

“The Bedford Stone Quarries”

(in Indiana)

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Peggy B. Perazzo
Email: pbperazzo@comcast.net
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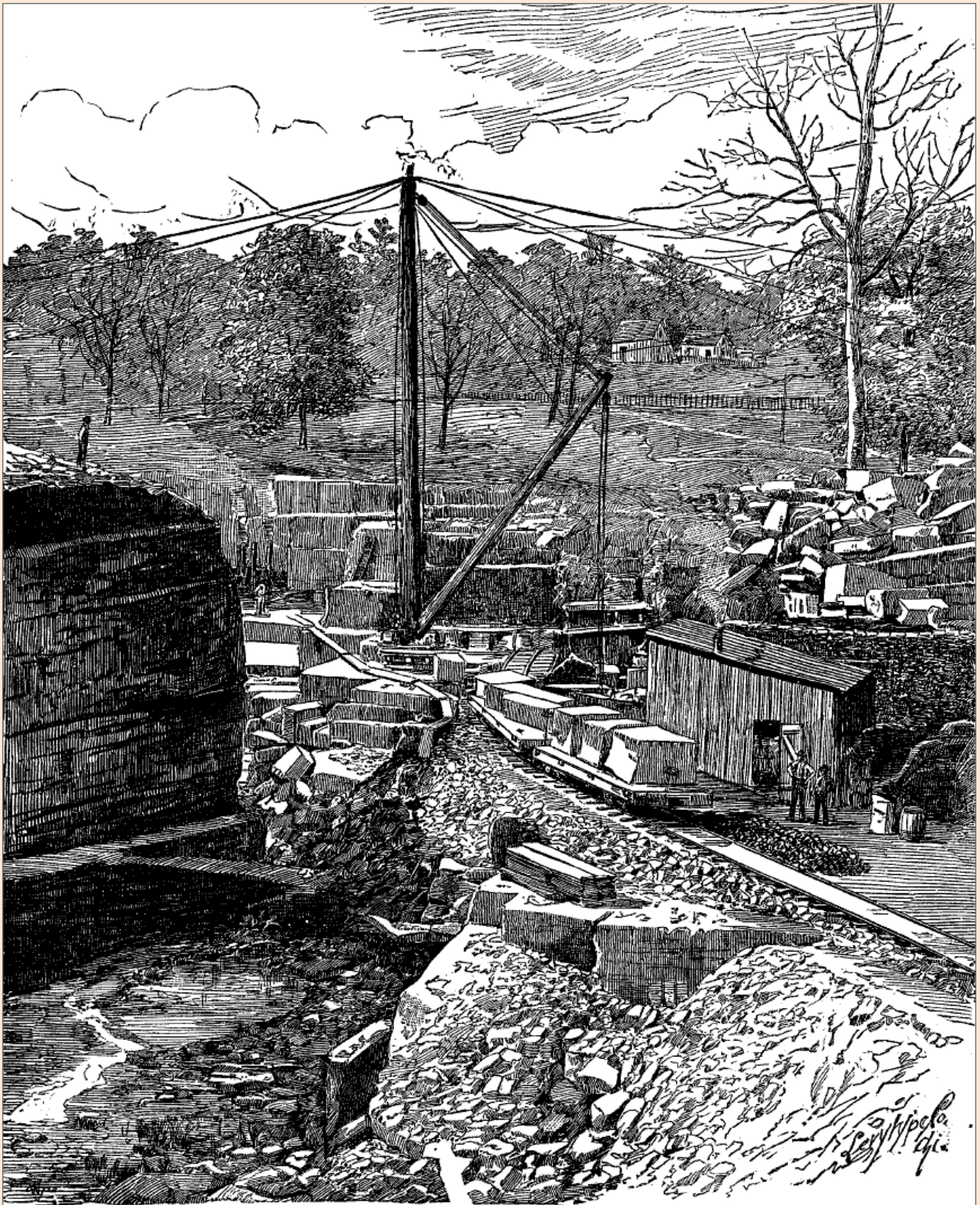
“The town of Bedford, Ind., lies in the heart of a celebrated limestone region, now famous throughout the country for the excellence and abundance of its building stone. The town has given its name to this stone, and has become the seat of an extensive quarrying industry. The region about Bedford is undulating, and is picturesquely diversified by woodlands and water-courses, the latter being turned in many cases to good account as a practical element in prosecuting the quarrying industries that flourish there.

“Underlying this entire region, and extending over many square miles, is found a massive structure of thickly bedded limestone, scarcely anywhere broken, and of varying and, in some cases, unascertained thickness. The stone is found in some localities of this region cropped out upon the surface, forming massive perpendicular ledges.

“In some localities where it has been quarried it has been pierced at a depth of 20 feet; while in others in thickness of 70 feet has been shown without reaching the bottom of the stratum. The stone appears to have suffered little or no disturbance since its deposition, lying in most cases in horizontal, or nearly horizontal, heavily bedded strata, which permit block of from 4 to 6 feet in thickness, and of any desired length, to be removed. The stone is very homogeneous in texture, exhibiting no traces of lamination, and possessing very nearly equal strength in vertical and horizontal sections. When first taken from the quarry the stone is quite soft, and is easily worked by the saw, chisel or planer. On exposure to the air it gradually grows harder and harder, and attains ultimately a crushing strength of about 12,000 pounds to the square inch, or more than sufficient to sustain the weight of the more substantial structure which it is possible to erect.

“Lithologically considered, it is an oolitic limestone. It exists in two varieties, both of which are quarried at Bedford – namely, the blue and the buff (or creamy brown), both, however having the same general physical properties. The blue variety is found generally in the uppermost strata, the buff prevailing in the deeper layers. Both varieties become lighter in color with age. The buff stone, which forms the bulk of that taken from the Bedford quarries, has been analyzed by Prof. Collett, the State Geologist of Indiana, who finds it to average 96.8 per cent of carbonate of lime, showing it to be an almost chemically pure limestone.

“The finely granular, homogeneous texture of the Bedford stone, and the total absence of lamination, give it a remarkable degree of toughness, and an elasticity under strain which gives it the ability to accommodate itself to the severest alternations of heat and cold without showing the slightest tendency to flake or to disintegrate. So remarkably, in fact, does it exhibit its resistance to the destructive influences of weathering, it is affirmed, that, in many old buildings, the tool marks made sixty years ago are still plainly discernible. Its weight to the cubic foot is 160 pounds. Its homogeneous texture is not only plainly visible to the eye, but manifests itself by the clear metallic resonance with which it answers back the blow of the hammer.



A VIEW OF THE BEDFORD STONE QUARRIES.

“A view of the Bedford Stone Quarries.”

“Although the excellence of the material for building purposes has been locally recognized for generations, it is only within the past decade or so that it has acquired a national reputation. This fact is accounted for by the serious failure of a company organized, shortly after the completion of the old Wabash & Erie canal, to work and ship it. This company located its workings outside of the limits of the stone field proper, and after expending a large sum in developing quarries of inferior stone, were forced to abandon their enterprise. This failure not only deterred others from the work of developing the inexhaustible deposits of excellent stone in other parts of the region, but, unfortunately, by inferior quality of the stone the company had sent abroad, seriously injured the reputation of the rock. Within the past decade, however, the industry has been powerfully revived, and the reputation of the Bedford stone has been fully established. Within this period it has been employed in some of the most costly and imposing structures in America, in the Court House at Chicago, the State House at Indianapolis, the government buildings at Frankfort, Ky., and at New Orleans, the Olympic theater at St. Louis, the Nevada flats in New York, in the piers of the bridges across the Ohio at Henderson and New Albany, and elsewhere. The Wm. K. Vanderbilt mansion in this city is also built of this stone, but, owing to the ignorance of those in charge, it was laid in cement, which has caused it to take a blackish color similar to that of iron rust. This fault for a time threw a cloud over this material in New York, but the subsequent erection of the Mutual Life Insurance building, in which this stone (properly laid) was also used, and its preservation of a clean exterior, free from any of the troubles caused by the cement, has effected a complete restoration of this stone to favor.

The tough, homogeneous character of the Bedford stone admits of its being placed in the wall in any position, and these same qualities, in connection with its softness when first quarried permits it to be carved and cut in the severest fashion.

“One of the technical journals, describing the locality and its products, affords us the following additional details: This stone is quarried by means of steam channelers, which carve out great blocks 6 by 8 feet in size and 50 or 100 feet long. These are in turn cut into blocks of desired size, and loaded on cars or otherwise handled by powerful steam derricks. The single shafts of stone cut out by the ancient Egyptians have been the wonder of the world, yet they are outdone in size by those cut out in the Bedford quarries. Each channeling machine is capable of cutting out about three car loads of stone per day, and the output in 1883 was 4,500 car-loads. At present, four quarries are in operation, giving employment to about 400 men, and the development of the field goes steadily on. The four companies now operating in this section are Voris, Norton & Co., the Hoosier Stone Company, Thomlinson & Reed, and the Hallowell Granite Company. These enterprises are all substantial in their nature, well backed by experience and capital, and have manifestly ‘come to stay.’ They work side by side harmoniously, and there is a gratifying absence in the petty jealousies too often found. In addition to the ‘Monon line,’ which affords an entrance into Chicago, Lafayette and Indianapolis at the north, and to Louisville and New Albany at the south, the Bedford and Bloomfield narrow gauge, upon which the quarries are located at a distance of two to four miles from Bedford, gives an outlet west to Terre Haute and thence by connections to St. Louis. The quarrying season extends from about the first of March until the heavy frosts in the fall. The demand is rather more active in the fall, because of the mills taking winter supplies, though brisk at all times.

“We give in connection with this article a view representing one of the most extensive openings made in the Bedford region, which exhibits in a very satisfactory and instructive manner the evenness of the stratification of this famous stone, the massiveness of its bedding, and its freedom from lamination.”

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Visit these links for photographs and further information on Indiana limestone:

The Indiana “Quarries” section of our web site, Stone Quarries and Beyond, which begins at the link below:

<http://quarriesandbeyond.org/states/in/indiana.html>

“Indiana Limestone,” on Wikipedia

http://en.wikipedia.org/wiki/Indiana_limestone

“Indiana Statehouse,” on Wikipedia (built with Indiana limestone in 1878)

http://en.wikipedia.org/wiki/Indiana_Statehouse

The “William K. Vanderbilt House,” on Wikipedia (The house was built on the northwest corner of 52nd Street and Fifth Avenue in Manhattan. It was faced in gray Indiana limestone.

http://en.wikipedia.org/wiki/William_K._Vanderbilt_House