statement by Thomas Payne who in 1776 wrote, "A long habit of not thinking a thing wrong often gives it the superficial appearance of being right." Rather than adopting an apathetic attitude or conforming to practices which he sincerely believes to be in error, Larry has chosen to take a stand and fight for what he believes is right, particularly in the area of career-affecting practices.

Larry says that through experience, he has learned that fighting issues is a two-edged sword: consequences and rewards. The consequences arise immediately, recognition comes much later. Successful wavemakers also gain wisdom with age. They learn that a decision can be controlled, but the consequences of that decision are neither predictable nor controllable. Therefore, they must fight unpopular issues persistently and always from a solid factual base.

He believes that while it may be true that nonconformists fighting issues in a bureaucratic environment will not be loved by the hierarchy, actually there are more loving persons in a hierarchical pyramid than those who may not be so inclined, and who may be temporarily in control. The chances may be high that a wavemaker would be ostracized by the "in-group" in some environments; but not in all of them. Larry's experiences prove the point.

Larry believes that one never loses an honest fight unless he quits. He believes that right always overcomes wrong in the long run, and that the rewards for such effort include public esteem and peer recognition, which are very satisfying personally and have long-lasting benefits.

Larry Dwon has received his share of honors. After three-quarters of a century, he remains an active volunteer, writer, speaker and teacher.

EDUCATION BASIC TO SUCCESS

Roger I. Wilkinson, the highly respected member of HKN mentioned earlier, began his BRIDGE biography of Larry Dwon, this way, *"There is a well-established view that character will make itself known in any environment. Some students of sociology hold that in the process of rising from underprivileged surroundings, even more determined and dedicated leaders are created. The lower East-Side of New York City produced George Gershwin, and upper East-Side's Yorkville gave us Lou Gehrig. But to Eta Kappa Nu, the important product of Yorkville, home of the Dead End Kids, is Larry Dwon."*

Born in 1913 of immigrant Polish/Ukrainian parents, and christened Vladimir L. Dzwonczyk, Larry early had impressed on him the virtue of hard work and the importance, in the New World, of getting an education. He attended public schools 168 and 82 and graduated valedictorian. He also received the Mark Goldberg Memorial gold medal for general excellence in scholarship.

Admitted to New York's famous Stuyvesant High School, Larry pursued the scientific course which demanded four years of physics and mathematics, his favorite subjects. He was elected to Arista Honor Society. Displaying a predisposition for involvement, he was elected Class President in his senior year, President of the Engineering and Mathematics Societies and Chairman of the Class Nite Committee. He also was co-editor of the school's Math Survey and member of the Algebra Team which competed with other high schools throughout the city. After school he played basketball with the Nomads, a team that competed among the city's many neighborhood settlement houses. He also was a very skilled street single-wall handball player.

Larry was admitted to Cooper Union, a free college in New York City, known for its high admission

requirements. He chose instead to enter Cornell University. He received a four-year tuition-free scholarship and a New York State Board of Regents scholarship. Working at various campus jobs made it possible to graduate with a Degree of Electrical Engineer, in 1935.

Again, as in high school, scholarship and extracurricular activities were priority objectives in college. Kappa Chapter of Eta Kappa Nu initiated him in 1934. He also was Chairman of the AIEE Student Branch and Chairman of a committee of student branch chairmen in the Northeastern Region of AIEE. These two leadership roles mark the beginning of Larry's more than 55 years of continuous involvement in professional activities.

At Cornell, Larry also was in charge of the Engineering Show in his junior year. He participated in stage lighting activities in the Cornell Dramatic Society for four years, and was made Master-of-Lighting in the senior year. Very few engineering students ever participated in this Liberal Arts-dominated activity.

To this day, Larry continues to study formally and informally. In 1942, he attended an advanced Electronics Program at Harvard. In 1954, he completed an evening MBA program at New York University Graduate School of Business Administration. In 1952, he attended a summer program in Executive Training at the University of Michigan. His latest studies include computers, word processing and desktop publishing.

BROAD WORK EXPERIENCE

Upon graduation, the depression was four years old. Some college graduates were selling apples on street corners. Larry had written 100 letters for job interviews. He received only five replies—four were negative and a telegram, *"Come Interview Monday."* In spite of the employment situation, he returned a telegram, *"Can't Monday Wednesday."*

On Wednesday his interviewer, a prominent engineer and manager at American Gas and Electric Company, was quite disturbed. He questioned Larry's judgement for returning a three-word telegram which was difficult to understand and postponing an interview date in light of the employment situation. Larry quickly answered the first judgement question by calling attention to the fact that a large enterprise, with more money than he had, also sent him a three-word telegram, which incidentally he understood. The fighting spirit was evident to the interviewer quite clearly.

To the other judgement question Larry explained the circumstances of his involvement in AIEE and the fact that on Monday he had professional responsibilities for student sessions and a committee meeting at the AIEE Summer Meeting which was held at Cornell that year. Fortunately, the interviewer and Philip Sporn, Chief Electrical Engineer, were both very active in AIEE. The latter person later became President of American Electric Power Company. Many

years later, he was the one who spontaneously said to Larry, *"You have to do something!"* This incident is explained later.

While Larry did not get a job with the company in 1935, he was granted eight interviews then and he was commended for his professional attitude. He joined the company January 1, 1938 after a persistent effort. He remained with the company for over 40 years. Much of Larry's activity was accomplished because this employer was supportive of educational and professional extracurricular activities. That too was one of Larry's fights with the establishment before it became an accepted practice. It was well known in AEP that Larry was not a "Yes Man." That had its consequences and strengths.

It is Larry's feeling that Philip Sporn remembered their first encounter. That chemistry helped him achieve the results reported. The match was established during the first meeting although not a job. It was a solid match, reinforced several times with other professional encounters. Philip Sporn was no pushover, but he was fair and supportive when well thought out and convincing strategies were presented. Therefore, when the time arrived which required drastic measures toward engineering education, he spontaneously turned to Larry.

Between graduation and AEP Service Corporation, Larry worked with Diehl Manufacturing Company designing electric motors and Holophane Lighting Inc. designing prismatic lighting equipment and systems. During World War II, he was on leave of absence, under contract with the Office of Science and Research Development, OSRD, first at Harvard Radio Research Laboratories, Cambridge, Massachusetts, and then at Bell Telephone Laboratories in New York City.

To supplement income in the era when employers were really underpaying engineers, Larry taught electrical engineering and illumination engineering at Pratt Institute and Polytechnic Institute of Brooklyn in their evening programs. As a matter of fact, teaching is one of Larry's strong interests. He has done so in industry and educational institutions. Today he still teaches in the Industrial Extension Service of the Engineering College at North Carolina State University. His title is Consulting Instructor.

Larry recalls that in the 40 years with AEP, he was able to perform successfully as an electrical and illuminating engineer. He was one of three engineers selected by Philip Sporn to hold a management position, conceived by himself, and titled Operating Sponsor. After three years, Larry personally was responsible for getting this position abolished. Later, Larry was appointed Administrative Assistant to a newly elected Executive Vice-President when the former (Larry's best boss ever) person retired. Two years later, Larry again convinced the new Executive Vice-President, Operations, that the administrative assistant position should be

used as a training position rather than a permanent dead-end career stopper.

He believes that the timing was then right for his final and most satisfying step at AEP. As he viewed it, much of engineering education was going down the science-analysis and mathematical manipulations tube and away from practice and synthesis. Philip Sporn became very upset, especially with what they perceived had been done to electric power education by an educator-dominated system. After making some attempts to halt the trend, he turned to Larry, when he concluded a very energetic speech to his colleagues at AEP, and said, *"Larry! You have to do something!"*

Mr. Sporn liked Larry's proposal and signed it. With that stroke, all matters concerning engineers, technologists and technicians dealing with college relations, recruiting, training and development, including salary and manpower utilization studies, were transferred from the personnel to the engineering departments. This was a tremendously important issue for which Larry had fought for a long time and finally won. He was named Manager Engineering Manpower.

In 1978, the Assistant Vice-President, Public Affairs, began a retirement article this way:

"Larry Dwon retired April 30 after 40 years of service with AEP Service Corporation."

"But he'll not be forgotten. He left behind an enviable legacy that will continue to be felt for years to come, wherever electric power engineering is taught or practiced."

"As manager engineering manpower for AEP for the past 23 years, the first and only holder of that assignment, Dwon looked past the end result—the attraction of literally hundreds of newly graduated engineers who chose to cast their professional lot with AEP—and saw the bigger picture. His crusade, since 1955, was to change the direction of engineering education in the nation's universities, to get them away from their love affair with aerospace, electronics and computers and into something solid, like electric power."

"His valedictory statement was, I will continue to seek opportunities to serve usefully."

And that is exactly what Larry has been doing since 1978. A consultant, registered since 1941 in New York State, and since 1983 in North Carolina State, he has made over 50 energy conservation audits. On demand, he teaches a course in this field. He also teaches a P.E. Review Course in Electric Power Engineering, as well as several other power and lighting courses.

Larry is a volunteer in the IEEE-USAB professional activities programs dealing with Age Discrimination and Student Professional Awareness Activities. He remains a member of the Power Engineering Education Committee which he conceived and helped to establish.

In Eta Kappa Nu, he continues to serve responsibly on the Outstanding Young Electrical Engineers' Committee. He is Historian and a contributing editor of the BRIDGE.

VOLUNTARY INVOLVEMENT

Space constraint precludes a thorough revelation of Larry Dwon's 55 year broadly based involvement in AIEE/IEEE, HKN, ECPD, ASEE EEI, EJC and other organizations. He served on numerous committees, some boards and he chaired many of them. In the process, Larry conceived new activities that have been implemented, for instance:

- Power Engineering Education Committee of the Power Engineering Society.
- Edison Electric Institute's Power Engineering Educator Award.
- EEI-ASEE Educator-Industry Annual Dinner.
- Hickernell Student Award of the Power Engineering Society.
- IEEE Student Branch Counselors' Award.
- Eta Kappa Nu History.
- Eta Kappa Nu Regional Visitation Program.
- Eta Kappa Nu Distinguished Service Award.

As part of this involvement Larry has had published over 200 manuscripts, over 75 of them in the BRIDGE. He has spoken to over 200 student, educator and engineer groups since graduating from Cornell, over 100 of them being S-PAC's since 1979.

An overview of Larry's major activity concentrations follows:

Pre-college Engineering Guidance—For over 20 years, Larry participated in guidance programs of New York and New Jersey Engineers' Guidance Committees. His approach, contrary to other views, was to give students factual information and not as a recruiting mission. Many published papers resulted from this effort. The report that went to the heart of this issue was titled, "Engineering and Engineering Technology Guidance: Problem, Program, Position and Proposal."

Engineering and Technology Education and Accreditation—For many years, Larry was an outspoken industry critic of the trend in engineering education after World War II. He disputed from the beginning the wrong reasons given for the creation of the Technology programs, but especially incorporating in its name the term engineering. He considers this to have been an unethical and unprofessional act without proper industry guidance.

When he was told, at an annual ASEE meeting, to keep quiet because he didn't know what he was talking about regarding accreditation matters, he spent one solid year researching the facts as far back as the beginning of ECPD, in 1932. This effort produced two detailed papers titled "Engineering Education and Accreditation: An ASEE-ECPD Educator Dominated System" and "Some Truths About Engineering Technology Education and Accreditation." Neither paper

would ASEE publish, so the former became a Transaction paper in Power Systems and Apparatus; and the latter was published in the BRIDGE. Both papers were discussed widely, but never again did the education community accuse Larry of not knowing what he was talking about. Many other papers were written in this subject area.

Power Engineering Education—The near demise of power engineering education in this country created many challenging opportunities to correct the trend. Three principal advocates of this correction were: Philip Sporn, President, American Electric Power Company; Eric T. B. Gross, Philip Sporn Professor, Rensselaer Polytechnic Institute; and Larry Dwon. To be sure, many other prominent people from industry and education provided their effective support in this important struggle. Larry wrote profusely on this subject. Three papers stand out. "Electric Power Engineering Education: Regressive and Revitalizing Forces" was the last one written before he was retired by AEP.

However, the two papers that caused the largest waves were, "Forces Influencing Engineering Education from Power" with about 27 written discussions, and "Top 20 Electric Power Engineering Graduate Schools and the Selection Parameters," with almost an equal number of discussions, although more heated. It took an IEEE Board of Directors' authorization to get the paper published as a transaction paper.

Eta Kappa Nu—Larry Dwon became associate editor of the BRIDGE in 1940, under A. B. Zerby's tenure as Executive Secretary. He has continued with different titles under subsequent executive secretaries. He held all offices in the New York Alumni Chapter and the New York Advisory Council. In 1957 he was elected national Vice-President and succeeded to the Presidency the following year. This was a major transition period for HKN. It became incorporated. Instead of a National Advisory Board and a National Executive Council, a Board of Directors became the national organization. Headquarters office was shifted from Dillsburg, Pennsylvania, to Urbana, Illinois, because A. B. Zerby retired and Professor Paul K. Hudson became Executive Secretary. There were two BRIDGE editors in succession until Paul assumed the role. It also had been Larry's job to find and recruit Paul. It was a hectic two years, Larry recalls.

Probably, Larry is best known for his long effort, since almost the beginning, in behalf of the Outstanding Young Electrical Engineer Award, OYEE. He became the first active chairman of the OYEE Award Committee after Roger I. Wilkinson, the founder. His most recent article on the 50-year review of the Award received many compliments. Also a history of Eta Kappa Nu, published in 1976, was researched and written by Larry. He has been broadly active in HKN, and the BRIDGE has contained many of his articles.

USAB Professional Activities—Since 1978, Larry has concentrated his IEEE efforts in the professional rather than the technical arena. His two principal interest areas have been Age Discrimination and Student Professional Awareness Conferences. He has been chairman of both committees, member, Communications Committee and Career Activities Council's Editor for Professional Perspective of the IEEE Institute.

In this area of activity he also has written extensively. Papers that have inspired lively discussions include, "Age Discrimination: A Serious Constraint to Lifetime Careers in Engineering," "Should Companies' Professional Practices be Graded?" and "IEEE-USA Professional Activities: 1973-1988 Funding Allocations." The latter is now in the hands of USAB. Repercussions may come later. Larry always seems to find stimulating issues.

RECOGNITIONS

Was it worth the effort? Larry says absolutely! Flack he got and loved it. Telephone calls and letters made him feel useful. But the awards, recognitions and congratulatory messages confirmed the fact that he had many friends and that objectivity prevailed.

Included among Larry's prestigious recognitions are the following:

- 1969—IEEE Fellow.
- 1975—Plummer Lecture Medal from the American Welding Society.
- 1976—Eta Kappa Nu Distinguished Service Award.
- 1977—First recipient of the Distinguished Service Award from the Power Engineering Education Committee.
- 1977—Edison Electric Institute's Special Citation for Leadership in Establishing Relations with Educational Institutions.
- 1978—Edison Electric Institute's Distinguished Service Award.
- 1982—USAB's Highest Award for Engineering Professionalism.
- 1984—Eminent Membership in Eta Kappa Nu.
- 1984—IEEE Centennial Medal from the Power Engineering Society.
- 1988—First recipient of USAB Literary Award Furthering Engineering Professionalism.

LETTERS OF APPRECIATION

In pursuit of his voluntary activities, Larry has dealt with many high level industrialists, educators and students. From among all groups, words of appreciation may be drawn. Here is a sampling:

A. B. Zerby, Executive Secretary, HKN—"The writer, who for 22 years has been Editor of the BRIDGE of Eta Kappa Nu, can truthfully say that Larry was the best associate editor he ever had. . . . One thing which should be patent to all who know him: He is not a 'Yes Man' . . . but he is a doer."

H. C. Witthoft, Vice President, Anaconda Wire and Cable Co.—"I should like to thank you most heartily for your good efforts in heading this committee (Hickernell Student Award) through the initial five years. It was not an easy task, I know, and we were indeed fortunate to have someone with your administrative ability, enthusiasm and propensity for responding to chaos with equanimity and humor. You will certainly be missed."

J. A. D'Arcy, Chairman, 50th Anniversary OYEE Committee—"On behalf of Eta Kappa Nu, I would like to thank you for having been a member . . . In particular, the history for the 50th Anniversary Book, the 50 year analysis of the Award for the BRIDGE, and research of winners, citations and companies, all were vital to the success of our celebration, and have resulted in reference material which can be used for many years."

Dave R. Reyes-Guerra, Guidance Director, ECPD—"Hardly ever does one come across another individual in a committee position with whom such a rapport exists that one wishes to continue on a personal basis. . . . I think very few people realize the enormous contributions that you provided to engineering guidance."

M. R. Lohman, President, ECPD—"The Executive Committee unanimously . . . resolved: That the Board go on record as being deeply appreciative of the strong leadership that Larry Dwon has provided to the Guidance Committee during the more than five years he served as its chairman and as having profound admiration for the dedicated manner in which he has striven to advance the course of engineering guidance."

P. K. Hudson, Executive Secretary, HKN—"I have to tell you dear friend, that you are one of the most worthwhile people I have met in 25 years in Eta Kappa Nu."

J. B. Gordon, Chairman, IEEE Student Activities Committee—"I would like to thank you for the outstanding work you have done on the Bendix Award Program. Due to your efforts we now have comprehensive rules for judging the proposals and a first-class slide presentation explaining the Bendix Award."

R. A. Budenholzer, Director, American Power Conference—"As always, it was a pleasure to see you at the American Power Conference, and particularly this year, because of the excellent talk you gave at the sponsored student breakfast on Monday morning. This was a superb presentation and one that I am certain will be a great help to all who heard it . . ."

Don S. Brereton, Editor-in-Chief, Professional Perspective—"You have seemed to me as one of the giants of USAB . . ."

EPILOGUE

Larry Dwon has shown himself to be the complete person described in the Eta Kappa Nu Constitution, and Eta Kappa Nu is proud to have Larry as a member. He responds that the pride is his, first, to be an electrical engineer and certainly to be a member of this great honor society.



Drifting Around the Kingdom *Part Two* *A Lovely Old Romance*

by
Paul K. Hudson

EDITOR'S NOTE: This article was prepared by Paul Hudson just before his death. We felt it appropriate to include it in this issue. Other articles prepared by Paul for future issues of the Bridge are on file in the Bridge Office and will be used at later times.

The Viking Hotel in York is the only four-star hotel in town. It is plain in some ways—the lobby is small and not very elegant. However, the dining rooms and sleeping rooms leave nothing to be desired. But over and above all of that was the fact that we were treated like royalty. It was not until we were there a couple of days that we discovered the reason.

The hotel has 185 rooms. A hotel employee explained to me that in the summer time 180 of them are assigned to the “tour people” and the other five are for the “privates.” I asked, “Who are the privates?” and was told, “You are one of them. Privates are people who are not on a guided tour. You are the only one that we have had in a long time that stayed with us so long. Most of the privates stay only one night or two.” So we were getting the royal treatment because we were going to stay long enough to see, enjoy and appreciate their town. They respected someone who would do that, especially since they were so rare.



The popular Viking Hotel in York

The tour people are mainly Americans who have bought guided tours around Great Britain. They arrive at the hotel in tour buses in the late afternoon, have dinner, sleep a little, and then present themselves in the lobby at 7:00 AM the next morning to ride on the bus all day another day, seeing things as they drive by if they bother to look. They are a sorry lot—going around dead tired and half asleep most of the time. They are led into the dining room in single-file and seated at single-file tables like prisoners, which in a way, they are. They sit there looking down at their plates without saying anything until the meal is over, and then drift back to their rooms. They do not give the hotel any trouble but I could see that the hotel employees did not think much of them. One day a porter said to me, “What do you think of these tour people.” I replied, “They are good people—they have worked hard all their lives and saved a little money—they just wanted to take a nice trip before they died but felt too insecure to do it on their own so they got suckered in on one of these stupid guided tours. The brochure of the guided tour told them that they would stay all night at the lovely Viking Hotel in York, visit the York Minster Cathedral, the National Railway Museum, browse in the shops of the Shambles, walk on the walls of the town, and enjoy dozens of other interesting things.” The Porter laughed. He knew



Photo above—The National Railway Museum at York

their time was too short for them to do any of those things. Even if they had bothered to walk into town after dinner they would have found the York Minster, the Railroad Museum, the shops in the Shambles, and the dozens of other interesting things closed for the day. When they got back to America they likely told all their friends that they had seen the historic city of York, whereas, in fact, they had not seen anything except a dining room and a bed room.

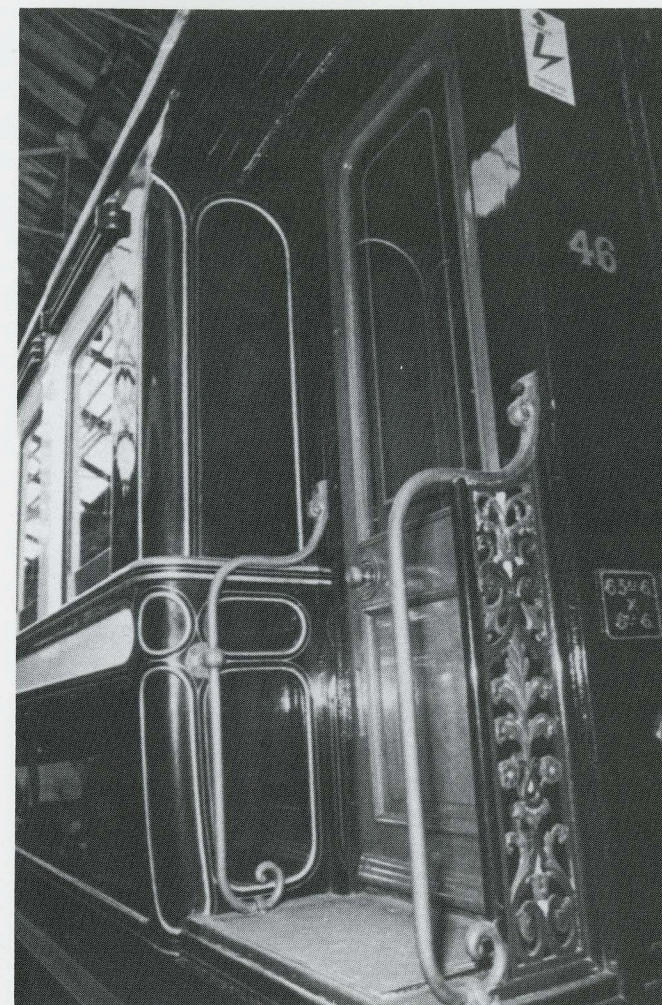
For me, the most important attraction in York after the Minster is the National Railway Museum. It is really something special and I doubt if there is another one any place in the world of equal importance. The reason, of course, is because Great Britain is a railroad country. It is my guess that 90 percent or more of all commercial domestic travel is by rail. Trains leave about every hour from any city to any other city, and the long-haul trains are very fast. We rode one from London to York—a distance of close to 200 miles—and the ride lasted exactly two hours. Since we had to go slow in London, York and other places where the track was not so good, it is easy to see that the normal speed was about 125 miles per hour. When the train entered a tunnel it was just like

a piston in a cylinder. The instant build-up of air pressure was so great I thought my ears were being blown out.

On one occasion the train stopped in the middle of a tunnel. I presumed it had been stopped by the block signals and that it would start again very soon, but I still had a moment of panic anyway. I am not afraid to die—everyone must do it—but I just do not want to go that way. The greatest disaster in the history of railroading occurred when a train stopped too long in the middle of a tunnel. All of the several hundred people on board were killed in a matter of a few minutes by the carbon monoxide from the engine stack. Just as I was about to dash for the door, the train started again.

Railroads have been one of the great and lasting loves of my life. I feel like Edna St. Vincent Millay when she wrote:

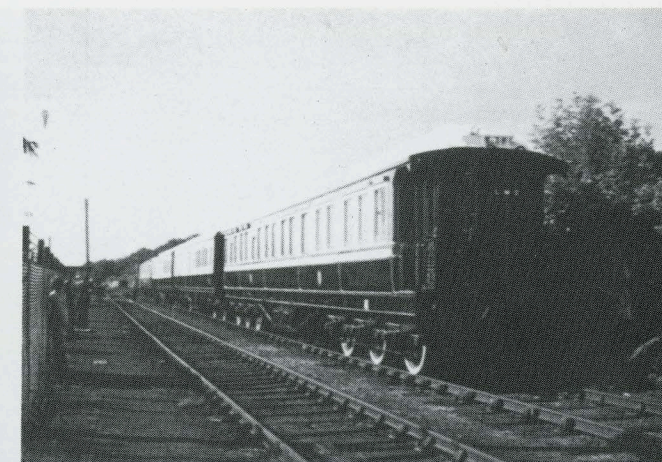
There isn't a train I wouldn't take
No matter where it was going.



Royal Train support vehicles as restored. The main view shows the elaborate door treatment of dining car 76

My father was a railroad man all his life and so I grew up riding trains free on passes. He was the Foreman of a small engine yard. It was the yard that was small, not the engines. When I was just a little boy he allowed me to play on the engines. One day when I was about 14 years old he said to me, "Would you like to run this engine down to the cinder pit?" I just stood there dumfounded. It was like the Saviour saying, "Would you like to go to Heaven?" No one can ever know the joy that went through the mind and soul of that 14 year old boy when, for the first time in his life, he pulled the throttle back on a steam locomotive and then felt the giant tremble and start to move under his feet.

It was not long after that that I became overconfident and my father pulled the rug out from under me. I knew how these engines worked and I could run them. I was something very, very special. But one



Top photo illustrates the dining car (together with the two first-class brakes) immediately after completion of repainting in 1979.



The bottom view shows East Coast brake (LNER No 109) as restored to immaculate varnished teak at Doncaster in 1977

day we were together in a cab and he started pounding on the engine with a small sledge hammer. "What are you doing?" I asked. He replied, "This steam injector is stuck open and I am trying to get it shut off." I was struck with terror by the thought that I might be alone on an engine, start to put water in the boiler, and the injector would stick open. What in the world would I do. I did not know how and where to hit it with a sledge hammer. From that day on my respect for my father became very great. He was a real man's man with a great talent, well liked and respected by his co-workers.

When I was about 20, I had the opportunity to reciprocate, but was not successful. One day a very large engine came in and people were discussing what its horsepower might be. I said, "If you really want to know, I will calculate it for you." Quickly I checked the cylinders, length of stroke, pressure, etc,



The picture above shows the royal dining room as converted in 1942 with loose chairs. Until this date, this end too was furnished in like manner to the view on page 19. The former fixed-seat positions are marked by plain wood panels on the sides and the ends.

Photo page 19: ➡

Interior of royal dining car 76. This view shows the unmodified 12-seat saloon (with its original seats and tables) as normally displayed at the Museum in the function of a 'serving' saloon.

and with an equation I had learned in a Heat Engine course at college, I told them the approximate horsepower. They just stared at me without saying anything. It was clear they did not believe me. I didn't think anytime after that to tell my father that I really had calculated the engine. He died sometime later so the matter is closed.

In their early days, railroads captured the imagination of the people just as airplanes did later. Many songs were written about trains and the people who ran them. Most lasting I suppose was *Casey Jones*:

Come all you rounders if you want to hear
The story about a brave engineer
Casey Jones was the rounder's name
On a six-eight wheeler boys he won his fame.
etc, etc.

Then there was the one called *Mountain Railroad*.

Life is like a mountain railroad
With an engineer that's brave
You must make the run successful
From the cradle to the grave.
etc, etc.

Sounds corny now but those were different times and mountain railroading was a very dangerous business. I thought about that several years ago when I was on the San Francisco Chief, going over the Donner Pass between Sacramento and Reno. That area is a real mountain wilderness. Near the top of the pass we started going through huge snow sheds one after another. I had never before seen anything like them. I was told that in the wintertime auxiliary engines,

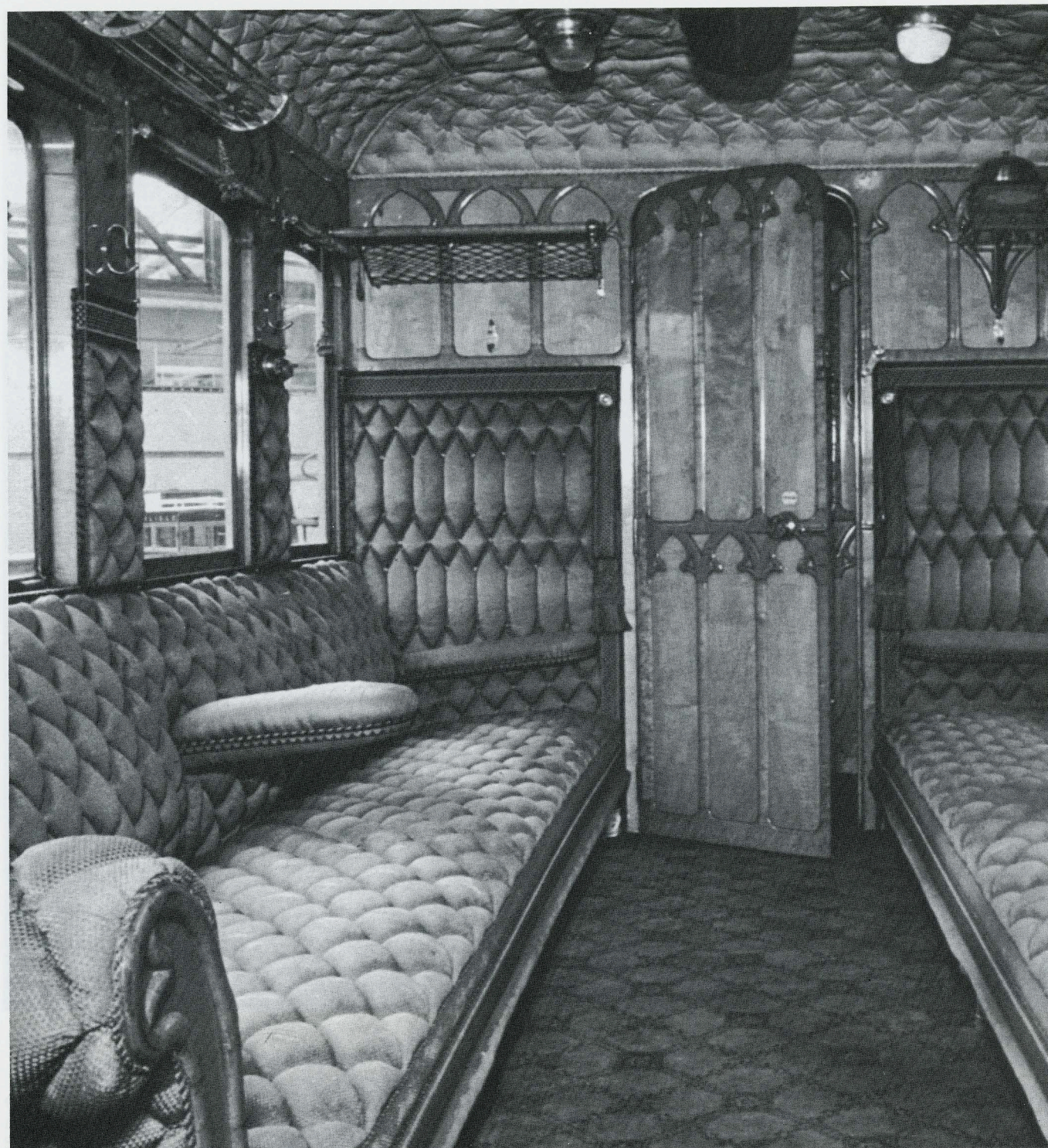


all heated up and ready to go, are stationed there to be used to rescue trains that become stranded in the mountains.

Finally, there was the song about the wreck of the *Royal Palm* and the *Ponce de Leon*, two luxury trains that smashed into each other down South someplace. Years later I had the pleasure of riding on the *Royal Palm* but by then it was not the class train it once was. Even today trains are still named as well as numbered, and I always thought it beautiful when a train was named for a person. One day I was standing on the platform of Central Station in Chicago when the train announcer's voice came over the loud speakers, "Attention please, train number twelve, the *James Whitcomb Riley* is now arriving on track one." I said

to myself, "There can be no other honor and joy in the world as great as having a crack passenger train named for you. Like Faust, I might be willing to sell my soul to the Devil for that honor." I would be glad if they named a freight train with six flat wheels and a hot-box for me.

I have been on quite a few trains that hit things but have never been on one that left the rails. In railroad parlance that is called "putting the city on the ground." However, I have been on two trains that broke in two during the run. The first one was the Broadway Limited. I woke up in the middle of the night and noticed that the train was much too quiet. Among other things, the ventilator fan in my room was turned



off. I went out into the hall and asked the porter what was wrong. He replied,

"They done left us."

"Who done left us?"

"The engine and first five cars. They will miss us pretty soon and come back and get us. I turned off your ventilator so your room would not get cold."

"Is the block system working?"

"Yes, of course."

"Have flares been set out?"

"Yes, don't worry, we will not get hit by another train."

I went back to bed and went to sleep.

The wonderful railroads that we once knew were not destroyed by the airplanes but by powerful, irresistible and regrettable human forces. Still, the love affair—the romance—that I have had with them, which began when I was a little boy, will continue undi-

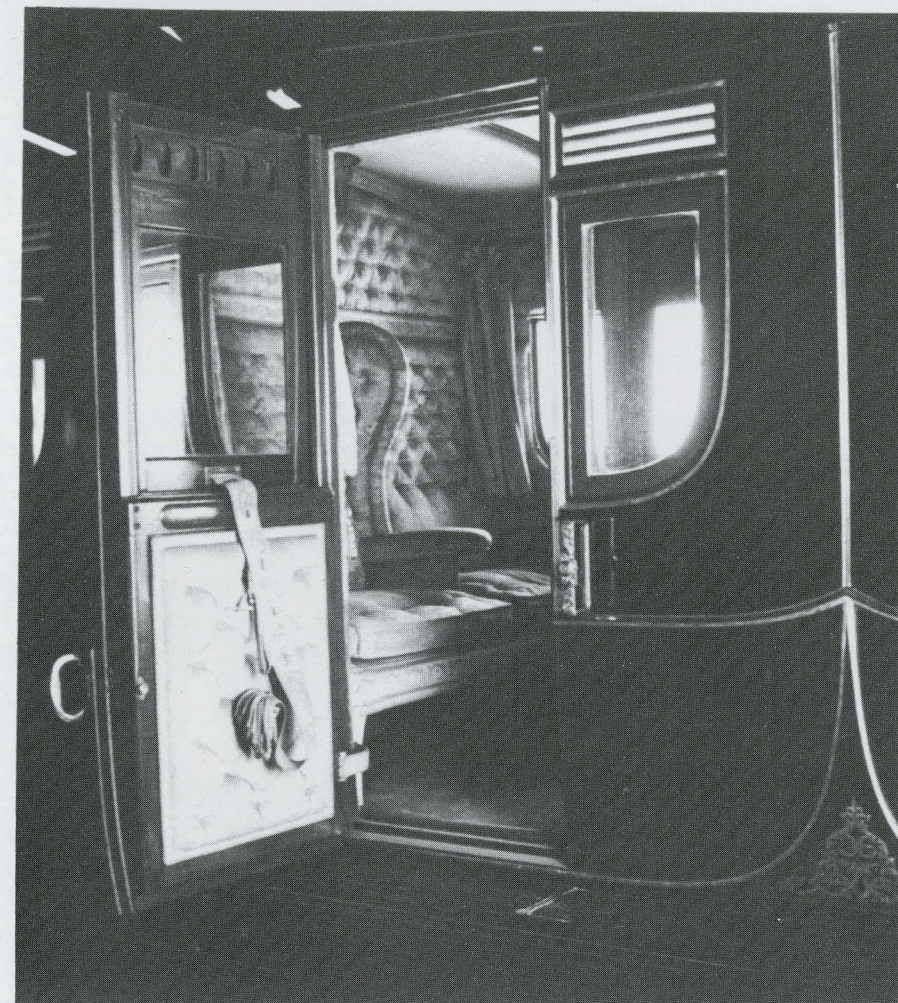
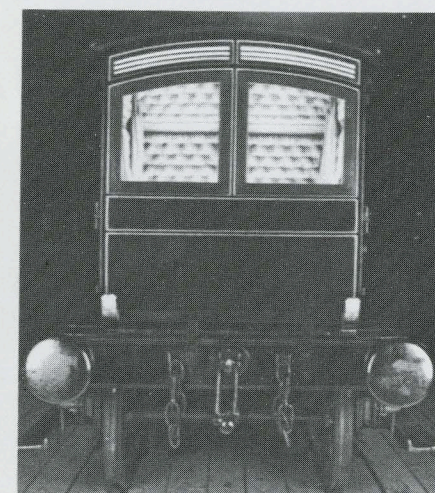
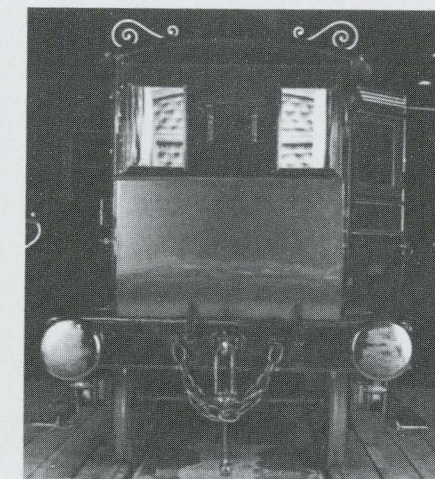


Photo above:
Embroidery and silk brocade in profusion—Queen Adelaide's carriage.



Photo on page 20:
The Queen's Day Car.



Photos above:
The bed compartment end of
Queen Adelaide's carriage.

The coupe (or chariot) end of
Queen Adelaide's carriage.

minished until I am finally gone.

These memories and many others were in my thoughts as I walked through the great railroad museum at York. I knew about most of the ancient engines on display, but many of the cars were completely new to me.

I had several thoughtful moments about one passenger car. It was a third-class car and was nothing more than an open flat-car with three-foot sides, and benches for people to sit on. They must have been

really miserable out in the open wind and with cinders and smoke from the engine smoke-stack blowing in their faces. But for me the most interesting cars were the ones that were built for the English Kings and Queens—especially the one for Victoria. They were real palaces on wheels. I have seen several private cars in America but none were in the class of the royal cars of England. I suppose one of the reasons is that each of the railroads in England builds a royal train and there is competition in seeing who can build the best one. (See also, photos on pages 22-24).



Photo above:
Victoria Regina, and no doubt about it—
the principal day compartment of the Queen's
saloon, furnished entirely to the Queen's
choosing and exactly as she last used it in 1900.



Photo page 22:
Expanded view of Queen's writing-table,
located at the left corner of the Queen's day
compartment.

Latter-day simplicity—
the King's and Queen's day
compartments and the Queen's
bedroom of the 1941-built
LMS saloons 798, 799.

