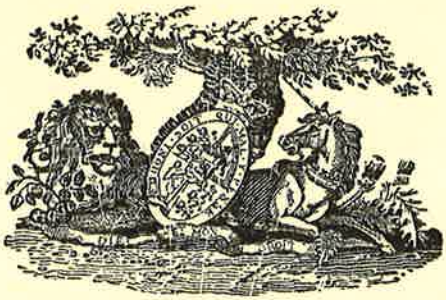
"Sylvania"
During 50 Years
1901-1951

DON G. MITCHELL



"Were American Newcomen to do naught else, our work is well done if we succeed in sharing with America a strengthened inspiration to continue the struggle towards a nobler Civilization— through wider knowledge and understanding of the hopes, ambitions, and deeds of leaders in the past who have upheld Civilization's material progress. As we look backward, let us look forward."

—CHARLES PENROSE
Senior Vice-President for North America
The Newcomen Society of England

This statement, crystallizing a broad purpose of the Society, was first read at the Newcomen Meeting at New York World's Fair on August 5, 1939, when American Newcomen were guests of The British Government

"Actorum Memores simul affectamus Agenda"

"SYLVANIA"—DURING 50 YEARS
(1901-1951)
A 50th Anniversary Address

AMERICAN NEWCOMEN, *through the years, has honored numerous corporate organizations, of widely various natures and both in the United States of America and in Canada, and has honored pioneers whose vision, determination, courage, extended experience, ripened judgment, hard work, and abiding Faith made possible the beginnings and continued the development of what grew to be internationally-known organizations. These men and these organizations have contributed mightily to economic and material progress. Such a Newcomen manuscript is this, dealing with an industrial organization whose technical contributions have been of high order, important alike in wartime and in peace. America has been enriched by such enterprises!*

FRANK A. POOR

Founder

"Sylvania" During 50 Years 1901-1951

DON G. MITCHELL
MEMBER OF THE NEWCOMEN SOCIETY
PRESIDENT
SYLVANIA ELECTRIC PRODUCTS INC.
NEW YORK

THE NEWCOMEN SOCIETY IN NORTH AMERICA
NEW YORK SAN FRANCISCO MONTREAL
1951

First Printing: December 1951
Second Printing: December 1951

This Newcomen Address, dealing with the history of Sylvania Electric Products Inc., and celebrating its 50th Anniversary (1901-1951), was delivered at a National Newcomen Luncheon, held in Ballroom of The Pierre, at New York, N.Y., U.S.A., when the "Christmas Honors" were bestowed upon Mr. Mitchell, the guest of honor, on December 19, 1951

SET UP, PRINTED AND BOUND IN THE UNITED STATES OF AMERICA FOR THE NEWCOMEN PUBLICATIONS IN NORTH AMERICA BY PRINCETON UNIVERSITY PRESS

INTRODUCTION OF MR. MITCHELL, ON DECEMBER 19, 1951 AT NEW YORK, BY CHESTER F. HOCKLEY, CHAIRMAN OF THE BOARD OF THE DAVISON CHEMICAL CORPORATION; VICE-CHAIRMAN OF THE BALTIMORE COMMITTEE, IN THE NEWCOMEN SOCIETY OF ENGLAND.

My fellow members of Newcomen:

YOUR Christmas Luncheon speaker is a man of wide attainments. He came to Sylvania in November 1942—almost a full year after the United States of America was attacked at Pearl Harbor. Although a young man in his 'thirties, he already had acquired a national reputation for marketing ability. He was employed as Vice-President in charge of Sales. But Sylvania didn't need sales then, for almost overnight its entire operation had changed over from making incandescent and fluorescent lighting products and radio tubes for the civilian market to producing like products and others for war purposes.

It had become apparent that if the war were to last but a few years this small Company would emerge with all of the facilities of a big company, after which it could stay big or it could drop back to the market it had previously enjoyed. The year before Germany attacked France, Sylvania had sales of $8 millions. The year our speaker was hired, the sales were $32 millions and mounting fast, so fast in fact that at the peak, in 1945, they surpassed $125 millions.

❦ ❦

To drop back to $8 millions, or twice or even three or four times that amount, was unthinkable. That is why a man of outstanding marketing ability was employed at the time. Only he didn't spend his time preparing a post-war marketing program. He couldn't. There was too much to do of an immediate nature. And that is where the man's versatility and management ability showed up strongly.

❦ ❦

Under pressure of doing what previously would have been impossible, there was need for coordination, need for the most delicate kind of salesmanship within and without the Company.

❦ ❦

Yes, he found time somehow to prepare himself for the post-war period. How, I do not know; but I can say to you that the first year of reconversion saw a drop to $69 millions, after which sales bounced back to around $100 millions.

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In 1946, at the time of his election to the presidency of Sylvania, he was said to be one of the youngest chief executives of a major company. However, his counsel had been sought in many places.

❦ ❦

He has taken prominent part in industry association work. At the present time, he is Chairman of the Executive Committee of

American Management Association, and a Trustee of the Committee for Economic Development.

Recognition for work he has done for enlightened management has come through honorary degrees from Parsons College, Rensselaer Polytechnic Institute, and Northeastern University.

❦ ❦

Today he is going to tell you something of the people, the policies, and the practices that brought this Company, in fifty years, from a renewer of light bulbs employing 15 people to an organization with plants in twenty-two communities in seven States, and employing more than 22,000 people.

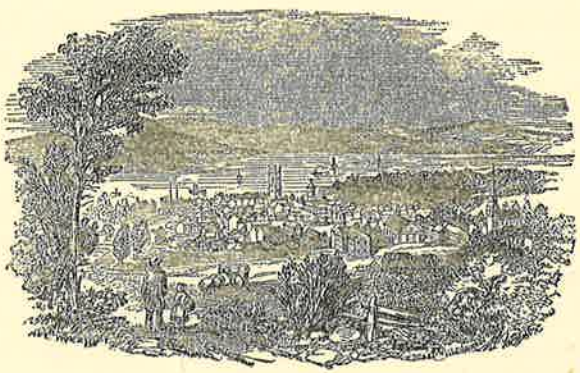
❦ ❦

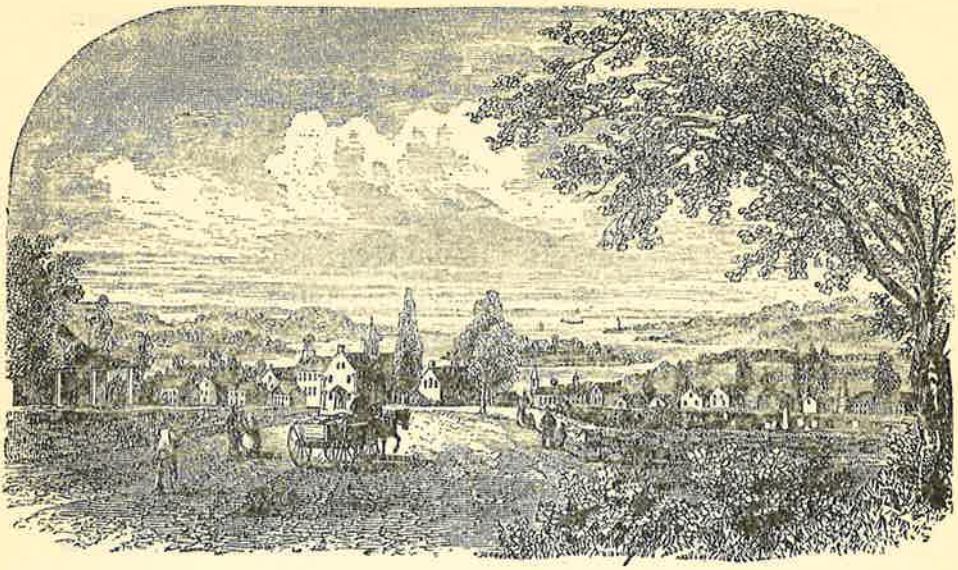
I might say, however, that he can do it most objectively, for he is the first President of Sylvania Electric Products Inc. who was not one of the founding fathers.

❦ ❦

It is my privilege and pleasure to introduce a friend, an associate, and a fellow member of Newcomen: Don G. Mitchell.

❦ ❦





My fellow members of Newcomen:

At the turn of the Century the influence of the Victorian era of empire building, of expansion, of opportunity still was strong. The United States of America had declared, and fought and won its first war against a major world power. Henty and Alger, those great minstrels of individual initiative, were popularizing the virtues of hard, honest work. Young men scorned paternalistic security; all they wanted was opportunity. They knew there would be pitfalls along the way, but that lent spice to the adventure!

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It was in such an economic and social atmosphere that Sylvania Electric Products was born. Its start, its battle with the giants, its later rapid growth to a position of prominence within its own industries, and the way it won its standing, have all the ingredients of another "From Rags to Riches." There is only one thing lacking—there was no rich owner's daughter for the poor but honest young company to marry. Its financial foundation was made solid

by the simple method of sacrificing current luxuries and by plowing back earnings as fast as they were made.

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There were many other small manufacturers of the same product who did not have the same courage and vision, who were not willing to pay the price of success. Many of those were absorbed later by the companies out of which Sylvania grew.

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Companies, like people, have a character, which, of course, is the heritage from the men who created and built the company. From character stem policies governing a company's behavior. The quality of its products, the kind of people it employs, the methods of doing business, the contributions to its industry—these are the outward signs of corporate character.

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You say of a man that "his word is as good as his bond." You say of a company: "you can't go wrong buying its product because the company always stands back of what it sells." In both cases, that's character. It isn't something one can buy, nor is it something that can be created overnight. Character is not something that can be changed like clothing, to fit the occasion. Character is built-in. It is a *part* of a company.

❦ ❦

An individual's character is formed by the time the middle 'teens have been reached. A corporation's character also is molded in its early years. It is shaped largely by the men who start the enterprise on its path. That is why the early years of a company and its founding people are important to know and to understand.

❦ ❦

The founder of Sylvania Electric Products Inc. is Frank A. Poor, who, I am happy to say, is still actively associated with the Company. He is Vice-Chairman of our Board of Directors. He is the oldest of three brothers. His next brother, Edward J., now a member of our Board, was formerly President and then Chair-

man. The youngest brother, Walter E., was at the time of his death, in April 1950, Chairman of the Board, having previously been President. Frank Poor, always self-effacing, never held any other operating office than Treasurer.

❦ ❦

As the oldest, Frank Poor seems to have had more companionship with his father, Joseph H. Poor, who was a modestly prosperous leather merchant. He travelled considerably and when young Frank was through his first year of high school he took the boy with him to Michigan, where he had some leather projects that were to keep him there for some time. The boy went to work for his father. In the year or so he was there, he learned what high school never could have impressed on him so strongly. He learned how little he knew about business and how much there was to know.

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Being away from home, the boy naturally sought the companionship of his father and quite unwittingly underwent a period of education that gave him growth, ambition, and confidence, while still in his 'teens. His formal education, upon return home to Salem, Massachusetts, was at the local commercial school. After a year or two of work he was ready to branch out for himself.

❦ ❦

Two loans endorsed by his father enabled him to buy a hay and grain business which, a year later, he sold. After paying off the loans he had left a profit of $3,500. Judged by today's values this wasn't very much; but, in 1901, when milk was selling for 5 cents a quart and everything else in proportion, this was a rather tidy sum for a youngster of 21 to have to invest in a business.

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His lawyer in the sale of the hay and grain business was a man who recently had invested some money in a small factory in Middleton Massachusetts, where burned-out electric light-bulbs were

being renewed. Without mentioning his own interest, he suggested to young Frank Poor that this might be a good place to invest his $3,500. Without going through all of the details, that is exactly what happened and, on July 31, 1901, Frank Poor found himself owner of a half interest in the Merritt Manufacturing Company. The owner of the other half was Matthew Merritt.

❦ ❦

As things turned out, of course, this was a splendid investment, but more than once in the first two or three years young Poor had serious doubts.

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Poor's partner, Matt Merritt, was an ingenious man. From his process for renewing light bulbs sprang all of the successful lamp companies operating in that area. It was difficult, however, to sell the lamps at the start, because the quality was not all it should have been. It was not long, therefore, before cash became scarce and there was not enough in the business for two partners. The upshot was that Frank Poor bought out Merritt for $750, which he borrowed from his father, and, in November of that year, became sole owner of the Company. At the same time he moved the operation to better quarters in Danvers, Massachusetts, where utility services were available.

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The first seeds of company character, determination not to be licked by adversity, were sown. More than once in later years this trait of perseverance has been called on to meet what seemed like unsurmountable difficulties.

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In Danvers, young Poor was alone. Oh, he had fifteen people, mostly women, doing the actual factory operations of refilling lamps and they could turn out some 500 renewed lamps a day. But it was he who had to procure the burned-out lamps, to sell and ship the renewed ones, to meet the payroll, and keep the business going. All the time he lived at home, taking out of the till when he had it, the few dollars each week he actually needed. He

recalls that his salary was $5.00 a week, but what records we have show that, as a rule, he received less.

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Shortly after moving to Danvers, the name was changed to Bay State Lamp Company, and its business, until 1909, was entirely that of renewing or, as they say, *refilling* carbon filament electric lamp bulbs. This practice no longer exists but in those days it provided enough business to keep several small factories going. Burned-out lamps were purchased for a penny apiece. They arrived in large barrels, dirty, unsorted, and badly blackened on the inside, many of them broken. Some of the older types contained considerable platinum wire. Those lamps were not refilled. They were broken up and the metal reclaimed. Occasionally one was found to be in pretty good condition; that was a bonus or dividend.

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Once sorted and washed, trays of bulbs then were taken to the operators for refilling. Lamps in those days were of the old type with pointed tips, for it was then the practice to exhaust the air from the bulb through a glass tube *in the top* rather than through the base of the bulb. When sealed off, this glass tube formed a miniature glass spike, or tip. In the Merritt renewal process, the glass tip was first tapped off, leaving a small hole in the bulb. Through this hole, the old filament was jerked out with a tool somewhat similar to a button-hook. The carbon deposit on the inside of the bulb was then burnt out by means of a gas flame and a new filament inserted and cemented in place. From then on, the process was the same as for making a new lamp: the air was exhausted through a glass tube by means of an oil vacuum pump —the primary equipment of the plant—and the tube sealed off. To make sure the renewed lamp would "deliver," each one had its voltage and light output read on the photometer in the darkroom.

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Few companies have been more influenced in their progress by patent matters than Sylvania. Just about the time little Bay State Lamp Company was beginning to break even, the General Electric

Company accused it, in 1904, of infringing the Malignani patent covering a process for exhausting bulbs. The upshot was the acceptance of a General Electric license for refilling lamps with a prohibitive royalty on lamps above a quota of 300,000 lamps a year. This happened to be about the number of lamps the Company was refilling and selling. There were features to the program, however, such as market stabilization, that made it attractive. In 1908, however, as the result of a U.S. Department of Justice investigation, the agreement was abandoned.

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Meantime, Bay State was beginning to "arrive." Its sales volume was up to around $50,000 and it had received an offer of $25,000 for its business from the National Electric Lamp Company, a General Electric subsidiary. The offer looked big at the time, but when Frank Poor is asked why he turned it down he says: "What else could I have done with the money?" He had become rooted in a business he liked, that he knew would grow. So, why sell? More perseverance.

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He was joined meanwhile, by his younger brother, Edward, who in time took charge of sales and when the Company was incorporated, in 1907, was made President. Frank Poor was Treasurer & General Manager, the only offices he would hold. Regardless of what title he took, Frank Poor always was the real head of Bay State and its successor, Hygrade Incandescent Lamp Company, which was organized in 1909 to make and sell *new* incandescent lamps.

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This graduation to *new* lamp manufacturing provided a basis of permanence the Company needed because the renewal business was, as events soon proved, uncertain and could never have attained any large volume. In fact, it was not much more than a second-hand business.

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Bay State continued refilling lamps for another four years, but, by 1913, this phase of the business was abandoned and Bay State

ceased to exist. The host business (Bay State), if I may borrow a term from zoology, had done its job well and the new lamp business (Hygrade) was strong and rapidly improving.

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Incandescent lighting, which was invented by Thomas Alva Edison the year Frank Poor was born, was now faced with its first major change. Tungsten had been found to be much superior to carbon, as an element for lamp filaments. Tungsten gave considerably more light for the same wattage. Initially, the filament was exceedingly fragile, but it was not long until a method was found to *draw* tungsten filament wire. When that happened, tungsten lamps began to take over the market.

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At about that time, the third brother, Walter, an electrical engineering graduate of Massachusetts Institute of Technology, entered the business as its first full-time engineer. And here began another phase of the Company's character. Walter Poor, by education and by nature, was a stickler for *quality*. He believed in continual improvement. He had that healthy kind of dissatisfaction that leads to progress. I have heard him tell how he ordered an entire run of lamps broken up, although something could have been realized on them as seconds—broken up at a time when the cost of a run of lamps was a lot of money for the Company.

❦ ❦

Almost as soon as Walter Poor came with Hygrade, in 1911, he started to work developing a small tungsten lamp that could be used on electric signs. The life of these lamps was short and it bothered the Poors, so they tried to find the cause. Edward, the president, spent many a night on top of Times Square buildings in New York where the signs were, hunting *unlit* lamps which he shipped back to Walter, the engineer. It wasn't long before the culprit was found to be high wind. After that, the remedy was simple—a filament anchor—but the process was, in effect, the beginning of Company research, a program which now is a major one in Sylvania operations.

Sign lamps were followed by large lamps, and led to a rapid growth. Then, First World War broke out, and before long the Company's supply of glass bulbs and tungsten wire, which it was getting from Austria, was threatened. A company in Newark, New Jersey, was found which had been formed to make tungsten wire but which had not yet turned out any. It was purchased and, by the time the last of the Austrian wire was gone, new wire of even better quality was coming from the new wire plant.

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A bottle manufacturer was found to make the bulbs. In this case, the quality was not as good; but at least the Company was able to stay in business. Here, in fact, is the first record we have of joint interest by the two companies that later were to form the present Sylvania. The bulb output of this plant was taken by both Hygrade and Novelty Incandescent Lamp Company.

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Sales were growing and the Danvers factory, even after enlargements, was too small and inefficient. Since there was not enough money to build and equip a new factory and to have sufficient left for working capital, arrangements were made for a factory to be built especially for lamp production which the Company would lease. A few years later the Company purchased the building at 60 Boston Street, in Salem, Massachusetts, which now is our corporate address.

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The week before Hygrade moved into its new quarters, in 1916, the General Electric won a decision upholding its Just & Hannaman tungsten lamp patent. This was the basic patent covering a tungsten filament lamp.

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The General Electric Company made no attempt to collect back royalties, which would have closed up most, if not all of the independents. Instead, it offered them so-called "*B*" licenses which provided for royalties and a quota limited to the percentage of General Electric lamp sales which the licensees enjoyed in 1915.

There now was one way and one way only for a licensee to grow at a faster rate than General Electric, or any competitor, and that was by buying up the quotas of *other* licensees.

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By 1931, when the merger took place, Hygrade had spent $630,000 in acquiring additional quotas.

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As can be seen, it took considerable cash to buy up quotas and to provide for the expansion which followed. For that reason, the Poors left the major part of their earnings year after year in the Company.

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To companies that were willing to plow back earnings to improve efficiency, the lamp business was a highly profitable one, in spite of frequent price reductions. And perhaps because it was so profitable, the Poors and other leaders among the licensees fretted at the license restrictions, forgetting sometime that there was nothing in the law compelling General Electric to license anybody.

This desire to expand operations found expression in the manufacture of radio tubes for the young and rapidly-growing radio industry. It was not until 1928, however, that Hygrade made its first tubes. From the standpoint of manufacturing, there were so many similarities to lamps as to make the addition a natural step. Both incandescent lamps and radio tubes were glass envelopes containing an electric circuit and from which the air had to be removed.

Nature abhors a vacuum, but we love it! In fact, no small part of our success is due to the *quality* of our vacuum.

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Sylvania has two roots, one of which is the New England enterprise, the early years of which just have been described. The other root is planted in Pennsylvania. Some five years after Frank Poor started in New England, a group of men in St. Marys, Pennsylvania, who had been in the lamp business, believed there was a market for *novelty*-shaped bulbs; their only trouble was finding the glass blower.

The name stuck but no novelty bulbs were turned out. Instead, like the New England Company, Novelty Incandescent Lamp Company, Inc., began by refilling lamp bulbs.

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The following year, a group of business men in Emporium, Pennsylvania, the Howards, became interested financially in the lamp company. A factory was erected in Emporium, and the business moved there. A young electrician of 23, working for a Warren, Pennsylvania, electrical contractor who did the Company's electrical work, attended to some repairs at St. Marys and then was engaged to lay out the wiring for the new plant. His name was Bernard G. Erskine. Ben or "*B.G.*", as he was affectionately known, stayed with the Company, becoming Superintendent within a year or two.

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After four or five years of unprofitable business, the Howards became discouraged. They were unwilling to put more money into the venture.

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When they discharged the original promoter, they made Erskine "temporary manager," and he and they began to look for outside capital.

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Novelty was manufacturing tungsten lamps under a license from Independent Lamp & Wire Company, which boiled down to an agreement to buy tungsten wire exclusively from the latter. Control of Independent was in the hands of Nathan Hofheimer, who, in turn, was very close to W. C. Durant, then head of General Motors Corporation. In this way, Mr. Durant learned that Novelty control was for sale. General Motors, in 1910, purchased 75 percent of Novelty's capital stock, and Erskine, with whom Mr. Durant had become very favorably impressed, became General Manager. A year later he was made President of Novelty.

❦ ❦

What Frank Poor was to Hygrade, Ben Erskine was to Novelty; except that Mr. Poor owned his operation, while Mr. Erskine

was an employee of his Company. In all other respects, however, the two men were the dominant personalities from whom came the inspiration, and the guidance, and the management.

Outwardly as dissimilar as day and night, Erskine being a fun-loving extrovert and Poor being a very modest man, underneath they were pretty much alike. They were self-made business men who operated on the principle of doing the best they could. They were honest and fair in their dealings. They were genuinely interested in the welfare of the people who worked for them and of the communities in which they operated, and they, in turn, were well liked. Quality of product was no more a fetish in Salem than it was in St. Marys and Emporium.

When the General Electric tungsten filament patents were sustained, Novelty did not take out a license but continued to operate under its license from Independent Lamp & Wire. Later, in 1920, when General Motors control passed from Mr. Durant to the DuPont interests, General Electric purchased the assets of Novelty and made it the Keystone division, with Mr. Erskine continuing in charge.

The sharp depression in 1921 brought about a decision to close out the Pennsylvania operation. However, Mr. Erskine was able to persuade General Electric to sell the properties to him and two associates. The price was $350,000, which was to be paid $100,000 down and the balance from earnings. By pooling all of their resources, the three managed to scrape together the down payment. On the first of January 1922, the Nilco Lamp Works began and, for the first time, the ownership was in the hands of the men who were managing the Company. Mr. Erskine's associates were Joseph C. Wortman and Guy S. Felt. Mr. Erskine was President, Mr. Wortman was Vice-President and head of the factory operations, and Mr. Felt was Secretary and Treasurer.

With the purchase went a license with a quota of $440,000.

To some people it might have looked like a foolhardy thing to buy, at the time of the Country's sharpest business recession, a business that the General Electric Company did not feel it could afford to maintain; but to Erskine and his associates it was no gamble to put up everything they owned or could lay their hands on, because they knew their own capabilities. They had that kind of faith in themselves and in their organization, that brushes aside all obstacles.

That is another character heritage of the Company.

Erskine and his associates were not long paying off the balance of the purchase price. Nor were they long finding the quota too confining for their energies. They purchased some lamp licenses to add to the quota, but even that wasn't enough.

In looking around for other products to add, they saw *radio* taking the public's fancy. The core of a radio set was a tube which involved the same manufacturing operations as an incandescent lamp. The patent situation was anything but clear and would probably stay in that position for some time.

An engineer was given the princely sum of $500 to find out how to make a radio tube. That was in the Spring of 1924, when radio broadcasting was only four years old. On Thanksgiving Eve of that year the first Sylvania radio tubes were shipped out of Emporium.

As a matter of fact, it wasn't Nilco but Sylvania Products Company which Nilco had formed to manufacture radio tubes. A half interest was sold to some other members of the organization. Among them were Max F. Balcom, now Chairman of the Board, and H. Ward Zimmer, Executive Vice-President.

In spite of all the enthusiasm that went into the radio tube operations, there were times when the principals had their fingers crossed. Their main business was making lamps, and it was very profitable. As licensees, however, they were not encouraged to enter other fields. That was the principal reason for forming a new company to manufacture radio tubes.

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This feeling, however, soon passed, and the radio tube part of the business grew rapidly and, in fact, overshadowed interest in the lamp business. In Salem, on the other hand, the lamp operations always were of major importance.

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By the end of the 'twenties, two things of major import happened. The radio tube patent situation was clarified in the Courts, and RCA's claims were established. As soon as possible both companies secured licenses. They were straight royalty licenses without quota, but they did not include power or transmission tubes.

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The other occurrence had to do with a company old in years but young in radio, which was bursting with an idea to mass produce and merchandise receiving sets. That was Philco, which, within a few years, was to become the Country's largest set manufacturer. Its two tube suppliers were Hygrade and Sylvania.

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Just prior to that, radios had been shipped *without* tubes in place. Philco was convinced that tubes could be procured that were rugged enough to take whatever beating occurred in shipping. They were right, and a business relationship was established which has continued ever since.

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Philco's requirements absorbed a major part of the output of the two companies. They both were licensees under the General Electric *lamp* patents and the RCA *radio tube* patents. The principals always had gotten along well together. It seemed like a

wise and natural thing to *combine* forces. Nilco was dissolved and Sylvania's assets were purchased with Hygrade stock. From the operation emerged Hygrade Sylvania Corporation.

E. J. Poor, who had been President of Hygrade, became Chairman of the Board, and B. G. Erskine, who had been President of Sylvania, became President of the new Company.

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Offices were maintained as before in Salem and in Emporium. Lamp manufacturing and sales became Salem's responsibility, and radio tubes that of Emporium. All lamps bore the Hygrade etch, and all radio tubes the Sylvania etch.

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To all intents and purposes the two divisions were operated as though they were independent companies. In some respects there was merit in this independence because it fostered a competitive spirit. Each division strived to do things better than the other, to bring out more new devices, to make more improvements. Of course, this could not continue. Good management, policy, efficiency, growth—everything demanded integration.

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Toward the close of 1940, Walter E. Poor was transferred to New York as Executive Vice-President for the purpose of unifying the Company. It is fortunate that this action was not further delayed because the war in Europe had stimulated business considerably. In 1938, the volume was $8 millions; in 1939, it was $11 millions; in 1940, it was over $20 millions.

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During the 'thirties the Company was busy filling out its lines as rapidly as possible, and several new and important products were patented. In the Year 1936, for instance, the record shows that 105 *new* types of radio tubes were developed, making the total 321 types. In 1937, the number of lamp types had increased to over 2,000. During the early part of this period, production of radio tube parts was started. This was the beginning of vertical integration.

Considerable significance always will attach to the Year 1938, because that was when the Company brought on the market its *fluorescent* lamp and decided not to include it in its lamp license. By thus refusing to subject its fluorescent business to the same quota restrictions as incandescent lamps, the Company was able immediately to secure a much larger position in the market, a position which it has been able to retain.

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Hygrade Sylvania had been working on a fluorescent lamp for a number of years and believed it had a sound patent position. Later, the Courts decided that the General Electric patents were valid and had been infringed; but, in the meantime, our Company had won and held a better market position than it would have had under the incandescent lamp quota system.

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When fluorescent lamps were introduced there were no *fixtures* to use them. To build a lamp business it was necessary to build a fixture business. Sylvania was the first manufacturer to produce a complete fluorescent lighting fixture.

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By that time, the Company had four strings to its bow—radio tubes, incandescent lamps, fluorescent lamps, and fluorescent lighting fixtures. And then came war. Within a very few months of Pearl Harbor, the Company had gone over almost completely to war production. In 1942, 85 percent of its production was for war purposes. And with it came expansion. From the original plants in Salem, Massachusetts, and St. Marys, Pennsylvania, making incandescent lamps; in Emporium, Pennsylvania, and Salem, Massachusetts, making radio tubes; in Danvers, Massachusetts, making fluorescent lamps and in Ipswich, Massachusetts, making fluorescent fixtures—*six* in all—the number grew, in 1945, to 29 plants.

❦ ❦

From a total number of employees in 1941 of around 6,000, the employment grew to a peak of 30,000 in August 1945. This figure, incidentally, has not since been equalled, although the sales

were 30 percent larger in 1950, and will be greater still in 1951.

In achieving this growth, the Company, which, in 1942, had shortened its name to its present Sylvania Electric Products Inc., further strengthened its vertical integration. By the close of the war it was building a large part of its special machinery, it had a tungsten and chemical plant, and a parts operation which included wire drawing.

❦ ❦

Of even greater importance, so far as management was concerned, it had learned by reason of necessity, the advantages inherent in *decentralization* when a large measure of local autonomy is permitted. Since then, Sylvania has been committed to that philosophy of management. Under it men have grown at the management level—men who enjoy and can handle responsibility. These men grew with the Company and for the most part are the product of decentralization.

❦ ❦

Of the more than one hundred men who are members of our Executive Compensation Plan, the average age is 44 years and the average length of service is 16 years.

❦ ❦

There is not time, *Mr. Chairman*, to relate all of the contributions Sylvania made to Second World War victory. For many important lighting and electronic products it was the sole supplier. It furnished a large amount of radar and communications components and equipment. Its fixtures and lamps lighted some of the largest war factories. Most spectacular, in terms of its achievement as well as the end result, were its contributions to the *proximity fuze* program.

❦ ❦

Besides furnishing a large number of the actual fuze assemblies, Sylvania played the major part in developing the tiny radio tube that actuated the fuze, and it produced some 95 percent of all such tubes.

The U.S. Navy has said it was the second most important weapon we had in the winning of the war. At different times, it has been credited with a major share in winning the Battle of the Bulge, in destroying the enemy air fleets, and in defeating the German *V-1* buzz bomb program to destroy England.

In the middle of the war, in 1943, Edward J. Poor resigned as Chairman of the Board and was succeeded by Mr. Erskine, who had been President. Walter Poor, who had been Executive Vice-President, became President.

On June 23, 1945, Mr. Erskine passed on. No change was made in the officers until the following May, when Walter Poor became Chairman, and I was elected President, after serving as Sales Vice-President since 1942, and Executive Vice-President since the first of 1946.

In 1950, the post of Chairman again became vacant through the death of Mr. Poor, and Max F. Balcom was elected to fill that position. In the same year, H. Ward Zimmer, who had been Vice-President in charge of Operations, was elevated to the post of Executive Vice-President.

Thus, *at the end of fifty years*, four of the six founding fathers are no longer with us. Only the original founder, Frank A. Poor, and his brother Edward are now living and taking an interest in the Company. Both are members of the Board and Frank Poor is Vice-Chairman.

The reins of the Company are in new hands, but hands that will hold to the fundamental policies on which Sylvania grew.

Since the war, we have grown and our greatest growth has come in the past two years. Just as our founders believed in plowing

back, so does the present management believe in strengthening the Company's financial position at all points by converting earnings into facilities as it is permitted.

❦ ❦

Part of our growth has come by way of acquisition, but most has come by the route of product development and research. In 1944, Colonial Radio Corporation of Buffalo, New York, was purchased. It now is our Radio and Television Division, which produces home radios and television receivers, automobile radio sets, and a variety of products for national defense.

❦ ❦

Two years later, in 1946, Sylvania set up the Wabash Corporation to acquire the Wabash photoflash and Birdseye lamp business. These now operate as part of the Sylvania Lighting Division.

❦ ❦

At this time, all products are merchandised under the one name: *Sylvania.*

❦ ❦

When *television* began to become popular, in 1947, Sylvania was called on to furnish *picture* tubes. Since then we have completely equipped two large new factories just to make these tubes, one at Seneca Falls, New York, and the other at Ottawa, Ohio.

We deliberately did not enter the television-set market at that time. Our experience with picture tubes indicated that there still was a lot of settling to be expected and that it might be prudent to wait a bit. We waited until the Autumn of 1949.

❦ ❦

One of our important divisions at this time is that devoted to electronics. Almost entirely engaged in national defense work it is growing very fast.

❦ ❦

Thus, at the present time, Sylvania has the following seven divisions:

Lighting, including photoflash and fixtures

Radio tubes
Picture tubes
Radio and Television
Electronics
Parts
Tungsten and Chemical

It has plants and laboratories in some twenty-nine communities in seven States, employing in excess of 23,000 people.

❦ ❦

In addition, it has wholly-owned subsidiaries in Brazil and Puerto Rico for mica fabrication; and in Canada, for fluorescent lamp and photoflash bulb production.

❦ ❦

Sylvania products are sold in every part of the World, outside the Iron Curtain. In some countries where monetary difficulties have made it difficult to export our products, we have made arrangements with leading independent manufacturers in our fields whereby we are cross-licensed and furnish technical assistance. In England, France, Mexico, and Argentina we have acquired a minority interest in these manufacturing companies. In Belgium we work on a royalty basis. It is interesting to note that our know-how and product quality have enabled our foreign affiliates to strengthen greatly their position within their home markets.

❦ ❦

This is not surprising since for many years a substantial percentage of Sylvania sales has gone into research and development. A 56-acre plot at Bayside, New York, known as Sylvania Center, has been set aside for research work. At present, we have there a large Physics Laboratory and now are building an even larger Metallurgical Laboratory. It will be used largely for work for the Atomic Energy Commission. Other central laboratories devoted to chemistry and product development are located on Long Island. In addition, there are divisional laboratories located at six of the divisions.

In this short story of Sylvania it obviously has been impossible to do more than touch on some of the high spots. More time was devoted to the early years because then were sown *the seeds of character* that determined the later strength of the Company. The men who were responsible for the early growth in New England and in Pennsylvania, and whom I like to think of as our Founding Fathers—the three Poor brothers, Frank, Edward, and Walter, and Erskine, Wortman, and Felt—may not have envisioned the Sylvania of today when they began. Nevertheless, they built a foundation that was strong enough not only to carry us *now*, but for a long time.

❦ ❦

"Out of crisis comes opportunity!" If Sylvania ever should have a coat-of-arms that well might be *its motto*. In 1907, when a panic hit Wall Street, Frank Poor was getting ready to expand from *refills* to *new* lamps. In 1914, when war threatened to cut off tungsten wire supplies, Hygrade learned it could produce better than it could buy, and thus was planted the seed of vertical integration. In 1921, when this Country was going through its sharpest depression, Nilco was organized. In 1929, when the Stock Market crashed, Hygrade was working on a new idea to revolutionize the merchandising of radio sets. In 1931, when we were almost at the bottom of our longest and worst depression, the Hygrade Sylvania merger took place. In 1941 to 1945, when the United States was in the Second World War, the Company proved its ability to do the next to impossible. It grew many times and, in the growing, learned the secret of decentralization.

❦ ❦

Maybe we have had some breaks! I am inclined, however, to believe that *the men* who built this Company *made* those breaks. When men have courage, energy, integrity, wisdom, faith in themselves and in those working with them, and vision based upon sound reasoning, they don't need luck.

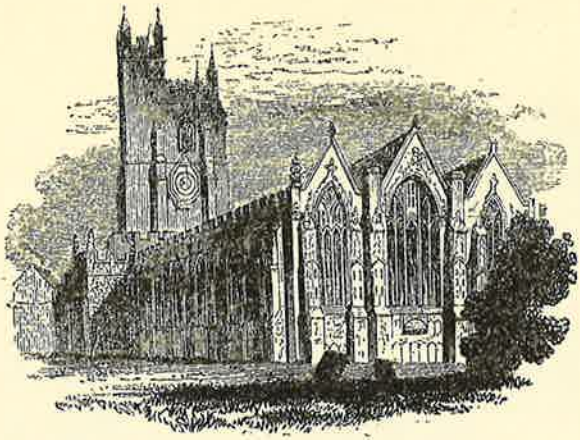
❦ ❦

That is the character that is built into Sylvania and is the foundation upon which its success has been achieved.

That is why it is so important to know the beginnings of a company and to know the men who bent the twig in the way it was to grow!

THE END

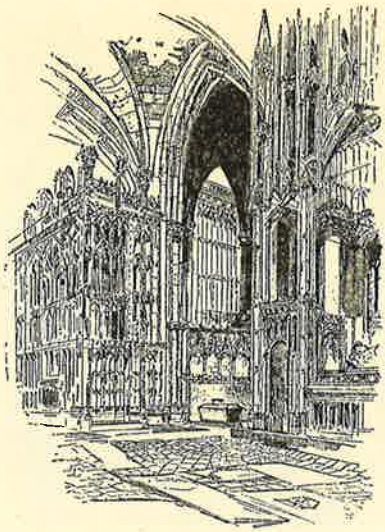
"Actorum Memores simul affectamus Agenda!"



THIS NEWCOMEN ADDRESS, *dealing with the history of Sylvania Electric Products Inc., was delivered at a National Newcomen Luncheon of The Newcomen Society of England, celebrating the Company's 50th Anniversary (1901-1951), held at New York, N.Y., U.S.A., on December 19, 1951.* MR. MITCHELL, *the guest of honor, was introduced by* CHESTER F. HOCKLEY, *Chairman of the Board, The Davison Chemical Corporation; Vice-Chairman of the Baltimore Committee, in The Newcomen Society of England. The luncheon was presided over by the* SENIOR VICE-PRESIDENT FOR NORTH AMERICA, *in this international Society whose headquarters are at London.*

"At the turn of the Century the influence of the Victorian era of empire building, of expansion, of opportunity still was strong. The United States of America had declared, and fought and won its first war against a major world power. Henty and Alger, those great minstrels of individual initiative, were popularizing the virtues of hard, honest work. Young men scorned paternalistic security; all they wanted was opportunity. They knew there would be pitfalls along the way, but that lent spice to the adventure!"

—Don G. Mitchell



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AMERICAN NEWCOMEN, *interested always in Industrial History and in the beginnings and growth of new industries that have contributed to national progress and to national defense, takes satisfaction in this highly informative and very human Newcomen manuscript. It is a recital typical of American initiative, American resourcefulness, and American enterprise. It portrays the spirit that has made possible America's amazing progress in Industrial Development!*

THE NEWCOMEN SOCIETY OF ENGLAND

IN NORTH AMERICA

BROADLY, *this British Society has as its purposes: to increase an appreciation of American-British traditions and ideals in the Arts and Sciences, especially in that bond of sympathy for the cultural and spiritual forces which are common to the two countries; and, secondly, to serve as another link in the intimately friendly relations existing between Great Britain and the United States of America.*

The Newcomen Society centers its work in the history of Material Civilization, the history of: Industry, Invention, Engineering, Transportation, the Utilities, Communication, Mining, Agriculture, Finance, Banking, Economics, Education, and the Law—these and correlated historical fields. In short, the background of those factors which have contributed or are contributing to the progress of Mankind.

The best of British traditions, British scholarship, and British ideals stand back of this honorary society, whose headquarters are at London. Its name perpetuates the life and work of Thomas Newcomen (1663-1729), the British pioneer, whose valuable contributions in improvements to the newly invented Steam Engine brought him lasting fame in the field of the Mechanic Arts. The Newcomen Engines, whose period of use was from 1712 to 1775, paved a way for the Industrial Revolution. Newcomen's inventive genius preceded by more than 50 years the brilliant work in Steam by the world-famous James Watt.

"The roads you travel so briskly
lead out of dim antiquity,
and you study the past chiefly because
of its bearing on the living present
and its promise for the future."

—LIEUTENANT GENERAL JAMES G. HARBORD,
K.C.M.G., D.S.M., LL.D., U.S. ARMY (RET.)

(1866-1947)

Late American Member of Council at London
The Newcomen Society of England