

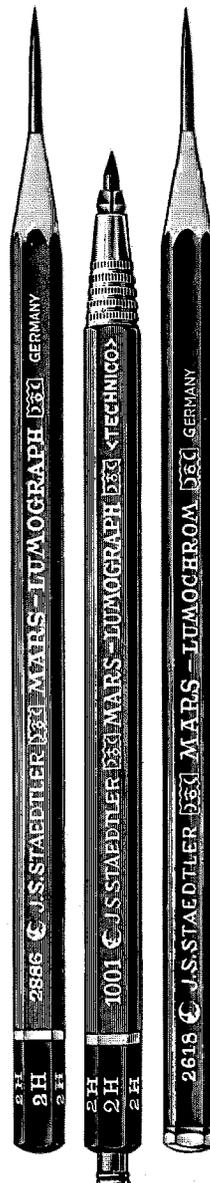
man and motion:

The wonders of the future are still little whispers in men's minds, or maybe — like Detroit Designer Norman James' magnetically suspended inter-city train — a drawing on a piece of paper. Traveling in a vacuum in an air-tight tube, it floats in space, held by a system of magnets built into cars and tunnel. Propelled electrically by "rolled-out" motor, train acts as rotor, tunnel roof as stator. Converter aboard train changes light projected through windows into electrical energy.

No one knows which ideas will flower into reality. But it will be important in the future, as it is now, to use the best of tools when pencil and paper translate a dream into a project. And then, as now, there will be no finer tool than Mars—sketch to working drawing.

Mars has long been the standard of professionals. To the famous line of Mars-Technico push-button holders and leads, Mars-Lumograph pencils, and Tradition-Aquarell painting pencils, have recently been added these new products: the Mars Pocket-Technico for field use; the efficient Mars lead sharpener and "Draftsman's" Pencil Sharpener with the adjustable point-length feature; and — last but not least — the Mars-Lumochrom, the new colored drafting pencil which offers revolutionary drafting advantages. The fact that it blueprints perfectly is just one of its many important features.

The 2886 Mars-Lumograph drawing pencil, 19 degrees, EXEXB to 9H. The 1001 Mars-Technico push-button lead holder. 1904 Mars-Lumograph imported leads, 18 degrees, EXB to 9H. Mars-Lumochrom colored drafting pencil, 24 colors.



J.S. STAEDTLER, INC.
 HACKENSACK, NEW JERSEY

at all good engineering and drawing material suppliers

BOOKS

AIR POLLUTION HANDBOOK

Edited by Paul L. Magill,
 Francis R. Holden, and
 Charles Ackley

McGraw-Hill, N. Y.

\$15

*Reviewed by A. J. Haagen-Smit
 Professor of Bio-organic Chemistry*

THIS HANDBOOK discusses different phases of air pollution in 15 separate sections. The engineering and control sections contain a review of sources of emission, processes and equipment for control, sampling and test methods, and legal aspects of air pollution. The more research-minded can find in the chapters devoted to chemistry, physics and meteorology a useful guide to the literature. The objectionable features of air pollution are described in the sections on epidemiology, animals, plants, and visibility. The last section consists of a table of conversion factors badly needed in a field dominated by grains, barrels, and mesalliances of decimal and duodecimal systems.

Diverse disciplines

It is a difficult task for the editors to assemble a group of papers from such widely diverse disciplines in one book and still keep a balanced treatment of the many aspects of air pollution. Faced with such a problem, contributors should be aware of why a book like this is bought, and by whom. The air pollution scientist is hardly expected to turn to a general compilation of a handbook to learn about his specialty.

Prospective readers

I believe that a book of this kind is most useful to workers in areas where no extensive library is available. Especially useful to them would be detailed descriptions of a number of key air pollution methods which can be followed in the laboratory or in the field.

Following this reasoning, we come to the conclusion that the engineer-

CONTINUED ON PAGE 12

ing or control side could have received more than the 106 pages, or one-sixth of the total, and that theoretical matters discussed—especially the sections on physics and chemistry of the atmosphere—could have been cut by reference to the available literature. For example, the chapter on chemistry goes to great length to show the importance of oxides of nitrogen in modern air pollution. The information about the testing procedures in the analytical section is so meager that most readers may even remember that much from their college days.

Dealing with specialists

However, in general the editors have done a commendable job, and where they sometimes failed, they deserve more of our sympathy than criticism in dealing with some 35 specialist contributors.

THE BLUE CHIPS
by Jay Deiss
Simon & Schuster

\$4.50

THE BLUE CHIPS is a novel about big business, and it comes fully equipped with all the stock items we have come to expect in this kind of book. One difference this time is that the man in the gray flannel suit is a scientist—Dr. Howell Winslow, a brilliant young researcher with the great pharmaceutical firm of Faber-King.

Dr. Winslow is the very model of a modern scientist. He has “lean, strong hands” and “the muscular discipline of a one-time practiced athlete.” He has “careless blond hair,” and “eager, idealistic, broadly-placed gray eyes,” along with a “small, straight nose” and a “determined mouth (which was nevertheless unsure).”

The unsure, determined mouth is the tip-off on Dr. Winslow. Will he pursue his “inner dream” and stick with scientific research, or will he take the administrative opportunity that is offered him and go out after the big money?

Dr. Winslow’s choice might be of more concern to the reader if the doctor—and most of the other characters in the book—were human beings, instead of carbon copies of other fictional characters.

In the course of telling the story of Dr. Winslow’s downfall, *The Blue Chips* dispenses a good deal of factual information about both the laboratory and the financial operations of a big pharmaceutical corporation—and this has a certain documentary interest. But *The Blue Chips* is far from being that good novel about science that so many people keep waiting for.

START TODAY TO PLAN TOMORROW

By knowing about some of the projects underway at the Babcock & Wilcox Company, an engineer may see his personal avenues of growth and advancement. For today B&W stands poised at a new era of expansion and development.

Here’s an indication of what’s going on at B&W, with the consequent opportunities that are opening up for engineers. The Boiler Division is building the world’s largest steam generator. The Tubular Products Division recently introduced extruded seamless titanium tubing, one result of its metallurgical research. The Refractories Division developed the first refractory concrete that will withstand temperatures up to 3200 F. The Atomic Energy Division is under contract by the AEC to design and build the propulsion unit of the world’s first nuclear-powered cargo vessel.

These are but a few of the projects—not in the planning stage, but in the actual design and manufacturing phases—upon which B&W engineers are now engaged. The continuing, integrated growth of the company offers engineers an assured future of leadership.

How is the company doing right now? Let’s look at one line from the Annual Stockholders’ Report.

CONSOLIDATED STATEMENT OF INCOME

(Statistics Section)
(in thousands of dollars)

| 1954 | 1955 | 1956—UNFILLED ORDERS (backlog) |
|-----------|-----------|-----------------------------------|
| \$129,464 | \$213,456 | \$427,288 |



B&W engineers discuss developments in the Universal Pressure Boiler.

Ask your placement officer for a copy of “Opportunities with Babcock & Wilcox” when you arrange your interview with B&W representatives on your campus. Or write, The Babcock & Wilcox Company, Student Training Department, 161 East 42nd Street, New York 17, N. Y.



N-220