

21
U.S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

450473
10-1-33

BUREAU OF STANDARDS JOURNAL OF RESEARCH



Volume 10

January to June 1933

Research Papers Nos. 512 to 572



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1933

National Bureau of Standards

JUL 6 1942

53572

Q01

.452

cop. 2

Corrections to be noted for Volume 10 of the Bureau of Standards Journal of Research

Page	Line	Now reads	Should read
2	Table 1, last column	K 0.3 Li 0.4	K 0.03 Li 0.04
76	13	$S_1 = 73.5 \times 0.22 = 16.17$	$\Delta S_1 = 73.5 \times 0.22 = 16.17$
	14	$S_2 = 70.0 \times 0.37 = 25.90$	$\Delta S_2 = 70.0 \times 0.37 = 25.90$
	equation (1)		$\Delta S_1 = S_1 \times C \times (t_2 - t_1) + R$
	equation (2)		$\Delta S_2 = S_2 \times C \times (t_2 - t_1) + R$
86	13 from bottom	Fire haze	Fire haze
118	Table 7	Unit for data in last three columns is btu/ft ³	Figure 8
	2d paragraph	Figure 7	(fig. 8)
	3d paragraph	(fig. 7)	Figure 9
	4th paragraph	Figure 8	7,321.452
145	33d line from bottom	7,321.452	Xe 1
	Table 2 facing page 146	XI	$(5p^3 D_3 - 5d^3 F_4)$
147	1, table 3	$(5p^3 D_3 - 5d^3 F_4)$	R_{xe}
	3, table 3	R_{xe}	obs. - calc.
	Heading last column table 3		RP530
275	Top of page	RP350	RP530
278	4	$E = -5375$	$E = -53.75$
318	17	I. $m > e > \gamma$	I. $ m > e > \gamma $
	18	II. $m - e = \frac{G\eta}{3} (e - \gamma)$	II. $ m - e = \frac{G\eta}{3} (e - \gamma)$
	19	III. $\frac{1d\sigma}{\sigma d\theta} = \frac{1+\sigma}{\sigma} (m - e)$	III. $\frac{1d\sigma}{\sigma d\theta} = \frac{1+\sigma}{\sigma} (m - e)$
	8 from bottom	$m - e$	$ m - e $
319	8	$m - e$	$ m - e $
	14	$m - e$	$ m - e $
	18	$m - e$	$ m - e $
356	20	base.	base 10.
398	Table 6, columns 2 and 3—delete the word Microbars		
447	2 from bottom	----- -----	$j = 4$ for U $j = 3$ for W
	last	----- -----	18
543	Footnote at bottom of page	i	
545	Column 1, line 1, table 2	Ca	C _a
556	Legend of figure 2	B = control button	B = contact button
668	Footnote under table 5—add footnote reference number 1		
729	Fire clay "M-1" ¹⁸ 11th to 15th columns, inclusive, "20-1, 120" and "4.9" apply only to material heated at 1150° C.		
738	Under section II, paragraph 5—delete the words "and the hydrated lime also"		
825	Page heading	8-hydroxyquinoline	8-hydroxyquinoline
826	17	$(\text{NH}_4)_2\text{CO}_4 \cdot \text{H}_2\text{O}$	$(\text{NH}_4)_2\text{C}_2\text{O}_4 \cdot \text{H}_2\text{O}$

BUREAU OF STANDARDS RESEARCH PUBLICATIONS

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) Reprints¹ from (a). Scientific Papers S1 to S329.
- (c) Volumes² of (a), cloth bound, consecutively paged and indexed. Volumes 1 to 14.

1919-1928:

- (d) SCIENTIFIC PAPERS¹ OF THE BUREAU OF STANDARDS (separates continuing series (b), Nos. S330 to S572).
- (e) Volumes² of (d), cloth bound, consecutively paged and indexed. Volumes 15 to 22.

1910-1928:

- (f) TECHNOLOGIC PAPERS¹ OF THE BUREAU OF STANDARDS, T1 to T370. Prior to T203 issued only as separates.
- (g) Volumes² 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 150 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.³
- (i) Volumes³ of (h), cloth bound (six monthly issues), consecutively paged and indexed.
- (j) Separates¹ 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. Copies of this circular will be found at all Government depository libraries having files of the Bureau's publications. This list is not, however, available for general distribution. Copies will be furnished to public libraries on request to the Bureau of Standards.

¹ For prices and other information, see CIRCULAR No. 24, and supplement thereto.

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

³ Volumes 1 to 6, \$2.75 each; 7 to 9, \$3 each. For shipment to foreign countries add 50 cents to the cost of the volume.