

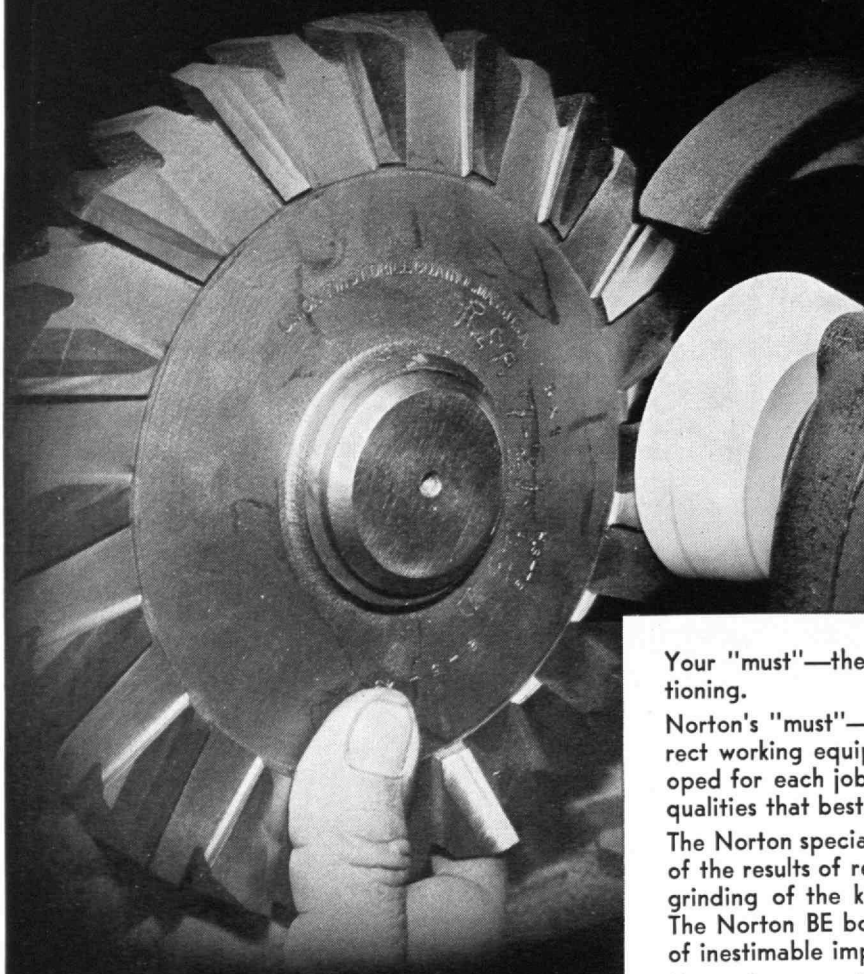
February 1944

TECHNOLOGY REVIEW

• Title Reg. in U. S. Pat. Office



"Must" for Aviation TOOL GRINDING Skill plus correct Grinding Wheel



Your "must"—the skill for a cutting-tool conditioning.

Norton's "must"—to give your skilled men correct working equipment—grinding wheels developed for each job of the shape, size and cutting qualities that best meet the conditions.

The Norton special 38 Alundum abrasive was one of the results of research to solve the problem of grinding of the kind required in the tool room. The Norton BE bond is another that has proved of inestimable importance in tool-room grinding.

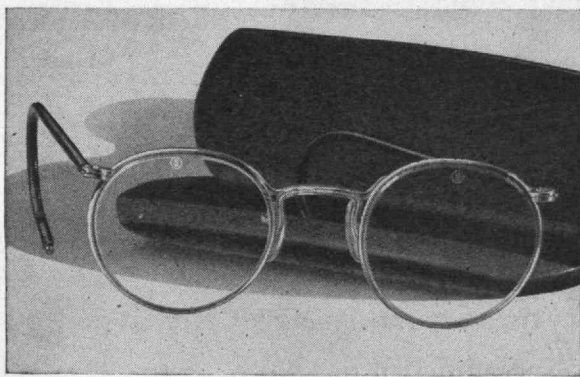
Up to the present time, you need look no further for abrasive and bond satisfaction, but you, too, may benefit from the Norton knowledge of shop performance on the variety of cutting-tool metals in use.

NORTON COMPANY, Worcester 6, Mass.

Behr-Manning, Troy, N. Y., is a Norton Division
Photo courtesy North American Aviation, Inc.

» **NORTON ABRASIVES** «

He had no peer
as a Tool Maker...
until he lost an eye



**...all workers on or near
Eye Hazardous Jobs
need AO GOGGLES**

Are the highly skilled men in your plant wearing goggles? The price of the finest pair of AO Goggles is trifling compared with the loss — even for half a day — of the services of one of your skilled men.

An adequate eye protection program that provides AO goggles for every man and

woman who works on or near an eye hazardous job will pay for itself in a few months. AO Goggles are designed to give maximum protection and workers find them comfortable to wear. Ask your Safety Director to get in touch with the American Optical Company's branch office nearest you.

American  Optical

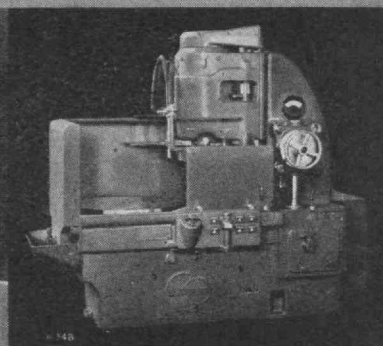
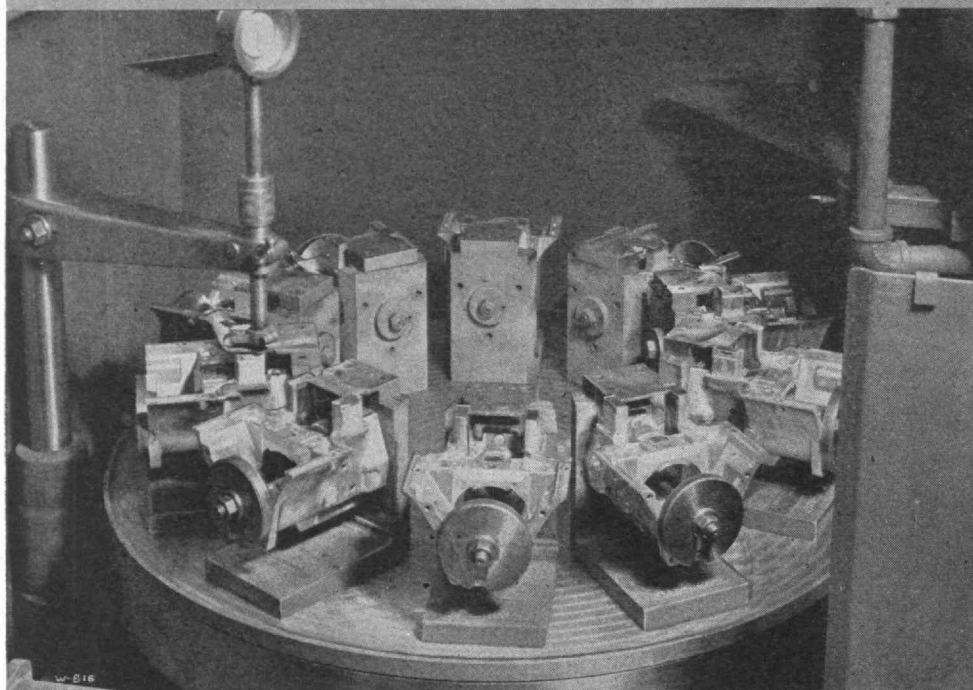
COMPANY

SOUTHBRIDGE, MASSACHUSETTS

Manufacturers for more than 110 Years of products to Aid and Protect Vision. Branches in all principal industrial centers

THE TECHNOLOGY REVIEW, February, 1944. Vol. XLVI, No. 4. Published monthly from November to July inclusive at 10 Ferry Street, Concord, N. H. Publication date: twenty-seventh of the month preceding date of issue. Annual subscription \$3.50; Canadian and Foreign subscription \$4.00. Entered as second-class matter at the Post Office at Concord, N. H., under the Act of March 3, 1879.

"PUT IT ON THE BLANCHARD"



Grinding Main Housing Poles for Magnetos on a No. 18 Blanchard Surface Grinder

Ability to remove metal quickly and cheaply makes it possible for Blanchard Grinding to carry through from roughing to finishing in one operation.

These Housing Poles for magnetos have .140" stock to remove from steel laminations. Ten

pieces are held on a Blanchard designed fixture on the No. 18 Grinder and 30 pieces are finished per hour.

The weight and rigidity of the Blanchard are essential for economical machining of parts such as these.

**CHECK THESE
ADVANTAGES
OF BLANCHARD
GRINDING**

★ **Production**

★ **Adaptability**

Fixture Saving

★ **Operation Saving**

Material Saving

Fine Finish

Flatness

Close Limits

★ *... Especially valuable on jobs like the one illustrated.*

The BLANCHARD MACHINE COMPANY

64 STATE STREET, CAMBRIDGE 39, MASSACHUSETTS



Send for your free copy of "Work Done on the Blanchard." This book shows over 100 actual jobs where the Blanchard Principle is earning profits for Blanchard owners.



A New Type of Ship Follows Her ...with the Same Type of Diesel

Below is a picture of the U. S. Maritime Commission ship American Manufacturer. She is one of the C-1 vessels propelled by Busch-Sulzer Diesel engines. The C-1's are giving a good account of themselves, delivering war cargoes on fighting fronts the world over.

Now a new type of Maritime Commission vessel will carry the battle to the enemy—the C1-MAV-I. Busch-Sulzer is proud, of course, that its

Diesel engines on C-1 ships made a reputation that has earned them the privilege of powering the new vessels. That reputation stems from nearly half a century of producing Diesel power noted for low operating cost, low maintenance cost and reliability. These factors will be offered to you when Victory ends our present schedule of 'round the clock production for the Army, Navy, Maritime Commission and high priorities only.



BUSCH-SULZER BROS. - DIESEL ENGINE COMPANY
S A I N T L O U I S



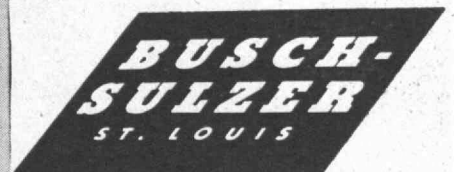
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AMERICA'S OLDEST
BUILDER OF
DIESEL ENGINES



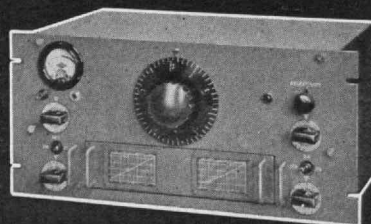
MEDIUM TANK, M-4
PHOTO BY
US ARMY SIGNAL CORPS

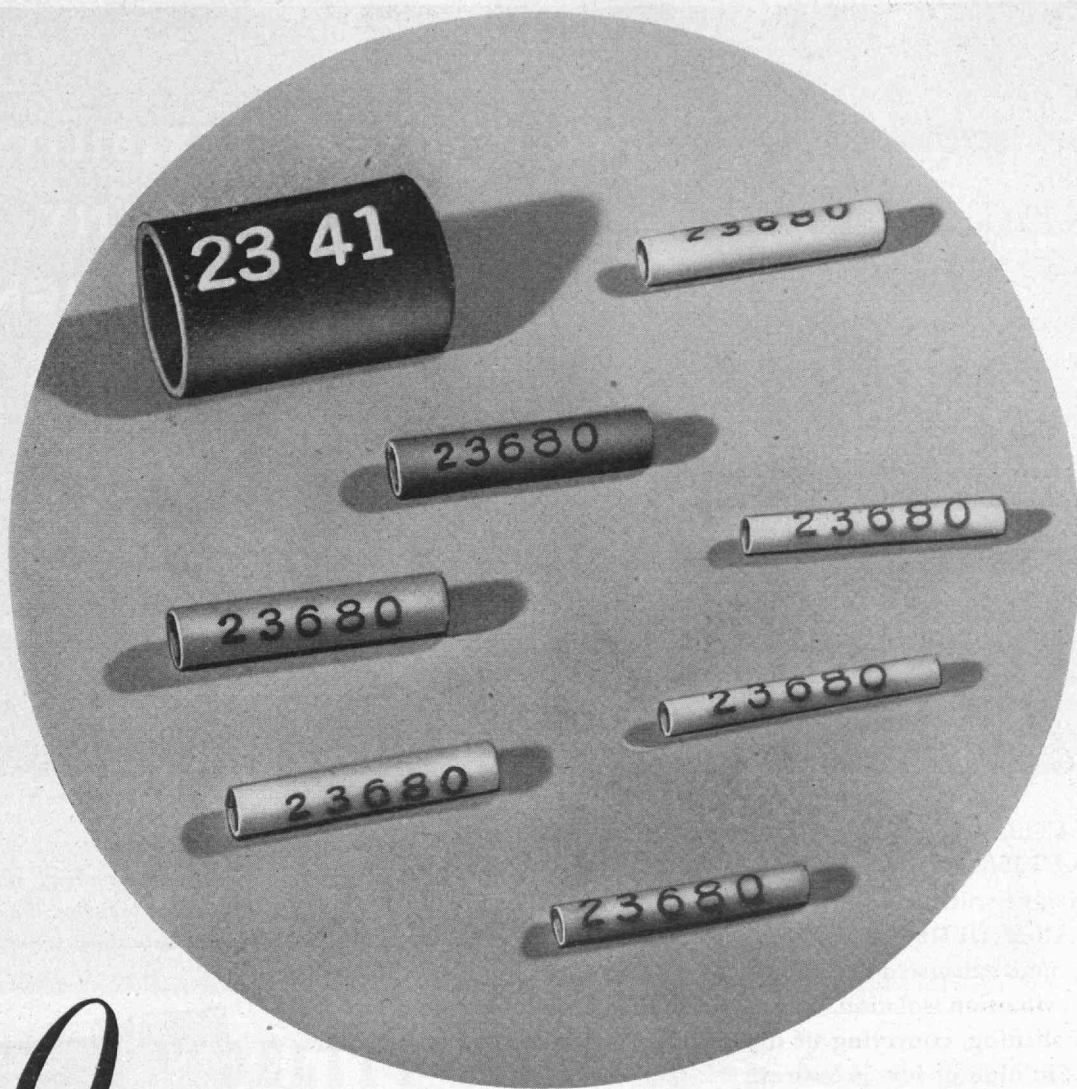
BUTTONED DOWN *and* ROLLING

Rolling all over the world. Hitting the enemy where it hurts him the most, covering infantry, scouting, fighting. Fighting and talking. Talking by radio to coordinate all in a pattern of Victory.



NATIONAL COMPANY, INC.
MALDEN, MASS.





Imprinted

TERMINAL INSULATORS AND IDENTIFICATION SLEEVES



THE identification of various electrical wires and cables is now a quick, easy job. For, Sandee Vinyl Sleeveings (made in all standard sizes) can now be cut to any lengths from $\frac{1}{4}$ " to $6\frac{1}{2}$ " and imprinted with identification marks or numbers! Sandee Vinyl Sleeveings are obtainable in all N.E.M.A. colors as well as black, white, and clear.

Electric wire and cable insulated with SANDEE compounds offer such advantages as:

1. High stability
2. High resistance to weathering conditions
3. Moisture absorption practically zero
4. High dielectric and ample tensile strength
5. Remarkable resistance to flame, abrasion, chemicals, oils, greases
6. Flexible at very low temperatures
7. Uniformity of size and quality

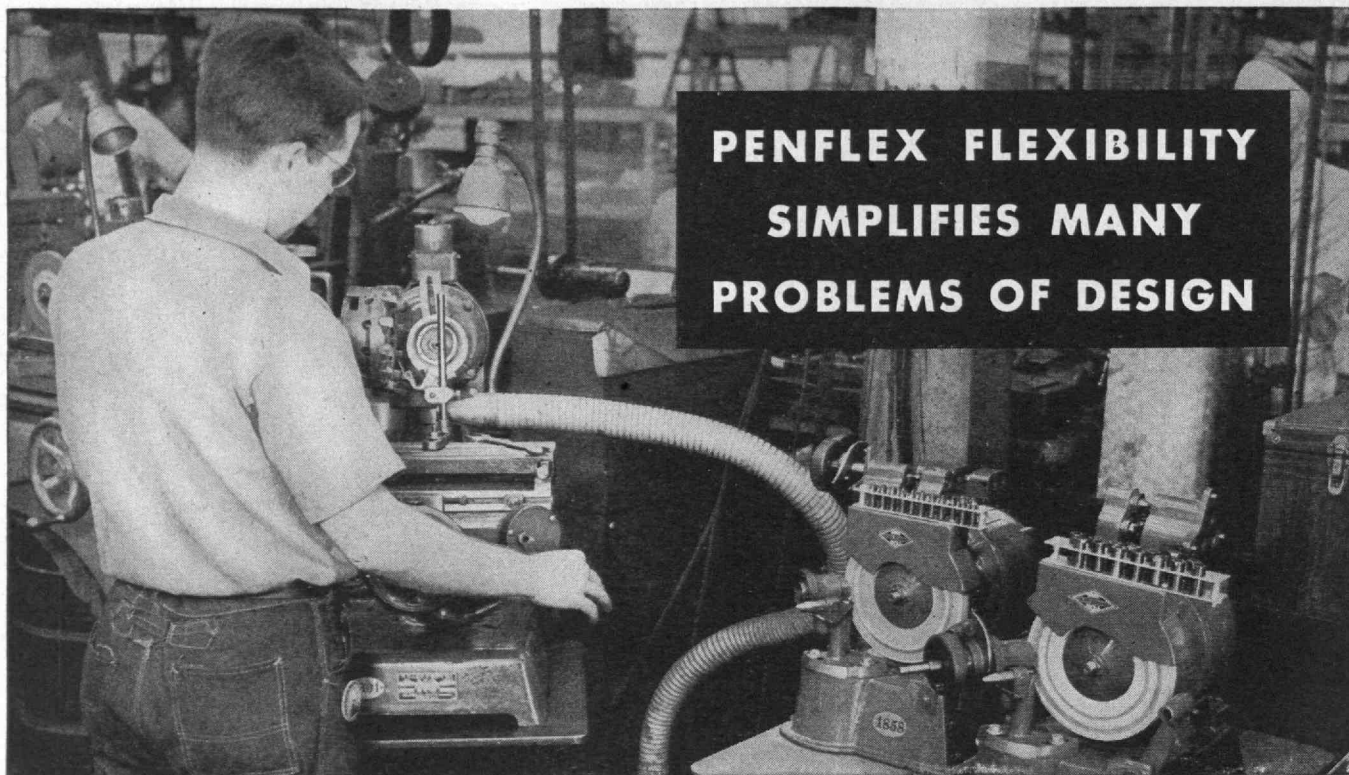
May we send you samples and complete information?

ELMER SZANTAY, M.E. '35, GENERAL MANAGER

Sandee Manufacturing Company

3945 NORTH WESTERN AVENUE • CHICAGO, ILLINOIS

EXTRUDED PLASTICS AND SPECIAL TOOLS



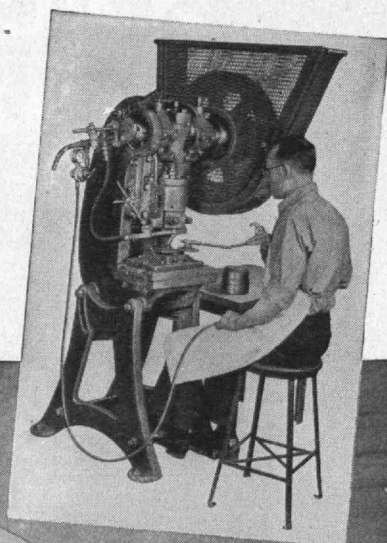
PENFLEX FLEXIBILITY SIMPLIFIES MANY PROBLEMS OF DESIGN

Photo Courtesy of Fidelity Machine Co.

ILLUSTRATED are several applications of PENFLEX Flexible All-Metal Hose and Tubing, showing how PENFLEX simplifies design problems. Light in weight with flexibility to make inaccessible installations easy, PENFLEX All-Metal Hose and Tubing are suitable for mobile units, bilge ventilation, fume exhaust, dust collection, coolant conveying, hydraulic and air controls, vibration isolation, oil can and similar flexible spouting, armor for flexible shafting, conveying of dry granular materials, and many other applications in high or low pressures.

PENFLEX, tight as pipe but flexible, follows any desired path. Material flows through smooth, easy bends without sharp turns to clog.

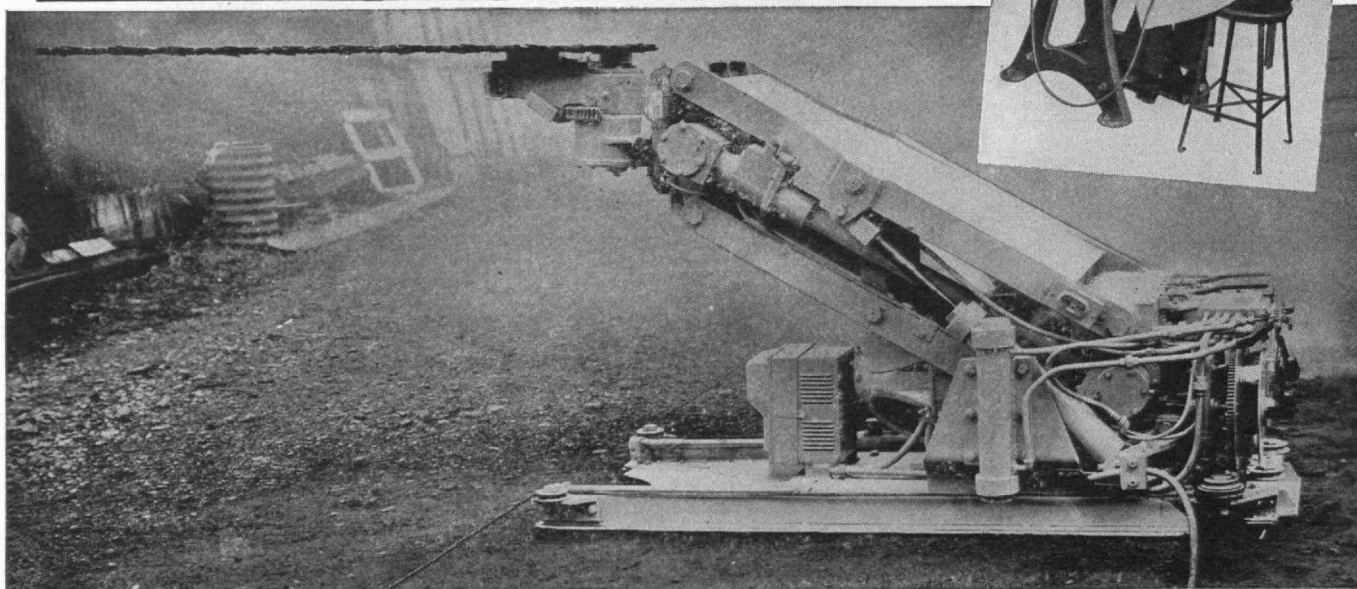
Tell us what type of material you are handling, and the operating pressures. We will send you data sheets promptly.

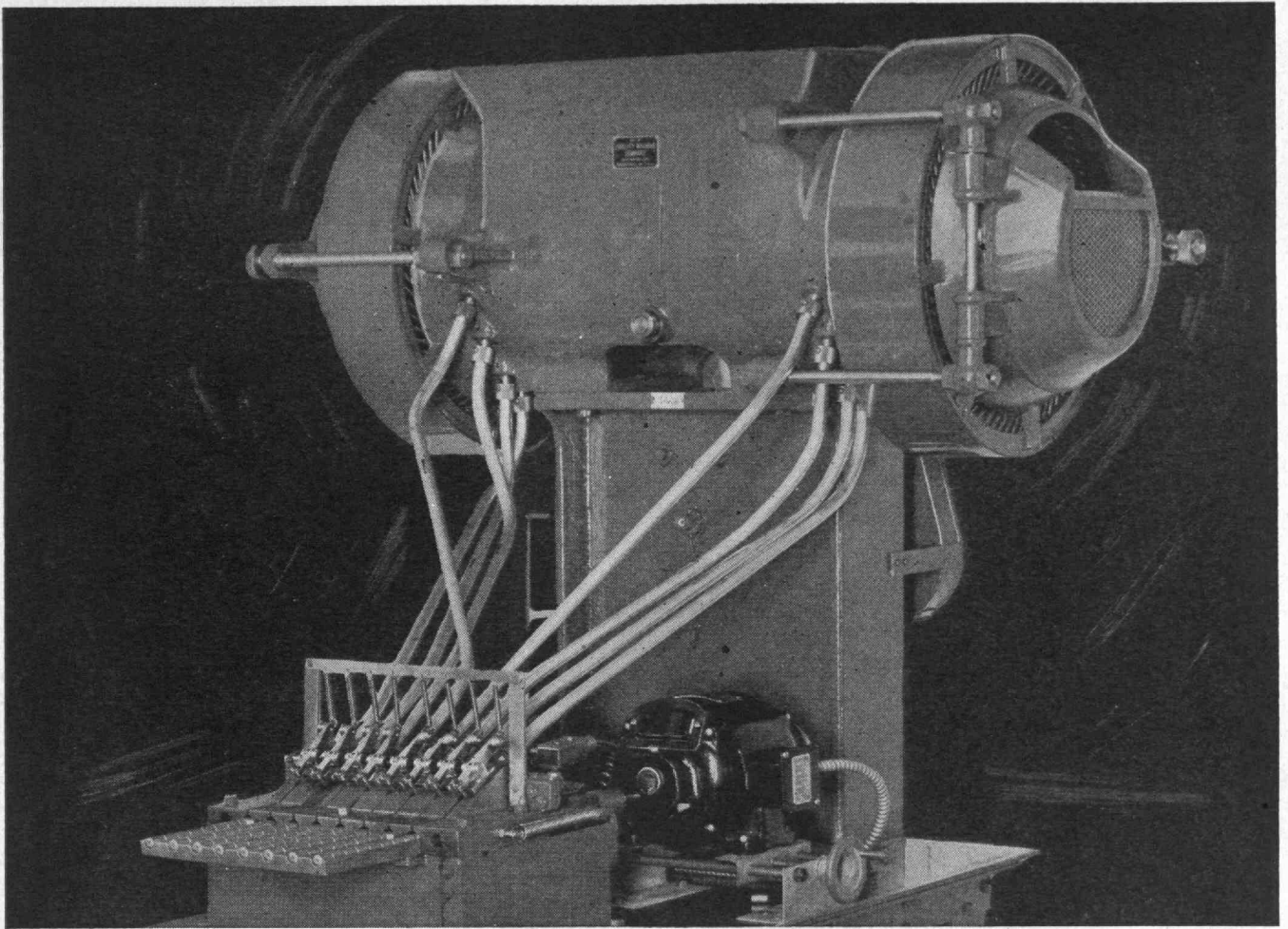


PENNSYLVANIA FLEXIBLE METALLIC TUBING CO.

7215 Powers Lane, Philadelphia, Pa.

ESTABLISHED 1902





Another FIDELITY Machine — war-born with peace-time applications — perhaps for you

If you have many small metal parts which have had to be sorted and handled manually—in large quantities—you will be interested in this adaptable basic machine which FIDELITY has made in a number of variations.

The parts are dumped into a hopper from which they are fed out in single or multiple tracks, in correct position for the next process. In some cases, sequential steps are taken care of by additional mechanisms or attachments, made integral with the automatic hopper and feeder element.

The machine illustrated sorts and delivers copper slugs through eight tracks at the rate of 20 slugs per minute per track—a total of 160 per minute. . . . Receiving trays, platforms or troughs in such machines can generally be designed to function also as piece counters or batch boxes.

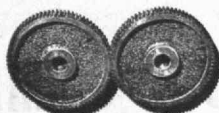
The range of FIDELITY'S developments in special machines designed and built to solve unusual and special production problems is described briefly in "Facilities."

A copy of this book is available if you write on your business letterhead.

BUY MORE BONDS



Designers and Builders of Intricate, Automatic Precision Machines



FIDELITY MACHINE COMPANY

3908-18 FRANKFORD AVENUE, PHILADELPHIA 24, PA.

How can machine tools avenge this

Dunkerque in Arkansas?



This is no enemy propaganda. No "usually well-informed sources" or Berlin broadcasts tell this tale. This is real . . . this is here . . . and this is defeat.

Our own private peacetime Dunkerque — in Arkansas, in New York, in West Virginia or California — in countless American "homes" where millions of people are ill-housed, ill-clothed, and bodily and mentally ill-fed.

What part will machine tools play in turning this kind of defeat into victory? The whole part, if the men of industry have the vision and the freedom to plan ahead, and to carry out what they plan.

If you are a manufacturer, there is one thing you can do at once: Have your production men and planners consult now with the engineers of the leading basic machine tool producers. They can help you in planning today your part in the peace that must be won after the war is won.

One of these is a Bryant man. . . . We invite you to send for him.



BRYANT CHUCKING GRINDER COMPANY

**SPRINGFIELD
VERMONT, U. S. A.**