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# scope

magazine of allis-chalmers people

september-october 1956



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## Cover Photo

"Breathes there a lad with soul so dead, that a split-rail fence never felt his tread?" The case in point is Haldor Bast, son of a Springfield Works machine shop clerk. The Bast family visited the Lincoln village at New Salem (Ill.) State Park recently. For more details, see Page 21.



## Photo Credits

Cover — Joe Goulet, Springfield Works; Page 3 — Clarence Hansen, West Allis Works; Page 5, lower center — Hansen; Page 6 — Hansen; Page 7 — Ray Metzger, Filmar, Inc., Cincinnati; Page 8, top two — Metzger; Page 9, top left, lower right — C. C. Williams, Norwood Works; Page 9, top right two and center — Metzger; Page 10 — Harold Shrode, West Allis Works; Page 11, top and bottom — Dave Ward and Dale Coffeen, LaPorte Works; Page 11, middle two — Walt Beaver, Pittsburgh Works; Pages 12 and 13 — Ward and Coffeen; Pages 14 and 15 — Beaver; Page 16, top left — Frank Hart, West Allis Works; Page 16, lower two — Lubitz and Bungarz, Wilmington, Del.; Page 17, lower right, middle and lower left, Hart; Page 17, LA breakers — Mike Durante, West Allis Works; Pages 18 and 19 — Bill Rodgers, Cedar Rapids Works; Page 20, top left, middle, bottom center — Hansen; Pages 21, 22 and 23 — Goulet; Page 24 — Williams.

## Scope

MAGAZINE OF ALLIS-CHALMERS PEOPLE — Published by Information Services, Industrial & Community Relations division, Allis-Chalmers Mfg. Co., Milwaukee 1, Wis.

## Banana Letter?

Just about every publication has received what is known in the trade as a "banana letter." This type of letter gets its name from the time a woman informed a hunting and fishing magazine that she was cancelling her subscription because it "never had any articles about raising bananas."

Maybe we'll be getting "banana" letters some day, but it won't be because we haven't told our readers as much as possible about Allis-Chalmers. That's why we're here.

This magazine, scheduled for publication every other month, will go to all A-C people in the continental United States. Subject material will be drawn from every phase of the company, everything that affects the jobs and lives of Allis-Chalmers employees. It will emphasize the "broad look," or as they say in television today, "the big picture."

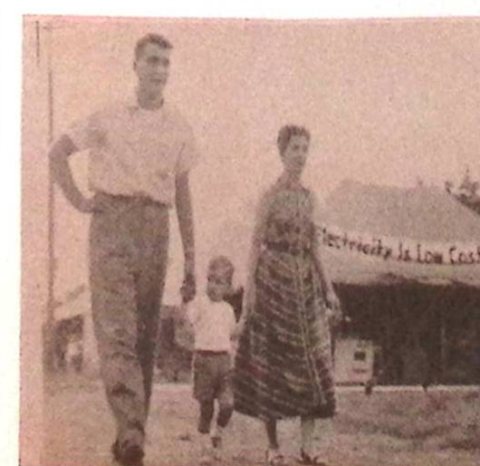
There is, and will be, an unending stream of story subjects—interesting items about employees; A-C products and the people who use them; share owners, dealers, distributors, suppliers and maybe even competitors. We may talk about A-C people at work on an unusual production job (as we plan to do in the near future), or possibly about the activities of A-C folks who contribute leadership in their plant community (any suggestions?).

In short, the contents of SCOPE magazine will be completely broad in scope, and cover the vast areas of product and population with which our company deals. Thus, the name SCOPE implies the unlimited range and scope of material which will be treated in issues to come.

So, here we go—with Volume I, No. 1 of this new endeavor devoted to telling A-C folks about the entire SCOPE of Allis-Chalmers—its people, its products and the companies and individuals who use them.



Carroll Pruess, Portage, Wis., tractor dealer, talks tractor to Mr. and Mrs. William Abelman of Portage while Billy, age 2, lets his attention wander. Below, the Abelmans pass the Wisconsin Power & Light Co. exhibit with its sign proclaiming "Electricity at Low Cost Hired Help."



# the county fair

THE county fair is many things to many people . . . It combines carnival with cooking, stock judging with stock car racing and 4-H exhibits with "Four-Star Attractions on the Midway."

For the future farmer or farm homemaker, the fair offers the opportunity to match a prize calf or a cherry pie against the field. For the young and the young in heart, the fair offers games of skill, death-defying rides and the chance to eat too much ice cream, cotton candy and "Genuine Coney Island Red-Hots."

And for an Allis-Chalmers farm equipment dealer the county fair provides a special show window for displaying his wares to old customers and new.

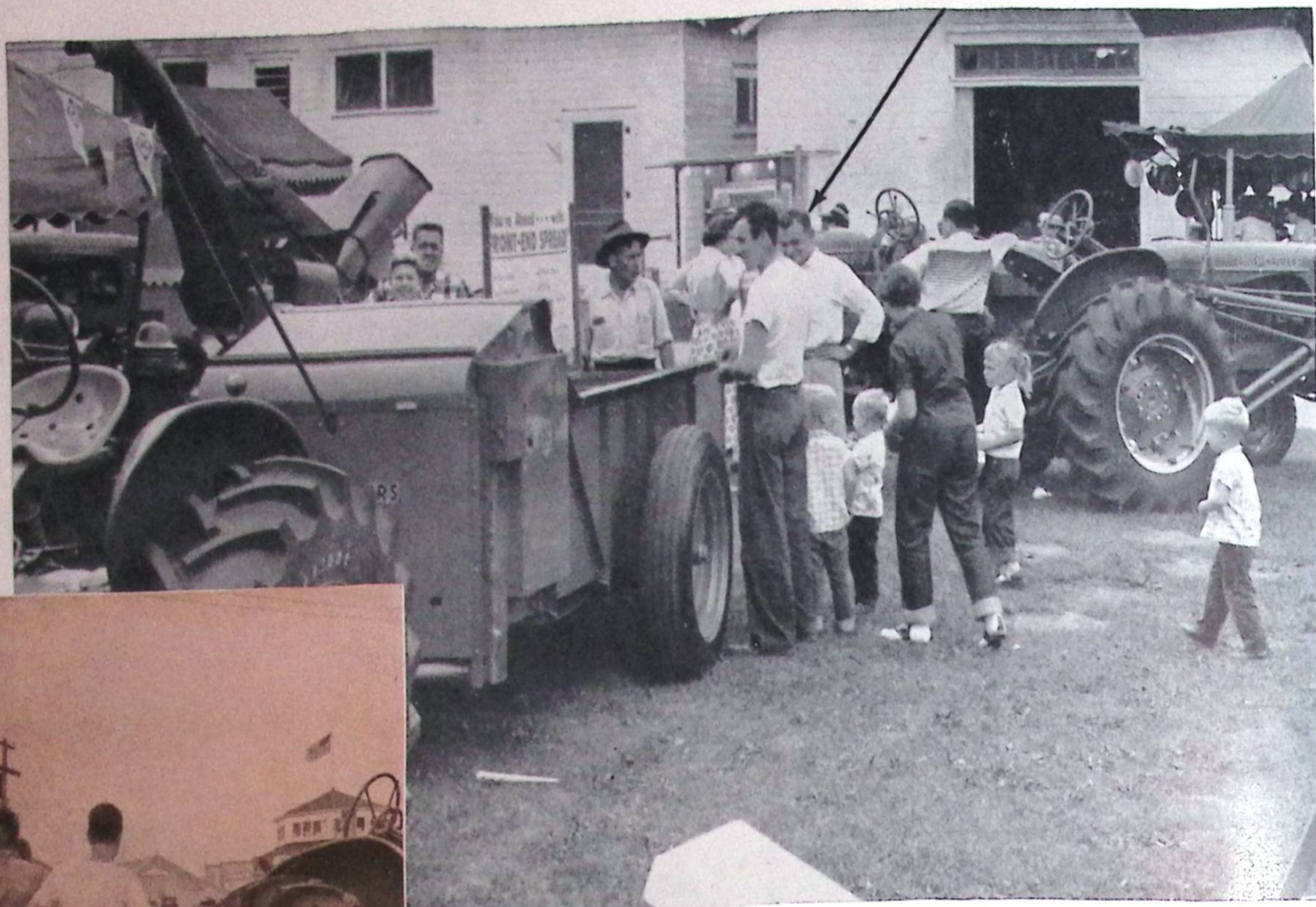
If you had attended the Columbia County Free Fair at Portage in central Wisconsin this season, you would have noticed the Allis-Chalmers farm machinery on display by Carroll Pruess, who operates the Pruess Implement Company, Portage.

In southern Wisconsin, at Elkhorn, near the Illinois-Wisconsin border, five dealers pooled their exhibit talents for another appealing array of the Allis-Chalmers line. Combining these at the Walworth County Fair were the Hi-way 12 Implement Sales, Newhouse Farm Machinery, Martin's Implements, Burlington Consumers Co-op, and Norman Schowalter's company.

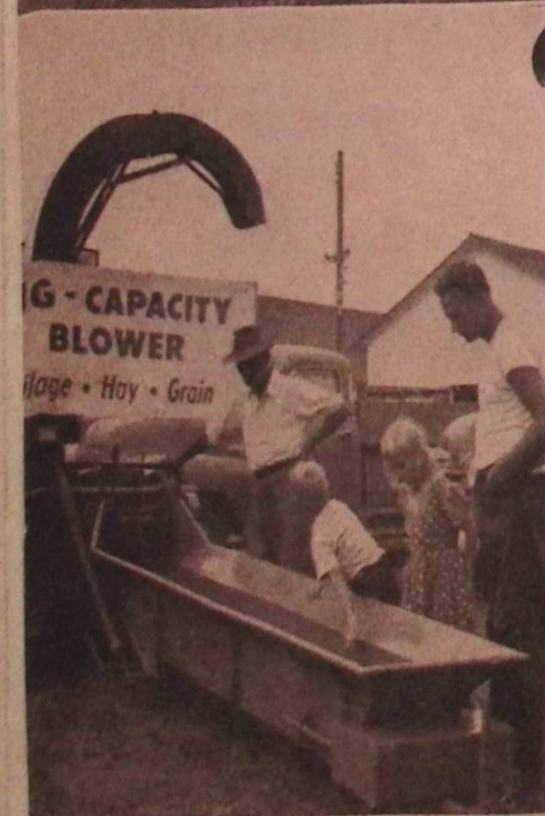
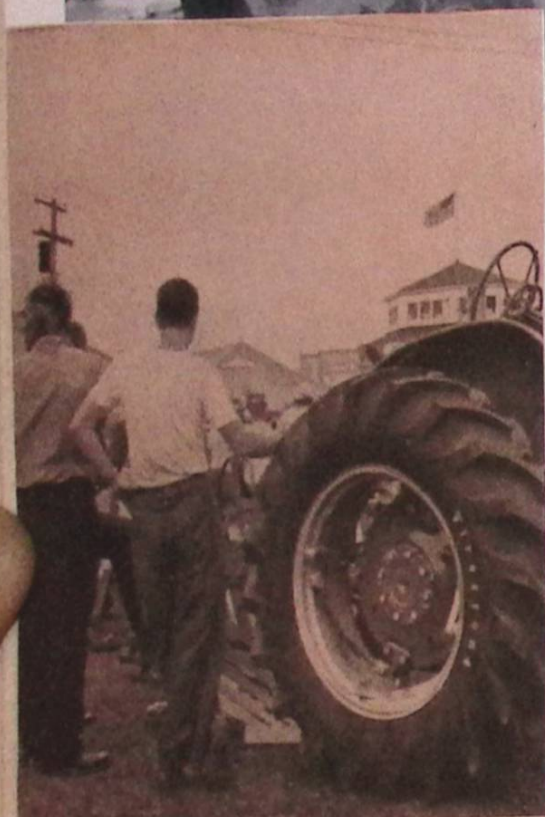
These fairs were only two of several hundred where the new A-C pattern for farm power was presented this year—and these pictorial impressions reviewing the fairs were duplicated time and again by fair-goers across the nation.

Here—and at every good county fair—there was something for all!





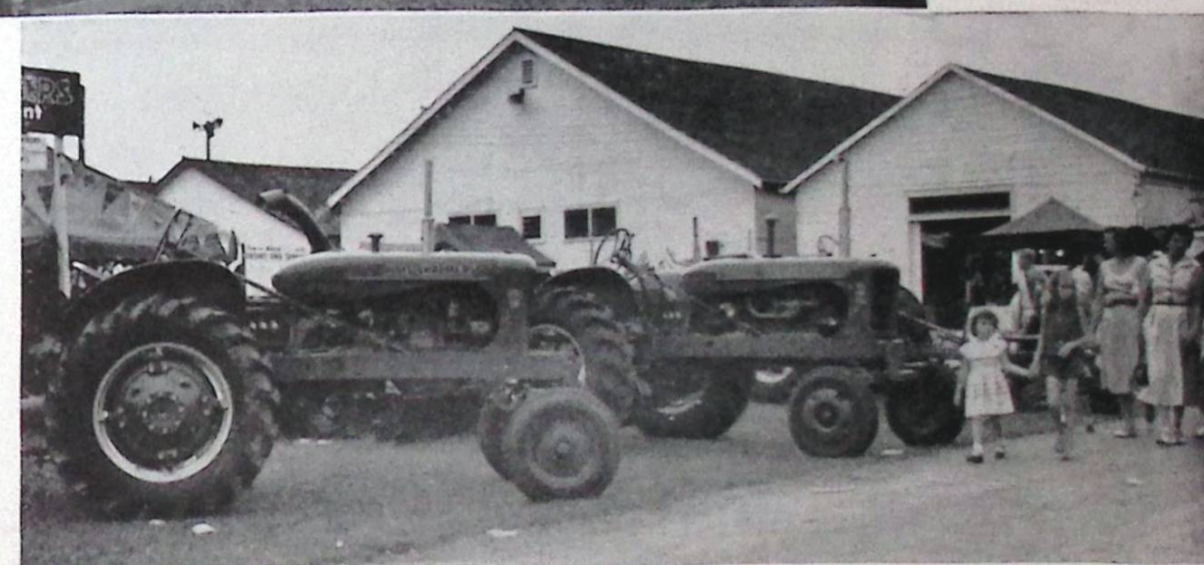
A-C's new front-end spreader (above) occupied center spot in Walworth County fair display, had considerable interest despite dreary weather on fair's opening day. Tractor Sales Blockman Rolland Bauer (arrow) had charge of the joint display. Bauer lives in Madison, serves Walworth, Racine and Kenosha county territory. At left, WD-45 wheel is a base for fairgoers looking over another part of the grounds.



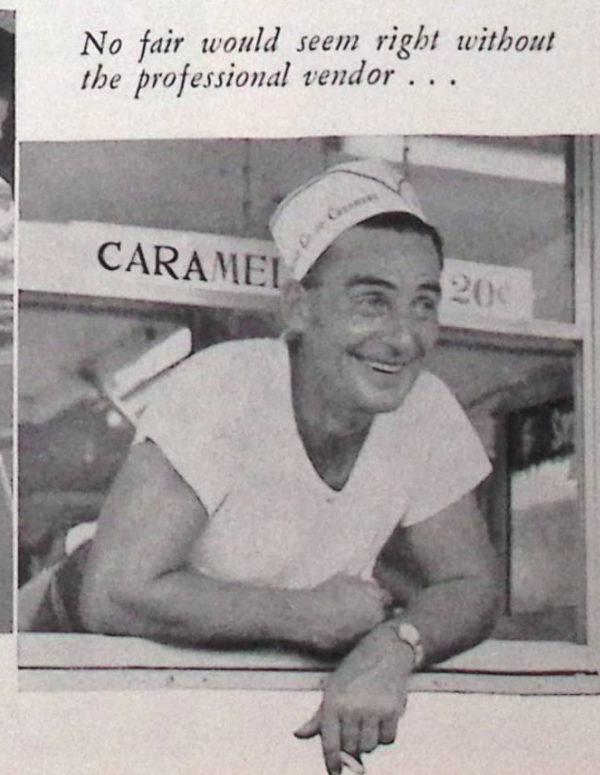
Big-capacity blower (above) calls for explanation by young farmer of tomorrow. View at right shows rear end of spreader, tent and pennants which formed central area of farm equipment display.



Expanse of A-C machinery display (above) includes "Big Bin" Model 66 ALL-CROP harvester, several WD-45's, harrow and other implements. Right, a relatively quiet period in the opening day at Elkhorn. Later in the Labor Day weekend the crowds would have blocked out a view like this.



Boy-sized tractor calls for boy-type direct action . . .



No fair would seem right without the professional vendor . . .



. . . and, of course, the music and motion of the merry-go-round.





## ON TO SCHOOL for Norwood scholarship winners

COLLEGE calling someone in your family?

By now, it's no longer a question of where to go or what to study, but a case of getting into the routine of campus life — of meeting the situation head on, just as two Ohio girls are doing this fall.

The girls, Delma Miller and Carol Quittschreiber, are two of the 11 high school graduates who won Allis-Chalmers \$500 scholarships\* this year. The mother of each girl is employed at Norwood Works. This pair's notable qualifications for A-C's annual awards are probably typical of their fellow winners. And so are the problems they encountered in getting ready for college. Any "back to school" period involves numerous problems, as A-C parents everywhere are well aware.

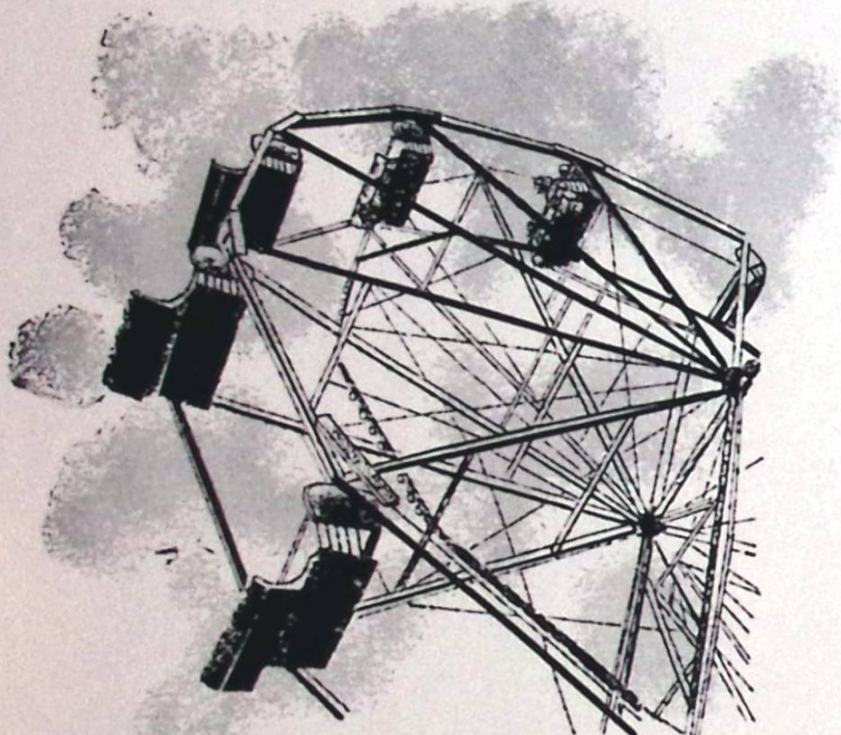
Carol and Delma must make the transition from active, popular high school life to the relatively serious business of being college students. Carol, who attended Norwood high school, will major in chemical engineering at the University of Cincinnati. Delma, a graduate of Cincinnati's Withrow high, will prepare for a teaching career at Denison University, Granville, Ohio.

Carol is the daughter of Mr. and Mrs. John Quittschreiber, Delma the daughter of Mr. and Mrs. James Miller.

College will also mean separation from home and family. The new life is a busy one, though, full of registration, orientation, freshman teas, buying books, shopping for other supplies, studying and generally getting adjusted to the college program.

In order to get an advance look at college life, Norwood's winners toured the beautiful University of Cincinnati campus with a SCOPE photographer. Some of the results are shown on the next two pages.

*\*Actually, Norwood Works had three of the 11 winners for 1956, but James Von Benken declined the award after learning that he had been named for another scholarship. This gracious act by the son of R. L. Von Benken, Norwood Electrical department assistant chief draftsman, made an additional scholarship available for 1956. Von Benken enrolled at Massachusetts Institute of Technology under a National Merit Scholarship Corporation Award.*



In photo at top left, Dealer Preuss (left) checks his literature rack with H. C. Harden, Allis-Chalmers blockman from Berlin, Wis. Top right photo shows Preuss pointing out to James Warrack of Dalton, Wis., how A-C's four-bottom plow increases WD-45 tractor capacity. Harden is in the seat. Warrack, an A-C customer for 11 years, now operates a WD-45.



Carol Quittschreiber (left) and Delma Miller, Norwood Works scholarship winners, on a tour of the University of Cincinnati campus. The spire of McMicken Hall's Christopher Wren tower is in the background.



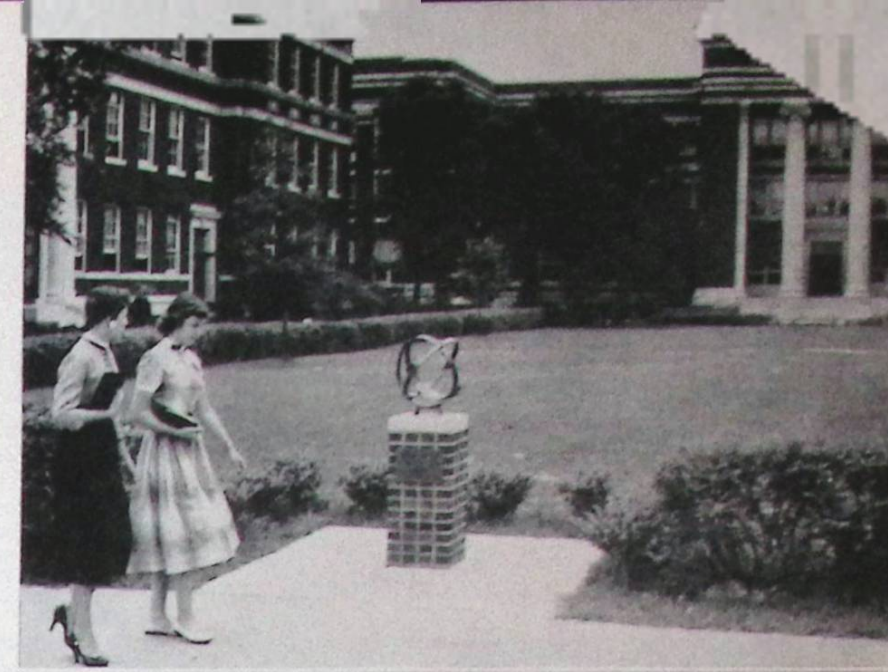
*registration, orientation,  
freshman teas . . .*



One of McMicken Hall's famous lions eavesdrops as the girls check a location on their tour of the Cincinnati campus. UC's spacious fieldhouse, above, provides a welcome rest stop later in the day.

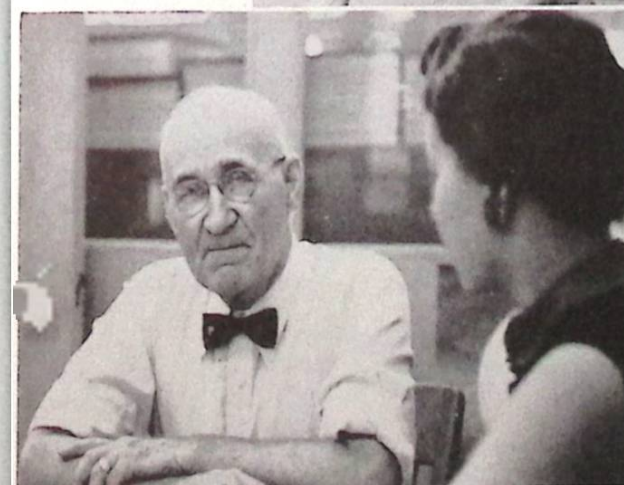


Campus dress shop calls for careful consideration of clothes' cut and color. Schoolwear will take part of the money the girls have been earning as summer-time employees in Norwood Works office.



No "concrete campus," Cincinnati's main buildings offer a blend of the traditional, top photo, engineering quadrangle and the modern new fieldhouse. Gaudy wastebaskets (left) are part of a successful drive against litterbugs on UC campus.

Both of the proud mothers, Mrs. John Quittschreiber (left) and Mrs. James Miller, have been at Norwood Works six years, working as winders in the Electrical section.



As an engineering student, Carol consults Dean C. Albert Joerger, photo at right, about the school's co-op engineering program. In photos at left, she talks with Norwood Works' J. C. Chisholm (top photo), who was an A-C engineering co-op student at Cincinnati in 1909, and L. F. Rumpke, who supervises activities of graduate training students while in Norwood's Electrical department.

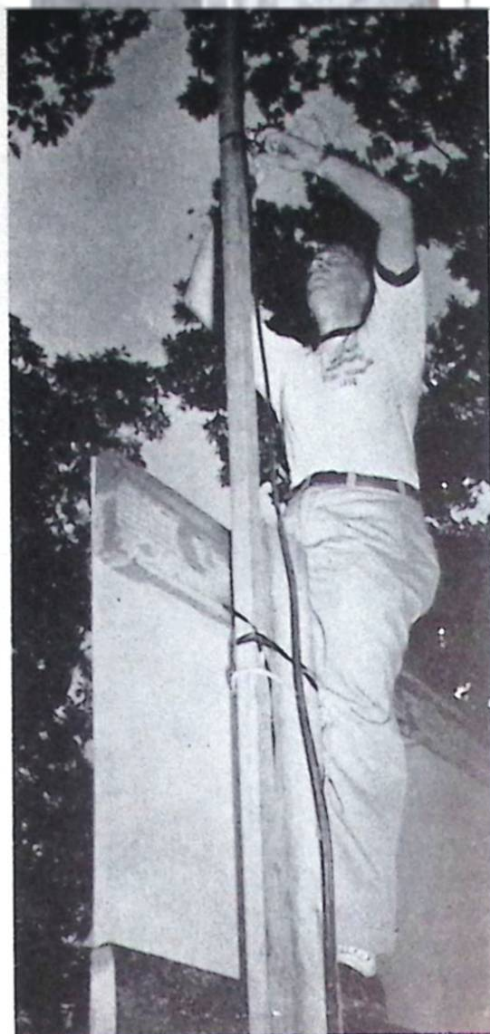




# a New Twist to an old game



West Allis radio "hams" found golf coverage easy after previous volunteer work on Civil Defense exercises, soap box derby, college homecoming parade, sports car races, etc. Top right photo shows O. W. Noeske, A-C induction heating application engineer, tying down a coaxial feed line to a 30-ft. antenna mast. Group in action above are, left to right, Ed Granowski (W9QMX), Norm Krohn (W9SKF), Noeske (W9LGO) and club president Fred Wendt (W9WAG). Another A-C member of the club, Alexander Smith, Rectifier laboratory employee, was at Whitnall Park course when these photos were taken.



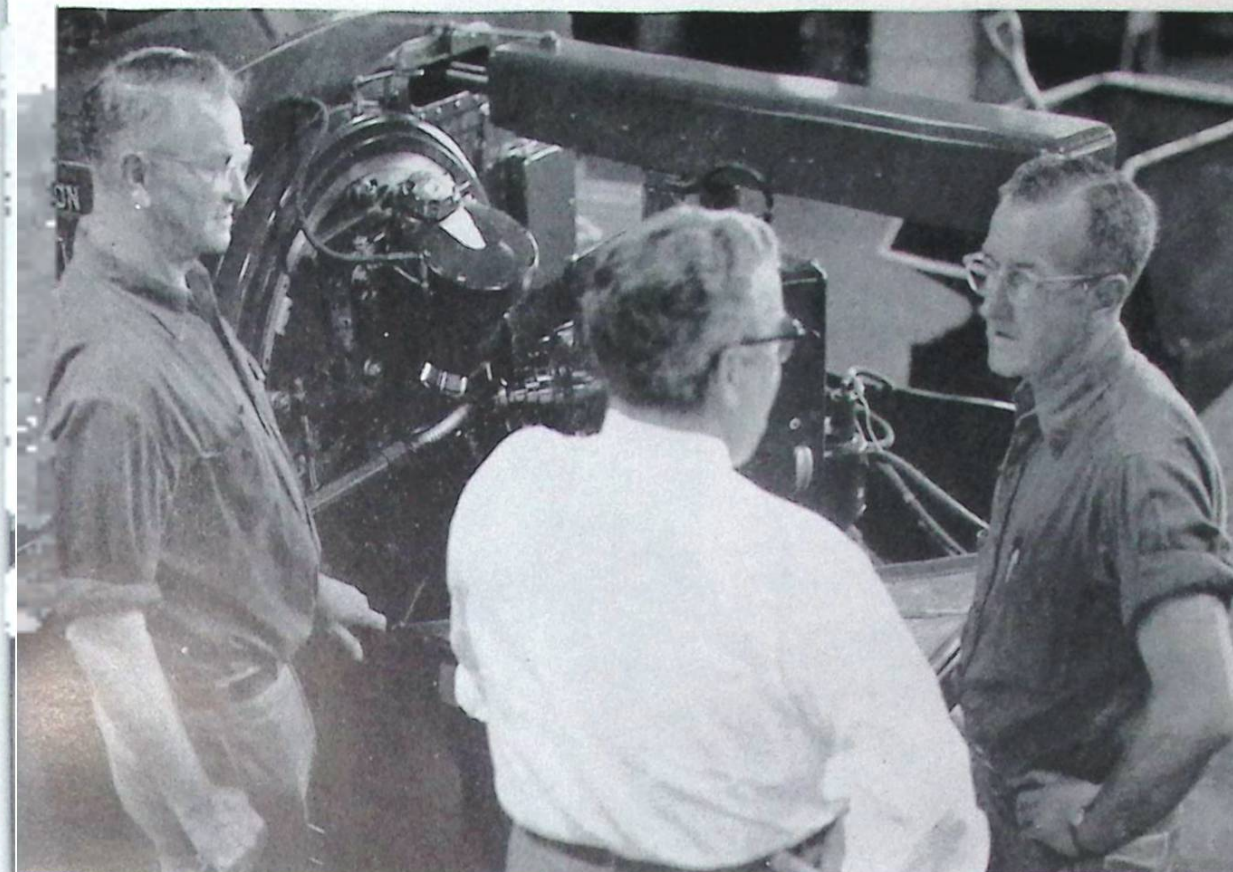
The West Allis Radio Amateur Club gave a new twist to an old game by furnishing two-way radio communications for the 1956 Midwest Industrial golf tournament in Milwaukee. About 15 members, including two A-C employees, worked the communications set-up between Allis-Chalmers W. A. Roberts golf course and Milwaukee county's Whitnall Park links.

Club members said it was the first time "ham" operators had been used to expedite posting of golf tourney scores. The system worked extremely well, giving golfers and officials at both courses immediate information as desired.

The meet, in which eight Allis-Chalmers teams competed, attracted more than 120 teams from 80 midwest companies. For A-C, there were two teams each from West Allis, Harvey and Norwood Works and one apiece from Springfield and Terre Haute Works.



Rain drove a number of the golfers to shelter in front of the pro shop in the Saturday session. Photo at left shows Carl Klandrud (right), West Allis Works supervisor of recreation, inspecting the trophies with Ray Detrick, Goodyear Tire & Rubber Co., tournament secretary. Klandrud is a past president of the National Industrial Recreation association.



To a large extent, a good safety program depends upon the foreman to promote safe thinking and help prevent accidents. John Reed (right), general foreman in the LaPorte Works gear department, discusses the department safety record with Howard Vaught, gear cutter, and Gil Snyder, supervisor of safety and sanitation.

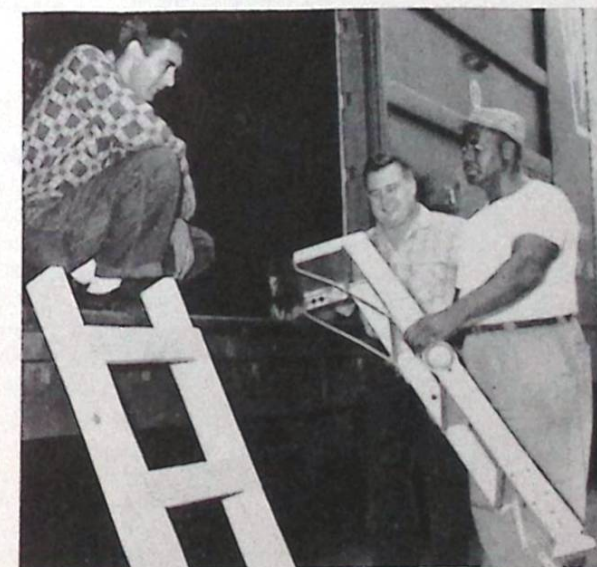
## Safety is **EVERYBODY'S** Business

A SUCCESSFUL safety program "clicks" because people want a safe place in which to work. *People* includes the truck driver, the shop clerk, the stenographer, the machine operator, the electrician, the foreman, the crane operator, the painter, the safety supervisor — everyone who works for Allis-Chalmers and wants to work safely.

Where does a safety program get its start? It's very possible that management gets it started by providing safe working conditions. It's likely that the safety supervisor and safety inspectors contribute a good deal in the way of suggestion and education. And the foreman can do a good job in helping to keep his department safety minded.

But it's on the job where safety battles are won or lost. And there it's up to each individual to do his share. If every worker feels that safety is *his business*, the battle is half won. For safety — at work, at home or on the highway — is everybody's business.

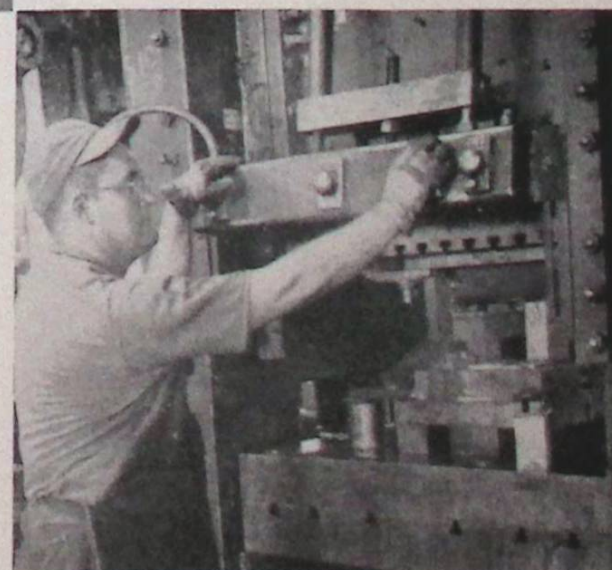
Desiring to present the general Allis-Chalmers feeling for safety, SCOPE has turned to LaPorte and Pittsburgh Works, which have typical, well-rounded



ABOVE: Roy Bartlett, Pittsburgh Works safety supervisor, checks a cable sling with James Plichta, hook-on man, observing.

LEFT: Algernon Gibbs (right) shows Robert Ludwig (center), Pittsburgh Works suggestion committee secretary, and Richard Rockey the lightweight aluminum ladder he suggested to replace "home-made" ladders used for getting into boxcars.

BELOW: Elmer Beatty, LaPorte Works, shows how this two-button control protects the operator's hands. The press won't operate unless both buttons are pushed.



safety programs with an emphasis on employee participation. They reflect the feeling of safety-mindedness that lowered A-C's all-works accident frequency figure to 6.9 for the first half of 1956, as compared with 7.7 for the first half last year.

Their products and processes are dissimilar — LaPorte makes harvesting machinery and Pittsburgh builds transformers — so it's the people and not the nature of the work that makes a plant a safe place.



## at LaPorte, everybody gets into the act

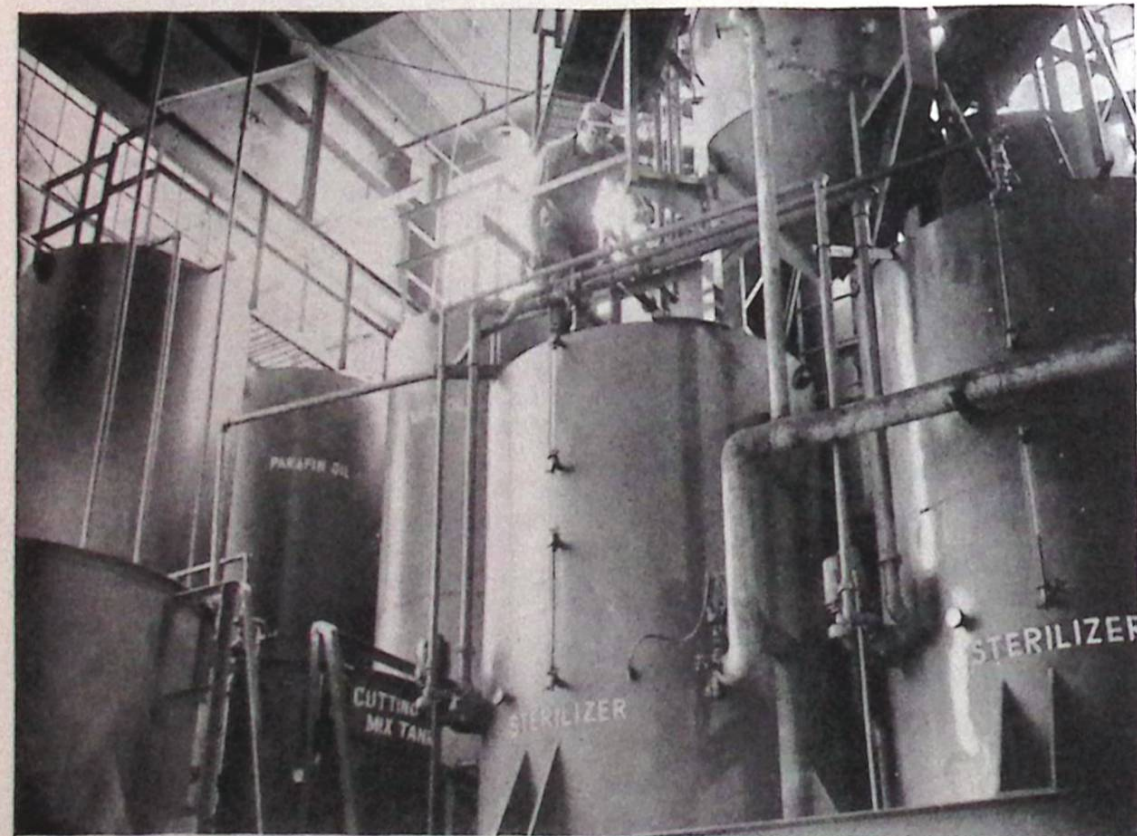
Both LaPorte and Pittsburgh Works have been given National Safety Council recognition for their consistently outstanding safety records. (However, Gadsden Works tops the A-C ranks with a zero accident frequency rate for 1955.)

Almost every year at least one A-C works qualifies for a National Safety Council award of merit by recording one million man-hours without a disabling injury. So far in 1956, Pittsburgh Works has won the award with a string of 1,460,314 hours worked between January and April.

Both plants have safety programs headed by men who are active in local and national safety organizations. LaPorte's Gil Snyder, for example, is a

member of the executive committee of the Automotive Machine Shop section of the National Safety Council. At Pittsburgh Works, Roy Bartlett is a member of the safe practices and procedures committee of the Western Pennsylvania Safety Council, which serves an eight-county area with plants employing more than half a million workers.

Snyder and Bartlett, together, disclaim any personal credit for the safety records established by Pittsburgh and LaPorte Works. They'd rather point to the safety work done by shop foremen and superintendents or call attention to the plant-wide realization that "safety is for everybody." They maintain an open door policy for any and all employees who know a safer and better way to do a job. They strive for neatness and a place for everything on the theory that a clean shop is a safe shop.



Many tons of sheet metal, above, are used in LaPorte Works products annually. Stores Attendant John Rupenthal and Crane Operator Russell Samuelson show the safe way to handle this 8000-lb. load with a four-way grab fixture. Reclaiming and sterilizing of cutting oils, left, has virtually eliminated oil-caused skin disorders since program was started nearly 10 years ago. Here is an example of sanitation paying off with savings — approximately 140,000 gallons of oil were reclaimed last year. Reggie Wise, oil room attendant, is adjusting control valve on the filter and sterilization system.



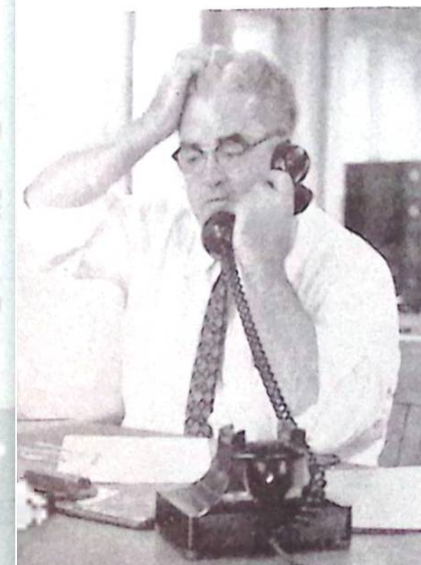
Mirrors reflecting traffic conditions within the plant area help tractor drivers like Sam Hammond (right) see around blind corners and warn him of oncoming pedestrians and vehicles.



Ward Singleton, in charge of the safety shoe store, left, needs little sales talk to influence Glenn Coulter (left) machine operator, and Robert Wolfenbarger, power shop truck operator, on the merits of safety shoes. They've been wearing "steel-capped" for years. Below, Walt Pries, assistant foreman, offers vivid testimonial for LaPorte's safety goggle program as he displays shattered lens and the broken drill bit which struck the lens while he watched operation of this machine. Teamwork of employees, supervisors, management and safety men has achieved outstanding results at this and other A-C works.

Open door policy, handy telephone and frequent plant inspections keep Snyder (left) and his staff in close touch with employees. Safety men are on "first name" basis with more than 90 percent of LaPorte workers.

"Safety first" is continued off the job as LaPorte employees drive out on busy Highway 35-39, which passes the plant's main gate. The works has a per capita traffic accident rate which is lower than that for the entire LaPorte area. Weekly meetings, below, range from free-wheeling discussions to careful analyses by members of the safety and sanitation department. Left to right around the table are Charles Little, Gerald Turner, Snyder, Joe Biernacki and Ward Singleton. McKinley Harris was on vacation at the time photo was taken.



Mrs. Dorothy Freel (right), shop clerk, shows Mrs. Dorothy Gibbons (left), plant matron, and Mrs. Marge Wright, telephone operator, the fine coloring job done by her nine-year-old daughter on a recent Allis-Chalmers newspaper safety advertisement.



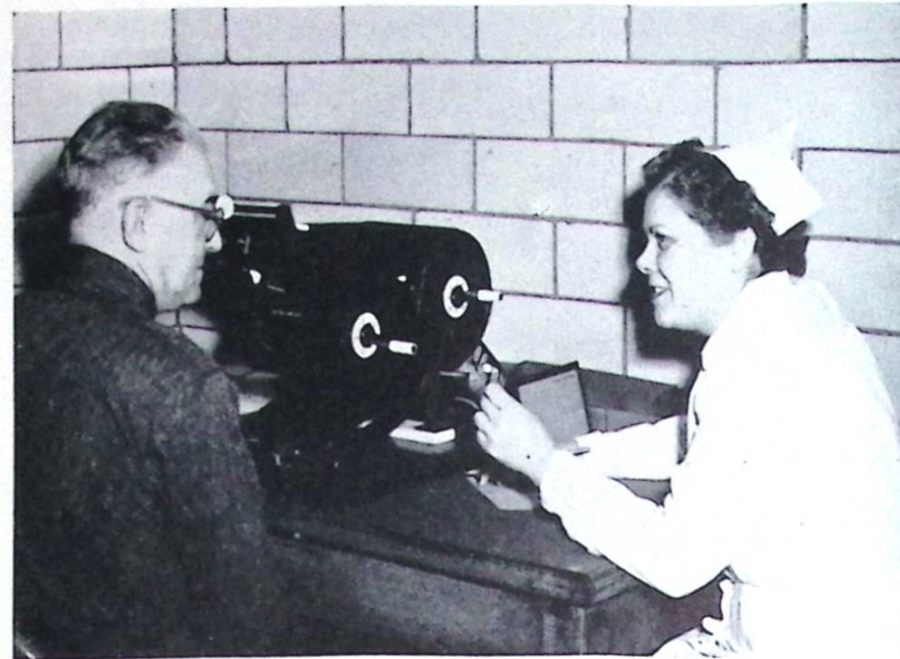


## and at Pittsburgh, too . . . .

Employee suggestions and frequent inspections help advance safety's cause. So do posters, informal discussions and other forms of reminders. So do the delicate precision instruments used to measure light, noise, vapor content, etc. But nobody can force safety on an employee—it's not a part of his job until he realizes that safety is actually a part of his entire way of life.

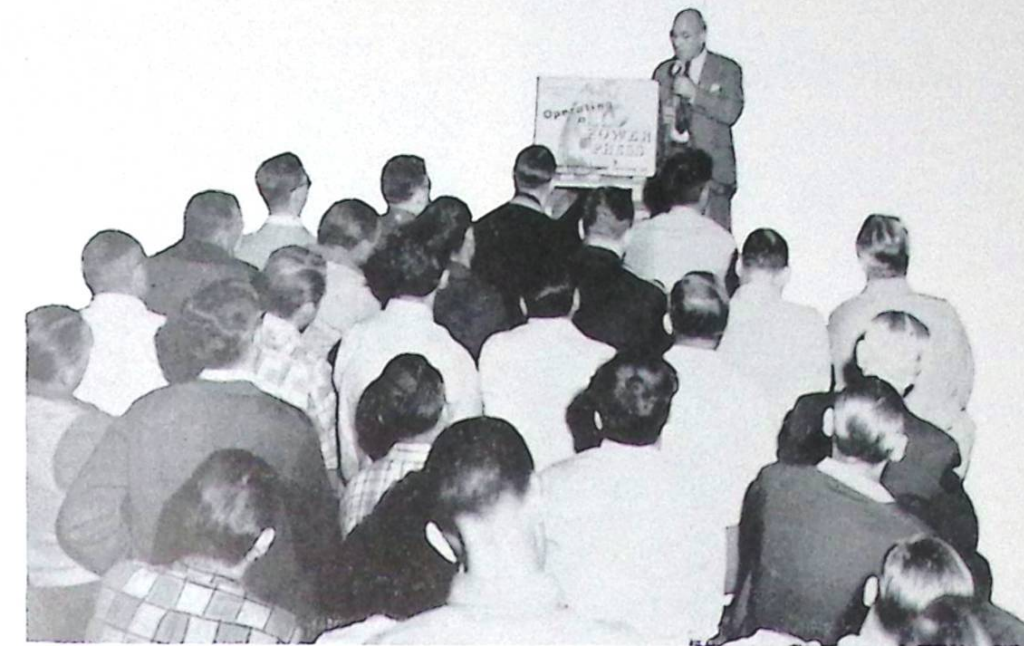
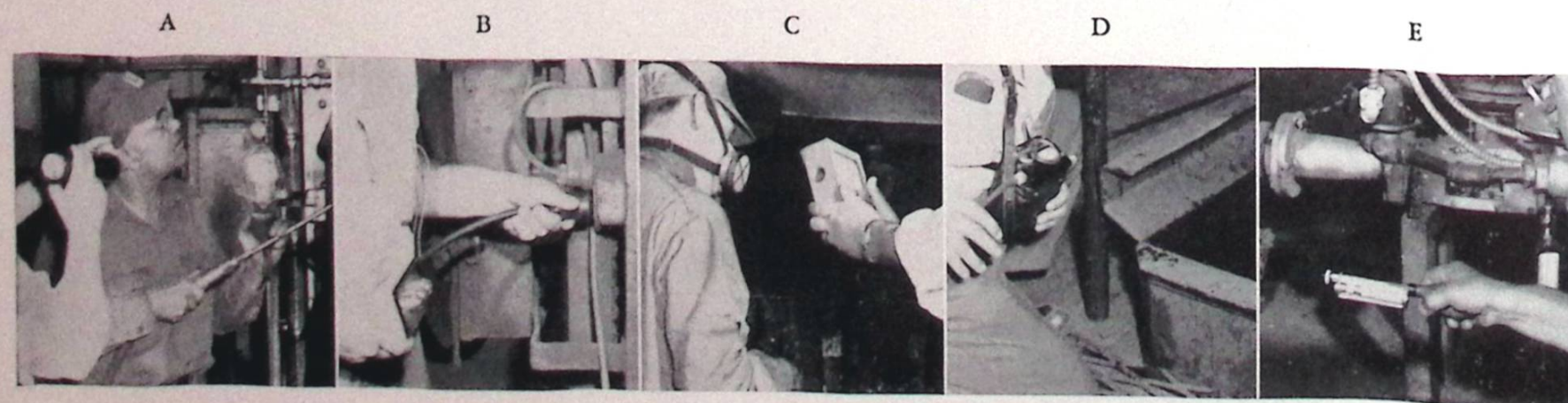
Then, when the employee starts thinking about his work in terms of safety, the thinking carries over into his off-the-job activities—working around the house, hunting, fishing, boating, driving his automobile.

And the cause of safety has won another missionary who'll do his best to convert others to doing things the safe way.

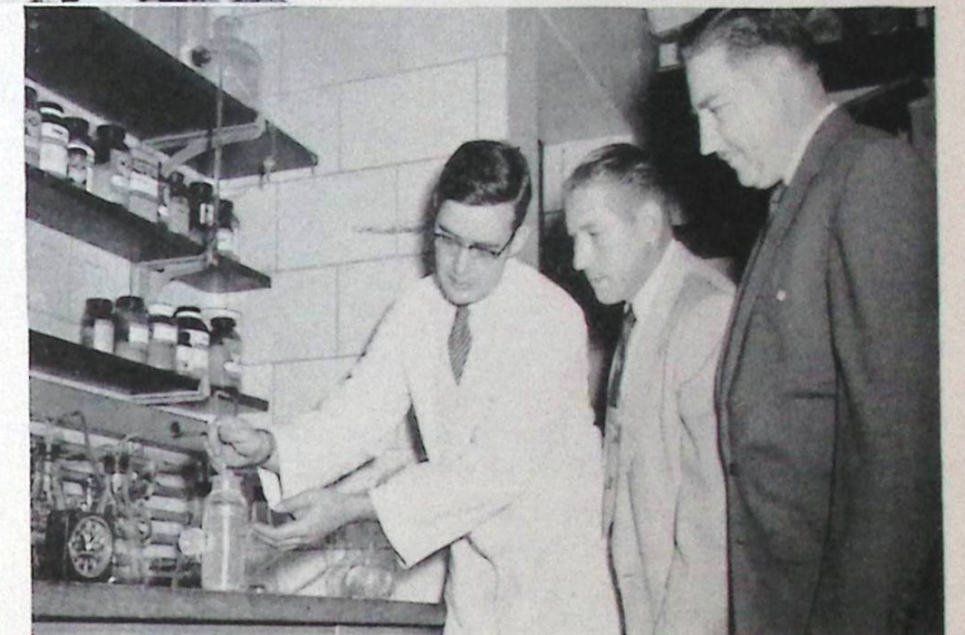


Miss Beatrice Lawson, Pittsburgh Works nurse, uses an Ortho-Rater to examine the eyes of August Rieger, welding machine operator, in photo above. Below, Lucius Della Mea demonstrates the electrical interlock which prevents transformer test equipment from being energized unless operator is in a safe position, away from the test area.

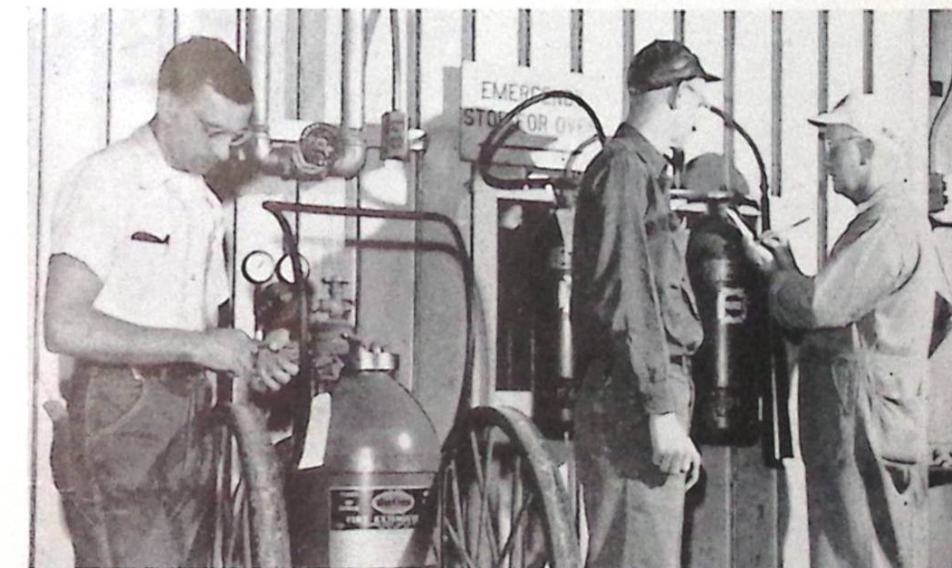
Sam Kotsenas, safety inspector, uses a light meter to take a light intensity reading at the drafting board of John Farmerie. Other safety "tools" are shown below. If you can't identify the instrument or the type of reading being taken, see top of Page 15.



Earl Stephan, industrial consultant for Western Pennsylvania Safety Council, gives a safety talk to shop foremen (above), one of the outside services available to Pittsburgh Works. Also called upon as required is the Industrial Hygiene Foundation of the Mellon Institute, right. Industrial Hygienist William Schreiber (left) demonstrates method of determining particle size from dust-laden air, to Bartlett and Frank Michalowicz, superintendent of industrial relations.



- A. A noise level reading is taken as George Quarles chips scale from a tank, using an air scaler.
  - B. This three-prong wall outlet is tested for proper connection and grounding, with a device which was developed through the National Safety Council. Different colored lights indicate any deficiency in the outlet.
  - C. The ventilation system in the waterfall paint spray booth is checked with a velometer. Painter is Edwin Winters.
  - D. Here an Explosi-meter is used to determine the concentration of varnish vapors in dip tanks used to apply varnish to insulated windings.
  - E. This instrument is used to test for possible carbon monoxide fumes in the oven area of the transformer tank bonderizing system.
- These are some of the "tools" of the safety man—accurate extensions of human senses, used to locate possible trouble before an accident or a lost-time disability can occur.



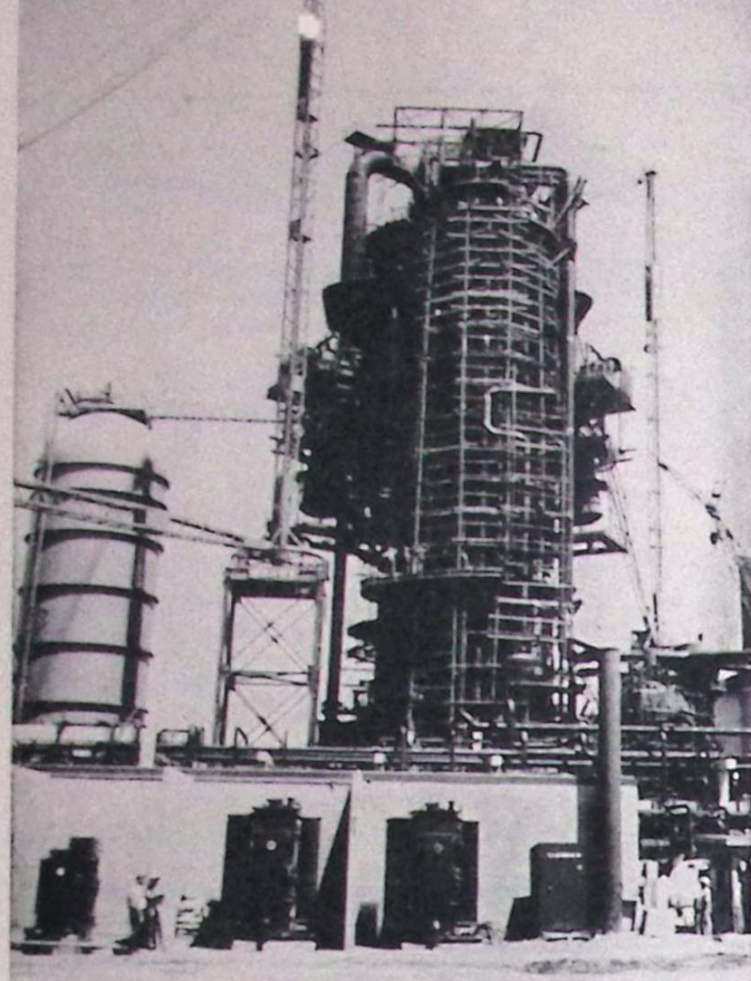
Top-notch fire-fighting equipment, left, is vital to Pittsburgh Works safety program. Harold Zibrat replaces seals on fire equipment, while Asst. Fire Chief Harold Booser and Capt. George Patton check inspection of first aid fire gear. In photo at left, Joseph Benko and George Shombert demonstrate use of Pneolator on "electric shock victims" Richard Strahler and Robert Granche. Demonstrations like this, including artificial respiration, are held every Monday in electrical test section. In photo below, Michalowicz goes over the A-C newspaper safety advertisement with pupils from Manchester (Pittsburgh area) grade school.





here's an A-C customer . . .

## Building A Great Refinery



Load center unit substation's Pittsburgh Works power transformers are dwarfed by huge refinery equipment in background. Switchgear, starters and other electrical components are enclosed in cement block building. A-C supplied 35 substations for Tidewater's new refinery.

THE world's most modern refinery is being built by Tidewater Oil Company 15 miles south of Wilmington, Del., and Allis-Chalmers machinery has played an important role in the construction and operation of the plant, a model of refining ingenuity.

From Springfield and Cedar Rapids Works came A-C construction machinery, including crawler tractors, motor scrapers and motor wagons, which contributed to the clearing and filling of the 5,000-acre refinery site.

And Allis-Chalmers furnished virtually all of the electrical equipment for what will be the largest refinery to be built at one time in the United States. Included in the multi-million dollar order are large electrical motors from West Allis Works, more than 300 smaller motors from Norwood Works, metal-clad switchgear from Boston Works, heavy duty motor starters, load center unit substations and Pittsburgh Works power transformers.

Located on the Delaware river, the new refinery will cost more than 100 million dollars and will have a daily capacity of 130,000 barrels of crude oil. Consulting engineer on the project is C. F. Braun & Company of Alhambra, Calif.

When the refinery goes "on stream," as oil men say, it will operate around-the-clock with advanced facilities designed to utilize any kind of crude oil for the economical manufacture of petroleum products.

The site is adjacent to deep water to permit ocean-going tankers to discharge their cargoes. Handy rail lines and superhighways will help speed distribution of Tidewater products to the eastern market area.

The Delaware Flying A refinery will supply the market once served by Tidewater's Bayonne, N. J., plant, which was closed down after its facilities became outdated.

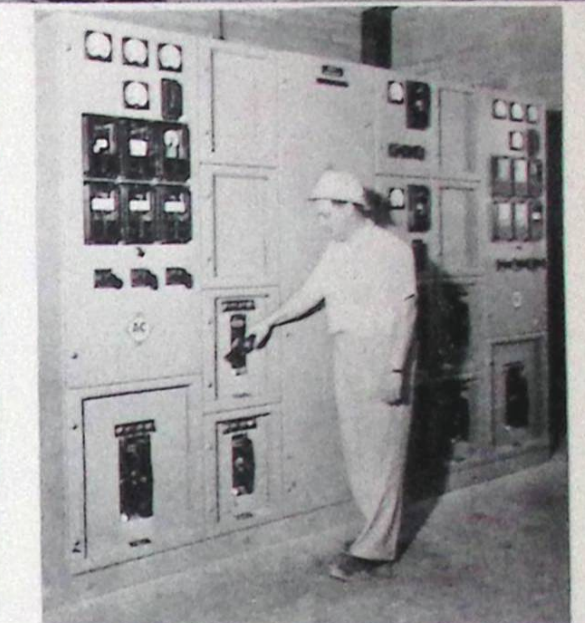
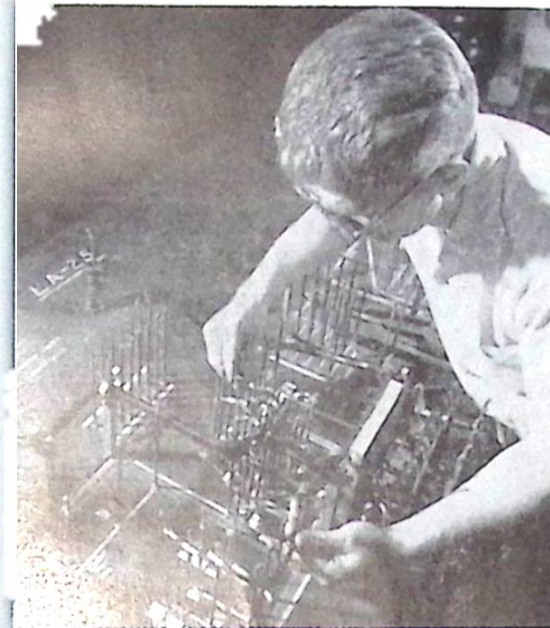
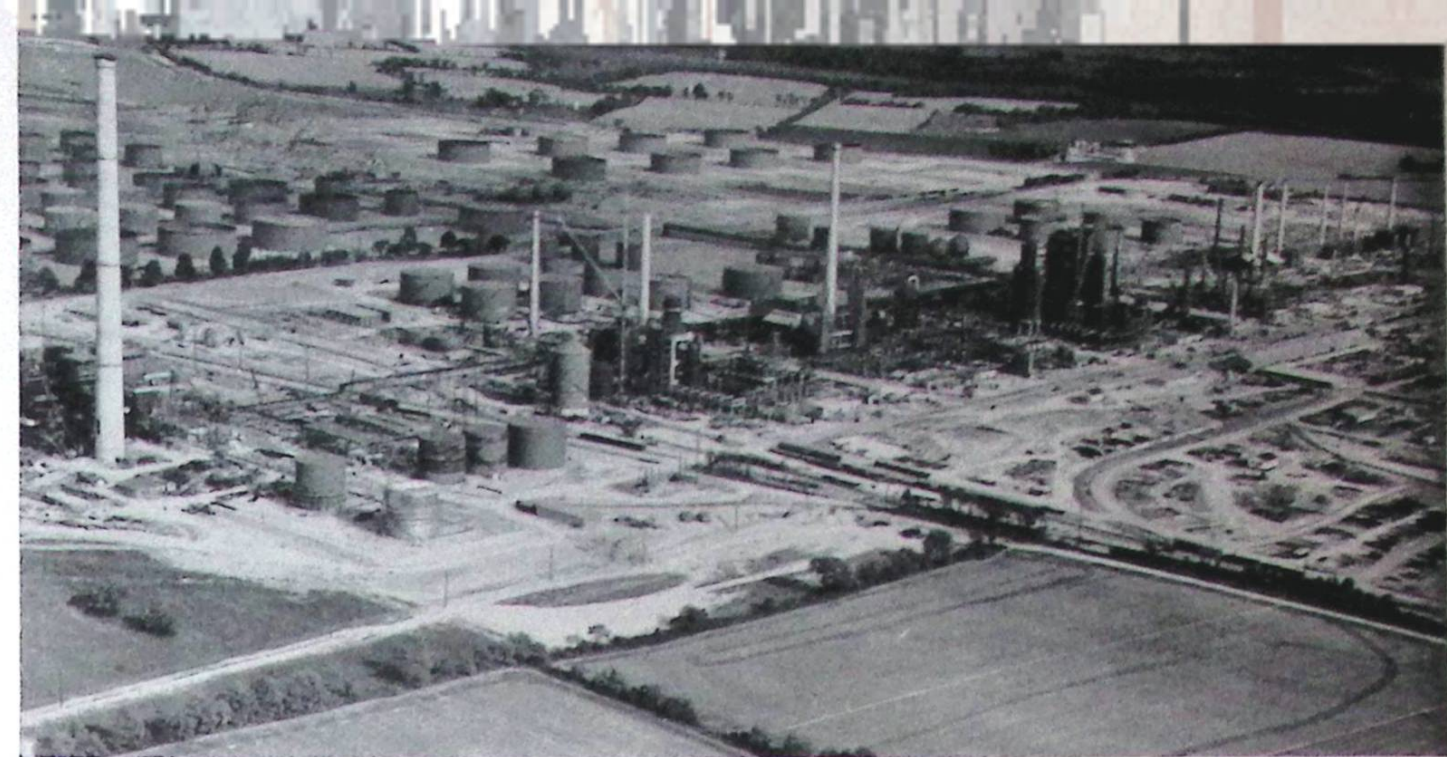
Some of the figures involved in the construction are staggering—more than 9000 workers had a hand in the project and it has been estimated that



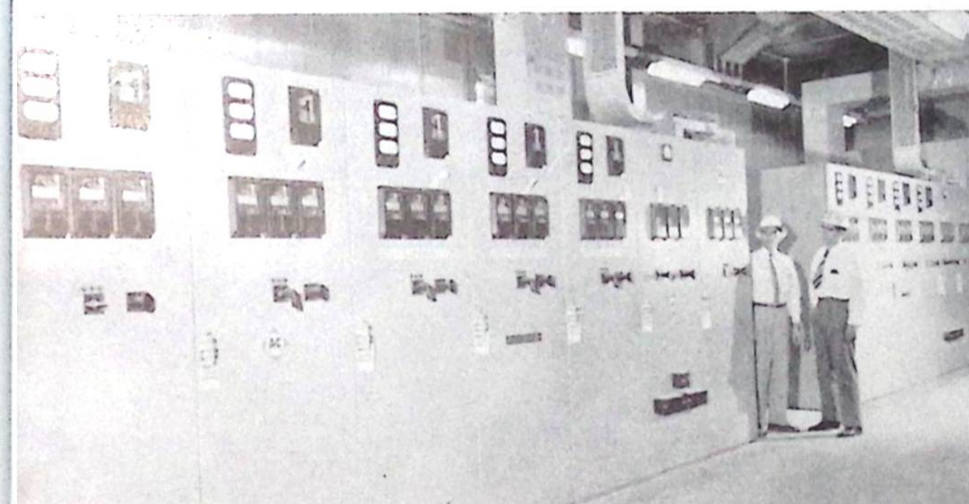
An A-C crawler tractor is used, above, to push loader which fills motor wagons in ground-clearing operation at refinery. Big ditch, below, carries part of the 48 miles of concrete ducts encasing 200 miles of electrical lines on the site. The refinery will use as much power as a city the size of Gadsden, Ala. (55,000 people).



Overall view of refinery site, right, shows the 5000-acre tract of land which is believed to be the largest parcel ever acquired for industrial purposes on the eastern seaboard. Clearing the land and filling 700 acres of swamp called for top-notch construction machinery from Springfield and Cedar Rapids Works.



Robert Davidson (left), Boston Works, is shown wiring the harness of an LA-25 breaker like those installed in the new refinery. Joseph Sbardella (center), Boston Works, is checking a group of LA-25's ready for shipment, while Tom Poulus (above), graduate training student, tries the handle of one of the low voltage circuit breakers installed at the refinery.



Portion of the A-C metal-clad switchgear installed in the refinery's power station is shown above with Hal Lanphear (left), Philadelphia district office representative, and a Delaware Power & Light Company engineer looking it over. Below, Adolph Zabana (left) and Emil Ruck are working on the "assembly line" production set-up used at Hawley to produce more than 100 Type HALC motor starters for the water refinery.



10,000 freight car loads and 70,000 truck loads of supplies and machinery will have been received by the time the refinery is completed.

Jutting into the Delaware valley skyline is the 350-ft stack of the world's largest crude unit and the 250-ft Orthoflow fluid catalytic cracking unit. The fluid coker will be one of the world's two largest, its twin being at Tidewater's Avon, Calif., refinery.

Other units going up at the refinery site are a huge vapor recovery gas plant, which will have a capacity of 90 million cubic feet of gas a day; the world's largest sulphur recovery plant; a 50,000-kw power station located on a 40-acre site, the total output of which will be used to meet the needs of the refinery.

In addition, the refinery will have its "business section" with seven brick and steel buildings, water and electrical departments, truck and rail freight terminals located at various points around the refinery "town"—an area the size of 185 city blocks.

The end result will be a refinery of the future, which will be a showplace of the oil industry. A monument to the ever-growing American family of motorists, Tidewater's new Delaware Flying A refinery is also a monument to the engineering and productive talents of A-C's electrical and construction departments.



machine shop takes shape on the site of razed buildings at Cedar Rapids.

to keep pace with growth conditions in A-C's key markets . . . Terre Haute and Cedar Rapids Works are in the midst of

# E-X-P-A-N-S-I-O-N

"AT LEAST a part of A-C's rapid growth has been due to our steady investment in plant and equipment, which has amounted to over \$77,000,000 of capital funds alone in the past five years. As you know, a very heavy proportion of these funds was invested in additional facilities for our Power Equipment division, serving the utility industry; the Industrial Equipment division, cement plants, etc.; and the Construction Machinery division—all with outstanding possibilities."

This statement reflects the intention of A-C's management to prepare for the expanding markets of the future.

Typical of the continuing program to strengthen our position in our more active markets are the projects now under way at Terre Haute and Cedar Rapids Works.

Nobody at Allis-Chalmers believes that productive capacity alone will sell goods. But, if the customer is sold on A-C quality and engineering, he feels he's entitled to reasonably short delivery on the product. And if he's in the utility, cement or construction business, he's going to demand delivery, because his customers won't wait.

And that's exactly why Allis-Chalmers is spending more than \$11,000,000 to "beef up" production capacities at Terre Haute, Ind., and Cedar Rapids, Iowa.

Terre Haute is in the midst of a \$9,500,000 expansion program for transformers and circuit breakers, scheduled for completion next spring. The works is also tooling up for production of compressor rotors for the J-79 jet engine for use by the U. S. Air Force.

The new facilities, planted squarely be-

tween the original plant and the still-new Tank shop, will give Terre Haute the capacity to build transformers in A-C's middle range of sizes. In addition to giving the company considerable strength in these ratings, the move will free capacity at West Allis for the "big ones" and at Pittsburgh Works for full production of distribution transformers and the smaller sizes of power transformers. The completed facility at Terre Haute will also provide capacity for the final assembly of high voltage circuit breakers.

Cedar Rapids, builder of A-C's line of motor scrapers, pull scrapers and motor wagons, has almost completed a \$1,800,000 modernization program. W. G. Gates, Cedar Rapids general manager, says "Ours is not so much an expansion as it is an improvement and addition to existing facilities and

replacement of some older buildings. However, this program will definitely increase our potential and provide jobs for an additional 400 people, raising our employment level to about 1200."

A. I. Thorsen, Terre Haute Works general manager, says that full production in the new transformer plant and on the J-79 compressor rotors will mean employment for approximately 2000 workers, an all-time high in the works' relatively short history in the A-C family.

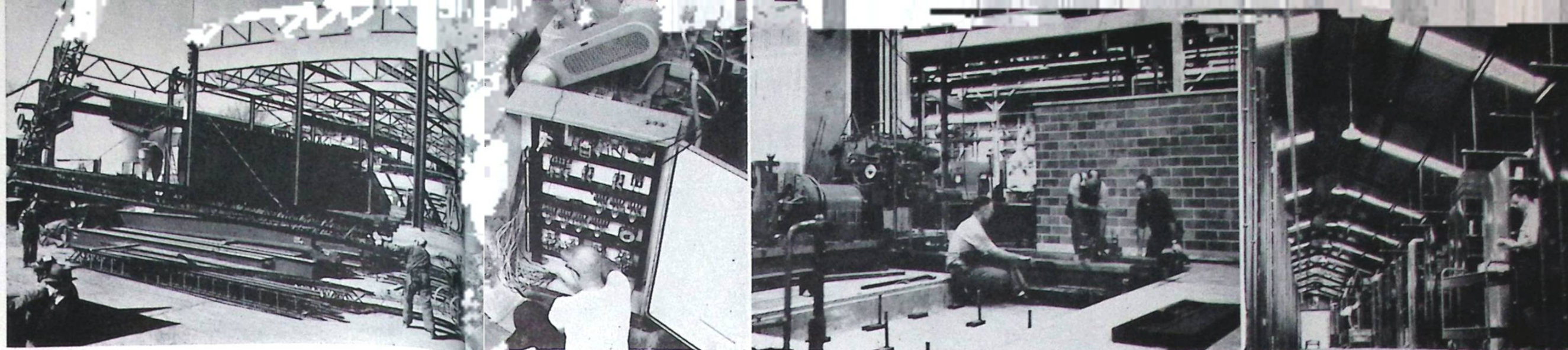
Excavation is completed at Terre Haute and structural steel is now being erected for the new building, which will measure 240 by 480 ft. when completed. The office portion will be a two-story structure, with manufacturing supervisory offices, cafeteria and rest and locker rooms.

Included in the plans are a motor-generator room to house the machines which will supply power for transformer tests, and vacuum tanks for drying the coil assemblies. Coil winding lathes have already been installed in other Terre Haute plant areas for the training of personnel in this operation.

At Cedar Rapids, more than half of expansion and modernization investment is in capital equipment, mostly machine tools. The building portion of the program will provide an Experimental and Engineering Laboratory building, a new machine shop, a twin to the existing storage building and the transformation of the former garage into office and storage space. The sales promotion building now houses a first aid department with the latest equipment, plus a general conference room and retired employee clubroom. One floor has been added to two wings to give the engineering department the entire top floor of the main office building.

These programs at Cedar Rapids and Terre Haute Works are not isolated cases—A-C is planning to meet expanding markets on every front with new machines, new facilities and increased skills on the part of the people who make Allis-Chalmers products.

And, despite the emphasis on production to meet anticipated demands, it's the Allis-Chalmers tradition of quality at a fair price that's going to keep the customer coming back for more.

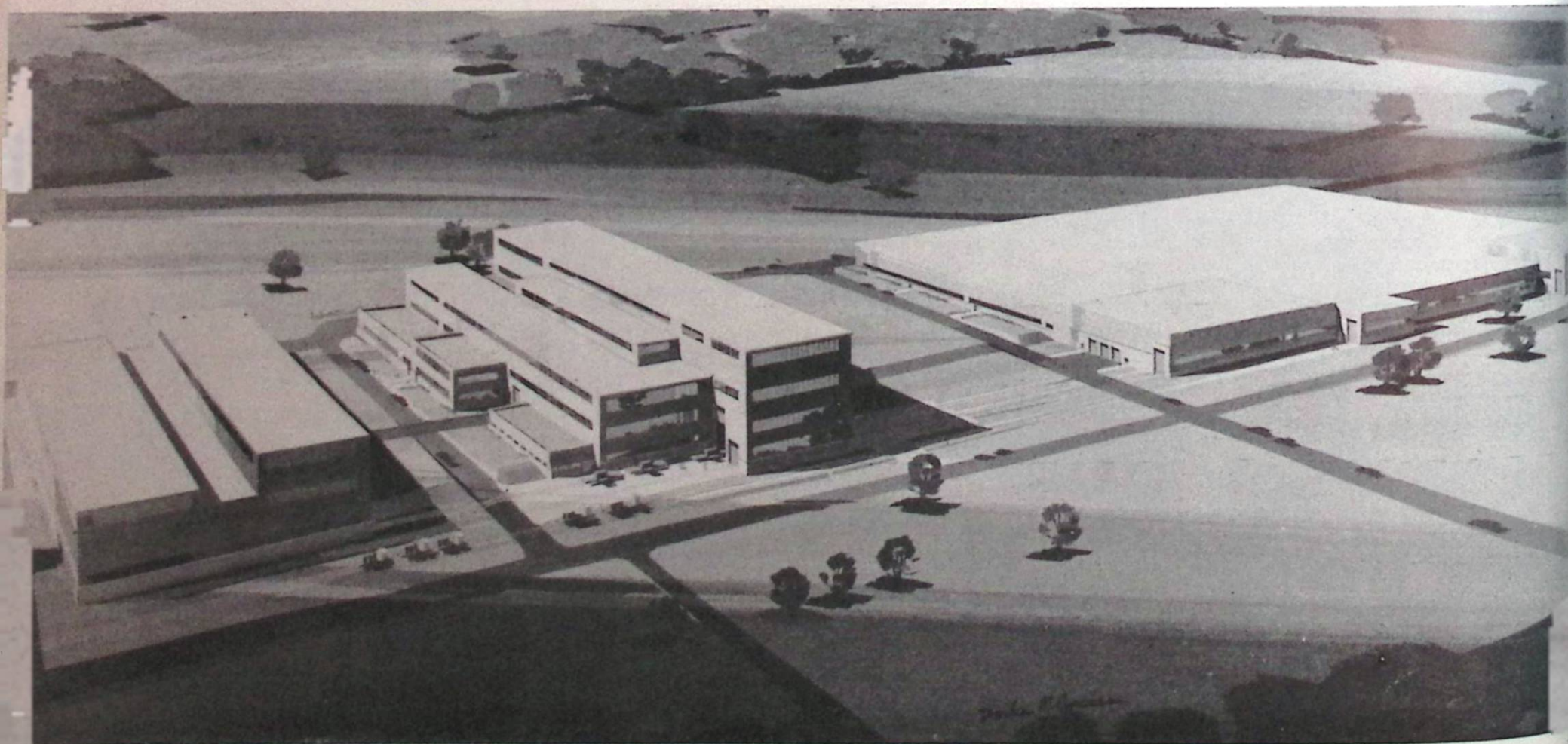
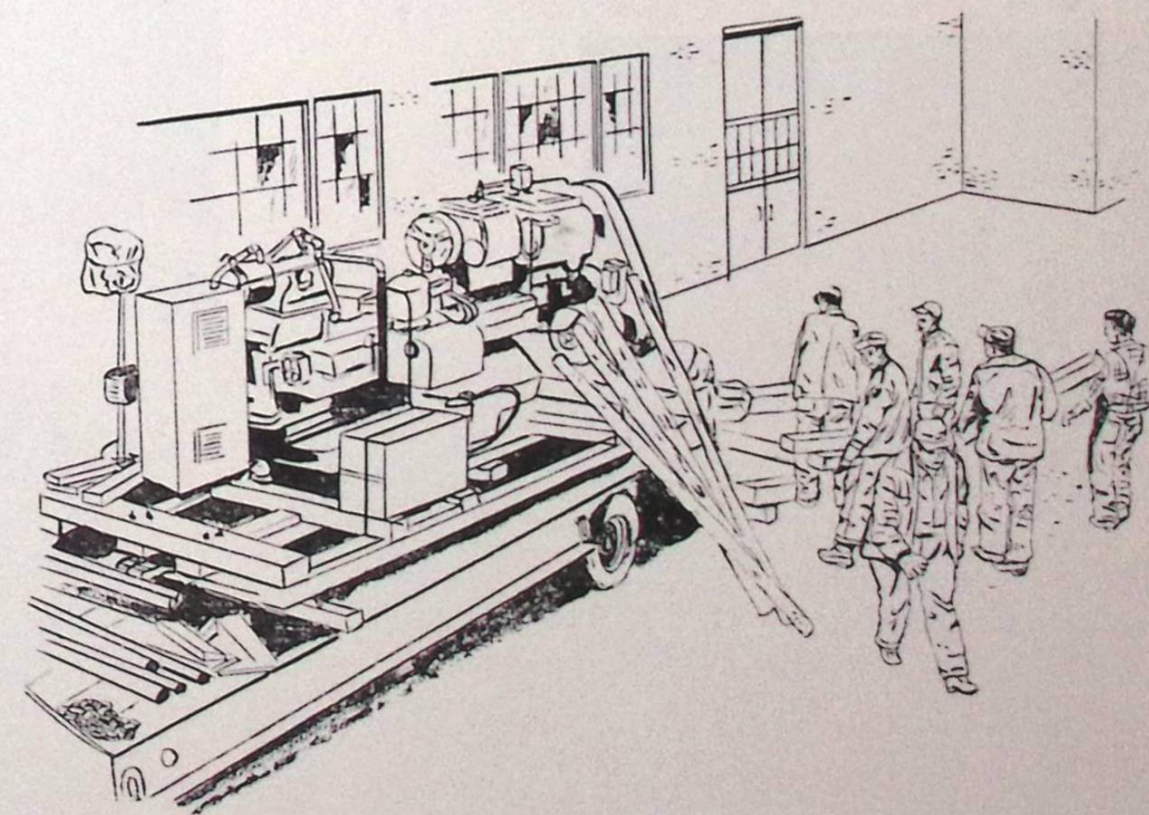


Left photo shows Jack Oxley, Cedar Rapids Electrical Maintenance, wiring the control panel of a Cincinnati external grinder. Photo in center shows Ralph Oxley, toolmaker, and Louis

Woods and Ray Comreid, tool room machine operators, lining up a Giddings & Lewis boring machine. Top right, stockman Bob O'Brien is shown in the new production stores building.

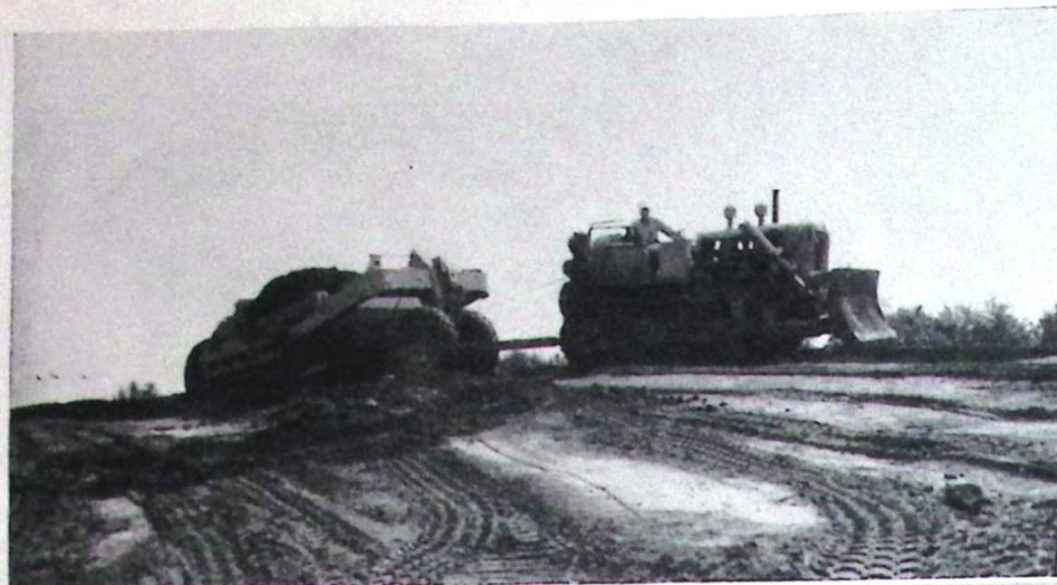


Work in progress above will add one floor to two wings of Cedar Rapids Works main office building, provide more space.



As Terre Haute Works will appear, with transformer building in center and service buildings on

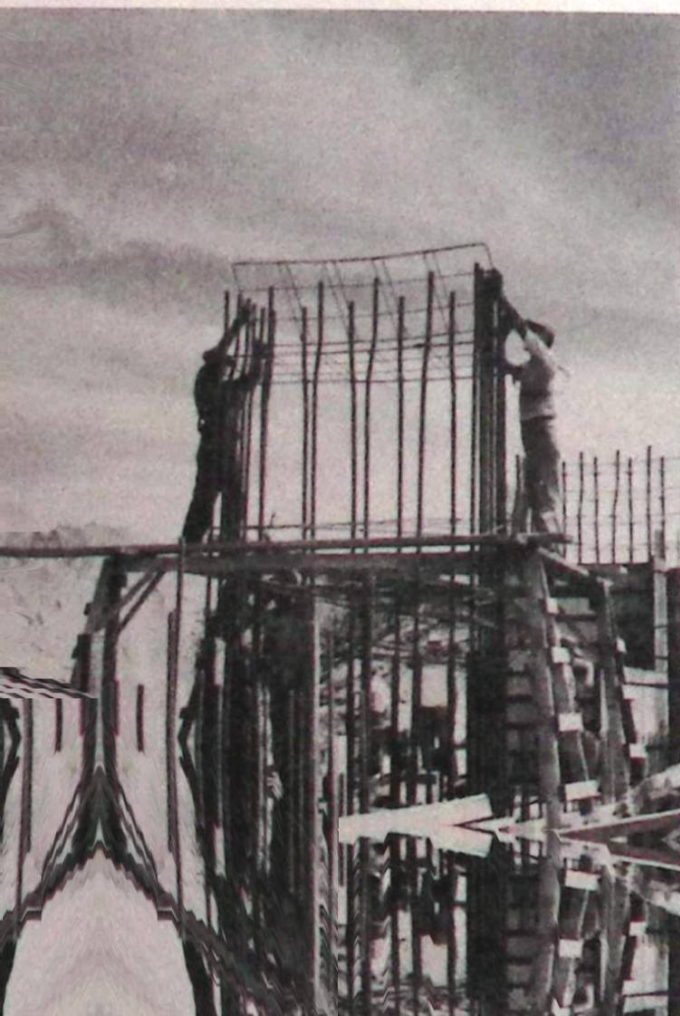




## at Terre Haute....

The men and machines on this page work for The Austin Company, contractor for Terre Haute's new transformer facility as well as builder of the original plant and the Tank shop.

Photos here show the last of the work on excavation and pouring footings. From here, the steel-work will rise and the silhouette of the new construction will begin to take form. Austin's crews use A-C earth-moving equipment on the job but it's not the familiar Persian orange . . . all of the Austin equipment that moves is painted a bright blue, including tractors, pull scrapers, cranes, trucks and even wheelbarrows.



Springfield Works employee  
and his family spend

## A Day with Lincoln



SIX SCORE and five years ago, Abraham Lincoln arrived at the remote village of New Salem, nestled in the wilderness of central Illinois.

A youth of 22 and practically unschooled, Lincoln, as he later described himself, was a "poor friendless youth working on a flatboat for \$10 a month."

Now reconstructed as a state park, with many of the cabins on their original sites, the village attracts thousands of travelers a year. And as the passing years add stature to the Great Emancipator, so does the significance of New Salem village increase among the historic shrines in America.

Among visitors to New Salem State Park last month were Bill Bast and his family, who arrived not by flatboat but in a 1956 "hardtop." Bill is a machine shop clerk with 13 years of service at Springfield Works. Mrs. Bast's father, Dick Dowell, an 11-year A-C veteran, worked on the restoration of the Rutledge Tavern at the village and is now in the Springfield Works Plant Protection department.

For Bill and Mildred Bast, the 19-mile trip from Springfield to New Salem meant a day of relaxation with their sons while Jim, 13, and Haldor, 9, reviewed some of the Lincoln material they had learned in school. Jim is a freshman at Springfield high and Haldor a fourth-grader this fall.

### Authentic Furnishings

The Basts visited many of the 13 cabins, 10 shops and a school where church services were once held in the village. These buildings have been reproduced as they appeared in Lincoln's time and furnished with authentic articles gathered by the Old Salem Lincoln League. The collection includes dough and corn meal chests, candle molds, wheat cradles, cord beds, flax shuttles, wool cards and pewter and earthenware objects of the early 19th century.

Bill and the boys were attracted by the surgeon's instruments and medical equipment in the doctor's office, along with awls, lasts and rasps in the cobbler's shop. Mildred happily compared her position as a home-maker today with the shopping, cooking and household furnishings of another age.

As the A-C family passed from cabin to store and from inn to saw mill, it was not difficult for them to picture the life of the New Salem villager of more than a century ago. At one hand was the cooper shop of Henry Onstot, where Lincoln and young Isaac Onstot often studied by the light of a fire made from shavings. Over there was the two-room cabin of Martin Waddell, the hatter, complete with its original wool and fur processing gear.

Guide folder in hand, Bast family plans tour of 300-acre village site. State park was created in 1919 after donation of land by the late William Randolph Hearst.

Across the street was the building where Lincoln became a partner of William F. Berry in the village store. History relates that the young storekeeper once walked clear to Springfield to return change to a customer who had been inadvertently overcharged.

In another locale, the Basts found the Rutledge Tavern, New Salem's welcome to travelers arriving by stage coach from Springfield, Beardstown or Havana. This log structure's four rooms and a loft served as residence, lodging place and general quarters for gathering the latest news from wayfarers. Lincoln slept in the loft when he boarded at the tavern.

### Shops Seem 'Open'

All of the cabins and shops are arranged to give the impression that the occupants have been called away, but will return shortly. Tables are set, sitting rooms await the kindling of a fire and shops seem "open for business."

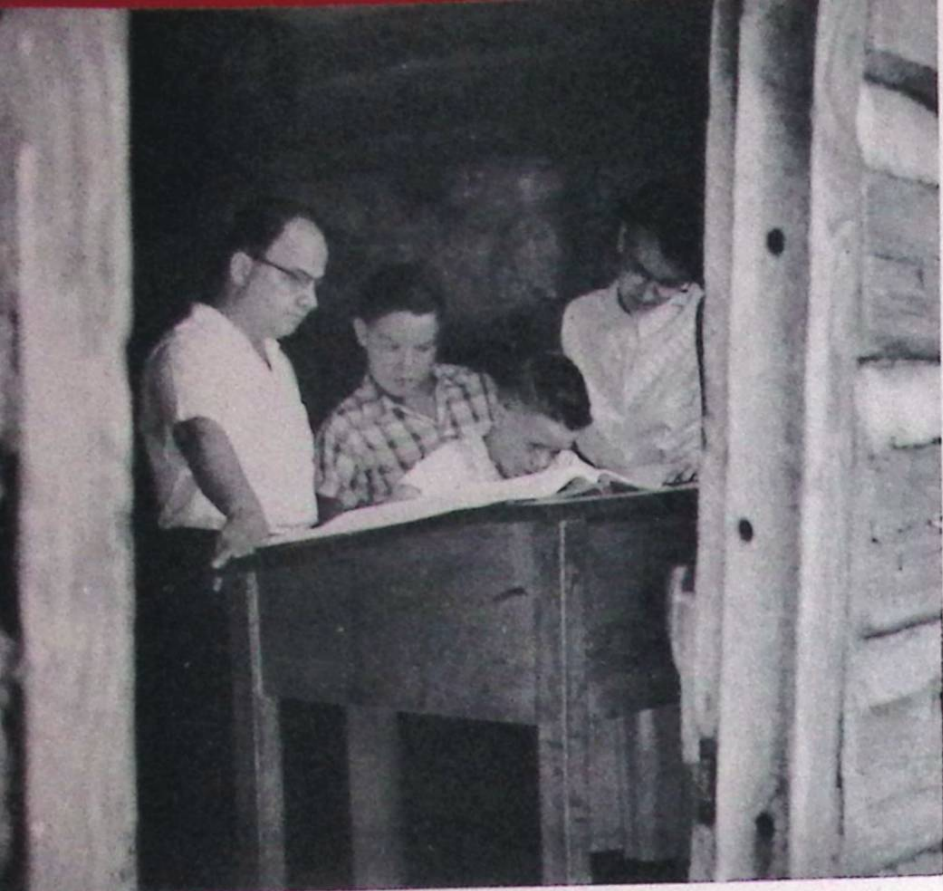
During his New Salem sojourn from 1831-37, Lincoln enlisted in the Black Hawk War, was elected to the Illinois legislature, served as postmaster and deputy county surveyor and eventually departed for Springfield to practice law.

New Salem village reached its heyday in 1835, with some 25 cabins and possibly 100 residents. It was virtually deserted by 1839, two years after Lincoln had left for Springfield.

The Basts ended their day with a visit to two Springfield landmarks, Lincoln's home and the Lincoln tomb. On returning home, all four agreed it was a day well spent, rich in the lore of Lincoln and the history of central Illinois.







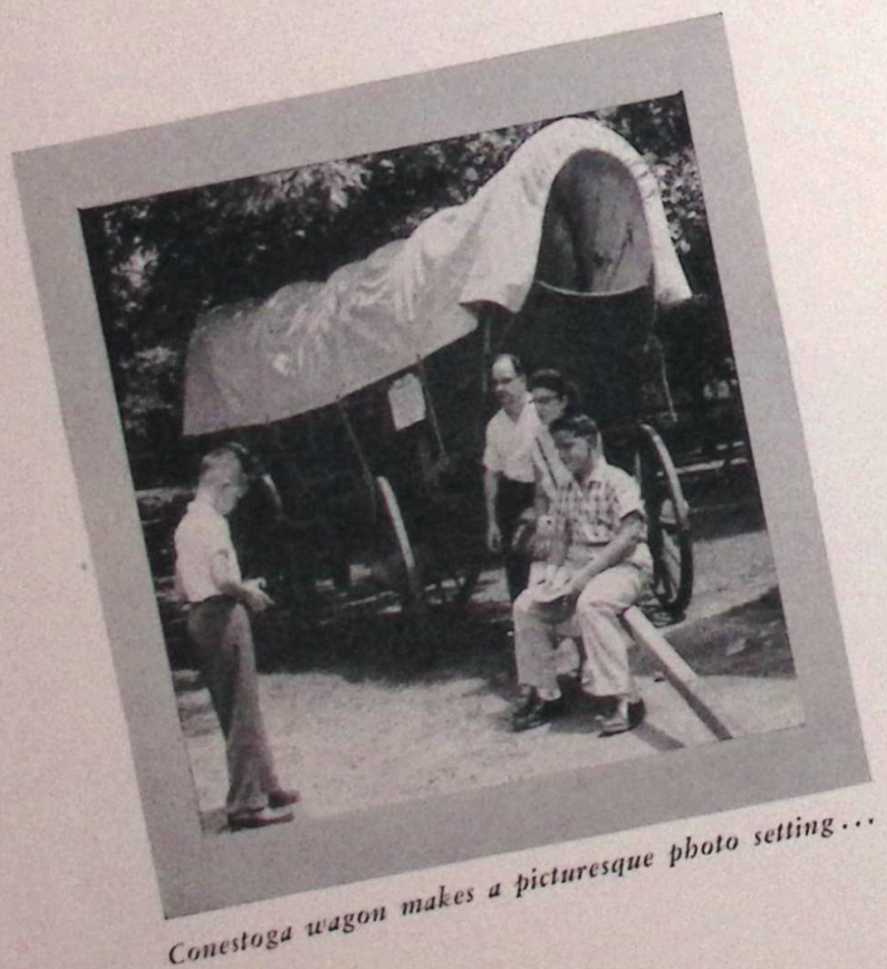
Signing the visitors' register at the restored Rutledge Tavern, top left, Haldor Bast notes that New Salem village draws Lincoln students from all parts of the world. Ash hopper, above, used in soap-making process is authentic. Postoffice, left, occupies part of area in Lincoln-Berry store, Lincoln's first venture into commerce. Mill dam, below, is place where Lincoln's flatboat was hung up, on a journey originally planned to take him down the Sangamon river and on to New Orleans. Lincoln disembarked to free his boat, stayed at New Salem six years.



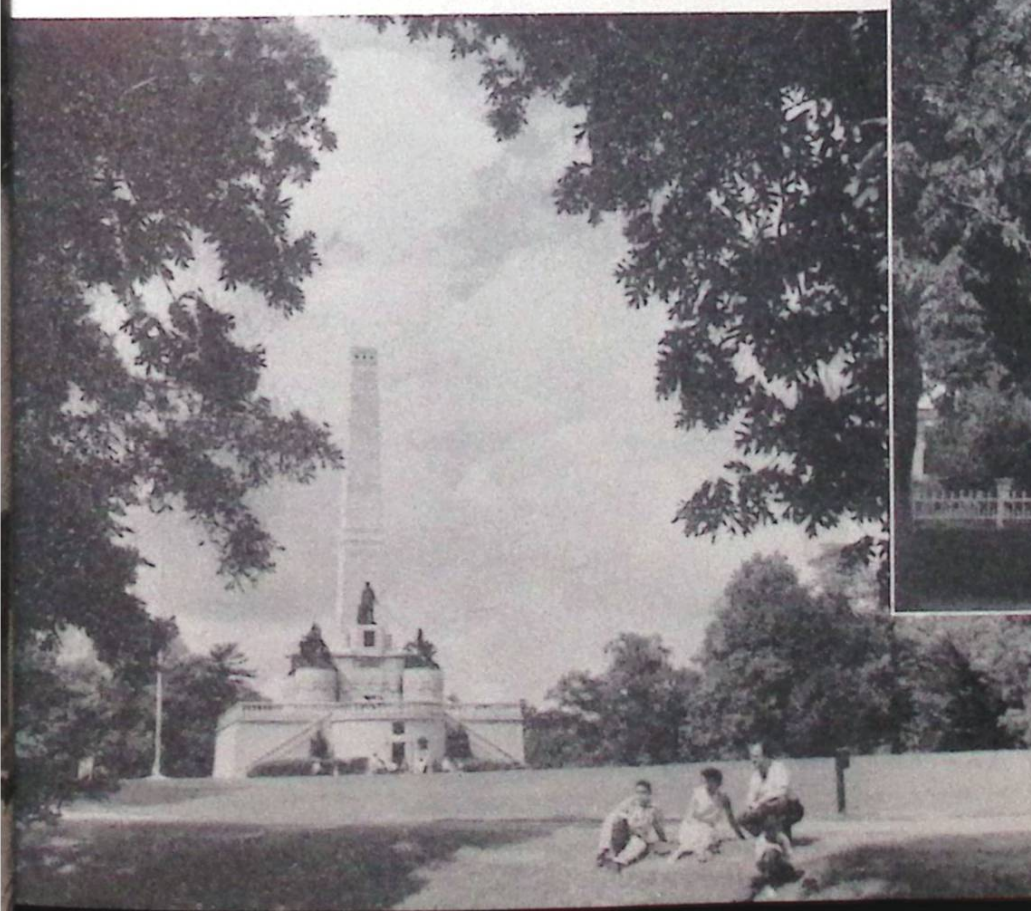
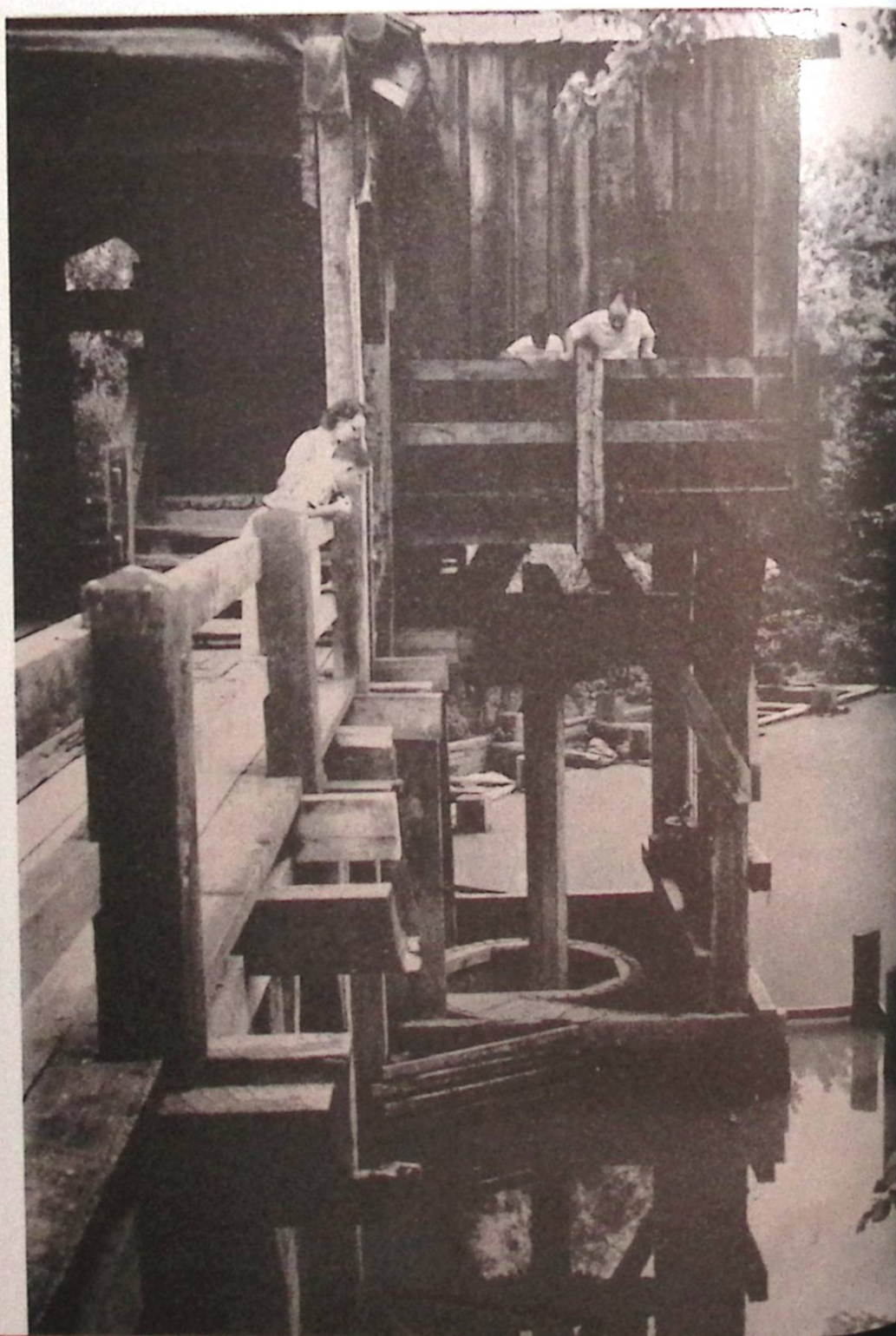
Rutledge Tavern scene, above, is in the style of a 19th century inn. Mildred Bast couldn't refrain from comparing its facilities with her modern appliances. Jim tried to fit "kid brother" into original cauldron, above right, used by village hatter to boil his wool.



Jim questions Dad on a phase of Lincoln lore as the Basts stroll down a lane in the history-steeped village. Even the shrubs, flowers and gardens are typical of Lincoln's day.



Conestoga wagon makes a picturesque photo setting...



Tour nears an end at the Lincoln home in Springfield, only residence ever owned by the 16th United States president. Lincoln tomb, left, also in Springfield, is the burial place of Lincoln, his wife and three of their four children.





Carol Quittschreiber of Norwood, O., is a 1956 winner of an Allis-Chalmers college scholarship. Studious as well as pretty, her ambition is to become a chemical engineer, which will mean mastering a mountain of books such as are shown here. For more about Carol, see story on Page 7.