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DENTAL MATERIALS:

Publications by the Staff of the National Bureau of Standards
and Research Associates on Dental Materials.

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GENERAL INFORMATION

Some of the publications in this list have appeared in the regular series of publications of the Bureau and others in various scientific and technical journals. Unless specifically stated, papers are not obtainable from the National Bureau of Standards. In general all publications may be consulted at dental school and technical libraries.

Where the price is stated in the extreme right hand column, the publication can be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. The prices quoted are for delivery to addresses in the United States and its territories and possessions and in certain foreign countries which extend the franking privilege. In the case of all other countries, one-third the cost of the publication should be added to cover postage. Remittances should be made either by coupons (obtainable from the Superintendent of Documents in sets of 20 for \$1.00 and good until used), or by check or money order payable to the "Superintendent of Documents, Government Printing Office" and sent to him with order.

Limited supplies of reprints of several of the papers, which were printed in dental journals, are available through the American Dental Association Research Fellowship at the National Bureau of Standards as follows:

Items 20, 73, 77 and 83 (5 cents each); Items 21, 39, 42, 48, 49, 50, 51, 52, 54, 62, 63, 65, 68 and 78 (10 cents each); Items 41 and 59 (15 cents each); Item 74 (50 cents).

Orders for the above items should be sent and remittance made payable to the "American Dental Association Research Fellowship, c/o National Bureau of Standards, Washington, D.C." DO NOT make remittance payable to National Bureau of Standards.

Series letters with serial numbers are used to designate Bureau publications:

S = "Scientific Paper". S1 to S329 are "Reprints" from the "Bulletin of the Bureau of Standards". S330 to S572 were published as "Scientific Papers of the Bureau of Standards". This series was superseded by the "Bureau of Standards Journal of Research" in 1928.

T = "Technologic Paper". T1 to T370. This series was superseded by the "Bureau of Standards Journal of Research" in 1928.

RP= "Research Paper". These are reprints of articles appearing in the "Bureau of Standards Journal of Research" and the "Journal of Research of the National Bureau of Standards", the latter being the title of this periodical since July 1934 (volume 13, number 1).

Circular C24 and supplements, the complete list of the Bureau's publications (1901-1936), is sold by the Superintendent of Documents for 55 cents.

American Dental Association Specifications may be found by referring to the following items:

No. 1.	Amalgam	Item 50
No. 2.	Inlay Casting Investments	26
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Dental Materials

<u>Item</u>	<u>Title</u>	<u>Series</u>	<u>Price</u>
1	Physical properties of dental materials (Amalgam and testing equipment). Wilmer Souder and Chauncey G. Peters (1920). Reprinted in Dental Cosmos <u>62</u> , 305 (1920).	T157	10c
2	Dental Research (Outline of program). J. Am. Dent. Assn. <u>11</u> , 249 (1924).		
3.	Physical properties of dental materials (Problems and possibilities). Wilmer Souder. J. Am. Dent. Assn. <u>12</u> , 509 (1925).		
4	Physical properties of dental materials. (Wrought gold alloys). R. L. Coleman, Jr. J. Am. Dent. Assn. <u>12</u> , 520 (1925).		
5	Possibilities of a specification for dental amalgams. Wilmer Souder. Bul. Chicago Dent. Soc. <u>5</u> , (July 24, 1925).		
6	Physical properties of dental materials (Amalgam). Wilmer Souder. Dent. Dig. <u>32</u> , 16 (1926).		
7	Physical properties of dental materials (Analysis of problems in casting gold alloys). R. L. Coleman, Jr. Dent. Cos. <u>68</u> , 743 (1926).		
8	Analysis of dental gold alloys. Wm. H. Swanger. Sci. Pap. BS <u>21</u> , 209 (1926). Reprinted in J. Dent. Research <u>7</u> , 373 (1927)	S532	10c
9	Selection of dental materials (Casting to dimensions). Wilmer Souder. J. Am. Dent. Assn. <u>14</u> , 189 (1927)		
10	Dental amalgam (Specification). Wilmer Souder. J. Dent. Research <u>7</u> , 173 (1927). (See later reports for revisions.)		
11	Casting gold alloys (Compositions and proper- ties). R. L. Coleman, Jr. Dent. Cos. <u>69</u> , 1007 (1927)		

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12	Problems of research. George K. Burgess, Proc. Am. Assn. Dent. Sch. <u>5</u> , 76 (1928)		
13	Dental gold alloys (Tentative specification). Wilmer Souder. J. Am. Dent. Assn. <u>15</u> , 627 (1928).		
14	Physical properties of dental materials (Summary of tests on gold alloys and accessory materials). R. L. Coleman, Jr. B.S. J. Research <u>1</u> , 867 (1928)- - -	RP32	35c
15	Mechanical amalgamation: Progress report of research on dental materials. N. O. Taylor. J. Am. Dent. Assn. <u>16</u> , 583 (1929).		
16	Survey of amalgam alloys: Report to the Research Commission of the American Dental Association. N. O. Taylor. (See later reports for changes in this list). J. Am. Dent. Assn. <u>16</u> , 590 (1929).		
17	A statement from the Bureau of Standards in relation to the utilization of the name of the Bureau in advertising. J. Am. Dent. Assn. <u>16</u> , 1108 (1929).		
18	Physical properties of dental materials (Some laboratory experiments for the dental schools). Wilmer Souder. J. Am. Dent. Assn. <u>16</u> , 1829 (1929).		
19	Specification for dental amalgam alloys: Report to the Scientific Foundation and Research Commission of the American Dental Association. N. O. Taylor. J. Am. Dent. Assn. <u>17</u> , 112 (1930).		
20	Progress report on research on dental materials (II). The research program. N. O. Taylor. J. Am. Dent. Assn. <u>17</u> , 775 (1930).		
21	Tentative specifications for dental casting investment. Wilmer Souder and W. T. Sweeney. J. Am. Dent. Assn. <u>17</u> , 780 (1930).		

<u>Item</u>	<u>Title</u>	<u>Series</u>	<u>Price</u>
22	Value of dental research appreciated by the profession. Wilmer Souder. Iowa Dent. Bul. <u>16</u> , 81 (1930).		
23	Problems in dental research. Wilmer Souder. J. Dent. Research <u>10</u> , 547 (1930).		
24	Amalgam technic: Dangerous and dependable practices. N. O. Taylor. J. Am. Dent. Assn. <u>17</u> , 1880 (1930).		
25	Survey of current inlay casting technics. N. O. Taylor and G. C. Paffenbarger. J. Am. Dent. Assn. <u>17</u> , 2058 (1930).		
26	Dental inlay casting investments: Physical properties and a specification. N. O. Taylor, G. C. Paffenbarger, and W. T. Sweeney. J. Am. Dent. Assn. <u>17</u> , 2266 (1930).		
27	Specification for inlay casting wax. N. O. Taylor, W. T. Sweeney, and G. C. Paffenbarger. J. Am. Dent. Assn. <u>18</u> , 40 (1931).		
28	Specification for dental impression compound. N. O. Taylor, W. T. Sweeney, and G. C. Paffenbarger. J. Am. Dent. Assn. <u>18</u> , 53 (1931).		
29	Progress report: Research on dental materials, Research program, Cooperative work on inlay casting technic. N. O. Taylor. J. Am. Dent. Assn. <u>18</u> , 294 (1931).		
30	Standards for dental materials. N. O. Taylor. Iowa Dent. Bul. <u>17</u> , 89 (1931). Michigan State Dent. Soc. Bul. <u>13</u> , 26 (1931).		
31	Dental casting technic: Theory and practice. G. C. Paffenbarger and W. T. Sweeney. J. Dent. Research <u>11</u> , 681 (1931).		
32	Problems involved in the study of wrought gold alloys for orthodontia. N. O. Taylor. Internat. J. Orthodontia <u>17</u> , 1033 (1931).		

<u>Item</u>	<u>Title</u>	<u>Series</u>	<u>Price</u>
33	Is mercury poisonous in dental amalgam restorations? Wilmer Souder and W. T. Sweeney. Dent. Cos. <u>73</u> , 1145 (1931).		
34	Inlay casting golds: Physical properties and specifications. N. O. Taylor, G. C. Paffenbarger, and W. T. Sweeney. J. Am. Dent. Assn. <u>19</u> , 36 (1932).		
35	Mercury for dental amalgams. Aaron Isaacs. J. Am. Dent. Assn. <u>19</u> , 54 (1932).		
36	Cast gold inlay technic as worked out in the cooperative research at the National Bureau of Standards and applied by a group of practicing dentists. R. H. Volland and G. C. Paffenbarger. J. Am. Dent. Assn. <u>19</u> , 185 (1932).		
37	Progress report on research on dental materials (1931). N. O. Taylor and G. C. Paffenbarger. J. Am. Dent. Assn. <u>19</u> , 404 (1932).		
38	Study of wrought gold wire alloys: Preliminary report. N. O. Taylor, G. C. Paffenbarger and W. T. Sweeney. J. Am. Dent. Assn. <u>19</u> , 410 (1932).		
39	Dental research at the National Bureau of Standards. G. C. Paffenbarger. Xi Psi Phi Quart. <u>30</u> , 386 (1932).		
40	Wrought gold wire alloys: Physical properties and a specification. G. C. Paffenbarger, W. T. Sweeney, and Aaron Isaacs. J. Am. Dent. Assn. <u>19</u> , 2061 (1932).		
41	Cristobalite for dental investment. W. T. Sweeney. J. Am. Dent. Assn. <u>20</u> , 108 (1933).		
42	Third Survey of amalgam alloys (1932-33). G. C. Paffenbarger and W. T. Sweeney. J. Am. Dent. Assn. <u>20</u> , 649 (1933).		
43	Science aids in improving dental restorations. Wilmer Souder. J. Dent. Research <u>13</u> , 154 (1933).		

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44	Progress report on research on dental materials (1932). G. C. Paffenbarger and W. T. Sweeney. J. Am. Dent. Assn. <u>20</u> , 885 (1933).		
45	Time required to cast dental restorations from molten alloy. Wilmer Souder. J. Am. Dent. Assn. <u>20</u> , 1010 (1933).		
46	Dental Research Fellowship at the National Bureau of Standards. Research Commission. J. Am. Dent. Assn. <u>20</u> , 1040 (1933).		
47	Preliminary report on the zinc phosphate cements. G. C. Paffenbarger, W. T. Sweeney, and Aaron Isaacs. J. Am. Dent. Assn. <u>20</u> , 1960 (1933).		
48	Fifteen years of dental research at the National Bureau of Standards. Wilmer Souder. J. Am. Dent. Assn. <u>21</u> , 58 (1934).		
49	Second survey of dental impression compounds and of inlay casting waxes. G. C. Paffenbarger and W. T. Sweeney. J. Am. Dent. Assn. <u>21</u> , 657 (1934).		
50	Specifications and certifications for dental materials. G. C. Paffenbarger and W. T. Sweeney (1934 revision of amalgam alloy specification). J. Am. Dent. Assn. <u>21</u> , 658 (1934).		
51	Zinc phosphate cements: Physical properties and a specification. G. C. Paffenbarger, W. T. Sweeney, and Aaron Isaacs. J. Am. Dent. Assn. <u>21</u> , 1907 (1934).		
52	Preliminary tests of some of the newer denture materials. Ronald Barber. J. Am. Dent. Assn. <u>21</u> , 1969 (1934).		
53	Revised list of dental materials certified to the Research Commission of the American Dental Association. C. T. Messner, J. Am. Dent. Assn. <u>21</u> , 2026 (1934).		

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54	Dental research at the National Bureau of Standards in relation to orthodontia. G. C. Paffenbarger and W. T. Sweeney. Internat. J. Orthodontia <u>20</u> , 1166 (1934).		
55	Investigation of "Chief" White Gold "Castloy": Research Commission. J. Am. Dent. Assn. <u>22</u> , 348 (1935).		
56	American Dental Association's affiliation with the National Bureau of Standards. R. H. Volland. J. Am. Dent. Assn. <u>22</u> , 618 (1935).		
57	Dental research at the National Bureau of Standards: Research Commission. J. Am. Dent. Assn. <u>22</u> , 625 (1935).		
58	Certified amalgam alloys: A.D.A. Specification No. 1. Research Commission. J. Am. Dent. Assn. <u>22</u> , 1028 (1935).		
59	Study of zinc phosphate cement by a group of practicing dentists under the direction of the A.D.A. Research Fellowship at the National Bureau of Standards. R. H. Volland, G. C. Paffenbarger, and W. T. Sweeney. J. Am. Dent. Assn. <u>22</u> , 1281 (1935).		
60	Certified inlay casting investments. A.D.A. Specification No. 2. Research Commission. J. Am. Dent. Assn. <u>22</u> , 1384 (1935).		
61	Certified impression compounds. A.D.A. Specification No. 3. Research Commission. J. Am. Dent. Assn. <u>22</u> , 1742 (1935).		
62	Standards for dental materials (Advantages). Wilmer Souder. J. Am. Dent. Assn. <u>22</u> , 1873 (1935).		
63	Standards for orthodontic materials. Wilmer Souder. Internat. J. Orthodontia. <u>21</u> , 1003 (1935).		
64	Certified zinc phosphate cements. Research Commission. J. Am. Dent. Assn. <u>23</u> , 299 (1936).		

<u>Item</u>	<u>Title</u>	<u>Series</u>	<u>Price</u>
65	Progress report on denture base materials. W. T. Sweeney and I. C. Schoonover. J. Am. Dent. Assn. <u>23</u> , 1498 (1936).		
66	Physical properties of the zinc phosphate cements. G. C. Paffenbarger and Wilmer Souder. Proc. IX Internat. Dent. Cong. <u>1</u> , 347 (1936).		
67	Research on dental materials brings improved dental service. Wilmer Souder. Proc. IX Internat. Dent. Cong. <u>1</u> , 1231 (1936).		
68	Report of Research Commission of the American Dental Association (List of certified products). J. Am. Dent. Assn. <u>24</u> , 269 (1937).		
69	List of certified products (1936-37). Research Commission. J. Am. Dent. Assn. <u>24</u> , 1355 (1937).		
70	Certified wrought gold wire alloys. Research Commission. J. Am. Dent. Assn. <u>24</u> , 1702 (1937).		
71	Dentists rely on standards. (Certification plan.) Wilmer Souder. Indust. Standard and Commer. Standards Month. <u>8</u> , 275 (1937).		
72	A specification for toothpaste. Wilmer Souder and I. C. Schoonover. J. Am. Dent. Assn. <u>24</u> , 1817 (1937).		
73	American Dental Association Specification No. 8 for dental zinc phosphate cements - First Revision (Effective July 1, 1938). G. C. Paffenbarger and J. R. Beall, J. Am. Dent. Assn. <u>24</u> , 2019 (1937).		
74	Dental silicate cements: Physical and chemical properties and a specification. G. C. Paffenbarger, I. C. Schoonover, and Wilmer Souder. J. Am. Dent. Assn. <u>25</u> , 32 (1938).		
75	List of certified products (1937). Research Commission. J. Am. Dent. Assn. <u>25</u> , 475 (1938).		

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76	Survey of certified amalgam alloys. Research Commission. J. Am. Dent. Assn. <u>25</u> , 981 (1938).		
77	An investigation of four gypsum materials used to prepare indirect inlay models. G. C. Paffenbarger and J. R. Beall. J. Am. Dent. Assn. <u>25</u> , 1146 (1938).		
78	Some properties of two types of resins used for dentures (phenol and vinyl). I. C. Schoonover and W. T. Sweeney. J. Am. Dent. Assn. <u>25</u> , 1487 (1938).		
79	List of certified dental materials (as of October 1, 1938). Research Commission. J. Am. Dent. Assn. <u>25</u> , 1857 (1938).		
80	New procedure for the analysis of dental gold alloys. Raleigh Gilchrist. J. Research NBS <u>20</u> , 745 (1938).	RP1103	10c
81	Annual report: American Dental Association Research Fellowship at the National Bureau of Standards. J. Am. Dent. Assn. <u>26</u> , 128 (1939).		
82	List of certified impression compounds: Research Commission. J. Am. Dent. Assn. <u>26</u> , 285 (1939).		
83	An investigation of a supposedly non-tarnish- ing amalgam. G. C. Paffenbarger. J. Am. Dent. Assn. <u>26</u> , 990 (1939).		
84	Probable chemical reactions in silicate cements (abstract). Wilmer Souder and I. C. Schoonover. J. Dent. Research (in press) (1939).		

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