DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS

S. W. STRATTON, Director

SUPPLEMENT NO. 2 TO CIRCULAR NO. 24: PUBLICATIONS OF THE BUREAU OF STANDARDS

[Issued October 1, 1919]

This supplement is designed to keep reasonably current the more important facts concerning the Bureau's publications. It is planned that the list of publications (Circular 24) will be revised biennially, and a supplement containing information of the character listed herein will be issued quarterly.

The initial letters preceding the numbers indicate the special series; i. e., S for Scientific Papers, T for Technologic Papers, C for Circulars, M for Miscellaneous Publications. In referring to publications the series initial and number give complete identification.

PUBLICATIONS NOT AVAILABLE

The publications listed below are not available for distribution by the Bureau of Standards, nor for sale by the Superintendent of Documents, but they may be consulted at any of the designated Government libraries listed in this supplement, pages 5–8.

Scientific	papers	Technologic	Circulars	Miscel- laneous
\$2 \$61 \$3 \$62 \$65 \$65 \$64 \$7 \$66 \$7 \$66 \$9 \$68 \$12 \$77 \$16 \$81 \$20 \$83 \$22 \$84 \$27 \$85 \$29 \$90 \$33 \$92 \$35 \$93 \$36 \$94 \$100 \$50 \$510 \$52 \$109 \$53 \$112 \$60 \$113 \$60 \$113 \$60 \$113 \$60 \$113 \$60 \$113 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60	\$114 \$164 \$115 \$165 \$115 \$165 \$121 \$170 \$122 \$174 \$129 \$177 \$133 \$182 \$137 \$190 \$140 \$198 \$141 \$202 \$144 \$203 \$144 \$211 \$145 \$216 \$145 \$216 \$152 \$238 \$157 \$309 \$152 \$238 \$157 \$309 \$158 \$317 \$156 \$161 \$163	T1 T44 T2 T45 T10 T59 T14 T73 T22 T74 T23 T76 T26 T79 T27 T82 T35 T88 T38 T97	C1 C29 C2 C30 C4 C34 C12 C35 C15 C39 C21 C42 C22 C45 C26 C46	M10 M11 M18 M20 M22 M25 M29 M30 M31

PUBLICATIONS OBTAINABLE ONLY BY PURCHASE FROM THE SUPERINTENDENT OF DOCUMENTS

The publications listed below may be procured only by purchase from the "Super-intendent of Documents, Government Printing Office, Washington, D. C.," and all orders should be accompanied by money order or cash (stamps and checks are not acceptable).

	Scientific papers			Tech- nologic papers	Circu- lars	
The state of the s	S1 S5 S24 S25 S55 S65	S102 S106 S109 S111 S130 S136	S143 S168 S172 S187 S207 S210	S221 S223 S234 S257 S266 S306	T3 T33 T57 T62 T96	C55

GENERAL INFORMATION

The large number of requests for Bureau of Standards publications precludes the sending of personal replies in each case. The request is returned with a form letter to notify the writer that the publications requested will be forwarded, if available.

- 1. Free distribution.—Free distribution is limited to one copy of any publication dealing with an individual's specialty. Additional copies may be purchased (see paragraph 4). This does not mean that any person will be furnished with copies of all papers on a general subject such as electricity, but only those dealing with his special branch of such general subject. This applies to all general subjects. Orders should be sent in accordance with paragraph 3.
- 2. Designations of publications.—Four series are issued, under distinctive titles, as follows: Scientific Papers, Technologic Papers, Circulars, and Miscellaneous Publications, and the issues in each series are numbered consecutively. The Scientific Papers were originally entitled "Reprints," but this title should not now be used. Bulletins (comprising 6 to 8 numbers of the Scientific Papers bound under one cover) are to be obtained by purchase only (see paragraph 4) and only for issues for volume 14 and prior issues.
- 3. Ordering and delivery of publications.—Order by group name and number, in addition to title, thus assisting in the prompt filling of your order. Deliveries require from 1 to 2 weeks time, as stocks are maintained by the Superintendent of Documents and forwarded only by him, as provided by law, on orders drawn by the various Government offices.
- 4. Ordering of sales copies.—Orders for the purchase of any Government publication should be addressed direct to the Superintendent of Documents, Government Printing Office, Washington, D. C., and not to the office issuing same. Orders should be accompanied by cash or money order remittance.
- 5. Mailing list.—A mailing list covering announcement of issues of new publications, but not providing for forwarding of copies, is maintained by this Bureau.

PUBLICATIONS ISSUED SINCE PUBLICATION OF CIRCULAR 24

SCIENTIFIC PAPERS

Cooling curves on an alloy steel of the composition C 1.75, Mn 1.26, Cr 15.0, and Co 2.90 show two transformations on cooling from 920° C, one being observed at about 750° C, with cooling rates slower than 0.70° C per second, and the other

at about 400° C, with cooling rates faster than 0.15° C per second. Trootsite is formed at the higher temperature and martensite at the lower. Heating curves of the martensite steel show an evolution of heat ending at about 645° C, which represents the precipitation of the carbide held in solution. This phenomenon is accompanied by an increase of 10 to 15° C in the temperature of Acl-3. (July 10, 1919.) 10 pp. Price, 5 cents.

S336. A Simplification of the Inverse-rate Method for Thermal Analysis...P. D. Merica
The use of stop watches in taking inverse-rate curves in thermal analysis is
described, and it is shown that they may be substituted for the chronograph,
which is often used without sacrificing accuracy or sensitivity. One operator is
able to record the successive time intervals for the inverse-rate curve with their
aid, and no time is subsequently required for the reading and counting of the
chronograph record; the intervals so recorded may be plotted directly. (July 11,
1919.) 4 pp. Price, 5 cents.

S337. Constitution and Metallography of Aluminum and its Light Alloys with Copper and with Magnesium.

P. D. Merica, R. G. Waltenberg, and J. R. Freeman, jr. The solubility temperature curves of CuAl₂ and of Mg₄Al₃ in aluminum were determined by the method of annealing and microscopic observation. Aluminum dissolves about 4.2 per cent of copper as CuAl₂ at 525° C and about 12.5 per cent of magnesium as Mg₄Al₃ at 450° C. The solubility of both compounds decreases with decreasing temperature. Observations are made regarding the structural condition of iron and of silicon in commercial aluminum. (Aug. 16, 1919.) 14 pp. Price, 10 cents.

S338. Some Optical and Photoelectric Properties of Molybdenite.

W. W. Coblentz and H. Kahler

The transmissivity, reflectivity, and photoelectrical sensitivity of molybdenite, MoS_2 , was determined in the spectral region of the 0.36μ to 9μ . The effect of temperature, humidity, and intensity of the exciting radiations, etc., upon the electrical conductivity was investigated. Molybdenite is conspicuous for its high photoelectrical sensitivity to infra red rays, extending to 3μ , being especially sensitive for radiations at wave lengths $\lambda=0.73\mu$, 0.85μ , 1.02μ , and 1.8μ . Samples of molybdenite from various localities differ greatly in sensitivity, which from the tests at liquid-air temperature seems to be one of degree rather than one of quality. (Aug. 16, 1919.) 30 pp. Price, 10 cents.

TECHNOLOGIC PAPERS

T125. The Viscosity of Gasoline...... The instruments ordinarily employed for finding the viscosity of lubricating oils are not suitable for gasoline, but it was found that the Ubbelohde viscosimeter, designed primarily for use with kerosene, served to determine the vis-

cosity of gasoline accurately enough for commercial purposes. The usual method of estimating the volatility of gasoline from the specific gravity is a rough approximation, and the volatility depends somewhat on the viscosity. (May 5, 1919.)

18 pp. Price, 5 cents.

T126. A Study of the Goutal Method for Determining Carbon Monoxide and Carbon Dioxide in Steels...... J. R. Cain and Earl Pettijohn It is shown that the method does not give the true carbon monoxide or carbon dioxide content of steels but, instead, a fictitious value for these gases, since they appear to be generated by action of the cupric salt on the carbides present. The amount of this action varies with (1) weight of sample relative to amount of solvent; (2) time of boiling solvent; (3) carbon content of the metal. (Apr. 30, 1919.) 8 pp. Price, 5 cents.

T128. Effect of Solar Radiation Upon Balloons.

Junius David Edwards and Maurice Blaine Long This paper describes briefly the effect of solar radiation upon balloons, including measurements of the temperature of balloon fabrics in sunlight, the radiation characteristics of balloon fabrics, the temperature of the gas in the balloon under various conditions, and methods of determining this temperature. The application of these results to aeronautical construction and navigation are pointed out. (June 13, 1919.) 29 pp. Price, 5 cents.

T129. Notes on the Graphitization of White Cast Iron Upon Annealing.

P. D. Merica and J. J. Gurevich

The annealing or graphitization ranges of temperature were determined for three different compositions of white iron used for car wheels. The temperature of incipient graphitization was about 830° C for a 6-hour anneal and about 730° C for a 48-hour anneal. These temperatures were not appreciably affected by the variation of chemical compositions of the samples investigated. Incidentally the results seem to indicate that graphite separates directly from solid solution. (July 12, 1919.) 12 pp. Price, 5 cents.

T136. The Determination of Free Carbon in Rubber Goods.

A. H. Smith and S. W. Epstein

The method consists essentially of removing the rubber and much of the organic matter by treatment with nitric acid. Constitutents other than carbon which remain and would show ignition losses are removed, in so far as possible, by treatment with various solvents. Because of the attack on carbon by nitric acid, the ignition loss represents about 105 per cent of the carbon originally present. Thus corrected, the results, although not absolutely accurate, are sufficiently so for commercial work. (Aug. 12, 1919.) 8 pp. Price, 5 cents.

T138. Effects of Glucose and Salts on the Wearing Quality of Sole Leather.

P. L. Wormeley, R. C. Bowker, R.W. Hart, L. M. Whitemore, and J. B. Churchill This paper outlines in detail the methods used and results obtained in testing sole leather with and without added glucose and salts. The object was to determine the effects of these materials on the wearing quality. A comprehensive series of actual wearing tests, laboratory machine wearing tests, and chemical tests on both the original leathers and the worn soles was conducted. The results have been correlated in so far as possible. A description of the leathers tested is embodied and all the important data are graphically illustrated. Several interesting and definite conclusions are drawn in the paper, which is the first of a series to be written on the subject.

CIRCULARS

C82. Recommended Specification for Linseed Oil-Raw, Refined, and Boiled.

Prepared and recommended by the U. S. Interdepartmental Committee on Paint Specifications Standardization, April 16, 1919. This Committee was appointed at the suggestion of the Secretary of Commerce, and consisted of representatives of the War, Navy, Agriculture, Interior, Post Office, Treasury, and Commerce Departments, the Railroad Administration, the Panama Canal, and the War Service Committee of the Paint Manufacturers' Association of the United States. The Committee submitted a preliminary draft of this specification to more than 300 representatives of the paint and varnish industry, including all of the large manufacturers of linseed oil, and gave careful consideration to the large number of replies received in time. (June 14, 1919.) 9 pp. Price, 5 cents.

LIST OF DEPOSITORY LIBRARIES

ALABAMA.—Auburn, Alabama Polytechnic Institute Library; Birmingham, Howard College Library, Public Library; Decatur, Carnegie Library; Mobile, Association Public Library; Montgomery, State Capitol Library, State and Supreme Court Library; Talladega, Public Library; Tuskegee Institute, Carnegie Library; University, University of Alabama Library.

ALASKA.—Fairbanks, St. Matthews Free Public Library; Juneau, Alaska Historical Society and Museum

Library.

Arizona.—Phoenix, The Territorial Library; Tuoson, Free Public Library, University of Arizona Library.

ARKANSAS.—Conway, Hendrix College Library; Fayetteville, University of Arkansas Library; Little Rock, Arkansas State Library; Pine Bluff, Branch Nor. College Library.

CALIFORNIA.—Berkeley, University of California Library; Eureka, Free Library; Los Angeles, Public Library; Sacramento, California State Library, Free Public Library; San Francisco, Mechanics Mercantile Library, Public Library; Santa Rosa, Free Public Library; Stanford University, Leland Stanford, jr., University Library; Stockton, Free Public Library.

COLORADO.—Boulder, University of Colorado Library; Colorado Springs, Colorado College Coburn Library; Denver, Colorado State Library, Public Library, University of Denver; Fort Collins, Agricultural College Library; Pueblo, McClelland Public Library.

CONNECTICUT.—Bridgeport, Public Library; Hartford, Connecticut State Library, Trinity College Library; Middletown, Wesleyan University Library; New Haven, Yale University Library; New London, Public Library.

Delaware.—Dover, Delaware State Library; Newark, Delaware College Library; Newcastle, Newcastle Library Company; Wilmington, Free Library.

DISTRICT OF COLUMBIA.—Washington, Departments of Agriculture, Interior, Justice, Navy, State, Treasury, and War Libraries.

FLORIDA.—Deland, John B. Stetson University Library; Gainesville, University of Florida Library; Tallahassee, Carnegie Library of the Florida State Normal and Industrial School, Florida State Library; Winter Park, Rollins College Library.

GEORGIA.—Athens, University of Georgia Library; Atlanta, Carnegie Library, Georgia State Library; Augusta, Young Men's Library; Dahlonega, Georgia Agricultural College Library; Douglas, Georgia Normal and Business Institute Library; Newman, Carnegie Library; Oxford, Emery College Library; Savannah, Georgia State Industrial College Library, Public Library.

HAWAII.-Honolulu, College of Hawaii Library.

Inaho.—Albion, State Normal School Library; Boise, Idaho State Library; Lewiston, State Normal School Library; Moscow, University of Idaho Library; Pocatello, Academy of Idaho Library.

ILLINOIS.—Belleville, Public Library; Bloomington, Illinois Wesleyan University Library; Carbondale, Wheeler Library of Southern Illinois State Normal University; Chicago, John Crerar Library, Newberry Library, Public Library, St. Ignatius College Library, University of Chicago Library; Danville, Library; De Kalb, Haish Library of the Illinois State Normal School; Evanston, Northwestern University; Freeport, Public Library; Galesburg, Free Public Library; Jacksonville, Public Library; Joliet, Public Library; Monmouth, Monmouth College Library; Normal, Illinois State Normal University Library; Olney, Carnegie Public Library; Peoria, Public Library; Rockford, Public Library; Springfield, Illinois State Historical Society Library, Illinois State Library; Urbana, University of Illinois Library.

INDIANA.—Bloomington, Indiana University Library; Crawfordsville, Wabash College Library; Evansville, Willard Library; Fort Wayne, Public Library; Greencastle, De Pauw University Library; Hanover, Hanover College Library; Huntington, City Free Library; Indianapolis, Public Library; Indiana State Library; Jasper, Jasper College Library; Lafayette, Purdue University Library; Merow, Union Christian College Library; Muncie, Public Library; Notre Dame, Lemonnier Library of University of Notre Dame; Richmond, Morrison Reeves Library; Terre Haute, Indiana State Norma School Library; Valparaiso, Valparaiso University Library.

İOWA.—Ames, Iowa State College Library; Boone, Ericson Free Public Library; Cedar Falls, Public Library; Council Bluffs, Free Public Library; Des Moines, Public Library; Dubuque, Carnegie Stout Free Public Library; East Des Moines, Iowa State Library; Fairfield, Free Library; Fayette, Upper Iowa University Library; Grinnell, Iowa College Library; Iowa City, State University of Iowa Library; Mount Pleasant, Iowa Wesleyan University Library; Mount Vernon, Cornell College Library; Sioux City, Public Library; Tabor, Tabor College Library.

KANSAS.—Baldwin, Baker University; Emporia, Kansas State Normal Library; Hiawatha, Morrill Free Public Library; Lawrence, Spooner Library of University of Kansas; Manhattan, Kansas State Agricultural College Library; Pittsburgh, Public Library; Sterling, Cooper College Library; Topeka, Kansas State Library, Kansas State Historical Society Library; Wichita, Fairmount College Library.

Kentucky.—Danville, Centre College of Central University Library; Frankfort, Kentucky State Library; Henderson, Public Library; Lexington, State University Library; Louisville, Free Public Library; Somerset, Carnegie Public Library; Winchester, Kentucky Wesleyan College Library.

LOUISIANA.—Baton Rouge, Hill Memorial Library of State University; Natchitoches, State Normal School Library; New Orleans, Howard Memorial Library, Louisiana State Library, Public Library, Tulane University Library; Ruston, Louisiana Industrial Institute Library.

MAINE.—Augusta, Maine State Library; Bangor, Public Library; Brunswick, Bowdoin College Library; Lewiston, Bates College Library; Orono, University of Maine Library; Portland, Public Library; Saco, Dyer Library Association; Waterville, Colby University Library.

MARYLAND.—Annapolis, Maryland State Library, United States Naval Academy Library; Baltimore, City Library, Enoch Pratt Free Library, Johns Hopkins University Library, Peabody Institute Library; Chestertown, Washington College Library; Frederick, Frederick College Library; Westminster, Western Maryland College Library.

Massachusetts.—Amherst, Amherst College Library, Massachusetts Agricultural College Library; Boston, Athenaeum Library, Public Library, State Library of Massachusetts; Cambridge, Harvard College Library; Lowell, City Library; Lyun, Public Library; New Bedford, Public Library; Salem, Essex Institute Library; Taunton, Public Library; Tufts College, Tufts College Library; Watertown, Free Public Library; Williamstown, Williams College Library; Worcester, Free Public Library.

Michigan.—Ann Arbor, General Library of University of Michigan; Battle Creek, Public School Library; Bay City, Public Library; Benton Harbor, Public Library; Detroit, Detroit College Library, Public Library; East Lansing, Michigan State Agricultural College Library; Grand Rapids, Public Library; Houghton, Library of the Michigan School of Mines; Kalamazoo, Public Library; Lansing, Michigan State Library; Muskegon, Hackley Public Library; Orchard Lake, Michigan Military Academy Library; Saginaw, Hoyt Public Library.

MINNESOTA.—Duluth, Free Public Library; Faribault, Public Library; Fergus Falls, High School Library; Minneapolis, Public Library, University of Minnesota Library; St. Cloud, State Normal School Library; Stillwater, Public Library; St. Paul, Minnesota Historical Society Library, Minnesota State Library; Winona, State Normal School Library.

Mississippi.—Agricultural College, Mississippi Agricultural and Mechanical College; Jackson, Carnegie Millsaps Library, Mississippi State Library; Oxford, Mississippi State University Library.

Missouri.—Cape Girardeau, St. Vincent's College Library; Carthage, Public School Library; Chillicothe, Hazelton Public School Library; Columbia, College of Agricultural and Mechanical Arts of Missouri State University Library; Fulton, Westminster College Library; Hannibal, Free Public Library; Jefferson City, Missouri State Library; Kansas City, Public Library; Liberty, William Jewell College Library; Perryville, Public School Library; Rolla, Missouri School of Mines Library; Springfield, Drury College Library; St. Joseph, Free Public Library; St. Louis, Christian Brothers College Library, Public Library, St. Louis University Library, Washington University Library.

MONTANA.—Bozeman, Montana Agricultural College Library; Butte, Montana State School of Mines Library; Helena, Historical Department of Montana State Library, Public Library; Missoula, University of Montana.

Nebraska.—Fremont, Public Library; Grand Island, Carnegie Library; Kearney, Public Library; Lincoln, Library of the University of Nebraska, Nebraska State Library; Omaha, Public Library; South Omaha, Public Library.

NEVADA.—Carson City, Nevada State Library; Reno, University of Nevada Library.

NEW HAMPSHIRE.—Concord, New Hampshire State Library; Dover, Public Library; Durham, Hamilton Smith Public Library; Hanover, Dartmouth College Library; Laconia, Public Library; Manchester, City Library.

New Jersey.—Atlantic City, Free Public Library; Bayonne, Free Public Library; Camden, Free Public Library; Elizabeth, Public Library and Reading Room; Jersey City, Free Public Library; Newark, Free Public Library, New Jersey Historical Society Library; New Brunswick, Free Public Library, Rutgers College Library; Orange, Free Library; Paterson, Free Public Library; Princeton, Princeton University Library; Trenton, Free Public Library, New Jersey State Library.

New Mexico.—Agricultural College, General Library of New Mexico College of Agriculture and Mechanical Arts; Albuquerque, University of New Mexico; Santa Fé, Territorial Library.

NEW YORK.—Albany, New York State Library; Brooklyn, Public Library, Long Island Historical Society Library, Pratt Institute Library; Buffalo, Grosvenor Library, Public Library; Canton, St. Lawrence University Library; Glen Falls, Crandall Free Library; Hamilton, Colgate University

Library; Ithaca, Cornell University Library; Keuka Park, Keuka College Public Library; Newburgh Free Library; New York, Astor Branch of New York Public Library, College of the City of New York Library, Columbia University Library, Cooper Union for Advancement of Science and Art Library, General Library of New York University, Lenox Branch of New York Public Library, New York Law Institute Library, The World Library, Young Men's Hebrew Association Library; Oswego, Normal School Library; Poughkeepsie, Adriance Memorial Library; Rochester, Rochester University Library; Schenectady, Union College Library; Syracuse, Syracuse University Library; Troy, Public Library; Utica, Public Library; West Point, United States Military Academy Library.

NORTH CAROLINA.—Buies Creek, Buies Creek Academy Library; Chapel Hill, University of North Carolina Library; Davidson, Union Library of Davidson College; Durham, Trinity College Library; Greensboro, Colored Agricultural and Mechanical College Library; Newton, Catawba College Library; Raleigh, North Carolina State Library; Wake Forest, Wake Forest College Library; Washington, Public Schools

Library.

NORTH DAKOTA.—Bismarck, North Dakota State Library, State Historical Society Library; Fargo, North Dakota Agricultural College Library; Grand Forks, Public Library; University, State University, 18th Public Library; University, 18t

sity of North Dakota Library.

OHIO.—Alliance, Mount Union Library; Athens, Carnegie Library; Bucyrus, Public Library; Cincinnati, Public Library; Cleveland, Case Library, Public Library; Columbus, Ohio State Library, Ohio State University Library, Public Library; Dayton, Public Library and Museum; Delaware, Charles Slocum Library of Ohio Wesleyan University; Gambier, Kenyon College Library; Granville, Denison University Library; Hiram, Hiram College Library; Lebanon, Public Library; Marietta, Marietta College Library; Oberlin, Oberlin College Library; Oxford, Miami University Library; Portsmouth, Free Public Library; Sidney, Public Library; Springfield, Warder Public Library; Steubenville, Carnegie Library; Toledo, Public Library; Yan Wert, Brumback Library of Van Wert County.

OKLAHOMA.—Alva, Northwestern State Normal School Library; Enid, Public Library; Guthrie, Oklahoma State Library; Langston, Colored Agricultural and Normal University Library; Muskogee, High School Library; Norman, University of Oklahoma Library; Stillwater, Oklahoma Agriculture and

Mechanical College Library.

Oregon.—Corvallis, Oregon Agricultural College Library; Eugene, University of Oregon Library; Forest Grove, Tualatin Academy and Pacific University Library; Portland, Library Association; Salem,

Oregon State Library.

PENNSYLVANIA.—Bradford, Carnegie Public Library; Erie, Public Library; Gettysburg, Pennsylvania

College Library; Harrisburg, Pennsylvania State Library; Haverford, Haverford College Library;

Huntington, Juniata College Library; Lancaster, Watts De Peyster Library of F. and M. College;

Meadville, Allegheny College Library; Norristown, William McCann Library; Philadelphia, Free

Library, Historical Society of Pennsylvania Library, Library Company of Philadelphia, Mercantile

Library, Philadelphia Museum Library, University of Pennsylvania Library; Pittsburgh, Carnegie

Library; Scranton, Public Library; South Bethlehem, Lehigh University Library; State College,

Carnegie Library of Pennsylvania State College; Reading, Reading Library; Warren, Public Library;

Washington, Memorial Library of Washington and Jefferson College; Waynesburg, Waynesburg College

Library; Wilkesbarre, Wyoming Historical and Geological Society Library. PHILIPPINE ISLANDS.—Manila, Library of Philippine Government.

RHODE ISLAND.—Kingston, Rhode Island College of Agricultural and Mechanical Arts Library; Providence, Brown University Library, Public Library, Rhode Island State Library; Westerly, Public Library.

SOUTH CAROLINA.—Charleston, Charleston College Library, Charleston Library Society; Clemson College, Clemson Agricultural College Library; Columbia, South Carolina State Library; Orangeburg, Colored Normal, Industrial, Agricultural and Mechanical College of South Carolina Library; Rockhill, Winthrop Normal and Industrial College Carnegie Library.

SOUTH DAKOTA.—Brookings, South Dakota State College of Agricultural and Mechanical Arts Library; Pierre, South Dakota State Library; Sioux Falls, Carnegie Free Public Library; Vermilion, University

of South Dakota Library; Yankton, Yankton College Library.

TENNESSEE.—Chattanooga, Public Library; Knoxville, University of Tennessee Library; Memphis, Cossitt Library; Nashville, Carnegie Library, Tennessee State Library, Vanderbilt University Library; Sewanee, University of the South Library; Spring Hill, Branham and Hughes School Library.

Texas.—Austin, Texas State Library, University of Texas Library; Clarendon, Clarendon College Library; College Station, Agricultural and Mechanical College of Texas Library; Dallas, Public Library; El Paso, Public Library; Fort Worth, Carnegie Library; Galveston, Rosenberg Library; Georgetown, Southwestern University Library; Houston, Lyceum and Carnegie Library; Jasper, Southeast Texas College Library; San Antonio, Carnegie Library; Waco, Baylor Library.

UTAH.—Logan, Agricultural College Library; Ogden, Carnegie Free Library; Provo, Brigham Young University Library; Salt Lake City, University of Utah Library.

VERMONT.—Burlington, Fletcher Free Library, University of Vermont Library; Middlebury, Middlebury College Library; Montpelier, Vermont State Library; Northfield, Carnegie Library of Norwich University.

VIRGINIA.—Blacksburg, Virginia Agricultural and Mechanical College and Polytechnic Institute Library; Bridgewater, Bridgewater College Library; Emory, Emory and Henry College Library; Hampden Sidney, Hampden Sidney College Library; Lexington, Virginia Military Institute Library; Norfolk, Public Library; Richmond, Richmond College Library, Virginia State Library; Salem, Roanoke College Library.

Washington.—Olympia, Washington State Library; Pullman, State College of Washington Library; Seattle, Public Library, University of Washington Library; Tacoma, Public Library; Walla Walla, Whitman College Library.

West Virginia.—Buckhannon, West Virginia Wesleyan College Library; Charleston, Department of Archives and History State Library; Fairmont, Normal School Library; Huntington, Public Library; Institute, West Virginia Colored Institute Library; Keyser, Preparatory Branch of West Virginia University Library; Morgantown, West Virginia University Library.

Wisconsin.—Appleton, Lawrence University Library; Beloit, Beloit College Library; Eau Claire, Public Library; Fond Du Lac, Public Library; La Crosse, Public Library; Madison, State Historical Society Library, State Library; Merrill, T. B. Scott Free Library; Milwaukee, Public Library; Platteville, State Normal School Library; Racine, Public Library; Superior, Public Library.

WYOMING.—Cheyenne, Wyoming State Library; Laramie, University of Wyoming Library.



