April 1936

TECHNOLOGY REVIEW

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THE TABULAR VIEW

ARTICLES in this issue relating to the Seventy-Fifth Anniversary of M.I.T. include President KARL T. COMPTON'S "Whither Bound?" and TREADWELL CLEVELAND'S "Technology Revisited." At his graduation from Williams College in 1897, Mr. Cleveland delivered the Philosophical Oration, and he was the author of the Graves Prize Essay. With these bays and laurels he entered the School of Philosophy at Columbia University and received his Master of Arts degree in 1898. After a year in the United States Forest Service, he was appointed a fellow in Psychology in Clark University, at that time exclusively a graduate school, under G. Stanley Hall. Now associated with publishing activities of the Institute, Mr. Cleveland has had extensive experience as author, editorial writer, and teacher. We welcome his paper as the objective view of one educated entirely in the liberal arts. ¶ Dr. Compton this year retires as President of the American Association for the Advancement of Science.

IN our February issue DR. PHILIP M. MORSE, Assistant Professor in the Department of Physics at M.I.T., contributed an article on the neutron which was a distinguished piece of scientific exposition for the layman. Again this month, in his article on the surface of metals, Dr. Morse clarifies and illuminates an obscure and difficult problem of science. ¶ DEAN A. FALES, Associate Professor of Automotive Engineering in the Institute's Department of Mechanical Engineering, knows the whims and frailties of the modern automobile. As he makes road test after road test of present-day models, he spots the many opportunities for increasing safety which he describes in his article on page 276. In a recent address before the Greater New York Safety Conference, Professor Fales' emphasis on the need for more safety caused widespread comment and approval.

WE welcome to membership in the Cover Club W. C. WEST, '11, of Chicago who contributes "Translucence" to our jacket this month as well as "Patrol" (page 272). We recently had the pleasure of viewing a large exhibition of Mr. West's pictures, and a stimulating experience it proved to be. He has a vast competence, not only on location with his camera, but in the dark room with his enlarger. His sense of the dramatic is ably abetted by his skill in tones and his versatility in print making. As Secretary, and then President, of the Chicago Camera Club, he has by precept and stimulation been influential in raising the standards of amateur photography. ¶ We salute with appreciation the numerous candidates who, with prints large and small, have presented themselves for membership in the Cover Club. We have already selected for use on forthcoming covers several photographs submitted by them. There is no limit to the number of applicants; we invite all who have unusual prints suitable for the cover to send them to us.

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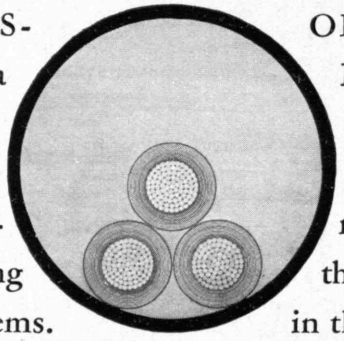

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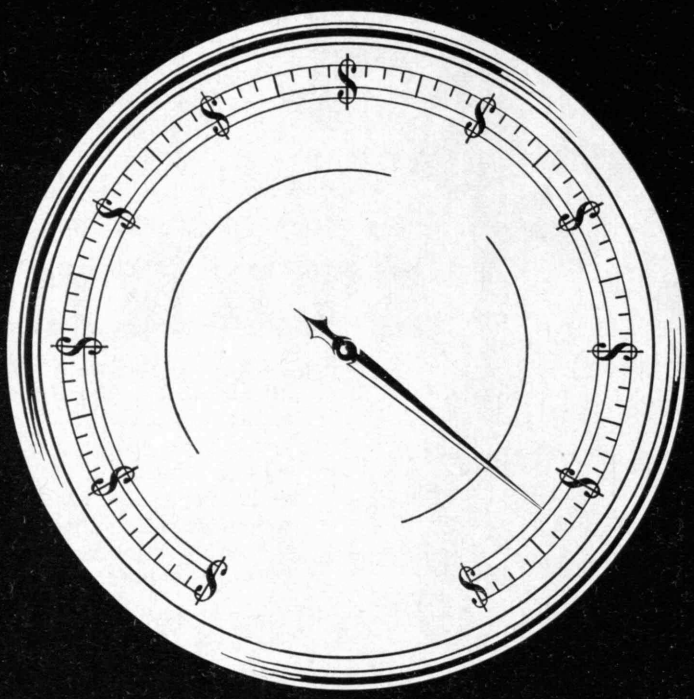

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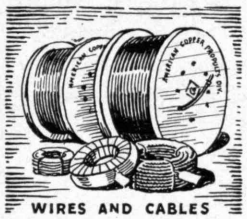
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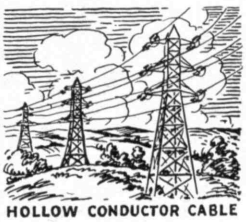
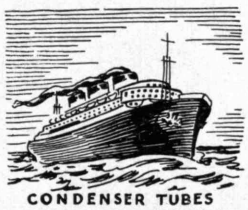

HOLLOW CONDUCTOR CABLE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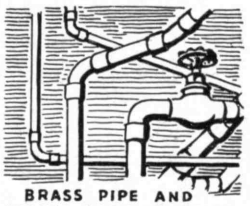
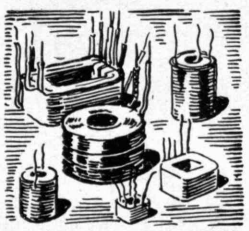

BRASS PIPE AND COPPER SERVICE TUBING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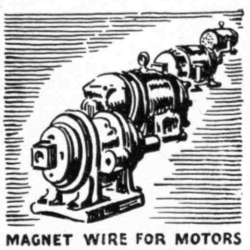
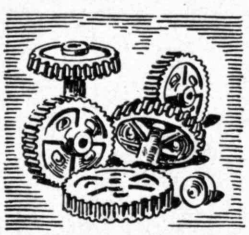

MAGNET WIRE FOR MOTORS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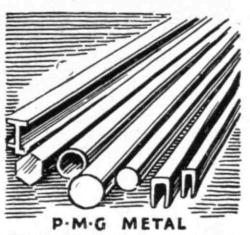
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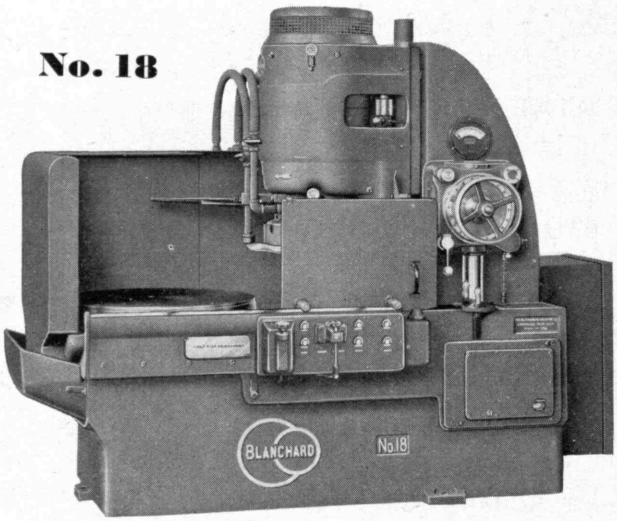

The No. 18 is a new addition to the Blanchard line of surface grinders. It is designed for work previously done on the No. 16 where finish must be more accurate or a higher rate of production is required. All who use or could use the No. 16 will be interested in the features of the No. 18.

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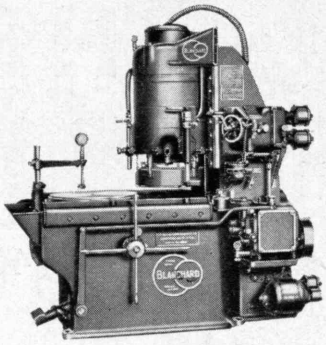
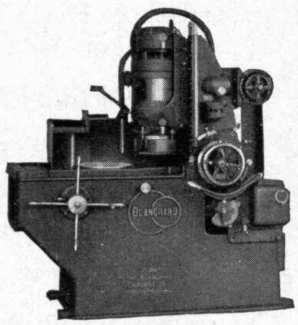
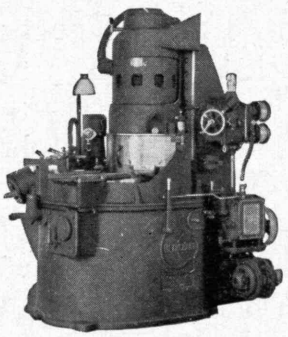
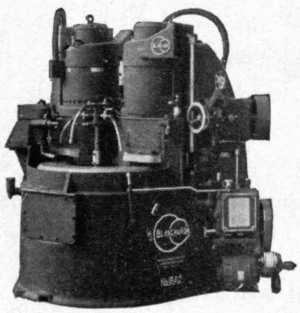




No. 10 — Suited to tool work, small lot production, and pieces under 18" diameter that must be ground one at a time.

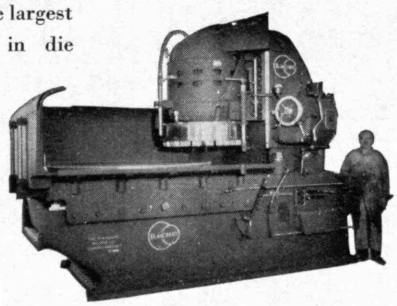
No. 16-A — A high-production machine for small parts in quantities. Chucking is either magnetic or in automatic fixtures.





No. 16-A2 — Two wheels, one roughing and one finishing, make it easy to remove more stock and produce finer finish.

No. 27-R — The largest Blanchard, used in die shops.



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MAIL RETURNS

Conundrums

An astonishing number of readers have written The Review about P. J. Rulon's article, "For Sharpening Your Wits," in The Review for February (page 184). Several of the writers presented new conundrums to supplement Dr. Rulon's collection, and in response to the evident interest in enigmas, we present several of these submitted problems.

From THOMAS D. GREEN, '26:

An army 10 miles long marched 10 miles, so that the rear of the army stopped at the same place the front of the army started. Just as the army started its march a messenger started from the back of the army, running ahead to the front to deliver a package. As soon as he got to the front, he turned around without losing any time and ran back to the rear. He ran at the same speed all the time. The army marched at the same speed all the time. The messenger got back to the rear of the army just as it finished its march. How far did the messenger run?
Hartford, Conn.

FROM A BANKER:

A man went to a bank to cash a check. Being in a hurry, he didn't bother to count the money he received, since he always did business with the same bank and knew the teller very well. With the money in his pocket he hied himself to the nearest store, where he made purchases to the extent of 67 cents. When he received his change from his purchases he noticed that he seemed to have too much money. He therefore counted his resources and discovered that even after spending the 67 cents, he had twice as much as his check had called for. It became clear that the bank teller had given him too much, since the man had had no money with him when he entered the bank. The man got to figuring and discovered that the teller had reversed the dollars and cents on the check, giving him as many dollars as the check called for in cents and as many cents as the check called for in dollars. Of course, the man went immediately to the bank to return the excess funds. How much (in dollars and cents) should he have given back to the teller?
Boston, Mass.

From MINOR S. JAMESON, '96:

Three houses; a man living in each; a well for each house. Each man goes from his house to each of the three wells for water, daily, by a certain path, but none of these paths crosses any other. How are the paths laid out?
Chevy Chase, Md.

From JOHN R. PERKINS, '20:

A man has a plot of land 12 rods square which he wishes to plant with fruit trees. The centers of the trees must not be within one-half rod of the boundary of the land, or closer than a rod apart from each other. What is the greatest number of trees he can plant?
Wayne, Maine.

How Many Trees?

"A farmer's son once had a problem, the solution of which would not have been speeded by college training. To encourage industry in the boy, his father allotted him a 16th of an acre of ground and told him he could have all the produce from it. The son decided he would plant fruit trees on his tract, and his father told him not to plant his trees any closer than nine feet apart. In laying out the plot, the father made it square, measing 52 feet, two inches, on each side. (This did not make exactly a 16th of an acre, but it made almost that amount, and it gave the boy exact dimensions with which to work.) The question was, of course, how to arrange the trees in rows so as to get the largest possible number of trees in the allotted space." This problem was included in Dr. Rulon's article with the suggested solution that a maximum of 41 trees could be planted. Here is a typical response to this solution: (*Concluded on page 250*)