

INDEX.

| | PAGE. |
|--|---------|
| Account of the geological formations along the New Albany and St. Louis Railway..... | 137-145 |
| Agriculture of Daviess county..... | 78 |
| Agriculture of Martin county..... | 111 |
| Agriculture of Sullivan county..... | 236 |
| Aikman's coal—analysis of..... | 39 |
| Alluvial bottoms of Sullivan county..... | 228 |
| Analyses of coals—tables of | 182-186 |
| Analyses of iron ores—table of..... | 187 |
| Analysis of Aikman's coal..... | 39 |
| Analysis of Alva Clark's coal..... | 54 |
| Analysis of Baker's coal..... | 86 |
| Analysis of Barr and Bro's coal..... | 147 |
| Analysis of Barker's—W. S.—coal..... | 151 |
| Analysis of Brashear and Howard's coal..... | 150 |
| Analysis of Burk's coal..... | 14 |
| Analysis of Chamber's coal..... | 13 |
| Analysis of Crosley's coal..... | 148 |
| Analysis of coal from near Buffalo..... | 152 |
| Analysis of Dick's coal..... | 14 |
| Analysis of Dutch Bank coal..... | 39 |
| Analysis of Gregory's coal..... | 51 |
| Analysis of H. K. Wilson's coal..... | 16 |
| Analysis of H. Wilson's coal..... | 16 |
| Analysis of T. Wilson's coal..... | 40 |
| Analysis of Hanna's coal..... | 18 |
| Analysis of Horn and Co.'s coal..... | 86 |
| Analysis of Hutz's coal..... | 92 |
| Analysis of Locust Grove coal..... | 158 |
| Analysis of McCord's coal..... | 51 |
| Analysis of Munson's Ridge coal..... | 90 |
| Analysis of O'Brien's coal..... | 52 |
| Analysis of Pigg's coal | 15 |
| Analysis of Pioneer Shaft coal..... | 17 |
| Analysis of Raymond's coal..... | 41 |

| | PAGE. |
|---|----------|
| Analysis of St. John's coal..... | 15 |
| Analysis of Spink, Cable & Co's coal..... | 39 |
| Analysis of Sampson's Hill coal..... | 98, 102 |
| Analysis of Staab's coal..... | 153 |
| Analysis of Sulphur Spring coal..... | 40 |
| Analysis of Standard Shaft coal..... | 17 |
| Analysis of Stocking's coal..... | 151 |
| Analysis of Turner's coal..... | 87 |
| Analysis of Willow Valley coal..... | 90 |
| Analysis of Wood's coal..... | 152 |
| Analyses of iron ores in Martin county..... | 98 |
| Analysis of mineral water—Daggy spring..... | 121 |
| Analysis of mineral water—Dew Drop spring..... | 122 |
| Analysis of mineral water—French Lick spring..... | 114 |
| Analysis of mineral water—Indian spring..... | 108 |
| Analysis of mineral water—West Baden spring..... | 116 |
| Anderson Valley Paint Mining Company..... | 142 |
| Antiquities of Martin county..... | 110 |
| Antiquities of Sullivan county..... | 237 |
| Apprau Ford..... | 43 |
| Area of coal field in Daviess county | 75 |
| Area of coal field in Martin county..... | 103 |
| Area of coal field in Sullivan county..... | 231 |
| Area of coal field in Indiana..... | 176 |
| Artesian well at Terre Haute—section of..... | 127-134 |
| "Azatlan—Fort "..... | 238 |
| B | |
| Banholzer's shaft—section at | 217 |
| Barr and Bro's coal—analysis of..... | 147 |
| Barker's coal—analysis of..... | 151 |
| Baker's coal—analysis of..... | 86 |
| Barnes' bank—section at..... | 220 |
| Barnes Ladd section..... | 201 |
| Bath House at Indian Springs—view of..... | 107 |
| Billings' land—section of bore on | 69 |
| Blast Furnaces—views of..... | 124, 163 |
| Block coal on locomotives..... | 177 |
| Botany of Jefferson county..... | 241 |
| Botany of Jefferson county—index to..... | 289 |
| Brazil Furnace..... | 7 |
| Brashear and Howard's coal—analysis of..... | 150 |
| Bretts bore—section of..... | 32 |
| Buffalo coal—analysis of..... | 152 |
| Burk's coal—analysis of..... | 14 |
| Building stone in Daviess county..... | 77 |
| Building stone in Martin county..... | 104 |

| | PAGE. |
|---|---|
| Building stone in Putnam county..... | 119 |
| Building stone in Sullivan county..... | 199 |
| | |
| C arbon—Clay county..... | 8 |
| Carbon shaft—section of..... | 9 |
| Catalogue of plants of Jefferson county..... | 241 |
| Catalogue of plants—index to..... | 289 |
| Catalogue of trees in Daviess county..... | 78 |
| Cave at Indian Springs—view of..... | 13 |
| Cave—Wyandotte..... | 139 |
| Chalybeate Springs, Sullivan county..... | 200 |
| Chambers' coal—analysis of..... | 13 |
| Clark's—section at..... | 54 |
| Clark's coal—analysis of..... | 54 |
| Clark's Station—bore at..... | 59 |
| Clay Coal Company | 9 |
| Clay in Daviess county :..... | 77 |
| Clay in Martin county | 105 |
| Clay in Sullivan county..... | 234 |
| Coal at High Rock..... | 73 |
| Coal at Hartford..... | 139 |
| Coal at Hart's mine..... | 162 |
| Coal at Fairbanks' | 206 |
| Coal at Martin's | 144 |
| Coal at Massey's..... | 144 |
| Coal at Dr. Posey's..... | 144 |
| Coal at Spears' | 160 |
| Coal in Pike county..... | 143 |
| Coal in Spencer county | 146 |
| Coal in Sullivan county..... | 229 |
| Coal on Crooked Creek..... | 149 |
| Coal on locomotives—Block..... | 177 |
| Coal measure fossils | 37, 42, 74, 82, 88, 210, 212, 214, 216, 225 |
| Coal measures of Daviess county | 22 |
| Coal measures of Martin county..... | 83 |
| Coal mining in Sullivan county..... | 233 |
| Coals—Tables of Analyses of,..... | 182-186 |
| Connected section of coal measures in Daviess county..... | 34-35 |
| Connected section of coal measures in Martin county | 84 |
| Connected section of coal measures in Sullivan county..... | 232 |
| Connected section of coal measures in Indiana and Illinois..... | 168 |
| County—Daviess..... | 20 |
| County—Martin | 81 |
| County—Pike | 143 |
| County—Putnam | 118 |
| County—Spencer | 145 |

| | PAGE. |
|---|-------|
| County—Sullivan | 192 |
| County—Warrick..... | 155 |
| County—Vigo | 124 |
| Collett's report on Sullivan county | 191 |
| Crim's coal | 87 |
| Critchlow's coal | 70 |
| Grosby's coal—analysis of..... | 148 |
| | |
| D aggy Spring—analysis of.. | 121 |
| Dant's land—section of bore on..... | 64 |
| Daviess county—agriculture of | 78 |
| Daviess county—building stone of | 77 |
| Daviess county—connected section of..... | 34 |
| Daviess county—clay | 77 |
| Daviess county—drift of | 75 |
| Daviess county—economical geology of..... | 75 |
| Daviess county—geology of | 22 |
| Daviess county—iron ores of | 76 |
| Daviess county—loess of..... | 75 |
| Daviess county—list of trees of..... | 78 |
| Daviess county—ochre of..... | 77 |
| Daviess county—report on | 20 |
| Daviess county—quaternary | 75 |
| Daviess county—timber of | 78 |
| Daviess county—water of | 77 |
| Dew Drop Spring—analysis of | 122 |
| De Tar's—section at..... | 143 |
| Diagram No. 1—description of | 27 |
| Diagram No. 2—description of | 31 |
| Diamond Spring..... | 123 |
| Dick's bank—section at..... | 203 |
| Dick's shaft—section of..... | 233 |
| Dick's shaft | 233 |
| Dick's coal—analysis of | 14 |
| Doherty's land—section of bore on..... | 73 |
| Drift of Daviess county..... | 75 |
| Drift of Martin county | 103 |
| Drift of Sullivan county..... | 227 |
| Dutch bank coal—analysis of | 39 |
| | |
| E conomical geology of Daviess county..... | 75 |
| Economical geology of Martin county | 103 |
| Economical geology of Sullivan county..... | 228 |
| Edwardsport—section at..... | 42 |

| | PAGE. |
|---|------------|
| F airbanks, Sullivan county—coal at..... | 206 |
| Ferree's quarry—section at | 195 |
| "Fort Azatlan," Sullivan county | 238 |
| Forts of Sullivan county—stockade..... | 228 |
| Fossils..... 37, 42, 74, 82, 88, 210, 212, 214, 216, 225 | |
| French Lick Springs | 112 |
| French Lick Springs—analysis of..... | 114 |
| Fruit of Daviess county | 78 |
| Fruit of Martin county | 111 |
| Fruit of Sullivan county..... | 236 |
| | |
| G arlick & Collins..... | 9 |
| Geography of Daviess county | 21 |
| Geography of Martin county..... | 81 |
| Geography of Sullivan county..... | 191 |
| Geology of Daviess county..... | 22 |
| Geology of Martin county..... | 81 |
| Geology of Sullivan county..... | 191 |
| Geological formations along the N. A. & St. L. Railway..... | 137-145 |
| Gravel, Sullivan county | 235 |
| Greencastle—building stone of | 119 |
| Gregory's coal—analysis of | 51 |
| Gritstone of Martin county..... | 105 |
| | |
| H anna's standard shaft—section of | 216 |
| Hanna's coal—analysis of..... | 18 |
| Hartford coal | 139 |
| Harris & Moots—section of bore at..... | 60, 61, 63 |
| Hart's land—section of bore on..... | 66 |
| Hart's coal mine..... | 162 |
| Hay's bore—section of..... | 56 |
| High Rock coal | 73 |
| High Rock—section at | 74 |
| Hitt's bore—section of..... | 58 |
| Horn & Co.'s coal- analysis of..... | 86 |
| Hotel at Indian Springs—view of..... | 81 |
| Hotel at West Baden Springs—view of..... | 112 |
| Howard's Mill—section at..... | 71 |
| Hunt, Dr. T. Sterry—on oil wells of T. H..... | 135 |
| Hutz's coal—analysis of | 92 |
| Hyatt's bore—sectioh of..... | 29 |
| | |
| I ndex to catalogue of plants..... | 289 |
| Indiana and Illinois—connected section of coals of..... | 168 |

| | PAGE. |
|---|--------|
| Indiana Mineral Railway..... | 7 |
| Indiana North and South Railway..... | 7 |
| Indian springs..... | 106 |
| Introduction | 5 |
| Iron ore in Daviess county..... | 76 |
| Iron ore in Martin county..... | 97-104 |
| Iron ore in Martin county—analysis of | 98-102 |
| Iron ore—table of analyses of | 187 |

Jefferson county—catalogue of plants of..... 289
 “Jug Rock”—description of..... 83
 “Jug Rock”—view of..... Frontispiece

Kennedy's land—section of bore on..... 65-68
 “Kitchen Middings,” Martin county 111
 “Knobs,” at New Albany..... 138
 “Knob” coal—section of..... 146

Lafayette blast furnace—view of 163
 “Lady Washington” sandstone..... 145
 Lamb's coal..... 52
 La Motte well—section of 209
 Lesquereux's connected section of coal measures in Indiana..... 168
 Lewisport seam—section of..... 149
 Lick Fork—section on..... 223
 Lime—Martin county 105
 Limestone—Sullivan county 234
 List of coal mines on the I. & St. L. R. R..... 10
 List of coal mines on the T. H. & I. R. R..... 10
 Locomotives—block coal on..... 177
 Locust Grove coal—analysis of..... 158
 Loess in Daviess county 75
 Loess in Sullivan county..... 226
 Lower carboniferous of Martin county..... 81

Martin county—agriculture of..... 111
 Martin county—antiquities of 110
 Martin county—building stone 104
 Martin county—Coal measures of 83
 Martin county—connected section of coal measures of..... 84
 Martin county—economical geology of..... 103
 Martin county—grit stone of 105
 Martin county—geography of 81

| | PAGE. |
|--|----------|
| Martin county—iron ore of..... | 97-104 |
| Martin county—lower carboniferous of | 81 |
| Martin county—lime of..... | 105 |
| Martin county—mineral paints of..... | 105 |
| Martin county—mineral waters of..... | 106 |
| Martin county—potters' clay of..... | 105 |
| Martin county—quaternary of..... | 103 |
| Martin county—timber of..... | 111 |
| Martin's coal..... | 144 |
| Mahan and Steinett farms—section on..... | 219 |
| Mammoth and mastodon bones..... | 103 |
| Massey's coal—G. W..... | 144 |
| McCord's coal—analysis of..... | 51 |
| McCord's—section at | 48 |
| Merom Hill—section at | 196 |
| Mills of Sullivan county..... | 235 |
| Mineral paints | 105, 142 |
| Millstone grit of Martin county..... | 82 |
| Mineral Railway—Indiana | 7 |
| Mineral waters, Martin county..... | 106 |
| Mineral waters, Putnam county..... | 121 |
| Mineral waters, Orange county | 112-116 |
| Mining in Sullivan county..... | 233, 234 |
| Modified drift..... | 227 |
| Montgomery's land—section of bore on..... | 62 |
| Montgomery—section at..... | 53 |
| Morrison, Woodruff and Co's mine..... | 10 |
| Mounds of Sullivan county | 237 |
| Munson's Ridge coal—analysis of..... | 90 |

| | |
|--|---------|
| N arrows—section at the..... | 204 |
| New Albany and St. Louis Railway | 137-145 |
| Newburg—section at | 156-157 |
| North and South Railway..... | 7 |

| | |
|--|---------|
| O 'Brien's coal—analysis of..... | 52 |
| Ochre in Daviess county..... | 77 |
| Ohio and Indiana Mining Company..... | 233 |
| Oil well at Sullivan—section of..... | 193 |
| Oil well at Terre Haute—section of..... | 127-134 |
| Oil wells of Terre Haute, by T. Sterry Hunt..... | 135 |
| Ores of Sullivan county..... | 234 |
| Ormsby and Co.'s mine..... | 10 |

| | PAGE. |
|--|----------|
| P aints—mineral..... | 105, 142 |
| Paleozoic Geology of Sullivan county..... | 192 |
| Peck's bore—section of..... | 28 |
| Pentramites in Martin county..... | 81 |
| Pigg's bank—section at..... | 221 |
| Pigg's coal—analysis of..... | 15 |
| Pioneer shaft—section at..... | 212 |
| Pioneer shaft coal—analysis of..... | 17 |
| Pioneer shaft | 233 |
| Population of Sullivan county..... | 228 |
| Posey's coal—Dr..... | 144 |
| Potter's clay, Martin county..... | 105 |
| Powers bore—section of..... | 195 |
| Putnam county mineral waters..... | 121 |
| Putnam and Vigo counties..... | 118 |
| | |
| Q uaternary in Daviess county..... | 75 |
| Quaternary in Martin county..... | 103 |
| Quaternary in Sullivan county..... | 226 |
| | |
| R ailway—Cincinnati, Rockport and Southern..... | 154 |
| Railway—Indiana North and South..... | 7 |
| Railway—Indiana Mineral..... | 7, 154 |
| Railway—New Albany and St. Louis..... | 137-145 |
| Railroads of Sullivan county..... | 229 |
| Raymond's coal—analysis of..... | 41 |
| Recapitulation of mining in Sullivan county..... | 234 |
| Recent geology of Sullivan county..... | 225 |
| Ring and Everhart's—section at..... | 222 |
| | |
| S alt well..... | 140 |
| Sampson's Hill coal—analysis of..... | 94 |
| Sampson's Hill—section of..... | 93 |
| Scales—section at Thomas..... | 49 |
| Section at Banholzer's shaft..... | 217 |
| Section at Barnes' bank..... | 220 |
| Section at Carbon shaft..... | 9 |
| Section at Clark's | 54 |
| Section at Dicks bank..... | 203 |
| Section at Dicks shaft..... | 223 |
| Section at Dr. DeTars..... | 143 |
| Section at Edwardsport..... | 42 |
| Section at Ferree's quarry..... | 195 |

| | PAGE. |
|--|------------|
| Section at High Rock..... | 74 |
| Section at Howard's Mill..... | 71 |
| Section at Merom Hill..... | 196 |
| Section at Motgomery's | 53 |
| Section at mouth of Veal's creek..... | 45 |
| Section at McCords..... | 48 |
| Section at Newburg..... | 156-157 |
| Section at Phillip Hutz's..... | 91 |
| Section at Pigg's bank..... | 221 |
| Section at Pioneer shaft..... | 212 |
| Section at Ring and Everharts..... | 223 |
| Section at Sampson's Hill..... | 93 |
| Section at Shea's..... | 48 |
| Section at Scales..... | 49 |
| Section at Shelburn shaft | 214 |
| Section at Spear's mine..... | 161 |
| Section at Standard shaft, (Hanna's),..... | 216 |
| Section at Sugar Creek coal mine..... | 125 |
| Section at Van Fossen's mill..... | 208 |
| Section of Artesian well at Terre Haute..... | 127-134 |
| Section of bore on Doherty's..... | 72 |
| Section of bore on Harris and Moot's land..... | 60, 61, 63 |
| Section of bore at Clark's Station..... | 59 |
| Section of Bretts bore | 32 |
| Section of coal strata at Washington..... | 24 |
| Section of Hay's bore..... | 56 |
| Section of Hitt's bore..... | 58 |
| Section of Hyatt's bore..... | 29 |
| Section of J. D. Williams' bore..... | 46 |
| Section of oil well at Sullivan..... | 193 |
| Section of Peck's bore..... | 28 |
| Section of Powers' bore..... | 195 |
| Section of the Knob coal..... | 146 |
| Section of the La Motte well..... | 209 |
| Section of the Shelburn well | 215 |
| Section opposite Lewisport | 149 |
| Section on Barnes-Ladd land..... | 201 |
| Section on Billings' land..... | 69 |
| Section on Crooked Creek..... | 150 |
| Section on Dant's land..... | 64 |
| Section on Hart's land..... | 66 |
| Section on Kennedy's land..... | 65, 68 |
| Section on Lick Fork | 223 |
| Section on Mahan and Steinett farms..... | 219 |
| Section on Montgomery's land..... | 62 |
| Section on Walker's land | 67 |

| | PAGE. |
|---|----------|
| Section west of Shoals..... | 89 |
| Shea's—section at | 48 |
| Shelburn Mining Company | 233 |
| Shelburn shaft—section of | 214 |
| Shelburn well—section of | 215 |
| Shells in the Loess, Sullivan county..... | 227 |
| Shell heaps in Martin county..... | 111 |
| Spear's coal—analysis of..... | 160 |
| Spear's mine—section at..... | 161 |
| Spencer county | 145 |
| Spencer county coal..... | 146 |
| Spink, Cable & Co.'s coal—analysis of..... | 39 |
| Springs—French Lick..... | 112 |
| Springs—analysis of French Lick | 114 |
| Springs—Indian | 106 |
| Springs—analysis of Indian..... | 108 |
| Springs—Putnam county mineral..... | 121 |
| Springs—Trinity..... | 109 |
| Springs—West Baden | 115 |
| Springs—analysis of West Baden..... | 116 |
| Springs of Sullivan county | 200, 235 |
| Staab's coal—analysis of..... | 153 |
| Standard shaft coal—analysis of..... | 17 |
| Standard shaft | 233 |
| St. John's coal—analysis of | 15 |
| Stone—Putnam county building..... | 119 |
| Stocking's coal—analysis of | 151 |
| Sullivan county—antiquities of | 237 |
| Sullivan county—agriculture of..... | 236 |
| Sullivan county—alluvial bottoms of | 228 |
| Sullivan county—clay of..... | 234 |
| Sullivan county—coal of..... | 229 |
| Sullivan county—connected section of coals of | 232 |
| Sullivan county—economical geology of | 228 |
| Sullivan county—fruit of..... | 236 |
| Sullivan county—geology of..... | 191 |
| Sullivan county—gravel | 235 |
| Sullivan county—limestone of..... | 234 |
| Sullivan county—loess of | 226 |
| Sullivan county—mills of..... | 235 |
| Sullivan county—mining of..... | 233 |
| Sullivan county—modified drift..... | 227 |
| Sullivan county—mounds of | 237 |
| Sullivan county—ores of..... | 234 |
| Sullivan county—paleozoic geology of..... | 192 |
| Sullivan county—population of | 228 |

| | PAGE. |
|---|---------------------|
| Sullivan county—railroads of..... | 229 |
| Sullivan county—recent geology of..... | 225 |
| Sullivan county—schools and colleges of..... | 229 |
| Sullivan county—soil of..... | 226 |
| Sullivan county—springs of..... | 235 |
| Sullivan county—stockade forts of..... | 228 |
| Sullivan county—timber of | 226 |
| T ables of analyses of coals..... | 182-186 |
| Table of analyses of iron ores..... | 187 |
| Terrace, or modified drift..... | 227 |
| Terre Haute Artesian well—section of..... | 127-134 |
| Timber of Daviess county..... | 78 |
| Timber of Sullivan county..... | 226 |
| Timber of Martin county..... | 111 |
| Trinity Springs..... | 109 |
| Turner's coal—analysis of..... | 87 |
| V alue of coal in Indiana..... | 176 |
| Value of coal in Sullivan county..... | 231 |
| Van Fossen's Mill—section at..... | 208 |
| Veals creek—section on..... | 45 |
| View of bath house at Indian Springs..... | 107 |
| View of hotel at Indian Springs..... | 81 |
| View of hotel at West Baden Springs..... | 112 |
| View of Jug Rock..... | <i>Frontispiece</i> |
| View of Lafayette blast furnace..... | 163 |
| View of mouth of cave..... | 13 |
| View of Vigo blast furnace..... | 124 |
| Vigo county..... | 124 |
| W alker's land—section of bore on..... | 67 |
| Warrick county..... | 155 |
| Washington, Daviess county | 21 |
| West Baden Springs..... | 115 |
| West Baden Springs—analysis of..... | 116 |
| West Baden Springs—view of..... | 112 |
| Well—salt | 140 |
| Western Coal Measures and Indiana coal..... | 164-181 |
| Williams' land—section of bore on..... | 46 |
| Willow Valley coal—analysis of..... | 90 |
| Wilson's coal—analysis of H..... | 16 |
| Wilson's coal—analysis of H. K..... | 16 |
| Wilson's coal—analysis of T..... | 40 |
| Wood's coal—analysis of..... | 152 |
| Wyandotte cave..... | 139 |

E R R A T A .

- Page 6, 12th line, for "coal measure" read "coal measures."
- Page 79, 26th line, for "Juglans" read "Carya."
- Page 79, 27th line, for "Juglans" read "Carya."
- Page 79, 28th line, for "Juglans" read "Carya."
- Page 109, 3d line, for "Lemar" read "Leonard."
- Page 148, 6th line, for "Crosby" read "Crosley."
- Page 148, 17th line, for "Crosby" read "Crosley."
- Page 148, 20th line, for "Crosby" read "Crosley."
- Page 161, 2d line, for "Coal L" read "Coal."
- Page 184, 4th line, for "Burk's" read "Burke's."
- Page 192, 18th line, after "to be" insert "nearly."
- Page 195, 16th line, after "Cylindrica" insert a comma.
- Page 196, 19th line, for "Anvil Rock" read "Merom Rock."
- Page 196, 27th line, for "Anvil Rock" read "Merom Rock."
- Page 197, 1st line, after "lineatus" insert a comma.
- Page 197, 13th line, after "Pinna" insert a comma.
- Page 201, 7th line, before "Athyris" insert "and."
- Page 201, 28th line, for "Anvil Rock" read "Merom Rock."
- Page 204, 20th line, for "mesaloba" read "mesoloba."
- Page 214, 24th line, for "1" read "2 Sp."
- Page 217, 9th line, for "augustifolia" read "angustifolia."
- Page 221, 3d line, omit the comma after "Productus."
- Page 226, 4th line, before "Azoic" insert "and."
- Page 257, 14th line, for "Sheruman" read "Sherman."