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The Shenandoah River Gundalow and the Politics of Material Reuse

Seth C. Bruggeman

College of William & Mary - Arts & Sciences

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THE SHENANDOAH RIVER GUNDALOW
AND THE POLITICS OF MATERIAL REUSE

A Thesis
Presented to
The Faculty of the American Studies Program
The College of William and Mary in Virginia

In Partial Fulfillment
Of the Requirements for the Degree of
Master of Arts

by
Seth C. Bruggeman
2000
APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of

Master of Arts

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Approved, March 2000

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ABSTRACT

From roughly the beginning of the nineteenth century to the end of the Civil War, Shenandoah Valley farmers and merchants shipped their goods to eastern markets aboard a now largely forgotten regional boat type. The Shenandoah River gundalow provided cheap transportation of goods at times when wagon transport over the Blue Ridge Mountains was either too costly or too difficult. At their destinations, gundalows were disassembled and sold as lumber to frugal builders who, in turn, erected buildings from Harpers Ferry to Georgetown now identifiable only by the distinct shape and size of their interior structural members.

This paper documents the surprisingly large scale of the gundalow industry, attempts to textually reconstruct the gundalow through use of archaeological and architectural evidence, and considers the motivations of those who participated in a Valley-wide network of material reuse. The large number of gundalows present on the River during this period combined with evidence of gundalow-based entrepreneurship suggests that navigation of the Shenandoah River constituted a serious economic endeavor. Moreover, this riverine enterprise occurred within a relatively isolated valley during a period in which improved transportation technologies and “foreign” business interests threatened the economic self determination Valley dwellers had closely guarded until that point.

I argue that reuse of gundalow lumber, especially during times of perceived economic crisis, constituted a political act. Valley builders diverted gundalow lumber from potential outside buyers (i.e. the railroad) thereby redirecting capital back to gundalow builders and thus centralized a gundalow-based Valley economic system. Though the pressures of progress proved ultimately too strong for the Valley’s defenses, the material record of its struggle remains preserved in the few gundalow buildings that remain today. In this way, I intend this paper to demonstrate how examining the movement of objects through precise historical moments that unfold within a context of crisis can transcend antiquarianism and effectively reveal the political motivations of “anonymous predecessors.”
THE SHENANDOAH RIVER GUNDALOW
AND THE POLITICS OF MATERIAL REUSE
Introduction

It is a peculiarly fortuitous phenomenon, urban sprawl, for the very tools of city growth must by necessity reveal the past before relegating it to obscure memory—a moment of clarity only occasionally savored by generally the most zealous of observers. This was made evident during the 1980s in Richmond, Virginia as developers laid shovel to ground in response to calls for additional parking facilities. Front-end loaders attacked the landscape throughout the decade turning up bucket after bucket of mud and debris. No special occasion attended this rough excavation until mud and debris mixed with wood—lots of wood. The Richmond Metropolitan Authority had sunk its developmental teeth into the heart of what was once Richmond’s Great Basin, the headwaters of Virginia’s substantial nineteenth-century inland canal network. Here, as early as one hundred thirty years ago, canalboats and other small craft congregated to serve trade networks spanning from the capital city to points throughout Virginia’s interior. Workers uncovered not only the basin’s walls and mechanical works, but its contents as well. Thanks to legislation passed some years prior, the find mandated professional attention and archaeological firms were contracted to document what was and remains perhaps the most impressive American canalboat find to date.

Though the find caused general excitement and garnered generous media attention, it roused no group more than the Virginia Canals and Navigation Society, a Richmond-based canal interest group founded in 1977. The group took action and in 1985 participated in the excavation of the first nineteenth-century James River bateaux to be salvaged in Virginia—the very find that has since sparked the now thirteen-year old James River Bateaux Festival. The excitement did not end there, however. Five years later, the society became involved in a new dig. William Trout, president emeritus of the canal society led the effort:

In the summer of 1990, the Richmond Metropolitan Authority (RMA) began to dig into the Great Basin between the James Center and the Twin Towers, to put in a parking deck and a plaza over their Downtown Expressway beside 10th Street. This part of the basin was an arm which led to the Tidewater Connection Locks, most of which had been destroyed by the RMA back in 1974.
We knew from our previous experience, thanks to James Center developer Henry Faison and CSX, that there would be boats, artifacts, and canal walls there. Unfortunately, RMA did not allow us to monitor the excavation, so we were not able to map the basin wall or to see other boats which were uncovered; workmen told us that they were advised to keep the boats out of sight to prevent us from slowing down the work. We would like to believe that these were run-of-the-mill bateaux, so we didn’t miss anything. But the one we were allowed to see, on September 10, was a type we had never seen before.¹

Fig. 1. George Rawls poses with what “we had never seen before.” (Photo by Bill Trout)

Some one hundred miles northwest of Richmond, on an October day in 1962, fifty-year old architect, Archie Franzen, walked down Shenandoah Street—the main avenue through lower Harpers Ferry, West Virginia—toward Building #44 of the then eighteen-year old Harpers Ferry Monument (now the Harpers Ferry National Historical Park). Franzen was to inspect the building, also known as the

Fig. 2. Shenandoah Street, facing northeast. (Photo by author)

¹ W.E. Trout, III, *The Shenandoah River Atlas, Rediscovering the History of the Shenandoah and its...
Philip Coons or Masonic Hall Building, make drawings, and determine what it might take to restore the structure, a project deemed undesirable by a 1957 report concerned with the building’s relative anonymity during John Brown’s 1859 raid and Stonewall Jackson’s subsequent 1862 Shenandoah Valley Campaign. Franzen ascended the building’s awkward, increasingly narrow exterior staircase, modified roughly one hundred twenty years earlier to access the building’s third-floor addition and new home to Harpers Ferry’s Masonic Lodge. Franzen entered the now vacant room and admired its large, undisturbed expanse and curious arched ceiling. The space was unique, one unlike any the architect had encountered in the park or would during his remaining twenty-seven years in Harpers Ferry. A cursory investigation ensued:

A careful perusal of the minutes of Charity Lodge #111 for the year 1845 shows that construction of the third floor meeting room was started early in 1845 and completed by November 22, 1845, when the Masons held their first meeting in their new quarters. Philip Coons was a Mason himself and in the minutes of March 22, 1845, mention is made of his having bought and salvaged brick, iron and lumber from the earlier Masonic Hall in the Episcopal Church which had burned down. Some of these materials may have been used in the construction of the new hall. The rear wall above the third floor level is brick and the width of the floor boards are narrower than those of the second floor.

The roof structure is supported by five king post trusses alternating with paired rafters to provide a large assembly room on the third floor uninterrupted by supporting partitions or columns. A vaulted plaster ceiling, elliptical in profile, was suspended over this assembly room, by means of old boat timbers scabbed to the lower chords of the trusses.

The plaster ceiling was gone, removed in 1956 by the Park Service in order to stabilize the roof of a building pierced by no less than twenty-nine windows. The boat timbers remained, however; but, then again, how did Franzen know they were boat timbers, or rather, why did he think they were boat timbers? The 1957 report mentioned nothing about boat timbers nor did Franzen Branches (Front Royal, VA: Friends of the Shenandoah River, 1997), p. 82.

explain his insight. Nonetheless, Franzen revisited the third floor of Building #44 in December 1962 with photographer, Jack Boucher. Boucher, under Franzen’s direction, took one shot that day—Neg. # EODC 1726—the only Park Service photograph ever taken of the interior of Building #44. Franzen later sat before his typewriter and laid out the caption for “Illustration No. 4, View of Masonic Lodge Room”:

The long timbers with the mortises are reputed to be salvaged boat timbers from cargo barges floated down the rivers to Harpers Ferry and then broken up for sale. The ceiling plaster and gale ends, down to the wood cornice line, were painted a light blue and decorated with clouds and stars.³

³ Franzen, p.19
summer of 1998 when, in preparation for graduate study in Virginia, I called Bill Trout to find out more about rumors I had heard regarding canalboat excavations in Richmond. Trout verified the rumors, but suggested that a far more interesting find had been made in the Great Basin—something he had never seen before. What Trout and others of the Virginia Canal and Navigation Society had found in 1990 were the remains of what they believed to be a James River gundalow, a nineteenth-century freight boat similar to the standard bateaux in dimensions, but less crafted, square-ended, and, most strikingly, impermanent. The gundalow was an ephemeral boat built for quick inexpensive shipment of freight down river. Once unloaded, these boats were disassembled and sold as lumber—lumber rumored to have framed innumerable buildings along Virginia’s inland waterways. Trout was excited, and rightly so—what were the odds of finding an intact boat originally designed for disassembly? Furthermore, the find verified the existence of a vernacular boat type that, until then, had only existed in rumors, passing remarks in secondary sources, and nowhere in the photographic record. What’s more, Trout intimated that he had visited and made drawings of a peculiar building in Harpers Ferry, WV in 1993 whose roof supported a framed arch allegedly constructed with boat timbers. That Harpers Ferry was some miles distant from Richmond proved only more tantalizing for Trout claimed that the timbers found in the building’s ceiling almost exactly matched those unearthed in Richmond—two gundalows, one hundred miles distant, and more or less structurally identical!

Thus began my involvement in the effort to salvage and reconstruct the history of a hitherto forgotten vernacular boat type. At least, that is what I assumed at the time, but preliminary research suggested that what Trout had stumbled upon was something even bigger. I was confused. Robert Mitchell’s seminal work, Commercialism and Frontier: Perspectives on the Early Shenandoah Valley, argues that despite its high concentration of sawmills, the Shenandoah Valley offered “no evidence that logs were exported; road haulage was out of the question, and the extremely meandering path of the lower Shenandoah River rendered transport
by water infeasible.”

Granted, Mitchell’s book is primarily concerned with colonial Virginia and only briefly steps upon the threshold of the nineteenth century. Even so, further investigation hinted that gundalow use was common by the early eighteen hundreds and further confused the situation; how could a river be unnavigable one decade yet be navigable early in the next?

Moreover, if the Shenandoah was impassable by boat, then why would a gundalow be found in a Harpers Ferry building? Gundalows were—with the occasional exception—used for transport purposes alone, the Harpers Ferry gundalow had brought something to Harpers Ferry, perhaps from the northern reaches of the navigable Potomac, but more likely from the upper Shenandoah where lumber, iron, wheat, and whiskey were produced in abundance. Furthermore, miscellaneous notes and comments like that from a 1868 edition of the *Shenandoah Valley* newspaper reprinted in Trout’s own book on the subject—“During the last week of February, 41 Gondolo boats passed Columbia Mills in page Co., on the Shenandoah river, in different groups...”—roused my suspicions concerning Mitchell’s non-navigable river argument.

As it happens, the evidence does suggest that gundalows were mainstays of Valley commerce and transportation from roughly the turn of the nineteenth century until the end of the Civil War, so much so that Mitchell’s claim concerning the river’s impracticability must be reevaluated. This finding adds a further burden to my project for, as if it were not enough to describe an until-now undocumented vernacular boat type, I must also determine the extent of gundalow use throughout the Valley as well as tease out the implications of an entire valley-wide network of material reuse. Indeed, this final element of the equation is perhaps most fascinating because when fleshed out, it reveals a certain resistance to progress, a struggle to maintain power

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5 Special gundalows were occasionally constructed for use by New Shenandoah Company survey teams. These craft featured crude accommodations for surveyors and, thus, earned the name “house boat.” See p. 17 for expenses incurred during the auction of a survey boat built by Adam May in 1848.

6 Though I have yet to find an extant copy of this 6 March 1868 issue of the *Shenandoah Valley*, John Wayland notes that of the forty-one “gondolas” referred to, eight carried flour with eighty-five barrels aboard each, eleven carried a combined eighty-thousand feet of lumber, and twenty-two hauled ten tons of
in what had until the mid-nineteenth century been an isolated Virginia community, and after, an
oft-traveled crossroads where canals, railroads, and macadamized roads tore the gundalow from
existence and robbed Valley dwellers of economic self-determination.

Throughout this period, the gundalow led what Arjun Appadurai would consider a very
social life in that its ultimate commodity value far surpassed the twenty or so dollars sought at the
end-of-trip auction. Appadurai argues that the social life of things is understood by moving away
from “the production-dominated Marxian view of the commodity and focusing on its total
trajectory from production, through exchange/distribution, to consumption.” 7 It goes without
saying that I cannot do all three elements of the equation justice in this short space—indeed, I
function as a moderator of sorts who smooths the gaps between Trout’s findings, primary
documentation, secondary sources, and my own insights—and, for this reason, rely at times upon
pure conjecture to hasten the narrative. 8 Nonetheless, by shifting the perspective of historians
like Mitchell who focus on “forms or functions” of exchange to one more interested in the
materiality of change or, rather the actual goods being exchanged, it is possible to understand “the
link between exchange and value” as “politics construed broadly.” I argue that the reuse of
Shenandoah River gundalows constituted at times, though not necessarily always, a political act.

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7 Arjun Appadurai, The Social Life of Things, Commodities in Cultural Perspective (Cambridge:
8 Any consideration of a historical material record absent of an accompanying or complementary textual
record naturally begs authorial intervention. The success of this intervention largely depends upon the
author’s ability to check his or her own imaginative caprice. One method for doing so involves being frank
with readers about the nature and extent of such intervention. Though the issue of authorial narrative
intervention has been addressed by a number of contemporary scholars, Carmel Schrire provides an
especially poignant model in her Digging Through Darkness, Chronicles of an Archaeologist
(Charlottesville and London: University Press of Virginia, 1995). Of special interest here is Schrire’s
introduction in which she explains:

These essays try to redress this silence in part by rooting themselves in historical and
archaeological sources. Palpable though the documents and artifacts may be, in the end their
deeper messages can only be read through acts of imagination. As a result, I turn, on occasion, to
fiction to enhance and enlarge the experiences under discussion. I make no pretensions about
writing historical fiction per se, though some of my writing clings as closely to the facts as do
fictional renditions. (p. 5)
The Rise of Navigation on the Shenandoah River

The origins of this politicized reuse network lay in the relative isolation of Shenandoah Valley communities. By this I do not mean the economic isolation that Mitchell argues was not a significant factor in the development of the Valley, but rather the sort of geographic isolation that lends itself to identity formation and that found expression in the very rhetoric of the “sons of the valley” who spent their lives surrounded by wooded mountains. Indeed, we must visit the Valley before it was a valley to understand fully the extent of this isolation. Until about 250 million years ago, rolling flatlands covered what is now western Virginia. The shift to mountainous terrain began when the African tectonic plate crashed into the North American east coast, sending shivers though the latter’s continental spine. Mountains exploded from the mantle’s surface forming a wrinkled brow running north/south all the way from Alabama to Quebec. This “Appalachian Orogeny” wrought a particularly fierce terrain in Virginia’s interior giving rise to the Appalachian Mountains (also referred to as the Shenandoah Mountains in Virginia) and their neighbors, the Alleghenies, to the north and the Blue Ridge Mountains to the south. A soil particularly rich with limestone accompanied the mountains’ ascent. Water funneled into the new Shenandoah Valley allowing the limestone to steep for millions of years until calcium carbonate flowed freely from the stone into the surrounding soil producing a rich loam perfectly suited for habitation by diverse plant and, consequently, animal life.

The Shenandoah Valley thus flourished for several million years as the mountains weathered, rivers formed, landforms settled, and ultimately, people arrived. The immigrants who initially gave rise to towns like Port Republic and Harpers Ferry—those nestled deep within the valley, impassioned the “sons of the valley” who championed it, and determined the fate of one Philip Coons who relied upon it.

\[9\] This phrase, “sons of the valley,” is especially striking in terms of a pro-Valley rhetoric. I discuss it in greater detail on p. 20.

the Shenandoah Valley—did not come from the east, however, where by 1607, English settlement had already begun. Indeed, the rugged Appalachians barred east/west travel throughout the eastern colonies, everywhere except Pennsylvania. Though Pennsylvania too is bisected by the Appalachians, it also serves as home to the only sizeable cuts through the range. As population density grew in colonial Pennsylvania and social tensions forced increasing numbers of immigrants into the backcountry, that colony’s “main export” passed through the Cumberland Gap, into the Great Valley, and subsequently into northern Virginia.  

Not surprisingly, many of these displaced Pennsylvanians were farmers, primarily of German and Scots-Irish stock. Settlers flocked into the northern Valley via the Great Valley throughout the early eighteenth century. They were greeted by rich, fertile pastureland and thick lumber stands, which served home to a variety of flora and fauna. Contrary to what one might expect, there is little evidence that the Shenandoah Valley was at all densely populated by American Indians, at least not until the mid-century when wars between northern and southern tribes as well as the Seven Years’ War led participants on both sides through the Valley’s natural north/south highway. For this reason, Pennsylvanians flocked to the Valley not only for the cheap, fertile land, but also to escape the notorious Indian hostilities of Pennsylvania’s western frontier.

Subsistence farming followed settlement and continued into mid-century as war and, hence, economic growth fostered Valley development. The Seven Years’ War hastened an agricultural surplus already present by the 1730s and further improved a growing road network that stretched throughout the Valley and, at places, across the mountains into the east. Revolution in the colonies further boosted the development of Valley trade networks, as did the boom in hemp production that immediately preceded the conflict. Finally, the Valley’s ultimate discovery of its capacity for wheat production by the end of the century added more fuel to this

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explosion of road networks, virtually doubling routes within and without the region between 1775 and 1800.

Indeed, dependable road systems were necessary by the beginning of the nineteenth century for, though the Valley had developed significantly throughout the colonial period, it nonetheless remained geographically cut off from eastern markets in Washington, Alexandria, Richmond, and Fredericksburg. Farmers sought ways to ship wheat over the Blue Ridge Mountains and, therefore, according to Mitchell, supported the creation of road systems so as to provide easy eastern access for hay-laden wagons. This solution was costly, however, and resulted in a logistical quagmire:

the lack of wagons to transport goods was sometimes as critical a factor to settlers in the upper valley as transportation costs themselves. Wagon transport...did not become important in valley trade until the 1760s, when the transport requirements of the hemp industry provided the first major demand for wagon teams. From then on, there were seldom enough wagons available to conduct trade between the upper valley and its outside markets. Wagons in general were expensive to construct, especially when the demand for wagonmakers and wheelwrights exceeded the supply. In addition, money had to be available to purchase nails, axle grease, harnesses, and horses for the wagon teams.  

No doubt when faced with such expense and difficulty, farmers searched for other avenues of transport. The most obvious alternative rested in the Shenandoah River. Until this point the Shenandoah was, for all intents and purposes, unnavigable. Shallow, seasonally-variable waters strewn with rocks and debris combined with often-fierce rapids and sharp bends to

Fig. 5. The Shenandoah bends treacherously through rock-strewn shoals. (Photo by author)

12 Mitchell, p. 222.
make navigation by all but the smallest boats and stoutest captains impossible. This changed, however, as military preoccupations abated, and national internal development took center stage in the 1780s and 90s. As early as 1774 George Washington had envisioned a plan to improve the Potomac and James Rivers for inland navigation. Though stalled by war, Washington’s plan ultimately came to fruition in 1785 with the birth of the Potomack and James River Companies. The relative success of these ventures suggested further possibilities for the Shenandoah River and thus was formed a Shenandoah Company in the 1790s to improve that tributary of the Potomac. Diversion of funds from the Shenandoah Company resulting from complaints by Augusta County residents who stood to benefit more from road construction than water development, stunted the company’s growth, however, and forced the organization to cede control to the Potomack company in 1802.

The Potomack Company was, in a sense, obligated to take up the work begun by the Shenandoah Company because Washington had also called for the erection of a U.S. Armory at Harpers Ferry, located at the mouth of the Shenandoah. By 1799, as work commenced on the armory, improvement of the river was necessary to channel up-river lumber and iron into Harpers Ferry so as to facilitate construction. By 1807, the combined efforts of the Shenandoah
and Potomack companies had cleared a substantial length of river between Harpers Ferry and Port Republic—the head of navigation on the Shenandoah. Even so, new complications arose and the Potomack Company became overwhelmed in its attempt to satisfy its own interests as well as those of the Shenandoah Company, and finally, those interests expressed by north branch Shenandoah residents who felt neglected by the company’s primary interest in the south branch. As a result, in 1815, the New Shenandoah Company was formed to renew its predecessor’s goals and extend improvement efforts to both forks. In this way, Mitchell is correct when he claims that “except for settlers at the extreme ends of the valley, the region was without cheap water transport throughout the entire eighteenth century, and the functioning of its towns was entirely dependent upon the maintenance of its highway network.” What he fails to recognize, however, is that even though the Valley did not have access to improved waters during the eighteenth century, efforts to obtain such were underway well before the beginning of the nineteenth. These efforts were responsible for the Potomack Company’s 1808 reply to “questions propounded by the Secretary of the Treasury”:

There are at this time navigating the Potomac and Shenandoah boats equal in burthen to about 800 tons, but it is to be remarked that the last season having been the first that the Shenandoah was open there were then no boats on that river, a few only were built during that year, many are now preparing, and it is estimated that for the next season the tonnage will amount to at least 1200 tons.

Foremost among these efforts, by the time of the New Shenandoah Company’s incorporation, was the physical improvement of the Shenandoah River between Port Republic and Harpers Ferry. The company relied, throughout its existence, upon contracted temporary

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13 Ibid., p. 195.
14 Corra Bacon-Foster, Early Chapters in the Development of the Potomac Route to the West (Washington: Columbia Historical Society, 1912), p. 175.
15 The company’s 3 February 1814 charter makes this goal implicit in its preamble:

Whereas the extension of the navigation of Shenandoah River will be of public utility, and the Potomac Company, which has failed to complete the said navigation within the time limited by their charter, has, on certain conditions, agreed to relinquish any further claim thereto: And whereas, it may be necessary to cut canals and erect locks and other works on both sides of the river; and the General Assembly, impressed with the importance of the object, are desirous of encouraging so useful an undertaking.
labor to improve or clear trouble areas when needed. Charles and Wright Gatewood performed the vast majority of this early work. In August 1825, the Gatewood brothers secured their first contract with the company to “improve the North branch of the Shenandoah River from its mouth up to the entrance of Tumbling run so as to open and make navigable the said river for...boats.” The Gatewoods and others employed by the company not only cleared river segments congested by trees and other debris, but also built works including dams and chutes:

Chutes were built in the dams of the passage of these boats. The top ends of the chutes were placed as far below the level of the water going over the dams as the bottom of the boats were submerged in the water, and were closed with a well fitting plank. The chutes fell gradually to the level of the water below the dams. These chutes were excellent passageways for fish in their annual migrations up the river. At a certain height in the rise of the river, both boats and fish could pass over the dams.

Though far less complex than canal works, New Shenandoah Company improvements were no doubt labor intensive and, given almost constant need, kept workers like the Gatewoods gainfully employed for over a decade.

Though seemingly never complete, their work paid off by 1829. At a General Meeting of the New Shenandoah Company, President William Bell declared that “the navigation of our river...its practicability and entire safety have been satisfactorily established.” Even so, water conditions changed from month to month with alternating weather patterns and continual construction of milldams by local millers. Even the shallow-drafted gundalow was not safe:

We got in sight just in time to see the first boat go thro, strike a great rock, split in twain, and the whole cargo of pig iron went to the bottom. Each boat was manned by six men,

16 New Shenandoah Company, 1 August 1825, “Record of the Proceedings of the General Meetings of the Shareholders and Orders of the Board of Directors of Said Company,” p. 128; hereon referred to as “Proceedings.”
17 George E. May Collection (SC #2055), Box 1, Folders 1,2,4, owned by the Harrisonburg-Rockingham Historical Society, on deposit at James Madison University Carrier Library, Special Collections, pp. 146-57.
18 Proceedings, 16 November 1829, p. 160. The New Shenandoah Company relied on the testimony of Capt. Orbison is are [sic] almost constant use of the river for several years, and frequently with a fleet of from six to ten boats, often principally manned by inexperienced hands have never met with an accident that has caused the loss of or seen an injury to a single article entrusted to his care—This fact (although very highly credible to the character of M. Orbison as a skillful waterman) incontestably establishes the safety of our navigation.
and when the boat broke those on it were carried to such deep water that, they had to swim. There were 18 boats in this fleet, and soon the men began to wade in and gather the iron together in a pile. The broken boat was then taken to the bank and repaired, reloaded and started on its way again.\textsuperscript{19}

In response to such mishaps, the river company took steps to standardize boat dimensions so improvers could construct works of adequate size to avoid groundings and unexpected collisions. The Gatewoods were specifically instructed to make their improvements so that boats “of Sixty-six feet in the keel, and eight feet in width” could manage “when there is water enough in the said North river [the Shenandoah] to fill the dams of one foot in height with an open sluice of eleven feet in width.”\textsuperscript{20} Nonetheless, the Shenandoah remained hard going and boat captains encountered new conditions at every pass, which proved ultimately unmanageable by the New Shenandoah Company.

For some time though, the company maintained a more-or-less consistently navigable stretch of water to which Valley merchants flocked. As mentioned above, the nearest sizeable markets for Port Republic produce lay two hundred miles away in Georgetown and Alexandria. Overland transportation using wagons was available, but costly and seasonably variable; wagon routes were invariably rendered impassable by spring and summer freshets. Therefore, prior to Valley rail service, upland producers turned to the Shenandoah River whose waters were made navigable by the very freshets that mired wagon routes, and they did so by the thousands. On a single day in 1840, riverman Jacob Sipe departed Port Republic with an astounding fifty-two boats containing over five thousand barrels of flour.\textsuperscript{21} John Wayland notes that even though a number of Page County farmers “began to haul across the Massanutten Gap to the railroad as soon as the New Market station was opened, many others continued to send their products down

\textsuperscript{20} Proceedings, 1 August 1825, p. 128.
the river in gondolas.” This was especially the case following 1862 when Stonewall Jackson swept the Valley burning as many bridges as possible behind him, rendering wagon transport all but impossible. Given the going price of eight dollars per barrel, it is clear why riverboats played an integral role in Valley life. As a result, Port Republic’s “sawmills, blacksmiths, coopers, carpenters, and farmers who grew flax for caulking all prospered because of the boats on the river.”

Nonetheless, despite improvements, the Shenandoah remained a narrow, shallow river, especially above Harpers Ferry, and could not conceivably host hundreds, let alone thousands, of boats at any one time. In addition, rocky, swift-running waters made return trips difficult if not, at times, impossible—the pay due boatmen for an up-stream haul would have exceeded the twenty to thirty dollar cost of a brand new boat. Moreover, Port Republicans would not have profited so, had their boats been long-lasting permanent craft meriting only occasional maintenance. Instead, Valley builders and merchants opted for an intentionally short-lived craft: the Shenandoah River gundalow. Unlike the sharp-prowed bateaux that plied the James and southern Potomac Rivers, gundalows built in Port Republic were fashioned for one-way use only and, thus, wholly ephemeral lives. Once built, loaded, and launched, gundalows left Port Republic or other upriver points and headed down stream for eastern markets. “There were many stations along the river where the oncoming fleet, or certain boats designated by the commodore, would go ashore to discharge or take on freight. Occasionally a fleet would not stop at Harpers Ferry, but continue by way of the Baltimore and Ohio Canal.” Once landed and unloaded, the gundalows were sold for between $18 and $25, at which time the boatmen returned to their point of departure on foot earning roughly $14 to $18 for the entire trip of about

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23 For example, George May describes a bridge built by John Beckone in 1852 with funds from Stephen Harnsberger. Jackson destroyed the bridge on 9 June 1862 to prevent General Freemont from advancing east and, thus, aiding General Shields. George E. May Collection, p. 106.
24 Ibid.
25 George E. May Collection, p. 147.
5 to 7 days. Though the disassembly and sale of gundalow wood was most likely a routine, informal affair, the sale of more elaborate gundalows like that built for the company by Adam May in 1848 were more special occasions. Company records note:

To J. Balaley for services as Auctioneer in selling House-Boat and properties used by the surveying party- $2.00
Cash paid [Dann] for hauling goods from boat to town 1.00
Cash paid G.W. Chambers for advertising 2.00

$5.00

Harpers Ferry Dec 16, 1848

Once purchased, the lumber was hauled off and put to use as seen fit by buyers. In this way, gundalows found their way into the walls, ceilings, and floors of “houses and stores of towns from Harpers Ferry to the nation’s capital.”

Reconstructing the Gundalow from the Historical Record

Though the New Shenandoah Company was intimately tied to this entire process of gundalow production, use, and reuse, references to the boat are few within its minutes. Indeed, the only references to gundalows occur in response to requests for permission to construct milldams. In 1832, for example, Solomon Hankle applied for leave to construct a milldam near Plains Mill in Rockingham County. The company granted Hankle permission “upon the condition that he provide a safe and easy passage through the said dam at all times both for the ascent and descent of all boats, gondolas, and other craft navigating the said river.” The form of this response is mimicked throughout the minutes suggesting official set parlance for such occasions. Even so, other sources suggest that not only were gundalows present, but that they constituted a commonplace element of everyday life along the Shenandoah. David Gilbert notes that as early as 1807, toll reports kept by Thomas Harbaugh during one month in that year

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26 Wayland, A History of Rockingham County, Virginia, p. 420.
27 Miscellaneous letters sent, reports, and receipts and accounts of the New Shenandoah Company, 1844-1851, record 103 of box 210, Virginia State Library, Richmond, VA.
28 Greiner, p. 42.
“show $243.69 received ‘on produce descending the Shenandoah’ and only $1.57 for boats ascending” suggesting that nonreturnable craft were already well established within the first decade of the nineteenth century.30 One local historian tells of a company of forty volunteers mustered during the War of 1812 by Thomas Gregg in 1814 and shipped from Charles Town, VA to Washington, DC via Harpers Ferry on two “flour boats”—flour being principal gundalow cargo.31 In the first article of the first issue of The Ladies Garland (1824), a Harpers Ferry women’s interest magazine, an anonymous writer saw fit to observe in her general description of the town that “the eye is occasionally arrested from the rustic objects of its admiration, to witness the rapid descent of heavily freighted boats.”32 Renowned boatman Jacob Sipe spoke from the other side of river boating when in 1841 he advertised his services in the Rockingham Register with the reminder that “last season he and his hands took through the Shenandoah Lock 5,623 barrels.”33 Roughly a decade later in 1855, the U.S. Armory Rifle Factory at Harpers Ferry complained about “the deposite of empty gondolas in the canal opposite to those works.”34 Perhaps most telling is George Mauzy’s 1840 advertisement in The Constitutionalist:

Notice. I Have a considerable quantity of GONDOLO PLANK, SCANTLING, &c. on hand, which I will sell low for Cash, or to punctual man. The Price for the plank is $1 per hundred feet and the scantling at a fip a piece. — 3t.

George Mauzy
Virginius, June 18, 1840.

That Mauzy had hundreds of feet of boat lumber to offer at such a low price suggests an excess and

33 Advertisement, Rockingham Register, 16 January 1841.
34 Trout, p. 78.
perhaps also some impatience in disposing of the material. One can imagine that the need to advertise must only have arisen amid large surplus.

Additional newspaper advertisements suggest that Valley residents occasionally expanded their interests and, to some extent, vertically integrated the gundalow industry. Stephen Harnsberger, for instance, held an official position with the New Shenandoah Company in addition to operating a flour hauling business by which he charged people such as Selah Holbrook “To hauling 50 barrels flour to River, $1.50.”\(^{35}\) Thus, he benefited from two different, though mutually dependent aspects of the gundalow industry. The same George Mauzy who sold gundalow lumber in the local paper also worked as the toll collector at the New Shenandoah Company’s station in Harpers Ferry. In this way, Mauzy doubly benefited from his position by earning salary from the company while taking advantage of a first-come-first-served policy on dismantled gundalow lumber. Furthermore, an advertisement in the 2 January 1862 edition of the *Rockingham Register* lists a sawmill and steam engine for sale by, again, George Mauzy.\(^{36}\)

This combination of advertisements suggests a pattern of entrepreneurship. While manning his station, Mauzy no doubt purchased gundalow lumber at low rates and then, with the aid of his saw mill, could have easily sold the milled lumber at slightly inflated rates to customers desirous of cheap building material, thereby securing a nice profit for himself and a good deal for the builder. Such speculating was not uncommon. Major James Richards of Riverton in Warren County was known to buy boats for “speculation and resale as building material.”\(^{37}\) Jacob Sipe too extended his reach into several aspects of the gundalow industry. In his 1841 *Rockingham Register* advertisement, Sipe emphasized “having a saw mill of his own to enable him to build his own boats, and having hands of his own [sic] to go with the water...All

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\(^{35}\) George E. May Collection, p. 34.

\(^{36}\) Advertisement, *Rockingham Register*, 2 January 1862.

\(^{37}\) Elliot Clarke Haley, et al., *An Economic and Social Survey of Warren County* (Charlottesville: University of Virginia, 1943), p. 20.
barrels delivered in good order—no cooperage to be charged.” Sipe thus integrated three elements of the gundalow industry. Not only did he ship cargo, but he also constructed his own boats and contracted out the labor of local boatmen. Such vertical integration suggests a scale of industry not at all accounted for by histories of Virginia. Men like Harnsberger, Mauzy, Richards, and Sipe reveal that not only did there exist a significant gundalow-based river economy, but that local capitalist spirit thrived by means of small-scale entrepreneurship and vertical integration. This entrepreneurial spirit certainly fulfilled the New Shenandoah Company’s 1824 call for its members to, “with generous liberality give employment to every industrious honest navigator who may offer his services—particularly if he should be a son of the valley.”

A number of these “sons of the Valley” earned widespread and occasionally flamboyant reputations. Among the most flamboyant was Zachariah Raines of Port Royal. Raines earned the honorary title of “Commodore” among locals, given his long years of river service. Born in 1810 near Browns Gap, Virginia, Raines played a visible role throughout the formable years of the Shenandoah’s gundalow economy and colored the undertaking with his own dramatic swashbuckling style:

Sometimes there were as many as twenty boats in one fleet. When the time of the departure of the fleet arrived, Commodore Raines and his men were in their glory. With ear-splitting blasts from long tin horns, much shouting, and loud singing, the boats, singly, or two lashed together drew away from The Point and headed down the river.

Raines possessed a vested interest in water transport. In addition to his employment as a river captain, Raines owned a significant amount of land rich in iron, a commodity frequently shipped by gundalow downstream. The boatman’s iron interests came to a head when the Abbott Iron

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38 Advertisement, Rockingham Register, 16 January 1841.
40 George E. May Collection, pp. 146, 149. Local knowledge places Raines’ birth date at 15 July 1810.
41 Ibid., p. 147.
Company laid shovel to his land without permission, sparking an intense legal battle.\textsuperscript{42} Even so, Raines was also known for his sobriety and upstanding citizenship not to mention his regular and active attendance at Port Republic’s Methodist Church.\textsuperscript{43} The river commodore died at age 60 in 1870, but left a rich legacy including great transport feats like that three years prior during a Spring outing, when Raines and eleven men carried 110 tons of iron 165 miles to Harpers Ferry in only four and a half days.\textsuperscript{44}

Though less flamboyant than Raines, a number of local gundalow builders also earned reputations for their skills. During early improvement efforts boatbuilders were apparently few and far between. Corra Bacon-Foster notes that as of 1803 when company commissioners set out to observe early improvement efforts, “premiums were offered for good boats, as there seems to always have been a shortage.”\textsuperscript{45} Builders like Mitchell Crawford soon filled the void. Though supplying Port Republic demands, Crawford resided in New Haven, an upstart community immediately adjacent to Port Republic. Indeed, Crawford benefited from little competition given that New Haven folded within a year leaving only “an abandoned house and a deep well of fine water... to mark the site of this ghost town.”\textsuperscript{46} Perhaps more widely recognized than Mitchell was Adam May. May arrived in Port Republic from Pennsylvania between 1810 and 1820 and succeeded at making the gundalow business a family affair.\textsuperscript{47} His son James Henry served as main assistant, his other son Daniel an assistant as well, and yet another son, Samuel, worked as pilot. Together, the family catered to a variety of Port Republic boat needs.

\textsuperscript{42} Ibid., p. 148.
\textsuperscript{43} Ibid., p. 149.
\textsuperscript{44} Noah D. Showalter, \textit{Atlas of Rockingham County, Virginia} (Harrisonburg: Noah D. Showalter, 1939), p. 51.
\textsuperscript{45} Bacon-Foster, \textit{Early Chapters in the Development of the Potomac Route to the West}, p. 105.
\textsuperscript{46} George E. May Collection, p. 146.
including construction in 1848 of a deluxe survey gundalow for the New Shenandoah Company for a whopping $33!\textsuperscript{48}

Although an entire industry had grown around the gundalow by the mid-1800s, extant primary accounts of the boat, its construction, and use are virtually nonexistent. Some hints remain, like Benjamin Perley Poore’s recollection of the Potomac River as being “navigable above Georgetown as far as Cumberland in long, flat-bottomed boats, sharp at both ends, called “gondolas.”\textsuperscript{49} John Wayland claims that “these boats” measured roughly ten-feet wide by eighty-feet long and could carry eight tons of iron in low water, twelve in high, eight to twelve thousand feet of lumber, or 110 barrels of flour.\textsuperscript{50} Eyewitness accounts are nonetheless rare and we must look elsewhere to gain some sense of the appearance and construction of these boats. Fortunately, though the Shenandoah River gundalows built by Crawford and the Mays might have constituted a distinct regional boat type, gundalows were not unique to the valley. Quite the contrary, varieties of gundalows used throughout the eastern United States were perhaps as numerous and varied as the names they were known by. In the northeast alone there exist up to forty variations on the name including “gondola, gundalow, gundelow, gunlo, gundaloa, and gundeloe.”\textsuperscript{51} This name no doubt derives from the Venetian gondola, also a flat-bottomed, sharp-prowed, though far more stylish, craft.

The trans-Atlantic export of this European type manifested itself in a number of variations throughout the eastern states. The *Oxford English Dictionary* defines the American version as:

A large flat-bottomed riverboat of light build; a lighter; used also as a gun-boat.

\textsuperscript{48} Greiner, p. 44.

\textsuperscript{49} Benjamin Perley Poore, *Perley’s Reminiscences of Sixty Years in the National Metropolis, Illustrating the Wit, Humor, Genius, Eccentricities, Jealousies, Ambitions and Intrigues of the Brilliant Statesmen, Ladies, Officers, Diplomats, Lobbyists and Other Celebrities of the World that Gather at the Centre of the Nation; Describing Imposing Inauguration Ceremonies, Gala Day Festivities, Army Reviews, &c., &c., &c., Vol. 1* (Philadelphia: Hubbard Brothers, 1886), pp. 50-51.

\textsuperscript{50} Wayland, *History of Rockingham County, Virginia*, p. 420.

1774 J. Wentworth in N.E. Hist. & Gen. Reg; (1869) XXIII. 276 The cannon were sent in Gondolas up the River into the country.

1777 E. Badlam in N.E. Hist. & Gen. Reg; (1848) II. 49 Colonel Brown has taken Ticonderoga—a number of armed gundeloes, one armed sloop [etc.].

1805 W. Hunter in Naval Chron. XIII. 39 Two Gundalos came down and fired at us.

1809 Kendall Trav. III. Ixiv. 31 Vessels are floated down to the sea, by means of flat-boats or lighters, here [northern U.S.] called gondolas.

1866 Whittier Snow-Bound 254 When favoring breezes deigned to blow The square sail of the gundelow.

1886 B. P. Poore Remin. I. iii. 51 The Potomac River..was navigable..in long, flat-bottomed boats, sharp at both ends, called 'gondolas'.52

The *OED*'s examples suggest in chronological order a parallel geographic shift from the northeast to the south. Indeed, the gundalow’s foothold in the north seems to have begun along the northeastern coast near or in what is now New Hampshire, where the first known mention of “gundalow” dates to 1659.53 Gundalows were especially pervasive along the Piscataqua River, the southern border between Maine and New Hampshire. Here, gundalows thrived from the mid-seventeenth century to the beginning of the twentieth as these state’s upland lumber industries provided well over two hundred years worth of constant cargo. The term gundalow also came to be associated with small, swift military craft such as the Gondola *Boston* built at Skanesboro, New York, involved in the Battle of Valcour Island under the command of General Benedict Arnold. For our purposes, however, the northeastern freight variety is of primary interest, for the northern gundalow’s life mirrored that of the Shenandoah Valley in terms of function and, to some extent, duration. The difference, however, is the extent to which the Piscataqua River gundalow remains alive in local memory—visitors can see a reconstructed gundalow at Prescott Park in Portsmouth, NH and even lodge at the Gundalow Inn when passing through Kittery, ME.54

54 For a discussion of gundalows in New England and a description of the construction of a traditional type, visit http://www.seacostnh.com/375th/journal0598.html.
Differences appeared in the structure and use of the northern and southern boats as well, but not until the turn of the nineteenth century. From roughly 1650 to 1800, the northeastern gundalow resembled something of a floating box, being a square-ended scow without rudder, deck, transom, or sail. These boats ranged from twenty to thirty feet in length, drew an approximately one-foot draft, and were poled or oared with cargoes of between ten and twenty cords of lumber. To this extent, the northern variety closely resembled its southern cousin. Both fall under the more general category of “punt” that Howard I. Chapelle notes had been commonly used in England and continental Europe prior to American colonization. He further comments that “in American accounts, the scow appears under various names such as the “flat,” “radeau,” and “gondalow” or “gondolo”; the latter name was more commonly used to indicate a flat-bottomed, chine-built, double-ended boat of pram class.” Here we find a line of descent beginning with the European punt, evolving into the American gundalow, and by 1800, splitting into distinct varieties of gundalow. Between 1800 and 1860 the Piscataquel gundalow adapted to meet increased demand for northern lumber. The previously sharp stern was squared off onto which was secured a fixed rudder and tiller, decks and cuddies were added athwartships, large swooping lateen rigs replaced oars and poles, and paint appeared to enhance durability as well as proprietary pride. Beginning at the turn of the twentieth century, the Piscataqua gundalow appeared in its final form with a length increase of up to and exceeding sixty feet.

Given the thin historical record surrounding Valley gundalows, the pre-1800 Piscataqua variety provides a model with which we can temporarily fill gaps in the Valley story. Perhaps the most significant commonality between the boats involved choice of materials. Richard Winslow notes in his discussion of Piscataqua gundalows that “the flats” were always laid with white pine. Members of the crew stood on the deck, performing their duties or working the long

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55 Winslow, pp. 29-30.
57 Winslow, pp. 29-30.
forty-foot sweeps, and needed maximum traction. Oak is slippery when wet, and pine assured the best footing.\textsuperscript{58} If Piscataqua boatmen were desirous of sound footing to the extent that deck materials were chosen accordingly, then Shenandoah boatmen no doubt demanded the same. Boating on the northern river, despite occasional chop and spray, was and is a placid affair. Wide deep rivers make for relatively smooth sailing. The Shenandoah, however, is a white-water river. Boatmen manipulated gundalows through manmade and natural chutes, rapids, and constant riffles. The wooden line between boat and river was routinely blurred by violent river spray and boatmen surely spent the majority of their down-river trip tromping amid persistent bilge water. Therefore, it seems reasonable to infer that Shenandoah gundalows, though generally lacking decks, utilized pine for hull/floor boards, especially given the abundance of pine high atop the nearby Massunaten mountain. Winslow also recounts the words of a New Hampshire builder, “Pine would swell...and they wouldn’t have to caulk it as much as some of the others.”\textsuperscript{59} Again, this favorable attribute suggests further reason to believe that pine was the wood of choice for builders like Adam May.

As for the actual building process, even less information exists concerning the Shenandoah River Gundalow. At this point, the Piscataqua gundalow comparison is no longer of assistance for as the northern boat evolved so did construction methods rendering previous approaches obsolete and therefore, forgotten. What information does remain pertains to the Piscataqua gundalow’s unique spoon-shaped bow, thick planking, and well-crafted joinery—features never acquired by the relatively primitive Shenandoah boat.\textsuperscript{60} Moreover, no primary accounts of the building process exist. One secondary source, George E. May’s unpublished manuscript, despite its excessively florid prose, offers some help here:

Here, too, was heard the ringing of the hammer, the thud of the mallet, and swish of the saw, as the boat-builders, with much good cheer, laboured at their appointed tasks. It

\textsuperscript{58} Ibid., 51.
\textsuperscript{59} Ibid.
\textsuperscript{60} Ibid., p. 49.
seems that, in some cases as least, patterns were used to build the boats by, and that they were built on both sides of the river. Stephen Harnsberger charges Jacob May, Oct. 30, 1844, “To hauling 1 boat pattern over the big river $.75.” In another account book Mr. Harnsberger, on May 28, 1847, charges John Holbrook, “To hauling Boat pattern to the point $.63.” On February 14, 1848, he gives Henry Mace credit for one boat pattern at $12.66. While it is doubtless true that no blue prints were used here in the boat-building business at the time, and that some of the builders may have needed a pattern for a guide, yet nothing is more certain than that some of the workmen were master-builders, and that nothing more than length and breadth needed to be given for them to build a first-class boat. Perhaps “pattern” meant the lumber used in building a boat. 

Though May’s account tells us little about the actual mechanics and processes of gundalow construction, his concern with patterns and their use connotes a certain frequency. The use of patterns indicates some degree of redundancy—a pattern would not be necessary nor worth the expense of construction if a part were to be made only once. Patterns also suggest standardization. This is to say that not only were the Mays and Holbrooks building lots of boats, they were probably building duplicate boats, again suggesting quantity, efficiency of design, and even the developing technologies of mass production. This said, we still lack the means to reconstruct a gundalow. We know that “the boats, called gundalows, were usually nine or nine and a half feet wide and from 76 to 90 feet long. The side planks were two inches thick and fourteen or more inches wide. To keep out splash-water the width of the sides was increased by placing one inch thick splashboards on top of the gunwales.” Moreover, we have some sense of the boats’ flat bottoms, square bows and sterns, and fore and aft mounted sweeps. Still, questions remain concerning joinery, overall shape, and so on—questions whose answers remained hidden in the walls of Harpers Ferry and the mud pits of Richmond for nearly a century.

Philip Coons and Gundalow Reuse

On a cold November morning in 1845, Philip Coons and a handful of workmen looked up from the third floor of Coons’ Shenandoah Street property and admired an azure sky of phony

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61 George E. May Collection, pp. 33-34.
62 Ibid., 146.
clouds and faint stars. Indeed, the Potemkin sky proved a fitting touch to Harpers Ferry’s new Charity Lodge #111; its open expanse evoked the Almighty and served tribute to the seemingly limitless progress bestowed upon that bustling antebellum crossroads. More impressive yet was the canvas beneath. Coons’ skymakers cast their scene upon a grand arched ceiling covering nearly nine-hundred square feet and reaching a close fifteen toward its more perfect inspiration.

Though large, the ceiling stood completely of its own will, not a single intermediary support interrupted sky or floor. This small stroke of architectural genius made for a wonderfully spacious meeting hall beneath an equally impressive motif.⁶³

It has been said, though, that destruction, like creation, is one of nature’s mandates, and so it was in 1845. Coons’ lodge had previously met for over two decades in Harpers Ferry’s Free Church, the first church built in that town. Though hardly private and even less majestic, the Free Church nonetheless offered a suitable meeting place for Masons, being within a stone’s throw of the rock upon which Thomas Jefferson stood in 1785 and declared the junction of the Potomac and Shenandoah Rivers a scene “worth a voyage across the Atlantic.”⁶⁴

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⁶³ Neither extant photographs nor first-hand written accounts of the ceiling predate the National Park Service report. Archie W. Franzon, most likely drawing from now-lost Charity Lodge #111 minutes, describes the ceiling in his 1962 historic structures report:

> The large lodge meeting room’s ceiling was vaulted. Its cross section was elliptical in shape transverse to the ridge line of the roof (the latter is parallel to Shenandoah Street). This ceiling had white stars and clouds painted on a light blue background. It was supported from old boat timbers used as furring suspended [sic] from shaped scabbing affixed to the lower chord members of the king post trusses above. As a result there was no need for intermediate supports thus providing a large uninterrupted meeting room. The outer walls were plastered with the exception of the southwest wall which is vertical wood boards. There is a wooden cornice running around the room at the spring line level of the vaulted ceiling.


> The passage of the Patowmac through the Blue Ridge is perhaps one of the most stupendous scenes in Nature. You stand on a very high point of land. On your right comes up the Shenandoah, having ranged along the foot of the mountain a hundred miles to seek a vent. On your left approaches the Patowmac in quest of a passage also. In the moment of their junction they rush together against the mountain, rend it asunder and pass off to the sea. The first glance of this scene hurries our senses into the opinion that this earth has been created in time, that the mountains were formed first, that the rivers began to flow afterwards, that in this place particularly they have been so dammed up by the Blue ridge of mountains as to have formed an ocean which filled the whole valley; that, continuing to rise, they have at last broken over at this spot and have torn the mountain down from its summit to its base. The piles of rock on each hand, but particularly on the Shenandoah, the evident marks of their disruptions and avulsions from their
struck, however, in early 1845 as flames ravished the town landmark and left Charity Lodge #111 homeless. Fortunately for the lodge, Coons had already begun construction of a two-story building on his new property on Shenandoah Street, not more than five hundred feet below the hill-perched church. Charity Lodge arranged with brother Coons to add a third floor meeting room and the project was complete by the end of 1845. Coons did not formalize his arrangement with the Masons until 1852 at which time the two parties put in print their agreement concerning

The privilege and right to build as a meeting place or lodge of the said Fraternity an addition or third story upon the stone house built by the said Coons on the West side of Shenandoah Street in said term on lot No. 46 of the plat on the division of lands of John Wager deceased...free from rent or imposition...but it is expressly stipulated herein...that the said parties of the second part (the Lodge) & their successors shall at all times hereafter keep in good repair the roof & spouting of the said building at their own proper costs and charges. And further that there shall be no limitation as to time in this grant except in the event of the destruction of the building by fire when this privilege shall cease & be forever void without the assent in writing of the said parties of the first part (Coons).

Our story began with the eruption of mountains in Virginia’s interior, mountains that framed the development of a unique, isolated economic system largely facilitated by something of an odd, throwaway boat. We now take up the thread with Coons’ reconstruction of the Harpers Ferry Masonic lodge. “Reconstruction” is appropriate here, for though Coons did beds by the most powerful agents in nature, corroborate the impression. But the distant finishing which nature has given the picture is of a very different character. It is a true contrast to the former. It is as placid and delightful as that is wild and tremendous. For the mountains being cloven asunder, she presents to your eye, through the cleft, a small catch of smooth blue horizon, at an infinite distance in that plain country, inviting you, as it were, from the riot and tumult roaring around to pass through the breach and participate in the calm below. Here the eye ultimately composes itself; and that way, too, the road happens actually to lead. You cross the Patowmac above the junction, pass along its side through the base of mountain for three miles, the terrible precipice hanging in fragments over you, and within about 20 miles reach Frederick town and the fine country around that. This scene is worth a voyage across the Atlantic. (pp. 48-49)

65 Harpers Ferry National Historical Park, “Chain of Title for Wager Lot No. 46, The Philip Coons Building, Bldg. No. 44, 1751 to 1953,” prepared by Charles W. Snell, 1979, pp. 4-5; hereon referred to as “Chain of Title.”

66 The Chain of Title indicates that the new lodge was dedicated on 24 June 1846 despite the 22 November 1845 date of completion noted by Franzen.

67 Chain of Title, p. 5
indeed build a new lodge, very little at all was new about the structure. Coons salvaged a wealth of material from the old church.\[^{68}\] Whatever could not be dragged away from the wreckage, was bought at discount from the proprietors. Brick, iron, and lumber all found its way down the hill to Shenandoah Street. Evidence of Coons’ thrift remains today. Visitors to the third floor of the Philip Coons Building in Harpers Ferry National Historic Park will notice seemingly out of place bricks in the room’s back wall as well as width inconsistencies between the third level’s floorboards and those of the two levels beneath. In short, the old Free Church literally rolled down the hill and landed flat atop Phillip Coons’ latest business venture.

\[^{68}\] Franzen, p. 2:

A careful perusal of the minutes of charity Lodge #111 for the year 1845 shows that construction of the third floor meeting room was started early in 1845 and completed by November 22, 1845, when the Masons held their first meeting in their new quarters. Philip Coons was a Mason himself and in the minutes of March 22, 1845, mention is made of his having bought and salvaged brick, iron and lumber from the earlier Masonic Hall in the Episcopal Church which had burned down. Franzen notes that he obtained permission to review the lodge’s minutes from Mr. Harry Chambers, the then eighty-year old lodge historian, including that “all minutes prior to March 22, 1845, were lost when
But, what of Coons' muraled ceiling? That too was salvaged, in part, but not from the church ruins. The timbers above Coon's plaster ceiling most likely began life high atop the Massanuteen Mountain, some ninety miles away.\textsuperscript{69} There, towering above Port Republic, stood the often seventy to eighty-foot limbless long-leaf yellow pines that fueled industries from Port Republic to Alexandria and beyond. Lumber-dependent industry was especially robust in Port Republic during the 1840s. This was nothing new, however. At least eighty-four sawmills operated throughout Rockingham and Augusta Counties as early as 1810.\textsuperscript{70} Indeed, men like Selah Holbrook made a small fortune in the lumber business. Following the success of his Port Republic sawmill, Holbrook established a flour mill, foundry, machine shop, and blacksmith shop—all made possible and, to some extent, sustained by the vast timber stands overlooking the Shenandoah Valley.\textsuperscript{71}

Lumber sales, however, did not contribute a significant nor tangible bulk to Port Republic's economy. \textit{Martin's Gazetteer} provides a glimpse of the town as it appeared in 1832:

\begin{quote}
It contains 30 dwelling houses, 1 house of public worship, free for all denominations, 1 common school, 1 house of entertainment, 2 mercantile stores, 1 manufacturing flour mill, 3 saw mills, 2 tan yards, 1 tilt hammer shop, with carriage manufactary attached, 2 other smith shops, 1 tin plate worker, 3 boot and shoe factories, 1 saddler, 1 cabinet
\end{quote}

the Episcopal Church was destroyed by fire in that year." The whereabouts of these minutes are no longer known.
\textsuperscript{69} Haley, et Al., \textit{An Economic and Social Survey of Warren County}. Haley notes that gundalow wood was most often obtained from this region.
\textsuperscript{70} Mitchell, \textit{Commercialism and Frontier}, pp. 208-09.
\textsuperscript{71} George E. May Collection, p. 37. The 1850 census for Buckingham County, VA lists Holbrook as a carriagemaker with a wife, three daughters, and two sons, one of which was a physician. Holbrook owned real estate worth $3000, placing him, though not among the wealthiest, among a high income bracket nonetheless. This is to say, Holbrook lived a comfortable life, largely due to Port Republic's lumber industry. The full census entry reads as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Sex</th>
<th>Occupation</th>
<th>Real Estate Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selah Holbrook</td>
<td>57</td>
<td>M</td>
<td>Carriage Maker</td>
<td>3000</td>
</tr>
<tr>
<td>Mary A Holbrook</td>
<td>42</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>William S Holbrook</td>
<td>22</td>
<td>M</td>
<td>Physician</td>
<td></td>
</tr>
<tr>
<td>Frances S. Holbrook</td>
<td>13</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garhave G. Holbrook</td>
<td>10</td>
<td>M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virginia B. Holbrook</td>
<td>8</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary L. Holbrook</td>
<td>8/12</td>
<td>F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
maker, 1 turner and chair maker, 1 hatter, and 2 tailors. The Shenandoah is navigable for flat boats from Port Republic to the District of Columbia, running at all times (except at very dry season) with from 60 to 120 barrels of flour on each boat.\textsuperscript{72}

This description is revealing in two ways. First, it suggests the extent to which Port Republic exploited lumber resources. The gazetteer lists six businesses primarily concerned with lumber; this is to say nothing of those like smithing that were indirectly dependent upon lumber for fuel. Though six does not seem like many, Port Republic’s 1832 population numbered only one hundred sixty. It follows that the town supported one lumber-dependent industry for almost every twenty-seven people, that is one for every fifth home! The passage also suggests the importance of flour milling to Port Republicans. In addition to the Shields, Preston & Company mill that the gazetteer most likely refers to, “there were a number in the neighborhood and were named for their owners, such as Nohler, Miller, Raynes, Lewis, Holbrook, Whitmore, Dunn, Dhester, and Harper.”\textsuperscript{73} The flour industry, perhaps more than any other in Port Republic, consumed vast amounts of lumber in terms of cooperage—flour being shipped in barrels—and the boats that took those barrels to market.

It was these boats—these gundalows—that ended up in the walls and ceilings of Harpers Ferry, a phenomenon best represented today in the ceiling of the third floor of the Philip Coons Building.\textsuperscript{74} Coons’ involvement with the property began on 18 June 1836 when he and partner James Duncanson made the high bid on the empty lot at $600.\textsuperscript{75} Sometime between 1836 and 1842, the two erected a structure on lot #46, though in that same year Coons bought out his partner for an additional $100 and began possession of the entire lot and now two-story combination bakery and apartment.\textsuperscript{76} The Masonic Hall was added in 1845 and no doubt added significant resale value to the structure for on 17 July 1855, Philip Coons left the venture and

\textsuperscript{72} Martin’s Gazetteer and History of Virginia (1832), p. 434, quoted in George May Collection.
\textsuperscript{73} George E. May Collection, this reference occurs within chapter eight of May’s manuscript though no page number is given.
\textsuperscript{74} A truly fortunate find, for raging floods have submerged the building’s bottom stories over eight times, leaving only the third primarily undisturbed.
Logan Lodge No. 25 until 11 November 1952 at which time the Masons sold their meeting place to the State of West Virginia and, hence, to the Harpers Ferry National Historical Monument.78

The Masonic Hall’s arched ceiling is actually a drop ceiling secured to timbers not derived from gundalows. It consists of twelve concave arch supports spaced roughly two and a half feet apart stretching from the back of the building to the front. To these arch supports are attached fifteen longitudinal members running perpendicular to the supports and spaced about two feet apart. To these were secured the lathing strips and plaster that served as canvas to Coons’ sky painters. The arch supports consist of two boards apiece, joined in the center so as to span the entire room. These boards are two inches thick and before being shaped to

Fig. 9. The Philip Coons Building (Building #46) as seen from Shenandoah Street. (Photo by author)

Fig. 10. National Park Service section and floor plan drawings of the Philip Coons Building’s third floor including external staircase.

75 Chain of Title, p. 3.
76 Ibid., p. 6.
77 Ibid.
78 Ibid.
form a round arch would have been about fourteen inches wide. The most distinct feature is the series of equally-spaced square holes that line the arches’ upper edges. Lateral members are of three varieties. The first—and majority present—are two-inches thick, six-inches wide, and span the entire ceiling. Again, these boards possess the aforementioned holes spaced evenly every two feet. The second variety of lateral member consists of four short members—about eight feet apiece—butted together at arch pieces to create one long span. Each is about two-inches thick by four-inches wide with a subtle curve on one end and all possess curious one by four-inch rectangular notches along their flat edges. Finally, a number of lateral members are only one-inch thick and six-inches wide and lack any evidence of mortise holes. These pieces do, however, feature groups of nail holes every two feet where are attached no apparent structural members thereby suggesting a previous use.

So, now that we have a general sense of the shape and dimensions of the gundalow and even a few samples of gundalow parts—although altered during passage from initial disassembly to ceiling top—all we need now is some clue as to the way these parts fit together in the original boat. For this we move to what can be called, for lack of a better term, the archaeological record. I am hesitant to refer to what follows as the “archaeological record.” James Deetz tells us that a value “of archaeology to history is a function of the commonplace quality of most material culture. As fundamental components of everyday life, things like
houses...were so universal and taken for granted that there was little need to make written note of their existence, much less appearance.... Archaeology...if used correctly, can provide insights not obtainable from the documentary sources.”\textsuperscript{79} Gundalows, as I have demonstrated, constituted part of the “commonplace” material culture of the eighteenth-century Shenandoah Valley and, as Deetz predicts, are “not obtainable” in any great detail from documentary sources. They were also disposable boats whose historical elusiveness was literally built in.

This said, it seems obvious that the odds of finding an archaeological remnant or even whole gundalow are slim to none. Fortunately for us, the odds leaned toward the former in 1995 as front-end loaders and heavy equipment sliced through Richmond’s Great Basin and—with the ever-watchful Bill Trout standing by—revealed a hand-full of boards suspiciously well ordered:

Armed with a certificate of insurance... I spent the day digging out the boat, following the planks to see where they led. This revealed a ten-foot long section of boat with one side left. It probably dates from the early 19\textsuperscript{th} century, because it was in a part of the basin which was walled off in later years.... On the Shenandoah, this type of boat is known as a gondola or “gundalow,” so we call our boat a “James River Gundalow.”

All of the planking was straight-sided (no tapering), of a hard wood (perhaps white oak), the bottom planks 11 to 13 inches wide and an inch thick, the side a single board 16” wide and 2” thick, set on the bottom planking and splayed outwards about 3” at the top.

The ribs, spaced about two feet apart, were single straight boards 4 ½” high and 2” thick, extending the width of the bottom. At the ends the ribs were mortised into the side board: a protrusion (“tenon” at the end of each rib was mortised into a hole about 1 ½” square in the side board. Therefore, each side board had a line of square holes near the bottom, two feet apart. The ribs were fastened to the bottom planking with rosehead (early) nails. In the center of each rib was a roughly 4 ½” by 1” “limber hole” for bilge water to drain through. Based on the limber hole as dead center, the inside of the boat was 84” wide at the bottom, and 90” at the top—that makes the boat about 7’ 10” wide on the outside, the same general width of a James River Batteau.

The side board had a patch 1” by 16” and more than three feet long attached to the inside by eight ¾ to 7/8” treenails (wooden pegs). We only uncovered one end of the patch, but it was probably a “butt block” to join the ends of two side boards together, to make up the length of the boat. If the length was similar to a James River Batteau, then the boat was from 45 to 60-some feet long.

The floor planks were 1” thick and 11 to 13 inches wide. These planks did not extend the full length of the boat; where two plank ends butted they were nailed to the

same rib, the technique also used by the James River Bateaux; and the same type of caulking, oakum, was used to make the boat watertight.

That's all we know at this time about the construction of this boat. What the ends were like, we can't tell. A foreman saw the south end going away in the backhoe bucket. But the north end, still unexcavated, is probably intact underground, under a parking lot. If we work hard with the right people, then someday, perhaps, it can be dug out to reveal at last the details of construction of a non-returnable boat—a square-ended bateau now known as the “James River Gundalow.”

Trout had done it; he and the Virginia Canal and Navigation Society had laid claim to the first and, perhaps last extant gundalow. A rough field drawing was made, but without laying down a site grid, taking into consideration soil types and erosion patterns, or otherwise approaching the site as only a historical archeologist could. This is fine and understandable, for time was of the essence and the society felt the need for swift, decisive action, ultimately deciding to salvage the entire find. Under cover of urban sprawl, the group removed the boat piece by piece—dislodging tenons from mortises, separating edge-to-edge joints, and removing the whole from its otherwise telling context—and transported it by car trunk to a public utilities building for storage. Perhaps under pressure to move the thing and now having glanced furtively through the secondary literature, the Virginia Canal and Navigation Society did to this gundalow what had never been done to any gundalow before—travelling northeast, the group followed the Shenandoah River all the way to Harpers Ferry, carrying the gundalow with them and laying it to rest in the dust beneath the once star spangled arched ceiling of the Masonic Lodge.

What remains of the “archaeological record” are a few rotten boards, a number of bent rusty nails, and a handful of treenails embedded in what once served as the boat’s sideboard. As it turns out, Trout’s reclamation of the gundalow does, indeed, answer a number of questions. First, it seems clear that whatever type of boat was used to construct the Harpers Ferry arch—if indeed it was a sole boat—was closely related structurally to the Richmond find. Since large bateaux were rarely used on the Shenandoah, given navigation difficulties, it is reasonable to
deduce that the Richmond find is indeed a gundalow and not a bateaux, which Trout notes was as a possibility despite the boat’s lack of curved boards. Furthermore, design similarities including board size, nail patterns, and like use of mortise and tenon joinery suggest a clear boat type. The peculiar square holes spaced at every two feet in the lateral members of the arched ceiling find expression in the mortise holes too spaced every two feet along the bottom edge of the boat’s sideboard. What appeared as useless nails in the ceiling members are seen in situ in the boat, securing ribs to floorboards, again spaced two feet apart. Most telling are the similarities in dimensions between ceiling and boat members. The arch supports, fourteen-inches wide prior to milling, match exactly the dimensions of the boat’s sideboards. The nail-embedded lateral ceiling members match the boat’s floorboards not only in width, but in thickness as well. And the odd, four-piece lateral members above with the curious four by one-inch notches along one edge appear in the Richmond boat as ribs complete with tenons and limber holes—the latter measuring four by one inches. In short, the two specimens match each other one-for-one in terms of dimensions and patterning, even though each plied wholly different waters. Moreover, these boats plied different waters at different times; the Harpers Ferry example was built sometime during the mid-1840s and the Richmond boat probably two decades prior. The date of the Richmond boat is more difficult to determine than the Harpers Ferry model, however. The only remaining indicators of date of production are the nails remaining in the boat’s floorboards and ribs. These cut iron nails, with their flat points, square shafts, and two-sided taper best fit what Jay Edwards and Tom Wells identify as a Type-8 nail; “this is the most common 19th century nail” found in Louisiana by the 1820s and popular throughout the states until roughly the turn of the century.\(^{81}\) The Type-8 nail’s life span was

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\(^{80}\) Trout, p. 82.

long and therefore does little to date this gundalow. Rather we must depend on Trout’s assessment based on the boat’s discovery within a section of Richmond’s Great Basin closed off by the 1820s. Despite differences of time and place these boats were no doubt of very similar dimensions and very similar to behold when whole—an indication of regionality and further evidence of standardization.
Moreover, these dimensions match those reported by most secondary sources. Shenandoah gundalows are generally described as being roughly nine-feet wide, a foot or so deep, and up to ninety-feet long. Both the Harpers Ferry and Richmond boats fit the first two measurements, thereby giving some credence to this testimony and further supporting the claims to lengths of up to ninety feet. With these dimensions in mind, we can revisit the question of gundalow-based entrepreneurship and illustrate the extent to which resale of gundalow lumber constituted a lucrative venture. As mentioned above, George Mauzy manned the Harpers Ferry tollgate and eventually shared ownership of a sawmill. Therefore, Mauzy had first dibs on any gundalows for sale at Harpers Ferry as well as the means to mill the reused lumber. A gundalow of the dimensions described above would yield at least 3,735 feet of “plank”—this being the sum of two sides ninety-feet long by fourteen-inches wide, a sum of floor plank covering ninety by nine feet, and forty-five ribs each nine-feet long—though this does not include whatever Mauzy advertised as scantling. Therefore, at $1 per hundred feet of plank, Mauzy could sell the lumber from a $25 dollar boat for about $40—a $15 dollar profit!\(^{82}\) Though this may not sound impressive at first, it should be noted that as of 1834, Mauzy earned $400 per year for his services as toll keeper on the Shenandoah; therefore, in one day of lumber selling, Mauzy could collect over one quarter of his base annual salary—an obviously lucrative venture considering the number of gundalows to be disassembled and sold.

But, Why Gundalow Lumber?

So, as Philip Coons stood within the newly built Masonic Hall and admired his handiwork, he witnessed the final step in a river-based cycle of material reuse. His men most

\(^{82}\) This is assuming that the majority of each boat was salvageable. Given that nails permeated gundalow lumber, it is unclear how milling operations occurred, it being dangerous to mill a nailed plank yet impractical to remove all the nails before milling. Though it is clear that this operation occurred, an understanding of how awaits further research. I thank Carl Lounsbury for drawing my attention to the problem of milling nail-strewn lumber.
Fig. 13. Using data gathered from first-hand accounts of gundalows combined with that derived from the Richmond gundalow and the Philip Coons Building ceiling, it is possible to visually reconstruct a generic boat type. This prototype assumes a rough length of eighty-feet (only one half visible here given space constraints), a width of nine, and a one-foot depth with an additional foot of freeboard supplied by splashboards, which are shown in place. Nonetheless, these dimensions represent educated guesses, as do the stern/bow details. Though reports indicate that gundalows featured sharp prows, the detail shown here is more the product of speculation than documentation. Whereas ¼ inch equals one foot in the two views below and immediately to the right, ½ inch equals one foot in the above right cross section complete with mortise and tenon detail.
likely purchased the ceiling lumber only days before at “the Point” where the Shenandoah and Potomac Rivers meet and flow to their terminus near Washington. Remilled and cut to order, the Massanutten Mountain yellow pine finally came to rest, now truly supporting the sky as it must once have appeared to from the valley floor at Port Republic.

But, the story is not yet over. There remains a question of intent here. Why did Coons opt for used lumber to complete his project? Questions of cost invariably explain gundalow lumber purchase, the used wood being far cheaper than fresh-cut timbers shipped from afar. An 1845 entry in the account book of William Barrow, an occasional Frederick County lumberer and miller, indicates that Mauzy’s advertised price was far lower than that offered for new lumber. It must be noted here that obtaining new lumber involved costs associated with collecting logs, transporting the logs, milling the logs, and then transporting the milled lumber.83

<table>
<thead>
<tr>
<th>W. Barrow</th>
<th>January 7: 1845</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine logs</td>
<td>$3.00</td>
<td></td>
</tr>
<tr>
<td>One day's hauling logs</td>
<td>$2.50</td>
<td></td>
</tr>
<tr>
<td>Three hands working one day</td>
<td>$1.00</td>
<td></td>
</tr>
<tr>
<td>Two hands working one day</td>
<td>$0.67</td>
<td></td>
</tr>
<tr>
<td>Two hundred and seven feet of inch plank</td>
<td>$2.7</td>
<td></td>
</tr>
<tr>
<td>One hundred and forty feet of half inch plank</td>
<td>$1.8</td>
<td></td>
</tr>
<tr>
<td>Four hundred and sixteen feet of laths at 42 cts per hun</td>
<td>$1.75</td>
<td></td>
</tr>
<tr>
<td>One day's hauling plank and logs</td>
<td>$2.50</td>
<td></td>
</tr>
<tr>
<td>Working a day one hand</td>
<td>$0.33</td>
<td></td>
</tr>
<tr>
<td>Two hands working one day</td>
<td>$0.67</td>
<td></td>
</tr>
</tbody>
</table>

By adding the cost of each step in this process, subtracting the cost of the laths, and dividing so as to determine value per dollar, it seems whoever did business with Barrow might have gotten a good deal on laths (Barrow’s $0.42/hundred verses Mauzy’s $0.01/piece), but paid roughly $23 per
hundred feet of board—twenty-three times more expensive than Mauzy’s lumber! Moreover, it seems this price remained standard over a period of time. John Stinton, a Richmond estate trustee, kept meticulous accounts of his sale of lumber to the Confederate government in 1862 and 1863; of nine exchanges ranging from $16/foot to $30/foot, Stinton’s fee per foot averages to be almost exactly $22/foot. Moreover, it seems this price remained standard over a period of time. John Stinton, a Richmond estate trustee, kept meticulous accounts of his sale of lumber to the Confederate government in 1862 and 1863; of nine exchanges ranging from $16/foot to $30/foot, Stinton’s fee per foot averages to be almost exactly $22/foot. This range in time and place can also be extended to lumber type, for both men dealt in a variety of types—pine, oak, hickory—and although lumber costs varied accordingly, the average price remained level, suggesting that George Mauzy offered a very attractive alternative for thrifty builders.

Masons are hardly known for their poverty, however, and Coons himself was relatively well off. By 1850, the Harpers Ferry merchant supported a wife, seven children, and nine slaves. Moreover, seven of Coons’ slaves were female suggesting a sizeable home and

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83 William Barrow, Account book, 1838-1893, Mss5:3 B2797:1, Virginia Historical Society, p.1. Note that, though this table approximates the original, I have removed two lines concerning the transport of stone.

84 John Stinton, Account Book, 1846-1866, Mss5:3 Si693:1, Virginia Historical Society, p. 15:

<table>
<thead>
<tr>
<th>Aug 30 (1862)</th>
<th>By Cash received for sold Confed: Government ft lumber</th>
<th>8.136</th>
<th>268 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octob 7</td>
<td>&quot; Do... Do... Do... 14.635 Do...</td>
<td>14.635</td>
<td>473 57</td>
</tr>
<tr>
<td>&quot;30&quot;</td>
<td>&quot; Do... Do... Do... 11.612 Do...</td>
<td>11.612</td>
<td>492 17</td>
</tr>
<tr>
<td>Dec 1</td>
<td>&quot; Do... Do... Do... 1.532 Do...</td>
<td>1.532</td>
<td>80 23</td>
</tr>
<tr>
<td>April 7 (1863)</td>
<td>&quot; Do... Do... Do... 9.920 Do...</td>
<td>9.920</td>
<td>566 53</td>
</tr>
<tr>
<td>&quot;23&quot;</td>
<td>&quot; Do... Do... Do... 15.358 Do...</td>
<td>15.358</td>
<td>954 10</td>
</tr>
<tr>
<td>&quot;29&quot;</td>
<td>&quot; Do... Do... Do... 900 Do...</td>
<td>900</td>
<td>43 66</td>
</tr>
<tr>
<td>May 25</td>
<td>&quot; Do... Do... Do... 16.048 Do...</td>
<td>16.048</td>
<td>827 83</td>
</tr>
</tbody>
</table>

85 U.S. Department of Commerce, Bureau of the Census, Harpers Ferry, Jefferson County, VA (1850), p. 416:

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Occupation</th>
<th>Place of Birth</th>
<th>Misc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philip Coons</td>
<td>50</td>
<td>Merchant</td>
<td>VA</td>
<td></td>
</tr>
<tr>
<td>Anne Coons</td>
<td>40</td>
<td></td>
<td></td>
<td>Illiterate</td>
</tr>
<tr>
<td>Emma Coons</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harry Coons</td>
<td>12</td>
<td></td>
<td></td>
<td>School</td>
</tr>
<tr>
<td>Chilton Coons</td>
<td>13</td>
<td></td>
<td></td>
<td>School</td>
</tr>
<tr>
<td>Harriet Bruce</td>
<td>&lt;13</td>
<td></td>
<td>MA</td>
<td></td>
</tr>
<tr>
<td>John Donahue</td>
<td>22</td>
<td>Clerk</td>
<td>VA</td>
<td></td>
</tr>
<tr>
<td>George Worth</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Douglass</td>
<td>24</td>
<td>(mulatto)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
domestic unit. Why would a builder thus predisposed scavenge for lumber when new materials could be had for—by Coons’ standards—an affordable price? Indeed, if Coons had acted alone, the question would be null. But, Coons was not alone, for as I have suggested and as local lore attests, the Shenandoah and Potomac rivers were, and perhaps remain, lined with buildings built with gundalow lumber. And if we consider the numbers involved, gundalow reusers found no dearth of materials. For instance, an observer in 1868 reported seeing forty-one gundalows pass the sleepy town of Columbia Mills, VA within the course of one week. If we assume that one gundalow possessed roughly 1,400 board feet of lumber, then over 57,000 board feet were available for sale during one week somewhere in 1868. Knowing from accounts that gundalows were very active between 1820 and 1870, we can estimate that the potential existed for over 136 million board feet of disassembled boat lumber sold or disposed of during this period at points along the Shenandoah and Potomac. These numbers are startling and beg further explanation.

It is curious, for instance, why consumers downstream of Port Republic bought so much used lumber when new materials were so readily available throughout the lush Shenandoah Valley. Further consideration of nineteenth-century lumbering practices, however, suggests that the Valley may not have been so lush by 1845. Valley residents were fully cognizant of their

Coons’ slave holdings appear in U.S. Department of Commerce, Bureau of the Census, Slave Census, District 28, Harpers Ferry, Jefferson County, VA (1850), p. 977:

<table>
<thead>
<tr>
<th>Slave by Number of Enumeration</th>
<th>Age</th>
<th>Gender</th>
<th>Black/Mulatto</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>44</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>2</td>
<td>24</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>5</td>
<td>17</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Female</td>
<td>Black</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>Male</td>
<td>Black</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
<td>Male</td>
<td>Black</td>
</tr>
</tbody>
</table>

Griener, p. 45.
major natural resource and wasted no time in harnessing it. One Front Royal observer noted in 1891 that,

there has been a strenuous effort to locate and get in operation as many industries and manufactories in wood as possible. The object of this was a wise one—to utilize in every conceivable manner the great amount of material in the way of timber growing in the adjacent forests…. The quantity and quality of this material has been fully examined and….will re-echo all through the Shenandoah Valley.87

Among these industries was milling, an economic mainstay in Rockingham and Augusta County as early as 1810. However, as increasing numbers of farmers settled Virginia, woodlands receded accordingly. Settlers harvested thousands of board feet of lumber to build houses and fences while burning vast timber stands to make room for crop fields. Repetitive burning destroyed young trees and robbed the ground of the moisture-holding humus essential for continual growth. In addition, Rockingham County’s thriving iron industry consumed nearly one hundred fifty acres of woodland per furnace every year to satisfy its charcoal dependency. At this rate, the small handful of furnaces along the river between Staunton and Harpers Ferry alone devoured over three square miles of timberland every year. Such extreme raping of the land brought John Wayland, the Valley’s most prolific chronicler, to note in 1927 that “The excellent building timber that formerly was available here in abundance has mostly been used up or destroyed by disease or pests.’88 In other words, Philip Coons’ may have had no other recourse.

That Coons may have been compelled to purchase gundalow lumber by high prices and limited availability suggests an additional force more elusive than the previous two at play here. The rapid deforestation described above was an inevitable byproduct of greater nationwide

87 Thomas Bruce, Southwest Virginia and Shenandoah Valley, an Inquiry into the Cause of the Rapid Growth and Wonderful Development of Southwest Virginia and Shenandoah Valley, with a History of the Norfolk and Western and Shenandoah Valley Railroads; and sketches of the principal cities and towns instrumental in the progress of these sections (Richmond: J.L. Hill Publishing Company, 1891), pp. 242-43.

88 Wayland, A History of Shenandoah County, Virginia, p. 353.
growth. Though the Shenandoah Valley to a large extent fueled this surrounding growth, it could not itself escape the consequences. Both the Baltimore & Ohio Railroad and the Chesapeake & Ohio Canal reached Harpers Ferry in the 1830s, linking the town with commercial points to the east. Though these improvements prompted greater deposits of gundalow lumber at Harpers Ferry—the boats needing travel no further than the railhead—they also introduced new vendors, new markets, and new threats. The Shenandoah Valley Railroad, for instance, attempted to buy land for railroad shops, but “the farmers and other employers of labor feared a rise in wages, and that they would no longer have men competing for the few driblets of work they were compelled to hire others to do, if the railroad built its shops here.”

At about the same time, a developer named De Ford sought to build a tannery in Port Republic, but “The farmers and others were not to be insulted by being requested to sell the land on which to build a “foreign” [industry].” Indeed, the once isolated Valley town was now left exposed, giving residents such as Philip Coons cause for alarm. Fears of “foreign” developers and investors pervaded the Valley and, as noted in retrospect by John Wayland,

between 1865 and the present a thorough going change has taken place in our local industries...Small shops of varied character have been discontinued, as a rule, and the articles formerly manufactured at home are now imported from large centers of industry.

This “thorough going change” laid heavy on the hearts on Harpers Ferry residents and reached even the town’s most elaborate industry, arms production. Merritt Roe Smith argues persuasively that industrialization, mechanization, and general distrust of “foreigners and outsiders” who “were met with suspicion” played a large part in determining the fate of the U.S. Armory at Harpers Ferry, ultimately preventing it from achieving the success of its sister plant

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89 George E. May Collection, p. 44.
90 Ibid.
91 Wayland, A History of Shenandoah County, Virginia, p. 353.
in Springfield, Massachusetts.\textsuperscript{92} Indeed, Smith nicely summarizes the situation in Harpers Ferry as experienced by Philip Coons:

The story of Harpers Ferry, most notably the efforts of its inhabitants to preserve accustomed life styles and practices in the wake of accelerating technology, presents a microcosmic view of the industrial revolution which is perhaps more suggestive of America’s bittersweet relationship with the machine than many historians have heretofore recognized.\textsuperscript{93}

Moreover, just as Coons finished construction of the Masonic Hall, the New Shenandoah Company faced imminent demise at the hands of nature and industry combined. Beginning in 1830, exceptionally cold winters, excessive spring freshets, and unusually arid summers devastated Valley agriculture and, hence, the New Shenandoah Company. The “freeze and very high floods” of 1830 wreaked havoc upon company works causing in excess of $1500 in lost tolls.\textsuperscript{94} A “shortness of the crop” added further cuts in toll payments in 1831.\textsuperscript{95} Similar complaints of ill weather and faulty crops continued throughout the minutes until 1842 when even worse conditions were reported and cast a negative tone upon the remaining reports.\textsuperscript{96} Ironically, the very same weather patterns that hindered river navigation made overland routes more efficient than usual. Minutes from the company’s 1835 General Meeting are most telling in this respect:

During the year 1834, owing to the injuries sustained by the wheat crop of the preceding year, the quantity of flour manufactured was less than usual and in consequence of the great and long continued droughts, the River was unusually low. The same cause which rendered our navigation more difficult, keeping the roads in unusually fine order,

\textsuperscript{93} Smith, p. 21.
\textsuperscript{94} Proceedings, 15 November 1831, pp. 1-2.
\textsuperscript{95} Proceedings, 16 November 1832, p. 15.
\textsuperscript{96} A passage from the Annual General Meeting of 1842 reads: During the winter of 1839-40 our works throughout the whole length of the river, on both branches, were greatly injured by the severe ice freshets during the winter and the great flood in the spring, whereby the company sustained a heavy loss, not only in the expense of reconstruction and repairing their works, but also from the fact that a considerable quantity of produce which had been boated down the river could not be...In the winter of 1840-41, from similar causes our works were again very much injured...in consequence of the almost universal failure of the wheat crop in the valley in that year our revenue was much less than it had been in preceding years. (pp. 82-83)
rendered transportation by wagon much easier, consequently the receipt of tolls at our locks was less than was showed have calculated on in a more favorable season.\textsuperscript{97}

No sooner than the company began to assert itself as an efficient mode of Valley commerce by 1830, did ill weather and improved wagon transport mark the beginning of the end of organized gundalow traffic on the Shenandoah River. This combination of weather and alternative transport also significantly lowered income by tolls by 1830 (See graph on p. 49).

Wagons were not alone in sealing the New Shenandoah Company’s fate. By 1830, company profits had risen, river use had increased dramatically over the past year, and improvements were finally making a difference in the valley economy. Indeed, the idealistic tone of President Charles Stewart’s address to the 1830 General Meeting, in retrospect, seems pathetically naive:

During the present year, the shackles of...habit have evidently begun to fade from the people of Rockingham. Along the North river in this county some respectable and enterprising men have opened their eyes to the superior advantages of navigation. They have undertaken and with great rapidity have been affecting the adequate improvement of that river up to Byarly Mill...While these things, within our own vicinity afford us much cause to rejoice in our labors, our prospects of a rich harvest are brightening from a distance. Who has not heard of the Baltimore and Ohio railroad company? Or who has not heard, and heard with pride and exultation of its progress? The course of that magnificent improvement is to the mouth of our river—the time is not distant when it will reach that point and afford us a choice of markets—again who has not heard of the Chesapeake and Ohio canal, and of its progress? This canal will come ere long into immediate contact with us. —Thus two of the most gigantic works in the world are approaching with astonishing rapidity and success, to our encouragement and aid. —the turnpike roads which intersect our river and divert from us so much of the commerce which is a legitimate appendage of the river, will dwindle into idle ways: and the produce of this rich valley, which now tediously wends its way along them, will soon see its market upon our waves.\textsuperscript{98}

The company’s optimism was justified at the time of the address. As mentioned above, river improvements seemed to pay off. Only a year before, river carriers had attained a level of efficiency that allowed them to transport flour barrels from Port Republic to Richmond or

\textsuperscript{97} Proceedings, 16 November 1835, p. 43.
\textsuperscript{98} Proceedings, 15 November 1830, pp. 171-72.
Fredericksburg for twenty to twenty-five cents less than wagons. However, foul weather soon set in accompanied by an even stronger force, the railroad.

In 1835, following the drought that vanquished wheat crops and solidified wagon roads, the New Shenandoah Company received an even sharper “invasion of their rights by the Winchester and Potomac Rail road company...by erecting pieces for a bridge in our canal and otherwise injuring our works so as to injure the navigation.” In no uncertain terms, the railroad had entered the Shenandoah Valley and stepped into the middle of the New Shenandoah Company’s somewhat less impressive works. The company levied legal action against the railroad, but to no avail, and as climatical conditions worsened, thoughts turned to a desperate remedy. During a special general meeting in 1837, the company proposed what would have been, a year before, unthinkable: “a still or slack water navigation...by means of dams and locks is the most eligible system of improvement for the Shenandoah.” Although anathema to all previous efforts to create a navigable Shenandoah River, the canal system would nonetheless keep power, economic and otherwise, in local hands. An engineer was ultimately hired to survey the river and when finished determined a fee for canal construction far beyond the company’s means. With no hope left in sight, the presidential address delivered to the company in 1843 set a tone markedly different than in 1829:

But whilst our work has had the effect of moderating the rate of freight upon the other media of transportation, it is true also, that the construction of the McAdamized turnpike and the railroad in the valley have by withdrawing from us a considerable portion of the carrying trade, materially diminished the revenues accruing at our locks and during the present years, our income has been very much diminished by injuries to our locks and other works by the high floods in the months of April and September. These injuries to our works, have not only reduced our revenues by diverting a portion of the trade from the river, but have absorbed a nay longer portion of that which has accrued in the repair of those injuries.

99 Proceedings, 16 November 1829, p. 160.
100 Proceedings, 16 November 1835, p. 46.
101 Proceedings, 15 June 1837, p. 58.
102 Proceedings, 15 November 1843, pp. 87-88.
Just as the New Shenandoah Company’s efforts fell under the footsteps of canal and rail, so did Valley boatmen suffer. Jacob Sipe’s 1839 and 1841 *Rockingham Register* advertisements are suggestive given that until these years, the paper seldom carried advertisements for boating services. Sipe surely felt the fall in business wrought by damaged river works and ill weather by 1839. His advertisement in that year “takes this method of informing his customers and the public, that he still continues the business of Boating Flour and other productions of this country to Market.”103 The fall in business was felt obviously harder by 1841. The second advertisement includes the text of the first, but adds that,

Last season he and his hands took through the Shenandoah Lock 5,623 barrels. He was not forgotten when there was a great deal of business to do, and he flatters himself that his customers will not forsake him when where I [ ] a little to do. He avails himself of this opportunity to return his thanks to those who have [ _____ ].104

This not so subtle plea for business suggests desperate measures and reveals a man well aware of the impending end to his gundalow business. Though the destruction of bridges during the Civil War briefly revived gundalow traffic on the Shenandoah, the company’s minutes end in 1860 and despite a few secondary references to post-war gundalow use, destructive weather, canals, railroads, and paved roads all but wiped valley memory clean of the gundalow.

Coons was entangled in the same mire that yearly sapped more life out of the New Shenandoah Company. Coons was a merchant and although it is unclear whether or not he patronized gundalow transport, it stands to reason that no merchant would disregard the demise of the Valley’s cheapest distribution venue, especially if he be a “son of the valley.” Coons’ success depended upon satisfying local demands. Once the canal and railroad arrived, however, Coons’ businesses met competition from outside vendors. Moreover, Coons was a slaveholder. The ideological currents that necessarily follow trade no doubt found their way into Harpers Ferry, confronting Coons and others like him with unwanted opposition. One Sunday morning

103 Advertisement, *Rockingham Register*, 21 December 1839.  
in late 1859 showed this clearly when John Brown and nineteen runaway slaves besieged the U.S. Armory at Harpers Ferry. Not a thousand feet from the Phillip Coons Building, this event placed Harpers Ferry on the national map and brought Coons face-to-face with growing sectional tensions. In the years preceding the siege, Coons’ purchases of gundalow lumber may very well have reflected to outside influences a form of resistance that aimed to localize Valley produce and minimize vulnerability to outside producers. Industrialists, manufacturers, and speculators loomed large on the Harpers Ferry horizon in 1845, a period immediately preceding that described by one local as having “passed out of the old condition...into a condition of dependence upon foreign products of all sorts...every local community in our country now finds itself in the clutch of distant capitalists.”


**Thinking About Reuse**

Before we explore Coons’ reuse of gundalow lumber as a material form of resistance, perhaps a few words are in order concerning what exactly reuse means, especially given the now
two-decade long popularization of recycling as a social phenomenon. Reuse and recycling are sibling processes. Both result from a need to conserve materials whether in times of scarcity or, more familiarly, times of environmental decay. Moreover, each tends toward similar ends by creating something new with something old. Unlike recycling, however, reuse does not fundamentally change the material composition of the source thing. Recycled paper, for instance, is made of old paper that is torn into fine pieces, chemically and physically reconstituted, and then formed into new paper, books, cardboard, or whatever else might be fashioned from the recycled material. The key element here is cycle. Recycling suggests a repetition of the production cycle a product or thing originally underwent to assume its initial form. Reuse on the other hand, is exactly that, a using again of a thing or product in its original form for purposes other than those for which it was intended. Environmentally friendly companies that make sandals out of old tires, for example, demonstrate a modern application of reuse. In this case, the reused material—the tire rubber—is never fundamentally altered or reconstituted. Rather, the tires are simply cut into shapes, flattened, and tailored to fit customers’ feet. Though reuse does not necessarily entail physical alteration, it does, like recycling, generally represent the passage of a thing or material into a new stage of existence intrinsically separate from the former. This is to say, using a broom to sweep a floor one day and to fend off chickens the next does not constitute an act of reuse; inverting that broom and standing it upright in a garden as a makeshift scarecrow, however, does.

This said, it must also be added that material reuse is not at all a new phenomenon. Quite the contrary, material reuse has occurred in a variety of places over a vast period of time. Verni Greenfield humorously though pointedly draws our attention to Isaiah 2:4 and notes that early Christians were advised, with environmentally friendly intentions no doubt, to “beat their swords into ploughshares and their spears into pruning hoods.”

pertinent to our discussion is the medieval northern European practice of passing large timbers between ships and cathedrals. These timbers, often traveling across the continent as timber frame cathedrals, were disassembled and reassembled elsewhere. In the Americas, residents of colonial Virginia quickly realized that awkward European armor served better purposes than protection in the often sweltering Tidewater region. James Deetz comments in *Flowerdew Hundred*:

Wholesale disposal of armor in Virginia can be understood simply by imagining oneself clad in steel in the July heat. What’s more, the armor recovered from these Chesapeake sites was obsolete when it arrived in the colony, war surplus as it were, leftovers from the stores in the Tower of London. The colonists appear to have had little use for it (although it is carefully noted in the 1625 muster, but then so is fish) and threw it in the nearest handy hog wallow or open trash pit.

Deetz was correct in his assessment of armor’s relative worthlessness in colonial Virginia, but did not have the benefit of recent excavations to understand the implications. Recent digs at colonial Jamestown, for example, have turned up a breastplate (c. 1607-1610) with turned up sides hammer welded together to form what appears to have been some sort of container or cooking vessel. Another noted explorer, Captain Samuel Wallis, nearly fell victim to the reuse habits of his men when, while moored off of Tahiti, he found that no small number of the *Dolphin*’s nails had been extracted and exchanged with native women for sexual favors. In more recent

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108 Deetz, *Flowerdew Hundred*, p. 68.
109 Beverly Straube, Curator, Jamestown Rediscovery Project, interview by author, December 1998, Jamestown, VA.
110 The following passage from Greg Dening, *Mr. Bligh’s Bad Language, Passion, Power and Theatre on the Bounty* (Cambridge: Cambridge University Press, 1992) demonstrates the power of reuse when commodity values are discovered to be greater than initially thought:
times, material reuse has manifested itself in American folk instruments. The wash tub bass, or gutbucket, for instance, consists of a stick—a broom handle perhaps—set against the rim of an inverted washtub and joined to the washtub by a string. Material reuse is also worthy of note for reasons other than mere curiosity or impressive ingenuity. Although reuse of gundalow lumber throughout the Shenandoah Valley might be viewed as a form of improvisation, there is more to be discovered here. Phillip Coons’ construction of the Masonic Hall cannot be dismissed as a form of innate American ingenuity stemming from contact with frontier regions à la Frederick Jackson Turner. This explanation is almost as contrived as it is simple. A more useful approach would show how the Masonic Hall at Harpers Ferry embodies a dialectic among materials, builder, and building. For example, Stuart Brand suggests in *How Buildings Learn* that “Buildings loom over us and persist beyond

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113 Brand, p. 15.
us. They have the perfect memory of materiality. When we deal with buildings we deal with decisions taken long ago for remote reasons. We argue with anonymous predecessors and lose.\textsuperscript{114} Coon's ceiling thus preserves for us a "perfect memory of materiality" in every milled side plank and floor board, every mortise hole and splintered tenon, and in every cloud and star that remain beneath. Indeed, these are all the results of "decisions taken long ago," but are the reasons so remote? I do not think so, or, at least I do not think they need to remain so for the very reason that the predecessor I have chosen to argue with is not at all anonymous, but rather present in the Masonic Hall's memory of materiality. This is a unique sort of memory that by virtue of its reuse reveals intent or, according to Verni Greenfield, "special insights into creators' thought processes. Our familiarity with common objects and their uses provides a reference point from which we perceive and respond to recycled objects."\textsuperscript{115}

So far, I have tried to reveal the "common objects" utilized by Coons in the Masonic Hall's ceiling and their history. Now, the task is to explain how incorporation of gundalow lumber into the Masonic Hall reveals Coons' thought process. I have already suggested that one way to approach the problem is to think of the Masonic Hall as manifest of a material dialectic in which we see evidence of interaction between materials, builder, and building. This is a start, but, ultimately, too simple. The material dialectic model can be applied to any made object and does not do credit to the uniqueness of the reused gundalow phenomenon. A more appropriate model, perhaps, is that of collage. Diane Waldman writes:

Collage...layers into a work of art several levels of meaning: the original identity of the arrangement or object and all of the history it brings with it; the new meaning it gains in association with other objects or elements; and the meaning it acquires as the result of its metamorphosis into a new entity.\textsuperscript{116}

\textsuperscript{114} Ibid., p. 2.
\textsuperscript{115} Greenfield, xvi.
This model is better because it mirrors to some extent Appadurai’s three-step approach to understanding commodity exchange that I described above and have more or less adhered to throughout the course of this paper. The “original identity” of the gundalow lumber falls under Appadurai’s general category of production, that being all material and cultural processes spanning from Port Republic to Harpers Ferry that contributed to the construction of the used product as it lay at the end of its trip on the Shenandoah’s banks at Harpers Ferry. The “new meaning it [the gundalow lumber] gains in association with other objects” occurs as a result of exchange, for this process of exchange requires an initial rethinking of the commodity so as to align it with the needs of the Masonic Hall. Once envisioned as fitting the collage of materials atop the Philip Coons building, exchange occurred by means of purchase from the boatmen or a middleman like George Mauzy. Finally, we can understand “the meaning it acquires as the result of its metamorphosis” as being facilitated by consumption, for Coons’ re-shaping of the lumber—his use of it—redefined that material in a way that also fundamentally altered the intended commodity life of the lumber. This also placed the lumber within an economic enclave and thereby prevented other consumers from accessing its commodity value. The essential political moment of our story comes down to this: by removing the gundalow lumber from its intended commodity life, Coons effectively centralized the Valley economy. By pouring money into a river-based economic cycle while resisting the products of “foreign capitalists,” he and like-minded reusers prevented capitalists (like those building the railroad) from harnessing lumber for purposes perceived as detrimental to the interests of the Valley economy in which Coons was vested. At this point, materiality meets resistance.

Indeed, Coons’ exchange for and consumption of gundalow lumber epitomized a brand of commodity diversion that characterized the whole trajectory of gundalow reuse, prior to the coming of rail, from Port Republic to Washington, D.C. According to Appadurai, diversion may sometimes involve the calculated and “interested” removal of things from an enclave zone to one where exchange is less confined and more profitable, in some short-
term sense. Where enclaving is usually in the interest of groups, especially the politically and economically powerful groups in any society, diversion is frequently the recourse of the entrepreneurial individual.117

This model fits activities throughout the Valley: upriver boatbuilders and shipping companies, often closely linked with the New Shenandoah Company (a group striving for economic power), collect lumber and effectively place it within a commodity enclave by means of gundalow transport. The gundalow reaches its destination, perhaps Harpers Ferry, and is then diverted by the collective entrepreneurial action of a middleman (Mauzy) and a consumer (Coons) from its normal life as boat into a new existence as building material. Coons eventually places the lumber in a new enclave, the Masonic Hall, and thereby avoids purchasing the lumber from non-valley merchants that now reach Harpers Ferry by canal, rail, and road. Thus he bars access to the commodity by economically powerful interests such as the railroads who could well use the lumber to build works that directly lead to the downfall of the New Shenandoah Company’s efforts to maintain a cheap, local, distribution system friendly to the “sons of the valley.” The role of economic crises is what differentiates Coon’s particular brand of diversion from that which had apparently occurred more or less consistently from the beginning of improvement efforts on the river. Coons’ reuse of gundalow lumber occurred within a distinct context of economic downswing as the once isolated, centralized Valley economy grew increasingly permeated by outside interests. Not coincidentally, the New Shenandoah Company experienced its worst fiscal year in almost twenty years. It must be remembered, after all, that Coons also benefited from the relatively low cost of gundalow lumber. By using it, he reduced the overhead involved in his building project and, thus, the financial strain felt by his business interests in the increasingly vicious exchange climate of mid-century Harpers Ferry. Within this chain of events, we see what seems to be a perfect realization of Appadurai’s claim that “The diversion

117 Appadurai, p. 25.
of commodities from specified paths is always a sign of creativity or crises” except that the “or” here can be confidently replaced with an “and.”

Though this model for understanding reuse of gundalow lumber as a form of material resistance in the Shenandoah Valley is as yet largely theoretical, it does not arise without precedent. The potential for resistance by means of material reconfiguration and positioning increasingly comes to light in the work of current scholarship. Appadurai, for example, notes the extent to which the late nineteenth and early twentieth-century nationalist movement in India, as facilitated by Mohandas Gandhi, expressed itself in terms of materiality, namely individual non-industrial production of cloth in a way that “the many strands of the political discourse on cloth are reconstituted and re-deployed in what might be called a language of commodity resistance.”

Closer to our discussion of material reuse is Allen Roberts’ handling of Senegalese reuse efforts as manifest in System D, a reference “to a selection of “d” words including Debrouille-toi!: “made a go of it?”,” Be resourceful?” or “Figure it out yourself!” Practitioners of System D construct commodities with appeal to tourists—trunks, briefcases, jewelry boxes—with discarded materials such as newspapers and misprinted sheet metal from local canning factories. In this way, Senegalese craftspeople who would otherwise suffer when “salaries are not paid on time... supplies run out, parts cannot be found, credit is unavailable, politics prove unstable, the weather goes haywire, and calamity strikes” are able to maintain their own sense of dignity, creativity, and financial wellbeing by defying—or diverting—the “established meaning” of common commodities. It is unfortunate, however, that the efforts represented by these examples—efforts to understand the implications of resistance vis-à-vis

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119 Ibid., p. 30
121 Roberts, p. 83.
material culture—have not as yet gained a foothold on the American front for, as I have demonstrated, the approach appears promising in terms of Philip Coons and those like him.

Nonetheless, Coons remains relatively voiceless within the historical record and it is perhaps presumptuous, if not rude, of me to pick his brain without the assistance of his personal papers or even the meeting minutes of his fraternal lodge. Indeed, before this model of material resistance can be confirmed or dismissed as active in the Shenandoah Valley, further evidence must be amassed concerning the prevalence of Valley reuse. It is extremely difficult to estimate how common gundalow reuse really was throughout the nineteenth century. Extant boat-houses are rare; this is especially frustrating in terms of Harpers Ferry for the stretch of land along the Shenandoah’s bank where most reused lumber probably found its way into the walls of homes and outbuildings has been washed and re-washed by numerous floods throughout the past century leaving a spartan architectural record. A more thorough account of extant structures, however, may reveal more about gundalow structure, the mechanics of reuse, and thus, the underlying motivations. Moreover, more effort must be directed toward determining the extent to which outer-Valley business interests competed with localized merchants in Harpers Ferry and to what extent their presence colored the anti-“foreign capitalist” rhetoric seemingly present from a quick glance at the correspondence and newspapers of the day. Indeed, my argument is null if no such popular discourse infiltrated Philip Coons’ Harpers Ferry.

Even if it proves ultimately impossible to establish a conscious network of Valley material reuse, however, the model is still effective for understanding and elucidating a commercial and economic phenomenon generally ignored by historians of the region. Moreover, the presence of intellectual reuse should not be slighted. Throughout the course of this paper, we have encountered a host of characters who have themselves encountered gundalows and the ceiling at Harpers Ferry and have each, to some extent, recycled the phenomenon in their own minds for a host of purposes. Aside from Coons, we have met folks
like John Wayland who in his local histories reuses the stories of gundalows and the flamboyant Zachariah Raines so as to perpetuate a savory bit of Valley lore; there is Archie Frenzen who as benefactor of this same lore, entered the Philip Coons building and was roused adequately to treat the mysterious ceiling as no other Park architect had done before or since; Bill Trout too steps to the forefront as defender of Valley history and champion against the capitalist forces perceived as enemies to it and in this way reawakens those same tensions I ascribe to Coons and the New Shenandoah Company by mid-century. Finally, there is the interloper amid all, myself, who diverts the contribution of all into a single narrative hoping to capture within this enclave a picture of the unseen.
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