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The
Hawk's Nest
AMERICA'S WORST

Incident

INDUSTRIAL DISASTER

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Epilog

A half century ago in a remote place, more than seven hundred persons may have died to build the Hawk's Nest Tunnel. Those who succumbed were not overwhelmed by some medieval plague: the mysteries of rock dust were sustained by public and industrial policy, not by technical ignorance. Hawk's Nest was born in the transformations of a new industrial age, so judgment of the events there must be based on unrelated criteria: the fate of the men, the companies that created the tunnel, and the future recognition of industrial disease. There is a symmetry in this study without names. Its subject, industry of scale, is also an anonymous process, consisting of great numbers of men and great numbers of replaceable mechanical parts, sometimes treated without distinction. As such, analogies may summon the language of war rather than that of economy. As when hearing the toll of soldiers dead in war, it is natural to ask about the men of Gauley Bridge, "What did they win?"

For themselves the workers won nothing at all except a brief respite from the poverty that afflicted millions of others during the Great Depression. There was no glory, except for Union Carbide, which boasted for years that the Hawk's Nest hydroelectric plant could illuminate the entire city of Charleston. There was certainly no sympathy or gratitude. The trials, the hearings, and the sometimes unfavorable national attention they brought were as unwelcome to the citizens of Gauley Bridge as they were to Union Carbide and its contractor. The migrant workers, looked upon from the first with suspicion and contempt, became the "undesirables, mainly Negroes" who were the real source of the troubles. And, thanks to the legislators and courts of West Virginia, there was no recompense for misery or even death, but for the meager settlements paid by Union Carbide's

contractor to a few out of the thousands of workers. For the rest—or so it was widely reported and is still remembered—when they could no longer work they were evicted from the camps and driven away by force. On the first threat of suits, it was said, at least one of the camps was burned to prevent its use by litigants who waited in the area in the hope of vindication in the courts. For the smaller number of men whose homes were nearby, the prospects of local work were diminished by the reluctance of coal mine operators to hire men who had been on the tunnel and who were allegedly more inclined to illness from dusty work.

If even the surviving workers gained little but misery by their toil in the tunnel, what of their employers? Rinehart and Dennis could boast of having built, with extraordinary speed and efficiency, a hydroelectric complex that was and remains an engineering marvel. Yet deaths, court costs, and settlements took a heavy toll on a company whose principal resource was an army of cheap migrant laborers. Rinehart and Dennis had established an enviable reputation by its construction of many tunnels, dams, and power stations before it broke ground on the tunnel that would be its greatest engineering challenge and success. Yet the company would never again compete for a major project. Within five years its assets were largely liquidated, its successors being purely local firms in Charlottesville, Virginia.

What, then, of the company that owned it all? The Union Carbide and Carbon Corporation had conceived the vast project and planned every detail of the dam, the tunnel, the power station, and the plant at Alloy to which they would supply a never-ending flow of electrical power. It had hired the contractor, dictated schedules and provisions for the workers' health and protection, and closely supervised every aspect of the operation. It had also taken care to separate itself and its ephemeral representative, the New Kanawha Power Company, from legal responsibility for the fate of the workers. What did it have to show for its vision and enterprise?

For a time its grandiose dreams were fully realized, and perhaps surpassed. Before the First World War the inventive plans of Major Moreland, founder of the Electro-Metallurgical Company, had overreached themselves. The modest diversion of the Kanawha River at Glen Ferris for the electrically powered molding of high-temperature alloys was a commercial failure. There were no markets for the company's aluminum, though the discarded product would find a use as grave markers above the dead of Fayette County. But Moreland's dreams had lived on in the ambitions of the successor company, challenging mountains and the natural limits of rivers and muscle. Union Carbide had predicted that the Hawk's Nest hydroelectric project would require seventeen years of continuous operation to redeem the initial investment. The costs of construction were paid for in half that

time. A new war had meanwhile created a demand for the metals that Union Carbide produced at Alloy, and the muck and the rock extracted from Gauley Mountain were fashioned into the steels and metals of triumphant enterprise. In just forty years the crude, semi-industrial operation at Glen Ferris had been transformed, by the Alloy plant and the Hawk's Nest Tunnel, into the center of the American ferrosilicon industry, employing forty-four hundred persons and powering twenty great furnaces.

From the standpoint of the Union Carbide Company, the Hawk's Nest Tunnel had more than justified itself. There was a unique mismatch between a primitive, poorly paid, and unprotected labor force and an industry ahead of its time, able to utilize the most modern equipment and techniques. The proof of industrial precocity was the Alloy plant itself, which would remain competitive for half a century. It is also in this mismatch between a highly mechanized technology and unskilled physical labor that much of the tragedy at Gauley Bridge can be understood.

Union Carbide had won an easy and relatively cheap victory over the workers who brought suits over claims of silicosis. Not all of its encounters in court were so quickly over, or so successful. As was recounted in chapter 1, the company had originally submitted its petition to dam the New River to the Federal Power Commission, but the government had taken no action. Union Carbide had then turned for permission to the Public Services Commission of West Virginia, which promptly granted it, as it had done with all the company's requests. In 1934, however, in the midst of the silicosis trials, the Federal Power Commission brought suit against Union Carbide, claiming full jurisdiction over the New River and, by extension, over the artifacts that affected its flow. In the following year, true to form, the state came to the company's aid. The attorney general, Homer A. Holt, who would soon become governor (and later the company's chief counsel), argued the rights of Union Carbide before the United States Supreme Court. The case dragged on, however, for thirty years, the federal government having decided that the New River case was central to its effort to win a broad decision on its jurisdiction over water rights. In 1964 the government finally prevailed. In practice this meant that Union Carbide had merely to install stream gauges and fishways at the Hawk's Nest Dam. The government nevertheless won, and retains, the right to purchase the tunnel and power plant, together with the smaller facility at Glen Ferris, in 1991. The purchase price of 1935 will still hold: \$11.2 million. In four decades of involvement with the Hawk's Nest Tunnel, federal attorneys were concerned exclusively with the cost of water, not the cost of disease.

For Union Carbide this final reckoning has been anticipated by other exigencies. By the 1970s the Alloy plant had reached the end

of its profitable life, retired not by obsolescence but by the decline of the domestic steel industry and the expansion of the ferrosilicon industry into the developing world with its cheaper resources and labor costs. In 1981 Union Carbide sold its rusting hulk at Alloy, and its entire electrometallurgical division, to a Norwegian firm, the Elkem Metals Company. The company that had begun its existence in a modest merger in the mountains of West Virginia had by this time become a vast corporation with extensions in three continents. In 1984, however, its prestige suffered a severe blow when an accidental release of toxic fumes from its chemical plant in Bhopal, India, took the lives of more than two thousand persons, and engendered a great many lawsuits against the company. Whereas the deaths at Gauley Bridge had won only fleeting interest in their own country, the tragedy at Bhopal focused the attention of the world on Union Carbide. Under a year of intensified scrutiny, Union Carbide's relationship to West Virginia also underwent a reassessment. The company admitted that twenty-eight relatively harmless incidents similar to those at Bhopal had also occurred in recent years at a sister plant at Institute, West Virginia, fifty miles west of Gauley Bridge. A more serious escape of fumes at the same plant less than a year later forced the company publicly to concede carelessness in its operations. In mid-1985 Union Carbide announced that, because of a decline in the profitability of its far-flung enterprises, it was planning retrenchment. The corporation's long-term future is in some doubt.

If building the Hawk's Nest Tunnel won for Union Carbide only a transitory return on its investment of human lives, is there nothing else to show for it? Although the occurrence at Gauley Bridge passed for the most part without notice or was soon forgotten, it did help to call to public attention the dangers of silicosis. This impact was pointedly described in the classic study of silicosis by William G. Cole and Lewis G. Cole, *Pneumoconiosis: The Story of Dusty Lungs*. William Cole had studied some twenty X-rays of lungs marked by acute silicosis among workers at Gauley Bridge and had traveled to the area under the sponsorship of the John B. Pierce Foundation, of New Haven, Connecticut. His findings were significant for his own medical research, and he emphasized their implications for national policies on industrial health as well: "Popular interest in silicosis, stimulating social and legislative activities and affecting judicial decisions, was notably accentuated by the newspaper notoriety of the Gauley Bridge episode."¹

On 26 February 1936, only three weeks after the congressional subcommittee had issued its report on the Gauley Bridge episode, Secretary of Labor Frances Perkins called for a national conference on silicosis, which first convened two months later. Medical, economic, legal, and insurance committees were established to address the haz-

ards and needs of the five hundred thousand American workers allegedly exposed and the one hundred thousand afflicted with silicosis. From these ambitious and humanitarian beginnings, hopeless deadlocks ensued; national legislation was not forthcoming. It seemed as though the Gauley Bridge tragedy had never occurred. The existence of acute silicosis was summarily dismissed with the observation that rumor attributed a few cases to exposure of less than one-and-a-half years, but that symptoms were more characteristic after exposure of ten or twenty years. Of the three national advisers to the conference from private industry, one was an official of Union Carbide.

As late as 1940, acute silicosis remained exempt from the category of compensable diseases. As the Coles would write,

Acute silicosis is not compensable in any form under the present accepted definition, and the manner in which legislatures and even medical investigators have ignored the rights of these victims has been a national disgrace. . . . Individuals of this group, though few in number, present a serious social problem. They deserve compensation and adequate compensation as soon as the diagnosis is established or certainly as soon as symptoms appear.

Such a victim is incapacitated for further labor in a dusty industry or any other industry; the most strenuous work of which he is capable is that of night watchman—perhaps on a part-time basis.²

Not all was in vain, however. By the end of 1937, forty-six states had enacted laws covering workers afflicted with silicosis. Where the federal government had failed, the states, through the workers' compensation system, had recognized silicosis as the prototypical occupational disease.

In federal action and state legislation to protect the health of future generations of working men, the workers who died at Gauley Bridge had helped to build an imposing monument, though no names are engraved upon it. But in the place itself, what is left to see that might remind a visitor that a great tragedy once occurred there? The tunnel, cleansed of deadly dust by the rush of water, will remain forever invisible. Its presence is revealed only by a road sign that praises technology without mentioning history, and by countless tons of silica-bearing rock dug from the tunnel and dumped along the river's edge because there was no means of or utility in transporting it to Alloy. The dam still blocks the flow of the New River at Hawk's Nest. It will remain, unless a few years hence the federal government decides to restore the river's marginal navigability. Nearer to Gauley Bridge the power station continues to celebrate with its tireless energy the efficiency of Union Carbide's engineers and contractor.

The camps where the workers lived are long since gone—destroyed, if the rumor is true, to make them uninhabitable as soon as the work

was over. Where Camp 1 stood there is now a country club, once intended for the pleasure of the Union Carbide staff, now privately owned. No sign remains to recall the former occupants of the site.

There did survive, however, long after the drilling and the trials and the hearings were over, one silent reminder of forgotten lives. The few who knew of it had preferred to let it remain hidden. But in 1954 the family farm belonging to Hadley C. White, the undertaker so often employed by Rinehart and Dennis, was bought by a local physician named Eccles. Later, when the Appalachian corridor was constructed through Nicholas County, several parcels of this land were sold to the state of West Virginia. It is the policy of the Highway Department to probe for old cemeteries before building a new roadway. In July 1972 the department's prober identified sixty-three potential grave sites in a plot on the Eccles farm that would be transected by the highway. A contractor from North Carolina was hired to exhume the graves and relocate any remains that might be found. No headstones or other markers for identification were discovered, but there were indentations in the earth. In forty-five of these, bits of wood and skeletal parts were found, having been relatively well preserved by properties of the soil.