## Tanuary 1946 TECHNOLOGY REVIEW Tite Reg. in U. S. Par. Office



## To Control PRESSURE

METAL CORPORATION

orsen

ΗE

HAROLD B. HARVEY '05 • Engineers & Manufacturers • SHERRY O'BRIEN '17

74th STREET and ASHLAND AVENUE · CHICAGO 36, ILLINOIS

FORGINGS IN ALUMINUM . BRASS . BRONZE . COPPER . MAGNESIUM . MONEL . ALLOYS

MACHINING FACILITIES

#### where cost reduction programs suffer

marks the spot

Unless you already have an adequate eye-protection program, eye accidents are, without a doubt, adding materially to your production costs. If experience in your plant is average, this avoidable cost amounts to \$5.00 per shop worker per year.\*

When 98% of eye accidents are avoid-

rican

COMPANY OUTHBRIDGE, MASSACHUSETTS Safety Division

UARD THE EYES OF

able\* — at a cost for safety goggles of only about \$1.50 per man — why let this waste continue?

Your nearest AO Safety Representative will be glad to arrange for a complete eye hazard survey of your plant without cost or obligation.

6 4

\*Estimated by the Society for the Prevention of Blindness.

ptical



THE TECHNOLOGY REVIEW, January, 1946. Vol. XLVIII, No. 3. 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 secondclass matter at the Post Office at Concord, N. H., under the Act of March 3, 1879.

# We have reversed the design . . . but NOT the principle

Users agree that the Bryant principle of cylindrical slide construction is ideal for the fast, precise, economical production of internally ground parts. Bryant engineers knew that this same principle, applied under the work head, would be more practical for certain types of jobs. The result was the Bryant No. 112. This result has been tested and proved for the past five years. The No. 112 is the last word for the internal grinding of tool room and small lot parts. It is designed with simple, concentrated controls — tooling and fixtures may be changed quickly — production is extremely fast — accuracy and work finish are among the finest ever produced by any grinder of any type. To help determine the value of the Bryant No. 112 on your work . . . Send for the man from Bryant.

PHANTOM VIEW OF BRYANT No. 112

BRYANT

EC US

SPRINGFIELD, VERMONT, U. S. A.

# Let NOBTON RESEARCH

RECONVERT with NORTON

THE same Norton research skill which solved so many wartime abrasive problems is now available to help you on your reconversion problems.

The work of the Norton staff of over 50 trained scientists and technicians (with their nineteen well-equipped laboratories totaling 50,000 square feet of floor space) is divided into two important phases:

- Constant improvement of abrasives and bonds to provide better grinding wheels. (Recent examples: 57 Alundum abrasive, B-5 resinoid bond, vitrified diamond wheels)
- Helping the Norton engineering staff in the solving of customers' current problems—working with them in the field and in the laboratories to determine the proper grinding wheels and grinding procedures.

Are you taking full advantage of Norton research? Contact your Norton abrasive engineer or distributor.

NORTON COMPANY, Worcester 6, Mass. Behr-Manning, Troy, N. Y. is a Norton Division

NORTON ABRASIVES



If you do compare - and your operation is anyway typical you'll find a single year's fuel bill is -

> nearly as much as, equal to. or greater than

- the total original cost of your boiler installation. Just think - in 10 years' operation - an installation costing \$50,000.00 may burn up fuel worth \$500.000.00, or more.

Doesn't such a comparison give a jolt to the customary attitude toward first cost of equipment?

> Doesn't it - instead - focus attention on such questions as -Will my next boiler installation be able to burn efficiently the lowest cost coals available to my plant? Will it be able to burn a sufficient variety of such coals to make me independent of changes in the coal market?

Two actual examples - many similar ones are on record - are described in the box. Read them, and if you are approaching the time when you will need a new boiler, consult C-E where you will find (1) a viewpoint that is concerned primarily with high return on your investment in terms of low annual fuel cost, and (2) a line of equipment adequate for any fuel or steam requirements.

Thus sound economics will be combined with sound engineering and the right equipment to give you - not the cheapest installation you can buy but rather one that will keep the allimportant fuel bill down to a minimum. With present high fuel prices and no prospect of post-war reduction. such an installation now offers the opportunity of greater economies than ever before. A-907-A

#### **TWO EXAMPLES TO** PROVE THE POINT

A confectionery manufacturer operated a medium sized C-E Unit at moderate rating during 1944. His fuel cost was \$32,000. The original cost of the unit was \$30.061.

A Paper Company operating a larger unit under continuously heavy load through the same period paid \$137,250 for coal. The cost of the equipment was \$66,000.

**COMBUSTION ENGINEERING** 200 MADISON AVENUE . NEW YORK 16, N.Y.

### **BAUSCH & LOMB MICROSCOPE**



### MODEL BA-8

141

The B series of Bausch & Lomb Microscopes is planned optically and mechanically to meet the greatest possible number of uses with a standard instrument. In weight, in balance, in range of magnification (from 20X to 980X) and in accessories available, these beautifully built microscopes give you a precision instrument that's truly versatile. Model BA-8 has built-on mechanical stage of improved design. An Abbe Condenser, 1.25 N.A., is held in a full-ring mount. Positive, smooth focusing is accomplished through rack and pinion coarse adjustment and B&L patent lever-type fine adjustment, with automatic take-up for wear. Write for Catalog D-185, "Laboratory Microscopes." Bausch & Lomb Optical Co. Rochester 2, N. Y.

#### BAUSCH & LOMB ESTABLISHED 1853





CAPTAIN HORACE L. HALL, U.S. Merchant Marine, retired, at his home in Springfield, L.I., N.Y., made daily recordings of transmissions from Australia, for more than four years, missing but four days. The apparently harmless news broadcasts kept the Australian Government in New York and Washington informed of every phase of the progress of the war, by a prearranged code.

The National HRO, used for this remarkable accomplishment is the first ever to have been shipped into the New York area and is over ten years old.





New Britain Specialty Co.



From garter buttons to tobacco pouches . . . from goggle frames to faucet sprayers . . . from oil seal rings to dust boots—these are only a few of the innumerable precision-molded parts we are constantly producing in our extensive, modern plant for large and small manufacturers throughout the country.

Rogers "Air-tite" Tobacco Pouch

SEALS AS IT CLOSES

If it can be molded of RUBBER—ACUSHNET will mold it! Specialists since 1910 in processing, compounding and molding rubber, we are equipped to design and precision-mold, exact to specifications, parts or products of natural or synthetic rubber.

We welcome all inquiries. When writing, please include complete information, specifications or samples.

Background illustration:—a "heat" of rubber garter buttons produced in a multiple mold. Button and strip is cut for attachment to garter.







### this "Quick-Change Act"

MANUFACTURERS, who are tangled up in the rush of transition to peacetime production, can get loads taken off their shoulders by *immediately effective* assistance in special work from this fast-moving organization, whose like is found nowhere else: *The Taft-Peirce Contract Division*.

ser.

Here is no precocious, single-skilled "war baby." Here is a well-rounded, fully integrated plant which has grown up uninterruptedly through the booms, wars, depressions, and normal times of the last 75 years. During this time, Taft-Peirce has served plants all over the world, in every industry you can think of. And here, ready now, are men and machines to give you quickly what you need—a single tool or part, an entire tooling program, or repetitive production of parts, assemblies, or complete products.

For action *now*, without stalling, wire or write to The Taft-Peirce Manufacturing Company, Woonsocket, Rhode Island. Or phone Woonsocket 1.

FOR ENGINEERING, TOOLING, CONTRACT MANUFACTURING

TAKE IT TO TAFT-PEIRCE