

VOL. 6, No. 9

SEPTEMBER 1947





What A Picnic We Had

When the call "come and get it" rang out at Spanish Terrace, Christiana Lake, August 24, about 700 American workers and their families lined up for dinner.

"It" consisted of: Baked ham, baked beans, potato salad, celery, bread, pickles, olives, coffee, milk, chocolate milk, orange drink, coffee, coke, and ice cream.

After dinner, games and contests were conducted. The winners, the prizes and the doners were:

The rolling pin throwing contest was won by Mrs. Marvin Rapp. The prize, a G. E. iron, donated by Bob Cliff of General Electric.

The three legged man's race was won by the team of Sherwood McCallum and Mel McCallum. The prize: two gallons of oil donated by Eddie Buckley.

J. W. Eubanks was awarded a power lantern donated by Dale Mangus of the South Bend Supply Co., for winning the fat-man's race.

Money prizes for the 50 yard dash for boys were collected by: George Hixenbaugh, Claude Magnuson, and Jim Brugh.

Bunny Rae Brunk, Mary Jane May and Bettymae Dipert won the 50 yard dash for girls.

Billy Copp consumed his portion of watermelon in the least time.

George Scott, Jr. and Bernie Byrd

formed the winning team in the egg throwing contest.

Steel shopper, William C. Hensel, age 73 years, 10 months, was given a money prize for being the oldest employee present.

Door prizes were drawn by: Francis Davis, a fluorescent light given by the McCaffery Co.

A pen and pencil set given by Ralph Boettcher of the Louis Allis Co. to Omer Boembeke.

An electric fan given by Soens Electric Co. went to George Scott, Jr.

Lambert Klaer won the coffee table given by Schumacher Construction Co.

To Mel Morris and Ray Steele go especial praise for the meal. Mel worked all day Saturday and Saturday night, then got up at 5:00 A. M. to begin again.

The committee and those who assisted included: Jepthah Minnes, Harold Gay, Robert Gibbens, Jackson Snyder, Frank Miles, Sidney Brugh, Harry Hixenbaugh, Art Fuller, George Reith, John Pawlowski, C. A. Soens, Jim Evans, Anne Spart, Kathryn Glass, Lucile Simcox, Mary Brennaman, Clair Wilson, Jack Metcalf, Jack Fitzsimmons, Melvin Ranstead, Bernie Byrd, Kenneth Bidlack, Joe Bidlack, Lynn Bowers, Bill Snyder, Bill Rapp, and general chairman Tom Hameline.





A & A Rebuilders, Inc., St. Paul, Minn., use this 27" x 36" Wheelabrator Tumblast for cleaning clutch assemblies and discs.



The 15" x 20" Wheelabrator Tumblast installed at Thompson Products, Inc., Chicago, for cleaning connecting rods during rebuilding operations.



Operator inspecting brake shoes prior to cleaning in the 27" x 36" Wheelabrator Tumblast at Meyers and Welch, Los Angeles.

Auto Part Reconditioners, Like Auto Part Builders, Clean by Wheelabrating

For many years auto part reconditioning has been a thriving and important business. Rebuilt and reconditioned parts supply many of the replacement parts that keep our autos running.

A reconditioned part usually is just as good as a brand new part, and with the added advantage of being cheaper.

As a rule, the old parts must be cleaned to remove rust and dirt prior to refinishing. Abrasive blasting is the quickest, most effective way to do the job.

In May of 1941 Mueller Accessories, Inc., Chicago, purchased a $15'' \times 20''$ Wheelabrator Tumblast to clean the parts they reconditioned. That was the first order in this field. Since then more and more sales were made to other firms engaged in this work. This year 24 Wheelabrators have already been installed, and many more units are on order or under construction in our shop.

United Motors Service Division of General Motors Corp. have already installed 9 machines and 7 others are on order for their various plants throughout the country.

Auto manufacturers use Wheelabrators for cleaning original parts, so the rebuilder or reconditioner also finds the Wheelabrator practical for cleaning such parts as:

Carburetors	Shock Absorbers
Generators	Connecting Rods
Brake Shoes	Brake Cylinders
Fuel Pumps	Distributors
	Generators Brake Shoes

Wheelabrating offers tangible benefits to reconditioners such as: Increased production at lower cost per unit, uniformly and thoroughly cleaned parts, easier inspection, and a shinynew appearance.



Auto Parts Exchange Co., Los Angeles, use this 20" x 27" Wheelabrator Tumblast for cleaning 30 to 50 water pump housings in just four minutes.



New 5 Clubber



Welder Milferd Gardner has thought his way into the exclusive "5" Club. And for his feat of having submitted five accepted ideas, he was

awarded an additional \$5.00 award. Imagineering Pays!



OFFICE Virginia D. Russ

MAINTENANCE Thomas A. Williams, Fred G. Biltz

STEEL SHOP

Robert J. Roth, Robert W. McCarthy, Robert W. Peppers, Glen E. Martsolf, Robert N. Pease, George F. Baker, Rolland D. Fisher, Charles L. Perkins, Paul R. Overholser, Charley H. Draper, Arthur L. Welker, Charles A. Forney, George R. Roush

MACHINE SHOP

William R. Miles, Vernon J. Wagner

MISCELLANEOUS

Donald E. Fawley, Stockroom; George Coryn, Jr., Metallurgical

SHIPPING

James T. Powell



When YOU'RE the customer, you're the BOSS. You decide where to buy and where not to buy. You demand FULL VALUE and FAIR TREATMENT. It's just that way with OUR customers. If they don't like our products and prices, they'll go somewhere else to buy.

So we've got to satisfy our customers TO HOLD ON TO OUR JOBS.

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Dustubes Collect Copper Fungicides

The dust created in the manufacture of copper fungicides by a Tennessee plant is poisonous. Difficulty was experienced in maintaining a labor force due to harmful effects of breathing the powder. With the installation of two Dustube Dust Collectors, all toxic dusts are collected ... employment turnover was eliminated and material collected is salable.

S a l t a way money and satisfaction by turning in your ideas to the Suggestion Committee. They pay real folding money for ideas.



Dustube Helps Grow Better Food

Take five pounds of nitrate, add eight pounds of superphosphate, and seven pounds of sulphate. Sprinkle on strawberries.

Your cookbook doesn't say that, but if the farmer who grew the berries followed these instructions, you can follow your cookbook's instructions for strawberry shortcake.

All this leads up to telling about the sale of a No. 255 KD Dustube Dust Collector, Davis Taylor made to Sunland Industries, Inc., Fresno, California.

In the latter half of 1946 Sunland built a new plant to manufacture fertilizer. Varying soil conditions, as well as different types of fruit, vegetables, and grain, require different kinds of fertilizer. This company is in a position to furnish a special fertilizer, specifically designed for the conditions which it must improve.

Along one side of the new building are approximately 25 ten-foot-square, open bins for storing the various raw materials that are later mixed into the commercial fertilizers. These materials include: Ammonium nitrate, ammonium phosphate, ammonium sulphate, chilean nitrate of soda, aero cyanamid, superphosphate, thermophosphate, sulphate of potash, muriate of potash, agricultural lime, and finely pulverized manure.

When a fertilizer for a specific order is to be prepared, the raw materials are scooped from the bins with an electric power scoop, and transferred to various weighing bins. Exact amounts of the raw materials are discharged from the bottom of the containers and transported by elevator and chute to a special mixer. After passing through the mixer, the fertilizer is discharged to a hopper which feeds the bagging machine.

The No. 255 KD Dustube Dust Collector ventilates all of these operations, collecting dust from the weighing bins, mixing chamber, and bagging operation.

While the collected material has some value, the primary purpose is to eliminate a bad dust nuisance that would otherwise result.

The Family Album



Waste Costs Money

Do you think waste can be reduced? Or do you think it is "one of those things that must be endured"? For the answer to that one, take a look at the record the men in the machine shop have hung up:

The machine shop is now purchasing less than half as many perishable tools (drills, milling cutters, grinding wheels, etc.) than it did during 1944 and 1945! Fewer tools to do the same work.

And when it comes to waste due to incorrect machining, the record is almost unbelievable. Our inspection reports show waste machining to be less than $\frac{1}{2}$ of 1%. Production machine shops usually consider 2% waste to be the irreducible minimum . . . and in job shops, such as our own, the minimum is much higher. Sometimes our machinists work on hundreds of pieces in a day and not a one is discarded!

Some of this record is undoubtedly due to newer machinery, and the excellent training given by the foremen and supervisors, but much of it is directly traceable to the skill and care of our machinists . . . men who do a good job and do it right.

In spite of this excellent record, however, a total of \$986.34 worth of material was scrapped in July by *all* departments, *excluding* the foundry!

So, even an excellent waste record is an expensive item in manufacturing. And remember, too, July was the month the factory was on vacation!

American Parade

Steps to an Order-From Be

Illustrated by Martin Boehnlein, Steel Shop

As Jimmy Durante says on the radio shows, "Everybody tries to get into the act". In the production, distribution and installation of American equipment, "everybody" gets into the act. All of us must function as a smooth operating team and every job or task is necessary and important. A breakdown in any phase of company operation would disrupt the entire manufacturing system.

In the sequence following, the steps necessary to complete the installation of a piece of special equipment have been listed, if the sale is for standard equipment, some of the steps are not required.

Also, there are a number of ways in which the original interest in an order may originate in addition to the one listed — sometimes from a salesman calling on a new company, sometimes from calls the salesman has made over a period of time, even years; however, this flow chart is intended to show how the work of all departments is related.

Engineer designs new machine for prospect, using results of demonstration and other pertinent information supplied by prospect and sales engineer.

7

4

dation for equipment or arranges for

samples of product to be cleaned at

the factory demonstration laboratory.

5

witness cleaning demonstration in our

6

sales department to send "proposal"

Sales engineer requests Mishawaka

laboratory.

to prospect.

Prospect's engineers and executives

Sales engineer calls on prospect, discusses problem, makes recommen-

8

Cost department estimates cost of producing machine.

9

Sales department writes up "proposal" giving exact details of proposed machine and costs, including delivery date, and sends to prospect.

10

Company gives order to sales engineer, who in turn, sends it to Mishawaka.





COST DEPT



1

Advertising department plans and schedules direct mail and magazine advertising.

2

Prospect sees ad, and being interested, inquires about equipment.

Sales department answers inquiry, sending catalog on equipment in which interest is shown. Copy of this letter is sent to sales engineer in area where inquiry originated.



American Parade

nning to End

11

Order entry writes up sales order, Cing 8 copies:

- Pale green tissue copy to Odelia Schaut who then writes up shop and works orders.
- White bond copy to customer formally acknowledging receipt of order.
- Goldenrod copy to sales engineer. Pink copy retained in sales department for reference.
- Yellow copy for sales reports, then to accounting for payment of sales commission.

Dark green copy to stock room.

Dark green copy to steel shop. Dark green copy to engineering department.



Work orders are typed and sent

Production office

Stock room

1:

Engineering

Billing

Shipping

Packing copy to go with shipment

13

Stock room checks order to dermine parts' needed, and requests archasing to order material not in ock.

14

Engineering department supplies tail and assembly drawings for ilding the machine.

15

Stock room requests Odelia Schaut type shop orders to construct the achine.

16

Foundry contributes castings ecded, others purchased outside.

17

Machine shop furnishes machined rts.









18

Stock room provides other parts and raw material.

19

Steel shop lays out steel pieces, fabricates parts and assembles machine.

20

Finished machine is tested and inspected.

21

Completed machine is painted in the paint shop.

22

Shipping department prepares and ships machine to customer.

23

Billing department invoices machine.

24

Accounting department handles payment of equipment.

25

Service Engineer supervises erection of machine.

26

Parts Service department handles orders for repair parts.











7

American Parade

American Blazes an Industrial Trail

There are a lot of platitudes floating around this world about "pioneering", "leadership", and the "true compliment of imitation".

But there are usually two courses of action open to every individual and every organization: To follow where others have led; or to strike out in new directions and chart the way to better things.

Each road has certain drawbacks . . . if one follows, one must always wait until another has paved the way; and never have the pleasure of doing something first or the fame and acclaim that come from real accomplishment.

The pioneers and leaders, on the other hand, find the way slow, expensive, and discouraging.

This is the course American has chosen to follow over the years. As a result, this organization and its men are acknowledged leaders in the field of blast cleaning. Its spirit of pioneering engineering development has accounted for more major achievements than all other manufacturers of blast cleaning equipment combined! The more important of these are listed as follows:



The *Tumblast* endless conveyor method of batch-cleaning which completely exposes all surfaces of every piece to the full effect of the abrasive blast.



The Airless Wheelabrator, the most effective and economical modern method of abrasive blast cleaning was invented and perfected here.



The "Humane" Type Sand Blast Room and Cabinet. Our engineers introduced this development wherein the operator works outside the room in safety and comfort, effectively screened from dust and rebounding abrasive, without requiring a helmet or respirator.



The Combination Wheelabrator Tumblast-Table for the jobbing foundry having a varied production which requires both a tumbling type machine and a table type machine.



The Continuous Tumblast, where parts are fed into the mill at one end, and come out clean at the other end, with no shutdown for loading and unloading.



The Monorail Cabinet for the continuous, large-scale production-cleaning of special work such as cylinder blocks, bathtubs, axle housings, etc.



The Wheelabrator Swing Table which handles 80% of all Airblast Room jobs and is capable of cleaning a wide range of large and small pieces where the daily production does not warrant the cleaning of several different types of equipment.

The Multi-Rotary Table to clean parts that are flat, fragile, or have high vertical edges or deep pockets.





Modern business doesn't stand still and wait, no matter how far apart the question and the answer might be. And this pace requires faster methods of communication.

Recently our British licensees, Tilghman's Patent Sand Blast, Ltd. inquired by cable about a business matter. The cabled question was not clear, and the answer involved a matter of such importance, risk of misinterpreting the question could not be taken. Also it was a matter that couldn't be answered satisfactorily by letter.

The usual method would have been for one of Tilghman's representatives to come to Mishawaka to discuss the matter . . . but modern business doesn't wait, as was said before. The decision, and the correct one, must be made immediately.

So, our President and General Manager decided to make a trans-Atlantic telephone call to Tilghman's at Broadheath, near Manchester, England. Making such a trans-Atlantic call requires some interesting preparations. Here's part of what was involved.

Our switchboard operator Kathryn Hums, informed the local telephone exchange that Mr. Pfaff would like an appointment to talk with R. T. Ankers about 10:00 A. M., Mishawaka time, the next day — 5:00 P. M., Broadheath time.

The telephone company took over. The New York office notified Mr. Ankers that Mr. Pfaff would like to talk with him. This, so he would be available when the call was put through.

Next day, at 11:28 A. M. Messrs. Pfaff and Cline in Mishawaka were talking with Mr. Ankers in England. With reception as clear as any local phone call.

It cost \$65.00 for these men to talk business for 13 minutes. But when the call was finished the questions were answered, and modern business proceeded along at its usual fast clip.





Service Engineer GEORGE THARP was near San Jose, California on a regular trip. As he came by a light plane fell and burst into flames. George couldn't help the pilot, but he did have his small box camera with him and took a few pictures. That evening he sold the pictures to the Oakland Tribune "for more than enough to buy a new suit." The Tribune printed one of the pictures, four columns wide.

And if that wasn't enough in one week, George had another adventure. He stopped in Modesto, California to send a wire and decided to get a shave.

When the barber lathered him with nearly cold water, George began to get suspicious and commented: "pretty nervous today aren't you?"

Came the reply: "Oh, I've been drunk and my right hand gets paralyzed so I have to strop the razor with my left hand."

George looked, sure enough his hand was drawn up as if at one time he had had polio. The razor was just lying in the hand.

After the shave (brave man, he went through with it) the barber gave him a pink slip with 75c on it. At the cash register the barber took the pink slip, rung the register and handed our service engineer a quarter (Tharp still hadn't given him any money.) George, considerably shaken by his experience, pocketed the quarter and hastily left.

JIM ANDREWS (maintenance) expressed his appreciation to all those who were helpful and sympathetic during the recent illness and death of his wife Vera.



JEAN E. TRACY

"When Joe told you to get a new grinding fixture he didn't mean a new set of teeth."

Cigar Passer-Outer

William Kauffman, Jr.
(maintenance)
Vern Valentine
(research)
Clarence (foundry) and
Elouise (formerly engineering)
Knisley

Reason

Danny Lee.

Born August 5

Phillip Ward,

Born August 4

Born August 6

Paul M. Kuhn

George Bennett

Jim Hendricks

Walter Yendes

Frank Harley

Roy Durbin

Janice Elaine,

From

New Diamond Wearers

To Betty Buck (files) Helen Komick (billing) Marcille Larimer (accounting) Martha Bragg (accounting) Amy Futter (accounting) Harriett Clawson (purchasing)

Research Department — Reported by Don May

KENNY CLARK is the proud possessor of a new house.

VIRGIL POPE thought there was enough space between a chair and a tree in his back yard to drive his motorcycle. There wasn't. So Virgil has a small accident and a sore leg as a result.

CARL RITTER spent two of those hot weeks up in Northern Michigan, where, while it was hot during the day, he slept under blankets at night. That was worth failure to catch any fish.

Machine Shop -

Reported by Don Karnes

JUNE SPARKS is back at work after an operation.

ROBERT LENSON is now working in the machine shop, after being transferred from Sandcutter assembly.

While the machine shop foremen were on vacation, tool maker "UNC" MOORE acted as foreman. * *

JOE HENDRICKSON took over the managership of the "A" league softball team near the end of the season. *

The bowling season is about to get underway. Six teams bowl on Tuesday evenings representing: The steel shop, research, maintenance, office, engineering and stockroom.

Steel Shop — Reported by Bernie Byrd

GEORGE DU BOIS went fishing and almost caught a pike; a fish so large he told JIM POWELL he was sure it weighed 20 lbs. A week or so later George went fishing again, and met one of his old fishing pals. Said the friend: "There's a large pike in here." "Yes, I know, I almost caught it and it weighs 20 lbs." "No, it doesn't, it doesn't weigh more than 18 lbs." And so the discussion continued. George supporting his contention because he was in a boat and the fish almost was . . . the friend was on the bank, and for too short a time the fish was too. The last that was heard, neither had conceded a pound, nor had the pike been caught.

ROY BUCK came to the rescue of LUCIUS ELLER (sweeper). Lucius was always losing or mis-laying a shovel, so Roy spent most of a lunch period welding an axle and wheels on a shovel.

* *

The men and women of the steel shop, and women of the machine shop and stock room bought recent bride EVA COPP FISHER a rose colored bed spread, white sheets and pillow cases.

One of the favorite jokes among the night men in the steel shop for a number of years. has been the fact that EARL DUKE can't remember his new address whenever he moves. Even his wife joined in the joke and wrote a note to foreman CARL BRITTON one time telling him the new address.

When Earl moved this summer, he thought to forstall such jokes at his expense, and gave the new address to RALPH WHITTAKER, rather than to his foreman.

Two days later he had to correct it. The new address for the Duke family is 2071/2 East North Street, Bremen. Which can lead to a lot of confusion!



Foreman RALPH HARRINGTON vacationed at Dewart Lake. Three-year-old daughter Shirley insisted on learning to row a boat. So daddy taught her. It had advantages, with Shirley rowing Ralph could devote all his time to plain and fancy casting. As a result he caught plenty of fish, while some of the permanent residents didn't do so good.

And if this sounds fantastic, ask MARY LOU HARRINGTON (files), she too, says Shirley rowed daddy around the lake.

New Machines Help Us Do Better Work

This 86" Wheelabrator Swing Table is installed in the demonstration laboratory for use in testing and to show potential customers how the machine will perform on their products. Swing Tables are made in four other sizes.

The demonstration laboratory is completely equipped with *American* machines for proving that the equipment will do the jobs claimed for them.





Wheelabrator blades are heat treated to make them tougher and more uniform in hardness. This is necessary because of the severe abrasive wear to which they are subjected.

Recently our heat treating procedure was changed from an air quench to a salt quench. Now, when the blades immerge from the 1650° F furnace, they are immersed in a liquid salt bath to cool them to 400° F. This takes two minutes. The blades are removed from the salt bath, drained, and washed in clear water.

The only time the blades are touched by hand is in loading and unloading, all operations through the furnace and quench are mechanical. Arthur Crook pushes a button controlling the lowering of the blade racks into the salt bath. Clarence Hartnell pushes the buttons on the day shift.

Actual Insurance Claim

Claim: Remove tonsils of employee's dependent child.	
Total hospital and doctor bill\$62.	.20
Insurance paid benefits of\$29.	.70

Insurance cost to employee: 65c or one-half the premium (for employee and two dependants). The Company pays the other half of the insurance premium.

Total cost to employee if no sick and accident insurance had been carried: \$62.20.

American Parade





Walt Beatty and George Reith inspect a sprocket grinder in the machine shop. They find that, while the operator, Andy Reidl, is protecting his eyes with safety goggles, the belt is not guarded.

Walt Ostrowski looks over molder Don Foutch to see that he is safely attired before "pouring the heat". Don's safety clothing includes: Special molders' heat-resisting goggles, canvas leggings, and molders' congress-type shoes. The shoes have no openings or holes through which spilled metal can seep. Also, should an accident occur, they can be quickly removed without unfastening.

Herman Jones and Bill Rapp inspect a section of the Tumblast assembly line. They find the material properly stacked, nothing in the aisles to trip over, and a generally neat and clean appearance.

One of the biggest problems in the shipping room is keeping the guard on the rip saw in place. Bill Kauffman, Sr., inspects the saw to be sure that this precaution is observed.



Safety Vigilantees On the Job

A Safety Committee consisting of labor and management representatives from every department is constantly on the alert to discover and eliminate hazardous working conditions. Members of the Committee are usually changed every three months.

As a rule, representatives do not inspect their own departments. For example, the men from the steel shop inspect the foundry, the men from the foundry inspect the shipping department, etc.

In August the plan was changed for the month, and when these pictures were taken, the Safety Committee members were inspecting in their own departments.

Willard Flowers points out to Stanley Hes improper stacking of material — motors in this instance. This has resulted in the damage of a crate, and the possibility of a man being scratched by the protruding slat.

Night "jeep" operator Lloy J Dunning requested a leg guard be installed on the large jeep. George Gay and Wilbur Sawdon inspect the finished guard which was designed and installed by the men on the steel shop night shift.



