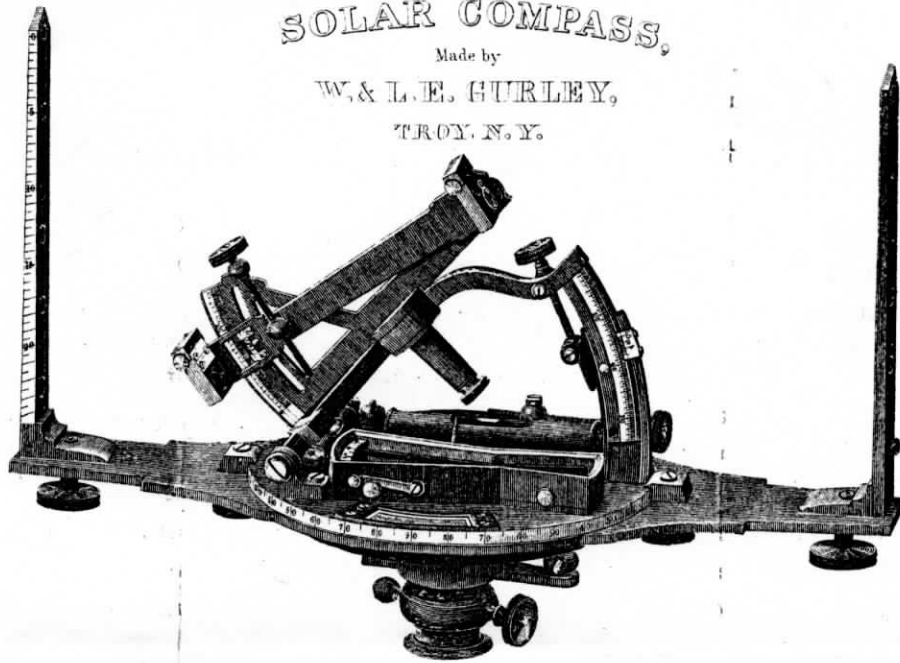


SOLAR COMPASS,

Made by

W. & L. E. HURLEY,

TROY, N. Y.



W. & L. E. Gurley's Circular.

1860.

THE design of the present Circular—is to apprise our former patrons in the West, together with those who have received our "MANUAL" in previous years, that we still continue the manufacture of SURVEYORS and ENGINEERS' INSTRUMENTS with increased facilities and extended patronage, and that although we have made important improvements in the same, they are still supplied by us at the same low rates as heretofore.

The extent of our business may be seen by inspection of the following pages, showing the number and kinds of Instruments furnished from 1855 to '60, in the States and Territories named, as well as the names and residences of those to whom they were sent, and to whom we also refer as to the quality of our work.

We still guarantee to all perfect satisfaction with the Instruments they may purchase of us, agreeing to make good all defects at our own expense—express charges included; and by the privilege of two weeks' trial, as offered in our "MANUAL"—to all purchasers who request it, in making their orders, furnish ample time for a thorough test of the quality of the Instrument, before the purchase is completed.

With the facilities possessed by us for the manufacture of Instruments, and the ample guarantees we offer of their excellence, we feel warranted in soliciting the favor of your patronage and influence.

W. & L. E. GURLEY,

Manufacturers of Civil Engineers and Surveyors' Instruments,

TROY, N. Y.

INSTRUMENTS SOLD BY W. & L. E. GURLEY

In the State of Ohio, from 1855 to 1860.

- Engineers' Transits.—1 to Antioch College, Yellow Springs; 1 to Cyrus Brown, Iberia; 1 to village of Bucyrus. 3
- Surveyors' Transits.—1 to M. B. Haynes, Oberlin; 1 to C. C. Moore, Salem; 1 to Jas. G. Hall, Hubbard; 1 to P. Voris, Brecksville; 1 to J. W. Smith, Urbana; 1 to John Newman, Mansfield; 1 to A. T. Wright, Bourneville; 1 to L. G. Perry, Miamisburg; 1 to Jas. Q. Baird, Urbana; 1 to John Cutler, Wapakoneta; 1 to L. K. Hayhurst, Elyria. 11
- Vernier Transits.—1 L. S. Cotton, Grainger; 1 to J. B. Chollar, ———; 1 to W. F. Simeral, Bloomingdale; 1 to Jas. B. McGrew, Malta; 1 to Jos. D. Taylor, Fairview. 5
- Vernier Compasses.—1 to Ezra S. Hannum, Columbus; 1 to Geo. P. Stevens, Twinsburgh; 1 to H. W. Peck, Chardon; 1 to S. French, Norwalk; 1 to Antioch College, Yellow Springs; 1 to A. E. Smith, Ashtabula; 1 to B. F. Dorr, Fremont; 1 to John Graham, Columbus; 2 to Jacob Mishler, Mogadore; 1 to Jas. V. Acton, Eaton; 1 to Franklin Paine, Painesville; 1 to C. D. Moore, Zanesville; 1 to M. C. Kelly, Samsontown; 1 to Geo. House, Gallipolis; 1 to L. Cass Sawyer, St. Mary's; 1 to E. F. Punderson, Cleveland; 1 to H. Strong, Napoleon; 1 to Wm. M. Cully, Carrollton; 1 to H. C. Jones, McArthur; 1 to Samuel Robinson, Millersburg; 1 to Peter Glathart, Vanlue; 1 to H. C. Moore, Bellefontaine. 23
- Rail Road Compasses.—1 to J. M. Holmes, Seville; 1 to Urbana University; 1 to N. S. Brittan, Richfield; 1 to J. Shortiss, Lexington; 1 to J. B. Darling, Sandusky; 1 to James Worden, Willoughby. 6
- Leveling Instruments.—1 to Antioch College; 1 to F. Carlisle, Ashtabula; 1 to John A. Lawrence, Wooster; 1 to H. P. Davis, Mansfield. 7 4

IN THE STATE OF INDIANA, FROM 1855 TO 1860.

- Engineers' Transits.—1 to F. K. Field, Auburn; 1 to J. D. Cook, Marion. 2
- Surveyors' Transits.—1 to D. W. Myers, Lisbon; 1 to Henry Krauskopf, Peru; 1 to Thos. Carr, Sparksville; 1 to John Miller, Frankfort; 1 to Notre Dame du Lac University, South Bend; 1 to D. B. Hasbrook, Indianapolis; 1 to Wm. Neal, Marion. 7
- Vernier Transit Compasses.—1 to John Rhodes, La Grange Centre; 1 to John Garis, Valparaiso; 1 to W. W. Dowling, Lisbon; 1 to Thos. Carr, Sparksville; 1 to Geo. S. Brinkerhoff, Huntington; 1 to John Fisher, Crown Point. 6
- Vernier Compasses.—1 to Joshua Truitt, Muncie; 1 to W. P. Case, Indianapolis; 1 to D. W. Altenburgh, Fort Wayne; 1 to J. F. Polk, Mechanicsburg; 1 to Bolivar Duncan, Bedford; 1 to John Sharp, Bowling Green; 1 to Zenas Cary, Carmel; 1 to E. A. Horton, Bluffton; 1 to Charles Foley, Cartersburg; 1 to John Cassidy, Washington; 1 to Robert P. Jackman, Madison; 2 to D. McLeaming, La Porte; 1 to William Troth, Jr., Vandalia; 1 to A. Armstrong, Vincennes; 1 to S. L. Trippe, La Porte; 2 to Jeremiah Hadley, Danville; 1 to Eli W. Brown, Columbus City; 1 to John H. Davis, Bowling Green; 1 to C. R. Harris, Patriot; 1 to A. P. Ferry, Wabash; 1 to Wm. Guthrie, Delphi; 1 to Aaron Baker, Mt. Vernon; 1 to J. Woodburn, Bloomington. 25
- Rail Road Compass.—1 to Z. F. Summers, Crown Point. 1
- Leveling Instruments.—1 to Henry Cook, Goshen; 1 to James D. Saunders, Evansville; 1 to J. Perrell, Hartford City; 1 to D. Agnew, Winamac; 1 to E. S. Babcock, Evansville; 1 to W. W. Conner, Noblesville. 6

IN THE STATE OF ILLINOIS, FROM 1855 TO 1860.

- ENGINEERS' TRANSITS.—1 to W. W. Hungerford, Chicago; 1 to M. M. Stimson, Galesburgh; 1 to C. T. Francis, Alton; 1 to H. J. Vaughan, Canton; 1 to A. D. Southworth, Loda; 1 to Ely S. Parker, Galena; 1 to L. C. McKenney, Galena; 1 to State Normal University, Bloomington. 8
- SURVEYORS' TRANSITS.—1 to B. J. Chatten, Quincy; 1 to Jon. Hay, Orangeville; 1 to M. Wadleigh, Galena; 1 to C. B. Johnson, Princeton; 1 to H. M. Ward, Monee; 2 to A. J. Mathewson, Lockport; 1 to C. A. Gilchrist, Macomb; 1 to Alex. Knapp, Galesburg; 1 to F. W. Winship, Princeton; 1 to S. B. Moore, Charleston; 1 to Jas. Boggs, Havana; 1 to W. W. McKean, Metropolis; 1 to T. McVicar, Belvidere; 1 to C. T. Dunham, Freeport; 1 to Edward H. Beebe, Galena. 16

IN THE STATE OF ILLINOIS, FROM 1855 TO 1860.—CONTINUED.

- VERNIER TRANSITS.—1 to S. J. Morey, Clayton; 1 to Thos. J. L. Remington, Rockford; 1 to F. Betser, Bloomington; 1 to B. J. Chatten, Quincy; 1 to W. N. Mitchell, Attila; 1 to J. H. Widmer, Magnolia; 1 to Samuel Ewers, Mazon; 1 to W. B. Stines, Boynton; 1 to Wm. Peters, Freeport, and four others.
- VERNIER COMPASSES.—1 to H. Curtis, Jr., Rock Island; 1 to Warren Miller, Carthage; 1 to L. Warren, Warren; 1 to P. S. Post, Galesburg; 1 to J. B. Ingersoll, Bloomington; 2 to A. D. Haight, Belvidere; 1 to T. G. Chase, Brighton; 1 to T. Standing, Hillsboro; 1 to B. Lodge, Paris; 1 to J. W. Gaston, Knoxville; 1 to C. A. Gilchrist, Macomb; 1 to J. T. McCrery, Pana; 1 to F. H. Hindman, Pope Creek; 1 to Samuel Hunt, Macomb; 1 to F. Betser, Bloomington; 1 to M. M. Stimson, Galesburg; 1 to J. Hay, Orangeville; 1 to J. J. Wall, Belleville; 1 to E. C. Siler, Quaker Point; 1 to S. Tyndale, Belleville; 1 to J. Wolle, Olney; 1 to F. Ropuguet, Belleville; 1 to W. F. Whittemore, Ottawa; 1 to C. S. Tresliu, Waterloo; 1 to J. B. Lee, Caclin, and thirty-nine others.
- PLAIN COMPASSES.—1 to F. W. Holcomb, Independence; 1 to Geo. Moreland, Prairie City.
- RAIL ROAD COMPASSES.—1 to R. P. Moore, Galena; 1 to F. W. Winship, Princeton; 1 to C. B. Holmes, Belvidere; 1 to E. C. Bigelow, Buda; 1 to N. A. Smith, Mt. Vernon.
- LEVELING INSTRUMENTS.—1 to H. Curtis, Jr., Rock Island; 1 to B. J. Chatten, Quincy; 1 to C. E. King, Galesburg; 1 to J. B. Ingersoll, Bloomington; 2 to W. H. Sidell, Quincy; 1 to C. T. Francis, Alton; 1 to H. J. Vaughan, Canton; 1 to J. J. Arnold, New Boston; 1 to W. F. Lambach, Peru; 1 to C. W. Allendorph, Carrollton; 1 to Cortes Fessenden, Springfield; 1 to E. H. Beebe, Galena.

IN THE STATE OF MISSOURI, FROM 1855 TO 1860.

- ENGINEERS' TRANSITS.—1 to E. Gray, St. Louis; 1 to J. B. Ellis, St. Louis; 1 to St. Vincent's College, Cape Girardeau; 1 to Washington University, St. Louis; 1 to Chas. McCully, Kansas City; 1 to R. J. Sloan, St. Josephs.
- SURVEYORS' TRANSITS.—1 to John Grace, St. Louis; 1 to Thos. P. Rubey, Huntsville; 1 to A. M. McPherson, Perryville; 1 to C. H. Allison, Booneville.
- VERNIER TRANSITS.—1 to Ira H. Smith, Oregon. 1 to A. M. Tutt, Clinton.
- VERNIER COMPASSES.—1 to Samuel McAfee, La Grange; 1 to J. A. Good, Clinton; 2 to Thomas H. Clark, Jackson; 1 to D. W. German, Rocky Mount; 1 to H. Holbrook, Belleville; 1 to G. F. Christian, Wyandotte; 1 to J. M. Willson, Sarcoux; 1 to J. P. Walker, Bloomington; 1 to Washington University, St. Louis; 3 to E. Gray, St. Louis; 13 to Henry Sanford, Jackson; 1 to A. M. McPherson, Altenburg; 1 to A. M. Tutt, Clinton; 2 to Charles T. Manter, Hopewell Furnace; 3 to J. A. Stephens, Springfield; 1 to R. M. Howard, Iron Mountain; 1 to John T. Jackson, Glasgow; 1 to A. Oliphant, Richmond; 1 to J. L. Holland, Laclede; 1 to W. R. Crisp, Versailles; 1 to J. A. Craig, Warrensburgh; 1 to R. F. Templeton, White Hare; 1 to G. H. Warth, Clinton; 1 to M. O. Jones, Independence; 1 to M. Sanders, Green Castle.
- PLAIN COMPASSES.—1 to T. A. Switzler, Melville; 1 to J. P. Johnson, Stockton.
- LEVELING INSTRUMENTS.—1 to A. B. Ogden, St. Charles; 1 to Simmons & Leadbeater, St. Louis; 1 to Washington University, St. Louis; 1 to C. H. Allison, Booneville.

IN THE STATE OF KENTUCKY, FROM 1855 TO 1860.

- ENGINEERS' TRANSITS.—1 to Prof. C. D. Lawrence, Russellville.
- SURVEYORS' TRANSITS.—1 to James House, Sherburn; 1 to Prof. J. J. Rucker, Georgetown College; 1 to J. W. Martin, Winchester; 1 to T. Larcom, Pageville; 1 to B. C. Davidson, Hawesville.
- VERNIER COMPASSES.—1 to S. S. McRoberts, Stamford; 1 to C. P. Shields, Russellville; 2 to G. B. Cooper, Jr., Hustonville; 1 to D. B. Denton, Glasgow; 1 to H. C. Huggins, Keene; 1 to T. H. Flood, Orangeville; 1 to H. A. Rock, Morgantown; 2 to Thomas Hart, Winchester; 1 to A. E. Reese, Cadiz; 2 to Prof. C. D. Lawrence, Russellville.
- PLAIN COMPASSES.—1 to H. G. Davis, Cadiz; 1 to P. J. Honaker, Harmony; 1 to R. H. Baker, Dycusburgh; 2 to A. Dresser, Hardinsburgh; 1 to D. Denton, Glasgow; 1 to S. B. Younglove, Hopkinsville; 1 to J. B. Ellis, Cadiz; 1 to D. B. Denton, Glasgow, Altsheller & Poynter, Three Springs.
- RAIL ROAD COMPASSES.—1 to Prof. C. D. Lawrence, Russellville; 1 to J. A. Rains, Dansville; D. J. Pendleton, Winchester.
- LEVELING INSTRUMENTS.—1 to C. D. Lawrence, Russellville; 1 to Prof. J. J. Rucker, Georgetown College; 1 to city of Henderson; J. D. Sanders, City Engineer.

IN THE STATE OF TENNESSEE, FROM 1855 TO 1860.

- SURVEYORS' TRANSITS.—1 to P. W. Dodson, Union University, Murfreesboro'.
 VERNIER TRANSITS.—1 to W. A. Simpson, Wrightsville; 1 to Geo. M. Helm, New Providence; 1 to James T. Adams, Pulaski.
 VERNIER COMPASSES.—1 to R. D. O. Meriwether, Memphis.
 PLAIN COMPASSES.—1 to W. H. Butler, Gainesboro; 1 to O. Fisk, Hilham; 1 to R. D. O. Meriwether, Memphis; 1 to J. Cole, Tazewell; 1 to T. H. Butler, Gainesboro; 1 to J. W. Stafford, Gainesboro.
 SOLAR TELESCOPE COMPASS.—1 to W. S. Newbill, Pulaski.

IN THE STATE OF MICHIGAN, FROM 1855 TO 1860

- ENGINEERS' TRANSITS.—1 to Prof. Peck, Michigan State University, Ann Arbor.
 SURVEYORS' TRANSITS.—1 to Geo. D. Emerson, Ontonagon; 1 to Martin L. Miller, Tuscola; 1 to John F. Tinkham, Grand Rapids; 1 to Hiram Bean, Grand Haven; 1 to Ira Chichester, Otsego.
 VERNIER TRANSIT.—1 to C. P. Ives, Grand Rapids.
 VERNIER COMPASSES.—1 to A. W. Hand, Lexington; 1 to Charles Wilson, Thetford; 3 to T. Fletcher, Grand Haven; 1 to R. H. Miller, Ottawa; 1 to J. H. Simmons, Paw Paw; 1 to Hiram Bean, Grand Haven; 1 to A. N. Williams, Grand Rapids; 1 to E. L. Wilson, Owosso.
 RAIL ROAD COMPASSES.—1 to H. Bean, Grand Haven.
 SOLAR TELESCOPE COMPASS.—1 to G. P. Cummings, Marquette.
 LEVELING INSTRUMENTS.—1 to H. Pomeroy, Marquette

IN THE STATE OF WISCONSIN, FROM 1855 TO 1860.

- ENGINEERS' TRANSITS.—1 to J. T. Dodge, Janesville; 1 to H. Lee, Janesville; 1 to H. E. Wells, Portage City; 1 to F. S. Blodgett, Milwaukee; 1 to E. Stratton, Milwaukee; 1 to S. F. Miller, Fond du Lac; 1 to W. W. Laman, Oshkosh.
 SURVEYORS' TRANSITS.—1 to J. L. Tubbs, Elkhorn; 1 to H. Meriton, Portage City; 1 to L. P. Drake, Madison; 1 to A. P. Clark, Rochester; 1 to Wisconsin State University, Madison; 1 to G. A. Randall, Oshkosh; 1 to H. W. Newton, Fond du Lac; 1 to L. P. Gilbert, Fort Atkinson; 1 to M. N. Randall, Avoca; 1 to C. D. Foote, Appleton; 1 to J. Trumbull, Janesville; 2 to H. J. Bliss, La Crosse.
 VERNIER COMPASSES.—1 to J. L. Ingallsbe, Springfield; 1 to C. H. Brown, Janesville; 1 to J. M. Webb, Wingville; 1 to H. Lee, Janesville; 1 to F. G. Steele, Beloit; 1 to A. B. Miller, Janesville; 1 to Charles Palmer, Manitowoc; 1 to W. F. Flanders, Milwaukee; 1 to G. W. Elliot, Wolf River; 1 to C. C. Mead, Fountain City; 1 to W. W. Hungerford, Prairie du Chien; 1 to C. Montague, La Crosse; 1 to C. H. Walther, Theresa; 1 to S. J. Fletcher, Eau Claire; 1 to J. R. Slawson, Racine; 1 to A. F. Childs, Sparta; 1 to J. J. Turner, Viola; 1 to E. Hetschke, Appleton.
 RAIL ROAD COMPASSES.—1 to H. E. Wells, Portage City; 1 to A. J. Treadway, Muscoda; 1 to J. W. Blanding, Muscoda; 1 to W. W. Dimock, Muscoda.
 SOLAR AND RAIL ROAD COMPASS.—1 to M. E. Jones, Menominee.
 LEVELING INSTRUMENTS.—1 to J. T. Dodge, Janesville; 1 to A. W. Whitcomb, Milwaukee; 1 to F. S. Blodgett, Milwaukee; 1 to F. S. Miller, Fond du Lac; 1 to H. Gardiner, Milwaukee; 1 to H. E. Wells, Portage City; 1 to A. S. Van Meener, Watertown.

IN THE TERRITORY OF KANSAS, FROM 1855 TO 1860.

- ENGINEERS' TRANSITS.—1 to Blood Bassett & Co., Quindaro.
 SURVEYORS' TRANSITS.—1 to J. B. Ingersoll, Topeka; 1 to T. M. Laws, Palermo; 1 to A. D. Haight, Moneka.
 VERNIER TRANSITS.—1 to B. L. Kingsbury, Lawrence; 1 to E. A. Smith, Fort Scott.
 VERNIER COMPASS.—1 to A. C. Pierce, Kansas Falls.
 SOLAR COMPASSES.—1 to A. Z. Sheldon, Lawrence; 1 to G. C. Van Zandt, Lecompton.
 LEVELING INSTRUMENTS.—1 to R. I. Sloan, Palermo.

FROM 1860 W.P. L.S. GURVEY CIRCULAR, NUMBER & TYPES
OF INSTRUMENTS SOLD IN THE MIDWEST FROM 1855 TO 1860

	Ohio	Indiana	Illinois	Missouri	Kentucky	Tennessee	Michigan	Wisconsin	Kansas Ter.	Totals
ENGINEERS TRANSITS	3	2	9	6	1	0	1	7	1	29
SURVEYORS TRANSITS	11	7	16	4	5	1	5	13	3	65
VENUE TRANSITS	5	6	13	2	0	3	1	0	2	32
VERNIER COMPASSES	23	25	65	43	13	1	10	18	1	199
RANGING COMPASSES	6	1	5	0	2	0	1	4	0	19
SOLAR COMPASSES	0	0	0	0	0	1	1	1	2	4
LEVELS	1	6	13	4	3	0	1	7	1	39
PLANE COMPASSES	0	0	2	2	9	6	0	0	0	19