U. S. DEPARTMENT OF COMMERCE

ROY D. CHAPIN, Secretary

BUREAU OF STANDARDS

LYMAN J. BRIGGS, Acting Director

BUREAU OF STANDARDS JOURNAL OF RESEARCH

à

Volume 8

January to June, 1932

Research Papers Nos. 396 to 452



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1932

National Bureau of Standards

JUL 6 1942

53570

QC1

.U52

Cop. 2

Corrections to be noted for volume 8 of the Bureau of Standards Journal of Research

Page	Line	Now reads	Should read
16 16 24	3 under table 4 under table 2	Runs 1 and 2; run 3 was made more than one-tenth of the radiation	Runs 1 and 3; run 2 was made more than one-tenth of 1 per cent of the radiation
135 183 189 409 434 509 572 604	11 Footnote 4 31 last col. of table 7 11 11 Table 2 Melt II, total carbon	R. E. Barnes R. E. Barnes $-\Delta/\Delta t$ with RD as varies H_2 2.71	$ \begin{pmatrix} = -\frac{dQ}{dT} \end{pmatrix} $ W. C. Barnes W. C. Barnes $-\Delta D/\Delta t$ with R as D varies transfer between lines 18 and 19. $2\Pi_2$
605 641 751 763	34" bar Table 3, Melt XI, 4th line from bottom Equation (25) 11 23	20.3 A ³ 10 ⁻⁷ mho Table 3	2.03 A 10 ⁻¹⁷ mho Table 2

RESEARCH PUBLICATIONS OF THE BUREAU OF STANDARDS, 1904-1928

1904-1919:

(a) BULLETIN OF THE BUREAU OF STANDARDS. A quarterly journal. The Bulletin contained all research papers until, in 1910, it was limited to scientific papers; see (f) for technical papers.

 (b) Reprints ¹ from (a). Scientific Papers S1 to S329.
 (c) Volumes ² of (a), cloth bound, consecutively paged and indexed. Volumes 1 to 14.

919-1928:

(d) Scientific Papers 1 of the Bureau of Standards (separates continuing series (b), Nos. S330 to S572).

(e) Volumes 2 of (d), cloth bound, consecutively paged and indexed.

Volumes 15 to 22.

1910-1928:

(f) TECHNOLOGIC PAPERS 1 OF THE BUREAU OF STANDARDS (T1 to T370). Prior to T203 issued only as separates.

(g) Volumes ² of (f), cloth bound, beginning with T203, volume designated No. 16, to volume 22; consecutively paged and indexed.

1928:

(h) Bureau of Standards Journal of Research (monthly, about 200 pages per issue), continuing and consolidating series (d) and (f). Subscription, \$2.50 per year (United States, Canada, Cuba, Mexico, Newfoundland, and Republic of Panama; \$3.25 elsewhere).

(i) Volumes of (h), cloth bound, about 1,200 pages each (six monthly

issues), consecutively paged and indexed, \$3.

(j) Separates 1 of (h) issued under new series title, Research Papers OF THE BUREAU OF STANDARDS.

CIRCULAR No. 24 contains a list of (a) to (g) and a subject index of same to June 30, 1925. The Supplement to Circular No. 24 continues this list and index. These give a complete list and index of all publications to December 31, 1931. The SUPPLEMENT also contains an official list of Government depository libraries in the United States at which the various publications may be consulted. A monthly list of the bureau's publications is now being published. This is free upon request to the bureau.

Bureau of Standards.

Bureau of Standards.

Volumes 1 to 21, \$2 each; 22, \$3. Special prices for set, address Superintendent of Documents, Government Printing Office, Washington, D. C.

¹ For prices and other information, see CIRCULAR No. 24, and supplement thereto; free on request to the