

# Quest for Leadership

The Arthur J. Schmitt Story

By Arthur J. Schaefer

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# Contents

## *The Arthur J. Schmitt Story*

Responsible steward .....	15
Resourceful youth .....	25
Inventive entrepreneur .....	49
Inspirational leader .....	71
International industrialist .....	95
Educational innovator .....	133
Notes.....	155

*"The important thing to do is to figure out a place for yourself  
in this world and then do something about it."*

—Arthur J. Schmitt



Arthur J. Schmitt

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# Illustrations

Autographed portrait of Arthur J. Schmitt . . . . .	Frontispiece
Wedding picture of Henry W. and B. Elizabeth Schmitt . . . . .	26
Arthur Schmitt, aged 4½ months . . . . .	26
Grandfather Peter Schneider and his wagon shop . . . . .	27
Arthur on his First Communion Day, aged 12 years . . . . .	28
The Schmitt home at 5733 West Ohio Street . . . . .	28
Six young Schmitts in the family Rambler . . . . .	33
Art Schmitt and his Wind Machine . . . . .	36
Family group at an Ice Show in the Stevens Hotel's Boulevard Room . . . . .	38
Four Schmitt brothers on the occasion of nephew Edward's wedding . . . . .	39
Arthur's cartoons in a letter to his sister . . . . .	40
Eleanor Schmitt as a member of the Girl Scout Organization . . . . .	41
Art Schmitt at the wheel on the Santa Fe Speedway . . . . .	43
His first invention, a molded radio socket . . . . .	53
Refinements in the socket and connections . . . . .	56
James Cuber with brothers Albert and Arthur Schmitt . . . . .	60
Commentator Ulmer Turner interviews the boss . . . . .	63
The main American Phenolic plant in Cicero, Illinois . . . . .	65
The Carl Raabes with Arthur and his mother . . . . .	66
B. Elizabeth in her advanced years . . . . .	68
"There was a magnetism about the man" . . . . .	79
The American Phenolic 1947 Spring Sales Convention . . . . .	82
Franciscan Friary in Tokyo, Japan . . . . .	84
Amphenolians in black tie . . . . .	87
AJ and couples at company dinners . . . . .	88
Amphenol connectors and cable installed in a Boeing B-29 . . . . .	96

Flying Fortress under construction at Seattle .....	96
Essentials of a coaxial cable .....	98
Braiding machine installing a conducting shield over cable .....	98
American Phenolic's cable assembly plant at 63rd and Harlem .....	104
Amphenol connectors being installed at Douglas Aircraft plant .....	104
Durethane plant at 7001 West 60th Street .....	110
Extruder producing polyethylene tubular film.....	110
Amphenol Electronics stock trading on the N.Y. Stock Exchange .....	119
Principals at merger of Amphenol and G. W. Borg Corporation.....	123
Arthur Schmitt as president of Illinois Manufacturers Association .....	128
The original Administration Building on the Fournier campus .....	134
Farms as part of the Fournier Institute properties .....	134
Fournier physics and chemistry labs, chapel, and drill hall.....	141
Views of The Cottage .....	146
Cardinal Stritch presides at a Fournier graduation .....	152
Father O'Malley accepts check from a favorite DePaul trustee .....	152



## Acknowledgements

If the warm nature and magnetic personality of Arthur J. Schmitt emerge from these pages, it will be because he lives vividly in the memories of persons who loved him and were generously responsive in conveying their recollections.

Among those to whom the author is especially indebted are fellow "Amphenolians" like James J. Cuber, Sr., Arthur's first male employee of the infant American Phenolic Corporation; Carl A. Raabe, one of his bright young men whom Arthur eventually encouraged to launch his own plastic firm; Martin A. Donlan, who was persuaded to take over personnel relations as the company rolls multiplied tenfold during World War II; John L. Woods, who undertook the company's financial affairs during this crucial period; Frank E. Shevlin, who was closely associated with Arthur Schmitt for 14 years as his business manager and is now the foundation's executive secretary; and William H. Rous, whom Arthur hired as his secretary and entrusted with increasing responsibilities which eventuated in his presidency of the company. As this book will reveal, Mr. Rous' insights into the character and personality of Arthur Schmitt are distinctively invaluable.

Others who were especially helpful have included Father Comerford J. O'Malley, C.M., chancellor of DePaul University, to whom Arthur was a personal friend and confidant during Father O'Malley's 20-year presidency of the university; John F. Mannion, retired Continental-Illinois banking executive, who was a financial consultant and a founding director of the Schmitt Foundation; and Dr. Richard C. Becker, who had the unique experience of three distinct relationships—as a student

for six years at the Fournier Institute of Technology, which Arthur had founded, as an officer of his company, and as a present director of the foundation.

Arthur's intimate family life has been shared by nephew and nieces Edward H. Schmitt, president of McDonald's Corporation; Marybeth Schmitt, a Cary (Ill.) travel-firm executive; and Mrs. R. M. (Barbara) Daugherty, a California homemaker. Miss Schmitt's collection of family photographs, letters, and other memorabilia was the source of much of the illustrative material used in this volume.

Particular thanks go to Ernest W. (Bud) Schneider for his initiation of this biographical project and his encouragement in seeing it through to completion.

—A.J.S.

# Foreword

A decade has passed since Arthur Schmitt spent his last days on earth. He was a man of special genius whose life goals were even larger than his considerable capacities as an inventor and manufacturer. Who he was and what he stood for deserve to be recorded for those who have been and will be the beneficiaries of his philanthropy.

His story is one of a lifelong quest for leadership among those he enlisted for his companies and among the boys and young men he educated in an enriched and accelerated program designed to prepare them for industrial and civic responsibility.

As this book attests, his memory is kept alive wherever his former associates foregather and reminisce about their careers with "AJ." He liked to surround himself with bright young men in whom he discerned the promise of achievement. The decades have taken their toll of these devoted workers, and Arthur Schmitt as he is preserved in their minds and hearts would eventually fade from human recollection if their oral histories were not taken.

It was for this reason that the directors of the Arthur J. Schmitt Foundation, which he established to improve society through conscientious and enlightened leadership, decided to authorize the publication of a modest biography which would provide recipients of grants from the foundation with the aspirations that Arthur would have for their success and how he would measure it.

The foundation directors asked Arthur J. Schaefer, who retired as a vice president of DePaul University, Chicago, after many years of service, to prepare the story of Arthur J. Schmitt.

One advantage he had was a personal acquaintance with Arthur Schmitt during the quarter-century after World War II when the latter was closely associated with the university as a trustee and benefactor.

We trust that, in addition to inspiring grant recipients, "The Story of Arthur J. Schmitt" will help the directors of the Schmitt Foundation and our successors to preserve the educational ideals of the man who established it.

—Ernest W. Schneider

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## Responsible steward

With the cynicism and iconoclasm that beset our age, mistrust of leaders and fear for where they are taking us, it is reassuring to learn about an industrial executive who embodied and espoused Judeo-Christian ideals and devoted his resources in a practical way to fostering them in our society. As is characteristic of such a person, this is a story which Arthur J. Schmitt, in his innate modesty, would not have permitted to be published.

It deserves to be presented to provide inspiration to the hundreds of persons who have benefited from the ideals and aspirations of the man and the charitable foundation he created to carry out his goals. It may also assure thousands of others that the corporate world is not confined to managers whose sole concern is balance sheets, bottom lines, and earnings per share.

Arthur Schmitt was a man of strong religious principles, inherited from his Roman Catholic German ancestors and nourished in adult years as a daily communicant. Though born to moderate circumstances, he rose by his resourcefulness, inventiveness, persuasive ability, and managerial capacity to develop a prestigious international firm whose electronic expertise served his country effectively, especially in the crucial years of World War II.

There was a strong sense in Arthur Schmitt of responsible stewardship with God to use his abilities and his managerial powers to fashion a better and more humane world. He possessed the virtues that are epitomized in the German work ethic—industry, frugality, honesty—but he went beyond a

demand for competence and efficiency to strive for a business climate of mutual trust and good rapport among his employees. He evidenced Christian concern and compassion for his working associates, whom he thought of as his family. He humanized their tasks as much as possible and inspired them to seek opportunities for growth in their work careers.

More than that, he challenged them and others to be concerned about the future, not just as it pertained to themselves but what it portended for their children and the country as a whole.<sup>1</sup> "The important thing to do is to figure out a place for yourself in this world and then do something about it," he told a student audience. "Don't just go drifting along and hoping that better things will happen."<sup>2</sup>

He challenged himself as well as others on this basis. Typically, the task he envisioned was so ambitious that his advisors warned him it could never be accomplished. "The most necessary thing in this postwar world is leadership," he said. "People always follow leaders, whether they are good or bad; the good leaders must outweigh the misguided leaders or chaos will result."<sup>3</sup> He decided to devote his resources to an innovative approach to making good future leaders out of the best young men he could find.

Arthur Schmitt's life spanned a period when the world was experiencing the greatest upheaval and change in recorded history. It went from horse-driven buggies to jet airplanes, from stereopticons to television, from coal stoves and kerosene lamps to nuclear generating plants. He participated in one war which made the world safe for democracy and another which ended with the awesome fury of atomic fission and the hovering threat of total annihilation.

He witnessed and helped to lead a monumental American war effort which overcame the Nazis and Japanese and attained for the nation a brief zenith of power which was soon dissipated. Barely a year after the end of hostilities, he said:

A rosy picture was painted to the whole nation of our great reconversion program. The automobiles and airplanes that would immediately go into production, the new types of homes, the magnificent concrete superhighways and glamorous apartments to be

erected in areas where slums exist were part of a beautiful dream that was to take place immediately at the conclusion of our war products program.

Further, it was talked about at great length as to how this country with its unlimited resources and tremendous product power would immediately export meat, lumber, machinery, and all sorts of products to the rest of the world and help rebuild. What an opportunity that was to ingratiate ourselves with the vanquished enemy!

And what happened? All you need to do is glance at the newspapers and you read of the strikes, the high prices, the conniving, the distrust, the crime among people in the United States who should have had an entirely different viewpoint.

They should have been so thankful for coming out of the war virtually unhurt, thankful for the mutual help given during the war, because after all it was a teamwork job and we all did work well together. Gratitude should have been so manifested that all of these bickerings could not have taken place.<sup>4</sup>

People had grown indifferent and careless in the decade after the war. "Life has got a little too easy, and no one seems to care," he noted.<sup>5</sup> The United States had changed from a highly solvent nation admired around the world to one in which bad politics and selfishness had caused such a deterioration, in his mind, that the nation's prestige was badly eroded.

"There are just too many people who, to put it plainly, simply don't give a damn," he said in 1948.<sup>6</sup> "Few people are sufficiently concerned about it to vote on matters of their interest at election time."<sup>7</sup>

Self-seeking politicians drew his strongest criticism. "Politics used to be a field in which one ventured because of pure patriotism rather than the best means of making a livelihood," he said.<sup>8</sup> "Today, far too many politicians are in office for the one reason that they can make a great deal more money, directly and indirectly, that way than they can at anything else. Hence you have politicians who will promise anything to anybody to become elected, and this can be very serious."<sup>9</sup> Yet he believed firmly in the American system of government and urged students to keep abreast of politics at all times and make sure that it was kept clean and honorable.

He concluded in 1946 that "the present mess of reconversion, inflation, labor troubles, political patch-up deals, together with bad morals, mismanaged money, gambling, and general insecurity is just the result of accumulated poor leadership in business, politics, and labor."<sup>10</sup>

The company he had founded in the depths of the Depression in 1932 had become sufficiently successful by 1938 to allow him to think seriously about the country's leadership problem and the direction of his resources to its solution.

He had left high school after the sophomore year because of impatience with a system that aimed at a rate of progress geared to the slowest learners. His sense of fairness told him that they were entitled to this attention, but there was still something wrong about the inattention to the brilliant student.

God did not create all men equal, regardless of what anybody says [he maintained]. Some have inherited a better intellect and a better physique than others; in our program, we should start off with the best of raw material—a combination of virtues that with proper education and experience will place the student at some future date among the industrial leaders who are so badly needed.<sup>11</sup>

He spent three years in formulating ideas and plans for stimulating such a student and accelerating his progress toward an ultimate position of national leadership.

Because his own career was wrapped up in electrical engineering, he assured himself that this was the appropriate area for the bright student.

I did not foresee all of the inventions that have taken place [he said later], all that has been accomplished through nuclear science, radar, and electronics, but I did know that it was a limitless field, and even now we are just barely scratching the surface. There is much ahead. Of all the branches of engineering none is more interesting, profitable, or has a greater future.<sup>12</sup>

He believed that no field was more vital to the defense of the country. "Today it is the engineers who are the most important



people in the American way of life," he said in 1948.<sup>13</sup>

The advent of nuclear energy put a new and heavier dimension on the responsibilities of the electrical engineer. This powerful force for good or evil needed capable administration based on justice and ethics if civilization was to endure. Technological institutions were not graduating students with such humanitarian insights. They were not even turning out persons, in his opinion, with backgrounds in commerce, accounting, self-expression, and other areas necessary to an administrator taking on business or industrial leadership.<sup>14</sup>

Arthur Schmitt would have felt vindicated by a study of 250 corporate leaders, initiated two years before his death and published seven years later, which revealed them to be narrowly technical and guilty of "under-development of the heart." The study was reported by Michael Maccoby, director of the Harvard Project on Technology, Work, and Character.<sup>15</sup>

After three years of preparation, therefore, scarcely a month after Pearl Harbor, Arthur Schmitt took the first steps toward a school that would accept high-school junior students of the highest possible mental, physical, and moral caliber with a view to training them under a superior faculty with a broad curriculum and excellent facilities and readying them to become industrial leaders at the earliest possible age.

Financial support for this ambitious and expensive enterprise, named the Fournier Institute of Technology, was to come from a foundation created only eight days after Pearl Harbor. Into it were to go the royalties from patents his ingenuity had earned and any future ones that he and his associates might develop. No benefit from the educational enterprise was to accrue to him or his company; the sole purpose was the development of effective leaders who would foster the best interests of the United States and its people.<sup>16</sup>

This program was launched not at the end of a career which had accumulated a fortune but rather when Arthur Schmitt was in his mid-40s and was receiving a modest salary from his company. Later, as its sales and profits zoomed in the war years, he took satisfaction in the fact that he was making money, but only for the reason that it was being invested in a

worthy cause in which he was actively involved. "I have never had as much fun doing anything in my life as I have in setting up this institution," he said in 1947.<sup>17</sup>

He used his persuasive powers each year on high-school principals, urging them to become his "talent scouts" by turning over to Fournier after two years the students of whom they were the most proud. "The kind of students we want are the kind you hate to give up," he said. "It involves a sacrifice, but I appeal to your fairness to the student."<sup>18</sup> His simple and direct approach enabled the Fournier staff to select regularly its quota of students from as many as ten times the number of nominated candidates. "A remarkably effective applied psychologist," a high-school administrator murmured after one of Arthur's presentations.

He foresaw his well-balanced Fournier graduates assuming positions of rapidly increasing responsibility in the Chicago-area business and industrial community. He selected the environs of Chicago as the site for Fournier because he liked the city, its national geographic position, and its citizenry. He limited Fournier applicants to those from the same area so that, while immersed throughout the week in an unusually heavy work schedule, they could go home to their families on weekends. "There is too much breaking up of family life now and we do not want to be a party to extending it," he said.<sup>19</sup>

His interest in Fournier students would not end with graduation. He and his associates would see that they were well-placed with employers who appreciated their special qualifications and agreed with Arthur's concept of rapidly developed responsibility and early leadership. Continuing contact would insure that the young man was moving up the executive ladder. Ultimately, he envisioned, Chicago would have hundreds of prominent, influential men united by their Fournier ties and aims in "positively shaping the destinies of the millions of people who are a part of the industrial and social fabric of the area."

His appreciation of American traditions and values, which he upheld and wished to improve, caused Arthur to look with alarm at the postwar emergence of Russia as a serious threat to

the U.S. way of life.\* "Now, two years after the cessation of hostilities," he said in a 1947 speech, "we find that in the Soviet we have a gangster perhaps more dangerous than the three men [Hitler, Mussolini, and Tojo] whom we deposed. . . . In the course of two years, the Soviet has subjugated countries by the method of causing dissension and distrust among a group of people and then walking in and usurping the government of these people."<sup>20</sup> He cited Latvia, Finland, Estonia, Poland, Czechoslovakia, Bulgaria, Rumania, and Yugoslavia as countries now under Soviet domination. "It is very difficult to get Americans aroused over Communism," he said in September 1946.<sup>21</sup>

Though invariably well-groomed and well-dressed, Arthur Schmitt's demeanor was more that of a self-effacing person than an international business leader. As one who had constructed his own first automobile, he had an affection for cars and coddled each Cadillac until, one after another, the mileage it had accumulated demanded a successor.† He lived modestly in a middle-class home his father had built on Chicago's West Side, not the most fashionable part of the city, until, nearing his 60th year, he erected a residence which he called "The Cottage" on the campus of the school so that he could watch the parade of young men receiving their leadership education. He was not a self-indulgent person. Someone suggested that his solitary extravagance was expensive cigars, which he smoked almost constantly. Not so, say close associates. The expensive cigars were gifts. His favorites, for price as well as mild taste, were Dutch Masters, then available at two for a quarter.

A lifelong bachelor (he said that when he was interested in girls, he had no money, and when he was busy making money he had no time for them), Arthur could give undivided attention day and night to his work, at once his vocation and hobby.

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\*It would be impossible to over-emphasize his distrust of the Russians, according to his associates. "AJ really identified the U.S.S.R. as our true enemy at a very early stage," says one officer. "He talked about it at every sales conference, at every important meeting we had. He said that after the war was over, we would have to face the Soviet menace. He was warning us at a time when it was not popular to talk about who our ultimate enemy was."

†According to a longtime associate, Arthur Schmitt favored Packards in his earlier years.

A longtime friend and business associate, banker John F. Mannion, remembered Arthur's call one day suggesting that together they look at a proposed site for his planned Fournier Institute. "When?" asked John. "How about this afternoon?" Arthur responded. John patiently asked, "Do you know what day this is? It's Thanksgiving, and I'm expecting a houseful of relatives in half an hour."

His family, as he often said, was his American Phenolic team. While he was unquestionably the boss, his employees felt close to him, their ideas and opinions respected. He listened and obviously digested what they had to say.

There were no executive dining rooms in his plants. Employees leaving late, as he often did, could usually expect a ride home. He enjoyed company picnics and other social events and graciously won the respect and admiration of the wives as he had their husbands. Throughout the years, he took pride in his team and the loyalty it gave him. In all his years as head of the large and fast-growing corporation, he never had a strike.

His appreciation of family and family values was expressed in remarks he made to students attending a college career conference at the Illinois Institute of Technology. Urging them to choose one of the Chicago-area schools, he said:

It is the duty you owe your family and your parents to stay as close to them as you can. Your parents have made sacrifices to look after your health and welfare. Likewise, many of you have younger brothers and sisters who look to you for guidance and good counsel, and it is your duty to take care of them. Leaving them on their own while you selfishly leave Chicago when you can get anything you want right here is entirely unfair.<sup>22</sup>

"He was a great person, a highly successful achiever, and yet his personal demeanor suggested none of these characteristics," said the Very Reverend Comerford J. O'Malley, C.M., for whom Arthur Schmitt was advisor, confidant, and personal friend for a quarter-century. "Art was quiet, undemonstrative, unassuming; he never attempted to dominate a group," observed the former president (for twenty years) and chancellor of DePaul University.

He was an alert listener and when at length he expressed his views he presented them in soft-spoken and deliberate fashion. I always had the confidence that his counsel was prefaced by full consideration and careful deliberation.

His faith in God and his country was a strong force in his life. He was deeply pious and deeply patriotic—not in externals of displayed rosary beads and flags but in inner convictions about the Christian and American ways of life. He enjoyed the fact that his birthday was national Flag Day.

My favorite image of him evokes a warm, friendly face with an amused smile and glistening eyes, often veiled behind the smoke of his ever-present cigar. He was a cherished friend.

A former Amphenol department head who left to establish his own thriving business aptly summed up Arthur Schmitt's attributes:

He was tough, but he was fair; he was strict, but he was kind; he was demanding, but he was admired; he was frugal, but he was generous; he talked little, listened a lot and to anybody who had anything to say, but he made his own decisions; he was quiet, but he was dynamic; he thought slowly and deliberately but was not indecisive when he had to make up his mind; he was exceptionally modest, shunned publicity, never boasted, but he was resolutely sure of himself.<sup>23</sup>

The fruitful career of Arthur J. Schmitt as a Christian entrepreneur deserves more detailed attention.

*"Make no little plans. They have no magic to stir men's blood. . . . Make big plans; aim high in hope and work."*

—Daniel H. Burnham

## Resourceful youth

Chicago was probably the most exciting place in the world in 1893, when Henry W. and B. Elizabeth Schmitt welcomed their third-born into the family on June 14. Six weeks earlier, the audacious young city had opened the portals of a massive exposition to mark the 400th anniversary of the landing of Christopher Columbus in America. It was a year late because the city planners needed time to make the 15th world's fair, designated The World's Columbian Exposition, more elaborately designed and executed than any of its predecessors.

The new arrival was christened Arthur John at nearby St. Lucy's parish in the outlying community of Austin, seven miles directly west of downtown Chicago. In later years, he liked to say he was born "upstairs in the blue room" of the family home at 5733 West Ohio Street. (Blue was his favorite color.)\* Henry was then 35, Elizabeth 30.

The father's occupation is indicated in the birth certificate as "Hide & Leather Commissioner," the mother's, as might be expected for the times, as "none."

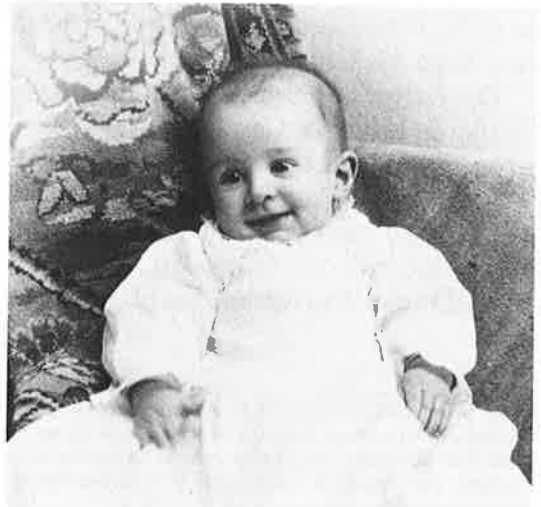
To meet the needs of a growing family, Henry built two adjoining homes on Ohio Street, the first at 5729 and later the three-story frame house at 5733 with high basement and gabled roofs. The former building, which served for some years

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\*The birth certificate records Arthur's parents as Henry William and B(eatrice) Elizabeth Schneider Schmitt. But Arthur's nieces recall that their grandmother's *B* stood for Barbara; two of them are so named in her honor. The birth certificate also records the place of birth as 5726 W. Ontario Street, which was changed to 5733 W. Ohio when Austin was annexed to Chicago.



*Henry W. and  
B. Elizabeth Schmitt*



*Arthur J. Schmitt,  
aged 4½ months*



as dwelling of his son Charles and family, no longer exists, but the latter stands proudly today in a declining neighborhood, reflecting the quality of original construction and the upkeep Arthur accorded it throughout his lifetime.

The elder Schmitts were born Chicagoans, but Arthur's grandparents on both sides were German immigrants, whose industry and husbandry produced an above-average middle-class environment for the family. The maternal grandfather made farm wagons in a shop at Twelfth and Canal Streets.\*

*Peter  
Schneider's  
wagon shop.  
Arthur's  
grandfather is  
third from the  
left.*



\*Grandfather Peter Schneider's title to the property, duly signed by Ulysses S. Grant, Jr., goes back to January 2, 1861. On his deathbed, he urged his wife and daughter never to sell it. When the latter died in 1954, her son took up the issue of his grandfather's land with the Chicago Burlington & Quincy Railroad, whose yards surrounded the tiny parcel. Twelfth Street, now Roosevelt Road, had been bridged over the CB&Q tracks so that the Schneider property was useless. Arthur Schmitt's attorneys persuaded the railroad to bring the lot up to street level and remove the concrete railings so that he could have a small building erected on the northeast corner of Roosevelt and Canal. The present owner of a short-order diner is paying off the mortgage in monthly installments to the Schmitt Foundation.<sup>1</sup>

One of Arthur Schmitt's associates recalls that as they were returning from a meeting at one o'clock in the morning and stopped for a red light at the corner, he noted that the diner was "packed to the gills with people waiting their turn." When he observed that it must be a gold mine, Arthur paused, then replied, "Yup, it's not bad." Asked how he knew, Arthur said quietly, "I own it."



*Arthur Schmitt on his  
First Communion Day,  
aged 12 years*

*The Schmitt home  
on West Ohio St.*



Eight children were born to Henry and B. Elizabeth Schmitt: Henry P. in 1889, Frederick L. in 1891, Arthur in 1893, Clara in 1896, Charles J. in 1898, Eleanor in 1901, Albert M. in 1903, and Clarence in 1906. Clara died at the age of four, Clarence at 18. The other Schmitts lived to adulthood.

The World's Columbian Exposition that marked the year of Arthur's birth was a titanic achievement for a city nearly destroyed by fire scarcely 20 years earlier. It was a triumph that was almost denied the brash young metropolis. The boldness of its conception prompted an Illinois senator to introduce a bill in Congress to make it an official project of the United States Government. This possibility stimulated other cities, particularly New York, to enter counter-claims to Chicago's rights. The ensuing diatribe pinned on Chicago one of its more enduring names as Charles A. Dana reminded his readers in the *New York Sun* to pay no attention "to the nonsensical claims of that windy city. Its people could not build a World's Fair even if they won it."<sup>2</sup>

When the leaders of Gotham promised to raise ten million dollars for the fair, Chicago's sponsors, who had formed a company with five million dollars' capital, promptly doubled that amount and eventually won the competition.

But to a dozen Eastern and Chicago architects who gathered on a bleak beach seven miles south of the heart of Chicago on a cold and cloudy day in January 1891, it appeared that Dana may have been right. As they gazed dubiously over the snow-covered sand broken here and there by forlorn patches of white oak, one of the members of the group, a Boston architect, thought that opening a fair on that location in 1893 was ridiculous: It couldn't be done. Chicago architect Daniel H. Burnham, who later directed the fair's construction, delivered the classic reply: "That point is settled."<sup>3</sup>

This was the same Burnham who a dozen years later was urging the city fathers to plan for Chicago as well as they had for the temporary "White City" that housed the exposition. "Make no little plans," he counseled. "They have no magic to stir men's blood. . . . Make big plans; aim high in hope and work."<sup>4</sup> It was a point of view that Arthur Schmitt would have approved.

Their three sons were too small to enjoy the fair, but Henry and B. Elizabeth were present on Chicago Day, October 9, 1893, as over 700,000 residents, half the city's population, paid fifty cents to pass the turnstiles.<sup>5</sup> The ticket stubs are among the family memorabilia.

The Schmitts took a ride on the newly invented Ferris Wheel, named after its designer, George W. G. Ferris.<sup>6</sup> Planned to rival the Eiffel Tower, which dominated the Paris Exposition four years earlier, the Ferris Wheel stood almost as tall as a football field's length and carried 40 persons in each of its 36 cars. At the summit, the 1,750,000 patrons who rode it were treated to a spectacular view: The lake to the east, the first downtown skyscrapers outlined against the northern sky, farm lands and prairies beyond the city from north to southeast, and the first buildings of the new University of Chicago immediately to the south. Directly below, some 200 structures included, as Burnham later wrote, "a dozen palaces, . . . all of great extent and architectural importance,"<sup>7</sup> among them an Administration Building whose dome rose higher than the Capitol's in Washington, D.C., and a Manufactures Building hailed as the largest in the world. Threading the "White City" of buildings were lagoons, canals, and basins.<sup>8</sup>

The year 1893 produced excitement of another kind in America. On May 6, five days after the World's Columbian Exposition opened, the stock market crashed and panic ensued, prompting the New Orleans *Picayune* to mourn: "On every hand there is depression, wreck, and ruin. We can't go much further." The personal appearance of Philip D. Armour and Marshall Field to guarantee deposits was needed to dissuade alarmed savers standing in line at the Illinois Trust and Savings Bank from continuing a run on the bank.<sup>9</sup> A branch office at the fair of a closed downtown bank threatened the deposits of foreign exhibitors until Chicago's wealthiest passed the hat and saved the day.

But thanks to the exposition and the money it brought to the city, Chicagoans suffered less throughout the summer of 1893 than the rest of the nation. Promotion of the fair had prompted a flurry of other construction as the handsome Newberry

Library, the Art Institute, the Historical Society, and the Academy of Sciences buildings were completed in 1893.<sup>10</sup> However, downtown Chicago was still a handful of skyscrapers, topped by the 22-story Masonic Temple at Randolph and State Streets, the tallest building in the world when it was constructed in 1891. (Edgar Lee Masters claimed in his memoirs that on a clear day from its roof-top one could see Council Bluffs, Iowa.)<sup>11</sup>

It was not until the fair shut down at the end of October and winter came on that the full effect of the Depression was felt. With reduced work forces and unemployment in businesses dependent on the fair, plus thousands of idle workers who had come to the well-publicized boomtown city in frantic search for jobs, Chicago took on an aspect as opposite to its White City promise as can be imagined. An empty warehouse close by the lakefront became a giant soup kitchen serving four thousand persons a day. A reliable newspaper account maintained that as many as 60,000 men were daily being fed free by the city's saloonkeepers. Homeless people slept wherever they could—on the floors of City Hall, in saloons, in police stations, each sheltering 60 to 100 men a night. Children by the scores were turned into the streets. With the close of the exposition, Chicago became like other cities in a nation with three million out of work.<sup>12</sup>

Even while employed before the Depression, people were badly overworked and underpaid. Machinists received \$2.40 a day, carpenters \$2.50 to \$3, teamsters \$9 to \$12 a week. Chicago manufacturers in 1893 employed 171,700 persons, to whom they paid wages of \$99.2 million, an individual average of \$577.75 per year. There were an amazing number of sweatshops using young girls who made as little as 25¢ to 40¢ a day. Children were kept working 12 to 13 hours daily.<sup>13</sup>

As business entrepreneurs, Arthur's grandfather and father and their families fared better than most of their fellow Chicagoans, who were largely German, Scandinavian, British, and Irish families, of whom the majority, like their neighbors of other nationalities, were foreign-born.

Arthur went to the Francis Scott Key Grammar School and

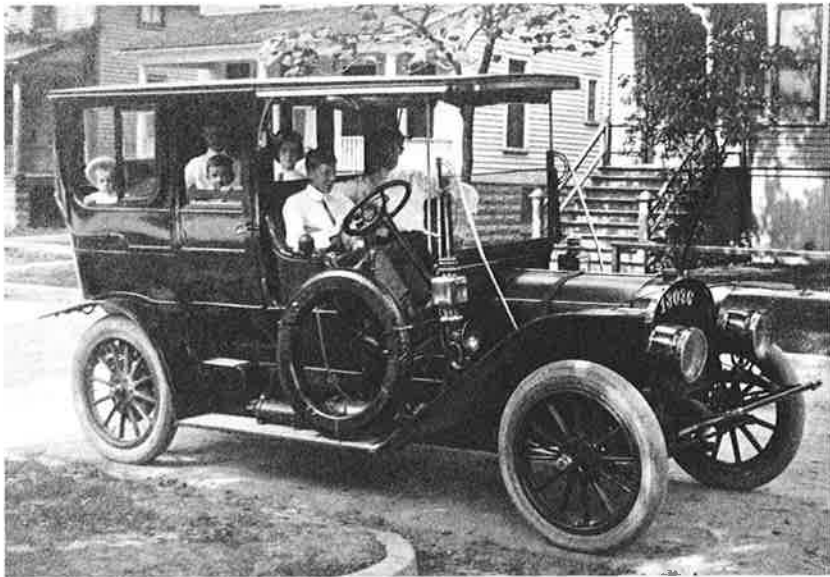
was much like other boys of his time, interested in sports, especially baseball. He enjoyed making wagons for himself and his brothers from crates and boxes attached to baby-carriage wheels. He was encouraged by his maternal grandmother, Mary Schneider, who as she watched him industriously striving to put together one of his wagons would unpack a hand tool, preserved in flannel wrapping, which had been made by her husband.<sup>14</sup> Both his grandmother and mother lived to reach their 90s, dying at 94 and 91, respectively.

Like other boys in the family, Arthur was sent to St. Ignatius High School, conducted by the Jesuit fathers on West Roosevelt Road. This was more than five miles from the Schmitt home, and considerable time was spent going to and from school. In clement weather, bicycles were the favorite mode of transportation. Within a year after his birth, Chicago claimed 86 miles of cable tracks on which rode 450 grip cars moved by 11 power plants around the city.<sup>15</sup> A cable street-car line ran out Madison Street to Austin at the turn of the century. It attained a rate of 9 to 12 miles per hour, whereas the more common horse cars could manage no more than 4 to 6 mph.

In 1897, the "Loop" around downtown Chicago connected the various elevated lines serving North, West, and South sides and enabled them to operate in continuous movement without reversing in their downtown terminals. Before World War I, the city could claim one of the finest rapid transit systems in the world.<sup>16</sup>

But in the time of Arthur's childhood the streets were still dust traps in summer and quagmires the rest of the year unless they were paved. As one writer put it, "They were begat in mud, born in mud, and bred in mud." Not many decades earlier, their prevailing condition prompted wry humor as residents posted signs warning passersby of "No Bottom," "Team Underneath," "Stage Dropped Through," and, on a floating hat, "Man Lost."

At the turn of the century, paved streets were covered largely with cobblestones or cedar blocks. Downtown walks were mostly huge stone slabs, outlying ones usually of wood, many at uneven levels. (The Chicago Association of Commerce



*Six Schmitt children with Arthur at the wheel of a Rambler  
(c. 1910) in front of the West Ohio Street home*

boasted in 1912 that there were 4,303 miles of streets in Chicago, of which "1,628 miles have been paved and improved, leaving 2,675 miles of what may be called 'country' roads." This meant that over three-fifths of Chicago streets were then unpaved.)<sup>17</sup>

As often happens with youngsters of creative minds and special interests, Arthur became impatient with schooling and left St. Ignatius after two years. His two older brothers, Henry and Frederick, had graduated from St. Ignatius, but the trio apparently gave their Jesuit teachers some concern, for when Charles enrolled five years after Arthur, the priest commented, "I hope you're not going to give us as much trouble as your brothers did!" Charles too left after two years.

As a boy, Arthur liked to read *Popular Mechanics* and articles he could digest in *Scientific American*. He also worked whenever he could in machine shops, where he found things that could be made, processes that fascinated him.

Within a year after leaving school, Arthur had become a

pilot and was flying his own plane. The state of aviation in 1910 is reflected in newspaper items like these:

Fort Wayne, Ind.—Walter Jones, 19 years old, made his first flight in a home-made biplane. He followed the railroad tracks from Fort Wayne to New Haven, a short distance away, and came to earth in a field some two miles beyond this latter town. Later in the day he made the return trip safely. The total distance covered was about six miles.<sup>18</sup>

A 1910 news item, this one from Chicago, reported that Henry J. Casanova was finishing a flying machine of the ornithopter type, with three wings to a side, at his residence, 1147 West Madison Street, barely a mile and a half from Chicago's Loop.<sup>19</sup>

At the time, Arthur was flying a plane made with stick and wire framework that supported two wings and a tail.<sup>20</sup> He sat in front of an engine whose propeller thrust him forward. Flying out of the Cicero aviation field just three miles from his home, Arthur could little realize that many years later he would have a thriving plant for his own company in the area where he took off and landed.

A landing mishap, fortunately involving a hay stack, left Arthur with only a salvaged engine and firm instructions from his father to cease his flying endeavors.

But his father died in 1911 and the following year Arthur was intrigued by a French Bleriot monoplane on exhibit at the First International Air Meet sponsored by the city on Chicago's lake front. This was the same model which became the first to fly the English Channel, and Arthur bought one.

Another absorption of the youth while still in his teens was the automobile. Like the airplane early in the new century, the auto was in its infant stage.<sup>21</sup> In 1900, there were only 90 permits in Chicago for electric cars, 55 for gas vehicles, and 44 for steam cars. The Park Board expressed its contempt for the new contraptions by banning in 1902 all automobiles which emitted "spurts of vapor" (steam cars), "offensive odors" (gasoline engines), or cars "with a speed more than eight miles an hour."



This was a reasonable limit on speed when it is realized that in 1895, in a highly publicized 55-mile race sponsored by the Chicago *Times-Herald*, two brothers, Charles E. and J. Frank Duryea, famous names in the early history of locomotion, drove a two-cylinder car of their own creation to win the competition at an average speed of five miles an hour. There were only six entries, and only one other car finished the race; with deducted time for repairs, the Duryeas had managed only a seven and one-half mph speed.<sup>22</sup>

An electrical engineer, Pedro Salom, writing in the *Journal of Franklin Institute*, expressed his preference for electric motors and warned of the dangers of the gasoline-driven car:

All the gasoline motors we have seen belch forth from their exhaust pipe a continuous stream of partially unconsumed hydrocarbons in the form of thick smoke with a highly noxious odor. Imagine thousands of such vehicles on the streets, each offering up its column of smell!<sup>23</sup>

In the first decade of the 1900s, the automobile made irresistible progress, rising from an output of 4,192 units in 1900, which sold for an average price of slightly over \$1,000, to a production of 65,000 in 1908, the year the Model T was created and General Motors was founded.

Private "manufacturing" of automobiles was still in vogue in 1910 when Arthur, grounded by his father, turned his attention to combining the method of air locomotion with the body of an earth-bound vehicle. He picked up a stripped-down chassis and modified the rear end so that it had only one centered rear wheel. His airplane engine with attached propeller provided extraordinary thrust for a ground vehicle.

Here was some of the thrill of flying, traveling at great speed with a fast-flowing jet of air caused by the whirling propeller. The ingenious part of his contraption was its simplicity. It did not need a clutch, transmission, universal joint, differential, or other components of the standard automobile. It did not even require a radiator, since the propeller air-cooled the engine.

By this time, the top legal speed for automobiles was 12 miles per hour, 15 on boulevards. But Arthur could travel 50 miles an



*Art Schmitt and his Wind Machine*

hour on straightaways with his wind machine.

The Schmitts' father succumbed on August 25, 1911, to Rocky Mountain fever contracted while he was in Wyoming looking after ranches he had purchased from proceeds of his leather-tanning business. His untimely death left B. Elizabeth, an indomitable woman though only five feet tall, with seven living children ranging in age from 22 to four. But she had managed on her own while Henry's business carried him to other parts of the country; a collection of some 30 silver commemorative spoons which Henry purchased for her in various cities remains, mounted on a spoon rack, as evidence of his travels. His leather partnership had flourished, and other assets, including farm properties in Louisiana, enabled B. Elizabeth to live comfortably with her family, even though the tanning partnership waned without Henry's involvement.

B. Elizabeth is in many respects as deserving of biographical attention as her son. Known to her classmates as "Lizzie" at the Academy of Our Lady (from which her daughter, Eleanor, also graduated) in the community of Evergreen Park, some 12 miles

south of downtown Chicago, she was an apt student and received an education beyond that afforded young women of her time. Her handwriting was almost impeccable, she penciled drawings of some merit, and she loved classical music.\* Her sister Lilli, who married an Italian, Albert Romeldi, was known on the operatic stage as Lilli Pardo, appearing with the New York Metropolitan and European opera companies. B. Elizabeth was also expert in needlepoint; an impressive likeness of Jesus is among cherished family possessions.

Always a tight-knit family, the Schmitts were drawn even closer by the loss of their husband and father. There was a matriarchal quality to B. Elizabeth, and no one ever doubted that she was now head of the family. Her grandchildren recall especially the holiday occasions when 20 to 25 family members were drawn together in convivial reunions.

"We always went to Grandmother Schmitt's for Christmas," recalls Edward H. Schmitt, one of two sons of Henry and president now of McDonald's Corporation, the restaurant chain. "It was a weeklong observance, culminated by her birthday on December 29 and New Year's," he says. "Easter was also observed there. On Thanksgiving, everyone came to our house, first in Hyde Park and later in Aurora. Grandmother and Eleanor had some help at home, but they made all the preparations for the parties held there." In later more affluent years, a favorite place for special occasions like Mothers' Day was the

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\*Associate William H. Rous, about whom we shall learn more later, recalls that around 5 o'clock one afternoon Arthur Schmitt came to his desk and asked, "How would you and Shirley like to go to the opera?" Rous says that "the only opera I knew anything about was the Bohemian opera, *The Bartered Bride*, and working as we were 12 to 16 hours a day at the time, the only thing I thought of nights was hitting the sack. But AJ explained that he was supposed to take his mother for a performance of one of her favorites, *La Forza del Destino*. I didn't think my wife would be eager to go on such a short notice, but she was among AJ's first female office employees and one of his favorites; nothing that happened at Amphenol ever surprised her.

"We arrived at the opera and introduced ourselves to Mother Schmitt. She was well along in years but bright as a button—charming and lovable. You wanted to hug her. She asked if we knew the opera and then quickly but completely took us through the libretto from memory.

"We enjoyed the performance and proceeded to drive Mrs. Schmitt home to Ohio Street. By the time we got there, it was well past midnight and I was just about out of it. She said, 'You're going to come in for a snack and a visit, aren't you?' When I noted it was very late, she said, 'Late? Young man, it's just the shank of the evening!'"



*The family group enjoying an Ice Show in the Stevens Hotel*

Boulevard Room of Chicago's Stevens Hotel (now the Conrad Hilton), with its spectacular Ice Shows.

Marybeth Schmitt, one of Albert's six daughters, recalls a Thanksgiving Day party in the early 1950s, when everyone was at dinner, the adults in one room and the children in another.

There was always a kids' table, and when you were old enough and your manners good enough so that you would not disgrace your parents, you were finally permitted to sit at the adults' table—if there was room. On this occasion, the brothers were engaged in their usual banter (they constantly teased one another) and Art was egging them on when Henry said to my father, 'Al, toss me a roll.' He did, and Grandmother corrected them and, when they couldn't stop laughing, she ordered them to leave the table until they could behave. Imagine! They were 60 years old and more and she was in her 80s. We could hear their laughter in the next room. Eventually they came back, properly subdued. You can understand how careful we were when Grandmother was around.

Barbara Daugherty, one of Charles' two children, remembers that her family moved into the next-door house at 5729 West Ohio "to watch over Grandma" while Arthur was being increasingly absorbed with his business and Eleanor with her career in the Girl Scouts. She recalls with pleasure the Saturday ritual at 5733 as she joined Grandma and Aunt Eleanor to listen to Texaco's Milton Cross and the broadcast of live opera from the New York Metropolitan while Eleanor manicured her mother's and Barbara's nails. Arthur would come back from the office in late afternoon to take his mother and sister out to dinner.

Every Sunday morning Uncle Art would drive Grandma, my mother and father, and Eleanor to St. Lucy's for the eight o'clock Mass [Barbara says]. A big breakfast followed, and when my brother Chuck and I returned from the nine o'clock children's Mass, they would still be at table enjoying each other's company.

The family members were extremely fond of one another and enjoyed poking fun at themselves and their mother. When they served Grandma her favored Limburger cheese, they would do it with a flourish, clothespins on their noses.

*Brothers  
Henry,  
Art, Charlie,  
and Al  
on the occasion  
of Edward's  
marriage in  
1952*

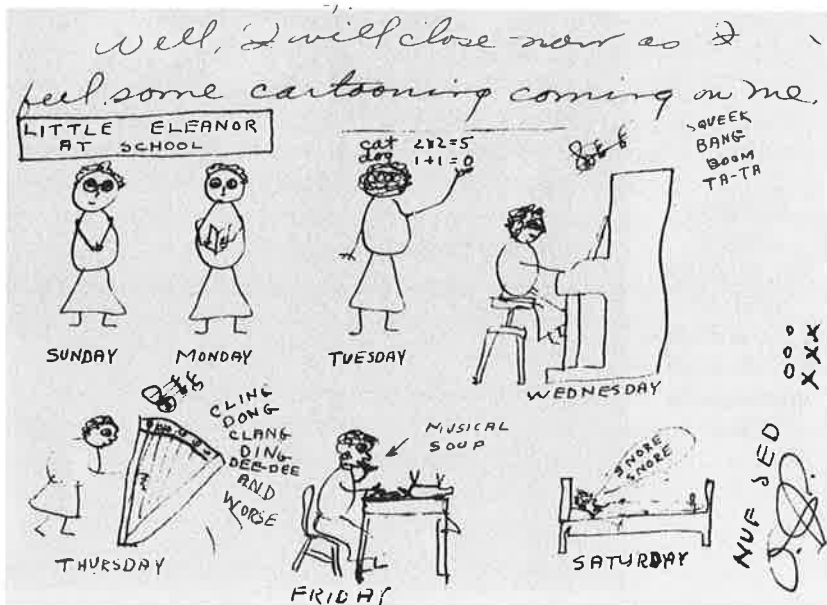


Whenever the men gathered, a pinochle game developed involving Henry, Charles, and Al and, whenever he came up from Missouri, Fred. Art was invariably present, kibitzing and pacing the floor with lighted cigar as he participated in the good-humored banter.

For a man engrossed as he was with a demanding business, Uncle Art took a fantastic interest in his family [Barbara says]. You could depend on his presence at baptisms and confirmations and graduations and other special occasions. In later years, when I lived in New York and in California, he made a point of stopping by to see me—and I'm sure he did the same with his other relatives. He just sincerely cared about his family.

One of the reasons Arthur never married, some have suggested, was his devotion to his mother and his sense of responsibility to make her life happy.

To her last days, Grandma was fastidious about her appearance [Barbara remembers]. She always wore high-buttoned shoes, hat, and gloves. Her nails were manicured, and she regularly had a corsage for special occasions that her boys had thoughtfully pro-



vided. She enjoyed theatrical, concert, and operatic performances, and she kept all the programs. Her life was enriched by the attention her family paid her—especially Uncle Art.

The relationship of Arthur and Eleanor was especially close in their younger years. She preserved some of his correspondence as their careers took them away from their Ohio Street home. While she was a student at the Academy of Our Lady and he was employed in Memphis, he wrote that he expected to be in Chicago for two days and would visit her at school. He closed "as I feel some cartooning coming on me" (*opposite page*).

Eleanor joined the Girl Scout Organization in 1932, beginning as a field director with the Chicago Girl Scout Council. After serving as an itinerant director for four years in Dubuque, Iowa, Green Bay, Wisconsin, St. Cloud, Minnesota, and Highland Park, Illinois, she became executive director of the Highland Park Girl Scout Council. Four years later, she joined the national staff as a council advisor in Region VII until she took an early retirement in 1961 to care for her brother at the Cottage, to which they had moved.

Noting that Eleanor had no radio in her room at Green Bay,

*Eleanor Schmitt, wearing  
her 30-year pin of service  
with the Girl Scout  
Organizaton*



Arthur sent her a note on a Waldorf-Astoria card postmarked in Chicago, asking, "Would you like one? Say the word and the expressman will deliver a nice new one to you."

She especially cherished a letter he wrote on an air-sickness bag from Europe in 1939. Embellished with his cartooning, it read:

Since there is no writing paper aboard this plane, I write on this. Among your souvenirs this should have a place because of its originality, say nothing of its usefulness. After you have read this, you can send your week's laundry out in it. Very practical.

Passed over Heligoland, which is a very small island owned by Germany on the North Sea. Population, 26 or more. They tie children by their ankles with a rope to keep them from falling into the sea.

Have a very nice Dutch hostess. But she is married, dammit. They have a different custom here. When they are engaged they wear the badge of slavery on the left hand and after marriage on the right hand, but after two years married they throw the damn thing away or wish they did. (Correction: She says no, only Americans do that.)

Here is a K.L.M. pin to you from Jean [the stewardess] also her signature for your autograph album—Jean Parthesius. Will write you next from Berlin.

As in all his correspondence to Eleanor, he signed off with "A.J.S. 000/xxx."

Acquaintanceships Arthur Schmitt developed in Kenosha, Wisconsin, where he went to work at 18 in the Rambler auto plant, led to a new direction in his career. At first an office boy for Rambler's chief engineer, Arthur's interest in autos got him into the shop and later the opportunity to help test Rambler cars before they were delivered to purchasers. Meanwhile, he went to school nights, learning to make engineering drawings.<sup>24</sup>

A special acquaintance was Victor Carlstrom, who was later a famous U.S. Marine flyer. Carlstrom and his associates, Eddie Rickenbacker, Barney Oldfield, and others, barnstormed with racing cars at county fairs. Arthur's wind machine wouldn't qualify for this competition, but its novelty



prompted the Motordrome Company of America, sponsor of many of these meets, to welcome his idea of demonstrating the machine at their events.

The contract which the company awarded him had interesting aspects that demonstrated the young man's incipient business acumen. He became 18 years old in June of 1911, and the company had engaged him for the summers of 1911 and 1912. He and the company may not have realized that he was not of legal age when the contract was executed; perhaps he was not even aware of this as a problem, but the likelihood is that he judiciously decided he was more apt to drive his wind machine for profit if he signed the contract himself than if he went to his father for authorization. Whatever, the legally worded document set forth the details of the contract and was duly signed and witnessed.

It provided that Arthur's remuneration would be based on gross receipts, not net profits. Moreover, it called for the employer to guarantee travel expenses, hotel bills, and the salary of a helper at each place he appeared, plus shipping charges for his machine.

An adventuresome youth, Arthur raced cars and speed boats and flew stunt planes. His airplane and auto-racing experiences brought him into close contact with aviators who, like Rickenbacker and Carlstrom, were later to become famous. One of them was Bert Acosta, whose career reached its zenith

*Art at the wheel raises a cloud of dust at the Santa Fe Speedway.*



in 1927 when, shortly after Charles Lindbergh's epic flight, he crossed the Atlantic with Admiral Richard E. Byrd and Bernt Balchen in their tri-motored plane, the *America*.

When he returned to the United States, Acosta was hailed as one of the most distinguished airmen in the country, and he enjoyed the status of an international hero.<sup>25</sup> Very soon thereafter, his fortunes waned. He was fined and his pilot's license was suspended for stunting. He was beset with marital difficulties and was arrested several times for non-support of his second wife and spent one and a half months in jail for abandonment.

A letter which Acosta wrote Arthur in 1950 indicated that he had a sponsor for new flight goals so that "what I have planned doing for so long is about to come to pass." He added:

I'll always remember the two cold, wintery occasions which found me at my wit's end in Chicago, and on both these evil days, you didn't bat an eye, but just dug out the check book and started writing.<sup>26</sup>

Acosta's plans did not come to pass as he hoped, and four years later he died in Denver's Jewish Consumptives' Relief Sanitorium after a two-year illness.

With the increasing appearance on the roads of the newfangled automobile and with Arthur's mechanical ingenuity, it was no special challenge for him as he approached his twentieth birthday to think of building his own car. Manufacturers of the time were assembling automobiles from parts made by producers of components; motors, clutches, transmissions, even frames were often made by some firm other than the manufacturer whose name appeared on the finished car.

So Arthur scouted around for parts, mostly used ones, and put together his own automobile. The result reflected his mechanical capacity and fairly represented the car of its day, with one noteworthy exception—it sat high from the ground on wagon-carriage wheels. This is not surprising when it is realized that the wheels had solid rubber tires, as did many contemporary autos. Pneumatic tires posed a serious problem for the driver when they went flat, for the wheel had to be removed

and the tires pried loose, a task requiring strength and mechanical aptitude. Standard equipment included tire irons for leverage, extra tubes, patches, a portable vulcanizer, and, of course, a tire pump. An equally cogent reason for Arthur's decision was the ample supply of carriage wheels left from his grandfather's shop.

Arthur's car ran well, but the family liked to remember the time when he took them on a jaunt from Ohio Street to Hyde Park for a costume party at his married brother Henry's home, Charles dressed as a bum, Arthur as a woman. Enroute back to Austin after the party, the car broke down, and Arthur was left with the problem of trying to fix it while in costume dress and smoking his cigar. He beat a hasty retreat to Henry's house, borrowed some clothes, and returned to repair his stalled automobile.

During his sojourn in Kenosha, Arthur took advantage of his night drafting studies to accept a position as a draftsman with the Thomas B. Jeffrey Company. He later worked for a meat packing company in the Chicago stock yards and thereafter as a machinist with the Bucyrus Erie Company in Erie, Ohio. At the age of 23, he went down to Memphis for a job with the Sterling Milling Company, a small firm with whom he rose to manager in two years. This was during World War I and, although Arthur was exempted from the draft because the mill produced flour, a food essential, he resigned the job to join the U.S. Army.

As an artilleryman at Camp Jackson, South Carolina, in 1918, Arthur kept his active mind busy learning the intricacies of radio, the new phenomenon in communications. He had striven to join his flying friend, Victor Carlstrom, in the U.S. Marines and had taken the Marine Corps physical examination. Then one day he received the news that Carlson had been killed in an airplane crash and his hope of becoming a Marine flyer faded with the death of his sponsor. Nevertheless, he was scheduled for transfer to the Marine Barracks at the Philadelphia Navy Yard for further assignment when the war ended. Arthur was discharged from the Army on December 21, 1918.

He returned to Chicago with no particular plans but with memories of the simple radio receiver he had built at Camp Jackson and a desire to learn more about its amazing possibilities. The discoveries of Guglielmo Marconi that produced wireless transmission of messages were enhanced by Dr. Lee de Forest, whose advancements permitted in 1916 the broadcast of music.

The first amateur receivers enticed music and voices from the air through a simple contraption which moved a small slider across a coil of copper wire wound around a cylinder, which could be anything from an oatmeal box to a rolling pin. A needle probed a crystal (giving the name "crystal set" to the unit) and found a "hot" spot which enabled an intent listener to hear music and voices through ear phones.

Though a deft mechanic, Arthur recognized his limitations in electricity and signed up as a journeyman electrician. One of the working cards he carried attests that he was a "member in good standing" of the International Brotherhood of Electrical Workers, Local Union Number 658. This one verified that it was "good until March 31, 1920."

The new method of communication spread like wildfire as it captured the fancy of America.<sup>27</sup> In 1920, station KDKA in Pittsburgh obtained a license, and on November 2 it broadcast the 1920 Harding-Cox election returns. The number of radio transmitters increased from three in 1921 to 595 a year later.

A manufactured crystal set priced at \$25.50 was heralded as "radio for everybody: any member of the family can learn how to use it in a few minutes; it is no bigger than an average hand camera and tuning is as simple as focusing a pair of field glasses."

The magic vacuum tube represented a giant step forward, but it complicated the production of radio sets since the part of the cabinet that received the tubes was made of Bakelite, a relatively new plastic, which was brittle and difficult to work. It was used because it was a fairly good non-conductor, or insulator, for electricity. The front panel of the set was also usually made of Bakelite and had to be drilled or sawed. In addition, Bakelite plates had to be fashioned and then assem-

bled with plates of aluminum to make the condensers required for radio wave-length reception.

This was the door that eventually opened to Arthur his path to business success. It began modestly in a third-floor room in the Schmitt residence on West Ohio Street that had been occupied by his recently deceased grandmother. There were no objections from his mother, brothers, or sister about his third-floor operations because there was not the noise encountered with pounding and hammering at wagons, autos, and airplanes.

But there was something else—a strong, acrid odor—that came from the plates of Bakelite on which Arthur was working. Condensers and other radio receiver parts could be bought, but Arthur characteristically wanted to make them himself. It was this curiosity which eventually led him to his inventive discoveries. The friction of sawing and drilling the Bakelite heated it and gave off a smell something like that from carbolic acid, common in those days since carbolic acid was widely used as an antiseptic.

Its chemical name was phenol. The odor that Bakelite produced when heated was like carbolic acid because it was a combination of phenol and formaldehyde, also a strong disinfectant. Crystalline phenol was used to make plastics; the aqueous solution was carbolic acid. Plastics of that day and for many years thereafter were known as phenolics. Some of them still are today.

*"He always insisted on making the best."*

—Ernest W. Schneider

## Inventive entrepreneur

Phenolic became an important word in Arthur J. Schmitt's future career. The inventive and inquiring mind that might have gone into the aviation or automotive industries had focused on phenolic and other dielectric (insulating) plastics and their increasing import in the burgeoning field of electronics. Arthur was to make American Phenolic and thereafter Amphenol a world-renowned trade name. It all began with his discovery that Bakelite could be molded to form a serviceable socket for electrical power connection.

Precursor to this international firm was a small company which Arthur formed in 1923 with a friend, Walter Horn. Financed with less than \$5,000, accumulated from Arthur's barnstorming and army days, it was named Walnart Mfg. Co., representing a contraction of the partners' first names. The pair began at 1249 Van Buren Street in Chicago, making multiple gang sockets for radio tubes with Bakelite as insulation. These were not yet the molded variety which would make the firm preeminent but were of the "laminated" type, two pieces of fibre being held together by rivets with appropriate openings in the upper fibre piece to receive the prongs of the tube. Between the pieces of fibre, so-called "contacts" were inserted to engage the prongs and provide the electrical circuit between the tubes and the lead wires. They were awkward to manufacture, had to be made larger than desirable, possessed poor electrical qualities, and failed frequently. The same thing was true of variable condensers, which were in short supply because manufacturers had difficulty stamping the aluminum flat and sawing the brittle Bakelite end-plates by hand.

But Arthur made the "mistake" of failing to read the shipping instructions for the  $\frac{3}{16}$ " Bakelite which informed that his attempts to stamp the Bakelite in a die press would be futile. After many failures he succeeded in designing a die for the job—and production zoomed. In the same way, he found a method for punching in a single operation the Bakelite front panel for the holes that accommodated the radio parts. Since competitors were drilling each of these holes in separate procedures, Walnart outproduced its nearest competitors by a 10-1 ratio.

As business grew, the firm jobbed other parts and advertised filament switches, Bakelite dials, variable resistors, binding posts, and friction vernier adjustors from larger quarters at 308 Green Street, off Jackson Boulevard.

The trademark displayed in Walnart advertisements assured "Your Guarantee of Reliable Apparatus, Dependable Service, and 'Trouble-Proof' Products." The firm's slogan was "Maker of Good Goods Only."<sup>1</sup>

With the young partners each enjoying an annual \$100,000 salary from the company, Horn's ambitions were fulfilled and he sold his interest in the firm to Arthur, who merged it in 1928 with the Continental-Diamond Fibre Company of Newark, N.J., and Cleveland, O., a much larger manufacturer of electrical parts. He became the district sales manager of the firm's Cleveland division. His promotional activities included presentation of papers to meetings of The American Society of Mechanical Engineers and other groups on subjects related to phenolic. One of these, maintaining the superiority of bearings made from a phenolic material ("celeron") over metal bearings, was given at the A.S.M.E. annual meeting in 1931.<sup>2</sup>

But the stock market crash of 1929 was followed by the Depression of the 1930s. With his sales philosophy that you didn't try to sell a customer, you worked for him, Arthur was able to keep many accounts threatened by the feverish competition. When Continental-Diamond's contract with the Ford Motor Company was endangered, Arthur proposed to Ford representatives that if they would provide the specifications for the wooden floor boards of their automobiles, he would use



them in making the boxes in which his firm's molded fibre transmission gears were shipped to Ford. When the boxes were dismantled, the Ford people could use the boards in their cars. With this kind of attention to his customer's needs, Arthur kept the account.

But relations with Continental-Diamond deteriorated as business slumped, and the firm's inability to fulfill commitments of the merger culminated in litigation. In 1932, Arthur returned to Chicago after severing his connections with the company.

He foresaw that when the economy recovered, radio sets would become more widely used and developed. He also recognized that airplanes would become an important means of rapid transportation and that only the economic climate was inhibiting their development. When normal business resumed, radio communication would require more and improved components which he would be prepared to provide. What he could not anticipate was the jetlike impetus that Nazi aggression and world-wide conflict would stimulate less than a decade ahead.

It was the worst of times to start a new business. The Depression had reached bottom in 1932 with the gravest disruption of the economic and financial structure the world had yet known. Falling prices for farm products and land were forcing foreclosures that deprived farmers of their homes and livelihood. As if this were not enough, the whole Great Plains area faced complete crop failure through the great droughts of 1932 and 1934. Unemployment and bank failures were higher than ever before in American history.

But Arthur was obsessed with an idea, one that grew from his awareness of the potentialities of tube sockets and improved ways of making them. In his Walnart days, working with the brittle Bakelite flat sheets that were stamped, sawed, or drilled for their various purposes, Arthur could see the superiority of molded sockets, if they could be made, over those that were laminated from flat sheets, painstakingly assembled, and difficult to install.

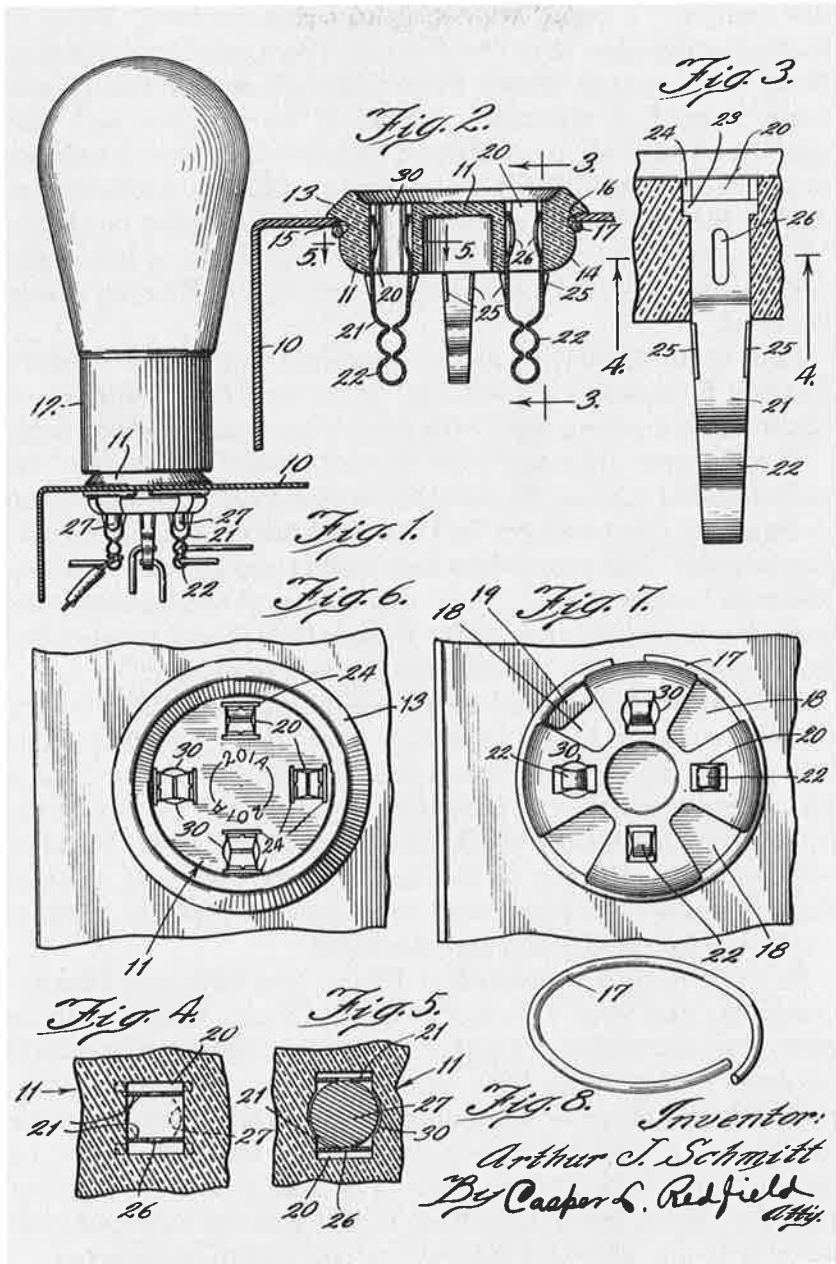
But while he was developing this product, he needed a busi-

ness that would bring an immediate return. He came up with the notion of attaching a cigar or cigarette lighter to a bridge or floor lamp, covered with a tassel for appearance, which in addition to being pulled to light the lamp could also be used, by pressing a button, to ignite a smoke. The Tassel Lighter Company came into being at 641 West Randolph Street, at Clinton, occupying space on the sixth (top) floor.

Two women were hired to assemble the lighter parts and also to make laminated sockets in the accustomed manner. Meanwhile, Arthur was developing a new radio socket which he was ready to file with the United States Patent Office on August 17, 1932.<sup>3</sup> The socket he invented was a single piece of insulating material preferably consisting of phenolic resin (Bakelite) molded into the desired form. A thick disk with an outside diameter approximately equal to that of the tube base, it was slightly tapered so that it could pass through a circular opening in the chassis. A lip at the top rested on the upper face of the chassis and a spring ring underneath secured the socket tightly to the chassis. The socket had as many pin-receiving openings as there were pins or prongs on the radio tube to be held. Other details of construction helped to make the socket far superior to those then being marketed. The latter were diamond in shape, with rivet holes near the points of the diamond for securing them in place.

Among the objects claimed for his invention, Arthur noted that each contact spring would be placed inside a cavity formed in an insulating body in such a way as to prevent an angular insertion of the tube prongs. Other objects included simplicity and ease of assembly of parts, compactness, interchangeability of sockets with each other, and location of the contact springs within the insulating body so that a person handling the radio receiver with a tube removed could not receive an electric shock.

It was from this ingenious device and its multiple offshoots that a great international corporation was to develop. The new socket was stronger and more efficient than other types on the market and was commercially successful despite its higher price. Moreover, it established a precedent from which two of



Arthur Schmitt's first invention, a molded radio socket

the company's basic operating policies evolved. First, it marked a decision to concentrate on the manufacture of electronic components rather than elaborate assemblies or systems. Second, it charted a course of "no compromise" with quality. Most of all, a reputation for know-how and the ability to solve the most difficult engineering problems emerged from Arthur Schmitt's efforts never to turn down an order, no matter how challenging. A testimony to the soundness of his socket design and construction is the fact that it is still being manufactured.

Late in 1932, Arthur asked acquaintances at the Western Electric Company's Hawthorne plant in Cicero, Illinois, to recommend a young man with some experience in electricity.

"I must have impressed Mr. Schmitt that I was handy," recalls James J. Cuber, Sr., now in his 49th year with Amphenol in Danbury, Connecticut, "so I started work on Lincoln's birthday in 1933." The young firm had been renamed the American Phenolic Corporation in November 1932 and was incorporated early the following year under Illinois law. It now consisted of four persons: Arthur, Cuber, and the two women.

Quite soon, Arthur had a mold built and a method of inserting the contacts to accommodate four- to eight-prong radio tubes. "When you're punching each contact in separately on a kick press, you're really banging," says Cuber. "We were making so much noise they could hear us on the first floor." Besides, business was growing as the new sockets were sold to local radio manufacturers and, with requests for variations, expanding lines were developed and marketed.

So the young firm moved to Throop and Harrison Streets, occupying the fourth floor of a loft building. With the move came the acquisition of a punch press which made the contacts for several types of sockets. When business reached the point that 12 hours of operation did not produce the needed quantity of contacts, Arthur Schmitt decided that he himself would take on the night-time 12-hour shift. The machine, with a coil of thin flat brass stock installed, would run for two and one-quarter hours, at which time a new coil had to be inserted.

He placed cardboard on the floor next to the machine and

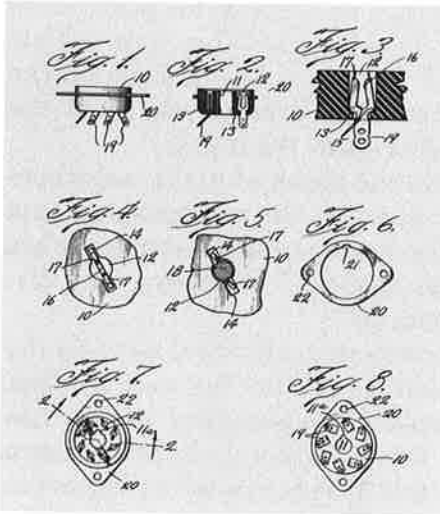
arranged a bench nearby on which he could do his paper work and periodically replenish the stock supply. When it came time to rest, he set an alarm clock for two hours of sleep on the cardboard pallet, awoke to refill the brass stock, reset the alarm again and again, and thus spent the night.

"I used to take the contacts to the plater at night, anywhere from 10 to 12 o'clock, pick 'em up at six the next morning, and bring 'em back to the shop so the women could start putting 'em into the radio sockets," says Cuber. "And there was Mr. Schmitt, all washed up, ready to go."

The purchase of a molding press was a forward move as the firm began to mold its own sockets. Another big step, the first toward product diversification for the company (if one can forget the now discontinued tassel lighters), derived from a conversation Arthur had with two friends who were pioneers in the manufacture of microphones. They commented about the need for a standard plug to fit all makes of microphones. Arthur conceived an adaptation of his now-popular radio socket with a male plug to fit it. This happened in 1934, and soon the American Phenolic Corporation was introducing the first uniform line of microphone connectors. Its 75 Series is still in use today.

The need for screw machine work for the microphone connectors brought the Hudson Screw Machine Company into a relationship with American Phenolic which it fulfills to the present day. Arthur knew Ernest E. Yaxley, whose Yaxley Mfg. Co. was the second largest components manufacturer in Chicago in the 1920s. He was also acquainted with Ernest A. Schneider, secretary and treasurer as well as part owner of the Yaxley firm. In 1931, Yaxley was sold to the P. R. Mallory Company and on December 22, 1932, Schneider purchased the assets of the Hudson Metal Products Company, whose owner, Edward Hudson, went bankrupt after having been staked in the screw machine business before the Depression by Schneider.

Arthur Schmitt called upon Schneider, who was unrelated to his mother's side of the family though they bore the same name, to have his firm, now called the Hudson Screw Machine



*His second invention was a refinement of the first, with improvements in the socket and contact springs and a standard means for connecting the socket to the chassis.*

Company, take care of American Phenolic's needs. Schmitt said: "I'm going to build the best damn microphone connector that's made, and I'm going to price it; people will always pay a bit more for quality." Ernest W. Schneider, current Hudson president, says, "He always insisted on making the best. If you look into the catalog today, you'll see it's still made up with the same parts."

In the mid-1930s Arthur had no money, but the elder Schneider recognized his integrity and went along with him, filling his orders. "Sometimes we waited ten months or more for our money," his son remembers, "but we knew he'd be good for it." When Arthur got around in 1936 or 1937 to discounting his bills, the Hudson owner sent him a congratulatory message.

Employee Cuber recalls how tight things were in the Depression years. He started with Arthur Schmitt at 15 cents an hour and worked 12, 14, and 16 hours a day. He took three days off each year—Christmas, New Year, and Easter. The plant was closed Sundays,\* but he was there—because Arthur was

\*Employee Rous, hired in 1941, recalls that for the first two years he went to the office every Sunday. Mr. Schmitt never asked him to come in, but when, now and then thereafter, he did skip an occasional Sunday, AJ was apt to say, "We missed you yesterday. We got a lot done."

and expected him to be. He remembers going ten weeks without pay because funds were short. When checks were received, he ran them over to the National Bank of Austin, the guard admitting him through a side door after banking hours to help keep their account in balance.†

Arthur never carried much money in those days [Cuber recalls]. I remember once he said he was taking a Belmont Radio man to lunch; we were trying to sell them our sockets. He asked me, "How are you heeled?" I opened my wallet and had a five and a one. "I'll split with you," he said, and he took the five. 'Course, I got it back.

Even in later years, Arthur Schmitt was not casual with his money. He carried two wallets in his back trouser pockets, one with 50- and 100-dollar bills, the other with lesser denominations. But he was never quick to open them. Frank E. Shevlin, who handled his personal affairs for 14 years from 1957 to his death, was executor of his sister Eleanor's estate, and now serves as executive secretary of the Schmitt Foundation, recalls trips in Arthur's seven-passenger blue Cadillac, which he called "the hearse," via the West Tollway to the 526-acre Sugar Grove farm near Aurora that Arthur had purchased. "He would make much ado about reaching for the coins to pay the toll but was always Johnny-come-lately," Shevlin amusedly recalls. He also remembers their visits to the barber: "By the time he had taken care of his ever-present cigar, buttoned himself, and was thoroughly brushed, I had paid the bill," Shevlin says. "Maybe he felt that since I wrote his checks I would see I was recompensed."

John L. Woods, who joined the firm in 1944 as controller and served as chief financial officer until his retirement in 1970, was reminded of an occasion in London when Arthur, who never carried any British money, could not pay the cabbie. "I had to come down and reimburse the doorman who had taken care of the driver," says Woods.

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†According to one early business associate, Arthur Schmitt's father had set up small estates (\$10-12,000) for each of his children. "AJ wouldn't touch his; he felt that the money was his mother's, but she wouldn't take it, either. Many times in the early days, it would have helped meet his payroll, but it sat in the National Bank of Austin until his mother died."

On October 26, 1936, Arthur Schmitt submitted to the United States Patent Office an application for his second invention.<sup>4</sup> It was a refinement of his first application (later granted on July 10, 1937), making improvements in the socket and contact springs of the original and providing a standard means for connecting it to the chassis. It also reduced the contact devices to thin, flat pieces of metal less than one inch long which made a superior form of electrical connection with a tube prong and were retained in position in the thick disk of phenolic resin without the use of any piece or part.

Two more patent applications were made with Arthur Schmitt as inventor in 1938. On January 21 of that year he filed a proposal for a combined socket and mounting plate which would permit the molded one-piece socket to be secured interchangeably with laminated sockets and their diamond-shape mounting still in use in some radio chassis. Two months later, on March 19, he came up with an invention which permitted

economical and simplified construction . . . in which an electron tube having a large number of electrodes or prongs, for example as many as eight, may be carried on a socket no larger than a socket for say a conventional four-prong tube, while at the same time security is provided against short circuiting between the circuits of the various prongs, even at relatively high voltages.<sup>5</sup>

With his concept of working for the customer, Arthur created a "lock-in" socket which could be mounted in a radio set without a retainer ring or mounting plate needed to rivet the tube socket in place in the chassis. The manufacturer could punch crimps or legs into the chassis, the tube sockets could be dropped in, and with one stroke of a press the crimps would lock in as many as eight or ten sockets, saving time as well as the space needed for mounting plates.

Arthur took his lock-in prototype to the RCA people in Camden, New Jersey, and impressed them to the extent that they ordered one million radio tube sockets, with delivery to begin in 30 days. The trouble was that the firm then had only one molding press, capable of turning out barely 250 sockets in a 24-hour day. But Arthur called in his toolroom foreman, Jules



Chenier, and they pondered how to devise an entirely new method of making a mold cavity by broaching rather than milling. Within three weeks, the firm came up with a steel which under extreme pressure was pushed in and produced uniformly the necessary cavities. Now the firm had a mold which made 32 sockets at one time.

But it was still touch-and-go for the company to fulfill its RCA order at the rate of 10,000 and more a day. Cuber would deliver a shipment aboard the 1:15 a.m. east-bound Pennsylvania train. "I'd get down there at one o'clock, just in time, and then in the morning I'd be back at 7 to open the shop," Cuber recalls.

"I told the old man I was getting tired," Cuber says. "But, then, he was there every day until 11 or 12 o'clock. And he'd be back on the job first thing in the morning — after he had gone to church, which he did daily."

Radio sockets and microphone connectors remained the firm's principal output, although new variations had been gradually added to the product lines. Then one day in 1938, a naval officer visited the plant, which had been moved to 120 West Van Buren Street (at Throop Street, across from the first Walnart address). He lamented that there was no standardization of plugs used on motor generator sets. This was enough to set Arthur to work toward the development of a line of interchangeable, general-purpose electrical connectors. He submitted his proposals to officials at the Wright-Patterson Air Force Base outside Dayton, Ohio. Schneider recalls that Arthur asked him to come in early in 1939 and informed him that he was calling Wright Field that morning at 11 o'clock. He tossed some blueprints to Schneider and asked, "Can you make that stuff?" Schneider examined the specifications and said, "Mr. Schmitt, nobody's ever cut tellurium copper."

These specs called for  $\frac{1}{8}$ ,  $\frac{3}{16}$ , and  $\frac{1}{4}$  inch diameters [Schneider recalls]. He asked me again "Can you cut 'em?" I told him I didn't know but we'd try. So he quoted on these connectors and we got our first orders in February 1940. So help me, we're still getting orders from the company — the same thing, only now they're made of bronze.



*Albert Schmitt,  
(from left)  
Jim Cuber, and  
Art Schmitt*

Out of these negotiations developed the first "A-N" (Army-Navy) standards, fortunately fixed in time for the start of World War II. The Hudson firm was able to substantiate through its production records the validity of Arthur's claim to certain patent rights in the A-N connectors produced for the armed forces. The qualities set in these connectors were spelled out by the Army and Navy in the first Military Specification (Mil-C-5015), which Amphenol commemorated three decades later by designating its mainstay AN/MS connectors "VET/5015."<sup>6</sup> The role of the company in this important development is indicated in the fact that Mil-C-5015 specified that the connectors had to be "Amphenol or equivalent." Arthur's prompt and effective response to the military's needs established once and for all the company's reputation with the government as a resourceful and dependable supplier of engineered components.

The move to the Van Buren-Throop location was necessitated by a growing operation which now had 300 employees and much heavier and more complicated equipment. Occupying the third and also, later, the fourth floors, American Phenolic had four molding presses and an enlarged punch-press department.

It was while attending a dinner sponsored by his mother's club that Arthur Schmitt first met Carl A. Raabe. The ladies of the German community in Austin and Chicago had formed a "Damen Verein Freundschaft" which met once a month at one of their homes to play euchre in the afternoon and to lay out a bountiful spread of food for their husbands and children in the evening. The celebration of the group's 25th anniversary in mid-1938 prompted a special dinner at the downtown Atlantic Hotel. Arthur's mother, the perennial secretary of the ladies' organization because of her leadership capacities and her fine penmanship, invited everyone at the table to give a little speech. One of those present was young Raabe, a recent graduate of Lane Technical High School. Arthur, who appreciated good self-expression, was impressed with young Carl's presentation and invited him after the dinner to seek a job with the firm.

After several calls, Raabe was put to work at the Van Buren Street plant, starting at 25 cents an hour. He later learned that the going rate was then 35 cents, but since Arthur Schmitt had sponsored him, Jim Cuber was instructed to start him at the lower level. He spent a full day at a drill press, cleaning the molded tube sockets by drilling the flashings or residue off the sockets after they had been molded. From there he graduated to the 100-ton molding presses, whose platens were at 400-degree temperatures.

In mid-1939, just months after the introduction of the A-N connectors, Arthur concluded a visit to Europe, where he learned that German radio set makers were using a new low-loss plastic with a lower power factor than anything employed in America. Though the plastic, polystyrene, was a far better insulator than Bakelite, its use in Germany for electrical purposes was not as prevalent as Arthur thought its advantages warranted. He therefore bought a Heinrich Horst extruder, a small plastic-film machine, and brought it back, along with plastic samples, to the States for experimentation.

He was greeted on his return to New York City by his sales representative there, Dan R. Bittan, who commented that he did not need an interpreter in Germany, since he knew the

language well. "That's the place I definitely asked for one," Arthur replied. "Those Nazis thought I didn't understand German, and I learned many things I wasn't supposed to hear."

With the new German plastic, young Raabe set to work molding polystyrene beads for a coaxial cable for which Arthur Schmitt had filed patent claims. A development of high-frequency engineering, coaxial cable had been largely originated by the Germans in the middle 1930s. It was composed of two electrical conductors, a central wire and an outer braid of metal or metal tube, the two conductors necessarily being kept apart by some form of insulation. In Arthur's development, the polystyrene beads performed this function. "It was the most ingenious, low-loss coaxial cable there was," says Raabe. The beads were hollow, permitting a central metal conductor wire to be threaded through them, the air space within the beads serving as an insulator against a braided wire shield, which served as the second conductor. Over the whole, a covering jacket of braided, varnished cotton was woven. Raabe himself acquired a patent for an improved method of stringing the beads onto the copper wire conductor.

Bell Telephone Laboratories saw great prospects in the new product, and American Phenolic was launched into its third major line—cable and wire. Its polystyrene-beaded cable was the first commercially produced coaxial cable in the United States. It became an important ingredient as the nation moved from an era of lower, radio frequencies (RF) into one involving the rudiments of radar, television, and other high-frequency (HF) communication.

Airlines began burying electric cables that operated marker beacons across the country. The new cable with its superior insulation proved just what was needed. Widespread acceptance was also found in electrified railroad yards, farmyards, and other places where a tough cable was required and where its power factor qualities were important.

Early in 1941, the British, who had been using coaxial cable of British design in their first radar sets, asked Amphenol to tool the British-made connectors they produced. The well-known news commentator, Ulmer Turner, told a story that

*Commentator  
Ulmer  
Turner  
interviews  
the boss.*



reflected Arthur Schmitt's penchant for cutting red tape and getting the job done:

An emergency call came for production of equipment using the British standard of threadings. London sent only one set of blueprints, where many were required. Under the law, they couldn't be copied.

Precious weeks dragged by, as striped-pants diplomacy tried 'thru channels' to get copies of what must have been on file in all English aviation engineering laboratories, there being no secret involved. Playing this hunch, Schmitt telephoned a friend in London, who got the copies for him.

Sometime later, a British colonel dashed in with an apology and the extra blueprints he had taken weeks to obtain. Smiling, the Amphenol president opened a desk drawer and handed him a completed model of the apparatus. Already, the factory was producing it for the colonel.

Gulped the awe-stricken Britisher, "If I wasn't looking at it with my own eyes, I wouldn't believe it."<sup>7</sup>

American Phenolic remained the sole U.S. manufacturer of coaxial cable for the first two years of World War II. The U.S. air forces used it effectively until their planes started to fly over 30,000 feet and condensation rendered the air space within the cable non-insulating. The military came to Arthur

Schmitt with a request for a dielectric coaxial cable that would be solid but still sufficiently flexible for their needs.

Dr. Harner Selvidge, a well-known electronics scientist, was engaged in February 1942 and, with Carl Raabe, he developed the idea of milling together very fine polystyrene and polyisobutylene. The resulting product was trade-named "Copolene." It was more flexible than polystyrene, but it was difficult to shape. A way was found by using more powerful motors on the extruders and a lower temperature in the extruding process. The result was the first solid dielectric cable. "It filled the bill," says Raabe, "and enabled planes to fly at altitudes over 30,000 feet."

By 1941, the company had outgrown available space on Van Buren Street, and a plant with two and three stories was purchased from the Chicago Rivet and Machine Co. at 1830 South 54th Avenue in Cicero, the location thirty years earlier of an aviation field from which Arthur had flown during his brief career as an aviator. Cuber recalls:

This is how we operated back in the '40s. We had bought the lumber to put new flooring in the Cicero plant; there it was, two full boxcars on a siding. So with six or eight of the boys, we unloaded one of the cars, a hell of a job because we had no idea that they stacked the wood right to the top. Finally, one car was emptied, but we couldn't move the other. There was a switchyard behind the plant, and I asked one of the switchmen if he could move the cars for us. "We're not supposed to do that," he said, but I persuaded him. So we got all the lumber in with our own men. That just shows you the kind of fellows they were—and they weren't getting paid a helluva lot of money in those days.

Cuber also remembers how the shop men also moved most of the equipment from Van Buren Street to the new Cicero location.

We'd work the plant all day, and at six o'clock the fellows and I would start moving. We used a Jackson Storage furniture-moving truck I had wangled from an uncle who was a Jackson boss. Our boys started dismantling the kick presses, taking them down the freight elevator, and loading them in the van. Meantime, our

maintenance man, John Freese, was out in Cicero, and he and some of the boys started to set them up in the Cicero shop. So the girls would leave Van Buren tonight, and tomorrow they started work in Cicero.

We moved everything but the 100-ton molding presses—even a 3,000-pound lathe. About two in the morning I told the Jackson driver to get himself a coffee and doughnut so we could sneak the lathe in the truck while he was gone. The elevator operator wouldn't take it down, because its capacity was only 2,500 pounds. So we got the lathe on the elevator, removed the lift truck, and I took it down. I shut off the power at the second floor and, believe it or not, we slid past the first floor to the ground—right where we wanted to take it off. We got it on the truck, quickly surrounded it with boxes so we could tell the driver the truck was full when he came back. He started to pull away, then asked me, "What have you got in there—lead?"

After a week of this, Cuber recalls he told Arthur Schmitt on a Saturday morning, "I've had five hours sleep in four nights. I can't take it any more; I gotta quit." Arthur turned to a cupboard, pulled out a bottle, half-filled a tumbler with Scotch,



*The main Cicero plant, pictured after Bunker Ramo acquisition*

and told him, "Down this and go home and get some sleep."

That's the way he was [says Cuber]. He could get the men to do anything for him. He used to walk through the assembly lines at noontime swiping a cookie here, a snack there. They all liked him; he just had a way about him.

There were occasions, around a holiday or in celebration of a company achievement, when Arthur would call in the foremen and toolmakers and over a drink or two would talk shop and recall earlier days.

He sponsored the company's softball teams, which were first organized in 1938. We were citywide champs in the industrial league one year [Cuber recalls]. When we had an important game with Cinch Manufacturing, Arthur bet 'em a hundred dollars we'd beat 'em—and we did. He gave me the money and told me to take the team over and drink it up. We did—to the tune of \$160, but he didn't mind.

The company's women's teams won industrial league titles in 1943 and 1945.

Raabe recalls that in those days Mr. Schmitt seldom went out for lunch. Even customers were brought in to eat in the plant cafeteria when it was installed in 1943. There was no executive



*Carl Raabe and his wife, Becky, dine with Arthur and his mother.*



dining room; Arthur had free run of the place and no particular table. "Maybe three or four days a week, he'd go behind the counter and make himself his favorite toasted ham and pineapple sandwich on the grill," Raabe says. At home, he liked to grind ham and make a ham salad sandwich with mayonnaise, nothing else, for himself, his mother, and his sister.

As a bachelor, Arthur seemed unaware of the home demands of his married employees and invariably found someone to eat with him every night. Cuber and Raabe recall that in pre-war years in the two Throop Street locations, it was not uncommon for him to invite them to dine individually with him two or three nights a week. Arthur's favorite at that time was the dining room in the Union Station, though there were occasional forays to Reich's Beanery on Harrison Street for soup and baked beans. After the move to Cicero, the regular stops became 333 Toppers at Austin and Lake and Ray Foley's on Madison Street in Austin.

The wives who had prepared dinners at home for their husbands did not appreciate Arthur's stealing them away. "The conversation over the restaurant table was always shop," says Cuber. "Once I told him I had shop up to here and would rather stay in the plant than waste two good hours over a steak talking about it."

Arthur's lack of concern for time was a commonplace among his associates. "Mr. Schmitt wore a wrist watch, but it meant nothing to him," says his presidential assistant Shevlin. "He might call you in at 4 o'clock on some matter, and you'd still be there at 9 with no thought of shall we go to dinner."

With Arthur's encouragement, the employees formed a Service Club after the war to develop closer relations between office and shop people. Activities included outings, picnics, bowling leagues, and dinners. Arthur was named honorary president, and Cuber was elected president.

Each year, we ran a raffle with a car as the principal prize to raise funds for the club [says Cuber]. I had the privilege of bringing the first book of tickets to Mr. Schmitt. He never had the 20 bucks to pay me; in those days, it seemed he never carried any money. Always had to pay me later.



*B. Elizabeth  
with plenty of  
sparkle despite  
advanced years*

It was Arthur's prerogative to draw the winning tickets for the raffle. His employees recall that one year he picked a name as winner of the car, glanced at it, put it in his pocket, and promptly picked another. Common opinion was that he had drawn his own name first, but he would not admit it. "Quite a guy!" they said of him.

The best explanation of why Arthur Schmitt never married is perhaps that he was wedded to his work. "In all respects, the business was his wife," says Woods. Cuber remembers that about dinner time when the firm was at its Randolph-Clinton address, a beautiful woman came to the office and asked for him. "I thought she was a model," he said. "He had an appointment that same night with a molding company in Plano, Illinois, which was doing our work, so I guess he took her along for the ride. That was her date."

He was devoted to his mother. In their relationship, she was the boss. Though small of stature, she was tall in command. Cuber recalls that on Sundays, Arthur would reach the plant about nine o'clock after attending Mass and the two of them

would go over shop problems until the phone invariably rang and Arthur would tell him, "Grab it. That's Mother."

I'd answer and she'd say "Arthur, Arthur!" She was in her upper 70s then. She'd ask where Arthur was, he'd be waving goodbye from the door, and I'd tell her he was on his way. "How long ago?" she wanted to know. I'd tell her ten or fifteen minutes, and she'd say, "Are you sure?"

She was a very fine woman, and he adored her. If there was some place he wanted to take her, she'd say, "When I'm ready, I'll let you know." She was the boss, all right, and he loved it.

*"There was a magnetism about the man that not only drew you to him, but you tended to joke about the hours you worked, the demands he made upon you in his quiet way, the fact that, though he never asked you to come in on Sunday, you felt a compulsion to be there."*

—William H. Rous

## Inspirational leader

The move to Cicero was surrounded by darkening clouds of war in Europe. In March 1937, Adolf Hitler's army had taken over Austria, in March 1939, he partitioned Czechoslovakia, and on September 1 of that year, his blitzkrieg conquered Poland within a month. The Scandinavian campaign was successfully concluded by the end of April 1940, and on May 10, the German armies attacked France through Holland, Belgium, and Luxemburg. The French nation fell on June 22, 1940, and by mid-August, Hitler began his aerial offensive against England.

Despite strong isolationist sentiments in the United States, it became increasingly apparent that America's participation in the war against Germany was only a question of time.

While the company was still located on West Van Buren Street, Arthur Schmitt was visited by Martin A. Donlan, a representative of the United States Department of Labor. It was Donlan's task to warn employers of the manpower shortage which would eventuate in case of war and the need to hire women.

Arthur Schmitt was impressed with young Donlan, still in his 20s, and called him with increasing frequency after the move to Cicero was completed. "He'd say, 'What are you doing tonight? Let's have dinner at Foley's.' I was a bachelor too at the time so it was no problem," says Donlan. "After eating, we'd go back to his office and talk." Firms surrounding the new plant were largely unionized, and some representatives began pressuring to take over American Phenolic. With his awareness of

the labor situations in these companies, Donlan was able to answer Arthur Schmitt's questions concerning them.

After sizing up Donlan for some time, Arthur invited him to join the firm, saying he had little experience with unions. He had made overtures to the Western Electric Company, but its union had a charter to represent only that company. Donlan, with memories of the depressed 1930s, was reluctant to leave a secure government job for a firm which he thought might not be in existence after the war, but he finally agreed to take a leave of absence and joined American Phenolic in June 1942.

Orders in the war years poured in so heavily that the company had to job them out. "Any screw machine house that could make parts, any molding house that could mold, platers that could plate—all were working for us," Donlan says. "Most of our people then were assemblers—3,000 of them jammed in one plant but doing a phenomenal job for the war effort."

I was hired to be personnel director in charge of labor and personnel problems and security. My first task was to get us organized, particularly with the unions coming in. I found that there were about 2,000 employee files, but only about 300 active ones. The turnover was rather great, and when people left, their files were not removed. We weren't paying very much, had no formal pay plan, no methods of review for increases—it really was a disaster.

Despite starting salaries of 45 cents an hour for men and 35 cents for women, some employees were making as much as \$70 a week, thanks to overtime pay including time and a half for Saturdays and double time for Sundays. The unions were arguing for this kind of pay for a 40-hour week.

"I had to get things put together in a hurry," Donlan said. "Almost everybody in the company punched the clock, so we had to get the office people on a straight salary basis or everybody would be in the union." He used delaying tactics while a night shift was started to cut down overtime and new personnel policies were inaugurated.

The company was getting severe pressure from two unsavory union organizers of a nearby plant.

They were a couple of hoodlums [Donlan says], with bad records. Their tactics included calling our employees at home and intimidating them. Four sound trucks blared day and night in front of the plant. They told their people I wouldn't be around long: They'd find me in a box. I rode many nights with a gun and never went directly home so I wouldn't be followed and nobody would know where I lived.

By Fall 1942, the company was ready to consider unionization. Through an uncle close to Michael Boyle, international vice president of the International Brotherhood of Electrical Workers of the American Federation of Labor, Donlan arranged for talks with Arthur Schmitt. Ultimately, Arthur told Donlan, "Let's get the stable people in here," and Michael F. ("Frank") Darling, president of Local 1031, was assigned by Boyle to the American Phenolic plant.

I worked inside and Darling outside, and we made sure that his union won. Despite the bitter rivalry then existing between A.F. of L. and the C.I.O., Darling was a reasonable man who recognized that the company had to make a profit to keep going, and thanks to him a good bargaining atmosphere prevailed between the company and the employees.

Donlan remembers that, years later, Darling told him, "The people here love Mr. Schmitt so much that of all the 103 plants in my local, this is the one that I would be most fearful of calling out on strike. I'm afraid they wouldn't come out!"

Arthur Schmitt recognized that his company was going to need topnotch talent in the demanding times ahead. He envisioned potential employees in every likely person he met. After he had sized them up and found what he was looking for, he would invite them to join him. Almost invariably, they were young men, 20 years or more younger than he.

One key employee hired in this fashion was William H. Rous, then 27, who was employed daytime from 8 to 4 o'clock at Arnold Brothers, a meat-packing firm on West Randolph Street in Chicago. This is how Rous, who rose from a stenographic position to the eventual presidency, tells how he went to work for Arthur Schmitt in 1941:

The agreement was that I would report at or about five o'clock for as long as AJ needed me. I didn't realize what was in store for me, but I learned quickly. After leaving Arnold's and grabbing a hamburger during a brisk walk, almost a mile, from the Randolph to the Van Buren plants, I would be called into AJ's office, and he would start dictating until 6:30 or 7. Then he'd go out to dinner, and I'd transcribe the letters and memoranda I had stenotyped. When he returned, he would start dictating again. This went on for approximately two weeks—until 10 or 10:30 each night, sometimes to midnight. I'd have to catch the El and then walk six blocks to my home in Cicero for four or five hours of sleep. Meanwhile, no check was forthcoming, and no one had me sign any employment form. Finally, I got nerve enough to ask Mr. Schmitt what the situation was. He said, "Well, aren't you on the payroll?" and proceeded to write himself a note.

I started to work with American Phenolic as a regular daytime employee at the munificent salary of \$23 a week—the same amount I was making at Arnold Brothers.

In addition to Rous, Donlan, and Raabe, other top members of Arthur Schmitt's team in the burgeoning war years,<sup>1</sup> when the number of employees increased tenfold, were C. V. ("Vic") Wisner, Jr., a patent attorney whom Arthur wooed from his father's law firm; Donald B. Alexander, a brilliant financial expert with a doctor of philosophy degree and a Phi Beta Kappa key, who had brought Rous to Arthur Schmitt's attention; Albert Dushek, an old-school accountant who had joined AJ in 1935 and ably handled the books of the small company until it was necessary to bring in John Woods in 1944; and Jack Dublon, who was hired by Mr. Schmitt to bring order and system to a production department that had grown too fast for efficient operations. Joining the group later was Richard M. Purinton, in charge of engineering, and his successor, Dr. Rodolfo Soria, who came in 1946.<sup>2</sup>

Another valued employee during the war years was the chief engineer, Curt Klosterman, who brought a fine technical education from his native Germany. His sense of precision and detail drew the respect of fellow bachelor Schmitt, and the two of them, with comparable temperaments, worked well together. Klosterman received a Certificate of Merit from the



Office of Scientific Research and Development for his wartime contributions.

Klosterman was responsible for the creation of two highly successful Amphenol connectors. Following a visit to the Wright-Patterson Air Force Base at Dayton, Ohio, Bill Rous was being driven to the airport by John Wilkinson, in charge of the Amphenol office in Dayton, when he noticed a connector sitting on the back seat of the car. Wilkinson informed him that it came off a captured German airplane, and Rous put it in his brief case.\* On his return to Cicero, Rous showed it to Dick Purinton, who was also intrigued with its design and called Klosterman into his office for a discussion of its possibilities for Amphenol. "Carl could hardly wait to work on what he saw as obvious design changes," says Rous. "Once we got it into production, it was an instant hit and became known as the Amphenol Blue Ribbon Series."<sup>3</sup>

About a year later, Rous received a call from a New England contractor who asked if he could attend a meeting at the Central Intelligence Agency's headquarters in Langley, Virginia, along with the man responsible for the Blue Ribbon design. Without being informed in advance of the purpose of the meeting, Rous and Klosterman learned that it related to a new coding and decoding device, which required a connector like the Blue Ribbon but much smaller in size because of limited space and with 50 contacts involved. "When I asked Curt if he could do it, he said with that lovely German accent, 'I don't see vy not; I sure vill like to vork at it,'" Rous recalls.

Out of this came the Micro Ribbon connector, which was an even greater success than the Blue Ribbon. Western Electric gave the company the largest single connector order ever placed in the industry with the stipulation that another manufacturer acceptable to Western Electric had to be licensed so that it and the Bell System could depend on more than a single source of supply. "We chose Cinch Manufacturing for that purpose and also built a factory on the Seminole Indian Reserva-

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\*It was a Liszt Connector, named for the man responsible for its design and production. He later became Amphenol's manufacturing manager at its facility in Diesenhofen, Germany.

tion in Florida for the sole purpose of producing Micro Ribbon connectors,” Rous notes.

Whenever he had studied a prospective employee long enough to offer him a job, Arthur Schmitt would say to him,

If you come with us—and I’ll let you know in a few days—there’s one thing I want you to know: If you’re willing to work hard, do the right thing at the right time, and generally behave yourself, there’s no reason in the world why you couldn’t wind up sitting in this chair” [pointing to his own].

Bill Rous recalls walking away from his interview with the feeling that Mr. Schmitt must be a great reader of character because he wouldn’t make a statement like that unless he somehow recognized your potential. “I’m sure every time he made the statement he meant it sincerely.”

One person he is sure received such a comment was Jack Dublon, who brought order out of a chaotic shop situation.

Jack had a dynamic personality [Rous says]. He was different from AJ, but like him he drew his people unto himself with the same kind of loyalty and dedication that AJ enjoyed. But he was a driver whereas AJ was a quiet leader. He was a proponent of the old-school axiom that a kick in the butt was worth two pats on the back but he tempered it with a generous, wide-open spirit that took the pain out of his blows. If he had not been cut down by cancer, he would have been an excellent president for the company.

Dublon was succeeded by J. Frank Leach, who brought from his Ford automotive background a meticulous, sophisticated approach to manufacturing and production control.<sup>4</sup>

Arthur Schmitt was an intuitive type of leader. He disparaged organizational charts that reflected an overly structured staff. He believed that if you hired the right man for the job, it would get done.

Arthur said [according to Rous], “Putting a person’s name in a box doesn’t accomplish anything; put five people in the same job and it will be done five different ways. You can’t compartmentalize people.” He may not have known much about organizational

charts, but he sure knew more than most executives about human beings and motivation—long before the Harvard School of Business made “motivation” an overworked cliché.

He encouraged his people to think and to come to him with their ideas. If he felt there was merit in them, their sponsor was encouraged to proceed. He invariably asked what kind of back-up there was if the idea fell short of expectations. But there was no second-guessing and no sarcasm or criticism in the event of failure. In that case, he liked to examine the project to find what went wrong and to discuss how it could be made right. One thing he insisted on: Don't make excuses.

“You were never fearful of approaching AJ with a constructive thought,” says Rous. “I believe this is a quality all too unique among successful men.”

When Rous first joined the company, Arthur Schmitt handled the business just as he had throughout its first decade. Every piece of mail—telegrams, orders, correspondence—passed over his desk. Sometimes it accumulated so that there would be two or three stacks in front of him, each a foot high. He had slots behind him designated “Dushek . . . Raabe . . . Woods . . . Wisner . . . Donlan,” etc. and he would sort into them the appropriate pieces with penciled notations.

“Sometimes you got telegrams that were two or three days old and what was urgent could be delayed a week or more, but it was more important to him to know everything that was going on,” Rous says.

As time went on, Arthur began to test Rous' writing ability by asking him to “tell this guy no, that fellow maybe,” and so on. Then came a cablegram informing that a Mr. Lagerkrantz, a representative Mr. Schmitt had hired in one of the Scandinavian countries, had been killed in an automobile accident. When it was followed by a letter from the widow providing more details, Arthur turned both pieces over to Rous and asked him to write a letter of condolence. Rous worked on it for some time with difficulty because he had not heard of the man and had no idea how well Arthur knew him.

"My effort must have been acceptable," says Rous. Arthur asked him, "Hey, how well did you know these people?" Rous replied. "You know, Mr. Schmitt, I never met them." "From this, I'd think you were lifelong friends," Schmitt replied.

This is about as close as Arthur Schmitt ever got to a compliment. He was never effusive in his praise. He doled it out so that when an employee received a note like "very well handled" or "great letter; let me see the reply," it was cherished like a precious stone.

After the Lagerkrantz letter, Rous found himself handling an increasing amount of his boss' correspondence, often without comment. "His favorite expression, when he'd give me a stack three or four inches high, was 'You might want to take care of this while you're resting.'"

Shortly after he started to work, Rous noted letters signed "L. Hanson, chief engineer." He asked Mr. Schmitt where he could find the man so he could learn more about American Phenolic products. "AJ just pointed to the switchboard and said, 'There's Mr. Hanson now.' It turned out that Mr. Hanson was Lill Hanson, who had been AJ's part-time secretary and ran the switchboard.

"When I asked AJ what to tell people who came in asking to see 'Mr. Hanson,' he knocked the ashes from his cigar and said, 'Tell 'em Mr. Hanson's out of town an awful lot.' It was not until Clark Quackenbush came on that 'Mr. Hanson' was no longer the chief engineer."

One of Arthur Schmitt's idiosyncracies, late at night after the office was deserted, was to go around examining the desks, opening the drawers to see what they contained. "Every now and then he would give me a memo to check on So-and-so, noting that his desk had an accumulation of unanswered correspondence," Rous said.

One of the things that impressed Martin Donlan when he started with American Phenolic was the fine relationship that existed between Arthur Schmitt and his shop employees.

We were mushrooming so fast that the old employees who knew the company and its spirit began to be a minority. I realized how important it was that he continue to know the people and vice



*"There was a magnetism about the man"*

versa so I'd tell him, "You're due out in the shop for a couple hours; be sure to talk to all the girls." It was something he did in former days and we wanted to preserve the morale it developed.

While the company for many years was Arthur Schmitt's show, it was clear that everyone was a participant. Arthur welcomed information and recommendations from staff members before making his decisions. Staff meetings were held regularly, usually after working hours at dinner. Each officer (without title at first; titles were unimportant to Mr. Schmitt) was in charge of his own domain once he was entrusted with it. The meetings were designed to coordinate the work of the manufacturing, production, engineering, and sales teams. Gradually, they got into policy making and developed bonus, life insurance, and accident programs. "AJ was not one to worry about these things," says Donlan.

He recalls one such meeting at which another staff member renewed a personnel problem which had been resolved. He had attempted to rehire an employee who left the company and now wished to return.

One of AJ's hard and fast rules was that if you left and did not improve your qualifications in your subsequent work history, you couldn't come back for more money than before [Donlan says]. This man was sent down to me to be given an increased amount of pay. I called the boss of his department and told him I'd be violating a rule put in by Mr. Schmitt and if AJ told me to forget it, I would. I said, "You go in and talk to him; I won't say a word." He called me back about five minutes later and said, "The fellow isn't going to be hired; send him back up."

At the subsequent staff meeting, when the department head tried to raise the question again, Arthur Schmitt set him down quietly but firmly:

"Martin Donlan joined us when we had no real personnel program. We haven't had personnel problems here, and we've got a reputation in the Cicero-Berwyn area as one of its finest employers. I don't want any of you fellows trying to go around any of his policies." Actually, they were policies that Arthur had laid down with Donlan or that the two had worked out together.

Donlan recalls that when the staff member tried to explain, Mr. Schmitt told him, "Don't defend yourself, dammit. Marty's the personnel man; let's leave it that way." When it was generally understood that each man was the authority in his own field, working relationships were harmonious and productive.

Arthur Schmitt's quest for leadership traits in his employees made demands upon their behavioral patterns. Rous recalls two instances in which this was impressed deeply upon him. The first occurred at the conclusion of the 1945 Amphenol sales conference, held at Chicago's Bismarck Hotel.

The last night [Rous says] was always a social occasion, and this was especially so since I had received a phone call informing that my brother Joe and our West Coast representative's son, Norm Marshank, both of whom had been listed as missing in

action, were safe and sound in a German prison camp.

I really celebrated with the help of everybody at the meeting, and a picture taken by a hotel photographer revealed yours truly leading a group of inebriated Amphenolians in old-time melodies.

One morning thereafter I was called into AJ's office. He threw the picture in front of me and asked, "How many copies of this are around?" I told him I didn't know and he said, "Get 'em all!" I gathered seven and gave them to him. Then he said, "I'll take care of these. You're important to the company and to me, but you've got a decision to make: Either you act like a responsible individual, a leader, or you act like one of the crowd. It's a basic thing to keep in mind."

Some time later, Rous was again called by Mr. Schmitt to his office.

He asked me to sit down and proceeded to ask questions I couldn't figure out. Questions like "Is everything OK with you and Shirley?" I told him things were never better. He took another drag on his cigar and said, "You're sure there's not something you should tell me about?" I was perplexed and mumbled that there was nothing I could think of.

After a long and awkward silence, he let me have it: "Young man, you know that nobody ever found any good answers in a bottle of booze." I protested that I didn't drink at all any more and had not for some time. He paused again, then walked over to my desk directly outside his office, pulled open the deep drawer, and pointed. Here was a half-bottle of Canadian Club whiskey. For a minute, I couldn't think how it got there. Then it dawned on me. Jack Longstaffe, who ran our Canadian operations, had just visited us. He fancied himself a practical joker and, knowing AJ's habit of checking desks, figured he might stumble across the bottle before I did.

I picked up the phone and put in a call to Jack, AJ meanwhile holding the bottle in his hand. I told him, "You so-and-so, tell Mr. Schmitt how that bottle got into my desk!" He explained that the whole thing was a gag, and then he and AJ proceeded to have a long laugh at my expense. After he hung up, AJ said, "I'm sorry, Bill, but you can't blame me for being concerned—right?" Then he winked and asked me if I'd like a drink. I told him, "Make mine root beer." His concern was genuine; he didn't want me to fall victim to a flexible elbow.



*The American Phenolic team at its Spring Sales Convention in 1947: (Clockwise from Arthur Schmitt in left foreground), Richard Purinton, Marge McGaffey, "Zip" Benton, Charles Mikl, Bill Rous, Carl Raabe, and guest speaker. (Clockwise from far right guest speaker in foreground), John Woods, Leslie Devoe, Earl Dietrich, Don Alexander, Ben Boldt, Ringland Kreuger, and Jack Dublon.*

While Arthur Schmitt was a deeply religious person, the matter of religion never intruded into the company picture. With the exception of Donlan, no other member of the top group was a Catholic. One religious incident is recalled by Bill Rous, a Christian Scientist, as a wartime experience he will never forget:

We were deeply involved in the Manhattan Project, the name given for the atomic bomb undertaking though at the time it was a mystery to us. It had an office on Michigan Avenue and purchased a tremendous amount of coaxial cable from us, a contract we were awarded not by competitive bid but by the determination of the head buyer, on the basis of tests he conducted, that ours was best. He was a strange man but a very clever inventor with a number of patents in the consumer field, one of which was a super-sonic device in vacuum cleaners which made them more effective in drawing dirt from carpeting. At lunches together, he regaled me with some of his inventions, which I naturally found impressive. When he asked me at one session if I could arrange for him to meet privately with Mr. Schmitt for at least an hour, I assumed he had in mind something that would interest the company.



I asked Mr. Schmitt, emphasizing the man's importance as a cable buyer and my impression that he had an invention the company might be interested in. He agreed to meet with him on a Saturday morning.

I met the man at the employment entrance, wondered why he had four or five books under his arm, and took him to AJ's office. Mr. Schmitt greeted him cordially and, when I began to excuse myself, asked the man, "Any reason why Bill shouldn't be here?" and then "What's on your mind?"

"I am here today to talk to you about the greatest evil facing mankind," he said. AJ leaned back in his chair with his cigar and said, "Oh? What might that be?" The fellow says, "I'm talking about the evil of Catholicism." You can imagine my reaction: I almost fell out of my chair. I looked at AJ, saw that cigar quiver for just an instant, and held my breath during a long pause, perspiring in every pore. If it had been anyone else, I imagine a skull might have been fractured. But AJ finally said, "Young man, I don't think we really have anything to talk about this morning." He turned to me, "What do you think, Bill?" I said, "I agree, sir" and told the man, "You better take your books; let's go."

When we got out of the office, he said to me, "What's wrong, what's wrong?" I said, "Man alive, do you realize you just made an ass of yourself in front of a devout, dedicated Catholic gentleman? Let's get out of here. You represent a lot of business to us, but not that much. If I'm unemployed on Monday, I'll be on your doorstep looking for work."

When I got back to my office, AJ was sitting there, smoking his cigar. He said, "What rock did you find that guy under?" I apologized, said I was sorry, thought he was going to offer us one of his inventions. God bless his soul, AJ started to laugh and said, "Don't worry about it. You learned another lesson."

One of the paradoxes in the character of Arthur Schmitt was that, though he was an extremely generous person, his pay scales were "really a disgrace," says Bill Rous, even up to the time of AJ's retirement. "He used to say that when people have a lot of money, they get spoiled. Well, he never gave us the opportunity to get spoiled!" Yet his secret charities were numerous. When Donlan informed him that a female office employee, who was a cancer patient, had exhausted her savings with bills in and out of hospitals, Arthur Schmitt wrote



*The Franciscan Saint Joseph, Friary in Tokyo, Japan, named units for Arthur's parents in appreciation of his generosity. A mission in the Philippines was also indebted for Arthur's substantial gifts.*

checks that eventually totaled \$50,000. His contributions always carried the injunction that "if I ever hear about this you'll never get another dime from me." His annual gifts to relatives aggregated over the years well over a quarter-million dollars.

"Arthur Schmitt was not a skinflint," says Donlan. "It's just that, being a frugal person with simple needs, a bachelor without a wife and children to support, he never gave that much thought to money. I don't think he really understood a family's need for money." Rous agrees, but adds that the only thing he ever received from Arthur Schmitt, aside from his relatively modest pay check, considering his growing responsibilities with the company, was a single gift of 200 shares of company stock, worth at the time \$4.50 a share—\$900.

"He was really a soft touch," says Donlan. He recalls an occasion when he came into Mr. Schmitt's office to find a man soliciting a contribution for his political organization. He displayed a check for \$20,000 from Paul V. Galvin of Motorola as an inducement, and Arthur was ready to respond. Donlan, however, asked if the man was a registered member of the organization and if he had been approved for solicitation by the Association of Commerce and Industry. The man beat a hasty retreat, and Arthur promptly informed his friend Galvin.

"This kind of thing happened with such frequency that John Woods and I developed a formula and assigned a committee to handle gift requests, with AJ's approval," Donlan says.

Arthur Schmitt was not penurious when it came to rewarding people for work done for him outside their regular employment. Donlan remembers that on more than one occasion, he was slipped a \$100 bill for tasks he was undertaking on Sundays at Fournier.

Despite his low pay scales, his people loved Mr. Schmitt. The shop personnel like to have continuous employment, and the company was able to boast for many years in its advertisements that, except for a temporary shutdown immediately at the close of World War II, it never had a layoff in its history.

"When things were slow, we would announce that if employees wanted to take a 90-day leave of absence, it would not be counted against their service," Donlan says. Women with children especially liked to have the summer off. Another policy of Arthur Schmitt was that no one would be laid off during the holiday season, from Thanksgiving past New Year's. These practices were unfathomable to people like Frank Leach, who came from the auto industry where periodic hiring and firing were accepted ways of life.

It is significant that the first strike in Amphenol's history came after its merger with the Borg Company in 1958 and involved the Borg employees' union.

The fact is that Arthur Schmitt was truly loved by his people. He thought of them as his family and made them feel it. Bill Rous recalls when he became engaged to Shirley Baumruck, who as Albert Dushek's secretary also handled the company payroll. "Payrolls being dear to AJ's heart, he became well acquainted with Shirley and thought very highly of her," Rous says. "Occasionally he would bring her souvenir gifts from his trips."

When I gave her the engagement ring, the word spread like wildfire, and as I arrived early the next morning, Mr. Schmitt was already there and beckoned me into his office. He said, "Sit down; I want to talk to you. I understand you've been passing around diamonds." "Only one, sir," I said. "I just want you to remember

something," he said. "I have known Shirley longer than you and have a very high regard for her. You had better behave yourself or you could have a problem." Then he gave me a dissertation on what made for a successful marriage. From the way he talked, you'd have thought he had been there. He concluded, "You'd better take good care of our girl."

AJ loved Amphenol romances and marriages, when both parties were Amphenolians. He seemed to feel that it was partly his doing, and he enjoyed it immensely. It was proof to him that Amphenol was indeed a family.

During World War II, the company received a call from the public relations office at the Great Lakes Naval Training Station, inquiring if it could provide 14 ladies to be escorted by young officers in training to a formal dinner dance at Chicago's Lake Shore Club. After discussion with Mr. Schmitt, Martin Donlan was given the delicate task of selecting the girls who would attend. They were provided with new formal gowns and corsages, and on the appointed Saturday evening, the group set off, escorted by Marty and Marge Donlan and Bill and Shirley Rous.

We got to the Lake Shore Club and waited and waited for the Navy men to show up [Rous says]. Marty called Great Lakes and talked to many people, none of whom knew anything about this officer group. Here we had 14 young ladies in beautiful gowns, all dressed up and no place to go. As usual, we turned to AJ, called him at home (it was then after 10 o'clock), and Marty asked if he'd mind if we took the party to the nearby Chez Paree, then Chicago's and one of the nation's leading night clubs.

AJ thought it was a great idea and said he'd join us shortly. He must have broken a speed record or two between Austin and the Gold Coast, because we had hardly been seated when he walked in, resplendent in his tux.

We proceeded to have an evening which was undoubtedly better than the other party would have been. AJ danced with every one of the gals—not once but several times—and we stayed there until the band gave up.

An interesting sidelight was that the girls, whom Marty and I referred to thereafter as AJ's harem, swore each other to secrecy. They agreed that if asked at the office about the party, they would



*Amphenolians in black tie: (Seated, from left), Carl Raabe, Arthur Schmitt, banker John Mannion, and John Woods. (Standing), Walter Wade, Dr. Rodolfo Soria, George Oehlsen, Ben Boldt, Bill Rous, Marty Donlan, Ray Carroll, and C. V. Wisner, Jr.*

reply, "It was fabulous!" If asked about their Navy partner, they would respond, "He was great!" It was obvious that the girls were happier at having spent an evening of dancing and dining with the president of the company than they would have with a budding ensign.

I don't know how many men in Arthur Schmitt's position would have put themselves into a tuxedo at that hour of the night and gone to the rescue as he did. But he enjoyed every minute of it—and the girls knew he did.

He had great difficulty firing a person, preferring to shift him out of a position he couldn't handle into another less demanding. When department heads mentioned the deficiencies of an employee, his reply would usually be, "Why don't you change things around so he'll be doing something he can manage." After a while, many employees recognized they had fallen short, and some left of their own accord.

When one such person dropped out, Bill Rous learned of it in this fashion:



*AJ is doing what he liked most—talking to his “family”—and Marge and Marty Donlan (left) and Shirley and Bill Rous love it.*



*It’s a question here of who is teasing whom and the Rouses enjoy the dialogue.*



*He is serious for a moment, but Bernice and Jim Cuber (left) and the Rouses know that the punch line is coming.*

His desk and mine butted each other for lack of space. I got in early, before 8 o'clock, and AJ was there, cigar already in hand. "What are you sitting there for?" he asked. "You belong at the other desk." I said that was Mr. So-and-so's desk. He replied, "He's not with us any more. Whatever he was doing, I want you to do." Among other things, this gentleman had been responsible for pricing Amphenol products. Now AJ was in effect telling me to assume that responsibility. Nobody, but nobody, knew less about pricing at that time than I did, and I finally got the nerve to tell him so. He knocked the ashes off his cigar and said, "Not a thing there you can't learn—and do better than he did!" And that was the end of it.

In all their years with Arthur Schmitt, Rous and Donlan recall only one person whom Arthur Schmitt actually fired. During the war, major customers pressed certain Amphenol employees to expedite their orders in preference to other customers'.

Philco's interests were handled by a young lad, who this one day had been taken out to a long lunch and returned in mid-afternoon, well inebriated [Rous recalls]. He staggered down the aisle of the general office in full view of 50 or 60 employees, bumping into desks as he came. I had a desk outside Mr. Schmitt's office and tried to intercept him. Unfortunately, I couldn't reach him in time, and as he opened the door of what he thought was the men's room, he actually fell into Mr. Schmitt's adjacent office, flat on his face halfway across the threshold.

AJ had an important visitor, but he rose calmly from his desk, stepped over the figure in the doorway and, with his finger pointed at him, said to me, "Fire him!" That's the only time I ever heard those two words from Mr. Schmitt.

That evening at dinner, I tried to persuade AJ to change his mind: The lad was a basically good employee, reliable and personable, and had several children. He swallowed hard and finally said, "Bill, if only you and I had seen this, I'd agree with you 100%. But with all those people out there, we've got to do it." Then he added, "Give him a good reference and see if you or Marty can land him another job."

Despite poor pay, his people swore by Arthur Schmitt and were as loyal to him as he was to them.

In all my years of close association with AJ, under circumstances that were often very demanding, I never saw him lose his temper and never heard him raise his voice or yell at anybody [Rous says]. As I developed in the business I came to appreciate how unusual this was, particularly with so-called big men, some of whom, I discovered, were little men in disguise. Many felt they had to show authority or leadership by sarcasm and demeaning remarks. AJ was always in control and gracious under every circumstance, whether a tense business situation, an industry banquet, or a social occasion. He just flowed into it. He had a touch that was unbelievable. He could talk to a brassy salesman, a Harvard School of Business graduate, or a major industrialist with equal aplomb, right on their levels."

This ability to be at home with anyone extended to small children, as Arthur's nieces and nephews can attest. Bill Rous recalls the time on a Saturday morning when he took his three-year-old daughter Bonny to the office to release his wife, Shirley, for other duties.

I put Bonny at the end of my desk with a pad and pencil and proceeded to get to my work. I had been at it for only a few minutes when AJ walked into the office. I introduced Bonny to him, and he sat her on his lap and proceeded to enthrall her with stories which he illustrated with his cartoons for the better part of an hour. He treated her in such a way that she felt she was in the presence of an old friend. It was one more reflection of AJ's great flexibility and his capacity to make anybody feel at ease. For a long time thereafter, Bonny would say, "When am I going to see Mr. Schmitt again?"

His salesmanship was incredible. "Arthur Schmitt could spellbind you," says Martin Donlan. "If you had a serious personnel problem with anyone, you gave him to Arthur Schmitt for a half-hour and your problem was solved." "He was the most quietly effective salesman who ever drew breath," says Rous. He recalled a situation when every major facility of General Electric was tied up in knots because of the American Phenolic's failure to meet shipping schedules. Frantic phone calls from West Lynn, Massachusetts, Syracuse, Schenectady, and other G.E. operations failed to produce desired results.



Finally two top G.E. executives insisted on seeing Arthur Schmitt in person.

This was when we were still on Van Buren Street, and I was in my first year of employment [Rous remembers]. I reviewed the picture, tried to run over the orders and schedules but I could tell he was not paying much attention. My mouth fell open as he leaned back and said to these fellows: "What do you do when you get something stuck in a pipe? You push something into the pipe, and what you're after will come out the other end. In your particular case, what we need from you is more business, more orders that we can push into the pipe." Well, the discussion went around and around, but it always came back to Schmitt pushing, pushing—"more orders into the pipe."

I finally drove these fellows out to Midway Airport and when we got there, one of them turned to me and said, "I don't know why the hell I feel so good. We didn't get anything we came for. All we did was make a commitment to give that guy Schmitt more business."

All the way back to Van Buren Street, I said to myself, "Willie, you have just learned a great lesson." That man could get business out of a stone if it was there.

Like many others, Rous confesses to being mesmerized by Arthur Schmitt.

There were many times when I asked myself, "Why do I, like many others, work as we do for Arthur Schmitt?" It certainly wasn't for any monetary reward. There was a magnetism about the man that not only drew you to him, but you tended to joke about the hours you worked, the demands he made upon you in his quiet way, the fact that, though he never asked you to come in on a Sunday, you felt a compulsion to be there.

Some of the things he did became legendary stories. His workers would say, "That's AJ! That's the old man!" However they referred to him, to practically everyone, Rous included, to his face he was always "Mr. Schmitt."

He was a presence, a presence wherever he was [says Rous]. There could be an industry meeting, or a banquet, with some of the nation's top corporate heads present, and when AJ entered quietly, cigar in hand, you'd hear whispers, "Who is that?" His name didn't

mean much and Amphenol was then hardly a household word, yet he conveyed something special. "Who is that man?" they'd ask. This was a tremendous advantage with people—with his own employees and even more with customers.

Rous, who is now a management consultant residing in Prescott, Arizona, says he regularly gets phone calls from former Amphenol employees in other parts of the country, reminiscing invariably about "those great years."

"They'll say, 'I'm working for a good company, but it sure isn't what Amphenol has been. Boy! Those were great years, weren't they?'" There is an informal organization on the West Coast of ex-Amphenol workers who gather once a year to share their memories. "It would be a great lift," Rous says, "to sit down with them and talk about AJ, his personality, his quirks, the manner in which he made us all feel we had a heavy oar in moving the Amphenol boat."

He and Frank Leach, the former vice president of engineering, regularly converse at length via phone about their experiences together. Now the chief executive officer of a major Northern California firm, Leach has told Rous that he tries hard to make his present company reflect what he felt at Amphenol; it is thriving, but he confesses that the "mystique" of Amphenol seems to be lacking.

Rous is often asked why he chose to retire at 55 in 1969 as Amphenol's president:

After Arthur Schmitt's retirement in 1964, Amphenol continued to be a reflection of his philosophies and particularly his ability to make all of us feel that we were part of something unique and meaningful. After the merger of Amphenol with Bunker Ramo (in 1968) I began to realize that the Amphenol which AJ had founded and developed and loved so dearly—an emotion that so many of us shared, and I more than I really knew—that Amphenol no longer existed. The new people really did not care about Amphenol in the way that we did. They had no emotional attachment, and I guess I couldn't blame them.

Whereas in former days, Rous would arrive at his office at 7:45 to find his secretary, Gladys Short, already there (her

husband, Jim. was a shop foreman who came in at 7:30) and he and Gladys would have an hour's dictation before the phones began to ring, "now for the first time in 28 years I found I had to force myself to go down to the office. It was time to quit."

"He was a great person," says John Woods. "I had the highest respect for Arthur Schmitt."<sup>5</sup>

"He was a tremendous guy to work for," says Marty Donlan. "I thank God he came along and I was at the right street corner to be associated with such a gentleman for so many years."

"I felt nothing but total respect and total gratitude for Mr. Schmitt and the years we had together," says Rous. "In my earlier years, he made me feel more like his son than his employee."

*“He was teaching all the time, whether you were riding with him on the 20th Century Limited or at Wesley Memorial Hospital, where he took us for periodic tests.”*

—Carl A. Raabe

## International industrialist

It is an irony of history that destructive wars energize mankind to incredible advances in science and technology. Just as the automobile industry was rapidly developed during World War I, the entire electronics industry vaulted during World War II because of the multiple new uses to which it was put—certainly far more than the designer of the original molded tube socket had in mind.

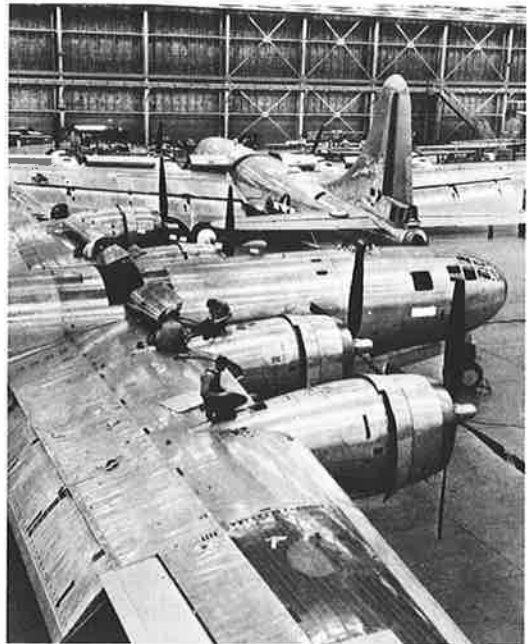
The average person thinks of connectors in terms of electrical plugs and sockets needed to activate vacuum cleaners, lamps, television sets, and other appliances in a home. There is an enormous difference between these needs and the 40,000 and more connectors required by modern electronic technology. Thousands of connectors are needed to keep one airplane flying. The B-29 bomber, the first of any importance operated by the U.S. military forces in World War II, had 1,600 connectors.

Arthur Schmitt's connectors permitted an airplane wing to be removed and, without rewiring of any related parts, another substituted simply by plugging in the connectors involved. Any part of a plane destroyed, disabled, or worn out—or merely requiring periodic inspection—could be replaced without re-wiring other than coupling the proper connectors.

It was not only military installations that helped American Phenolic to become the largest connector manufacturer in the world. Its superior components found their way into everything from all types of heating equipment and computers to electrocardiographs and electronic organs. In 1952, its 47-



*Amphenol  
connectors  
and cable being  
installed in a  
Boeing B-29  
Superfortress*



*B-29 Flying  
Fortresses  
under construction  
at Seattle, Wash.*

contact plugs were installed in Yankee Stadium, New York, for what was then the world's largest and most complicated scoreboard.

A tribute to the engineers who designed connectors in a later era was paid by the *Amphenol Connector Division News* in a May 1972 article celebrating the firm's 40th anniversary:

Designing our kinds of environmental connectors encompasses tremendous detail and heavy concern about minute considerations. Contacts can range in size from the thickness of a pencil to the thinness of a needle, and all must perform with the same reliability. A shell the size of a half-dollar may house two of those connectors, 155 contacts, or any number in between, but they must be impervious to the same elements, both natural and imposed.

Each pair of contacts, the pin and the socket, which mate inside the shells must operate independently of every other contact, which means they must be insulated from each other within a very small area—but still work as a 'gang' connection.

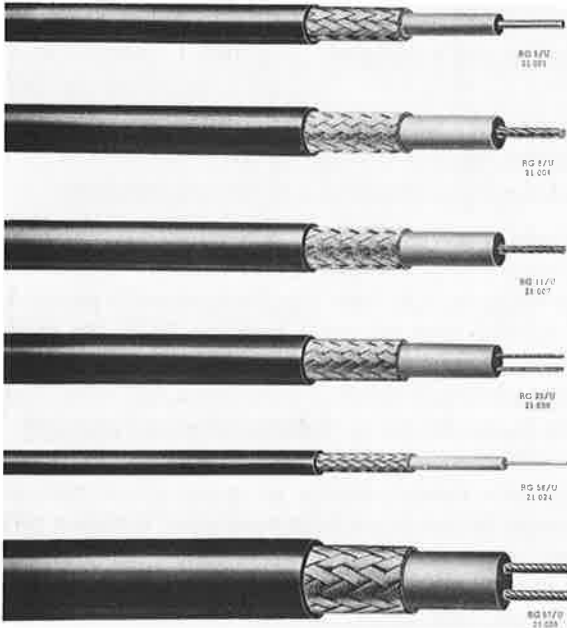
The materials that engineers investigate, isolate, and use have very specialized, almost indestructible properties and must not only withstand abuse but comply with such requirements as rigidity, hardness, toughness, and maintain constancy of these characteristics through heat or cold and still be malleable enough for manufacture . . . or they must be flexible, durable, resilient under extreme conditions and be molded into tiny parts.

It should be obvious that these materials are very expensive, so the engineers must also design components that can be manufactured practically with the least amount of waste.

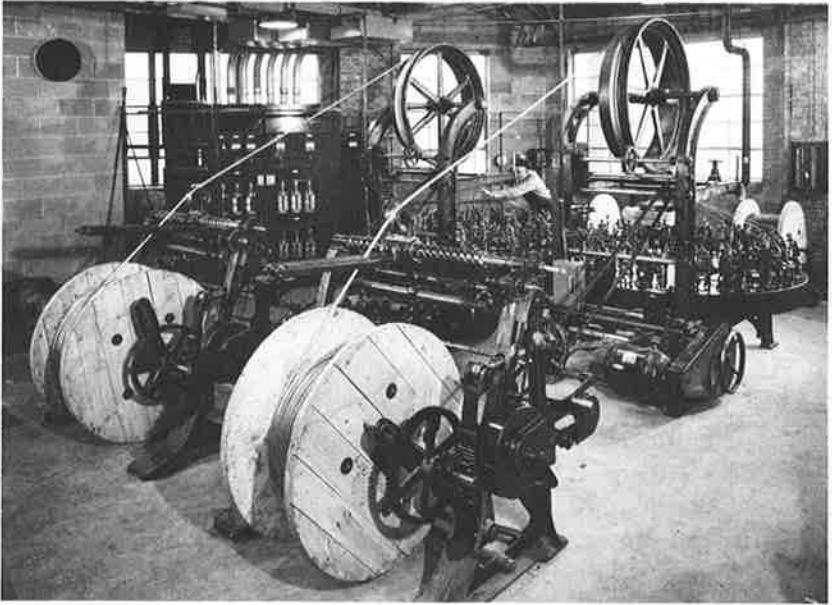
Every area of a connector must be designed to the most exacting dimensions. Engineers design and plan to the thousandths of an inch . . . the split hair . . . the micro-second . . . the nano-second.<sup>1</sup>

As has been noted, the refinement of polyethylene coaxial cables played a vital role in the war effort. They were found in the Hiroshima bomb which dealt the ultimate blow. One of the largest single orders American Phenolic received in the war was a contract of \$1 million for coaxial cables.

With the Japanese attack on Pearl Harbor on December 7, 1941, and the nation's declaration of war the following day, American Phenolic was already rolling in its Cicero plant as a prime defense industry serving the National Defense Program.



*Essentials of a coaxial cable: a central conductor, polyethylene dielectric, braid shield (the second conductor), and jacket*



*Braiding machine installs conducting shield over cable.*



It had expanded to a 184,000 square-foot capacity with rapidly increased employment, eventually reaching a three-shift seven-day week with other leased plants elsewhere to augment its production capacities. By the end of the war, the company had 45 sub-contractors making electronic parts under its specifications.

Small wonder, then, that the young corporation, less than ten years old, grew tenfold in total sales between 1941 and 1944 and that it produced an estimated 62% of all the connectors used by the aircraft industry during World War II.

Under Mr. Schmitt's leadership, the company was pressed into heroic service in the war years. "People worked every hour they could stay awake—and slept on the desks when they couldn't," an employee recalls. Arthur Schmitt had said early in 1942, "To do our share in meeting this challenge, we have acquired a new plant, and we pledge ourselves to build and increase our production without stint to meet the needs of the day."<sup>2</sup> So, "without stint," production went on 24 hours a day at the Cicero headquarters. Some employees worked 70 hours and more a week, and American planes got their connectors.

Great shipments overseas during the war occasioned the need for a cable address, which quite readily became "Amphenol." This is how a trademark, with blue background naturally, came into being for products of the American Phenolic Company. During the war the words, "Amphenol Connector," became almost a generic term.

In his desire to make the *best* product, Arthur Schmitt was not completely happy with the insulation in his connectors. Its composition varied enough in the molding process so that it was sometimes out of tolerance. His researchers were instructed to tackle the problem, and they came up with a substance which was christened, quite naturally since Arthur was its progenitor, Blue Resin. To process it, he acquired a defunct chemical factory in Forest Park for \$100,000, and the Acme Resin Company came into being in 1943.

The naming of this and other Schmitt companies provides an interesting insight into Arthur's wary mind. One of the things the Depression had taught him was that firms with names

beginning in the latter part of the alphabet often waited longer for their money. Companies started paying bills beginning with the letter *A* and often were out of cash by the time they reached *J* or *K*. His firms would be in front in times of financial stress!

Another reason, he added later, was that it was advantageous to have the firm name on top in industrial, catalog, and classified listings. Prospective customers tended to start their investigations with the first names on the lists.

Acme Resin was a great success. When a patent had been obtained and his own company needs were satisfied, Blue Resin was sold to Arthur's competitors. Patent rights and royalties as usual went into the foundation, helping to sustain it after other patents had expired.

Acme Resin figured in the development of one patent which produced more royalty income for the foundation than any other in its ultimate portfolio of 70. Arthur's brother Charles, a foundry executive, mentioned to him the problem he was encountering in casting metals in sand molds. Employees were getting ill from the gases released from the reaction of the hot metals on the molds. Moreover, the casting had an unsatisfactory sand-pitted surface. Acme's answer was to coat the grains of sand with resin by using a muller to mix the plastic and sand. The process effectively covered the sand, preventing the production of offensive gases and producing the smooth cast finish the foundry people were seeking. The resulting patent produced high royalty returns from all over the world—Japan, Germany, France, and other countries—as well as the United States.

Early in the war, the British made available the type of polyethylene which they were developing. "It came to us like bars of soap, little pillows," says Carl Raabe, "and we ground them down and fed them into our machines." Together with Dr. Selvidge, who continued to come in periodically on a consulting basis, Raabe developed a technique of extruding polyethylene onto wire, from the finest to a quarter-inch in diameter with polyethylene insulation up to one inch in diameter. "In addition to the insulation, we used our own braiding machines to

put on a second conducting shield and covered the coaxial unit with a polyvinyl chloride jacket," Raabe explains.

The firm had an A-N contract and cooperated with the U.S. Navy in writing American standards for A-N connectors and coaxial cables that are still in force today.

The polyethylene development introduced a fourth major product line for the company. It found a ready market with wide acceptance in such industries as aircraft, shipbuilding, railroad and airway communications, as well as countless other requirements for military applications during the war.

The early development of this clear soft plastic yardage is reflected in old catalogs showing it as covering for baby carriages, mixers, and other equipment as well as tailored into raincoats, aprons, and garment bags—even as a do-it-yourself Disney-type fish design, with instruction for etching and back-lighting as "a novel decoration for the home."

The cessation of hostilities in 1945 brought an abrupt end to war contracts. As a result, the firm's net sales plummeted from a peak of almost \$39,000,000 to under \$5,000,000 in 1946. The decline produced the only net annual deficit (\$423,000) in the firm's entire history.

Controller Woods recalls the abrupt halt in production as the war ended. "We had two teletypes working day and night over the weekend as we received 10,000 order cancellations aggregating over \$9,000,000," he notes. "We filed claims for approximately half of them to get paid for work we had done and salvaged almost \$4,000,000."

The Employment Department was ready with termination telegrams to all its wartime work force. "Maybe AJ himself got one!" Donlan says. Employees were gradually called back as the company reverted to peacetime production.

In anticipation of the end of hostilities, Donlan worked to set up a contract termination department. He brought in his brother, J. Raymond ("Ray") Donlan, a vice president of the Chicago Title and Trust Company, who worked with Arthur Schmitt and others on evenings, Saturdays, and Sundays to review war orders and get all claims adjusted. "The Govern-

ent settled with us fast," Donlan says, "because we got our claims in early."

With its supplies of plastic powder, the company turned to the production of toys. "One of the things we made most of was a child's potty," says Woods. "It didn't represent a lot of money, but we got rid of scrap material." The name given to the short-lived subsidiary was, typically, Agate Plastics Corp.

In anticipation of the Allied victory, Arthur Schmitt reorganized the company in 1945 from his privately-owned firm to a publicly-owned stock corporation, offering 345,000 of 400,000 shares for purchase. Book value per share, which had been \$1.30 at year-end 1941, rose to \$9.39 by year-end 1945—still far short of values that would triple in years ahead.

Sales representative Dan Bittan recalled that when American Phenolic filed a prospectus with the Securities Exchange Commission as a condition of becoming a public company, earnings of top personnel had to be listed. As he and Arthur reviewed the report, Arthur noted that Bittan's reimbursement in sales commissions led the list at \$256,000 while his own as chief executive was only \$75,000. "Wanna swap jobs?" he facetiously asked Bittan.

He endeavored in other ways in 1945 to prepare his company for the drastic changes that war-end would bring. "As a hard-hitting, efficient production unit," he told employees in one of a series of noon-day talks, "we successfully overcame tremendous difficulties on the road to war, and I am sure that if we all continue to work together, we shall have a rapid and pleasant return to the pursuits of peace." He asked for harmony among individuals and departments in circumstances that would require readjustments and personal sacrifices.

Arthur noted that the transformation would demand changes in shop procedures, applications of machinery and equipment, working hours, and job tasks. He asked for forbearance as management made the necessary adjustments.

He called attention to the need to keep peacetime production at a high level not only for employees' own sakes but for returning servicemen as well.

Many of these men will come back with an enviable technical training augmented by a great deal of actual experience. It will be our duty to see that they are permitted to take full advantage of the freedom and security for which they have fought and others died.

The wartime pressures wrought havoc with health and nerves, Arthur warned in one of his noon talks, and he urged employees to check carefully into their physical condition.

Amphenol has provided adequate industrial medical care and has tried to make working conditions the best possible under the unusual circumstances we faced during the war. But these cannot make up for months and months of hard work, loss of sleep, and other things.

The company had a selfish as well as personal interest in the workers, he pointed out. They too owed it to themselves to guard their health in every way they could.

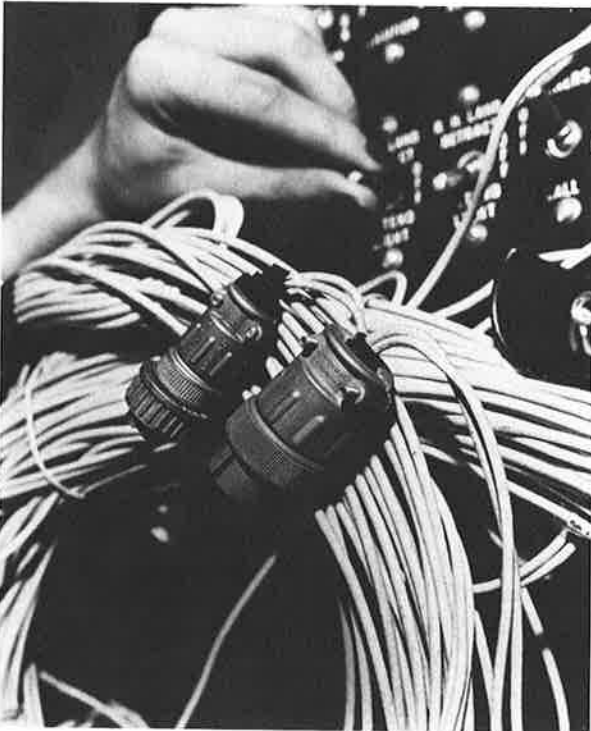
His interest in them extended to their financial security. Their cash-filled pockets were tempting them to buy things at a time when good merchandise and true values were not available. "Normal times will return, and quality will be there," he said. He advised employees to save, to invest in war bonds:

The fellow who spends today is liable to come out on the short end; why not salt away all you can today and wait until the sun is really shining?"

One avenue the company might pursue in the return to peacetime production was suggested by the experience gained in extruding pliable film on the machines Arthur had brought back from Germany. Prior to the war, he had generously made available all the electronic component parts his firm manufactured to people who were toying with television. In 1940, they gave a demonstration to Arthur and his associates, displaying on a 4" by 3" screen images projected by the apparatus. "All we could see were numbers and signals," Raabe says, "but it seemed miraculous that these pictures were transmitted from miles away."



*American Phenolic's cable assembly plant at 63rd and Harlem*



*Amphenol connectors installed in Douglas Aircraft plant at Santa Monica, Calif.*

Now, in the postwar years, American Phenolic developed with RCA a twin-lead coaxial cable, familiar today to every TV owner. The milk-colored polyethylene that housed the leads from antenna to set was affected by sunlight, and a protective pigment was added that gave its customary brown color. One of the Amphenol engineers came up with the idea of shaping the tape like a dumbbell, thinner between the leads, thus saving 20 to 25% of the polyethylene used. Because of the company's know-how in extruding polyethylene, it was the first in the country to produce TV cable.

The success of the company's cable, wire, and synthetics division necessitated the creation in 1951 of a new facility at 63rd Street and Harlem Avenue. This plant with 65,000 square feet was a timely addition as the Korean War heated up the economy. "Already well over 90% engaged in defense production, the end of the year (1952) will probably find Amphenol's four plants all nearly 100% engaged in production vital to the defense of the nation," *The Amphenol Engineering News* reported.<sup>3</sup> It noted that in 1951 Plant No. 2 on 55th Avenue in Cicero went into full production, Plant No.3 was reactivated as a cable-assembly center, and Plant No. 4 opened its doors in August for the production of synthetics and cable, including cable extrusion, wire braiding, heavy injection molding, and other operations. Soon it was to undergo expansion for cable assemblies, plating, engineering, and warehousing. Total sales in 1952 surpassed the World War II peak as they increased from \$13,191,000 in 1950 to \$25,825,000 in 1951 and \$36,114,000 in 1952.<sup>4</sup>

Raabe, who was in charge of the cable and plastic division with offices at the Harlem Avenue plant, had to come in to Cicero every morning at 10 o'clock for a one-hour session with Arthur Schmitt.

I'd bring him up to date, and he'd tell what he wanted done [Raabe recalls]. He'd read over letters I had prepared for our customers; sometimes he'd make me rewrite them—as many as five times when his thinking on a given problem changed overnight.

All of this was part of his teaching process: He was teaching all the time, whether you were riding with him on the 20th Century Limited to New York or at Wesley Memorial Hospital, where he took us for periodic physical tests. He had moved me around the company in all departments except accounting before he put me, when I was barely 23, in charge of thermoplastics, which had become my chief interest.

Amphenol executives remember another "teaching" experience at a health resort called Mudlavia, in Northern Indiana, where Arthur took them to discuss business and rejuvenate themselves while lying in mud baths. Their consensus was that AJ worked them so long and hard they never had a chance for "relaxation."

Still another event of this kind was the lot of Bill Rous shortly after World War II. AJ had recovered from pneumonia at Wesley Hospital and Dr. Marquardt of the Wesley staff refused to release him unless he went to Arizona for a week or ten days under Rous' supervision.

I was foolish enough to pack swim trunks and shorts, thinking that since the good doctor prescribed the warm, dry Arizona climate, we might make it to the swimming pool [says Rous]. We were in Arizona only three days when AJ asked if I had rented a car, saying, "We're going to have trouble calling on people out here if we don't have a car."

From that point, the rest and relaxation concept turned into a working reality.

One night AJ called Dave Marshank, our representative in Los Angeles, and told us to meet him in Tucson. At 11 o'clock that night I drove him the 125 miles to Tucson, AJ sleeping all the way. We held a planning session with Dave in a hotel there until four A.M. Of course, AJ was fresh as a daisy, but Dave and I couldn't keep our eyes open.

The following morning found us at an Air Force modification center near Tucson. AJ even insisted we call on a distributor in the area. Later, we drove back to Phoenix, stopping at Goodyear and a couple of other companies. AJ loved every minute of it. I got back to



Midway needing a rest. My swim trunks were in the same immaculate condition as they were when I left Chicago.

Another insight into Arthur Schmitt's personality was afforded to Rous during the Phoenix visit. While staying at the El Conquistador Hotel there, they encountered a charming lady named Helen, whose last name Rous can't recall. One of her interests was the restoration of Tombstone, Arizona, toward which she had received some support from Hollywood movie studios.

It became apparent to Rous that Helen, recently widowed, was a person of Arthur's earlier years. For several hours she tried to persuade him to put up a small factory near Tombstone for the manufacture of cap pistols, gun belts, and other Western souvenirs. Proceeds of the enterprise would go toward the restoration of Tombstone.

AJ listened patiently, gracious as he always was, and at length gently let her know there was no way he would get involved. At one point he excused himself, and Helen turned to me: "Bill, I bet you wonder who I am."

She told me, "We were very close, but by the time I think Art was ready to pop the question, I was already committed." Then she added, "I have never lost my affection for him. You are very lucky to be associated with a man like Arthur."

Rous tells of the time he accompanied Arthur Schmitt to the Battle Creek (Mich.) Sanitarium.

On the spur of the moment, he would take off for a couple of days without a word to anybody at the office. This time he asked me to go along. We caught a late train, arrived at Battle Creek close to midnight. Instead of going to bed we were stripped and given an enema to end all enemas, followed by exercises.

In the morning I was very hungry and mentioned to AJ that a couple of eggs, with a nice slice of ham and even a rasher of bacon, would taste great. He didn't say a word. After we got to the dining room, I understood why. The sanitarium served only non-meat items—"meat loaf" made out of cereals, "pork chops" only in shape.

We went through the first day like this, and that night around 9 o'clock AJ said, "How'd you like to take a walk into town?" "Is this something we can do?" I asked. "Well, there's no harm in it," he said. So we left the building through the rear. We were no more than 50 yards away when AJ pulled out a cigar and lit it. Smoking was strictly forbidden.

We walked into town, and from the ease with which AJ located this little restaurant I knew he had been there before. In fact, the proprietor recognized and greeted him warmly. We proceeded to have an overloaded platter of roast beef, after which we walked around town awhile and headed back. When we were about 20 yards away, alongside the porch which encircled the building, AJ flipped his cigar into the bushes.

He didn't realize that a sharp-eyed, elderly nurse had seen him and, as we ascended the front steps, she started to give it to him. "Mr. Schmitt, I am surprised! I am ashamed! I never thought you would do that! Where have you been? You know you must not smoke while you are here." AJ took on the expression of the little boy caught with his hand in the cookie jar, but he came up the steps, put his arm around the dear old lady, and proceeded to talk to her. After he had turned on the charm for a couple of minutes, I would have bet \$100 that if he took another cigar out of his pocket, she would have offered to light it for him. She was smiling! She extracted his promise that he would never do that again. She made him admit that he had had roast beef, but she seemed to soften to a degree that, if he had invited her to join us to the restaurant the next day, she probably would have gone along."

In 1946 Arthur Schmitt paid \$300 an acre for the 526-acre farm at Sugar Grove near Aurora, Illinois. His idea was that his brothers Charles, Albert, and Henry (Frederick was now living in Oklahoma) would establish homes there in a Schmitt colony. His nephew Edward went out the next year at the age of 22 and worked the farm for five years, and in 1948 his father, mother, and brother joined him. But Betty, Charles' wife, and Mary, Albert's spouse, were reluctant to leave Chicago, and the rest of Arthur's plan never materialized.

That was the purpose of the farm [Edward says], "to keep the family united. He was great on that. He had tremendous affection

for his 12 nephews and nieces. During their early years, he would romp with them on the floor while his brothers played pinochle at the family gatherings.

Throughout their lifetimes the brothers remained close. Albert worked for Arthur until his death, Frederick in the '30s and early '40s until he joined the General Electric Company in Oklahoma. As best they could, his brothers helped Arthur to meet his payrolls in the trying early days, and when his business was profitably established he was generous to family members and close friends with substantial gifts of money at Christmas.

Their camaraderie was something to behold. "I remember when I was in the third grade," Marybeth Schmitt recalls, "and I was riding in Uncle Art's big Fleetwood out at Sugar Grove and he and his brothers were teasing each other. I loved it because you never knew what was coming next."

Art was less overt than his brothers, though every bit as warm and affectionate. "He always took an active part in family activities, but was the more quiet family member," Edward recalls. "He never imposed his position on others unless he felt it would be detrimental not to do so. He tended to be recessive rather than dominant.

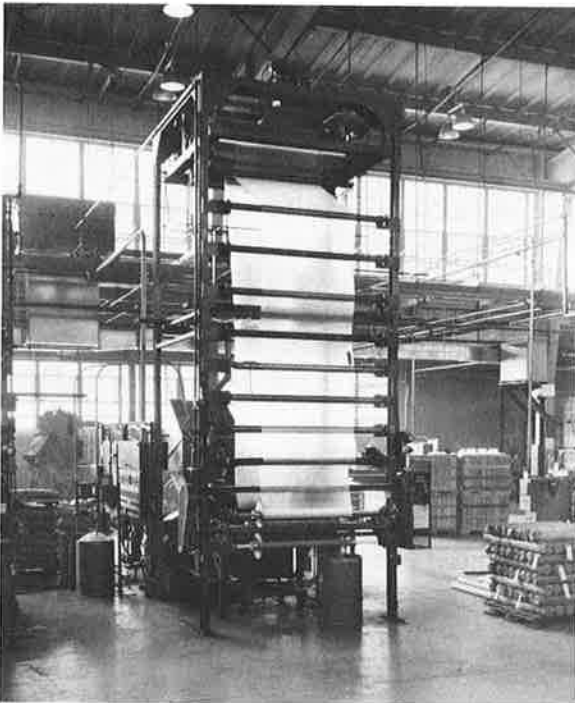
"He never indulged in self-praise, always downplayed his role in accomplishments he had a right to claim," Edward says. He astounded his sister and brothers attending the 1947 graduation exercises of DePaul University as the citation awarding him an honorary degree indicated his founding over five years earlier of the Fournier Institute of Technology. Close as they were, his family had never heard of it.

"He was always low-keyed, except on very rare occasions," Edward recalls. "Despite the mistakes and disappointments in his life—and there were some—he never seemed shaken by them. He was a very balanced person. And he was very reachable, to his fellow workers as well as to his relatives."

Another peacetime use suggested for polyethylene was packaging of goods and products. The experience American Phe-



*Durethene plant at 7001 West 60th Street*



*Durethene  
extruder  
producing  
polyethylene  
tubular film at  
new plant*

nolic had gained from working before the war with German-originated polystyrene enabled it to improve the British plastic with advanced techniques for extruding and molding.

The use of plastics in packaging food and other products, Arthur Schmitt and Carl Raabe could foresee, was just one aspect of its commercial and industrial possibilities. Immense quantities would be required to provide moisture seal under and over poured concrete highways, insulate buildings from bad weather while under construction, provide air sealers and moisture repellents for all kinds of materials, etc. The heaviest use at the time was to protect white rubber with polyethylene film until it was ready for molding onto whitewall tires.

The dilemma confronting Arthur and his board of directors was whether to launch a new industry unrelated to electronics. A highly trained and technically skilled electronic sales force was not prepared to sell the new product; entirely new marketing techniques, facilities, and manpower would have to be developed.

While he agreed with the board's decision that the product should not be a part of Amphenol's future, Arthur was reluctant to see what had been accomplished go to waste as production was shut off and equipment stored. When he found that Raabe was in agreement, he acquired vacant land at 19th Street and 55th Avenue in Cicero and improved it with a one-story building which he leased to Raabe for a five-year term. Moreover, he arranged with the Austin National Bank for a \$75,000 loan, which Raabe signed. "The loan bought a lot of equipment in those days," Raabe says. "I hired some men and women and we moved in. Within four months we were making a profit."

Soon the firm, which was named the Durethene Corporation, was extruding tubular film, increasingly in demand for packaging, as well as the flat variety. As it outgrew its facilities, Arthur Schmitt, recognizing a thriving enterprise, erected another plant, which the firm also rented. He also financed in 1952 the purchase of land and the construction of a plant in Los Angeles, and Durethene almost immediately turned it to

profit. Finally, he built a plant at 7001 W. 60th Place, near the 63rd and Harlem address, with Durethene as lessee. "It was a large, beautiful operation," Raabe says, "with 50,000 square feet, to which we added 20,000 square feet of warehouse space.

If it hadn't been for Mr. Schmitt (that's what I always called him) in providing the opportunity and building the plants, the company would never have got off the ground.

But make no mistake: He didn't *give* us anything. He saw everything as a good business deal. We paid good rent on his real-estate investments, we paid 5% royalties to his foundation for the know-how provided by his engineers, and we paid fees on all the patents involved in our processes—all of which, of course, we were glad to do.

Durethene became the second largest film producer in the country, making film and sheeting up to 45 feet wide for such installations as underlaying irrigation ditches in the West and Southwest, where water was scarce.

Raabe later sold the firm to Koppers, Inc. of Pittsburgh. It is today the Arco-Durethene Division of the Atlantic Richfield Company.

Two other Schmitt enterprises deserve mention. To achieve better insulation on wire, a process which would require more intensive heat than coal, gas, or electricity could provide, Arthur Schmitt in 1953 contracted with the Ragnar Benson firm to construct an experimental laboratory at Harlem Avenue and 60th Street. Here it was planned that highly radioactive cobalt, to be purchased from the Argonne Laboratories, would be used to polymerize the plastic, polymonofluorethylene, from a gas to a heavily bonded solid. Named Alkalon, the firm was costing in research as much as it earned in sales and after about ten years it ceased activity.

Another corporation was organized in 1950 for research and production in the aircraft guidance field. It was called Ampatco, following Arthur's penchant for alphabetical up-front names and his combination of principals' identifications. The military services after World War II had brought to this country technically skilled men who were found to be anti-Hitler

and who wished to establish themselves in this country. One of them was Albert Patin (hence the "Am" for American, "pat" for Patin, and "co" for company), whose factory in Berlin with 3,000 employees specialized in the manufacture of automatic aircraft control devices. Now working at Dayton's Wright Field, Patin was introduced to Arthur Schmitt, and in time the corporation was formed, with research, development, engineering, experimentation, and testing at Lemont and production and manufacture in a plant at 1817 South 55th Avenue, Cicero, directly behind the American Phenolic headquarters.

Annual ordeals for the Amphenol staff were major shows<sup>4a</sup> such as the Radio Parts Show at the old Stevens Hotel in Chicago, now the Conrad Hilton, and the Institute of Radio Engineers Show in New York, the biggest of its kind in the world, which then drew 30,000 or more engineers from every part of the globe. A weeklong affair, it invariably drained the energy of every Amphenol member—everyone, that is, except Arthur Schmitt.

People would come to me and say, "How is it that Arthur Schmitt is here every day, morning and night, and yet he always looks fresh?" [says Bill Rous]. During one of the New York shows, after the third or fourth day, I said to AJ, "I can't take this; how do you do it?" "Bill," he said, "I'll let you in on a secret: Now and then you've got to pull a sneak." And he proceeded to tell me how, maybe after lunch with a group, he'd excuse himself and go up for a half-hour nap, possibly a shower and a change of shirt. These catnaps, one or two a day, were all he needed to recharge his batteries.

One thing he had that I lacked: a master switch so that if he decided to rest, all he had to do was sit in a chair or lie on a sofa or bed and in a minute or two he was asleep. He could knock off for a few minutes anywhere—automobile, train, or plane.

One happening during such a convention deserves mention for its demonstration of Arthur Schmitt's coolness and aplomb under any situation. One of the few top female engineers of the Bureau of Ships, who shall remain nameless, developed a friendly feeling for Arthur Schmitt over the years. She liked and respected him and invariably sought him out when they

got together at the shows. She was in a key position as far as Amphenol was concerned, so she was treated with kid gloves. On this occasion, having reached a tipsy state at one o'clock in the morning, she decided she had to see him. John Wilkinson, from Dayton, and Carl Palmer, Amphenol's Washington representative, strove in vain to keep her from going up to his room. From here on, Bill Rous tells the story:

Several of us were sitting in AJ's suite, and he was in the bathroom when she arrived. We told her he was "in chambers" and asked her to wait. She said, "Wait, hell! I gotta see him now!" She barged in, and there was AJ, sitting on the throne, fortunately with an issue of the *New York Times* on his lap. She says, "Arthur, you old s.o.b., how are you?" He calmly said, "Mary, how good to see you. I'm sure you'll understand my not rising."

She sat there on the bathtub and they visited for almost an hour, all the while AJ sitting there with the newspaper as his shield.

Despite his company's role in the development of airplanes, Arthur Schmitt had a lifelong attachment to trains. His three favorites were the 20th Century Limited, the Broadway Limited, and the Capitol Limited. He loved the dining cars, their stewards and waiters, and he found it easy to sleep well on a train. He knew every whistle stop from Chicago to New York; he'd look at his watch and tell his traveling companion, "We must be coming into Pittsburgh." Long after the DC-3 and its successors made air flight commonplace, he never gave up his affection for trains. For some time he avoided flying during the severe winter months and suggested that his associates do likewise, preferring one of the good trains.

Arthur Schmitt made many shrewd choices of the people he wanted on his team, but one of his best, in Rous' mind, was Ben Boldt, whom he had wooed as his advertising manager from the Rockola Company.

Ben had a talent for continuing AJ's basic idea of portraying Amphenol in a manner far more impressive than it actually was [says Rous]. He brought sophisticated developments in advertising and promotion. He made changes in cataloguing so far ahead of



anybody else in the industry that we constantly got inquiries as to who did our catalogs.<sup>4b</sup>

He remembers one occasion when he and Boldt were faced with the task of coming up with an idea for the special convention issue of the *Electronics Magazine*. About an inch thick, it was deemed a waste of money for advertisers who filled it, yet if a company were not included, the industry might think it was going out of business.

In this particular instance, Rous and Boldt conceived the idea of putting an Amphenol ad announcing a new line of connectors on both sides of a page printed on heavier cover stock and located somewhere near the middle of the book so that anyone flipping the pages would invariably encounter it. Boldt added another gimmick: printing the pages upside down and perforating the stock at the spine so that it could be brought home as a catalog sheet.

"Ben was like AJ with a new idea," says Rous. "He'd sit there and you could watch the wheels turning in his head." He says that the reaction at the show was unbelievable. "I had call after call, asking 'What are you guys doing?'"

With its concentration on electronics, the American Phenolic Company's recovery from its 1946 year of retrenchment was sped by the growth of the industry in communications, customer television, space travel, and computerization.

Like radio, which in its early years needed an outside antenna, television also required antenna of a more complex sort to cover the broad-band aspects of both video and sound signals. The company's first development from FM reception was followed quickly by the now-famous "in-line" antenna, of which more than a million were sold.

Another company milestone was reached in February 1948 as it opened in Syracuse, N.Y., its first sales-engineering office outside Chicago. From its beginning in 1932 to that date, the firm had employed outside sales representatives exclusively to sell its products.

These products numbered 8,000 in the four major product lines as the company entered 1950. During the year it intro-

duced a new 15-contact connector to fill a need for instant-quick disconnect applications in electronic equipment. This turned out to be American Phenolic's fifth major product line, which became known as the "rack and panel" connector. As with the other lines, variations and additions blossomed as new series were added.

The new sales peaks achieved in 1952 as the Korean War turned American Phenolic's four plants into predominantly wartime operations continued with only slight abatement in 1953. A new marketing policy established 100 industrial distributors in major areas throughout the United States so that customers could have local sources of supply to serve their emergency or short-run requirements. It had the effect of reaffirming to the industry the company's leadership among components manufacturers.

It came about through the ingenuity and persistence of Bill Rous. In his thorough, methodical way, Rous saw it through from conception to successful operation.

Mr. Schmitt did not want to see every detail which I had meticulously developed, but he did ask how much we were risking. I told him between \$3 and \$4 million and about two years of lost distributor business. He asked me if I had a "fix" or backup on the plan, and when I assured him I did he urged me to go ahead.

Rous had warned AJ that he might receive complaints from every major manufacturing account in the country, telling him the plan was unfair and unworkable.

We agreed to a general reply he would make, and he held to it totally. Sure enough, he heard from old friends at Boeing, Grumman, Motorola—you name 'em. Some threatened to drop us, but he asked them all for a six-month grace period, promising that if the program didn't work we would make amends and see they were taken care of.

Robert Svoboda was one of Amphenol's unsung heroes. His implementation of the program as head of the Distribution Department was flawless. Within 90 days we knew we had a winner, and AJ began to receive the kind of calls he relished. The same people

who had complained now said he had produced a program which was the best thing to hit the components industry.

The success earned Rous and Svoboda one of Arthur Schmitt's rare open compliments.

Martin Donlan contends that the development of this department, later named the Amphenol Distributor Division, was an important key to the company's continuing vitality. Because these distributors signed up to carry a complete inventory of Amphenol parts, they were able to supply small manufacturers in lean times when parts were hard to get. Other company's products were also inventoried and sold. The experience gained in distribution was invaluable when Amphenol later moved this approach to the international scene.

Manufacturers of resistors, condensers, and other components flooded Amphenol with requests for details of its distributor system. "We made everything available," Rous says, "even to our competitors in the connector field because we felt if the program was adopted industry-wide, it would benefit all concerned."

Thanks to the marketing activities and a favorable economic climate, there was no decline in post-Korean production. An open house in February 1953 hailed the inauguration of "the nation's most modern and efficient cadmium plating system" as Plant No. 5 consolidated all plating operations under one roof in the block west of the Cicero headquarters. The plating line became highly automated to dip racks into one tank after another, 24 in all, in a 200-foot horseshoe formation. The plant was capable of plating 125,000 piece parts per eight-hour shift. It used 300 gallons of water per minute with an auxiliary 5,000-gallon tank of sulphuric acid tapped for feeding to the proper tanks as needed.<sup>5</sup>

In 1954, a license agreement was signed with the company's Canadian representative, J. R. Longstaffe, to manufacture the firm's products in Toronto. The name of the new company was Amphenol Canada, Ltd., anticipating the parent firm's action two years later.

The rationale for this development was stated by the *Amph-*

*nol Engineering News:*

The problem facing Canada in the field of electronics is one involving facilities for greater production. Dominion aviation, for instance, has need for all the tools, dies, and manufacturing facilities which the United States now has. It is recognized, however, that the Canadian volume of business will not warrant the vast expenditures necessary to provide these facilities.

The solution to this problem, as seen by the principals, lies in harmonious collaboration between United States and Canadian plants whereby all the necessary engineering skills, intricate assembly techniques, and production methods become available from the States until they can be developed in Canada.<sup>6</sup>

A sixth major product line was introduced in 1954 as the company responded to the increasing use of the specification "to be hermetically sealed" found in orders for components. The Korean war had forced the military services to reconsider the sealing problems of electrical connectors. The Navy's carrier-borne aircraft particularly developed problems caused by penetration of the connectors by hydraulic fluids and cleaning agents such as carbon tetrachloride. A new approach, called "potting," sealed the connectors with a compound known as thiokol. The advantages included greater electrical reliability under varying temperatures and humidity, weight- and space-saving construction, ability to withstand severe vibration, increased reliability in the presence of aircraft fuels, solvents, and lubricants, and lower cost than standard or mechanically sealed connectors.<sup>7</sup>

Arthur Schmitt and his company were now at the crossroads. "Things were getting fiscally tight," Controller Woods remembers.

AJ was concerned about the future of the company and how we were going to get there. If we were to meet the challenges ahead of us, we needed growth and that meant capital. So AJ commissioned me to sit down with Hornblower and Weeks and set in motion plans for raising the money we needed.

Preparatory to an effective presentation of a public stock issue, the recommendation came to change the firm's name to take advantage of its popular trademark, Amphenol. The prospectus, dated August 1956, presented to the public the opportunity to invest in the Amphenol Electronics Corporation.

In announcing the vote of shareholders at the annual meeting, President Schmitt said:

We have felt for some time that "American Phenolic Corporation" has not been truly descriptive of our activities. When the company was started in 1932, molded phenolic was a relatively new dielectric material that connoted both newness and quality. It was used in our first radio tube sockets and reflected our concern (still continuing) for superior component performance. Today, Amphenol's activities are closely tied to the electronics industry, and there are hundreds of materials used in our products. The continued use of 'phenolic' in our name would only be misleading. As the Amphenol Electronics Corporation, we are better named for today—and better named for the future. The inclusion of "Amphenol" in the new name reflects the positive identification of this popular trade name with our activities. It has kept pace in customer identification with each new product. It will continue to be our trade name and trademark.<sup>8</sup>

*Arthur Schmitt watches as N.Y. Stock Exchange president G. Keith Funston points to APL being traded.*



Amphenol celebrated its 25th anniversary in 1957 with over 2,000 employees in seven specialized manufacturing plants. The *Amphenol Engineering News*, in its 10th year, boasted that the firm's position as a components manufacturer

is unique in that while there are others in our field who are active in a few of our product lines there is no other single manufacturer who has attempted to present as complete and as varied a line of electronic components. In electrical connectors, high-frequency connectors and cable, in sockets, plugs, cable assemblies, in 25,000 different parts, Amphenol is the industry's only single source.<sup>9</sup>

The sixth plant was a screw-machine division, purchased in 1956 from the Exact Metal Specialties Company to consolidate for a brief period certain manufacturing processes. Plant 7 was put in operation in the Cicero cluster in the anniversary year to facilitate fast shipment of small component orders. Complete stocks of Amphenol's entire line were transferred to the plant for more streamlined customer service.<sup>10</sup>

To commemorate the 25-year milestone, the corporation, whose shares were previously traded over the counter, appeared on May 17, 1957, on the board of the New York Stock Exchange. Founder-president Schmitt and other company officials looked on as the first transaction on the Exchange was the trading of 100 shares of Amphenol stock.

Now a giant in the specialized electronic components industry whose products were being used in aircraft, missiles, computers, and communications equipment—in short, wherever precision electro-mechanical components were relied upon—the firm's sales had increased 336% in the decade following World War II, its plant space had more than doubled, and the number of employees had tripled.

Thanks to the company's enlightened employee-relations policies, Amphenol had never experienced a single day's production lag because of labor controversy. As part of the anniversary observance, a profit-sharing and retirement program was added to the bonus, life insurance, and sickness and accident programs already in force.

Other advances of this eventful year included the purchase of Danbury-Knudsen, Inc., of Danbury, Conn., and the erection of office and plant facilities on the West Coast.

Danbury-Knudsen, founded in 1919 as the Danbury Electric Manufacturing Company, had become a prime maker of RF connectors, microwave and wave-guide equipment, coaxial switches, coaxial relays, rack and panel connectors, and antennas for mobile equipment and microwave communication. The coaxial switch and relay line was a patented device utilized in nearly all aircraft, ground, and mobile communication equipment. The microwave components were highly important in the radar defenses of the nation.

The West Coast facilities were completed late in 1957 to provide a quick-reaction capability in design and production of intricate and highly specialized connectors for the growing West Coast missile and aircraft industries. The rapidly developing electronics market in that environment found the plant readily responsive to its needs.

Disturbing the anniversary-year celebration was the sudden death by heart attack of Arthur's brother, Albert M. Schmitt, at the age of 53 on February 5, 1957. Second oldest Amphenol employee in length of service, Albert went to work for his brother in 1934. He acquired experience in many departments but settled on shipping when getting materiel on the road became of paramount importance in the war years. He was Amphenol's traffic manager at the time of death. In addition to his wife and six daughters, he was survived by Arthur and his sister, Eleanor, the last living members of the Schmitt family of eight children.<sup>11</sup>

Plant development continued in 1958. The preceding year, Amphenol acquired a 48-acre site at 25th Avenue and Cermak Road in Broadview, Ill., through a \$1 million purchase from the Broadview College and Theological Seminary.<sup>12</sup> Nearby were 51 acres of vacant land which Arthur had purchased ten years earlier. In October 1958, Plant 7, the Customer Service Stock Department, was moved into what was formerly the Harris Pine Mill Furniture Factory, about one block southeast of the new Amphenol plant then under construction on the recently

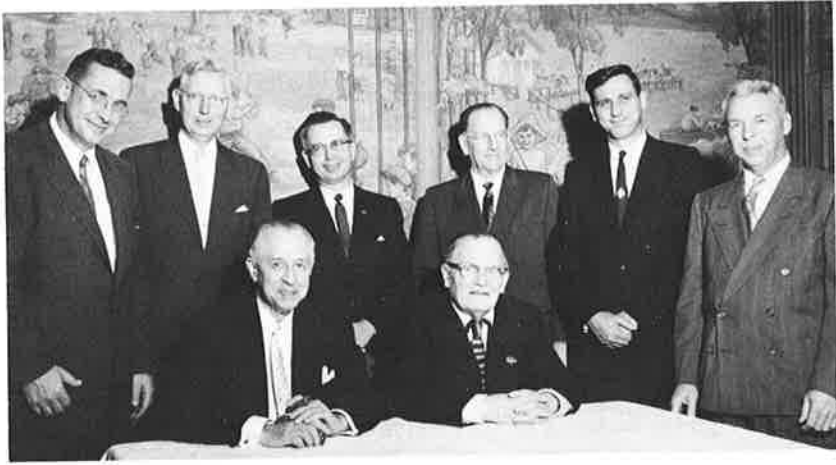
acquired property.<sup>13</sup> In mid-1959, the main office was moved into the new \$2½ million building with its 160,000 square feet of corporate offices and manufacturing facilities. Now Amphenol was able to concentrate all its operations, some of which had been housed in several purchased or rented buildings in the Chicago area, into three locations—Cicero, 63rd-Harlem, and Broadview—totaling 575,000 square feet with resultant benefits in efficiency and economy.

As owner of the first Broadview parcel, Arthur conceived and planned with his associates the utilization of these properties by industrial tenants. In all, 26 buildings were constructed for well-selected corporate neighbors. Practically all were built by Anton Mourek, a contractor whose work in altering and expanding American Phenolic buildings in Cicero had drawn Arthur's approval and respect. With three company buildings also owned by Schmitt in the 63rd-Harlem vicinity, they produced fabulous income, returning annual rentals of almost one million dollars at the time of his death.

The Broadview village board and local residents paid tribute to Arthur Schmitt for the quality of industrial development which he and his representatives had recommended as they planned for the orderly growth of the Schmitt industrial park. Unlike other suburban communities which allowed helter-skelter industrial investment as they searched for broadened tax revenue, Arthur and his associates worked closely with Broadview officials as regulations were set for building heights, fire controls, and other ordinances, the land was improved with paved streets, sewers, and water, and selected firms were invited to lease buildings in the park.

The year 1958, evaluated as recessionary by the nation's economists, found Amphenol characteristically bucking the conservative trends of business and industry by taking its biggest step forward to that date: It announced in the fall of that year a contemplated merger of Amphenol Electronics and the G. W. Borg Corporation to be submitted to the stockholders of each company for ratification. The merger was consummated on December 31 under the new name of Amphenol-Borg Electronics Corporation.<sup>14</sup>





*Arthur Schmitt and George Borg at merger, with associates (from left) John Woods, Harold Egnes, Bill Rous, Byron Booth, Fred Pace, and Lester Grether. Egnes, Booth, and Grether were Borg executives.*



It was described as the biggest single event in the company's history. It joined two firms, "each founded and built on sound principles, including superior quality of product, complete integrity in all of the business dealings, and a philosophy that people are the most important asset of any company," said Matthew L. Devine, who had been elected president in January 1960.<sup>15</sup>

A former partner of the management consulting firm, Cre-sap, McCormick, and Paget, Devine had served on the Amphe-nol board of directors since 1956 and was a member of the executive committee. Arthur Schmitt retained the post of chairman of the board and chief executive officer.

Like Arthur Schmitt, George W. Borg was an inventor who hung on to his discovery and pursued its full development as a manufacturer. His invention of the disc clutch in 1910 was vital to the application and control of the combustion engine and to the vigorous growth of the automobile industry. In 1913, he and his father joined with a lawyer-turned-financier to form the Borg and Beck Company, manufacturing the first automotive clutch, with G. W. Borg as its vice president. In 1922, he became president and in 1928 merged the firm with Warner Gear Company and Marvel Carburetor Company. The name was changed to Borg-Warner Corporation, which today is an industrial giant in automotive parts, household appliances, steel specialties, and aircraft parts and equipment.

While he served as Borg-Warner's chairman of the board, Borg formed the G. W. Borg Corporation in Delavan, Wis., to manufacture automotive clocks and electronic components. Subsequent growth and other mergers found the corporation producing, at the time of the union with Amphenol, textiles for industrial uses and electric-clock components as well as direct reading dials, potentiometers, fractional horsepower motors, aircraft instruments, and time and frequency standards.<sup>16</sup>

The career of George Borg is as remarkable as that of Arthur Schmitt. A hardworking and adventurous youth in Moline, Illinois, he became one of the leading industrialists in the United States, with fabulous holdings that included the exclusive Casa Blanca Hotel at Scottsdale, Arizona, and thousands of arid Arizona acres that he turned green with deep-water wells.

As he approached the end of his life, Borg summoned his longtime friend, Arthur Schmitt, to his palatial estate of 3,000 acres on the shore of Lake Delavan in Wisconsin. Borg informed him that, wishing to consolidate his affairs and liquidate his company's assets, he wanted to sell his firm to someone

possessing his own managerial integrity.

Intermediary was Paul H. Davis, a highly respected Chicago financier, who served on both Amphenol and Borg boards and, knowing of Borg's wishes, recommended the merger and helped to see it to completion.

Reorganization of Amphenol and Borg was accomplished in 1959 as nine autonomous divisions were designated. Foreign operations included two companies in Canada—Amphenol Canada, and Borg Fabrics, Ltd.—and one, Amphenol (Great Britain), Ltd., in England. The British firm had been formed in June 1957 to manufacture and sell the entire line of Amphenol products under an exclusive license in the United Kingdom and other Commonwealth nations, except Canada. In May 1959, the general offices of the corporation were moved to two-story facilities of the new Broadview plant development.

Acquisition of the Borg Company gave Amphenol its first strike experience.

Mr. Borg was deathly afraid of unions and always gave in to them [says Martin Donlan]. Realizing that we could not meet their latest excessive demands, we began to stockpile their automobile clocks, and we warned the auto manufacturers that we were probably going through a period of labor stoppage and they should stock in advance whatever they could.

The auto industry, Donlan explains, does not warehouse parts and keeps no inventories. Vendors are required to maintain a schedule guaranteeing that shipments will arrive on a given day. "You don't miss the schedule very often, or you cease to be the vendor," he says.

Amphenol-Borg weathered the strike, which lasted for seven weeks, and thereafter had no more union problems.

The succeeding years witnessed the growth of Amphenol's international operations. Arthur Schmitt had been one of the first, if not the very first, of radio components manufacturers to set up his own export department. He appointed sales representatives in virtually every significant country of the world. He did it not because he had any illusions about developing a

great export business but rather to portray Amphenol as an international organization. The catalogs emanating from Van Buren Street prior to the war showed on their back covers a globe with the names and locations of Amphenol representatives in it. Together with a drawing of the Van Buren Street building (of which the company occupied only two floors), the advertisement suggested a strong international firm whose products were available anywhere around the world.

William H. Rous was the first to recognize the possibilities of a genuine international export business. With characteristic thoroughness, he mapped out a program for its implementation and twice brought representatives to Arthur Schmitt, one French, the other British, who were interested in launching it. On both occasions, Arthur Schmitt, with an instinctive distrust of foreigners, turned the proposals down.

With the assistance of Eugene Gaenslen, Rous continued to work on his detailed international plans on Saturdays, Sundays, and evenings, holding them in abeyance until Matt Devine became president in 1960. Practically the first thing on Devine's desk when he took over as chief operating officer was the Rous proposal.

"Do you want to handle this yourself?" Devine asked Rous. "Then what are you waiting for? You're losing time!"

Rous cannot say enough for Devine's support in the international picture. "Matt was an actionist," says Rous. "He lacked even a fraction of AJ's instinctive response to people and did not have his personal touch, but he knew how to make quick decisions and move things forward."

The Amphenol-Borg Electronics GmbH, a wholly-owned subsidiary, was established in 1961 for the manufacture of electronic components. In 1962, the organization by Japanese associates of Dai-Ichi Denshi Kogyo, a distributing company, was launched for the import and sale of Amphenol-Borg component products. The incorporation was completed the following year with Amphenol-Borg obtaining a 34% minority interest in exchange for technical data, and Dai-Ichi Denshi Kogyo began manufacturing Amphenol-Borg components. In 1964,

the former licensee, Amphenol Canada, Ltd., of Toronto, was acquired. In the same year, Electronics Perfeccion, S.A. de C.V. of Mexico, a manufacturer of tube sockets, connectors, and other electronic components, was purchased to operate as a wholly-owned subsidiary and to serve as a base for South America. Also in 1964, a wholly-owned Belgian subsidiary was formed to manufacture deep-pile fabrics for the European Common Market, and the Borg Textile Vertriebe GmbH, a wholly-owned fabric sales company, was organized in Germany.

Bill led us into the international markets [says one of his associates]. With his self-acquired expertise he knew how to go about getting the necessary resources to establish subsidiaries and joint ventures in foreign countries in a sophisticated way that the multi-nationals weren't then even thinking about.

Now into his 70s, Arthur Schmitt was slowing down.\* He was allowing a quadrumvirate composed of John Woods, financial vice president, J. Frank Leach, manufacturing chief, Richard M. Purinton, head of engineering, and William Rous, in charge of sales, to plan and make decisions.

"The real key to Arthur's success, his genius," says Dr. Richard C. Becker, who joined the Amphenol team in 1959, "was his ability to identify capable people, to select those who were in harmony with what he wanted to accomplish and then give them the support and occasional direction necessary. It was his ability to 'read' people and then to help them do the things he wanted done that I think was his most significant personal quality."

Woods says that AJ was an easy man to work for, "especially if you were in an area where he let you alone to do your thing."

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\*Few of his associates knew that in his adult years Arthur Schmitt was afflicted with diabetes. One who did was Martin Donlan, who strove in vain to have him utilize the company's excellent medical facilities. "Being a German, he may not have wanted to admit he couldn't bring himself to inject the needle," Donlan suggests. "That's why he went away so often to Wesley Hospital and other places for a weekend—to bring his blood sugar count down. We had a head nurse whom everyone affectionately called 'Florence Nightingale,' but he seldom used her services. Then, too, he loved sweets—pie, ice cream, candy."



*Illinois Manufacturers Association president at 1955 banquet*

As a financial expert himself, Woods was fascinated by Arthur Schmitt's sense of timing in his investments. "He was uncanny," Woods says. "He could be exasperating sometimes for not taking action—and not giving you a reason. But everything he touched turned to money. I never saw him invest in anything that didn't turn out." Becker notes that Arthur was not to be stampeded into a decision. "He would make it in his own good time—and his own good time was, more often than not, the right time, the perfect time."

Frank Shevlin attests to Arthur Schmitt's Midas touch.

I remember when his accountants suggested that AJ invest in oil wells to reduce his income tax [Shevlin recalls]. After they left, he puffed his cigar and said "hogwash." But later, when he decided to go ahead, he picked up interests in six wells in the Southwest. Five of them came in, and AJ had one-eighth to one-half ownerships in them. But he was not much into the stock market—thought it was a crap game.\*

Aside from Arthur's advancing years and dwindling vigor, Woods believes that AJ regretted the bigness of a firm that prevented him from keeping in personal touch with everything. "He preferred the older days when, late at night after receiving a call from a customer urgently requesting parts, he could go down to the shipping room and change a label on a package that was going out on another order," Woods remembers from World War II days.

He loved the challenge of meeting customers' needs. It was the key to his effective salesmanship—not the stereotype of the fast-talking, high-pressure approach but the calm, sincere, well-informed presentation that assured the customer his

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\*Rous was reminded of the time when he and wife Shirley had put together a couple of thousand dollars and, since everybody seemed to be buying stocks, decided they should give it some thought. "AJ said, 'I'll tell you about the stock market. One, it ain't all that complicated; just remember to buy low, sell high. Two, it's not worth anything until you sell it. And three, above all, stay out of it.' All of this was delivered with cigar in hand and tongue in cheek, but very quietly it got the message across to me that the last thing Bill Rous needed at that time was to start fooling around in the stock market. It was a message I adhered to for a good many years.

problem was being solved. Behind this was the homework that had carefully analyzed the customer's needs and had brought his company's creative capacities to bear to meet them.

In a sales presentation, AJ would reflect the confidence arising from his in-depth awareness of the customer's business as he unfolded how Amphenol could be of service [says Dr. Becker]. He was great at orchestrating the session, bringing specific staff members in and out of the presentation to explain technical details. It was something to watch!

In 1964, Arthur Schmitt stepped down as chairman and chief executive officer of the firm he had founded 32 years earlier. He proved himself not just a man with ideas, an inventor willing to let others develop and profit from his discoveries. Though he held a veritable tiger by the tail, he hung on even through the years of World War II with their astronomic demands. He displayed the foresight, the acumen, the financial keenness, and the managerial judgment to build a great international company which at the time of his retirement employed 6,800 persons in ten U.S. divisions and eight subsidiaries in other countries utilizing 2,200,000 square feet of plant facilities. The four original patents he had obtained for his radio tube socket had grown to 70, developed by him or under his direction. In appreciation, the company's board of directors accorded him the title of founder-chairman until his death on March 29, 1971, in his 78th year.\*

He had served as a trustee of DePaul University, the College of St. Francis, Joliet, and the Illinois Institute of Technology, as a member of the advisory council for science and engineering at the University of Notre Dame, and as a member of the citizens committee of the University of Illinois. He was a past president of the Illinois Manufacturers Association.

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\*In 1968, the American Phenolic Corporation was combined with the Bunker Ramo Corporation as the Amphenol Components Group of Bunker Ramo. The merger placed the company well up on the list of the 500 largest industrial firms in the United States. Bunker Ramo's 1971 Annual Report disclosed that the Amphenol division accounted for 51% of the company's revenues and 62% of its earnings.



He was awarded honorary doctoral degrees from DePaul, Christian Brothers College, Memphis, Tenn., and St. Procopius (now Illinois Benedictine) College, Lisle. In 1957, he was among 100 distinguished Chicagoans honored by Loyola University and in 1967 received DePaul University's St. Vincent de Paul Award "for serving God through the needs of men."

"He wished to bring the City of God to the City of Man," his friend Father Comerford O'Malley, the DePaul chancellor, said in the funeral sermon.

In his own life, these "cities" were never separated but combined in a union soundly based on fidelity to Christian principles that influenced his attitude to family, business associates, and all those with whom he came in contact. More significant than his success in business was the depth of his spiritual insight that served as the foundation of his life.

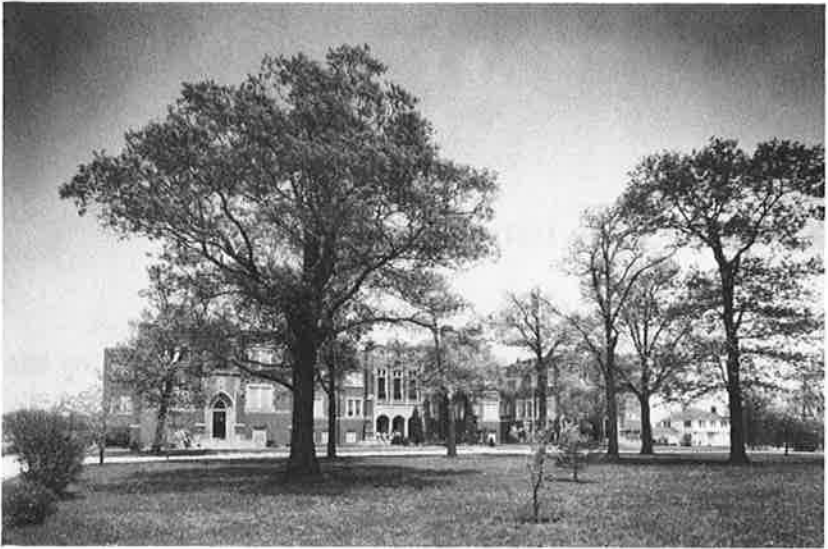
*"You couldn't imagine trying to do a better job of organizing an educational experience. It had the full electrical engineering component, so much of business as well, and then the humanities—the Great Books, music appreciation, and the other dimensions. It was superlative."*

—Dr. Richard C. Becker

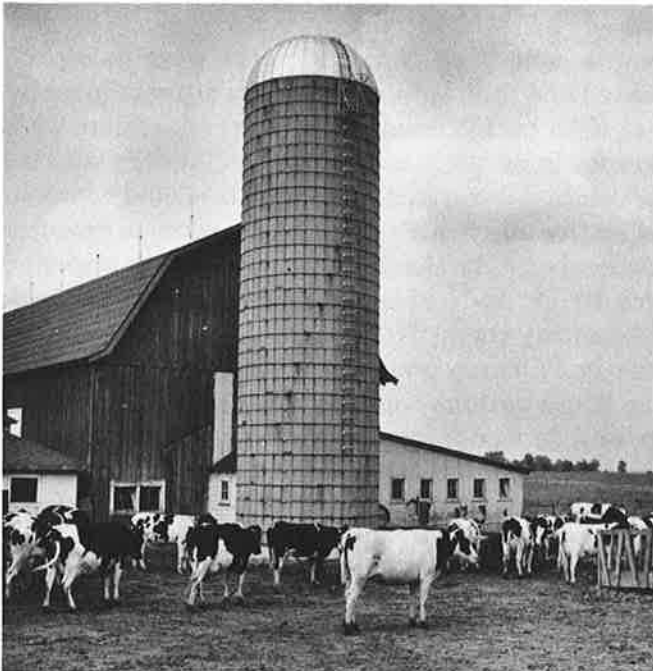
## Educational innovator

With his business growing in size and complexity as the 1930s wore on, Arthur Schmitt became more respectful of the need for formal education. "Many years ago," he was to admit, "a man could make a living, amass a sizeable fortune, without much if any formative education at all,"<sup>1</sup> no doubt recalling his own experience. Life was quite simple then, he acknowledged; now it was becoming more complicated with each passing year. His own field, electrical engineering, was one in which an uneducated man could no longer compete.

He also became concerned that engineers were being too narrowly educated and that industrial leadership was going by default to those with backgrounds in general education. This would be dangerous in an age of science and technology with its wondrous discoveries if those who uncovered them did not have a keen sense of justice and morality and the wisdom to exercise responsible leadership.<sup>2</sup> By the time he was in his mid-40s, ideas were crystalizing, and he began to consider what he could do about implementing them. That would take money, but his inventive genius had already produced patents whose royalties were mounting. More patents would be forthcoming, his alert mind told him, and he would form companies to exploit them. His legal counsel advised that he could turn over his royalties to a foundation to finance whatever philanthropic goals he had in mind. Patent rights would expire after 17 years, but if the companies he formed were also assigned to the foundation after they were firmly established, there would be a continuous and growing source for the funds needed to support his project.



*The original Administration Building on the Fournier campus*



*Three farms  
were  
part of the  
Fournier  
Institute  
properties.*

After three years of reviewing the technical colleges and their preparation of engineers, analyzing their deficiencies, sharing with educators and business leaders his educational concepts, and devising a program he might be able to inaugurate, Arthur Schmitt was ready for action. Eight days after Pearl Harbor, the necessary documents were executed, and the Arthur J. Schmitt Foundation came into being. In addition to founding and operating a school and its farm, its purpose included founding and operating a research foundation directed in part to aeronautical, electrical, and chemurgic research.

His initial investment in the foundation was his four wholly-owned patents, valued at \$3,500,000. Though his company salary in 1941 was only \$22,500, he had received approximately \$175,000 in royalties that year from his patents. He expected that ownership of future patents he and his researchers might obtain would also be assigned to the foundation, entitling it to all royalties that American Phenolic and its licensees might receive.

A few months after the foundation was established, Arthur and the trustees found a home for his new approach to engineering education. It was a seminary at Lemont, Illinois, in the DesPlaines Valley, about 27 miles from downtown Chicago. In 1929, the Clerics of St. Viator had erected a three-story U-shaped brick and stone building on a 121-acre farm for the preparation of young men for the priesthood. The seminary was named Fournier Institute in honor of a pioneer Viatorian priest.

Arthur and his associates determined that the property was eminently suitable for their purposes. It was close to the great city he loved and yet sufficiently remote to prevent distractions. Nearby was the Atomic Energy Commission's newly created nuclear reactor installation, Argonne National Laboratories, with outstanding scientists who might become available for lectures and part-time instruction.

The farm, with a large cattle barn and several other smaller structures, could provide another unplanned dimension to the broadened education of neophyte engineers while at the same time it supplied their needs for fresh food.

Financial problems had forced the Viatorians to offer the property for sale, and on June 12, 1942, an agreement was reached and the foundation acquired the site for Arthur's dream, to be named the Fournier Institute of Technology.

"I remember going out almost every Sunday with AJ before he bought the property," Martin Donlan recalls. "The first trip I asked myself how it could be refurbished. Things were in disrepair, pipes burst from freezing."

Repairs and renovation of the main building began on September 14, 1942. Extensive remodeling provided administrative offices, a dormitory, classrooms, physics and chemistry laboratories, a library, and a machine shop. Improvements were also made on the farm properties, which became an increasingly important source of food in the years of wartime shortages.

Meanwhile, the search was begun to gather the best possible faculty of religious and lay teachers and to select a small cadre of youths qualified to inaugurate the program. Appeals were made to Chicago-area Catholic and public high-school principals to offer their best candidates for the senior-high years to take advantage of what this unique institution had to offer—an accelerated course for superior youths to be educated for national leadership through engineering. Their education would be free of charge for tuition, room, and board; their future careers would be assured by the promise of the founder that their progress would be followed in friendly industrial firms willing to cooperate with the new institution's objectives.

Arthur assured himself that with the best "raw material"<sup>3</sup> he could find—brilliant students of homogeneous capacities for an accelerated program under highly competent instructors, and the best possible plant and equipment—he could produce graduates capable of leadership at an early age.

It would be his purpose to get these graduates into positions where they could exercise their leadership capacities. Through his acquaintanceships among manufacturing companies in Chicago, he would approach selected firms on behalf of each of his candidates.

We will not be talking with the employment clerk, nor the personnel manager [he said], but rather with the chief executive of that company. We will promise him a man upon graduation provided he will likewise promise that he will give that graduate all the responsibility and authority which that graduate can handle.<sup>4</sup>

He would ask no favors for the young man, simply a square deal. "We do not want him taken advantage of and we do not want him fenced in so that he cannot move forward."

Periodic checks, perhaps every six months, would be made by Fournier's vocational advisors, who would call upon the employer to learn how the graduate was doing. If he needed further technical coaching, he would receive it at night or on weekends.<sup>5</sup>

One of the factors that spoiled more careers than anything else, Arthur believed, was that the average employee shifted jobs and moved around because someone else offered him a few dollars more. Since he never had any assurance that he would amount to anything, he was always concerned with his immediate paycheck. Fournier people would counsel any graduate on proposed job changes. "We will naturally put him only where we think he has a real opportunity," Arthur said, "and if it becomes necessary for him to change we will be in the picture with him."<sup>6</sup>

Given these conditions, he could envision hundreds of men in high positions in the Chicago area where, working as a group, they could become a great benefit to each other, to society, and to their country.

Because of the manpower demands of Selective Service and the need for gradual development of the educational program, enrollment at Fournier was first confined to the junior and senior years of high school; a full-college curriculum would come later.

No distinctions were to be made as to the prospect's financial condition or his religious background.

We don't care if a student's parents are poor or wealthy [Arthur said]. This is not a school for under-privileged young men; others can take care of them. [However] if a man tries to go through life

without a good basic sense of moral responsibility, he is not an asset to himself, his friends, or his country. Therefore, religion, which is a basis for morality, is a necessary part of a Fournier education. There is no compulsion for those students who are not of the Catholic faith to attend Catholic services.<sup>7</sup>

About 200 candidates were submitted from their high schools for admission for Fournier's first class. After two full days of written examinations and a physical checkup, fifty were chosen to appear before the selecting board.

These were the questions Arthur asked his examiners to consider in their choices:

How fertile is the brain? What are his demonstrated abilities to get along with his fellow students? What are his leadership characteristics? How does he organize himself? Is he the one who gets things done? Did he get anywhere as a Boy Scout, or was he merely along for the fun? Does he look after his normal chores at home with a grudge, or does he appreciate the responsibility he owes his parents? Is he physically sound, mentally well-balanced, with a searching mind and an intuition for discovery?<sup>8</sup>

With this exacting task, the board selected 19 young men who formed the first Fournier class in September 1943. Ten were Catholic, nine non-Catholic.

With the end of the war, Arthur was able to inform the high-school principals attending a dinner as his guests on March 14, 1946, in Chicago's Union League Club of his plans for developing the Fournier plant:

Last year, we finished our Engineering Building, which is quite modern, and the bricks are now being laid on a general machine-shop building, which is due for completion this May. Our architect is now working on the plans for a two-story chemical, tool and die, and plastics building, and construction will start in a few months and should be finished this year. We propose to have the best-equipped shop of its kind in the country. We have to have it in order to properly educate the type of graduate that is necessary in these modern times.



He also noted that an open-air gymnasium was scheduled for completion in 1946, with lighted tennis courts and basketball and volleyball facilities, which could be flooded in winter for ice hockey and skating. "The architect is also working on a gymnasium with a swimming pool, and we would like to finish it this year if possible," he told the high-school administrators.

He indicated that a large amount of military-surplus machinery and equipment, including two radar units, was donated to the school or acquired at discount from government resources.

He felt it necessary to reiterate that he desired no publicity, either for himself or the school. "Fournier is not a publicity stunt," he said. He regularly turned down requests of reporters and publishers to do a story. Those wishing to visit the school out of curiosity were discouraged. There was no "catch" in the Fournier enterprise. "This school is not intended to be a training ground for employees of my company," he said.\* "The only reason for the school is that it produce good industrial leaders."<sup>9</sup>

The Fournier graduate would discharge his obligation for education and all its costs "when you have taken your place in industry and have become a credit to yourself, Fournier, and the United States; until then, you still owe it."<sup>10</sup>

In September 1947, Fournier was ready to accept its first college class, and 20 of the 27 graduating high-school seniors moved into an electrical engineering curriculum. The high-school program was phased out gradually, closing with the last class of graduates in June 1951.

During the years to come [Arthur Schmitt told the new colleagues] our students will be educated not only in electrical engineering but also in economics, civics, business administration, and accounting, giving a business executive the perspective needed for his administrative duties.

By no means least, throughout the student's entire stay at Fournier the manner and methods of self-expression will be taught

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\*Amphenol executives, while they recognized Arthur Schmitt's reasons for not hiring Fournier graduates, were unhappy about the restriction. "At a time when we had a tremendous need for talent, it was a tough pill to swallow to know that these highly talented young people were not available to us," comments Bill Rous.

and projected to the end that he not only will be a good speaker and writer but will know what he is speaking and writing about. That is why we want debating teams developed here at Fournier. The ultimate goal is industrial leadership, and the leader who is inarticulate, who has the ideas but cannot express them, is not serving the purpose for which Fournier was created.<sup>11</sup>

While Fournier was not a military school as such and was not affiliated with ROTC, it had military personnel on its faculty to keep the young men fit and alert to national preparedness as they learned the rudiments of military drill.<sup>12</sup>

The plans and goals of Fournier, he explained, were not just the product of his own brain; they were shared by a group of experienced men in educational and industrial fields. The programs of the major engineering schools were being constantly studied and evaluated to the end that "at all times the educational standard at Fournier will be ahead of what is provided by any other engineering college that we know of." This was not a boast, he felt, but a practical and feasible goal, made possible by the quality of his raw material, the students themselves.

At his annual dinner for the principals in February 1948, Arthur Schmitt told them of the new science building, two stories high and 200 feet long, which had been recently completed. Electrical engineering occupied the first floor, with physics and chemical engineering on the second. He estimated that when all the bills were in the cost would exceed \$400,000.

He also noted that five brick houses for faculty and the business manager were to be completed during the summer.

The architect had submitted plans for a large dormitory, 375 feet long, with two stories and a basement. Excavation was expected during the summer of 1948; total cost was anticipated to be \$700,000—a sum, he admitted, that disturbed the foundation trustees.

As the 1948 school year opened, Arthur welcomed faculty and students at the annual Founder's Day dinner, expressing regret that the newly built Armory was not yet ready for occupancy.



*A physics laboratory at Fournier (above). Physical education drill conducted by military personnel in Armory (right).*



*Original Chapel*



*Chemistry Lab*

The honest reason for it [he said] is that the bricklayers have agreed among themselves to lay just one-half as many bricks as they have been laying for the past 20 years, and all the rest of the building trades, carpenters, plasterers, and almost everyone else, are doing the same thing. When a man does just a half-day's work for a full day's pay, he is just as dishonest as the grocer who gives you a half-dozen eggs and charges you for a dozen.

Economists and politicians might attribute these spiraling costs to inflation, but they were missing the real reason:

If everyone, by some miracle, would decide to become personally honest and fair and do the kind of day's work they are capable of and used to do, all of this inflation with high prices and general feeling of insecurity would stop. You could buy a Ford car for half of what they are charging you, and it would be a good one. You could buy a house for one-third what you pay for it now. Likewise, a suit of clothes. And a nice, thick, juicy steak would cost only \$1.25 instead of \$3.50. [This, of course, was over 30 years ago!]

In 1948, Arthur Schmitt took pride in welcoming the high-school principals to the Fournier campus for their annual dinner meeting. Again he called attention to the deficiencies of the average engineering graduate.

We would like to achieve our reputation here based on developing electrical engineers who know their profession thoroughly and who are also capable business administrators and can write and express themselves in a manner calculated to produce the proper results.

He paid tribute to America's engineering genius and cited the importance of engineers in America's future. "American engineers won the last war, not bankers and certainly not the politicians," he said. "This country needs engineers more than it needs most of the other professions."

There was no field, he believed, with richer rewards, none more intriguing, none more important to the nation's defense.

The first Fournier college class was graduated in 1951 with 13 proud possessors of bachelor of science degrees in electrical engineering. Already, Fournier students were making their

mark in competition with representatives of the many colleges and universities in the Chicago region. In 1950, with a total student body of 78, a Fournier student was elected chairman of the Chicago Region Forensic Commission of the National Federation of Catholic College Students. In the same year, with the emphasis upon communicative arts, Fournier students prepared a radio script titled "Operation Survival," with students from nearby St. Francis College in Joliet in female roles. After public presentation over Joliet's radio station WJOL, the play and its theme, the impending menace of Communism, attracted the attention of the National Broadcasting Company, which produced it on a nation-wide radio program, using professional actors but crediting the Fournier Institute of Technology as its creator.

As founder Schmitt had requested, Fournier organized debating teams in 1946 and the following year, on March 15, received a station license with call letters W9YVC for its newly formed Radio Club. In 1951, a Speakers Bureau enabled students to book talks before public groups on inter-racial inequities, labor-management misunderstanding, problems of the under-privileged and handicapped, and similar subjects of social import. In the Fall of 1951, a Fournier student was elected president of the Chicago Region, National Federation of Catholic College Students, and another was made chairman of the National Forensic Commission of the federation.

The following year a Fournier undergraduate was appointed director of the North American Commission of Pax Romana, an international student movement. By 1954, Fournier had conducted a national speech contest and a national debate tourney. These were significant accomplishments for one of the nation's smallest colleges . . . until it is realized that the 1954 class had maintained a four-year *cum laude* average, testimony to Arthur Schmitt's belief in "raw material" and the efficacy of the teaching staff.

The enriched curriculum ranged from calculus and advanced mathematics, analytical mechanics and thermodynamics, communications engineering and ultra-high frequency techniques, corporation finance and business law, to Plato, Aristo-

tle, and Thucydides, Wagner, Beethoven, and Bach. Unlike the average college student who attended class 18 hours or less per week for a 16-week semester, the Fournier undergraduate was covering the same work in 26 hours per week for 11 weeks. To take advantage of the engineers and scientists available at nearby Argonne National Laboratory, Fournier imposed upon its students attendance at some evening and Saturday classes which Argonne specialists could teach.

It was a grueling program and students were required to maintain an 85 average to avoid probation, with only one term to redeem themselves. One-third of those who started at Fournier either dropped out or were released for inability to carry the load, Arthur informed the principals in 1954.

It soon became apparent that, to accomplish Fournier's primary purpose of a complete education, the college curriculum had to be increased from four to five years. When it was inaugurated in September 1951, Fournier became one of only five colleges and universities in the country whose course of instruction in electrical engineering enforced this requirement. By 1953, the five-year curriculum had evolved into a program of 192 semester hours, with 48 devoted to general education, 16 to business, and 128 to engineering.

While his American Phenolic Corporation had its own research department, engaged in the fields of electronics and plastics, Arthur Schmitt recognized the need for a broader approach to research that would benefit students entering other industries. He envisioned also that this approach would lead to discoveries whose royalties would sustain the foundation and the school it supported. Dr. Harner Selvidge, who had guided the company in its development of plastics, became identified with the foundation in February 1942 as director of research. He was instructed to hire assistants and undertake research at Fournier for the U.S. Government and private interests. It became the policy of the foundation that all government projects were to be undertaken at cost, but fees and royalties were accepted from industry for products and procedures developed by the research staff. Almost immediately in 1942, the foundation's research arm had received contracts for

projects on code transmission apparatus in military communications for the Office of Scientific Research and Development and on the rotor joint and its solid dielectric antenna for the Navy Department. Research continued at Fournier after Dr. Selvidge left in January 1946 to join the Bendix Aviation Corporation. Projects ranged from improved antennas for submarines to superior cable insulation in high-flying aircraft.

With Arthur Schmitt's connections, the Fournier curriculum was enriched with field trips to Chicago-area institutions, which ran the gamut from factories to banks. Guest lectures ranged across the spectrum of human knowledge. It is interesting to note that of all the notables who made commencement addresses at Fournier, only one was an engineer.

In 1952, Arthur Schmitt completed construction of a two-and-a-half story mansion-like residence adjacent to the Fournier campus. Of stone construction, it contained 16 rooms plus other areas not technically so classified, a third-floor attic, and lower-level rooms. The latter included a game room, recreation room with stone fireplace (there were three others elsewhere in the house), bowling lane, and arc-shaped hardwood bar. With five bedrooms, in addition to three bedrooms in the servants' quarters, it was manifestly more than Arthur himself, with his simple requirements, could use.

He continued to live with his mother and sister on West Ohio Street in Chicago, where his mother had resided for over 60 years. He did not tell them of this new residence which he referred to as "The Cottage," lest his mother be disturbed at leaving the home her husband had built for her.

"Even Eleanor did not know about The Cottage," Edward Schmitt says, "until after her mother's death." He himself had been informed because Arthur, who had taken him out to look at Fournier school developments, pointed out the excavation for his new home. One experience that must have persuaded Arthur not to try to move his mother was an occasion when he sent workmen to remove a wrought-iron fence that surrounded the Ohio Street house.

Grandma came out madder than a wet hen, and when she learned what they were up to, she got Arthur on the phone [Ed-



*The Cottage on the Fournier campus and Eleanor Schmitt before its front entrance. The aerial view of the Lemont properties shows The Cottage in the right foreground.*





ward says]. He explained that the fence was in disrepair and she said firmly: "I want you to know one thing: This is my house, it will always be my house, and I'll live here 'til the day I die—and I don't want you to disturb anything!" And he never did. He and Eleanor didn't move to Lemont until after Grandma's funeral.

He told the Fournier faculty and students that he expected to spend his declining years at the Cottage, "watching this parade of young men receiving their education and then more importantly watching their progress in life after they have graduated."<sup>13</sup> The reason for the magnitude and elegance of the place was that it gave Arthur at last the opportunity to entertain industrialists and government leaders in the quiet and seclusion of this retreat and to accomplish the purposes of such business and social encounters. It was his private joke to entice the president of RCA or other dignitary to a "cottage" in the country and regale him and other guests in the large dining area, with golf enthusiasts thereafter testing their skills on a two-hole adjacent course to the amusement of spectators on the patio.

Royalties from 70 patents of almost \$4,500,000 beginning in December 15, 1941, through June 30, 1955, developed by Arthur Schmitt and his research associates, plus other income turned over by the founder to the foundation, kept pace for a time with sharply rising costs. The original plant and grounds acquired from the Viatorian Fathers had become five major buildings with underground utilities, 14 homes for faculty and research personnel, and three farm groups on a campus which had grown to 308 acres with parcels of adjacent land acquired in 1951 and 1953.

Martin Donlan's brother, Ray, proved helpful in Fournier acquisitions. Using his real-estate expertise acquired at the Chicago Title and Trust Company, Ray Donlan arranged that the properties were acquired blindly through him. "If anybody knew it was Arthur Schmitt who was interested, the prices would have gone sky-high," Martin Donlan says.

One person uniquely qualified to measure the Fournier experience and later association with Arthur Schmitt as an Amphenol employee is Dr. Richard C. Becker, currently presi-

dent of Illinois Benedictine College, Lisle (Ill.). Becker entered Fournier as a junior out of Chicago's St. Mel High School in 1947 and graduated from its four-year college curriculum in 1953, having been in attendance for six of Fournier's twelve years.

"You couldn't imagine trying to do a better job of organizing an educational experience," he says of Fournier. "It had the full electrical engineering component, so much of business as well, and then the humanities—the Great Books, music appreciation, and the other dimensions. It was superlative."

Fournier students who mastered early homesickness and the rigors of the program grew warmly appreciative of Arthur Schmitt. Upperclassmen referred to him affectionately as "Uncle Arthur." However, Becker recalls that Arthur backed off from his original intent to guide Fournier graduates through later careers. The entire first graduating class of 1951 was steered to Motorola. The following year several were hired by Motorola, but by the third year there was a broader diversification, Becker explains.

"I think resistance built up among some students who thought the plan was too highly structured and they were not in charge of their own destinies," he says. Sensitive as always to human reactions, Arthur recognized that this was more than his protégés wanted and wisely tapered off the guidance program. "We didn't feel those constraints and pressures in our 1953 class," Becker says.

He and a handful of other students enjoyed a special relationship with Arthur Schmitt through periodic invitations, once every six months or so, to come down one at a time to his office in Cicero on Sunday mornings so that Arthur could get a grass-roots evaluation of his Fournier program. "He would ask me how things were going, how meaningful my studies were," Becker says. "In this as in all his approaches to life he was thorough. He wanted to make sure the program would be the success he intended."

Becker recalls that in the course of each session, usually an hour long, Arthur would reach into a drawer of his big desk and come up with a box of cigars. "He would ceremoniously open

the box, ask if I'd like a cigar and then 'Mind if I have one?'" After the box was closed and replaced in the drawer, he would proceed carefully to remove the cigar's wrapper. "There was not much talking at this point but rather attention to the ritual of undoing the cigar, formally placing and lighting it."\*

Becker saw this routine developed into a psychological ploy during his later years with Amphenol. When an impatient or angry customer came to see him, AJ would first ask the caller if he wanted a cigar and then, gaining permission to have one himself, would walk to the end of his office where a cabinet contained a humidor. Slowly and methodically he would open the cabinet, withdraw the humidor, close the cabinet, walk back to his desk, put the humidor down precisely, lift the cover, select a cigar, close the cover, unveil the cigar, delight in its aroma, and carefully light it. A few contented puffs and Arthur had set the tempo of the encounter to less aggressive and more relaxed rhythms.

It was not Arthur Schmitt but Casper ("Cap") Nash who approached young Becker about carrying on into graduate studies. When informed that Becker lacked the finances, he expressed the opinion that the foundation might be able to help him. "Cap and his wife, Emily, were *in loco parentis* in a very affectionate and meaningful way to the students," Becker says. "They had a very positive and personal influence on us." An Army officer, Nash had been assigned to Amphenol during World War II and had handled contract terminations before becoming Fournier's business manager and Arthur's right-hand man on the campus.

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\*William Rous was present in Arthur Schmitt's office on an occasion when his longtime friend and business associate, Otto Dvorak, then head of procurement for the Crosley Company in Cincinnati, Ohio, visited him in Cicero. "AJ did this quite often in my early years," says Rous. "He would often ask me to sit in on a session, strictly as an observer, as an experience from which I might learn something." At one point, AJ went to the window at the back of the table behind his desk and flipped out a cigar butt. Otto walked over, looked down, and exclaimed, "I can't believe it!" He was looking at a pile of cigar butts covering the roof of a small shed adjoining the plant. Estimating the cost of the cigars, Dvorak suggested that, for this money, he could own the building across the street. AJ quietly took a long draw on his new cigar and said amusedly, "Otto, I got news for you: I do own that building."

Thanks to Cap Nash and the foundation, young Dick Becker was able to pursue a master's degree in electrical engineering at the University of Illinois (Champaign). He became one of the first to give Arthur Schmitt and the Fournier staff the opportunity to test how its graduates could measure against the competition of the major universities.

With the foundation paying all his expenses for room, board, tuition, and books, Becker received master's degrees in electrical engineering and mathematics and proceeded, with partial help from the foundation, to acquire his doctoral degree from Illinois in 1958 with a dissertation in ultra-microwave research principally sponsored by the Atomic Energy Commission.

He was invited to take an assistant professorship at Illinois but preferred the practical industrial engineering approach to the more theoretical one of academia.

In one of his invited visits to Arthur Schmitt, which continued throughout his Illinois years, Becker informed him of his nationwide search for challenging employment. Well into his Dutch Master, Arthur said, "Been thinking of you; have you considered this place?" Becker expressed the impression that Amphenol's rule against hiring Fournier graduates was still in force. Arthur felt this policy was behind him at this point since Fournier had closed four years earlier.

The result was that Dr. Becker went to work as an Amphenol research scientist, rising by stages through a group vice presidency to the corporate staff as director of administration before leaving the firm in 1973 to form his own company.

Looking back on his Fournier educational experience, Dr. Becker describes it as "magnificent." He believes in the merit of Arthur Schmitt's original concept and, from his awareness of the careers of many of his classmates, in the success of its outcomes.

The forward rush of technological knowledge and the demands it imposed for ever-more learning and research were conditions Arthur Schmitt and his advisors could not have anticipated prior to World War II. Now nuclear fission, ballistic and guided missiles, space craft, and other fantastic advances