

INTRODUCTION.

It gives me pleasure to be able to note the continued prosperity and rapid extension of our mining and manufacturing industries. Districts that were but yesterday covered by a primeval forest, or only broken here and there by the quiet pursuits of the husbandman, have been awakened by the whistle of the locomotive and the puffs of the stationary engine; coal-begrimed miners throng the streets of mining villages of a year's growth, and the work of mining and shipping coal is pushed forward with an energy and zeal that is unprecedented in the West, and far outstripping the hopes of the most sanguine utilitarian.

The number of mines in the block coal region have greatly increased in all the counties, and it is gratifying to know that the demand for coal is still greatly in excess of the supply.

The benefits derived from this invaluable fossil fuel are not confined alone to the limits of the coal field, but by means of the numerous railroads which penetrate its domain, all parts of the State, as well as the leading cities of the neighboring States—Chicago, St. Louis, Cincinnati and Louisville—have their manufactures stimulated by this most valuable of all minerals.

At the present rate of progress of mining in Indiana, a few more years will develop an endless chain of mines over the entire area of the coal field from Warren county on the

north to the Ohio river on the south, with a belt of blast furnaces girdling the zone of block or iron-smelting coal.

The old iron furnaces are all in blast and making good yields of iron. Arrangements are being made to build a new furnace to be placed beside the Brazil furnace, which is to be blown by the machinery originally designed to run two stacks. Another is to be built at Terre Haute by the Vigo Iron Company, and one has already been built at Shoals, in Martin county, which will use, principally, the native ore referred to in my Report of 1870. This ore occurs in great abundance in Martin county, and the semi-block coal found in Sampson Hill, a short distance southeast of Shoals, will supply it with fuel.

It is also highly satisfactory to know that, by making known the extent and economical value of the minerals, the Survey has had the effect to stimulate mining and manufacturing interests wherever it has been carried. I might further illustrate this by citing the increased activity in mining operations which it has brought about in Daviess county. At Washington, in this county, mines have been in operation since the opening of the Ohio & Mississippi Railroad in 1856, and the business had grown to fair proportions, but I think it may be said, without fear of exaggeration, that coal mining has received an impetus and operations in that line have increased with a rapidity heretofore unknown. Lands which were rated at fifty and one hundred dollars per acre have advanced to two and three hundred dollars per acre, and capital from various parts of the country has been turned to this county for profitable investment. Instead of having their mining operations restricted to one seam—the “Washington coal”—the Survey has pointed out the existence of not less than eight distinct seams, five of which are, locally, of workable thickness.

The following named counties have been surveyed in detail: Perry, Dubois, Pike, Parke, Dearborn, Ohio and Switzerland, and a preliminary examination has been made in Wabash, White, Jasper, Howard, Huntington, Miami, Cass, Carroll, Clark, Harrison and Crawford counties.

In the prosecution of the work I have been assisted by Prof. John Collett, Dr. G. M. Levette, Prof. R. B. Warder and Prof. Barnabas C. Hobbs.*

Considerable attention has been given to the analysis of coals and other minerals, in order to be able to make known their true commercial importance and to point out the various uses to which they may be applied.

I take this opportunity, also, to acknowledge my obligations to the following named railroads for favors extended to me in the way of annual passes and for uniform courtesies tending to promote the interests of the Survey :

Indianapolis, Peru & Chicago Railway.
Pittsburg, Cincinnati & St. Louis Railway.
Indianapolis, Cincinnati & Lafayette Railroad.
Jeffersonville, Madison & Indianapolis Railroad.
Indianapolis & Vincennes Railway.
St. Louis, Vandalia, Terre Haute & Indianapolis Railroad.
Indianapolis & St. Louis Railroad.
Cincinnati & Terre Haute Railway.
Evansville & Crawfordsville Railroad.
Louisville, New Albany & Chicago Railroad.
Fort Wayne, Jackson & Saginaw Railroad.
Illinois Central Railroad.

*Prof. Hobbs was employed at the request of the Commissioners of Parke county, and a special appropriation was made in that county to pay for his services, as I was not willing, having already made a general report on this county, to spend further time and money there before visiting counties which had as yet received no attention.