

WHEELABRATOR

PARADE





The Customer is Boss . . .

If you ever received poor service in a store (as most of us have at one time or another) and left saying, "I'll never go back there again," you know how unpleasant it is to have your needs as a customer ignored. It's a bad experience for the store owner, too. He's lost a customer and damaged his reputation besides.

The same situation spells disaster for companies, too, whenever they fail to tailor their products and services to their customers' needs and desires. Apparently for some, the old maxim about the "Customer Is Boss" has gone out of style, but if that condition persists, they will probably go somewhere, too — out of business. Respecting a customer enough to satisfy him is always in style.

Of course, like many "rules", "The Customer Is Boss" works best in a realistic context. At Wheelabrator, this rule gains added responsibility when it reads, "The Customer's Needs Are the Boss".

In other words, our first obligation as engineers,

production personnel, researchers, and salesmen is to give a customer the right equipment to do the job. This is not the same thing as simply selling him what he thinks he needs. Our history of open dialogue with customers, isolating and solving their problems in our demonstration labs, his plant, or at the conference table, is why we can assert that Wheelabrator products give "Vital Values" to those who use them.

And in addition to the best equipment, our customers deserve and must receive good service. That means production schedules met, shipments made on time, and installations completed and operating when promised. If we fail in the "service area", we will be in the same spot as the store owner I mentioned earlier.

It's true — "The Customer's Needs are the Boss." And we must be ready to prove it.

James F. Conroy
President

VITAL VALUES
WV
FOR INDUSTRY

WHEELABRATOR
PARADE
Vol. 29, No. 6 November-December, 1970
F. CARTER DREVES — Editor
Published for
Employees of The Wheelabrator Corporation
Mishawaka, Indiana

ON OUR COVER

Some holiday traditions, seen through our ancestors' eyes, make up PARADE's November-December cover. Things have changed a lot since those earlier, slower days. Sleighs have become snowmobiles, Christmas trees are plastic, and few kids receive rocking horses anymore (unless it's the latest, electrically-powered model). But one tradition remains . . . the family, the center of the holiday season even to this day.

WHEELABRATOR
SWING
TABLE:

**A
SAFE
BET
FOR LOWER
CLEANING
COSTS**

Protecting important papers and records from fire, theft and loss is a job that's capably handled by "Sentry" safes, manufactured by the John D. Brush & Co., Inc., Rochester, New York. They're compact, extremely handsome and have passed U.L. fire endurance tests up to 1700°F. — just the thing for maximum security at home and office.

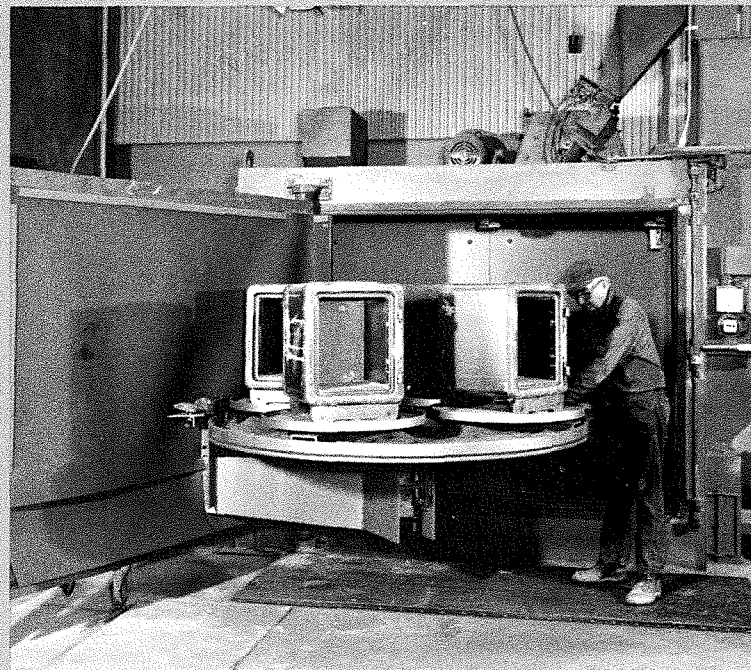
One of the major reasons for Sentry's long-lasting good looks is a 72" dia. Wheelabrator Swing Table, which thoroughly blast cleans the safes, as well as their components, right down to blemish-free metal. The matte finish obtained is ideal for more uniform paint coverage, much longer paint retention and provides a far more scratch-resistant final finish.

But an even greater contribution has been made to the cost structure of the firm by the Swing Table. Direct labor costs of former wire brushing and chemical cleaning have been substantially reduced. In addition, actual cleaning time per 100 units has been slashed by 66%.

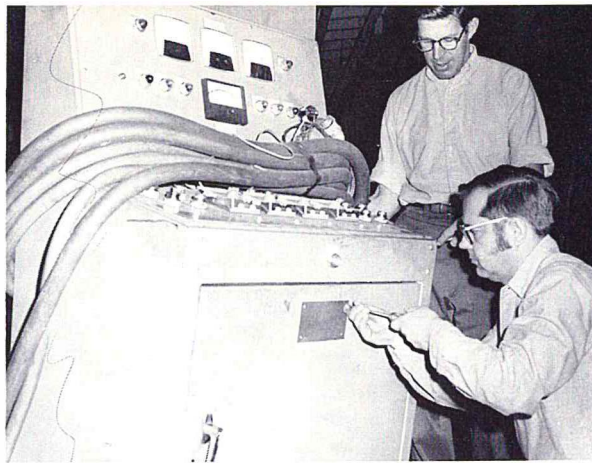
John D. Brush & Co., Inc., likes Swing Table versatility, too. Four rotating auxiliary tables on the main table easily handle four 250-lb. safes in a 30-sec. blast cycle, or they can be used to process a multitude of smaller safe components with equally effective cleaning results. Large or small, Swing Tables clean them all — and do it more thoroughly, more uniformly, and at a far lower cost per piece.



ABOVE — Safe before cleaning, left, and after a 30-sec. blast cleaning cycle in the Swing Table, right, dramatically illustrate the superb finish results obtained. The uniformly clean, matte surface provided by abrasive blast cleaning takes paint better, holds it longer and makes it more scratch-resistant. **BELOW** — 72" dia. Wheelabrator Swing Table, with four rotating auxiliary wheels, thoroughly blast cleans four 250-lb. steel safes or a variety of small components in a 30-sec. blast cycle.



WHAT'S IN A NAME?



IF IT'S ORBORESONANCE, IT MEANS BIG THINGS FOR WHEELABRATOR AND OUR CUSTOMERS, TOO

Al Berry and Ralph Dietrich are working on a new, unusual machine. In fact, they and the men who designed, built, and tested two earlier experimental units are about the only people who have seen it up to now.

It's called an Orboresonant Cleaning and Finishing Machine (OCFM for short) and it offers industry a better way to clean the hidden, interior passages of complex castings. Up to now, such work was done by slow hand cleaning or pressure flushing, neither fully effective and both costly. However, the OCFM, which "scrubs" out the castings' passages with sharp media can turn out lustrous, clean pieces in record time. Racine Hydraulics, Racine, Wisconsin, who purchased the first production model OCFM, anticipate a considerable savings on finishing costs when they begin using the system in January.

Applications for the OCFM, while specialized, are extensive. A marketing study recently revealed that the OCFM has over 100 potential applications in the hydraulics industry alone.

Orbo-What?

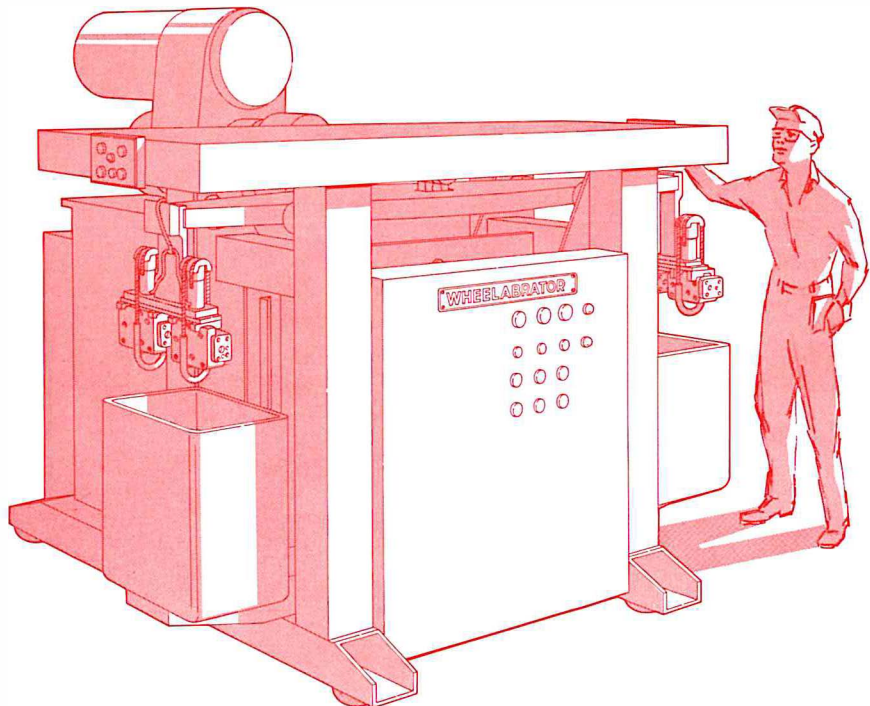
In laymen's language, "Orboresonance" refers to the way the OCFM vibrates a casting. The OCFM utilizes a specially designed steel beam that is caused to vibrate, or resonate, by a mechanical oscillator. The name "Orboresonant" is derived from the orbital action of the oscillator inducing resonance to the beam.

In a sense, the high-carbon steel beam acts like a violin string when it's plucked. An incredible 90 vibra-

tions per second are set up, generating energy levels that "fluidize" the media around the casting. What happens is that the sharp media actually flow like water through the casting's recesses, taking burrs, sand and scale with them.

A by-product of the vibrating (re-

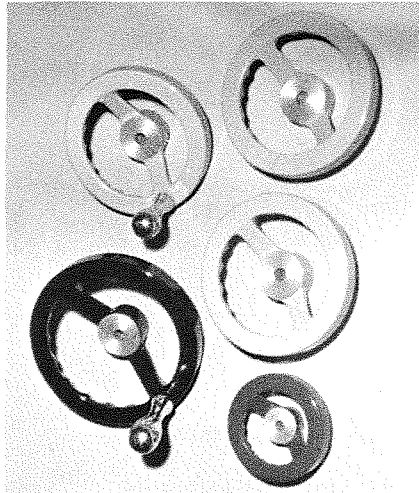
sonating) beam, just as with the violin string, is sound. The 12-foot beam in the OCFM, in fact, becomes a giant tuning fork when the machine is on, creating a steady, low sound. It's hardly music, but the OCFM plays a pretty good tune as far as industry is concerned.



An artist's conception of the Orboresonant machine we are building for Racine Hydraulics. Castings to be cleaned (held by fixtures left and right) are suspended from the resonating beam and are immersed in the movable containers of media.

AN OLD STANDBY GETS A

Bright, New Look



The well-known Balcrank handwheel, a 62-year veteran of machine shops around the world, now comes coated in green, red, blue, gray, and black plastic as well as its customary paint or chrome finish.

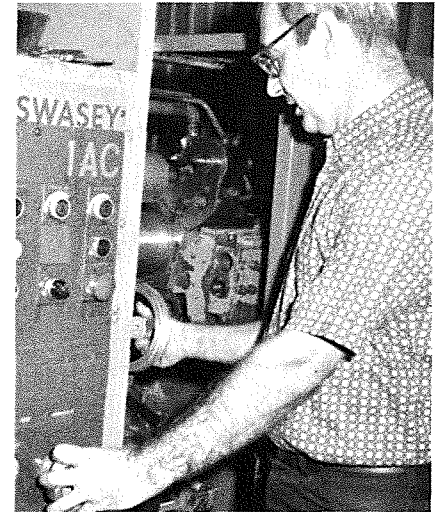
Balcrank's decision to coat handwheels in colored plastic already has caught the eye of machine designers; many inquiries were received when the "Imperial" Line (Balcrank's trade name for the colored wheels) made its industrial debut at the Production Engineering Show in Chicago. Also, *Industrial Equipment News* has requested that a color photograph of the "Imperial" handwheels be used as the cover for a forthcoming issue.

The plastic coated wheels offer customers several benefits. Handwheels, as every machinist knows, are subject to constant wear and corrosion. But the Imperial Wheel's coating of butyrate, one of the toughest plastics known, is virtually corrosion-free. Also, the colored

wheels give machine designers a chance to accent their most advanced designs in a new, unusual way.

At the onset, the "Imperial" Line seems a crowning success for a product that has endured many years.

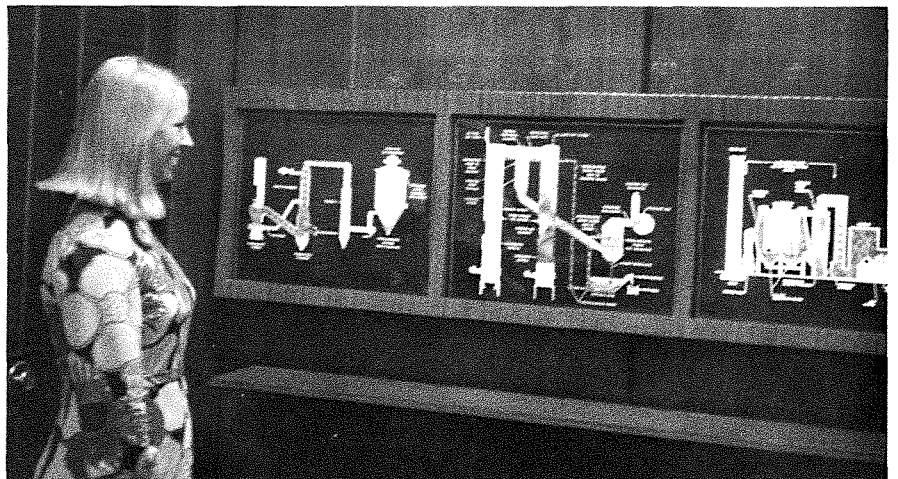
Joe Kring, machinist, prepares to face off and bore a handwheel; (at left) the finished product — the new, plastic-coated handwheel.



LIGHT and MOTION

An Unusual Technique Makes for Lively Wheelabrator Displays

Anna Marie Palumbo, secretary to Richard Adams, takes a look at the Technimation display in the lobby of the Research Center.



Motion is the heart of every Wheelabrator process. The spinning centrifugal wheel, the tumbling of the pieces on the continuous belt, the pulsating bags in our Ultra-Jet, or the flow of air through a precipitator — each is essential to the machine's function.

Yet, describing these actions to a customer is a challenge. Sketches and photographs help, but they "freeze" the motion. The actual

"flow" of work pieces is still left to the viewer's imagination. An unusual graphic process, however, is beginning to change this.

Called "Technimation", the process projects polarized light through a drawing to create the illusion of various motions inside a machine. As the light hits coated areas of the drawing, the rays are broken into swirling, floating, or pulsating patterns. Add color and the effect is as

spectacular as it is instructive.

Portable units for sales presentations and larger, trade show models have been built that illustrate many items in our vibratory and APC lines.

A permanent "Technimation" display of typical APC applications is now located in the R & D Building lobby. Stop off for a first-hand look at how this unusual process gives new life to our displays.

people AND events IN THE NEWS



A. L. Federnok



J. J. VanBelleghem



R. L. Orth

35 YEARS

Anniversaries

30 YEARS	20 YEARS	15 YEARS	15 YEARS, Cont.	15 YEARS, Cont.
F. W. Geist	S. F. Hopper	H. D. Cooley	R. E. Lidgard	E. H. Sanders
D. L. Snyder	G. Roy	R. E. Wyckoff	F. A. Adams	W. C. Holderead
R. L. Wade	W. C. Boyer	T. T. Banacka	R. R. Ward	L. S. Whitney
C. P. Bultinck	E. D. Conner	W. B. Sawdon	R. Chevie, Jr.	
	C. R. Myers	W. J. Ciesielski	P. VanDenAvyle	10 YEARS
25 YEARS	W. G. Myers	D. N. Toliver	O. Grubb	L. M. Hensel
G. F. Partridge	R. D. Lightner			

Balcrank "Jet Pulser" Featured in "American Machinist" Magazine

The September 21, 1970 issue of *American Machinist* magazine

included a feature article on the Balcrank Jet Pulser pumps used by the Ford Motor Company plant in Indianapolis. Ben Brosheer, senior editor of the magazine, authored the article in conjunction with **Ray Donovan**, Sales

Manager-Jet Pulser and **Bob Green**. "Results . . . have been so profitable that similar conversions and installations will probably be considered throughout Ford and other massproduction organizations," Brosheer stated.

Speaking for Wheelabrator

Frank Culhane, Sales Manager—APC, spoke to members of the Industrial Council of the South Bend-Mishawaka Chamber of Commerce on the subject of air pollution control devices. A movie and slides were shown. **Don Colley**, Senior Research Engineer, addressed attendees at the 9th Annual Indiana Air Pollution Control Conference at Purdue University. Topic of Colley's address was "Stack Sampling Yields Fractional Efficiencies for Dust Collectors." The Conference was sponsored by Purdue's School of Civil Engineering, the Indiana Air Pollution Control Board and the State Board of Health. **George Dehn**, Product Manager—Wet Collec-

tors, conducted a technical seminar on air pollution control devices for the Michiana Chapter of the Society of Automotive Engineers. **John Straub**, Director of Peening Technology served as chairman for the event. **Joseph Janush**, Marketing Manager, spoke at a three-day meeting of structural steel fabricators at Southern Methodist University, Dallas, Texas. Janush presented an illustrated paper on the advantages of blast cleaning as it pertains to structural steels. Also, at a meeting of the National Association of Corrosion Engineers, Janush conducted a workshop session for three committees he heads that are conducting laboratory and field work on the subjects of centrifugal blast cleaning, visual standards and surface profiles. **Hardy W. Steb-**

bins, Industry Sales Manager—Foundry, addressed the Milwaukee Chapter, AFS on the topic of a 'systems' approach to cleaning." 125 foundrymen from the Milwaukee area attended. **Ray Wolf**, Assistant Manager, Precision Finishing Division and **John Burlingame**, Regional Manager, Eastern Region, spoke to the members of the Society of Die Casting Engineers of New York at the group's September meeting held in Paramus, New Jersey. Films and slides of precision vibratory finishing and blast installations were shown. Ray Wolf also spoke to 15 representatives of the South Bend Supply Company, a local distributor of our media and compounds line. Assisting Wolf was **Ernie Gibson**, area sales engineer.

Supervisors Club In the News

Members of Wheelabrator's Supervisors Club have met three times since the group resumed

its operations in September. Dr. Chris Anderson from the University of Notre Dame spoke to the club in October on the topic, "Program Designed to Motivate Today's Worker". In November the members and their wives at-

tended the Club's annual dinner dance held this year at the Morris Park Country Club. **Charles Carlin** is the Supervisors Club president and **Harry Eisele** served as chairman for the dinner dance.

Appointments and Promotions

J. E. O'Callaghan has been promoted to the position of Field Sales Manager, General Products Division, reporting to **L. W. Kohlmeyer**, Vice-President-Sales. Taking O'Callaghan's place as Regional Manager-East Central Region is **Rufus F. Duff**.

O'Callaghan began as an Abrasives Specialist and has sold all products in the Wheelabrator line — abrasives, parts, precision finishing products and Wheelabrator equipment. He served as Regional Engineer for Equipment in the West Central Region and later as Regional Manager-East Central Region, one of Wheelabrator's most important sales areas. Duff has compiled a

successful 12-year record as a Field Engineer in both supplies and equipment sales.

K. H. Barnes has been appointed Manager of Products Assurance, a staff position reporting to Mr. **K. E. Blessing**, Vice-President and General Manager. The new position was created with a view toward upgrading the quality of Wheelabrator products, reducing the cost of customer adjustments, and improving the acceptance of our products and our company. Activities in this area will relate to Manufacturing, Engineering, Sales, Financial, and Materials Management and in scope, will include all product lines: Blast, Precision Finishing Products and Air Pollution Control.

George Jones has been appointed as Regional Manager—Central Region, effective January 1,

1971. In 1953 he joined the Wheelabrator Marketing Department, then worked in the Abrasive Engineer Program until 1958 when he took a Field Engineer assignment in Chicago. In 1961 he was promoted to Manager of Abrasive Sales and subsequently, Parts Sales were added to this responsibility whereupon his title was changed to Manager of Supply Sales.

On November 1, **Tom Mott** was promoted to the position of Manager of Equipment Sales—General Products Division. This position will complement the job of Field Sales Manager and will afford the supervision and directions to support the needs of Wheelabrator customers. Reporting to Mott will be the Industry Managers, Demonstration Department, and Proposal Engineering Group.

Julianna Club — "Busy as Ever"

The Christmas season finds the Julianna Club members active in many projects. In early November, they were off to Lee Wards, a store in Elgin, Illinois, which sells materials for making Christmas decorations, gifts, etc.

In nearby Geneva, Illinois, the Club had lunch and then shopped at a variety of unusual stores. **Eileen Hofmann** served as Chairman for the trip. On December 5th, the Club was off again, this time to Chicago for their annual shopping spree. The trip was organized by Chairman **Joan Draim**. Then on December 10th, the annual Christmas party, held at the L. H. Inn, brought the entire Club together for a

dinner, entertainment, and the announcement of new officers. "Visions of Sugarplums" was the party theme and the members were entertained by folksingers. Chairman for the event was **Florence Duncan** and she was assisted by co-chairman **Pat Stoockinger**. The Julianna Club also provided eight well-stocked Christmas baskets to needy families and **Sharon Peyla** served as chairman for the charitable project.

Industrial Shows Highlight Fall-Winter

The 1970 Iron and Steel Show, held in September at Cleveland's Convention Center, brought together several hundred firms exhibiting goods related to the steel producing industry. Wheelabrator's booth, a multi-phase design, featured slab and billet descaling, APC equipment, and abrasives. At the focal point of our exhibit were four billets, blast cleaned in our Demonstration

Lab.

Balcrank was well-represented at the Production Engineering Show in Chicago. The Show, held concurrently with the National Machine Tool Builder's Conference, was attended by over 120,000 management, design, and engineering personnel. Balcrank featured their full line of machine accessories in their display, as well as their "Jet Pulser" coolant system. Balcrank's new "Imperial Line" of plastic-coated handwheels were introduced at the show and com-

manded considerable attention by attendees. Delta Sonics, also represented in the Balcrank booth, showed their line of ultrasonic cleaning and plastic welding equipment.

Wheelabrator also participated in the International Union of Air Pollution Prevention Association's Clean Air Congress, December 6-11, held in Washington, D. C. The Wheelabrator booth featured color photographs of our APC installations around the globe, submitted by our international affiliates.

Significant Sales

Significant orders received in the last two months include: A 4-wheel strip descaling machine equipped with a 3-compartment

continuous automatic dust collector destined for Armco Steel Corp., Middletown, Ohio; a 2-wheel pipe cleaning machine for Valley Steel Products, St. Louis, Mo.; a 6-wheel horizontal plate

and structural descaling machine for St. Johns Shipbuilding and Dry Dock Co., Ltd., New Brunswick; and a 34 Super Tumblast for Central Foundry, Defiance, Ohio.

NEWS &

A PICTORIAL VIEW OF EVENTS AND PERSONALITIES AT WHEELABRATOR — 1



D. Roger Neeld, Vice-President—Engineering, was a willing sales prospect for four energetic young stock salesmen representing the four Wheelabrator-sponsored Junior Achievement companies. Neeld is a member of the South Bend-Mishawaka Board of Directors for Junior Achievement.



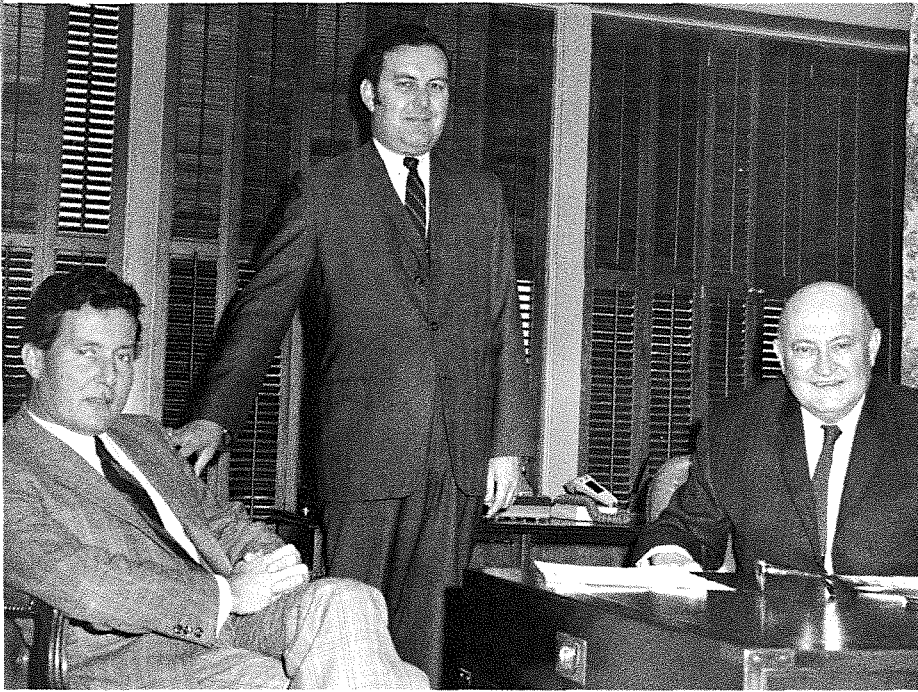
Eric Bonyhady, (left), vice president of Prestige Group, Pty. Ltd., a company Northmead, Australia, came to Wheelabrator in late October to discuss the vitriory finishing of zinc die castings with Ray Wolf (center), assistant manager Precision Finishing Products, and William Brandt, Sales Manager, Precision Finishing Products.



Hail the champs—our softball team, who copped the City Championship this year with a 9 to 3 record. Congratulations to Team Captain Harold "Hooter" Mayes and his m

VIEWS

President at Wheelabrator-Allevar; J.A.; International Visitors; Softball Champs; Local Guests . . .



Jean Pierre Givry, named to the position of Chairman of the Board and President of Wheelabrator's joint-venture company in France, Wheelabrator-Allevar, recently met with James L. Hesburgh, Vice-President — International Operations and James F. Connaughton, Wheelabrator President. M. Givry assumed the position upon retirement of George Bietrix who remains as a Director of the French firm.



William Macmillan (left), Technical Director of Tilghman Wheelabrator Ltd., came to Mishawaka in late October for engineering discussions with Armando Nicolini, Engineering Liason Manager—International Operations, and other personnel.



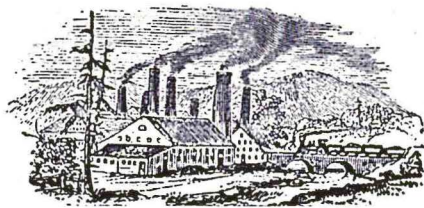
Dr. Theodoro Niemeyer, (left), Director of Acos Villares S.A., one of Brazil's most prominent steel mills, recently conferred with James Boyer, Product-Manager—APC Systems Design and Ernie Kolesiak, Sport Department, about solving air pollution problems at his plant.

Notre Dame graduate students from the class of Dr. William Sexton (center) were recent Wheelabrator guests. The group toured our plant and studied various production and inventory systems with Mr. James Donlon, Vice-President—Finance (second from left) and Mr. Jack Beery (right), Materials Control Manager. At far left, one of the student participants.

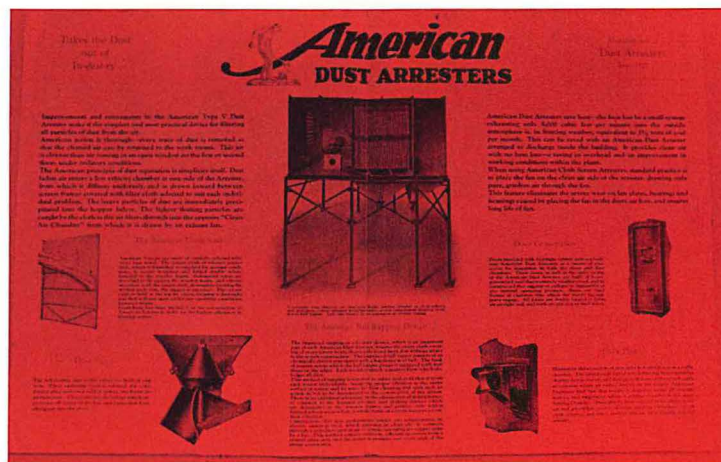


A recent visitor to Wheelabrator from Stockholm, Sweden was Mr. Carl von Rosen, who met with Mr. James L. Hesburgh, Vice-President—International Operations. Mr. von Rosen is the Managing Director of Karlebo, a Swedish firm which has worked with Wheelabrator affiliates in Europe.





AIR POLLUTION CONTROL ...on the Move



The Story of How Our A.P.C. Division Grew and How It Is Gearing-Up for the Future

Men have griped about dirty air for a long time. Even as far back as the year 1272, citizens of London saw the light — or the lack of it — and clamored about the smoky skies over their city.

In the U. S., people really didn't think much about air pollution before the turn of the century — the 20th Century. We were still a country of "wide-open" spaces, whose limits were loosely bound by rails and fence rows and whose natural

resources seemed unlimited. Thick, dark smoke pouring from the stacks of industry was more a symbol of progress than environmental decay. It wasn't until 1913 when the U. S. Bureau of Mines noted that dust could be a hazardous fact of life in the miner's world that public interest was aroused.

It was in 1913, too, that early Wheelabrator engineers created the "American Dust Arrester", a device that "Takes the Dust out of IN-DUST-ry". It drew in dirty air, allowed the heavy dust to settle and trapped the lighter, floating particles in cloth filters that looked like window screens. Most important — it worked, and the "American Dust Arrester" soon was "arresting" dust as an addition to our "Humane Sand Blasting Room" a forerunner to another Wheelabrator innovation, the centrifugal blast wheel.

Until 1930, the "American Dust

search Engineer. Customers were trying adapt our "Dust Arrester" to control pollution from hundreds of industrial processes that didn't even exist back in 1913. Clearly, new ideas were needed.

The first idea emerged two years later in the form of a tubular fabric bag — the Wheelabrator "Dustube". Although the "Dust Arrester's" screens worked well, the tubes were easier to clean and they were not without precedent.

For years, similar "dust bags" had been hung in smelter houses, providing limited dust control. Cleaning



... Leslie L. Andrus (retired) pioneered the development of Wheelabrator's air pollution control technology and headed its first APC Division.



... Len B. Nelson, Vice President in charge of Wheelabrator's A.P.C. Division.



... Clyde A. Snyder, Chief Air Pollution Research Engineer, has been responsible for many of Wheelabrator's important advances in clean air technology.

resources seemed unlimited. Thick, dark smoke pouring from the stacks of industry was more a symbol of progress than environmental decay. It wasn't until 1913 when the U. S. Bureau of Mines noted that dust could be a hazardous fact of life in the miner's world that public interest was aroused.

Arrester" was our principle contribution to clean air. But then things really started to happen.

Fabric Filter First

In 1930 the Research and Development Department was founded, consisting of "one man with ideas" — Clyde Snyder, now Chief APC Re-

maintenance of these bags was primitive, though; men beat the dust-caked bags with paddles and buggy whips.

So industry found the Wheelabrator "Dustube" a real improvement, a high-efficiency, low-cost device that was easy to clean (we designed a shaker system and the new Ultra-Jet

... Frank Culhane, Sales Manager—A.P.C. and his field force (L-R), Robert Morand, John Phelan, Jerry Lanois, James Miniea, Melvin McVay, H. Neff Jenkins, Terry Tureskis, Alfred Kroll (Ed Koval not pictured).



model even uses high-pressure air blasts to release the dust).

In the six years following WW II, Wheelabrator personnel made five significant breakthroughs, adapting the "Dustube" for the asbestos, carbon black, and steel industries, for "super cleaning" air and in underground ventilation. Also, we showed industry how to collect dust for more than health reasons. Fabric filters not only improved in plant conditions, they also recovered valuable elements otherwise lost to atmosphere. Asbestos processors, for one, knew this made sense.

Today Wheelabrator stands as the leading supplier of fabric filter collectors and "Dustube" orders head the ranks in total APC sales volume.

APC Activity Mounts

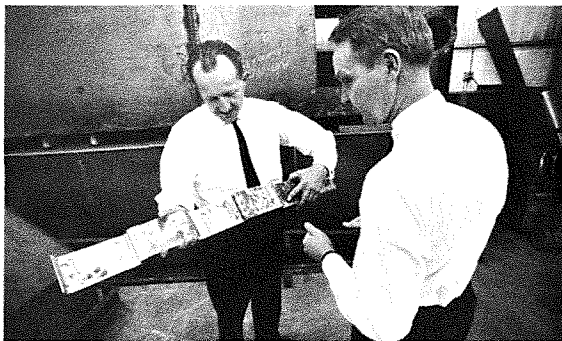
But long before WW II, it was apparent that systems other than filter tubes were needed. Again, R & D entered the scene. They knew the greatest enemy of cloth filters was heat. From then on, technicians at Wheelabrator and later at the W. W. Criswell Division in New Jersey and the Canadian subsidiary, Barrday, Ltd. have sought and developed

"Wheelacone Wet Collector".

It could handle hot gas streams and safely collect combustible dust (such as magnesium). Later, other "wet" systems, in particular the "Turbex" wet scrubber, became part of the Wheelabrator line.

Recently, the "Turbex" garnered special attention by industry when it was used to clean the thick smoke and gases from a gray iron melting furnace. In this installation, the gases enter the "Turbex" system, hot enough to melt aluminum and emerge as clean air.

Another major APC equipment de-



... Heinz Engelbrecht, left, Lurgi Engineer stationed at Wheelabrator and Robert L. Bump, Engineering Product Manager, Wheelabrator Electrostatic Precipitators, examine one of the electrically charged plates which collect dust in a precipitator.



... Richard L. Adams, left, Engineering Manager of Fabric Filter Systems, and George W. Roper, Manager of Special Air Pollution Control Projects.

In fact, it was at the Johns-Manville asbestos mills in Quebec that Wheelabrator recorded one of its most dramatic installations — 70,000 Dustubes that clean over 3 million cubic feet of air each minute! Every asbestos mill built in the last 20 years has employed an APC system built on this design.

special heat-resistant fabrics. Yet, some "superhot" applications remained that could devour even the best "Dustube" unit.

This led to a new device using water and chemicals to "scrub" dirt from the hot gas stream." By 1937, a prototype was built. Two years later, the idea became the first

development occurred in 1965 when we were licensed to manufacture and sell the Lurgi electrostatic precipitator. Our licensing firm, Lurgi Apparatbau GmbH of Frankfurt, Germany, was formed in 1919 and is a world leader in air pollution control. With Lurgi, we exchange technical data and can call upon their staff of

(Continued on next page)

3,000 engineers and technicians for research.

The precipitator, a huge chamber filled with many rows of electrically charged rods and collector plates, pulls charged particles out of the gas stream, attaching them to the collector plates. In turn, the plates are rapped automatically and the dust is collected. Now at over 15 sites in the U.S., our "precip" is a major adjunct to the arsenal of products we offer to combat pollution.

At present, APC personnel are de-

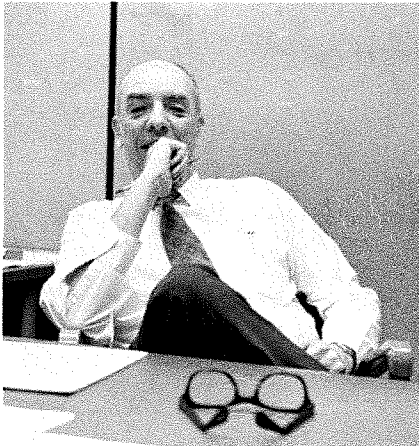
veloping the new "Ultra-Dyne", a device that uses a continuous filter belt to "screen" out pollutants. When ready, the "Ultra Dyne" will offer industry a way to correct one of the most stubborn pollution conditions — oily particulates that cannot be efficiently trapped by conventional systems.

People

But the evolution of equipment is only half of Wheelabrator's APC story. People are the rest.

In 1945, a special "Dust and Fume" Division was created, reflecting management's awareness that the pioneering effort that made Wheelabrator blast cleaning famous also could spur our success in the pollution control industry.

Under the direction of Leslie L. Andrus, a pioneer in APC and a founder of the Industrial Gas Cleaning Institute, the Division grew into an operation staffed with outstanding engineers, sales, and technical personnel. Today, our Air Pollution



... Bob Dorman, Manager of APC Construction, oversees the field erection of our equipment.

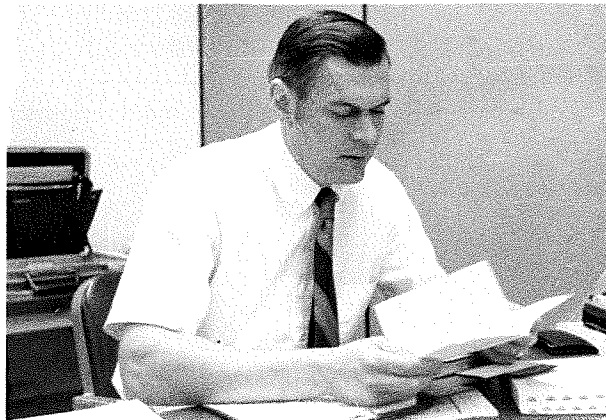
... A portion of APC's new engineering facilities, completed in October.



... Jim Boyer, Product Manager—APC Systems and Design, heads up the team of engineers who write APC equipment proposals.



... Robert Shukis, Sales Manager—Utilities, who handles APC equipment sales to the utilities industry (power, light, etc.).



Control Division (the name changed in 1966) is headed by Len Nelson, Vice-President — Air Pollution Control.

Housed in the Research Center, APC is organized with Product Managers and industry sales specialists, each experienced in a key field. Geographically, the APC sales staff represents Wheelabrator in every manufacturing center in the U. S. and Canada. In addition, several of our international licensees and affiliates make APC's influence world-wide.

Discussing the Division's future, Nelson says the much-publicized "pollution control boom" is yet to come, but he adds that "our level of activity greatly increased in the past year. We have secured the services of many well-qualified men and we are grearing-up our engineering operations. It's a foregone conclusion that pollution codes will tighten on a national basis, and this means our work volume could easily triple."

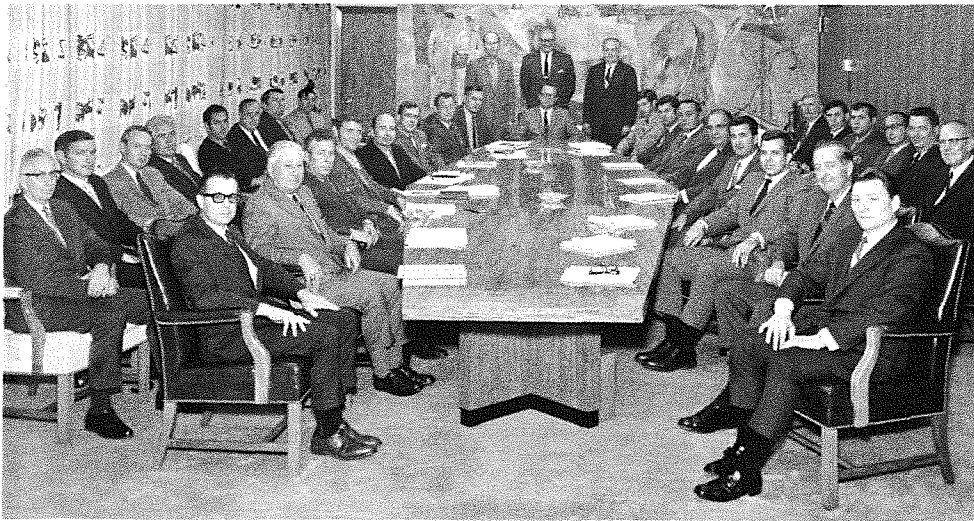
"In the last month, we've placed a larger quantity of APC data on our

computer for this very reason. To test the system, we used the computer to determine the total weight — in tons — of material going into a precipitator we're building. That's an involved question, of course, and it could take us many hours to arrive at a figure. In seconds the computer gave us the answer. It differed three pounds from what we had calculated. With the men, facilities, and systems like this, the future of APC will be exciting and rewarding for everyone."

... Jack Thomas, Sales Manager—Rock Products, serves the cement, rock crushing, and allied industries, another area vitally interested in clean air systems.

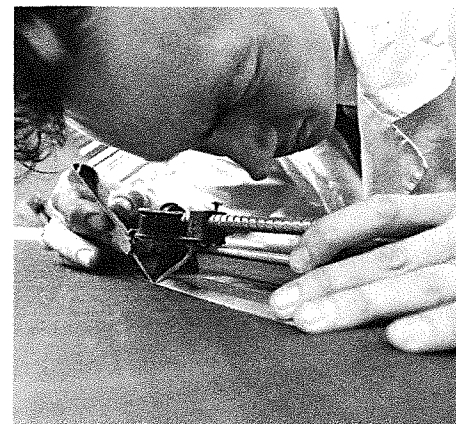


... George Dehn, Product Manager — Wet Collectors, supervises the engineering and installation of our "Turbex" wet scrubbing systems.

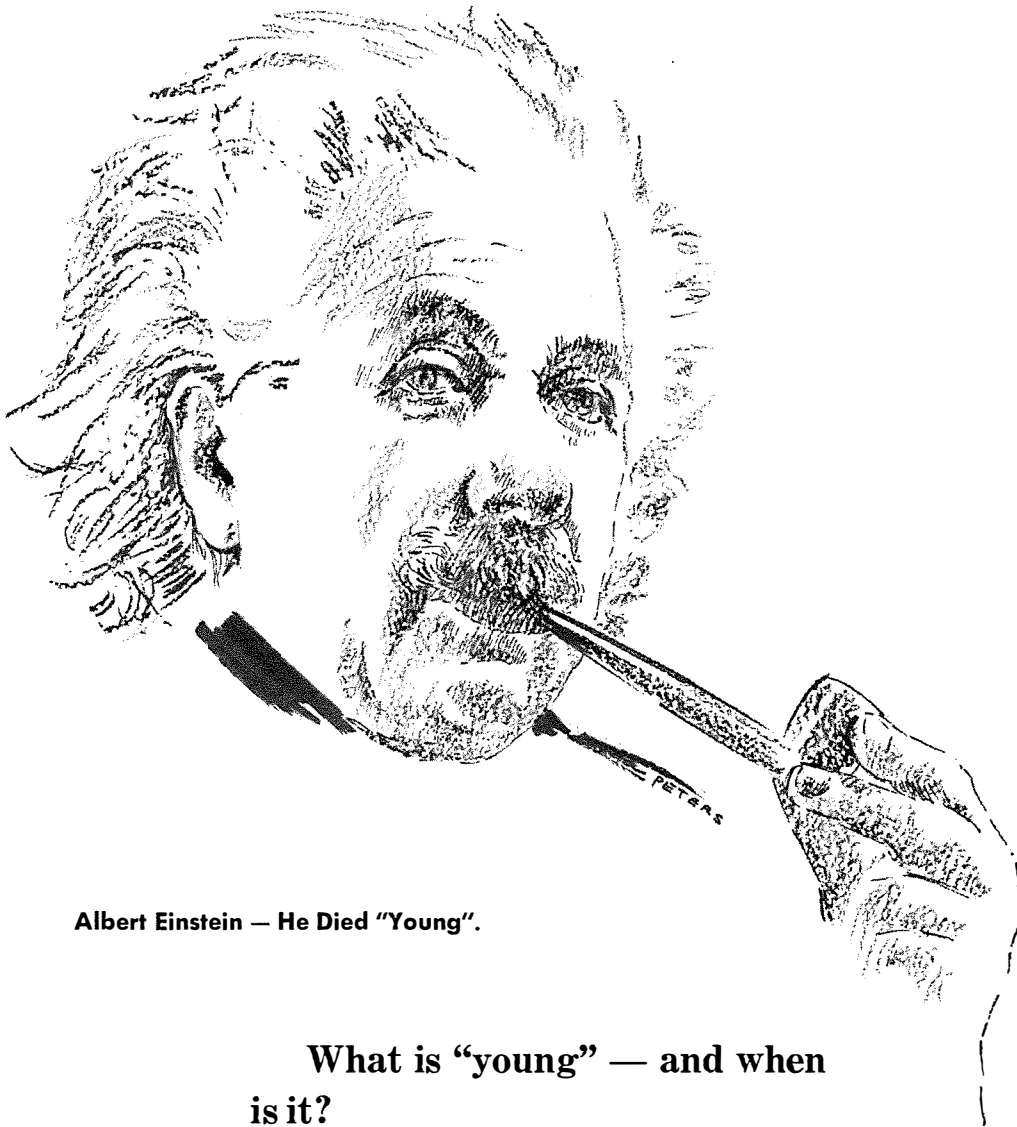


... Personnel representing every phase of our APC operations in both the U.S. and Canada meet with (standing at rear) Mr. L. B. Nelson, Vice President—A.P.C., Mr. James F. Connaughton, President, and Mr. K. E. Blessing, Vice President and General Manager during the A.P.C. Division's Fall Sales Conference.

... Technicians (left) examine dust particles and (right) cloth structure, part of a constant search for better, more efficient air cleaning systems.



What is young?



Albert Einstein — He Died “Young”.

What is “young” — and when is it?

Young is an attitude, a spirit. A way of looking at things. Of responding to them.

It is not an age. Not a hairstyle or a piece of clothing or a musical beat.

Young can be a child examining his first marigold with wonder

Profit-Sharing to Date

and delight . . . or Verdi at 81, composing his finest opera.

Young can be a teen-ager swinging on a surfboard . . . or Einstein, in his 70's, still working on his unified field theory, sailing his boat and playing his beloved fiddle.

Young is not a monopoly of youth. It survives, and flourishes, everywhere the vision has been kept fresh, the muscles of the mind firmly toned, the juices freely flowing.

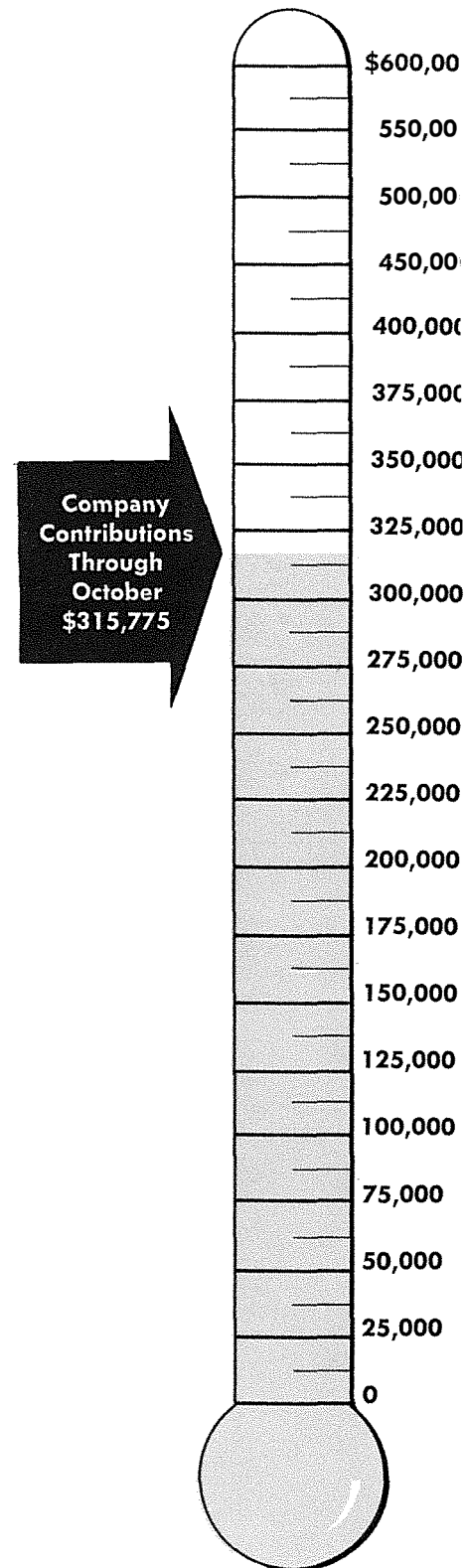
Let's not cater to youth, for its own sake, for its shibboleths and slogans and styles of the moment. Nor scorn it for any of those reasons.

Instead, let's respect "young". Wherever it may be found. Whether the beard is soft and curly or stiff and gray. Spirit has no color. It is always translucent, with its own imaginative sheen.

Youth should be listened to. But **young** should be followed.

There is no generation gap between the young of any age.

Reprinted by permission of the Leo Burnett Company, Inc., Chicago.



The Unusual Hobby of Ray and Harriette Steele Preserves the Legacy of Our Hoosier State

Indiana's rich historical heritage is something Ray and Harriette Steele know well. In fact, they have combined their interest in Indiana's past and Ray's photographic skill into a rewarding hobby—traveling, photographing, and researching the landmarks of the Hoosier State and later turning the material into a variety of interesting slide-lectures.

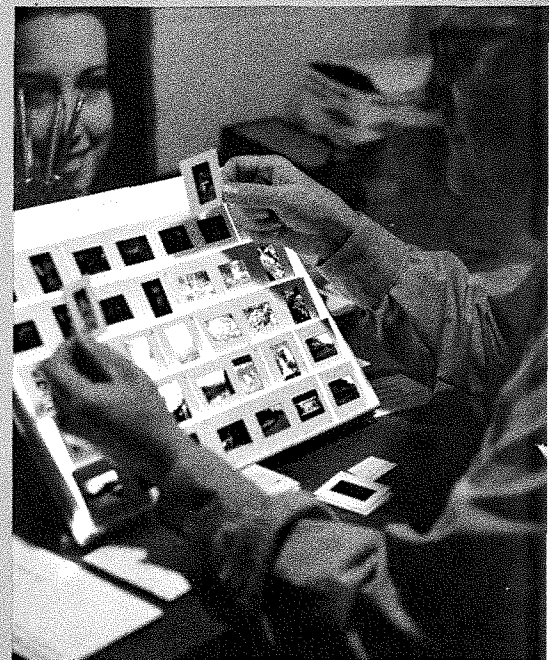
Mishawaka to Vincennes

Slide shows by the Steeles are in so much demand that they often have to turn down requests. They have presented shows at schools, garden club meetings, churches, homes for the elderly, and many other organizations on such engaging subjects as "The Four Seasons" (Indiana landscapes through the seasons), "Church Spires" (Ray has photographed some 100 church steeples for this series), "Indiana's Covered Bridges" (Indiana has 138 of these unique pieces of rural architecture and Ray has photographed all but three), "Indiana Landmarks" (a photo-tour of Mishawaka, South Bend, Bristol, Wabash, Madison, Indianapolis, Aurora, and Vincennes), and "Touring Historic Indiana" (a similar show that begins in Fort Wayne, moves south to Corydon, Indiana's first capitol, and then through the beautiful countryside and homes around New Harmony and Vincennes). Any one of the 30-minute shows makes for an enjoyable evening — and is a concentrated, vivid lesson in Hoosier history.

Twenty Years with the Camera

Ray explains that his interest in photography began "at least 20 years ago" when he purchased an Argus C-3 camera, just before the Steele family left for a vacation in the Smoky Mountains. "Since then, I've been collecting equipment," he says, "and I have over 3,000 slides that cover almost every historic area in Indiana."

Photography fans might be interested to know that Ray's stock of camera equipment is quite different from the C-3 days. All slides for



shows are taken with a Nikon F-Photomic-FTN, one of the finest 35 mm. cameras, and he uses a full range of close-up, wide-angle, and telephoto lenses. "With all this equipment", Ray jokes, "it's impossible to take a bad picture", and his photos prove it.

His slides capture the quiet coolness of a woods in Brown County, the green, rolling countryside around

Top — Ray (who serves as Wheelabrator's Personnel Manager) and Harriette Steele coordinate the script and photos from one of their shows about Indiana history.

Left — Ray and some of his photo equipment.

Right — In the darkroom, Ray edits slides from a trip the Steeles made this fall — where else but in Indiana!

Franklin and Dearborn Counties and the stateliness of the old homes along Lincoln Way East in Mishawa-

ka. A photograph by Ray is used as a postcard by Fernwood, Inc., a nature preserve located along the St. Joseph River northwest of Niles. (Until recently, Ray was the official photographer at Fernwood, and he prepared slide lectures there, too.)

In addition, Ray has been active in the South Bend-Mishawaka Camera Club (no longer in existence), and his photographs have won several awards in local competition. While much of his skill in capturing scenes on film is pure instinct, Ray has some professional training, too — through an accredited photography school and studying with a local film studio. Following his father's hobby, the Steele's son, Michael, is a freelance photographer in Milwaukee.

Midnight Hours

But pictures are only half of the Steele's slide shows. While Ray handles the camera work, Harriette

finally ready, the Steeles call on their son-in-law, Gerald Kline (Chairman of the English Department at John Adams High School, South Bend) who narrates the show. Ray selects appropriate background music (classical to jazz) and together they tape-record the script and music.

Asked "why" they pursue this unusual hobby, the Steeles explain that "we like history." Preserving — at least on film — Indiana's historic homes and landmarks, some not yet officially protected from destruction, is much of their goal. Ray has made what certainly is one of the most comprehensive photo-surveys of Mishawaka-South Bend landmarks in existence. "I had the opportunity to photograph the old Oliver Hotel, inside and out, only a few days before it was taken down," Ray says, and you can be sure that when the next historic building or home is slated for destruction, Ray will have

HISTORY LIVES IN INDIANA

writes the script. "I really burn the midnight oil preparing our scripts", she says, adding that the average 30-minute script runs 4,000 words — about 12 pages. Material for the scripts come from many sources: the Mishawaka Public Library, the Northern Indiana Historical Society, information on historical markers, books, maps, and magazines dealing with Hoosier history. Among her many memorable experiences while gathering material was a chance to talk with one of the descendants of the followers of Robert Owen, a leader of the short-lived, Utopian community of New Harmony (started shortly before the Civil War), an experience many historians would enjoy.

Currently, Harriette is gathering information about Indiana's Amish, a strict people whose reputation as prudent farmers is well-known. They will be the subject of the Steele's next show.

Putting the Show Together

When the photos and script are

recorded its presence long before the wrecker's ball arrives.

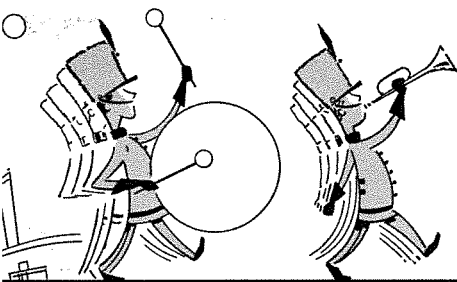
"We look at our slide shows in another way, too", Ray says, "as a retirement interest. Eventually we hope to put much of this material — and new photos, too — together in film strips for schools and libraries." Chances are, they will.

Some friends of the Steeles keep asking them to join them on a vacation, and laughingly complain that right now "you can't get the Steeles out of Indiana".

"It's almost true," says Ray. "We would like to do shows about other parts of the country but it's important to know your own state first, especially in a state so filled with history as Indiana. We can concentrate on Indiana history for a long time yet."

Right — A few historic homes and buildings in the Mishawaka area, filmed by Ray: (From top) Mix home (torn down recently); Garth Stroup home; Bridge on Old Goshen Road over Baugo Creek; Mishawaka City Hall.





PASSING PARADE

CANADIAN Classics

PARADE sends its best to our friends at Wheelabrator of Canada for the news that follows. Thanks especially to **Ron Donnelly**, our new Canadian correspondent.

Who should meet 1200 miles from home on a crowded Prince Edward Island beach, but **Martin Ubbink** of Blast Div., and **John Adamse** of A.P.C. Engineering . . . **Walter Wingfield**, A.P.C. Engineering is back from a week's holiday in Fort Wayne, Ind. Walt is a hockey scout for the Fort Wayne Komets and while talking with the arena manager down there found that a bus load of employees from Wheelabrator, Mishawaka, attend the games . . . A warm welcome back to **Enid Drysoale** after a short stay in the hospital . . . One rule permitted in the Wheelabrator father and son golf tournament was the borrowing of another employee's son, resulting in **Jim Wilkinson**, Sales and (son) Paul Marit, tying **Ian Somerville**, Service Rep. and son, Glen, for top spot . . . Oak-Wheel Social Club's annual picnic, the first year for a men's horse-shoe pitch, found finalists **Bill Wilkinson**, V.P. and **Bill Adams**, Warehouse, losing to **Ron Donnelly**, A.P.C. Eng. and visiting **Walter Stanbitz** from Barrday plant, Galt, Ont. . . . Welcome back to **Syd Wilkinson**, warehouse manager and **Eric Robinson**, Parts Dept., both having undergone surgery. Odd thing too, both from the same car pool . . . Sorry to lose **Margaret Rigby**, Payroll, but happy also for her and her husband with the adoption of a baby boy . . . Congratulations to **Gordon Big Canoe** on receiving his 10 year pin . . . Congratulations to **Jude Malone**, fitter, and wife, a baby daughter . . . **Eric Christensen**, assembler and wife, a baby boy . . . **Clayt Dinger**, Sales, not being happy with a hole in one on the 172 yard 3rd hole (a 5 iron), at the end of June, used a driver into a stiff wind on the 187 yard 13th hole for his second hole in one of the season, around the first of Sept.

R. Donnelly, A.P.C. Engineering

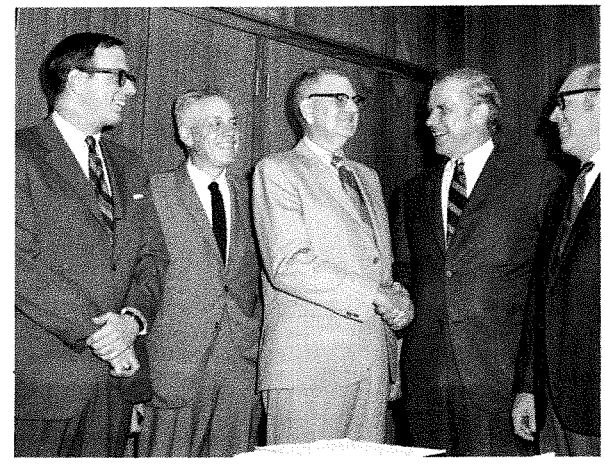
"Meanwhile, Back in Mishawaka"

This reporter and family spent a week and a half traveling through Canada and visited the Falls on both sides . . . **Corby Kiser** and wife are

the proud parents of a baby boy — Congratulations . . . **C. A. Nettrouer** is on sick leave. Hope to see you soon, Clarence . . . Our deepest sympathy to **Jean Bodine** on the loss of her husband . . . We regret to hear of the death of **Sadie Daggy**, former night nurse . . . **Herman Miller** and wife went to Canada on a fishing trip. He said he doesn't want to talk about it. Sorry about that, Herman . . . **Bob Barsoda** and **Virgil Bordner** went Coho fishing. Bob caught two — one weighed 10½ lbs. Virgil hooked one but it got away . . . **Lee Florea** also went Coho fishing and caught one . . . **Fred Beals**, production electrician, spent his July vacation hunting and photographing covered bridges in Central Indiana. He found 19. He also visited the Gen. Lew Wallace Library and Museum in Crawfordsville . . . John Bodine, son of **Jean Bodine** and the late "Cash" Bodine, was designated "Distinguished Army ROTC Cadet" at ceremonies at Indiana University recently. John received his commission as Second Lieutenant at military commencement on May 21, 1970. The "distinguished cadet" honor is bestowed on senior cadets who have demonstrated ability, initiative and other leadership qualities essential to successful performance of duty as an Army Officer. John is a graduate student at I.U. having just completed his first year at I.U. Law School . . . John may be remembered as one of our summer student workers, sometimes known as "tar baby". He received the nickname from time spent on the roof one summer putting a new coat of tar on the roof of the factory.

Robert Nettrouer

After 36 years of service to Wheelabrator, **Walter Nelson**, Service Engineer in the Southern Region, has retired. Commenting on Nelson's career, Vice President of Sales, **L. W. Kohlmeier** said, "There are many large Wheelabrator installations in the South that stand as testaments to the knowledge and capability of **Walter Nelson**." Pictured are **J. E. O'Callaghan**, Field Sales Manager, **R. Orth**, Vice-President, **Nelson**, **L. W. Kohlmeier** and **J. E. Skene**, Director of Customer Service.



Lou Kenney worked again this year as our "loaned executive" on the United Fund Campaign . . . **Bob Leliaert** visited Washington, D. C. during his vacation week . . . **Glenn Fulmer** spent a week's vacation fishing — Happy Birthday to Glenn who has just reached his "16th" birthday. That's what he told us, and who are we to argue? . . . **Candi Weldy** visited South Bend recently to attend my wedding! We were really glad to see her.

Nancy Baldoni, Ind. Rel.

We'd like to extend our best wishes to **Mr. and Mrs. Chester Smith** who were married September 11. Mrs. Smith is the former Joan Kirkwood for Production Control. Chester is a foreman in Assembly . . . We'd also like to congratulate **Helen Swartz** on her recent marriage to **John Relicke** . . . A hearty welcome is extended to **Stanley Hes** who joined our department . . . **Doris Grindeland** went to Iowa to attend a friend's wedding . . . **Bud Kyle** and his wife vacationed out East visiting their daughter . . . This reporter spent two marvelous weeks vacationing in California and Las Vegas.

Kathy Hes, Mat'l's.

We have several new babies to welcome. **Anna Hartley** and **Betty Honold** each have a new grandson. **Tom Strantz** is proud of his little son — his first child. **Tom Burmeister** added a new little girl to his family . . . **Hubert Davidson** and **Ward Correll** each chose to spend two weeks of their vacation touring the New England States. Ward also visited his son and his family out there . . . **Dimi Sowiak** spent some time in the Pennsylvania Dutch area in Lancaster, Pa. . . . **Phil Diehn** spent a week in Austin, Texas with his family . . . **Andy Federnok** made a trip to Florida to see his son in the Navy and spend a restful vacation . . . All of us wish **Dottie Whitmer** the very best on her retirement. We're sure that with all her many interests, she will not have time to be bored . . . **Julius VanderBruggen's son**, **Russell**, had a harrowing experience while on vacation in North Carolina. He was attacked by

unknown assailants who robbed, beat and stabbed him, but we are glad to hear that he is recovering very nicely . . . **Jean Seybold** spent an enjoyable week's vacation in Houston, Texas . . . All of us wish the very best to **Ken Barnes** on his new assignment as Manager of Products Assurance.

Betty Honold, Eng.

Customer Service has two father-son teams in the Detroit district, **Art** and **Andy Joye** and **Albert** and **Michael Bische**, plus two brothers, **Dale** and **Jim Reddrick** . . . **Phil Jordan** is a proud grandfather, (his daughter and son-in-law), to Kristin Lee. Phil had a great fishing trip except that he caught not a single fish . . . Welcome to **Rosemary Nagle** replacing **Lillian Cook** . . . **Bob Molnar** and wife, **Kathy**, adopted a baby, **Kimberly Kay** . . . **Olive Hartung** of Export had a nice vacation with her family and a trip to Illinois.

Julie Craven, Export

Mary Ann Graveel is going to Canada for a weekend vacation . . . **Joan Schue** and **Elaine Baldini** were among the local fans at the Notre Dame-Missouri football game at Columbia, Missouri. They also went to Lansing for the Michigan State game . . . Welcome home from the hospital to **Mark Saltzgaber**, son of **Carol Saltzgaber** . . . **Earl Fairbanks**, Sales, just moved into his new home . . . Congratulations to **J. E. O'Callaghan** who was recently promoted to Field Sales Manager . . . **Dick Fenska** went pheasant hunting in Nebraska on his vacation . . . We wish a speedy recovery to **Rena Lester's** husband who recently had open heart surgery . . . Sorry to see **Alan Van Huffel** leave the Parts Dept. Best of luck, Al . . . **Anne Sawyer** saw the sights in San Francisco on her vacation . . . **Lorrie Pfender** moved into a new house and who should she have for a neighbor but her boss, **Paul Myers**.

Lorrie Pfender, Parts Sales

Congratulations to **Bob** and **Mary LeMon** who celebrated their 28th anniversary November 7th . . . **Carter Drees** and his wife, **Judy**, are busy working with Southhold Restorations, an organization interested in identifying and preserving the homes and buildings of historic or architectural importance in the South Bend-Mishawaka area . . . We're happy to hear that **Lu Hensel's** husband, **Art**, is progressing so well after his open heart surgery.

Karen Myers, Marketing-Adv.

Best wishes to **Mike Maggart**, his wife, and their new baby daughter, **Laurie** . . . There are several new faces in APC. The latest to join us are **Ruth Ann Amacher**, **Mary Jo Acrey**, **Rudy Harsanyi**, **Charles Runyon**, **Al Retek**, **Carl Overmeyer**, and **Ray Holman** . . . Welcome back to **Danny Segulja**, returning after a long illness . . . Farewell to **Ed Hackett**, who left Wheelabrator to organize his own business . . . **Fred**

Sjoquist has found football pools to be a valuable supplement to his income. What's the secret, **Fred**? . . . Our deepest sympathy to **Karl Smith** on the death of his father.

Marsha Honold, APC

Del Biesbrouck, Cost Dept., is planning a ten-day stay in Georgia. She will be visiting her daughter for the holidays . . . **Jane Clements**, Financial Dept., is planning to spend the holidays with her and Wayne's family in Michigan . . . Welcome to **Betty Urbanski**, the new employee in the Credit Dept. . . . **Grace Prentiss**, Billing Dept. will be taking care of her grandchildren from Troy, Mich. for the holidays. Grace attended an unusual festival in Circleville, Ohio. She tells us she went to a Pumpkin Festival where she picked her own pumpkins and was offered an endless variety of pumpkin desserts and candies . . . **Mary Schroeder**, Accounting Dept. visited Brown County in October. She spent three days there enjoying the beautiful scenery . . . Better late than never news from Data Processing — **Sharon Phillips** was married August 29. She and her husband, **Herb**, are now living in an apartment in Mishawaka . . . Mr. and Mrs. **Ron Wachs** had a boy, **Stephen**, in September. This is their third child . . . **Bill Rockhill** plays classical guitar for a hobby. He and **Ron Wachs** frequently get together for jam sessions . . . **Tony Heimann**, Data Processing, was married to **Cecile Naulty** on August 8 . . . **Jim Robinson** and his wife are avid tennis players. They won the city league mixed doubles and **Jim** won the men's singles in his division.

Elaine Baldini, Cost Dept.

Our best wishes for a happy retirement to **Helen Leyes**, North Shipping and **Eva Copp**, Production Control (nights). Enjoy it, girls. We have enjoyed a dinner in honor of each one of the retirees . . . Our congratulations to **Joan Kirkwood**, Production Control and **Chester Smith**, Steel Shop, who were recently married. Our very best wishes to you both . . . This reporter and husband **Ray** attended the wedding of **Mary Michele Leliaert**, daughter of **Ray Leliaert**, and **Dennis Rader**, of the R & D Lab. **Mary** and **Dennis** were married on Oct. 3. **Mary** worked in Industrial Engineering this summer . . . Our deepest sympathy to the Bodine family upon the death of **Cash Bodine**, husband of **Jean Bodine**, of the Steel Shop office . . . Our sympathy also to the **Lambert Klaer** family in the passing of his mother-in-law, **Mrs. Branson**.

Hildreth Boehnlein, Ind. Engr.

Congratulations to Mr. and Mrs. **Ray Van Vooren** on the arrival of their new baby daughter, and to Mr. and Mrs. **Gale Lechlitter** who are the proud parents of a new baby boy . . . Condolences to the family of **Casey Wegnerowski** who passed away recently. The men of the first shift will all miss **Casey** . . . **Bob**



After 29 years in Wheelabrator's Advertising Department, **Art Fuller** retired and moved to Sun City, Arizona where he and his wife have built a new home. Here **Art** (center), shows his retirement gift to **A. E. Lenhard** (left), Manager of Sales Promotion and Advertising and **Les Petersen**, President of the Petersen Printing Company and longtime associate of **Art's**.

Gorny and family traveled through the New England States and Canada and visited Niagara Falls . . . **Pappy Breden** and wife spent their vacation fishing and relaxing at Fish Head Lake, Michigan . . . **Pappy** said the fish are so big he had to use three-pound bass for bait! . . . **Lewis Snyder** and family traveled to Spokane, Washington to visit relatives. During their trip out they visited Yellowstone National Park and Mt. Rushmore . . . **Glenn Benson** and **George Bruggner** and friends went on a deer hunting trip to Wyoming. The deer were in luck, none were shot . . . and finally, **Howard Grove** reported to us that he was spending his vacation in the deep woods of Osceola doing absolutely nothing.

Dave Lange, Steel Shop, 1st Shift

Ray Gervais' daughter, **Kathy**, and son, **Larry**, became winners in their age group in the Pass, Dribble and Shoot Contest in this area. They'll now compete in the district finals in Chicago . . . All of **Ken Watson's** friends in R & D wish him a quick recovery from his recent operation . . . **Jim Bird** also underwent surgery on his injured hand . . . Congratulations to **Harold** and **Brenda Floyd** on the birth of their daughter, **Jodi Lynn** on October 15.

Paul T. Hillebrand, R & D

Congratulations to **Jack** and **Mary Bell** on their 15th anniversary . . . Our condolences to **Elmer Livingston** on the recent death of his sister . . . Congratulations to **Hacker Combs**, **Oren Grubb** and **John Messer** on the good luck of their 160-mile hunting trip on opening day . . . Welcome back to the 2nd shift, **Cleo Werntz**, **John Messer**, **Harry Rutkowski**, **Gene Kempner**, **Jim Kite**, **Dean Hans** and **Clark Bargo**.

Roger Coleman, Machine Shop

it's your "BENEFIT"



Melissa Wagner, daughter of Dick and Linda Wagner (Dick is a Sales Engineer in Training), hands Pharmacist Dick Deardorff the Wagner's Blue Cross/Blue Shield card, identifying them as eligible for the Prescription Drug Benefit Plan.

Some of the "sting" went out of high medical costs for Wheelabrator employees last October 1st, the day our new Blue Cross/Blue Shield Prescription Drug Benefit went into effect.

In simple language, the next time your doctor hands you a prescription, you only have to pay the first \$2.00 of the drug's cost. Blue Cross/Blue Shield pays the rest. Just give your participating pharmacist the prescription (your doctor could phone it in, too), your Blue Cross/Blue Shield identification card, and pay no more than \$2.00 — no matter how much the prescription costs. All federally designated prescription drugs, including insulin (although it's not a prescription drug in some areas) costing over \$2.00 are covered by the new plan.

By now every employee covered by the plan should have received two things in the mail — his **Abstract of Prescription Drug Benefits** and the new Blue Cross/Blue Shield Identification Card. The plan applies only to full-time Wheelabrator employees and their eligible dependents in the United States.

Pharmacies participating in this plan, both in Mishawaka and elsewhere, display the familiar Blue Cross/Blue Shield emblem. However, employees can use the benefit on drugs purchased at non-participating pharmacies (the reimbursement is less) and at pharmacies located outside the plan area. Consult the **Abstract** for full details on how to use the Prescription Drug Benefit under those conditions.