

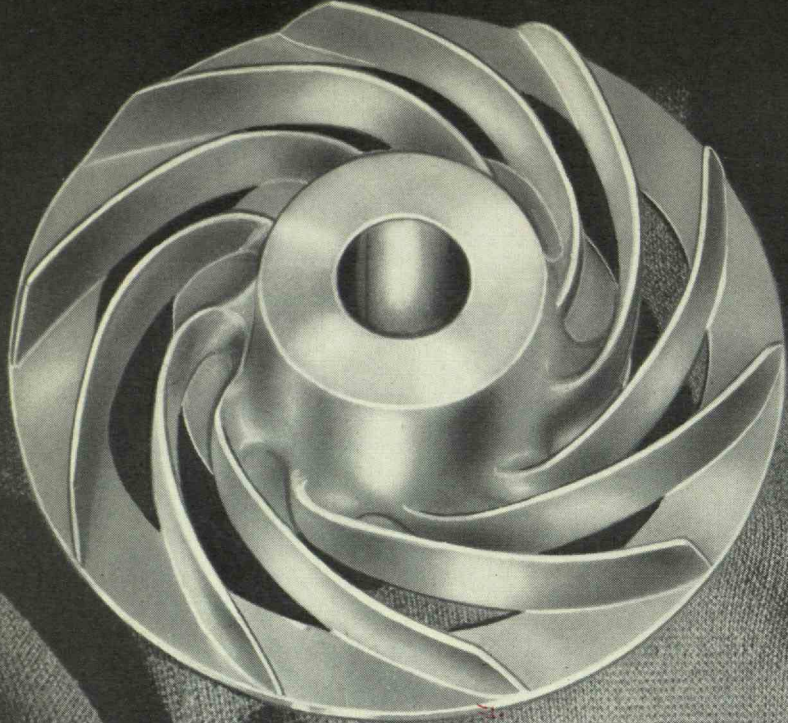
June 1948

TECHNOLOGY

REVIEW

Title Reg. in U. S. Pat. Office

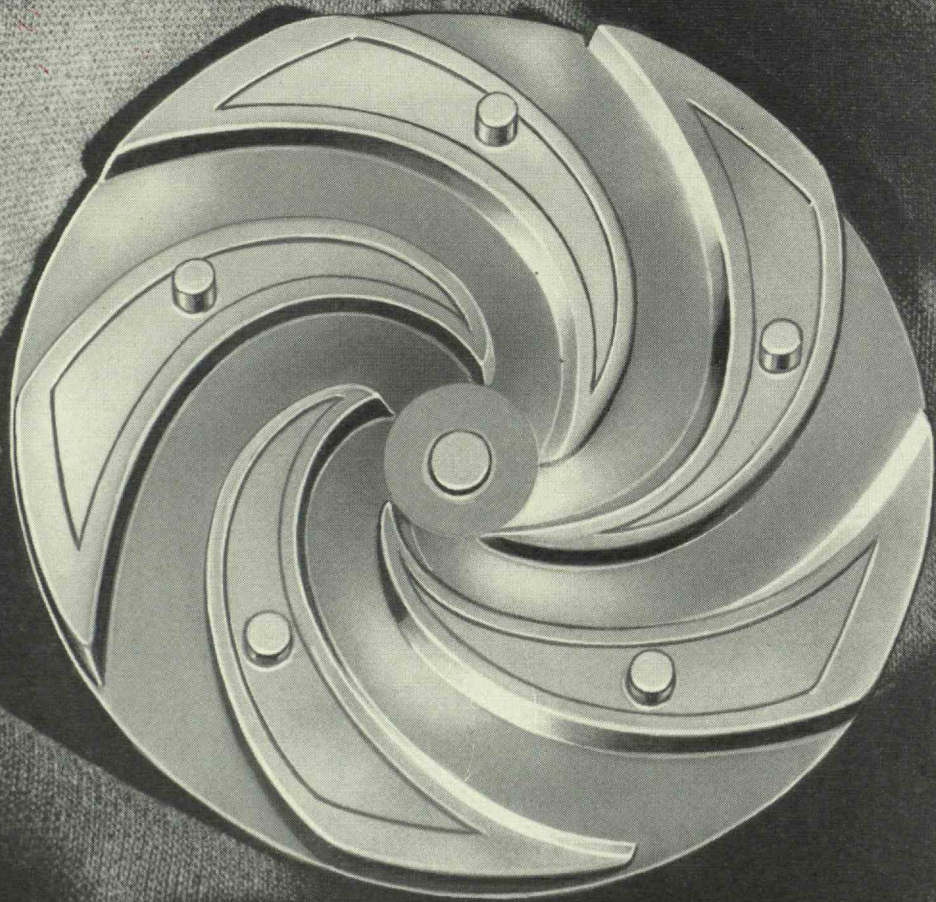




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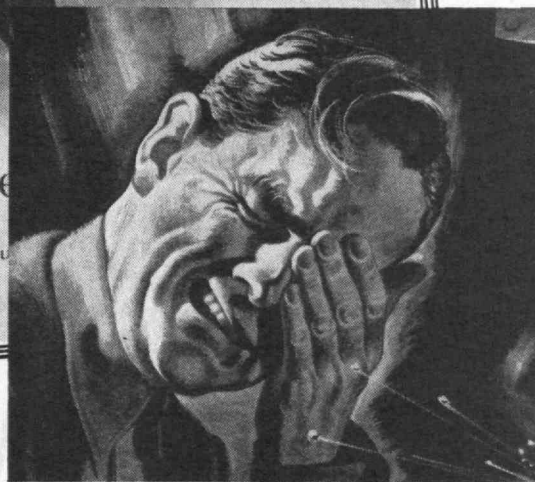
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Write for this Booklet which tells
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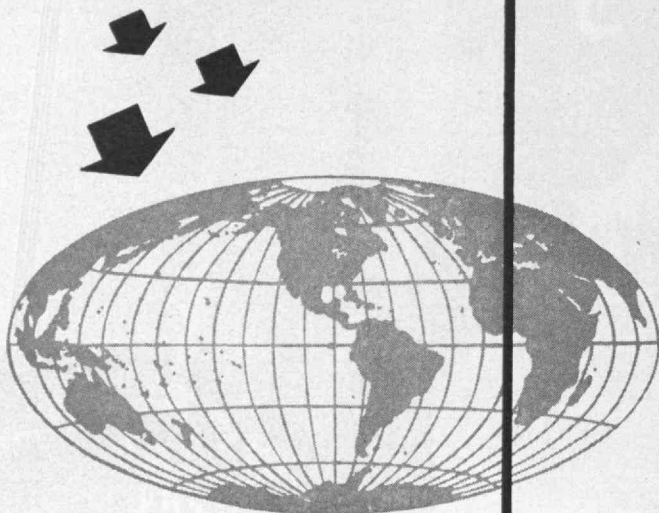
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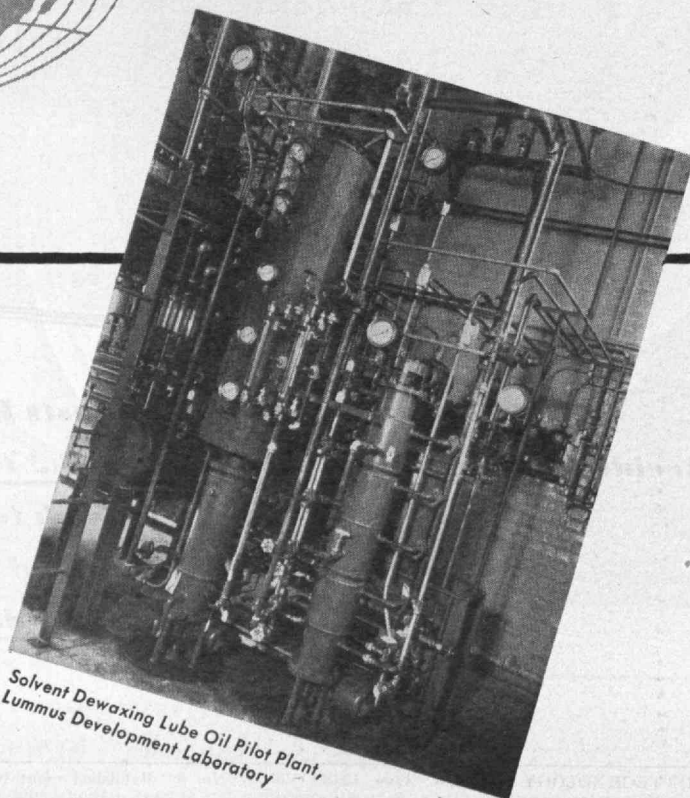
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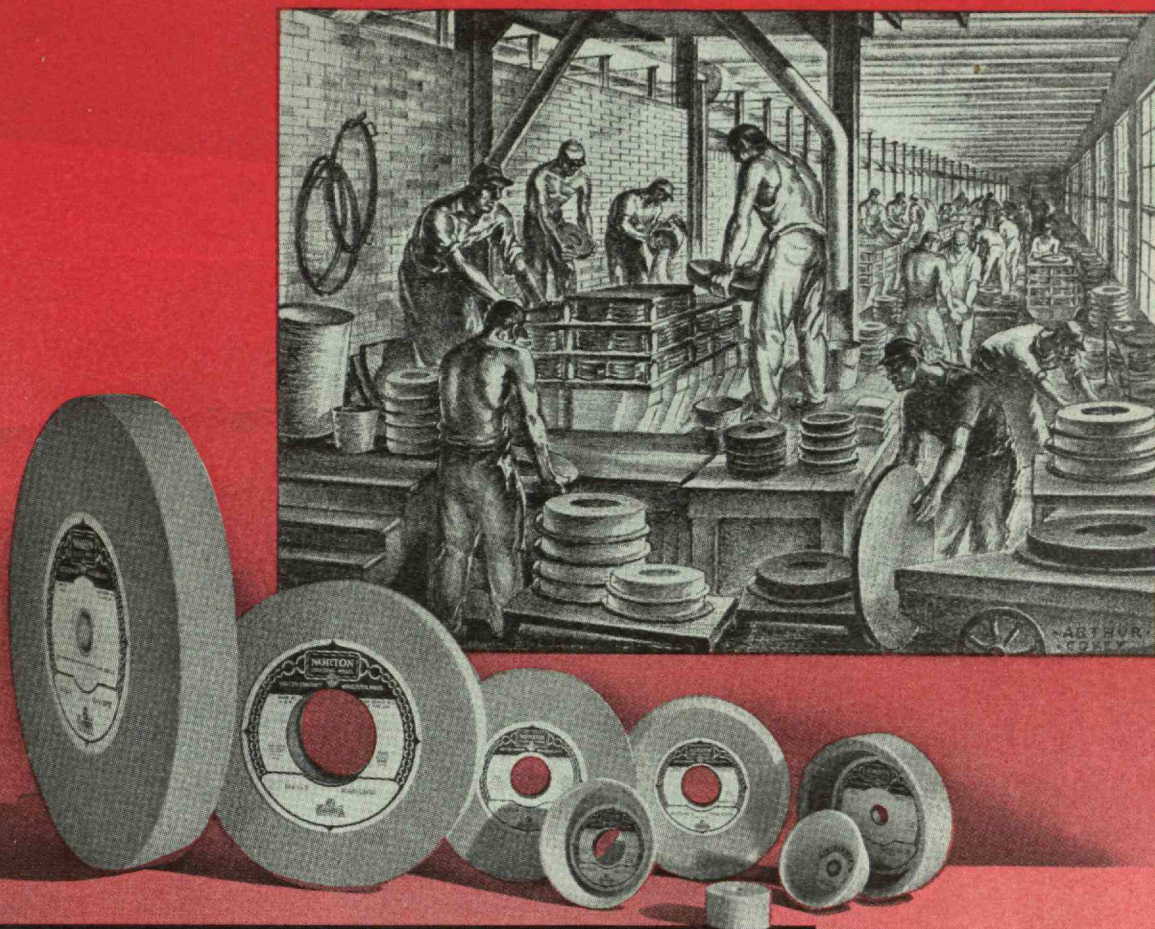
Upwards of 85 Process Units for Solvent Refining and Dewaxing of Lube Oils.

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Solvent Dewaxing Lube Oil Pilot Plant,
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TEN HOURS AT WHITE HEAT

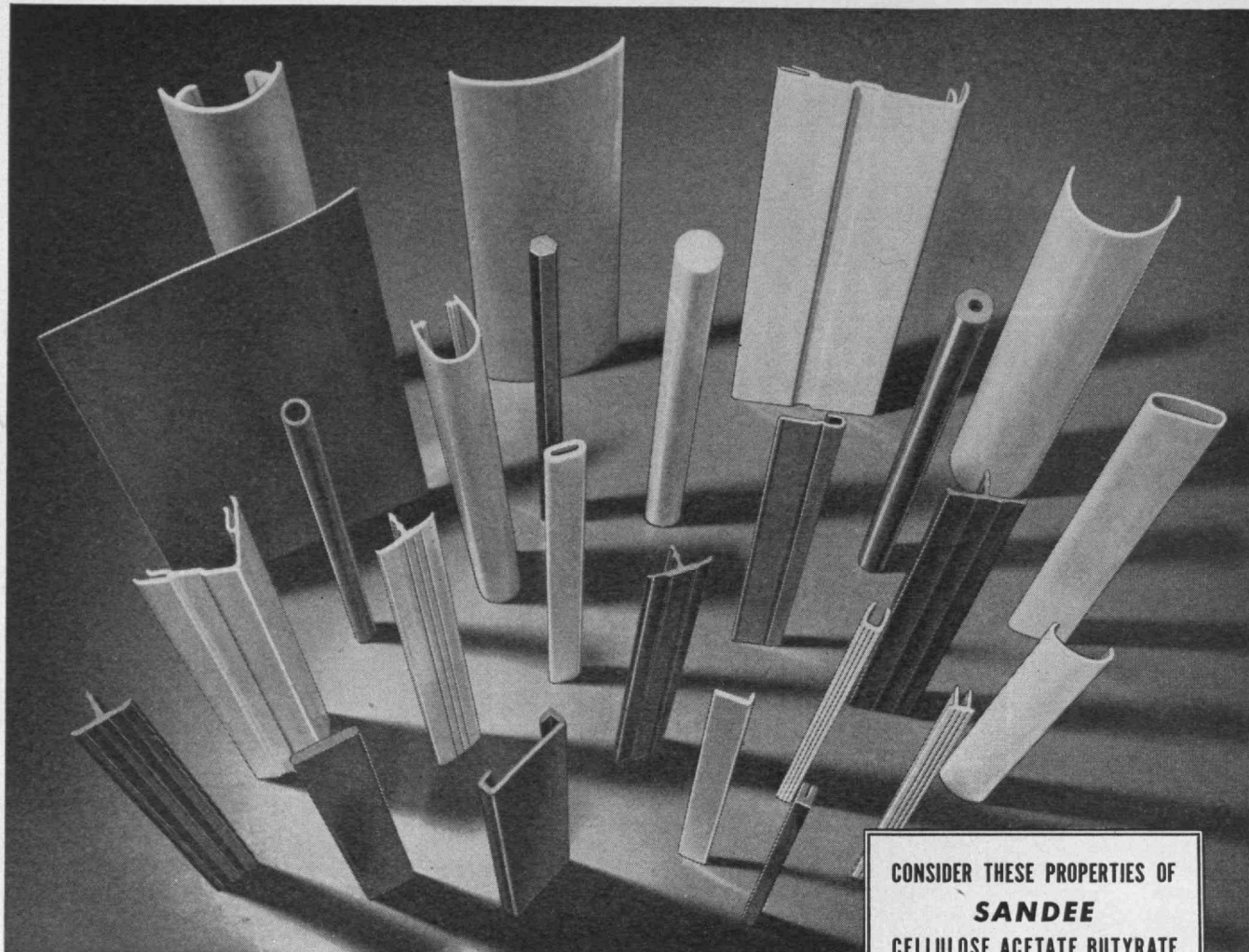
HERE you see skilled Norton workers loading cars of grinding wheels for a five-day trip through one of the Norton tunnel kilns. For about 30 hours the wheels will be in the "hot zone"—a third of this time at white heat (2200°F.). This making of vitrified bonded grinding wheels is a process which requires extreme skill. The clay bonds are carefully blended to formulas developed by the Norton laboratories. The wheels are so located on the cars that each receives just the right amount of heat. Temperatures are scientifically controlled every foot of the way through the long kilns. Yes, Norton grinding wheels are "burned" with the most modern equipment and with a "know-how" that is backed by over sixty years' experience in producing vitrified products.

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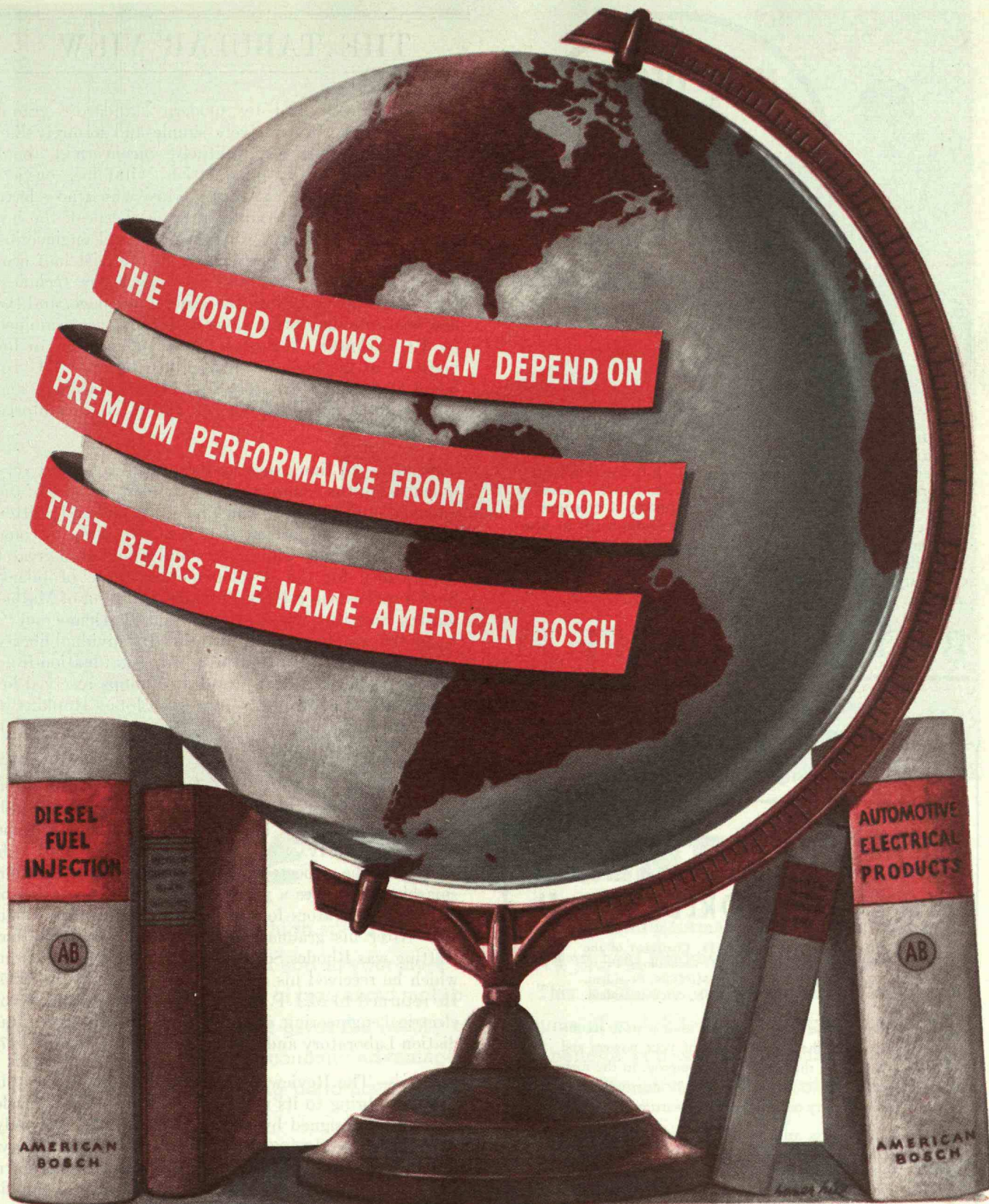
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By JOHN BURCHARD, Chairman of the Massachusetts Institute of Technology Press.
Foreword by KARL T. COMPTON, President.
Epilogue by J. R. KILLIAN, Vice President.

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May 1948

354 pages

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THE TABULAR VIEW

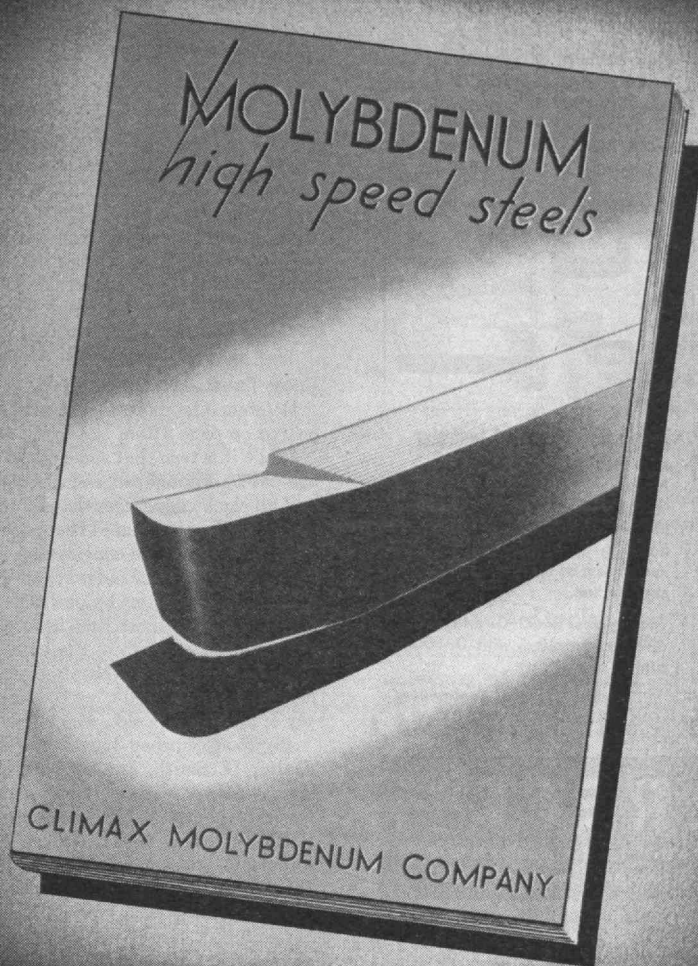
Glossology. — Judged by modern standards, grandfather lived a comparatively simple and leisurely life. He went his own way, blithely unconcerned about nucleonics, frequency modulation, vitamins, or jet-propelled airplanes. Yet these terms, which now have been injected into everyday language, bespeak the impact on our daily lives which science and engineering have brought about, particularly in the past half century. The ease and readiness with which new technical terms find their way into the general language, and the new concepts they bring along with them, are examined by PAUL COHEN, '35, (page 429). In addition to his vocation as mechanical engineer for the Sperry Gyroscope Company, Mr. Cohen wields an able pen, and rounds out a decade as one of The Review's editorial associates.

Revered. — In times such as the present, we need very much less of the common man and infinitely more of the uncommon man. Yet so much has been said and written in support of the former, that it is refreshing to come upon a spokesman who reveres and would give greater opportunity for the development of those of talent. Such a spokesman is H. B. PHILLIPS, Professor of Mathematics, Emeritus, whose article "What Is Democracy?" (page 433) emphasizes self-disciplined, individual liberty as the basis of a true democracy. After graduation from Erskine College in 1900, Professor Phillips received his degree of doctor of philosophy from Johns Hopkins in 1905. He was a member of the Department of Mathematics from 1907 until 1947, and its head for 12 years.

Accelerators. — Atoms have been chipped and even split, but the forces holding the nucleus together are still one of nature's best kept secrets. "Artificial Cosmic Radiation" by IVAN A. GETTING, '33, (page 435) tells what may be expected from recent research in atom smashing and gives a good account of the operation of cyclical accelerators for speeding up elementary particles. After his graduation from M.I.T. in 1933, Dr. Getting was Rhodes Scholar at Oxford University from which he received his doctorate of philosophy in 1935. He returned to M.I.T. in 1945 as associate professor of electrical engineering, after heading a division of the Radiation Laboratory and became a full professor in 1947.

Puzzle. — The Review runs a bit out of character this month to bring to its readers a novel crossword puzzle (page 444) designed by JOHN M. KECK, '23. Not only is this pastime devised by an alumnus of Technology, but the diagram itself contains many terms well known to M.I.T. students. Its design contains several significant symbols which all engineers will recognize.

Hobby. — Believing that all work (for which it is well known) and no play makes Jack a dull boy, the Institute inaugurated a student Hobby Shop in 1937. Now revitalized after World War II, the important part which this activity plays in student activities is recounted (page 441) by ISAAK STEMPNITZKY, 6-45, who is completing his studies for a doctorate in mathematics. Mr. Stempnitzky has been foreman of Hobby Shop.



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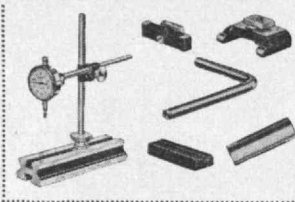
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2 GOOD WAYS TO SIMPLIFY CHECKING and COMPARING

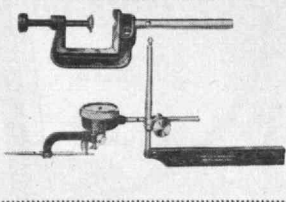


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Approbation

FROM F. P. HANKERSON:

It was with great interest that we read the article "Roll out the Barrel" in the Trend of Affairs section of the April, 1948, issue of The Review. It was most excellent.

We would indeed like your permission to republish this, giving due credit to The Review and to the author.

Editor, The Wooden Barrel
St. Louis 2, Mo.

And Disapprobation

FROM THOMAS D. PERRY, '00:

Reference is made to the article "Roll out the Barrel" which appeared on page 310 of the April, 1948, Review.

While it is true that some of the present-day barrels are made by the age-old traditional process, especially the cheaper types for oils, paints, and all slack cooperage, that is only part of the story.

Plywood, or laminated beer barrels were developed some 10 years ago, in which I had some considerable part, and much better service can be obtained than in the older types. The staves are twice as wide, reducing leakage potentialities by one half; the frequent rupture of the wood on the bilge, where bent, has been eliminated entirely; and there is adequate in the strength of the bung stave. Oak is used for the inner and outer layers of the seven-ply stave, with cheaper woods for the central layers. This plywood construction has done much to conserve the supply of prime white oak, which is so much prized for barrel manufacture.

Plywood bourbon barrels are in the course of development under Arthur D. Smith, Jr., '23, and have passed excellent strength tests. Their ability to properly age spirituous liquors is under test, so far favorable, but not to be completed for a couple of years more.

It is to be regretted that the editorial staff of The Review missed this important phase in barrel development that has been presented before the American Society of Mechanical Engineers and published in many trade journals. It is not my desire to increase the thorniness of the editor's bed, but the cooperage industry deserves credit for its alert development along modern and efficient lines. You have inadvertently made this industry appear to be unaware of modern progress, which is quite undeserved.

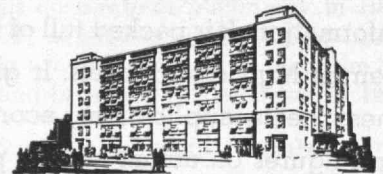
Moorestown, N. J.

On Conservation

FROM MARSHALL N. WATERMAN, '24:

I think the articles on conservation by Dr. Ira N. Gabrielson which appeared in the January and February, 1948, issues of The Review were most worthwhile and interesting. The Review continues to be excellent.
New York 21, N. Y.

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