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Classified List of Papers and Notes
Contained in Volumes I-XIV
of the
Transactions and Memoirs
of
The Academy of Science of St. Louis.

Classified List of Papers and Notes contained in Volumes I-XIV. Transactions Academy of Science of St. Louis (in octavo).

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— (Variability of foliage of a single tree).	1:3	2.00
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Entomology — Continued.

Riley, C. V. (On migratory butterflies). 3:4	\$2.00
— On the larval characters and habits in the blister-beetles belonging to the genera <i>Macrobasis</i> , Lec. and <i>Epicauta</i> Fabr.; with remarks on other species of the family Meloidae. Pl. V. 3:4	"
— On the difference between <i>Anisopteryx pometaria</i> , Harr. and <i>Anisopteryx aescularia</i> , W.-V., with remarks on the genus <i>Palaecrita</i> . 3:4	"
— (On the oviposition of <i>Saperda bivittata</i> Say). 3:4	"
— (Oviposition of <i>Leucania unipuncta</i>). 3:3	"
— (Parasites on eggs of <i>Caloptenus spretus</i>). 3:4	"
— (Paris green and insects) 3:2	"
— Remarks on canker-worms and description of a new genus of Phalaenidae. 3:3	"
— (Transportation of silk-worm eggs). 3:4	"
Robertson, C. New or little known North American bees. 8:3	.25
— North American bees descriptions and synonyms. 7:14	.50
— Some Illinois bees. 10:2	.25
Trelease, W. (Jumping beans). 4:4	2.00
Walsh, B. D. Descriptions of North American Hymenoptera. 3:1	"
Wislizenus, A. (The so-called "army worm"). 2:1	"

Anatomy, morphology.

Alt, A. Original contributions concerning the glandular structures appertaining to the human eye and its appendages. Pls. XXII.-LVII. 10:8	.50
Engelmann, G. (Genital parts of female opossum). 2:2	2.00
Hilgard, T. G. (Comparative anatomy of the skull). 1:3	"
— Comparative organotaxy of fishes). 1:4	"
— Notes on comparative organotaxis. 1:3	"
— (Skull of vertebrates). 1:2*	"
Stevens, C. W. (Monstrosity in head of lamb). 1:4	"
Terry, R. J. (Cervical rib in man). 8:12	.25
Todd, C. A. (Anomalous skull). 5:3-4	4.00
— (Arm-muscle of negro). 5:1-2	"
— "Reversion of type" in the digastric muscle of the human being. 4:2	2.00
— Subcutaneous pocket in front of ear of man and elephant). 4:3	"

Physiology.

Goldstein, M. (Physiology of voice production). 10:11	.50
Harrison, E. (Iron-ore bezoars of ox). 3:2	2.00
Kodis, T. (Electro-chemical theories of animal electricity.) 10:11	.50
Porter, W. T. (Apparatus for administering anaesthetics during artificial respiration). 5:3-4	4.00
— The growth of St. Louis children. Pls. I-XLVI. 6:12	1.00

Physiology — Continued.

Porter, W. T. The physical basis of precocity and dullness. Pls. I-II. 6:7	\$0.50
— The relations between the growth of children and their deviation from the physical type of their sex and age. Pl. I. 6:10	.25
Riley, C. V. (Sex causation) 3:2	2.00
Runge, E. C. Merycism regarded in the light of atavic ten- dency. — Report of a new case, with results of an in- vestigation of its digestive chemism. 6:11	.25
Sawyer, A. (Water required for domestic animals). 3:3	2.00
Todd, C. A. (Soaring of buzzards). 5:1-2	4.00
Trelease, W. An unusual phyto-bezoar. Pl. XL. 7:18	.25

Botany — See Biology.

Chemistry.

Bandelier, A. F. Observations on ozone, made in Highland, Madison Co., Ills. 2:2	2.00
Bremer, L. (Aniline dye tests of glucose). 9:9	.25
Carter, Seymour. (A new method of directly transforming cereals into food-stuffs). 12:10	“
Curtman, C. O. (Detection and analysis of blood). 6:18	.50
— (Test for aniline colors). 5:1-2	4.00
Cushman, A. S. The post-mortem detection and estimation of strychnine. 6:17.	.25
Forder, S. W. See Keiser.	
Hunicke, H. A. (Boiling point of hydro-carbons). 9:9	“
Jewett, E. C. (Specific gravity determination of alloys). 4:4	2.00
Keiser, E. H. (A method of determining the amount of lime in cements). 13:9	.25
— (Some derivatives of acetylene). 9:9	“
— and S. W. Forder. A new method for the determination of free lime, and on so-called dead burnt lime. 13:6	“
Litton, A. (Aluminum). 1:1*	
Luedeking, C. Anomalous densities of fused bismuth. 5:1-2	4.00
— Contribution to the chemistry of combustion. 5:3-4	“
— The hydration of colloids. 5:3-4	“
— (Iron in atmosphere). 5:1-2	“
— The long continued action of the electric discharge on iodine. 5:3-4	“
— On the analysis of the barium group. 5:3-4	“
— On the specific heats, specific gravities, and the heats of hydration of the acids of the fatty series, and their mixtures with water (with plate). 4:4	2.00
— The post-mortem detection of chloroform. 5:1-2	4.00
— See H. A. Wheeler.	“
Potter W. B. (Analysis of Geyselite). 4:3	2.00
— (Analysis of Peruvian lignite). 3:4	“
— Analysis of Spiegeleisen). 4:1	“

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Chemistry — Continued.

Reed, C. J. The graphic representation of the relation between valence and atomic weight (with triple chart). 4:4	\$2.00
Richter, George. (The physical and chemical properties of gelatin). 12:10	.25
Sander, E. (Analysis of condensed milk). 4:4	2.00
Schiel, J. (Bisulphuret of carbon). 1:1*	
— (Observations on glycerine). 1:1*	
Seddon, J. A. (Specific gravity and determination of alloys). 4:4	"
Warren, W. H. (Production of perfumes). 10:11	.50
Wheeler, H. C. and C. Luedeking. Iodine in blowpiping. Pls. XI-XIII. 4:4	2.00
Wislizenus, A. (Ozone). 1:3	"

Earthquakes. — See Meteorology.

Education, sociology.

Geddes, P. (Plan for increasing the educational value of expositions). 10:11	.50
Soldan, F. L. (The advance made in education during the nineteenth century). 11:11	.25
Wood, O. M. (Sociology of the negro). 8:12	"
Woodward, C. M. At what age do pupils withdraw from the public schools? 7:8.	"
— (Formulae of Herbart). 7:20	.50

Engineering, machinery, manufactures.

Adams, W. (Telephone for deaf persons). 4:3	2.00
Eads, J. B. (River jetties). 3:2	"
Espenschied, C. (Flour milling). 10:11	.50
Johnson, J. B. (Portland cement). 8:12	.25
Kinealy, J. H. (Volume of air passing a register). 7:20	.50
Kinsley, C. Discussion of series dynamo-electric machines. 8:7	"
Nipher, F. E. (Electric lights). 3:4	2.00
— (Electric lights). 4:1	"
— (Mechanical influence of design). 4:1	"
— (On applying muscular work). 3:4	"
— On the output of the non-condensing steam engine, as a function of speed and pressure. 5:3-4	4.00
Schmidt, A. Iron manufacture in Missouri. 3:3	2.00
Scott, C. M. On the improvement of the western rivers (with plate). 4:1	"
Thurman, John S. Industrial uses of compressed air). 11:11	.25
Woodward, C. M. The efficiency of gearing under friction. 8:6	"

Entomology. — See Biology.

Ethics.

Sheldon, Walter L. A bird's-eye view of the literature of ethical science since the time of Charles Darwin. 13:4	.75
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Ethnology. — See Archaeology.

Folk-lore. — See Language.

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Geology, palaeontology.

Broadhead, G. C. Age of our porphyries.	3:3	\$2.00
— (Bones of large animals in drift, etc.).	3:1	"
— Carboniferous rocks of eastern Kansas.	4:3	"
— Coal measures in Missouri.	2:2	"
— (Fossil horse in Missouri).	3:1	"
— Missouri geological surveys, historical memoir.	4:4	"
— On the well at the Insane Asylum, St. Louis County. Pl. I.	3:2	"
Emmons, E. (Geology of North Carolina).	1:2*	
Engelmann, G. (Geological and botanical notes on the Rocky mountains.	3:2	"
— (Hot springs of Colorado).	4:3	"
— (Labeling specimens).	1:3	"
— (Petritied wood from near Pike's Peak).	3:1	"
— (<i>Sigillaria</i> marks on Illinois coal).	3:2	"
Engelmann, H. (Lower Carboniferous in Southern Illinois).	2:1	"
Evans, J., and B. F. Shumard. On some new species of fossils from the Cretaceous formation of Nebraska Territory.	1:1*	
Hambach, G. Contribution to the anatomy of the genus <i>Pentremites</i> , with description of new species. Pls. A. B.	4:1	"
— Description of new Palaeozoic Echinodermata. Pls. C, D.	4:3	"
— Notes about the structure and classification of <i>Pentremites</i> .	4:3	"
— (<i>Pionocrinus</i> found at St. Charles, Mo.).	4:4	"
— Revision of the Blastoideae, with a proposed new classification and description of new species. Pls. I-VI.	13:1	1.50
Harrison, E. Age of the Porphyry hills of South-east Missouri.	2:3	2.00
Hawn, F. The Trials of Kansas.	1:2*	
— See Swallow.		
Heilprin, A. (Glacial phenomena in Greeland)	7:20	.50
Hermann, E. A. (Fossil bison femur).	10:11	"
Holmes, N. (Loess and Drift, in connection with the Big mound at St. Louis)	2:3	2.00
— (Mastodon and man).	1:2*	
Keyes, C. R. Relations of the Devonian and Carboniferous in the upper Mississippi Valley.	7:15	.25
Kirchner, W. C. G. Contribution to the fossil flora of Florrisant, Colorado. Pls. XI-XV.	8:9	.50
Klem, Mary J. The development of <i>Agaricocrinus</i> . Pls. XVIII-XXI.	10:7	"
— A revision of the Palaeozoic Palaeëchinoidae, with a synopsis of all known species. Pls. I-VI.	14:1	1.00
Koch, A. C. (Bones of mastodon).	1:2*	
— (Explorations in Mississippi and Arkansas).	1:1*	
— Mastodon remains, in the State of Missouri, together with evidence of the existence of man contemporaneously with the mastodon.	1:1*	

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Linton, M. L. (Impression in sandstone). 1 : 1*	
Litton, A. Belcher & Brother's Artesian Well. Pl. V. 1 : 1*	
Lyon, S. A. Descriptions of four new species of <i>Blastoidea</i> , from the Subcarboniferous rocks of Kentucky. Pl. XX. 1 : 4	"
— Remarks on the stratigraphical arrangement of the rocks of Kentucky, from the <i>Catenipora escharoides</i> horizon of the upper Silurian period, in Jefferson County, to the base of the productive coal measures in the eastern edge of Hancock County. 1 : 4	"
Marcou, J. (Age of geological formations). 1 : 3	"
— Notes on the geology of Kansas and Nebraska. 1 : 4	"
— (On the Dyas in Nebraska). 2 : 3	"
— On the <i>Terebratula Mormonii</i> . 3 : 2	"
McAdams, W. (Drift fossils at Jerseyville, Ill.). 3 : 2	"
— (Drift fossils from Illinois). 4 : 3	"
McGee, W. J. Notes on the geology of Macon county, Missouri. Pl. IX. 5 : 1-2	4.00
Norwood, J. G. (Rocks of Illinois). 1 : 2*	
Potter, W. B. (Geological relations of the ore deposits of Missouri). 4 : 4	2.00
Prout, H. A. Description of a new species of <i>Productus</i> , from the Carboniferous limestone of St. Louis. Pl. II. 1 : 1*	
Description of a new species of Bryozoa from Texas and New Mexico, collected by Dr. George G. Shumard, geologist of the U. S. expedition for boring Artesian wells along the 32d Parallel, under the direction of Capt. John Pope, U. S. Corps Top. Eng. 1 : 2*	
— Descriptions of new species of Bryozoa. 2 : 2	"
— First of a series of descriptions of Carboniferous Bryozoa 1 : 2*	
Second series of descriptions of Bryozoa from Palaeozoic rocks of the western States and Territories. 1 : 2*	
Third series of descriptions of Bryozoa from the Palaeozoic rocks of the western States and Territories. Pls. XV-XVIII. 1 : 3.	"
— Fourth series of descriptions of Bryozoa from the Palaeozoic rocks of the western States and Territories. 1 : 4	"
— (Fossil tooth from Abingdon, Va.). 1 : 4	"
— New Bryozoa, mostly from the Falls of the Ohio). 1 : 3	"
Schmidt, A. On the form and origin of the lead and zinc deposits of Southwestern Missouri. 3 : 2	"
Shumard, B. F. (Base of Cretaceous in northern Texas). 1 : 4	"
— A catalogue of Palaeozoic fossils of North America. 2 : 2	"
— (Coal measures in northern Texas). 1 : 4	"
— Cretaceous formation of Texas). 2 : 1	"
— Description of a new fossil Crinoidea from the Palaeozoic rocks of the western and southern portions of the United States. Pl. I. 1 : 1*	

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- Shumard, B. F. Descriptions of five new species of Gasteropoda from the Coal measures, and a Brachiopod from the Potsdam sandstone of Texas. 1 : 4 \$2.00
- Descriptions of new Cretaceous fossils from Texas. 1 : 4 “
- Descriptions of new fossils from the Tertiary formation of Oregon and Washington territories and the Cretaceous of Vancouver's Island, collected by Dr. Jno. Evans, U. S. Geologist, under instructions from the Department of the Interior. 1 : 2* “
- Descriptions of New Palaeozoic fossils. 2 : 1 “
- Descriptions of new species of Blastoidea from the Palaeozoic rocks of the western States, with some observations on the structure of the summit of the genus *Pentremites*. Pl. IX. 1 : 2* “
- (Discovery in Texas of dicotyledonous leaves in the Cretaceous strata, and the existence of an extensive Miocene formation). 2 : 1 “
- (Fossils from the white limestone of the Guadalupe mountains, N. M.). 1 : 2* “
- (Geological map of Texas). 2 : 1 “
- (Lower Silurian in Texas). 1 : 4 “
- Notice of fossils from the Permian strata of Texas and New Mexico, obtained by the United States expedition under Capt. John Pope for boring Artesian wells along the 32d Paral., with descriptions of new species from these strata and the Coal measures of that region. Pl. XI. 1 : 3 “
- Notice of new fossils from the Permian strata of New Mexico and Texas, collected by Dr. George G. Shumard, Geologist of the United States Government expedition for obtaining water by means of Artesian wells along the 32d Parallel, under the direction of Capt. John Pope, U. S. Corps Top. Eng. 1 : 2* “
- Notice of some new and imperfectly known fossils from the Primordial zone (Potsdam sandstone and Calciferous sand group of Wisconsin and Missouri). 2 : 1 “
- Observations on the geology of the County of Ste. Geneviève, being an extract from a report made to the Missouri Geological Survey, in 1859. 1 : 3 “
- Observations upon the Cretaceous strata of Texas. 1 : 4 “
- (Tertiary in Texas). 1 : 4 “
- (Vertical section of the Silurian strata of Cape Girardeau county, Mo.). 2 : 1 “
- See Evans.
- and G. C. Swallow. Descriptions of new fossils from the Coal measures of Missouri and Kansas. 1 : 2 *
- Shumard, G. G. (Coal measures). 1 : 2*
- Geological structure of the “Jornada del Muerto”, New Mexico. 1 : 3 “

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Geology, palaeontology — Continued.

Shumard, G. G. Observations on the geological formations of the country between the Rio Pecos and the Rio Grande, in New Mexico, near the line of the 32d Parallel. 1:2*	
Spencer, J. W. Niagara fossils. Pls. I-X. 4:4	\$2.00
Swallow, G. C. Descriptions of new fossils from the Carboniferous and Devonian rocks of Missouri. 1:4	"
— Descriptions of some new fossils from the Carboniferous and Devonian rocks of Missouri. 2:1	"
— (Fossils from Kansas). 1:2*	
— Mr. Meek's notes on my preliminary report of the geology of Kansas, as edited by Dr. Hayden. 2:3	"
— Notice of remains of the horse in the altered Drift of Kansas. 2:2	"
— Some new varieties of <i>Spirifer lineatus</i> , Martin; <i>Spirifer cameratus</i> , Morton; <i>Spirifer Kentuckensis</i> , Shumard; <i>Spirifer Leidyi</i> , Norwood and Pratten; <i>Spirifer increbescens</i> , Hall; and <i>Spirifer Keokuk</i> , Hall. 2:2	"
— See B. F. Shumard.	
— and F. Hawn. The rocks of Kansas. 1:2*	
Todd, C. A. (Artesian wells at Jacksonville, Fla.). 5:1-2	4.00
Vodges, A. W. Notes on Palaeozoic Crustaceae, No. 1. On some new <i>Sedalia Trilobites</i> . Pl. XV. 5:3-4	"
Weller, S. Kinderhook faunal studies. I. The fauna of the Vermicular sandstone at Northview, Webster County, Missouri. Pls. II-VI. 9:2	.50
— Kinderhook faunal studies. II. The fauna of the <i>Chonopectus</i> sandstone at Burlington, Ia. Pls. I-IX. 10:3	"
— Kinderhook faunal studies. III. The faunas of beds No. 3 to No. 7 at Burlington, Iowa. Pls. XII-XX. 11:9	1.00
Wheeler, H. A. (An account of the active volcano Colima). 13:9	.25
— (Granite boulders near Hematite, Mo., showing the polishing action of ice). 12:10	"
— Note on the glacial drift in St. Louis. 7:3	"
— (Some notes on the glacial drift). 6:18	.50
— (Temperature of deep mines). 4:4	2.00
Worthen, A. H. Notice of a new species of <i>Platycrinus</i> and other fossils, from the mountain limestone of Illinois and Iowa. 1:4	"
— Review of some points in Dr. B. F. Shumard's report on the geology of Ste. Geneviève county, Mo.). 1:4	"

Language folk-lore, etc.

de Coruna y Colludo, A. Zoque — the language spoken at Santa Maria di Chimalapa, and at San Miguel and Tierra Blanca, in the State of Chiapas, Mexico. 4:1	"
Dacus, J. A. — Translator. — See A. deCoruna y Colludo	
Gatschet, A. S. Tchekilli's Kasi'hta legend in the Creek and Hitchiti languages, with a critical commentary and full glossaries to both texts. 5:1-2	4.00

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Language, folk-lore, etc.—Continued.

Holmes, N. (Sanskrit and Nahuatl). 4:1 \$2.00

Inscriptions.

McMasters, S. Y. (Coin from Alton, Ill.). 1:3 “

Mitchell, O. M. (Inscription on Leeds mummy-coffin). 1:4 “

Seyffarth, F. (An ancient Assyrian brick). 1:1*

— Egyptian theology, according to a Paris mummy-coffin.
Pls. I-II. 4:1 “

— The hieroglyphic tablet of Pompeium grammatically translated and commented on (with 32 lithographed pages of symbol and commentary). 4:2 “

— Notice of a burnt brick from the ruins of Nineveh. Pl. IV. 1:1*

— A remarkable Papyrus-scroll, written in the Hieratic character about 1050 B. C. (with 16 lithographed pages of inscription and annotations). 1:4 “

— A remarkable seal in Dr. Abbott's museum at New York. 1:2*

Stone, G. A. (Scarabaeus tablet and Papyrus scroll). 1:4 “

Machinery. — See Engineering.

Manufactures. — See Engineering.

Mathematics.

Chessin, A. S. On the motion of gyroscopes. 12:3 .45

— On some relations between Bessel functions of the first and of the second kind. 12:9 .25

— Strains and stresses in a rotating thin circular disc. 13:9 “

— On the true potential of the force of gravity. 12:1 “

Engler, E. A. Geometrical constructions for cutting from a cone of revolution plane sections (a) of given eccentricity, (b) of given latus rectum. 6:8 “

— A geometrical construction for finding the foci of the sections of a cone of revolution. 6:2 “

— The normal to a conic section. 8:8 “

Kinealy, J. H. A spiral on a torus. Pls. I-II. 5:1-2 4.00

Nipher, F. E. Application of the equations for gaseous nebulae to our own planetary system. 14:8 .50

— (Device for the projection of pendulum figures). 4:1 2.00

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— On the predetermination of the speed of the trotting horse. 13:2 .25

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— On certain properties of a field of force due to a single mass. 5:3-4 4.00

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Mathematics — Continued.

Nipher, F. E. (On the distribution of errors in numbers written from memory). 3:3	\$2.00
— On temperatures in gaseous nebulae. 9:7	.25
— (Thermodynamic surface of steam). 4:3	2.00
— (The curve of speed of the trotting horse). 13:9	.25
Poats, T. G. Isogonic transformation. 11:3	.15
Pritchett, H. A. A formula for predicting the population of the United States. 5:3-4	4.00
Roever, W. H. (Brilliant points and loci of brilliant points). Pl. A. 10:11	.50
— Geometrical construction of the lines of force proceeding from (a) two parallel electrified lines, (b) two electrified points. 7:9	"
— Geometrical properties of the lines of force proceeding from (a) a system consisting of an electrified plane and an electrified line parallel to the plane, (b) a system consisting of an electrified plane and an electrified point. 7:12	"
Seddon, J. A. (Hydraulic flow equation). 5:1-2	4.00
— (Resistance to flow in hydraulics). 8:12	.25
Woodward, C. M. (An easy method for determining the length of a generation). 11:11	"
— (Formulae of Herbart). 7:20	.50
— The relations of internal pressure, volume, and temperature of an isolated mass of perfect gas of uniform temperature and an equilibrium under the action of its own forces. 9:3	.25

Medicine, sanitation.

Holman, M. L. (The purification of St. Louis water). 8:12	"
Kirchner, W. C. G. (Bacteriological examination of river water). 14:8	.50
Leete, J. M. (Some facts concerning past visitations of cholera). 4:4	2.00
Potter, W. B. (Sewage and river water). 4:4	"
Ravold, A. (<i>Bacillus coli-communis</i> in fish and reptiles). 10:11	.50
— (Diphtheria antitoxine). 7:20	"
— (Hiss test for typhoid <i>Bacillus</i>). 8:12	.25
— (On the typhoid <i>Bacillus</i> found in the Mississippi river water). 6:18	.50
— (Placental infection in meningitis). 9:9	.25
— (Tuberculosis). 8:12	"
— (Widal's typhoid test). 7:20	.50
Van Ornum, J. L. (The cleansing of Cienfuegos). 10:11	"

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Meteorology.

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— The mean and extreme daily temperature in St. Louis during forty-seven years, as calculated from daily observations (with three charts). 4:3	"
— (Meteorological notes). 1:3; 1:4; 2:1; 2:2; 2:3; 3:1; 3:2; 3:3; 3:4; 4:1; 4:2; 4:3 @ \$2.00 each.	
— (Meteorological observations at St. Louis for the year 1859). 1:4.	
— Meteorological table for 1859, St. Louis, Mo. 1:4	"
— Meteorological table for 1860, St. Louis, Mo. 2:1	"
— Meteorological table for 1861, St. Louis, Mo. 2:1	"
— Meteorological table for 1862, St. Louis, Mo. 2:1	"
— Meteorological table for 1863, St. Louis, Mo. 2:2	"
— Meteorological table for 1864, St. Louis, Mo. 2:2	"
— Meteorological table for 1865, St. Louis, Mo. 2:2	"
— Meteorological table for 1866, St. Louis, Mo. 2:3	"
— Meteorological table for 1867, St. Louis, Mo. 2:3	"
— (Prevalence of tornadoes). 4:1	"
— (Rains in St. Louis from 1838-1865). 2:2	"
— (Singular series of thunder storms). 2:1	"
— (Snowstorm of Oct. 25, 1862). 2:1	"
— (Unusually violent storm). 2:1	"
Engelmann, G., and A. Wislizenus. Meteorological observations for 1856, made in St. Louis. 1:1*	
Engler, E. A. Auroral phenomena on the evening of Sept. 12, 1881. 4:2	"
Frankenfield, H. C. (Hot and cold waves). 7:20	.50
Hayes, R. (Hail storm of May 19, 1873). 3:2	2.00
— (Tornado of March 30, 1872). 3:1	"
McLellan. (Lightning and trees). 3:2	"
McPheeters, W. M. (Lightning effect upon trees). 3:1	"
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— (The establishment of a Missouri weather service). 3:4	"
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— (Meteorological notes). 5:3-4	4.00
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— Magnetic survey of Missouri. Fifth annual report. 4:3	"
— (Rain-gauges and wind). 5:1-2	4.00
— Report on Missouri rainfall, with averages for ten years ending December, 1887 (with nine plates). 5:3-4	"

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— Winter temperatures.	5:3-4	4.00
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Norton, J. B. S. (Effects on trees of tornado of May, 1896)	7:20	.50
Parry, C. C. On the character of the persistent snow-accumulations in the Rocky mountains, Lat. 40°-41° North, and certain features pertaining to the alpine flora.	2:3	2.00
Sawyer, A. On climatic change in Illinois — its cause.	3:2-3	4.00
von Schrenk, H. A severe sleet-storm. Pls. X-XI.	10:5	.25
— The trees of St. Louis as influenced by the tornado of 1896. Pls. III-IX.	8:2	.50
Smith, S. An hypothesis concerning the formation of hail.	1:2*	
Wadsworth, J. L. R., and F. E. Nipher. The tornado of April 14, 1879 (with three charts).	4:1	2.00
Wislizenus, A. Atmospheric electricity. Pls. I-III.	2:1	"
	Pls. XII-XIII.	2:2
	3:1	"
— (Lightning and trees).	3:2	"
— (Meteorological notes).	3:1	"
— Meteorological observations for 1857 made in St. Louis.	1:2*	
— Meteorological observations made in 1861, in St. Louis, Mo. Pl. II.	2:1	"
— Prevailing winds in St. Louis, Mo.	1:2*	
— Yearly report of atmospheric electricity, temperature and humidity, from observations made at St. Louis, Mo.	2:2	"
— Yearly report of atmospheric electricity, temperature, and humidity, from observations made at St. Louis, Mo.	3:1	"
—, and G. Engelmann. Meteorological table for 1858, made from observations in St. Louis.	1:3	"
— See G. Engelmann.		

Earthquakes.

Hayes, R. Catalogue of earthquakes for 1871.	3:1	"
— Catalogue of earthquakes for the year 1872-3.	3:2	"
Nipher, F. E. (Earthquakes of November 18, 1878).	4:1	"

Mineralogy.

Broadhead, G. C. (Mineralogy of Cole County, Mo.).	3:1	"
— Occurrence of bitumen in Missouri.	3:2	"
Engelmann, H. Topaz in Utah.	2:1	"
Gage, J. R. On the occurrence of iron ores in Missouri.	3:1	"
Hilgard, E. W. (The existence of gold in the conglomerate of Madison County, Mo.).	2:1	"
Leonhard, A. V. Notes on the mineralogy of Missouri.	4:3	"
— On the occurrence of Millerite in Missouri (with 2 plates).	4:3	"

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Mineralogy — Continued.

Leonhard, A. V. (Pseudomorphs). 4:2	\$2.00
Owen, R. (Rock salt, near New Iberia, La.) 2:2	"
Sander, E. (Gold at Golden City, Ark.) 5:1-2	4.00
— (Rock salt from Vermillion bay, La.) 2:3	2.00
Sharwood, W. (East Bradford Allanite). 1:4	"
Shumard, B. F. (Oil springs in Ray and Carroll counties, Mo.) 2:2	"
Wheeler, H. A. (Bituminous coal from Lower Silurian). 4:4	"
— (New locality for Pickeringite). 4:4	"
— Note on the occurrence of blende in lignite. 7:4	.25
— Recent additions to the mineralogy of Missouri. 7:5	.50

Meteorites.

Broadhead, G. C. (Meteor of December 9, 1875). 3:3	2.00
— The meteor of December 27, 1875. 3:3	"
— (Meteor of January 3, 1877). 3:4	"
Clark, M. L. (Meteorite near mouth of Osage river). 1:4	"
Hurichs, G. (Meteor and meteorites of Forest City, Ia.) 5:3-4	4.00
Holmes, N. (Abstract of Haidinger on meteorites). 2:1	2.00
— (Meteoric iron found in Nebraska). Pl. XXI. 1:4	"
— Prout, H. A. (Nebraska meteorite). 2:1	"
Shumard, B. F. Notice of meteoric iron from Texas. 1:4	"
— (St. Louis meteorite). 2:1	"

Morphology. — See Biology.

Obituaries. — See Biographic notices.

Palaeontology. — See Geology.

Philosophy.

Wislizenus, A. Thoughts on matter and force. 2:2	"
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Photography.

Nipher, F. E. (Electricity and photographic plates). 7:20.	.50
— (Electricity and photographic plates). 10:11	"
— On certain properties of light-struck photographic plates. Pls. XII-XVII. 10:6	"
— (Negatives printed by contact from a lantern slide or positive picture, by the light of a 300 incandescent lamp). 11:11	.25
— (Positive photography). 10:11	.50
11:11	.25
— Positive photography with special reference to eclipse work. 10:9	.10
— The relations of direct to reversed photographic pictures. Pls. II-X. 11:4	.75
— (Zero photographic plate). 10:11	.50

Physics.

Chessin, A. S. (The harmony of tone and color). 11:11	.25
Curtman, C. O. (Light in vacuo). 3:1	2.00
Eads, J. B. (Explanation of rotoscope). 1:1*	

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Physics — Continued.

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— (A cheap recording instrument for Robinson's anemometer and the anemonescope). 3:4	"
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— (Determination of the latent heat of vaporization). 6:18	"
— (Determination of the constant for a galvanometer). 4:3	2.00
— (Distortion of a magnetic field by means of explosions). 13:9	.25
— (Experiments in binocular vision). 3:4	2.00
— (Experiments with colored glass). 3:3	"
— (Fire-alarm apparatus). 3:4	"
— (Formation of vortex in water). 4:2	"
— The frictional effect of railway trains upon the air. 7:20	.50
10:10	.25
— (Kapp's method of prediction for dynamos). 5:1-2	4.00
— The law of contraction of gaseous nebulae. 13:5	.25
— The law of minimum deviation of light by a prism. 7:4	"
— A method of measuring the pressure at any point on a structure, due to wind blowing against that structure. Pls. I-II. 8:1	"
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— On gravitation in gaseous nebulae. 9:4	.25
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— Seddon, J. A. (Intensity of light). 5:3-4	4.00
Roever, Wm. H. (The effect of the earth's rotation upon falling bodies). 11:11	.25

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— Appendix to Dr. Parry's Notice of some additional observations on the physiography of the Rocky mountains. 2:2	"
— Elevation of St. Louis above the Gulf of Mexico. 1:4	"
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Nipher, F. E. (Map of New Madrid county, Mo). 4:3	"
Parry, C. C. Account of the passage through the Great canyon of the Colorado of the West, from above the mouth of Green river to the head of steamboat navigation at Collville, in the months of August and September, 1867, by James White. 2:3	"
— Ascent of Pike's Peak, July 1, 1862. 2:1	"
— Notice on some additional observations on the physiography of the Rocky mountains, made during the summer of 1864. 2:2	"
Sawyer, A. (On the origin of ravines in the prairie). 3:2	"
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Mississippi and Missouri rivers.

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— The variation in the stage of the Mississippi river at St. Louis. 2:2	"
Fay, T. (Stages of Mississippi at Market St.). 3:3	"
Holmes, N. (Delta of the Mississippi). 3:2	"
Pratt, G. C. (Stage of the Missouri river). 4:1	"
Scott, C. M. (The formation of the banks of the lower Mississippi). 4:1	"
Warren, G. K. (Mississippi river). 2:1	"

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Sanitation. — See Medicine.

Sociology. — See Education.

Zoology. — See Biology.

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