able time is required to interpret it. For example, in one 1944 paper about three hours were required to find the necessary information for only six compounds. Since hundreds of compounds are to be abstracted, this becomes a slow and tedious task.

It seems that it would be relatively easy for the authors, who are familiar with the compounds upon which they are reporting, to give the aforementioned information in their papers, preferably in connection with the table of data. If this were done, the data could be abstracted much more easily and quickly.

FORREST F. CLEVELAND
DEPARTMENT OF PHYSICS,
ILLINOIS INSTITUTE OF TECHNOLOGY

ANOTHER MASTODON FOUND IN OHIO

WITHIN the last few weeks, the skeleton of a mastodon was found on the farm of Carl Work, located about 2 miles northeast of Jackson, Ohio, and approximately 12 miles from Wooster. The bones were found protruding from the bank of a drainage ditch. The skull with the two tusks, the neck vertebrae and a number of ribs were unearthed. The entire skeleton was not present and apparently the rear portion of the animal had been removed, either during the excavation of the ditch or subsequently by erosion. The tusks, which are complete, are three feet in length and 4 inches in diameter at the base. The teeth are in excellent condition. The bones indicate a small animal. The material in which the skeleton was embedded is a muck deposit. An examination of the soil at the depth of three feet, which was the horizon of the skeleton, indicates that it is a layer of peaty material covered by sandy loam. The fact that it is a flat stretch of land, which was originally so poorly drained that a drainage ditch was necessary, combined with the evidence of a peaty formation, indicates that at one time the area was a swamp. Doubtless, at some time after the great Ice Age, this animal was mired in the bog and died there. A few years ago, parts of another mastodon were found in bog deposits near Benton, Ohio, located not far from the spot where a giant sloth was unearthed. The latter, found at a depth of five feet, was embedded in marl and peat in an area known as "The Plains" south of Millersburg, Ohio.

KARL VER STEEG
COLLEGE OF WOOSTER

SCIENTIFIC BOOKS

PUBLICATIONS OF THE MATHEMATICAL TABLES PROJECT

Table of the Bessel Functions $J_0(z)$ and $J_1(z)$ for Complex Arguments. By the Mathematical Tables Project, under the sponsorship of the National Bureau of Standards. xliv + 403 pp. New York: Columbia University Press. 1943. $5.00.

Tables of Lagrangian Interpolation Coefficients. By the Mathematical Tables Project. xxxvi + 392 pp. New York: Columbia University Press. 1943. $5.00.

Table of Circular and Hyperbolic Tangents and Cotangents for Radian Arguments. By the Mathematical Tables Project. xxxviii + 410 pp. New York: Columbia University Press. 1943. $5.00.

Table of Reciprocals of the Integers from 100000 *through* 200000. By the Mathematical Tables Project. viii + 201 pp. New York: Columbia University Press. 1943. $4.00.

FOR the prosecution of the American war effort, in which mathematical research is playing such a fundamentally important role, it is difficult to imagine any more important event than the organization early in 1938 of the computing group under the direction of Dr. Lyman J. Briggs, director of the National Bureau of Standards. With Dr. Arnold N. Lowan, the able technical director of the group, many manuscripts of fundamental mathematical tables were prepared. And the nucleus of the original great group is still very active while dealing with problems of the Applied Mathematics Panel of the National Defense Research Committee.

Up to the end of 1942 the Mathematical Tables Project had published 15 bound volumes. To these are now added four volumes, the first to be published by the Columbia University Press. The first three of these are of particular importance.

The table of Bessel Functions $J_0(z)$ and $J_1(z)$, for complex argument, $z = re^{i\phi}$, has the range $r = 0(.01)10$; $\phi = 0(5°)90°$; to 10 places of decimals. For $\phi = 0°$, the table is really of $J_0(r)$, $J_1(r)$ for every hundredth of a unit of the argument. For $\phi = 45°$, we have the most extensive table of ber, bei, ber′, bei′ functions yet published. The same may be said of the tables of $I_0(r)$ and $I_1(r)$ for $\phi = 90°$, although Aldis in 1899 published a 21-place table for each tenth of a unit 0 to 6, and an 18-place table for each unit 6 to 11. Except for Dinnik's trivial and highly erroneous three-page table of 1922, this volume contains the first table of the kind. We understand that the Project has prepared similar tables of $Y_0(Z)$, $Y_1(Z)$.

The volume of tables of Lagrangean Interpolation Coefficients will be welcomed by all users of tables, and especially by those computing with machines. The main part of this volume is occupied with 9 tables