



1979

Historic Maps of Kentucky

Thomas D. Clark
University of Kentucky

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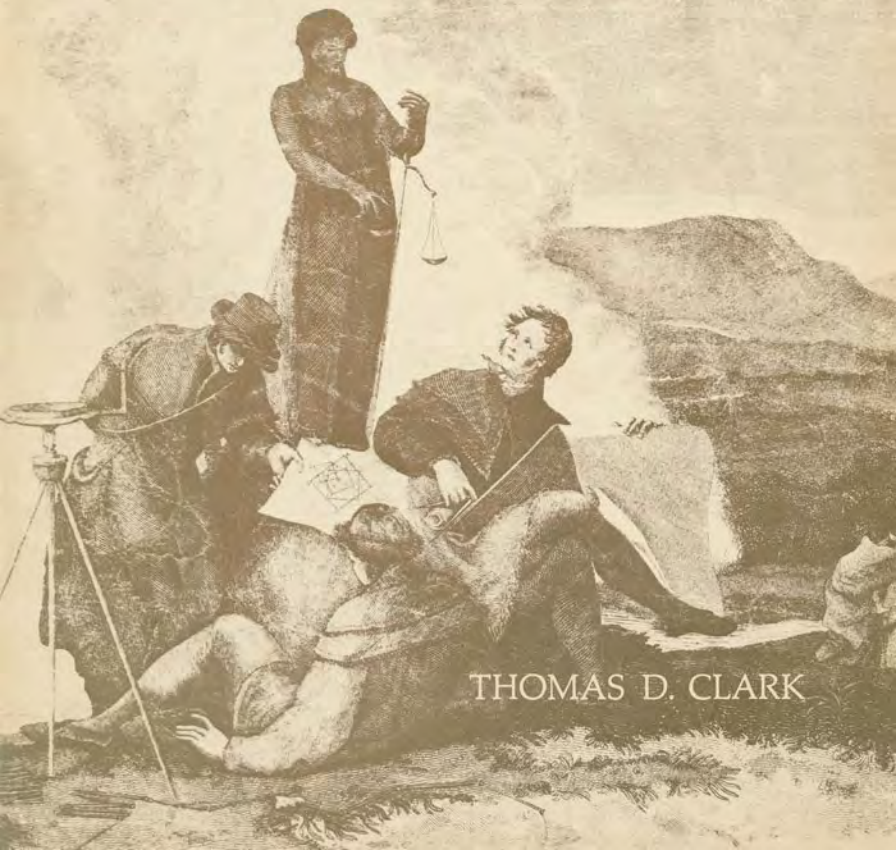
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HISTORIC MAPS OF KENTUCKY



THOMAS D. CLARK

Thomas D. Clark

HISTORIC MAPS OF KENTUCKY



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To Elizabeth Turner Clark

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PREFACE

THE physical shaping of Kentucky was governed, with the exception of the Tennessee boundary, by geographical features. This accounts for its distorted pear shape and meandering lines. Irving Cobb humorously said the shape of the Commonwealth resembled a camel on the rise. Though three of the boundaries are natural ones there were also political ones, which were determined by the Commonwealth of Virginia. This is especially true of the boundary above the Ohio, which was set, 1781-1784, at the "low water mark." Almost constantly since 1792 this boundary has been in contention. At present it is an issue of both territorial and environmental concern.

Historically it seems an astounding absurdity that it took almost a century for first Virginia and North Carolina and then Kentucky and Tennessee to establish a boundary. In 1858-1859 the line between the two states was finally surveyed scientifically and marked from New Madrid Bend on the Mississippi to Cumberland Gap, with large engraved stones erected every five miles along the boundary. I have made a considerable effort to locate some of these markers, and only in one case have I found one standing partially upright and virtually unharmed. Farmers, pipeline construction crews, and highway workers have uprooted and, in some cases, destroyed these monuments. Lying under water in Drake's Creek on the border of Simpson and Allen counties is a broken stone that appears to be marker 33. It appears that this stone, at the location of the famous beech tree on the eastern leg of the "black jack jog" stood directly in the right-of-way of the Tenneco gas line, and consequently was bulldozed into the creek. Stone 31 has been restored to its upright position, possibly stone 30 has been replaced, and only the base of stone 32 at the eastern end of the black jack jog remains, in the midst of a cultivated field. It defies belief that two states that endured such a protracted controversy over the location of the boundary would allow the monuments to be removed or injured. Both legislatures enacted rather stringent laws threatening heavy fines

and imprisonment for anyone vandalizing them. There is no record that these laws were ever enforced.

The mapping of a rapidly maturing region was a continuing process. New settlements, counties, villages, and towns sprang up overnight. Internally there were constant creations and revisions of boundaries. The opening of new roads, and later the improvement of streams and the building of railroads added new features to the land. Not visible upon the general maps but highly important was the intricate maze of metes-and-bounds land surveys. No doubt this mode of hit-and-miss surveying resulted in many of the irregularities in county boundaries and in the creation of the several jogs and indentations in the state boundary. In almost no other concrete area of Kentucky history are folk whims, emotions, sentimentalities, and greed so clearly exhibited as along the myriad political boundaries.

Scores of maps, black and white and tinted, were produced before 1877. It has been a challenging and often frustrating experience to select from these a very small number from which faithful and valid facsimiles could be made. The cost of reproducing maps of high fidelity precluded the making of a wider selection. The ten maps reproduced here have been chosen to reflect the growth of the Commonwealth of Kentucky from the moment it was only a geographical gleam in an imperialist eye until after the Civil War. Since 1877, and the appearance of the excellent map created by Nathaniel Southgate Shaler's geological survey, literally hundreds of maps of Kentucky have been published. These have served all kinds of purposes from politics to public health.

An effort has been made in this brief book to define the forces that bore upon the shaping of Kentucky geography and to identify the map-makers and publishers who produced earlier maps. The making of maps in Kentucky has involved many skills, geographical, geological, and cartographical. Beyond this, however, the Kentucky map has been shaped by the powerful influences of local and state politics, in-

terstate relationships, and those of folk origins. In numberless cases the folk living along boundaries have shaped them to suit their needs and desires.

The preparation of this book and the accompanying maps has placed the author and publisher under heavy obligations to many persons and institutions. This project was conceived by Evalin Douglas of the University Press of Kentucky, and she has given it masterful and creative editorial oversight. Katie Bullard of the Press has gone far beyond the call of duty in the collecting and photographing of maps and design of the book. William Marshall and Claire McCann of the Special Collections Division of the Margaret I. King Library were most cooperative in allowing us free access to the University of Kentucky's map collection. Gwen S. Curtis, map librarian, gave generous assistance in locating information about cartographers, engravers, and publishers. Susan Csaky, Martha Jane Whiteside, and Rebekah Harleston of the Government Documents Library allowed us generous use of maps and documents.

Professor Tom Field of the Department of Geography gave us valuable counsel at the outset of the project. Riley Handy, Elaine Harrison, and Nancy Baird of the Kentucky Library, Western Kentucky University, facilitated use of their splendid map collection, and were most generous in supplying special bibliographical information. James Bentley, Martin Schmidt, and Richard Hagy of the Filson Club not only made available that organization's map collection, but James Bentley was most helpful in the reproduction of the Filson Club map. In Frankfort General William Buster, William Long, and William B. Chescheir of the Kentucky Historical Society gave us substantial assistance in locating materials.

Kathy Holden of the University Law School Library was generous with her time and talent in the location of legal sources. In the Special Collections Division Terry L. Warth gave us guidance in matters of locating materials. Jane Munson of the Jonathan Truman Dorris Museum, Eastern Kentucky University, allowed us to copy the conflicting land claims plat.

Susan Godlewski of the Lilly Library, Indiana University, facilitated our obtaining a copy of the Brooks map of the Falls of the Ohio, and John Vint of the Indiana University Press not only obtained a negative of this map, but delivered it to us in person.

Locating the disputed Kentucky-Tennessee boundary on the ground required the assistance of several persons. Mrs. Dorothy Steers of Franklin shared her invaluable store of knowledge of Simpson County in generous measure. She not only gave us documentary assistance, but went into the field to help locate some of the markers. Mrs. Margaret C. Snider of Simpson County steered us with certainty along the border, and supplied us with information about the people living along the line. Mr. Floyd Pitts of Franklin and Mr. Tom Johnson of Simpson County helped us locate markers, and Mr. Johnson has restored marker 31 to an upright position.

Nancy D. Bethel, Henderson County Clerk, supplied a copy of the report of the Kentucky-Indiana Commission to establish the boundary around the Green River Island. Darrell Watkins of Henderson supplied the photograph of the surveyors' plat of the established island boundary.

Jerry Crouch of the University Press of Kentucky assisted me materially in one of my visits along the Tennessee border. Clyde Burke of Lexington holds many Kentucky authors in his debt for his excellent photographs. We are indebted to him for several of the photographs included in the text.

The foremost responsibility of authorship is to strive for accuracy, clarity, and comprehensiveness. Inevitably the preparation of a book on Kentucky maps involves numerous strands of state and national history. I have endeavored to throw some light on the two complex issues of the long smouldering dispute between Kentucky and Tennessee, and the even more complex one of the "low water" boundary along the northwestern shore of the Ohio. No one, not even the Supreme Court of the United States, can settle this issue conclusively because of the major physical changes which have occurred during the past two centuries. I alone assume full responsibility for the interpretations and accuracy of this study.

METES & BOUNDS OF KENTUCKY

Now Know ye, that we. . . are graciously pleased to enlarge our said Grant unto them, according to the bounds and limits hereafter specified. . . All that Province, Territory, or Tract of ground, situate, lying and being within our Dominions of America aforesaid, extending North and Eastward as far as the North end of Carahutke River or Gullet; upon a straight westerly line to Wyanoake Creek, which lies within or about the degrees of thirty six and thirty minutes, Northern latitude; and so West in a direct line as far as the South Seas. . . .

Charles II, King of England (1665)

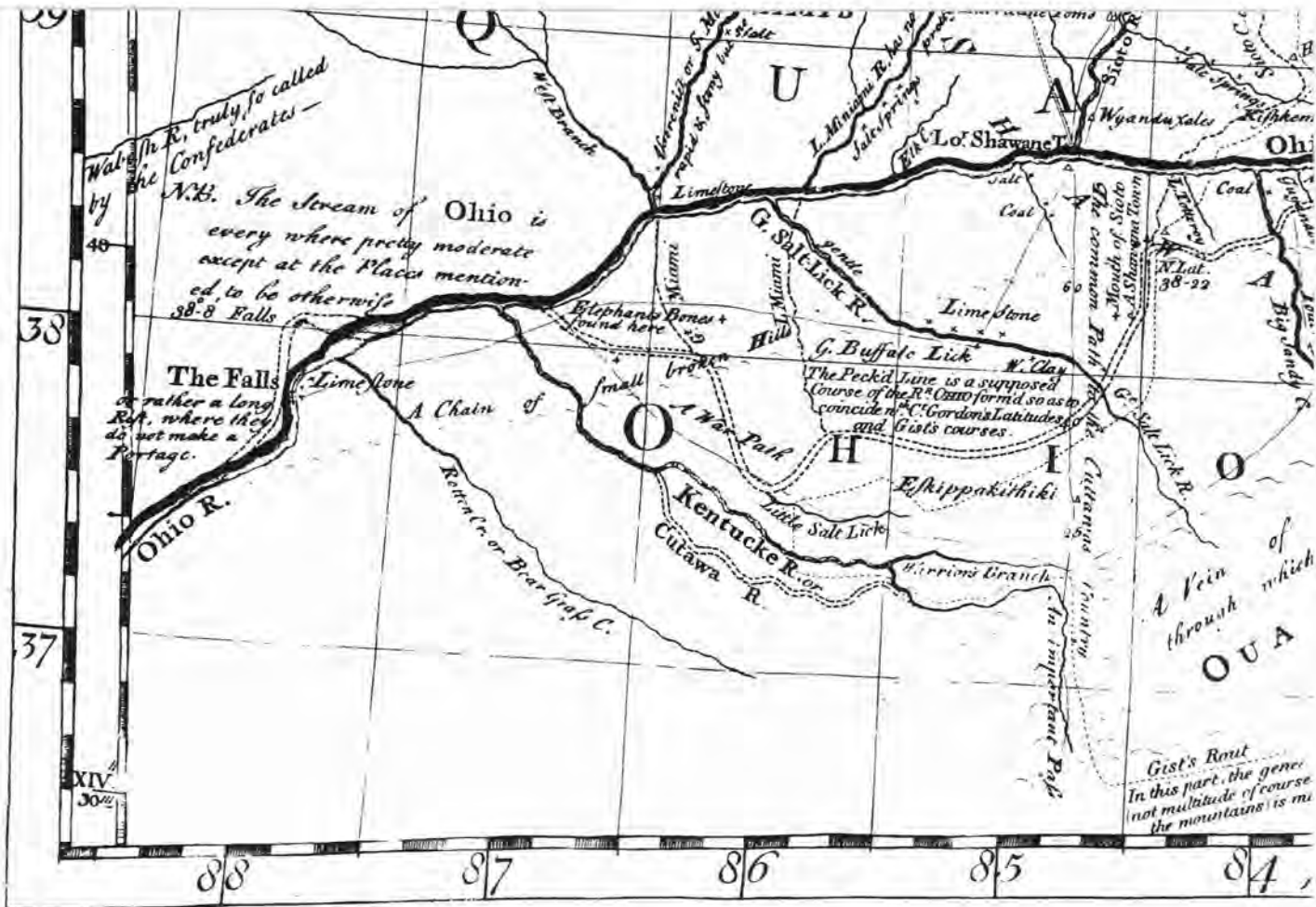
1. A Virgin Borderland

EARLY cartographers portrayed what was to be Kentucky as an unknown land crossed by streams of uncertain names and mysterious courses. Seventeenth century French were satisfied to present it as a vast wilderness lying vaguely south of the "Ouabache" River and penetrated by two or three westward-flowing lateral streams. To document their ignorance they generously adorned their cartographical perversities with symbols for trees and allowed the region to slumber undisturbed in its arboreal fastness.

It is to be doubted that French adventurers in the Mississippi and Ohio valleys before 1750 ever got fixed in their minds the true relations between the Ohio and the lesser Wabash, or determined which was the main stream. The mouths and courses of the Tennessee, Cumberland, Kentucky, and Big Sandy remained a mystery to them. The early French map-makers, however, were not without a touch of romance. One labeled the present land of Kentucky a buffalo range, and portrayed mounted hunters riding Sioux fashion after these beasts across a broad slice of prairie land.

If the geography of the Ohio Valley proved mysterious to Frenchmen, it was well beyond the comprehension of Englishmen who seldom ventured outside the walls of their London drafting rooms. To

them the western valley country was an endless maze of hills strewn about in no discernible pattern, penetrated by unlabeled streams, and all covered on paper, at least, with undifferentiated woodlands. A particularly fine example of British befuddled notions of American geography was a Mr. Popple's "Nouvelle Carte Particuliere de L'Amerique," drawn in 1735. He performed this service for the Lords Commissioners of Trade and Plantations. He wished to be accurate and, he said, "To correct the Many Errors committed on former maps, and Original Drawings." Because of this desire he submitted his cartographical masterpiece to "The Learned Dr. Edmund Halley, Professor of Astronomy in the University of Oxford" for his scientific observation. This learned scholar of the ancient towers perhaps had knowledge of the courses of the Isis and the Thames, but the Ohio might as well have been one of the acid-impregnated rills of Venus. Mr. Popple was dead right when he said, "The head of the Mississippi is in very Boggy Country." He was off, however, when he located it on the fiftieth degree, north latitude. It was not until the era of the French and Indian War that the British began to consolidate their fragmentary knowledge of the western country so that they could present it on a reasonably intelligible map. In 1755 Lewis Evans of



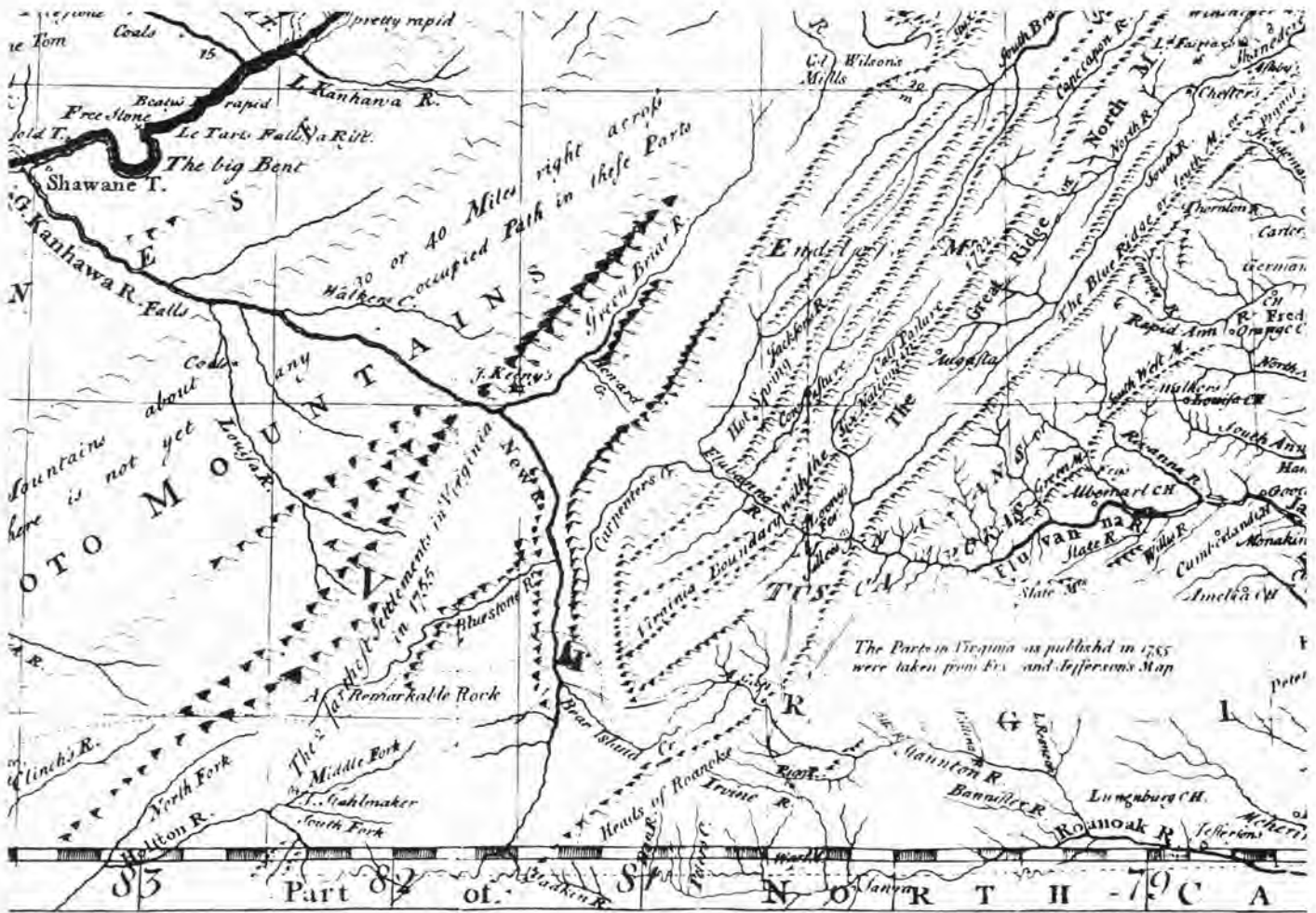
Philadelphia prepared and published his "Map of the Middle British Colonies in North America," which was later revised and published by Thomas Pownall, Member of Parliament, in 1755.¹

From 1750 to date the making and refining of the map of Kentucky has been a continuous process. The establishment of external borders of the region has been historically a tedious process of political change, consolidation, and clarification. Through more than two centuries of settled history the settling of county and land boundaries inside the state has involved deep human emotions, political chicanery, lack of engineering skill, and legal deficiencies. This geographical malady began partly with the disputed Virginia-North Carolina boundary and was intensified as frontiersmen penetrated the Blue Ridge barrier to begin settlements in the Watauga Valley of eastern Tennessee.

The constantly changing contents of Kentucky historical maps have been as valid documentary reflections of pioneering as the contemporary written records. By cartographic progressions were reflected the growing frontier population and the advance of agricultural, transportation, and industrial systems.

They also gave a glimmer at least of the existence of natural resources, the importance of the streams, the impact of topography, and the location and rise of the towns. Most informative were the indications of paths of population movement. There has not been a decade since 1775 that the general map of the area now occupied by the Commonwealth of Kentucky has not produced changes that demanded fundamental cartographical revision and refinements.

Geographical expansion and changes originated with British and European thrusts toward this continent. Each nationality fashioned its own particular approach and reason for colonizing North America. Motives and objectives were almost as numerous and varied as were private adventurers. Each in time played a distinctive role in bringing the western river systems and their valleys into geographical focus. From this perspective it is remarkable that they accomplished this in such a short space of time. Before Europeans penetrated the western country animals and Indians had stamped indelibly upon the land patterns that have endured into this modern era. The broad Ohio Valley and the Appalachian Highlands were not trackless wildernesses, which newcomers



From Thomas Pownall's 1776 edition of the Lewis Evans map. The "Parts in Virginia" are credited to the Fry and Jefferson map (see page 14).



A French view of the Kentucky country, from a map of 1759, shows "les Illinois" engaged in "la Chasse de boeuf." Note that the Ohio is shown as a tributary to the "Ouabache."



Mr. Popple's Kentucky, from a French edition of his map.

first viewed in the seventeenth century. No greater myth persists in American and Kentucky history than the one that the virgin lands of this part of the Old West awaited the coming of the white man to be explored. They were crisscrossed from a much earlier age with trails, and salt licks and other impressive natural landmarks were so well known that Indians, north and south, were able to describe them.

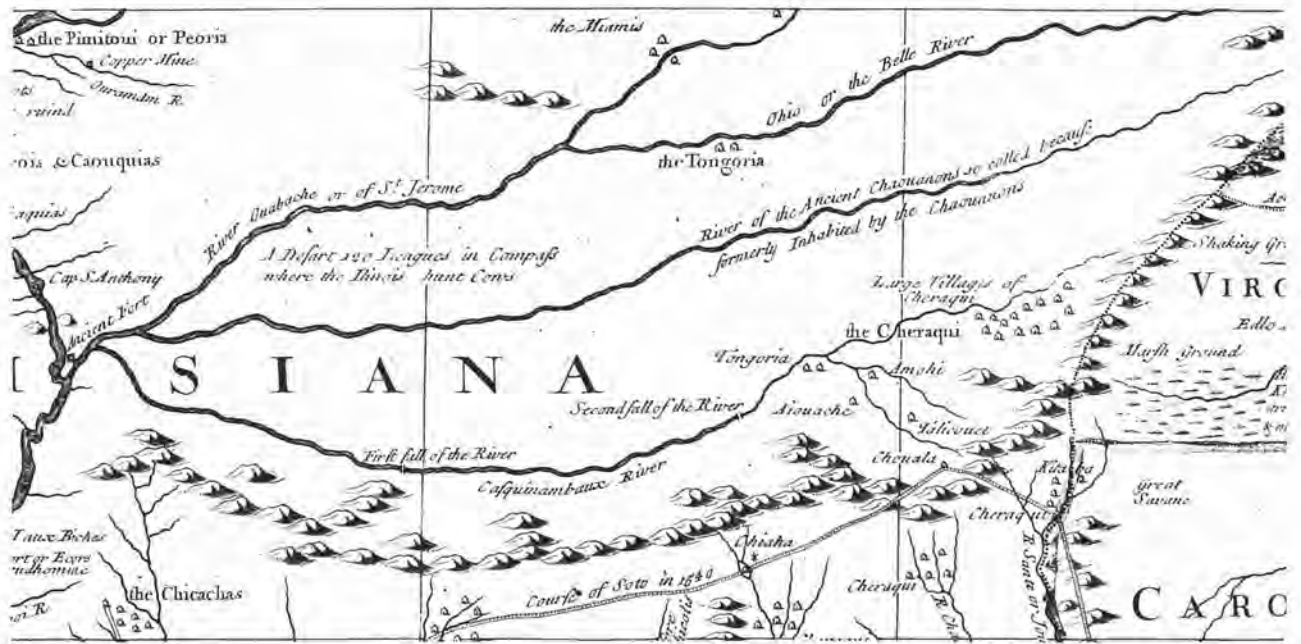
Thus it was that cartographically Kentucky emerged chrysalis-like out of a hard fibrous cocoon and grew by stages into more distinct and sophisticated forms. So far as European and British interests were concerned Kentucky's chronological stages began with the inception of the colonization of the continent itself. International trade and border political rivalries hastened the westward movement from the eastern British colonies. Lodestone of this movement was the availability of seemingly inexhaustible virgin land, which drew Frenchmen, Englishmen, and American frontiersmen across the mountains.

The land inside the great fold of the eastern mountain wall and southeast of the Ohio River was to mid-seventeenth century Englishmen *terra incognita*. So far as early colonists sticking close to the lower reaches of the James River and the Atlantic shore were concerned, they were already in contact with more frontier than they could master. For the policy-makers in London the western country did not exist in more tangible form than as degrees of latitude. In making a grant to the Virginia Company of

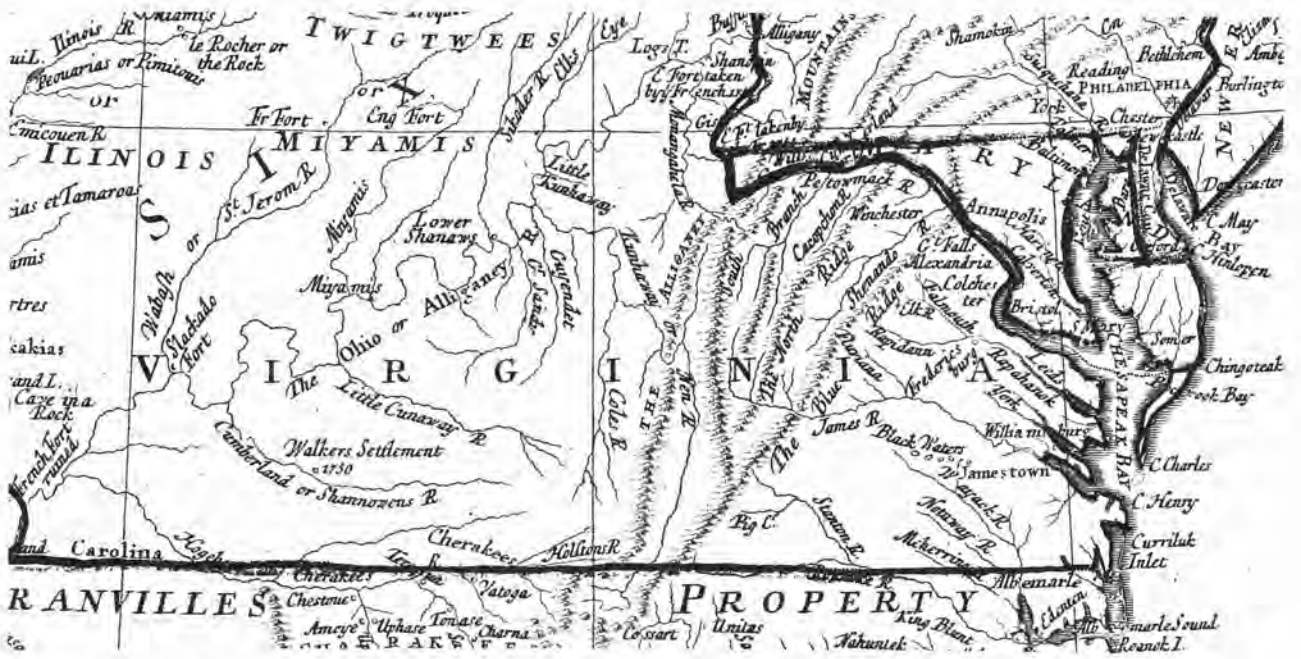
London in 1606 the Crown decreed the "first colony" was to be planted somewhere between latitudes 34° and 40° and extending virtually into infinity to the west. In the second charter granted Carolina in 1665, Charles II designated the line 36° 30' west to the ocean as the boundary between Virginia and the southern colony.² In so doing the King established one of the most disputed boundary lines in American history, and one which would cause the officials of the future states of Kentucky and Tennessee a great deal of anxiety.

During most of the seventeenth century English colonists moved up the James River with what at times seemed imperceptible speed. For them the vast frontier upstream held its terrors and its superhuman challenges. In London the managers of trade and the plantations sought to superimpose on North America the British pastoral experience by controlling the process of making land grants, hoping thus to advance an integrated settlement line with the movement of population inland. The Virginia colonials themselves slowed population movement by their desire to hold fast to the ocean umbilical lifeline to the Old World. They moved inland only as fast as they could establish farms and plantations along the James and other coastal streams and provide means of protecting them.

In 1646 the Virginia House of Burgesses declared frontier forts were necessary to the safety of



The Ohio—or Ouabache—Valley as shown in a "map of Louisiana and of the River Mississippi" published about 1719.



Virginia according to a map published in Nuremberg in 1756.

the plantations. It turned over to Captain Abraham Wood the care and control of Fort Henry. With it the captain received 600 acres of land tax free. This frontier outpost, located on the site of present-day Petersburg, Virginia, was to have a major impact on frontier trade and exploration. It quickly became the major fall-line trading station, drawing Indian and white traders, and from it major back-country explorations were launched. So far as a historian can be certain in the use of the term "first," Fort Henry was the first of a long series of major trading and exploration outposts all across North America.³

Every seventeenth-century Indian trader who went out from Captain Wood's fort was also a major explorer who brought back with him important bits of geographical and commercial information. From this outpost of British civilization and commerce traders and packtrains were outfitted to venture as far inland as the Cherokee country in the upper reaches of the Tennessee Valley. Also, it was to Fort Abraham Wood that Indians came to procure trade goods and to exchange furs, skins, and geographical information about the back country. Abraham Wood, personally, was a combination of backwoods land speculator, Indian trader, member of the House of Burgesses, frontier military officer, and Indian diplomatist.⁴

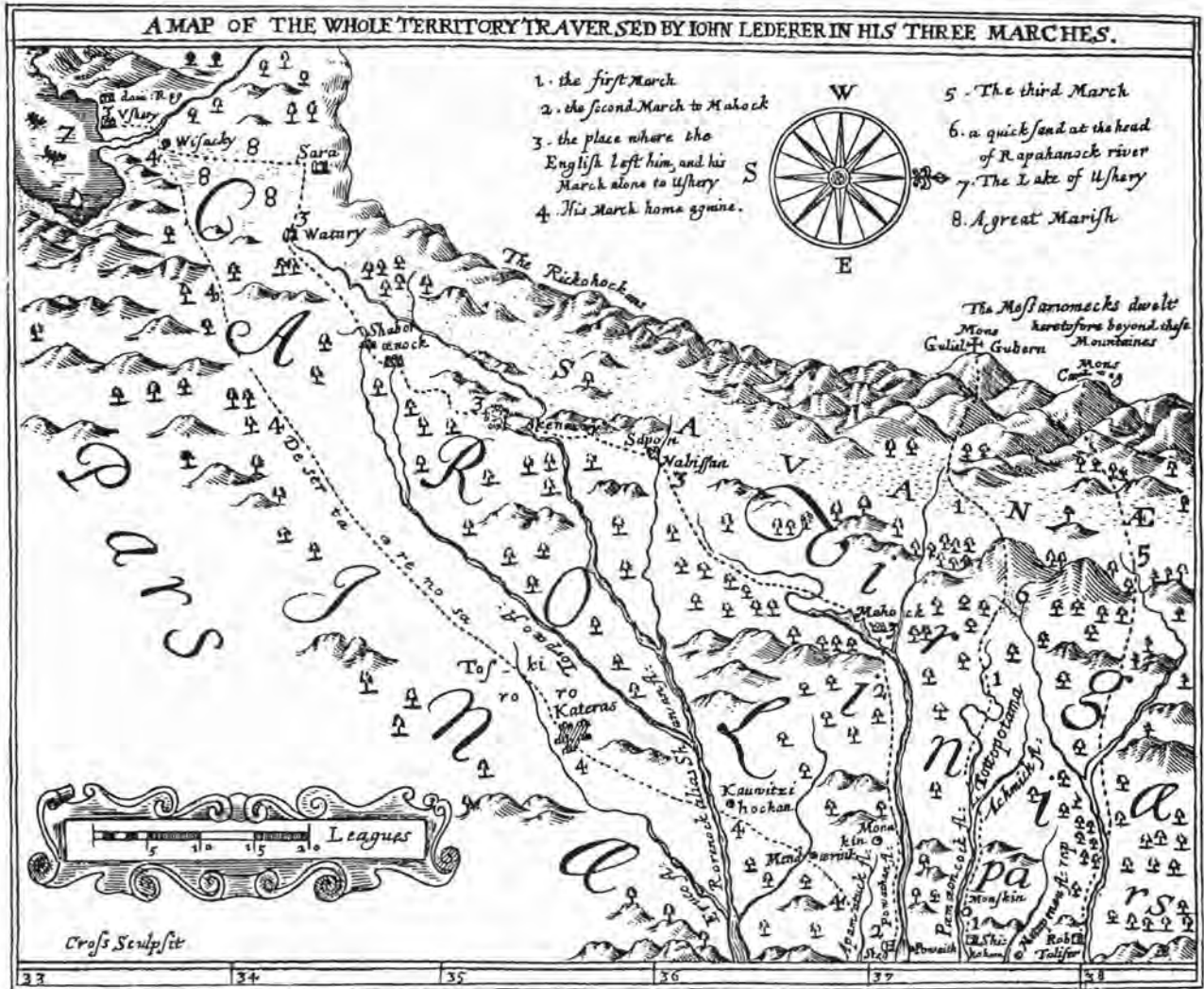
Governors in Virginia and colonial officials in London were convinced there was an open water passage either to the western ocean or gulf, or to the "South Seas." They also thought that buried in the recesses of the unexplored western mountains were lodes of precious metals. Indian visitors passed along the word that five days' travel from Fort Abraham Wood to the southwest were great rivers at the foot of the mountains. This news tempted a trading and exploring company to adventure in that direction as early as 1650. True to Indian information the traders within five days reached the confluence of the Dan and Stanton rivers. This was the beginning of extended colonial British exploration, which in time would take Captain Wood's men as far west as the eastern tributaries of the Ohio and Mississippi. In 1671 the famous Batts and Fallam party reached the Ohio-Mississippi valley, finding along the way marks on trees indicating that white visitors had preceded them.⁵

No doubt the most important facts associated with the early explorations from Fort Abraham Wood were the locations of Indian villages, streams, and

trails between the falls of the James River and the Blue Ridge. The actual discovery of the Mississippi and Ohio rivers in the period before 1670 is shrouded in legend and uncertainty. Nevertheless the English colonial approach to the future region of Kentucky was being undertaken bit by bit. Unhappily none of the earliest explorers seem to have drawn even primitive maps giving some recorded concept of where they traveled.

The last quarter of the seventeenth century was a period of expanding Indian-fur-skin trade all along the western frontier. A major Virginia promoter of western expansion was Sir, or Governor, William Berkeley. Instead of commissioning the experienced Captain Wood and his men to make explorations he fell into the error of listening to a German physician of vague origins, John Lederer. Between March 1669 and August 1670 this "explorer" traveled into the western Virginia backcountry. Both his journal and map are indefinite as to where he traveled and the lay of the land. Some indication of the quality of Lederer's discoveries is contained in the report, "They are certainly in error, who imagine that the continent of North-America is but eight or ten days journey over from the Atlantick to the Indian ocean, which all reasonable men must acknowledge, if they consider that Sir Francis Drake kept a west-northwest course from Cape Mendocino to California." He said, "I am brought over to their [Indians'] opinion who think that the Indian ocean does stretch an arm or bay from California into the continent as far as the Apalatean mountains, answerable to the Gulfs of Florida and Mexico on this side. Yet I am far from believing with some, that such great and navigable rivers are to be found on the other side of the Apalateans falling into the Indian ocean, as those which run from the eastward."⁶ Although Lederer lost favor with the Virginians, he published accounts of his three adventures onto the frontier with many geographical misconceptions if not downright fabrications. He seems to have mistaken the deepening haze of distant mountain ranges for bodies of water, and valleys for plains. He did gather a glimmer at least of Indian life in the region.

The names of two other Virginia explorers of record stand out in this period. They were James Needham and Gabriel Arthur. These men penetrated the country about the headwaters of the Tennessee River system by 1674. Arthur was captured by the Cher-



John Lederer's map of his three journeys from the Tidewater settlements to the interior in 1670.

okees and taken across the Appalachian chain to the Great Kanawha. Later he was returned to Fort Abraham Wood. In the rounds young Arthur gathered a significant amount of information about the nature of the country both about the head of the Tennessee and beyond the mountains in the central Ohio Valley.⁷

By the end of the seventeenth century the Virginia traders had traveled deeply into the western valleys and foothills of the Appalachians and Blue Ridge. They gathered an appreciable amount of knowledge about the general lay of the land inside Cumberland Gap, and by their various journeys had planted Virginia feet well on the way to future Kentucky. Two impelling motives drove Englishmen in this direction: profits from the Indian trade, and a growing land

hunger. These southern woodsmen were almost completely oblivious to the fact that as they worked their way westward from the Atlantic Coast, French explorers were working their way into the Ohio and Mississippi valleys both from the St. Lawrence-Great Lakes region and up from the Gulf of Mexico.⁸

Priests, adventurers, and *couriers-de-bois* all entered the territory around the Great Lakes, exploring broad areas across the chain of lakes country as far west as Lake Superior. At best the proclaimed discovery by Cavalier Robert LaSalle of the Ohio in 1669 or 1670 must be considered a moot question. It is possible that LaSalle never saw that river until he passed its mouth on his Mississippi River expedition in 1682. Yet the legend has persisted in Kentucky

that he discovered the Falls of the Ohio and the site of present Louisville. Also, the sweeping claim made by Sieur Daumont de St. Luson in the famous Pageant of Sault Ste. Marie in 1671, in which the French took possession of all the western country, was of little importance itself. It did, however, prompt the French to undertake intensive explorations and to include the Ohio Valley on their maps after that date.⁹

After 1670 French traders ventured deeply into the Ohio Valley, gathering not only furs and skins as they went, but vital geographical information, which in time was portrayed on the numerous French maps. Of vital concern in this age were the courses of the rivers, and the attempt to separate the main streams from the laterals. A classic example was the persistent notion that the "Ouabache" rather than the Ohio was the main stream in the central valley. The French explorations and Indian trade were to stimulate a growing rivalry with the English to the east of the Appalachians.

Unfortunately there were no Jesuit missionaries in Virginia to make a record of the frontier advance; few of the seventeenth-century explorers from the coastal colony were sufficiently literate to make notes of their ventures or to draw maps portraying their travels. Even so they gathered the kinds of information necessary to the map-maker. It is difficult for the modern historian to sift from the contemporary documents enough information to assess fully the precise importance of early colonial explorers other than to

say that they located trails, mountain passes, headwaters and stream courses, passed on general observations about the nature of ground cover and human and animal occupation, and established notions of distances involved in traveling from the settlement line on the James River to the outskirts of the mountain frontier. They also learned about the locations of such prominent landmarks as salt licks, barrens, fall lines in streams, deposits of unusual animal skeletons, and mineral outcroppings. Collectively this knowledge, however imprecise, was to enable future cartographers to organize the internal features of maps of the Kentucky country.

No early visitors developed more vital topographical information for map-makers than land hunters. From the first entry of Abraham Wood and his men into the Virginia backcountry in 1642 down to the addition of the Jackson Purchase to Kentucky by Indian treaty in 1818, the land hunter or scout was a key personage in exploration and the gathering of precise information about the extent and nature of that part of the western country north of the Tennessee River, southeast of the Ohio, and west of the Appalachians. In a sense every hunter-trader was also a land scout. If he had no direct interest in the land, he at least was well attuned to its effects on his travels and its resources for hunting and trading. Evidence of this appears on the earliest maps of the new country, both immediately east and west of Cumberland Gap.

2. The Royal Boundary & the Westward Movement

BY mid-eighteenth century Anglo-French rivalry in the Ohio Valley had involved the two nations in a struggle to monopolize the rich western Indian trade. An equally attractive lure was the all but inexhaustible land resource. In 1749 Céleron de Blainville came south from the St. Lawrence settlements to plant leaden plates at the mouths of the lateral streams of the Ohio.¹ To give higher visibility to the French claims de Blainville attached tin shields to

trees along the way. Technically at least this was an invasion of territory to which the London Company of Virginia had been granted charter rights, and news of this activity touched off a new wave of Virginia activity in the region.

After 1745 the Kentucky frontier became a common trading ground for both Virginia and Pennsylvania traders. The woods traders and runners of the famous western Pennsylvania entrepreneur George

Croghan were known to have visited and traded at Indian Old Fields or Eskippakithiki in present-day Clark County; they wandered along the Big Sandy, the Licking, the Kentucky, visited the Big Bone Lick and the Falls of the Ohio. The record, however, is vague as to how many traders there were or just where they visited aside from the places mentioned above.²

A second group of hunters and woods-wanderers, the "Long Hunters," repeatedly crossed the mountains to the Kentucky country. Like their predecessors they kept few or no records, but many of the names of these visitors are known. Among them were Elisha Walden, Henry Skaggs, William and John Blevin, Charles Cox, William Pittman, John Stuart, Benjamin Cutbird (or Cuthbirth), and John Finley. The last was to leave a personal impact on the land.³ He was at Indian Old Fields, where he gathered much information about the Kentucky stream system, the Indian and game trails, and the general lay of the land. The best known of the long hunters, however, was Daniel Boone. He, like the other early woodsmen, made no trail notes. But long hunter tales added to knowledge of the western country. It was in fact the long hunters who stamped the wilderness image so indelibly upon the Kentucky country. Bit by bit the early woodsmen conveyed by word of mouth a sense of locations and distances in the wild borderland inside of Cumberland Gap and below the Ohio.⁴

Virginal Kentucky was so crisscrossed by game and Indian trails that few early hunters and subsequent pioneer-settlers established original trails. In later years Daniel Boone blazed a new entryway for the Transylvania Land Company, and some internal connecting roads were opened. Otherwise the ancient trails were broadened into bridle paths and roads as the population of Kentucky grew.⁵

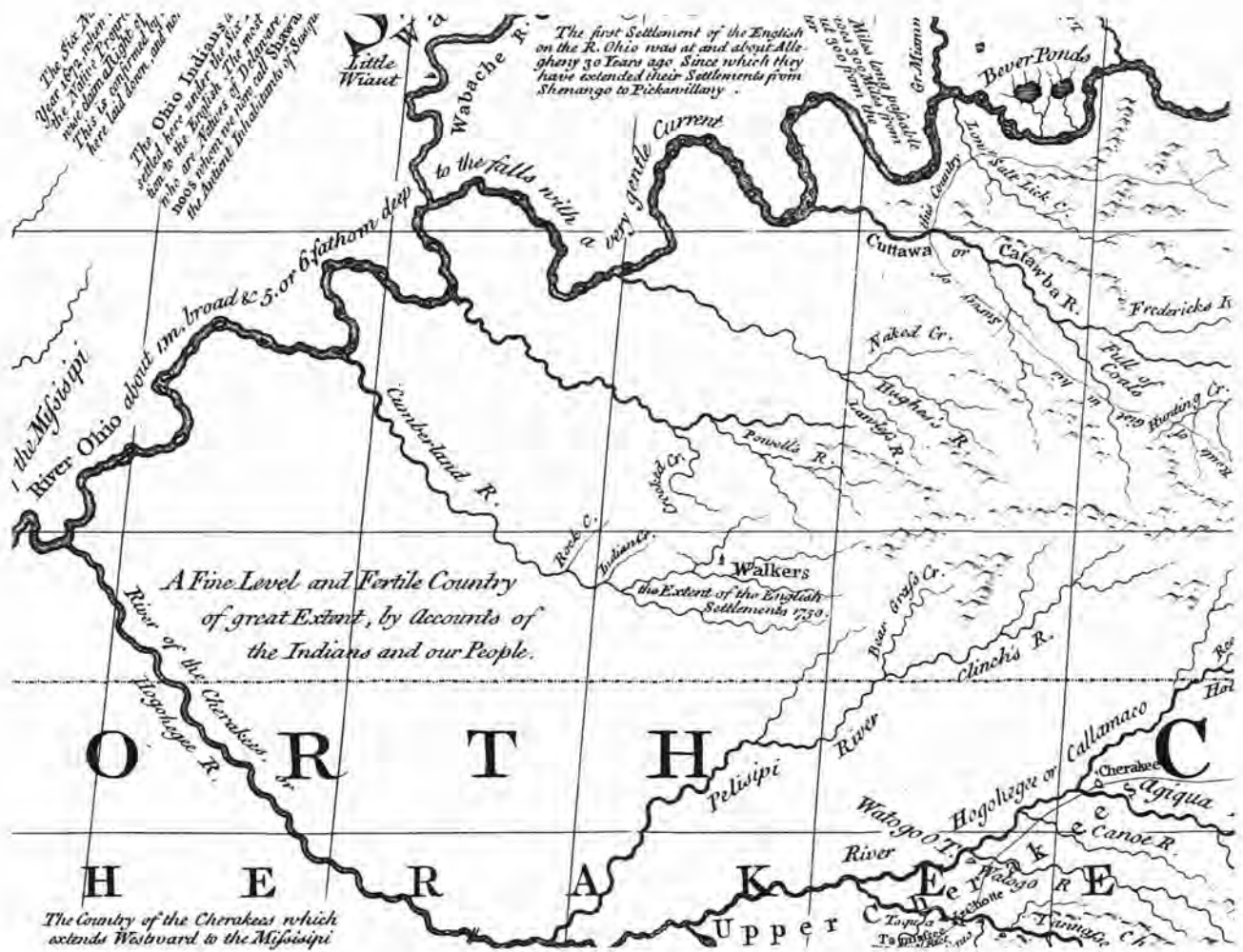
Behind the exploration of the western country in mid-eighteenth century was the powerful force and influence of organized land companies. In 1749, and immediately upon the heels of Céleron de Blainville's claiming expedition along the Ohio, the influential British-American Ohio Company was awarded a charter grant of 200,000 acres of western lands ostensibly for the purpose of planting a colonial buffer against French expansion.⁶ Members of this company were influential Englishmen and colonials who exerted considerable influence in Parliament and in the various colonial legislatures. The Loyal Land Com-

pany, largely of Virginia origin and control, was organized in that year and in competition with the Ohio promoters. It also was granted a block of wild and virginal lands west of the Cumberland Plateau. In December 1749 this company employed Dr. Thomas Walker, a physician-surveyor, to lead an exploring expedition into Kentucky. Dr. Walker and five companions rode away from Albemarle County on March 6, 1750. They traveled up the great Valley of Virginia toward the known pass in the southwestern Appalachian range. A month later, April 13, they arrived in "Cave Gap," which Dr. Walker renamed "Cumberland" in honor of William Augustus, Duke of Cumberland and son of George II and Queen Caroline. The party found in the Gap the sign of the cross and other marks left on trees by previous visitors. Dr. Walker added to these his own name.⁷

From April 13 to June 19 the Walker party explored the valleys and ridges of Kentucky between the Cumberland Gap and the Rockcastle River, and thence northeastward to the Big Sandy Valley by way of the Red River and the western escarpment. En route Dr. Walker made rather full notes in his daily journal describing the land and its features. He recorded descriptions of several remarkable landmarks. Near the Cumberland River in the vicinity of present-day Barbourville the Walker party built a log cabin. They explored down that river to its fall line, visited the headwaters of the Rockcastle, crossed the Red and Licking, and traveled along the Levisa and Tug forks of the Big Sandy. They left the transmontaine region by way of the Green Briar River on their return to Charlottesville.⁸

Behind in the Kentucky country the Walker explorers left indelibly fixed on the land the names Cumberland Gap, Mountain, and River, and the names Levisa and Louisa along the Big Sandy. Most important of all, they carried home with them the first clear documentation of Anglo-Colonial travels on the Kentucky frontier.⁹

A year after Dr. Walker's visit the Ohio Company sent the famous Indian trader and trail-breaker Christopher Gist to the west to "spy out" suitable lands on which to settle its 200,000-acre claim. Unlike Dr. Walker, Christopher Gist had only a boy servant for a companion. Once at the head of the Ohio he had to take extraordinary precautions to obscure the purpose of his travels. Had Gist's mission been publicized he might have been violently op-



John Mitchell's famous map of North America, first published in 1755, drew on the journals of Christopher Gist in its representation of the Ohio Valley.

posed by Frenchmen, Indians, and Pennsylvania and Virginia traders. From Red Stone on the upper Ohio Gist traveled westward into present Ohio across the Muskingum and Scioto rivers. He bore instructions to observe "Ways & Passes thro all the Mountain you cross, & take an exact account of the Soil, Quality, & Product of the Land, and the Wilderness & deepness of the Rivers & Mountains as near as you conveniently can." After he located a body of good land, Gist was instructed to continue to the Falls of the Ohio so that he might be able to inform the company of the navigability around or over the rocky barrier. Of decided pertinence to the further clarification of the geographical features of the western country the surveyor was told, "You are to draw as good Plan as you can of the Country You pass thro; You are to take an exact and particular Journal of all your Proceedings, and

make a true Report thereof to the Ohio Company."¹⁰

Christopher Gist and his companion ferried themselves across the Ohio River at a point just above the mouth of the Scioto. They then traveled diagonally into Kentucky, crossing the Licking and Red rivers, and turned eastward across the upper reaches of the Kentucky, then into the Cumberlands and through Pound Gap. Gist spent just over a month, March 12 to April 19, 1751, in Kentucky. He never reached the Falls of the Ohio because he was warned that hostile "French" Indians were encamped there and would place his life in jeopardy. He neither saw the Big Bone Lick nor the fertile lands of the central Bluegrass. Nevertheless his journal constitutes a dramatic account of the country through which he traveled, especially when he stood on the crest of the Cumberland ridges and looked off into the endless waves of

hills and valleys. Along the upper Kentucky forks Gist crossed the trail of Dr. Thomas Walker.¹¹

In one respect the visitations of Dr. Thomas Walker and Christopher Gist may be viewed in the context of a formal historical opening of Kentucky lands to half a century of intensive exploration and settlement. In a greater geographical sense their combined journals are the first documentation with any degree of accuracy of the topography of the state.

Long before Dr. Thomas Walker and Christopher Gist set out to explore the Kentucky wilderness a situation arose between the colonies of Virginia and North Carolina that was to have profound effect on the future states of Kentucky and Tennessee. Errors made by surveyors in the first quarter of the eighteenth century haunted these states for almost the first seventy years of their existence. As settlement lines spread and the population increased along the borders of Virginia and North Carolina it became necessary to establish a precise boundary of jurisdiction over the granting of land deeds, control of civil and criminal affairs, and the collection of taxes. In the years 1727 and 1728 an attempt was made to establish such a boundary.¹²

Virginia appointed as commissioners William Byrd, William Dandridge, and Richard Fitz-William; North Carolina sent Christopher Gale, Edward Moseley, John Lovewick, and William Little. Each colony appointed two surveyors to run the dividing line. Charles II, completely ignorant of colonial geography, decreed in the Second Carolina Charter that the line should begin at the north end of Currituck Sound and run "upon a straight westerly line to Wyonoake Creek, which lies within or about the degrees thirty six and thirty minutes Northern latitude; and so West in a direct line as far as the South Seas."¹³ In prescribing this line the King was almost splitting English occupation of the North American continent in two, and setting a boundary which was to create long-enduring political furore in the new states.

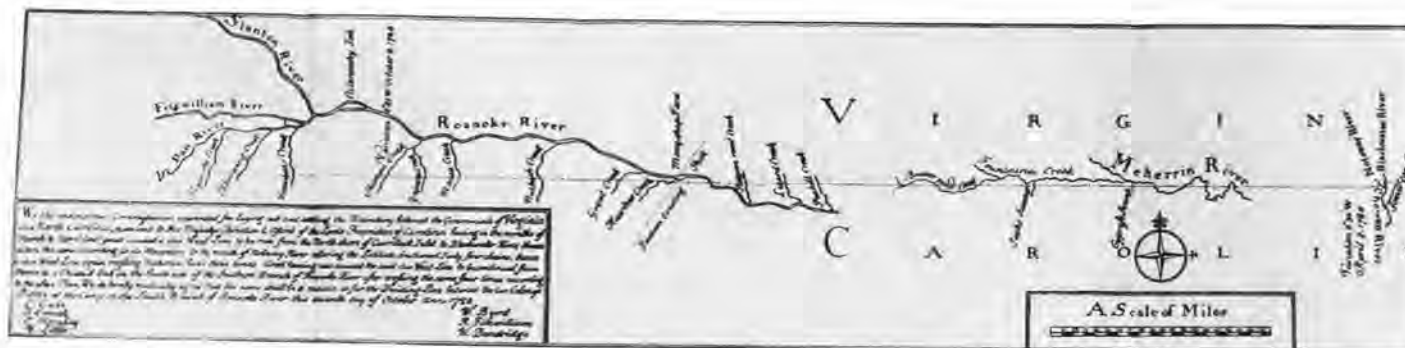
The boundary commissioners were instructed in 1727 by Governors Spotswood and Eden to survey the colonial boundary line as far west as the settlements extended. Aside from the intercolonial political disputes that had grown out of the indefinite border there came to the surface another plaguing element of boundary establishment. Settlers had outrun the established line and had developed strong folk attach-



A surveyor's four-rod chain and a compass, of the kinds used in eighteenth-century boundary surveys.

ments for one or the other of the colonies, a phenomenon that was to disturb Kentucky and Tennessee many times in the future.

From the outset arguments arose over two or three points that always set surveyors at loggerheads. First, no one in the Currituck Sound area remembered a creek by the name of "Wyonoake," and differences arose among the commissioners and surveyors as to which creek should be considered the westernmost landmark mentioned in the Second Charter. The sorest points of contention, however, arose when compass and astrolabe readings did not coincide, so that the surveyors could not agree at what point on the ground to begin running the direct line that in the King's imagination extended "as far as the south seas." Even more frustrating, the watery area immediately west of Currituck Sound made surveying with their primitive instruments almost impossible. The eighteenth-century surveyor used a large open-faced compass, equipped with two sighting slits, mounted on a jacob staff—a sturdy wooden leg with a steel-pointed foot to jab into the ground. He leveled



The boundary between the colonies of Carolina and Virginia, as mapped by William Byrd and his colleagues.

the compass by tilting it from side to side until two spirit levels agreed, then lined up the slits with the needle and read the line as far ahead as he could see a "flag" or marker. Measurements were taken with a four-rod (sixty-six-foot) chain consisting of 100 links joined together with "eyes" or flexible loops; because the chain was constantly being dragged over rocky ground the eyes became worn, creating enough discrepancy over a long distance to make it difficult to arrive at original points in a resurvey. The surveyors of the Virginia-North Carolina dividing line were not equipped to take stadia readings across the stretches of nearly impassable ground and water west of Currituck Sound. Once past the muck shoal basin they faced the boggy insect- and snake-infested Dismal Swamp. This forbidding area was scarcely firm enough to set an instrument or to support a surveyor long enough to take sightings. Beyond the great swamp the forest was dense and forbidding even though underfooting was firm.¹⁴

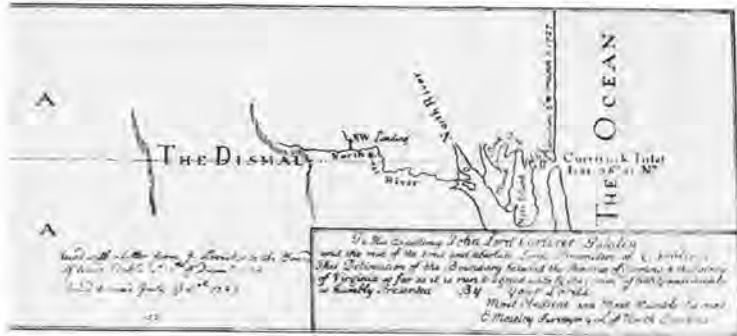
As the technical problems of instrumental readings and line location multiplied, so did the arguments between members of the Virginia delegation and between the Virginians and the North Carolinians. It became necessary to call a halt in the survey to allow tempers to cool and to recoup the health and strength of the surveyors. In the summer of 1728 the survey was resumed and was continued into October when the party had reached the headwaters of the Roanoke River and the foothills of the Blue Ridge. There on October 16, 1728, the commissioners agreed to end their labors. In his *Secret History of the Dividing Line* William Byrd wrote, "The last Line Tree they mark't is a red Oak with the Trees around it blazed. We determin'd to proceed no farther with

the dividing Line, because the way West grew so mountainous that our jaded Horses were not in condition to climb over it."¹⁵ This ended the first dividing line survey on the bank of Peter's Creek in present-day Stokes County, North Carolina, a distance of 241 miles and 250 poles from the starting point on Currituck Sound.

By 1749 expansion of the population into the western hinterland required an extension of the dividing line between the two British colonies, and Peter Jefferson and Joshua Fry blazed the boundary through rough, mountainous country from Peter's Creek to Steep Rock Creek.¹⁶ This extension was intended to get out well ahead of the settlement line, but in just thirty years it had been outstripped by the westward-rushing tide of people.

After 1770 surveyors and land scouts in the Kentucky country spied out and marked large claims; long hunters became more active in their visitations; at the Falls of the Ohio speculators, including Lord Dunmore and John Connolly, scouted the land.¹⁷ In 1771 the General Assembly of Virginia further asserted its authority over the mid-Ohio Valley by creating Fincastle County, which embodied the territory south and east of the Kanawha River, south of the Ohio, and north of the future dividing line with North Carolina. Like the claim of the parent London Company of Virginia the borders of Fincastle County were left largely open to include all of Virginia's transmontane claims.¹⁸

By that time both Virginians and North Carolinians had crossed the first tier of the eastern mountains to settle the upper reaches of the Tennessee Valley. As these Watauga settlements grew, political and population pressures developed that Virginia could



not ignore. The first incident was the negotiation by Richard Henderson and the Transylvania Land Company of the treaty cession from the Cherokee Indians at Sycamore Shoals, 1774–1775. In 1774 James Harrod began a settlement at the headwaters of the Salt River, and the next year Daniel Boone and Richard Henderson planted the Transylvania Company settlement of Boonesboro on the south bank of the Kentucky River. Boone and his party of thirty men, in the two weeks from March 10 to 25, 1775, blazed the Boone Trace or Wilderness Road between Cumberland Gap and Boonesboro.¹⁹ For the first time this route was to establish a fairly dependable internal base line between two fixed points by which distance could be accurately estimated.

By early 1776 the partisans of the two eastern colonies, at Harrod's Town and Boonesboro, found themselves almost immediately involved in a rivalry for control of the new frontier. At Harrod's Town, the newly arrived George Rogers Clark was able in the late summer to consolidate support for Virginia to retain control of the western country. That fall, back in Virginia, Clark was able to persuade Virginia officials to create Kentucky County out of the western part of Fincastle. The new district was to be located southwest of the Big Sandy River, south of the Ohio, and west of the Great Laurel Ridge or Cumberland Mountain. The southern boundary presupposed a future extension of the 36° 30' Virginia-North Carolina dividing line.²⁰

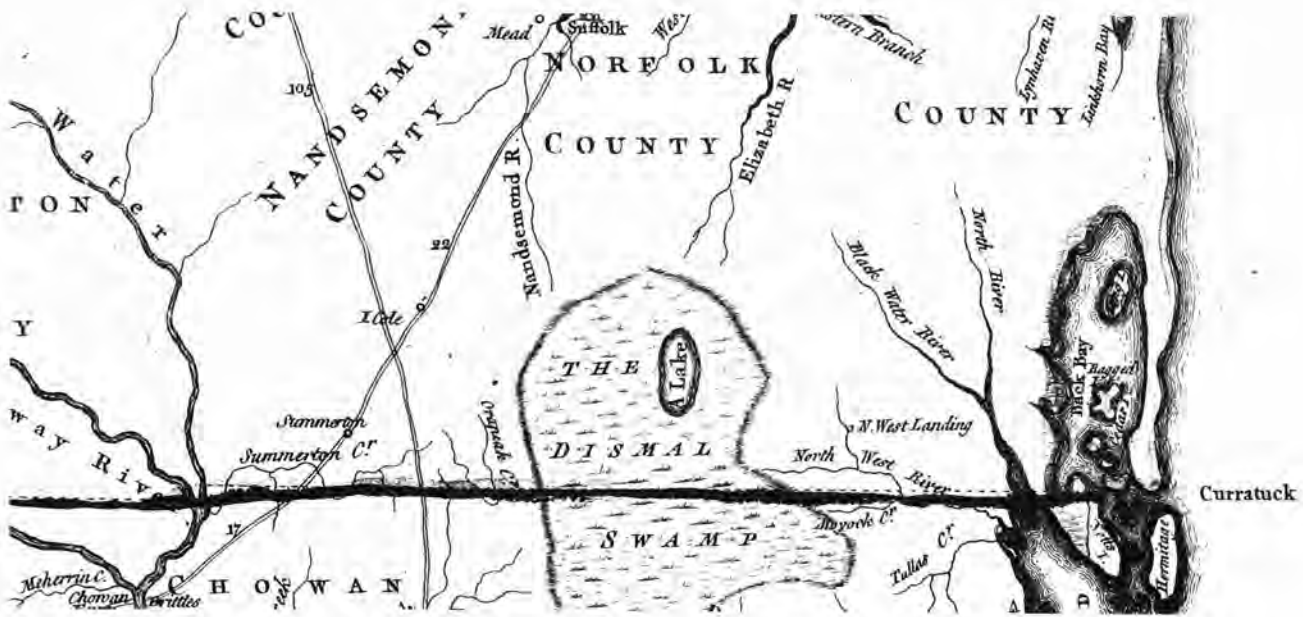
Accordingly, in 1779 the two states agreed to extend the Jefferson-Fry survey of 1749 westward from Steep Rock Creek toward Cumberland Gap and beyond. Dr. Thomas Walker and Daniel Smith represented Virginia, and Richard Henderson and William B. Smith represented North Carolina. This arrangement brought into association four wilful men who in

time proved uncompromising and argumentative over instrumental settings, a beginning point, declinations, astronomical readings, and all other surveying issues.²¹

The four commissioners met in September at Steep Rock Creek and began the search for the last mark on the old survey. On the 6th of the month they took an astronomical or celestial reading, which established that they were approximately on the Jefferson-Fry line at 36° 30' 25".²² This was about a minute and a half north of the true course of the original charter grant, a variation that favored North Carolina. Nevertheless the commissioners pushed ahead for forty-five miles to Carter's Valley. There Walker and Henderson became involved in an argument over the accuracy of the line. Richard Henderson asserted that between Steep Rock Creek and Carter's Valley the line had been allowed to dip approximately two miles southward and off course.²³ At this point the commissioners parted company, each group to run its own line from Carter's Valley to the ridge of Cumberland Mountain and a point just south of Cumberland Gap. Clearly the dispute between Henderson and Walker had been provoked by instrumental declinations and erroneous sightings with the astrolabe, and by failure to make proper adjustments for the normal veer of the compass needle. If Smith's and Walker's compasses were off and their celestial readings in error, their wholly unreliable measurements compounded the confusion. This was especially true for about 120 miles of mountainous terrain and for the stretch across the Kentucky barrens.²⁴

The eastern portion of this boundary would have been a challenge to the most skilled surveyor working with the four-rod chain that was the measuring device of the time. Traditionally, the head chainman carried ten pebbles or other markers, dropping one at the end of each chain length. These were gathered up by the rear chainman in lieu of recording notes of distances chained. At best, the potential for error in this procedure is obvious, but in mountainous terrain even an approach to accuracy required a tedious variation. The correct method was to "break" the chain in short lengths, measuring each segment on a horizontal plane. It appears that Walker and Smith instead made measurements in full chain lengths up and down slopes, a procedure that would account for the discrepancies found by later surveyors.

At the point on Cumberland Mountain just south



A detail from a celebrated map of Virginia by Joshua Fry and Peter Jefferson shows part of the dividing line the cartographers helped to survey. (This copy of the map is defaced with a mark along the boundary.)

of Cumberland Gap, the North Carolinians ended their survey after having created a confusing variation in the eastern line. Though most of the party departed the field, Richard Henderson and several companions remained to follow the Virginia surveyors as far west as the Clear Fork of the Cumberland River, 123 3/4 miles from the Gap.²⁵ Although they criticized the Walker party, they overlooked the fact that the northwestward veer of Walker's compass needle had robbed Virginia of considerable acreage between the Walker line and the true 36° 30' course.²⁶

On March 23, 1780, after many adventures, the Walker party concluded its survey on the east bank of the Tennessee River at a distance Walker and Smith reckoned at a little more than 271 miles.²⁷

The surveyors, including Thomas Walker and Daniel Smith, obviously created an error in their failures to confirm their celestial readings and correct their instrument, and in their measurements. One of their most serious mistakes, however, was failure to establish durable markings along the line. They had failed to find the terminal mark of Jefferson and Fry, and they did too little to ensure the location in the future of their own "witness" markings. They placed two hacks above a slash and two hacks below on trees; in their report to the Virginia House of Delegates there is no mention of stone markers.

The Walker line was to play a prominent part in early Kentucky political history. First it provoked a dispute between Virginia and North Carolina, and then between Kentucky and Tennessee. For more than half a century, 1799–1860, the governors and legislators of the two states expended an incalculable amount of energy and emotion in enacting legislation to stabilize their common border, in sending angry messages back and forth, and in resurveys. They followed the precedents of the mother states and appointed commissioners to reach compromises, correct errors, and establish permanent markers.

Unhappily the border problem between Cumberland Gap and the Mississippi River was unsettled when Kentucky was admitted to the Union in 1792. It remained so when the Tennessee Constitution of 1796 declared the boundaries of the new state to conform with those described in the North Carolina cession to the United States. The eastern border between North Carolina and Tennessee was described in terms of natural boundaries, but that dividing the two new states was stated as being "within the chartered limits of the state of North Carolina, are within the boundaries and limits of the state, over which the people have the right of soil."²⁸ This meant that the issue of the Walker line, which had plagued Virginia and North Carolina, was to remain a thorn of conten-

tion between Kentucky and Tennessee, though it did not trouble imprecise cartographers. Map-makers dealing with the two states before 1870 seem to have been largely oblivious to their border troubles.

Between 1775 and 1792 approximately 70,000 people had moved into Kentucky and were establishing new communities and towns.²⁹ The pattern of developing settlements during and immediately following the Revolution spread from the region north of the Kentucky River to that about the Falls of the Ohio. There was almost a rampant activity in land claiming and speculation; the record of claims entered, 1776–1785, is an extensive one. In order to establish some semblance of political order the House of Delegates in 1780 created three counties in the trans-Appalachian territory. These were Fayette, Jefferson, and Lincoln. The boundaries the legislators described were natural and imprecise. For instance, it would have been difficult for a surveyor to establish the boundaries of Jefferson County from the brief description given in the law.³⁰ Nevertheless this law set up some internal lines by which the geographical face of Kentucky could be gauged.

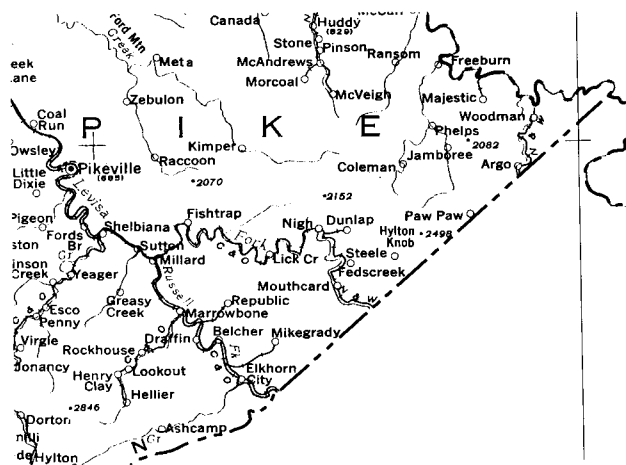
With the creation of the three new counties there came into existence the county seats of Lexington, Stanford, and Louisville. Besides these were Harrodsburg, Danville, Boonesboro, and a dozen or more stations or core settlements that quickly grew into towns. With the rise of villages and towns local roads came into existence and with them came a sense of internal distances. The opening of the Wilderness Road, for instance, was a long step in the transition from distances measured in the Indian terms of “sleeps” to English statutory miles. Equally important was the developing sense of boundary; every evolving step in political formation required some kind of geographical definition. Since the boundaries of the three counties were based almost solely upon the courses of streams, the origins, courses, and mouths of these streams became important not only in establishing the limits of political jurisdictions, but in the development of internal communication.³¹

Following the Revolution Virginia developed more than the usual jurisdictional interest in its western district. The vast area of unclaimed wild lands promised to relieve it of an enormous financial obligation by the making of land grants instead of cash bonuses to its veterans. This fact alone was to have a material bearing on both the growth and internal de-

velopment of the West. It was hardly possible that a state could export so much of its population in this way without sending away from its older communities a considerable amount of leadership and talent. Once west of the mountains the emigrants began to assert a political independence that led to the organization of new counties. With the creation of Madison, Mercer, and Bourbon counties in 1785 began the process of subdivision which in every decade down to 1912 changed the political map of Kentucky.³²

The move for statehood, which culminated in 1792, brought about new problems of defining the boundaries of Kentucky. Unlike most of the state constitutions formed after that date, Kentucky's did not attempt to prescribe state boundaries, depending rather on the provision in the enabling act of October 1785 that the Virginia boundary would remain undisturbed, and that the Ohio River would be “Free and common to the citizens of the United States.” Later the Virginia Compact of 1789, repeating almost verbatim the act of 1785, prescribed in fairly loose terms the new state's general boundaries. The latter document became a cardinal part of Kentucky's legal existence.³³ Thus cartographers who undertook to portray the new State of Kentucky immediately after its entry into the Union in 1792 drew both external and internal boundary lines on the basis of political agreements made between Virginia and North Carolina and between Virginia and her fledgling daughter. They by no means, however, represented a true and accurate cartographical description of Kentucky in the late eighteenth century.

From the outset Virginia and Kentucky recognized that the Cumberland Mountain and Big Sandy boundaries had to be located with greater care. The Virginia House of Delegates in 1799 enacted a law permitting for the first time a survey and marking of the joint Virginia-Kentucky boundary along the southeastern and northeastern borders. The Kentucky General Assembly agreed to participate in a joint survey. Following the already established American practice, three commissioners were appointed from Virginia and three from Kentucky, to meet on the traditional boundary and conduct the survey of a new line. Representing Virginia were Archibald Stewart, General Joseph Martin, and Creed Taylor. Kentuckians were John Coburn, Robert Johnson, and Buckner Thruston.³⁴



From a point near Elkhorn City on a modern map, the boundary established in 1799 runs at 45° east longitude to the Tug Fork of the Big Sandy.

When the joint commission met it had to determine in general where the boundary might be located. It assembled at the forks of the Big Sandy, or as they called it, the “Grand Sandy River,” just above the present town of Louisa, to begin the survey eastward from that point. Before they took a sighting on this course, however, it was necessary to determine which fork of the river they would follow to the eastern mountain divide. In order to decide this issue they agreed to run the eastern mountain boundary first so as to establish a known point where terminal transfixion might occur.

In running the Cumberland Mountain boundary the commission agreed to begin the eastern boundary at the point established by Thomas Walker’s surveyor in 1799, one mile and a half and twelve poles south of Cumberland Gap. From this known point the line was run up the watershed spine of the mountain between the headwaters of the Cumberland and Kentucky rivers on the west, and the Powell and Guest rivers on the east.³⁵ This boundary on the watershed course would cross the new road through Little Paint Gap opposite the channel of the Russell Fork of the Big Sandy and just east of Elkhorn City in present Pike County. At that point the surveyors proceeded up range on the magnetic compass reading of 45° east longitude to the upper intersection with the Big Sandy or the Tug Fork. From that point the boundary was turned on a northwest course following the channel of the Tug Fork to the point where the

commissioners first assembled at the confluence of the Big Sandy forks. From this point the boundary followed along the course of the main stream of the Big Sandy to the low water mark on the northern bank of the Ohio.³⁶

In renegotiating this eastern and northeastern boundary between Virginia and Kentucky considerable emotion was aroused, especially in the area between the Russell and Tug forks of the Big Sandy. Settlers in this strip assumed they lived in Virginia. Fortunately it was sparsely settled, but nevertheless the two legislatures had to give the matter serious attention. Settlers who penetrated this mountain fastness, of Scotch, Irish, and English stock, were fiercely independent American frontiersmen; along the revised boundary of the Tug Fork lived the famous Hatfields and McCoy’s who in later years became embroiled in one of America’s most famous mountain vendettas.³⁷

At best the negotiated boundary between Virginia and Kentucky was one of metes and bounds except for the short link along the 45° east longitude. The mountain spine was too steep and precipitous for chainmen to establish anything approaching an accurate measurement. The same was true down the water course of the Tug Fork, which cuts its way through rockbound mountain shoulders along most of its course to the main stream. The only positive blessing was the fact that there was little chance of the stream’s changing its course.

A second and no doubt more serious legal consideration in establishing the new boundary was that land grants made by both states were involved in the new agreement. This was especially true along the Russell Fork. To reduce the confusion and reassure landholders the two states enacted laws providing that grants made by either prior to October 1, 1799, and lying anywhere along the Big Sandy and east of the new line up the Cumberland range would be honored in whichever state the claims were located.³⁸

The Virginia and Kentucky commissioners with their surveyors were not engaged in the location of the joint boundary long enough to have accomplished much precision. Fortunately they followed, with the one exception, well defined natural lines in which errors could be tolerated without provoking serious disputes. For the eighteenth- and nineteenth-century map-makers the generalities of the boundary were sufficient.

3. *The Walker Line & the Jackson Purchase*

TO THE south the border between Kentucky and North Carolina (Tennessee) remained in dispute when Kentucky was admitted to the Union in 1792. No effort had been made by Virginia to rectify the obvious error in the Walker line from Steep Rock Creek westward. Because of this error, dispute between Kentucky and Tennessee was an inevitability. When North Carolina ceded its western lands to the United States in 1789 it left the boundary confusion to the two future states.

When the North Carolina cession, in form if not in fact, made the western territory a federal responsibility, the United States Government undertook to resolve the issue. In his correspondence between President George Washington and Governor Patrick Henry of Virginia, Secretary of State Thomas Jefferson described the western border problem in terms of families caught in the zone between the Walker line and the supposed 36° 30' boundary. They were faced with several unsettling problems, the worst of which were the validity of land titles and enforcement of civil and criminal laws.¹

When Kentucky presented its constitution in 1792 seeking admission to the Union, Jefferson again called Washington's attention to the confused southern boundary. Washington in turn requested Congress to resolve the matter. That body in 1794 declared the Walker line, proclaimed as its southern boundary by Virginia in 1781 and 1791, to be the established southern boundary of Kentucky.² But the issue was more complex than the Congress recognized. North Carolina's part of the Walker survey had ended at Cumberland Mountain. From that point to the Mississippi the survey was a unilateral one with no legal interstate standing. Virginia had not mentioned this boundary in the enabling acts of 1785 and 1789.³

In 1801 the Kentucky legislature called for a joint boundary commission to set up a permanent boundary "agreeable to the chartered limits of the states of Virginia and North Carolina." But the legislators were inadequately informed about the colonial history of the dividing line; because the actual phys-

ical boundary between Virginia and North Carolina had not been located by charter, the Kentucky legislation was defective and a year later was repealed.⁴

The Tennessee Legislature gave little or no evidence before 1819 that it was willing to accept Kentucky's several proposals to appoint a joint boundary commission to reconcile the discrepancies in the Walker survey. Contrary to the hopes of Kentucky the Tennesseans enacted a law in 1817 declaring in unequivocal terms that so far as run and marked, the Walker line of 1780 was the true boundary.⁵

Part of the renewed bickering between the two states was stimulated by the negotiation of the Treaty of Old Town or the so-called Jackson Purchase. As early as 1802 the Jefferson Administration became deeply concerned with the claim of the Chickasaw Indians on the large territory west of the Tennessee River and east of the Ohio and Mississippi rivers. These lands, in both Kentucky and Tennessee, had been closed to settlers since the Hopewell Treaty of 1785, in which the United States agreed to protect the Chickasaw homeland. This was a hunting ground the Indians neither occupied nor used, but they were extremely jealous of its possession. Repeatedly they informed Indian agents and other federal officials that they would not sell their lands. The correspondence of Thomas Jefferson, James Madison, James Monroe, and John C. Calhoun, secretary of war, contains voluminous materials on the subject of gaining control of the strategic western river system.⁶

In early 1818 the president and secretary of war opened correspondence with Governor Isaac Shelby of Kentucky and General Andrew Jackson of Tennessee asking them to hold a cessionary council with the Chickasaws in the hope they could be persuaded to cede their hunting ground to the United States. At the end of September Shelby and Jackson met the Chickasaws at Old Town in a tremendously interesting council in which persuasion, bribery, and even intimidation were used by the commissioners. On October 19, 1818, the Chickasaw Treaty was signed. As soon as the treaty was ratified by the United States Senate it became more important than ever not



A view of Virginia and North Carolina on the eve of Kentucky's statehood. Lincoln, Jefferson, Fayette, Nelson, Mercer, Bourbon, and Madison counties are located in Kentucky, and eastern Tennessee is identified as the "new State of Franklin."

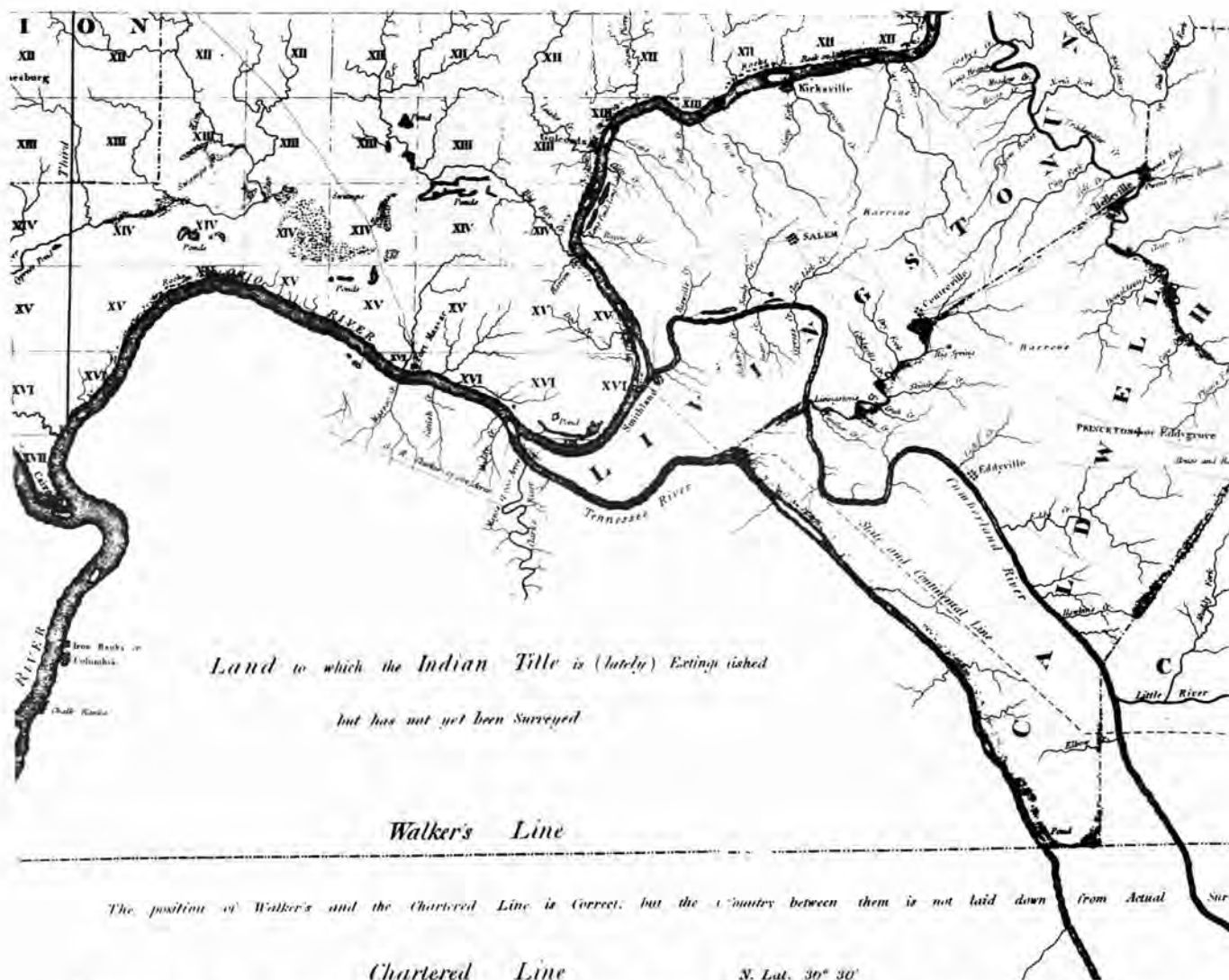
only to survey state boundary lines but to make internal surveys of county boundaries and land grants.⁷

Earlier, in the spring of 1817, the Kentucky General Assembly had anticipated an additional dispute with Tennessee over the establishment of a line dividing any territory that might be acquired from the Chickasaw Indians. For that reason Luke Munsell of Frankfort was given financial backing for the publication of his map of the Commonwealth. He was authorized to draw upon the state treasury for a loan in the sum of \$6,000, to be repaid with interest within three years. In making this loan the legislators also gave subtle indication that the map might prove useful documentary material in future negotiations with Tennessee. They said it would be drafted on an elegant scale, "Map of Kentucky, comprehending the limits of the counties in the state, drawn from accurate and careful survey; shewing the meanders of our watercourses, the situations of towns, villages, and remarkable places, as well as designating the roads of our country; it being the wish of this body to give encouragement to the literature, especially to that description of it, which may be considered as belonging to the state, and advantageous to the community; and the first attempt at a dignified delineation of our country."⁸

The Chickasaw Treaty transferred to the federal government a large area of virgin land that had been withheld from settlers. Before it could be opened to settlement it was necessary for Kentucky and Tennes-

see to enact legislation providing for surveys, in order to conform with the United States land laws. The Kentucky General Assembly enacted a law requiring Governor Gabriel Slaughter to appoint two commissioners who would employ a surveyor and crew to run the dividing line through the new purchase, dividing it between the two states. This law provided that Governor Slaughter would inform the Governor of Tennessee of this action, and if the latter chose to appoint commissioners then they would meet the Kentuckians within four months to conduct the survey; otherwise the Kentucky commissioners were instructed to act alone. This resulted in the running of the Alexander-Munsell line. Perhaps these surveyors were the most competent of any who had attempted to locate the accurate bearing on the 36° 30' line. Their survey from an established point on the western channel of the New Madrid Bend to the Tennessee River ran approximately seventeen miles south of the supposed terminus of the Walker line, and if continued eastward would have cut off the town of Clarksville, Tennessee. Kentucky had assumed an aggressive lead, and if she had been allowed to continue the survey eastward Tennessee was in grave danger of suffering a heavy loss without recourse to a higher authority. Repeatedly Congress had refused to become involved in disputes between the states, and it was equally difficult to get a boundary case before the Supreme Court.⁹

Governor Joseph McMinn broke the inertia of his



A detail from Munsell's great map of Kentucky, 1818. The land in the Purchase area, except for two grants on its northern boundary, has not yet been surveyed. Munsell marked both Walker's line and the "chartered line" along latitude 36°30'.

state in his message to the Tennessee Legislature in 1819. He now centered the argument on the wishes of the people, saying that it was evident that both Tennesseans and Kentuckians living along the Walker line were satisfied with the boundary and they should not be disturbed. He also contended that the line had been accepted by the Virginia compact and the North Carolina cession and, in fact, by the framers of the constitutions of the two states. He indicated that in accepting the Alexander-Munsell line dividing the Purchase area Tennessee would lose more territory in the west than it would gain east of the Tennessee and west of Cumberland Gap.¹⁰

The Tennessee legislature selected the former Kentuckian, Judge Felix Grundy, and William L. Brown, as commissioners, to visit Frankfort and discuss the possibility of a compromise of the dispute with the Kentucky General Assembly. Kentucky responded with the appointment of John Jordan Crittenden and Robert Trimble to negotiate with the Tennesseans and to help oversee the location of a permanent boundary.¹¹ John Rowan, a short-term judge on the Court of Appeals, also served briefly as a commissioner; the official record is silent on why he was appointed or why he did not sign the final report.¹²

Following the appointment of the two state commissions, several plans of adjustment were proposed and rejected. Crittenden made a full report of the proposals, objections, and final compromises. The first Kentucky proposal was that the projected extension of the Walker line west of the Tennessee River would lie along 36° 40' latitude, and that the territory south of that projection and north of the true 36° 30' line should be given to Kentucky to compensate for loss of acreage between the east bank of the Tennessee and the mouth of Obey's River. At the latter point a line should be run directly south to intersect 36° 30', and thence east to the spine of Cumberland Mountain, the proposition that had been made by the Kentucky General Assembly in 1817. The Tennessee commissioners promptly rejected this proposal, and submitted one of their own that Kentucky and Tennessee would exercise concurrent jurisdiction over the Tennessee River where it touched both states, and that the Walker line be accepted as the boundary.¹³

The Kentucky commissioners disagreed among themselves at this point in the negotiations. Judge John Rowan, an ultraconservative jurist then caught

up in the political controversy that was to lead to the bitterly partisan Old Court–New Court fight, argued vehemently against compromise in any form. He prepared a detailed brief in which he presented what he called "The Kentucky Point of View." In this he contended that the line surveyed in 1779–1780 between Cumberland Gap and the mouth of Obey's River was never in fact established by precise instrumentation or marking and that both Virginia and North Carolina had abandoned their sovereignty over the western territories in 1789 and 1790–1791. He said he knew full well that the so-called Walker line west of Cumberland Gap was beyond the jurisdiction of both states: Walker and Henderson had failed to agree upon a common boundary and this failure nullified their work. Under the territorial laws of the United States Virginia and North Carolina were barred from exercising authority beyond their western borders, and Tennessee actually recognized the 36° 30' in Section XXXII of its constitutional declaration of rights.¹⁴

The commissioners reached an impasse and momentarily it seemed that nothing short of bloodshed would settle the issue. The Tennesseans, however, relented to the extent of accepting the Alexander-Munsell line as lower boundary to the Purchase Area, and agreed to make equitable and reciprocal agreements in dealing with private land claims. John Jordan Crittenden said the main issue was the simple one of accepting or rejecting the Walker line as the true boundary eastward from the Tennessee River. He thought that by strict interpretation the right possibly lay with Kentucky, but in a more practical sense "there are many circumstances that are calculated to mitigate this right, that address themselves strongly to us, and plead against a rigorous assertion of it." In justifying his view he discussed the "mitigating circumstances," citing almost the same historical facts as Judge Rowan. He was willing to accept the Walker line as the legal boundary. In doing so he told the Kentucky General Assembly, "There may now be some magnanimity and generosity displayed in sacrificing it (our naked abstract right) to the peace and harmony of the two States. We shall thereby obtain a peaceable and quiet possession of all the territory which we claim west of the Tennessee, and which, in all probability, otherwise would become the scene of controversy and dangerous collision between the states."¹⁵

In February 1820, the legislatures of Kentucky and Tennessee ratified the "Articles of Stipulation" entered into by the two sets of commissioners. The agreement was signed in a formal ceremony in Frankfort by John J. Crittenden, Robert Trimble, Felix Grundy, and William L. Brown on February 2.¹⁶ This agreement accepted the Alexander-Munsell line west of the Tennessee and the joint jurisdiction of the river link northward to the Walker line; all claims to land in this area were declared void, land claims along the Walker line east of the Tennessee were to be validated no matter which state had granted them, and it was provided that the governors of the two states might someday have a more precise survey made and the line marked with permanent monuments.¹⁷

Involved in the contention between Kentucky and Tennessee were four facts. First, there was an

unusual sensitivity about surrendering any territory considered to belong to one or the other state. Second, no one knew just how much acreage would be involved in a resurvey and on which side of the line the loss or gain might fall. This was an explosive gamble, which politicians were reluctant to risk. There was also the intensely personal matter of the location of homesteads and the sanctity of land titles. Finally, Virginia too had a stake in the settlement of the line because it stood to lose part of its military reservation located in Kentucky.¹⁸

By no means was the Kentucky-Tennessee boundary finally settled by the agreement of 1820. Unlike the agreement between Kentucky and Virginia in 1799, this one necessitated forty years more of negotiation and resurveying before the line was finally fixed as a properly marked boundary.

4. *Dr. Walker's Legacy*

CONFIRMATION in 1820 of the compact between Kentucky and Tennessee ended only one phase of the boundary dispute. In reviewing the actions of the two state legislatures and the governors one is almost led to think the feud was carried on for the sadistic pleasure it gave governors and legislators. Fierce state loyalties gave rise to a do-or-die posture when the thought of surrendering territory was suggested. Tennesseans must at times have been puzzled by their neighbors' maneuvering and jockeying. In 1818 the Kentucky General Assembly nullified in a single act all the laws pertaining to the state's southern boundary.¹ Though it is difficult to fathom all the reasons behind this move, it no doubt was intended to put Kentucky in a better position in the future to negotiate with Tennessee; perhaps it was believed a new survey might be made, this time beginning on the Mississippi and running eastward. A more obvious motive may have been the legal obliteration of the Walker line.

Beginning with 1819 and running to 1860 the

Kentucky and Tennessee statutes were cluttered with boundary legislation. Instead of settling the major issue, the compact of 1820 opened two highly dramatic chapters in interstate relations. At that date no one could actually follow the physical Walker line for any distance. Few if any persons living in 1819 could positively identify any surveyor's marks on that line. Forty years had elapsed since Walker's men had hacked their three notches on trees—some said two notches, a blaze, and two notches. The scars had healed over, trees had either been cut or rotted, or markings were otherwise obliterated. The slightest familiarity with the notching of trees in the Appalachian and southern areas of Kentucky reveals how difficult it is to locate a line tree, and that it borders on an impossibility after forty years. Tree growth along the Walker line was fairly rapid, and the only way marks could be identified was by "blocking" a tree to uncover the original marks and counting the growth rings covering them. The problem was knowing which tree to block. Walker's measurements



(Above) A tree marked with a notch, a blaze, and a notch. (Right) This tree has been injured—possibly by blazing—at some time in the past. (Below) Blocking reveals the injury, which can be dated by counting the growth rings.



were so imprecise that it was not possible for another surveyor to duplicate the original calls when and if they were known.²

This tremendous problem had to be resolved before any intelligent approach could be made to establishing a permanent boundary on the 1779–1780 survey. In 1821 the Kentucky General Assembly ratified the line that William Steele of Kentucky and Absalom Looney of Tennessee ran in the summer and fall of that year.³ They started their survey at the seven pines and two black oaks on top of Cumberland Mountain, one mile and a half and twelve poles south from Cumberland Gap. This point was north of the established corner of Virginia and Tennessee. They ran from the old Walker marker on a west course 114 miles “to three hackberry trees on the bank of Cumberland River on the west side, about twenty-four poles above John Kerr’s house.” In his report to the Kentucky General Assembly Steele referred to the terminal point west of the Cumberland River as being twenty poles above “John Reaves’ house.”⁴

Near whosever’s house it was, Steele and Looney halted their survey, to be resumed later by another surveyor. This stretch of the line was the

least complicated of all because it ran through rough mountain country where few permanent settlers had established homesteads.

Only once in the Steele-Looney survey, as reported in the laws of Kentucky, was a magnetic call mentioned. No precise point was described as located on the ground among the witness trees atop Cumberland Mountain. Most of the calls mentioned along the boundary were references to stream crossings; perhaps some of the creeks and branch rivers at that date bore no established names. Some of the names given by the surveyors sound as if they refer to experiences of the survey party.⁵ Finally, the terminal markers described as standing near the west bank of the Cumberland River were two hackberry trees. These trees grow rapidly and are fairly short lived; marks hacked upon them are healed over quickly. An even more impermanent witness was John Kerr's or John Reaves's house, which was exposed to destruction by fire, decay, storm, demolition, or flood.

The line west of the Tennessee River was subject to the federal territorial regulations of the Northwest Land Ordinance of 1784. When lands purchased from the Chickasaw Indians were turned over to Tennessee and Kentucky it was with the requirement that they be surveyed into townships and sections.⁶ In order to carry out this mandate Kentucky employed William Henderson, a relative of Richard Henderson, to establish township and sectional lines. Ostensibly Henderson had no authority to survey the boundary between the two states, but to organize the internal survey he had first to find the agreed upon boundary. He accepted the Alexander-Munsell survey of 1819 with very few variations. Actually the Henderson survey was of secondary importance. There were to be other piecemeal surveys before pressures of a highly disturbing nature forced a competent establishment of the entire line.⁷

The second dramatic chapter in the border chaos resulted from provisions in Section V of the 1820 convention. This section reserved to Kentucky the sale of all vacant and unappropriated lands lying between Cumberland Gap and the Tennessee River and north of the true 36° 30' line, lands ultimately to become part of Tennessee. Kentucky's grants and deeds of warranty were to have full validity in the Tennessee courts as evidence of ownership and the unappropriated lands were not to be subject to taxation by Tennessee for five years.⁸ This provision made the

accurate location of the new western line an urgent necessity.

Three days after the Kentucky General Assembly ratified the joint Kentucky-Tennessee commission's compact, it enacted a law enabling "any person except aliens" to acquire title to vacant land anywhere east of the Tennessee River and between the two latitudinal lines. This land could be purchased at the rate of \$15.00 per hundred acres.⁹ For the next decade it appears evident that pressures were exerted on legislators to favor land claimants. In November 1820, the price was dropped to \$10.00 per hundred acres, less than one-tenth of the \$1.25 per acre set for federal lands by the land law of 1820.¹⁰ Four years later Kentucky doubled its price to \$20.00 per hundred but almost immediately reduced it to \$5.00 per hundred. The law of 1824 allowed prospective purchasers to claim as much acreage as they wished between Obey's River and the Tennessee. It required claimants to mark boundaries plainly by hacking trees, raising stones, driving down stakes, and following water courses of "ancient" established boundaries. This provision itself had the makings of lawsuits, fights, and even killings. Surveyors and chainmen were to identify themselves by signing warrants and plats. Settlers already on the land were to have exclusive rights to residences they had constructed to "the centre of a square, when laid off to the cardinal points." This may have meant the center of a modest farmstead holding or possibly the center of a section (640 acres), which would give the original settler the advantage of an option on a considerably larger acreage. The claimant, however, had to register his warrant and procure a deed before August 1, 1825. The governor of Kentucky was instructed in the 1824 law to appoint a surveyor to establish the 36° 30' line to determine the southern limits of land grants made in the designated territory. Governor John Adair was also instructed to send a copy of the law to the Governor of Tennessee notifying him that he might also appoint a surveyor to represent that state.¹¹

Five years was a remarkably short time in which to dispose of such a wide strip of wild and unappropriated land, especially in areas where the land was not the most highly desirable and was located completely away from the flow of immigration. The Commonwealth was anxious to dispose of as much of the wild lands as it could in the allotted time. The

state's treasury profited from the sales, though it stood to lose citizens.¹² All sorts of lenient provisions were made to speed up the making of claims. The Commonwealth made some grants that amounted to welfare payments. The General Assembly in 1825 enacted a law permitting Kentucky seminaries and academies to register claims from the Tennessee strips under the terms of the original academy act of February 10, 1798. This law obviously was passed to favor the Simpson County Seminary.¹³

In 1826, when the five-year period expired, Tennessee levied a one-cent-per-acre tax on the lands north of the 36° 30'. In turn the Kentucky General Assembly early in 1827 reduced the price of wild lands to \$5.00 per hundred acres. When the expiration date occurred the legislators provided that persons who had made surveys within the past year but who had not registered their warrants were to be given a year of grace in which to do so.¹⁴

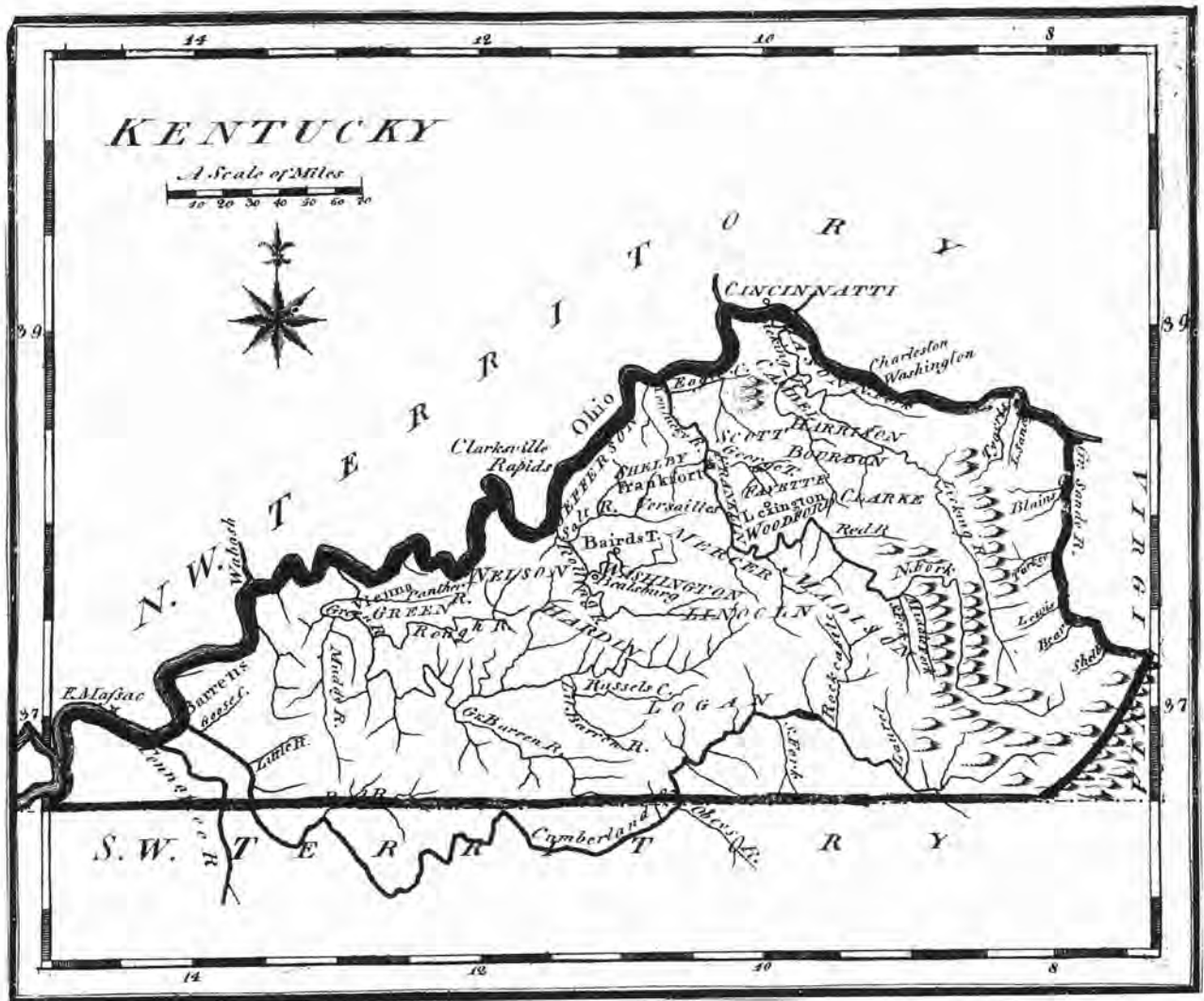
West of the Tennessee River the Jackson Purchase area was opened to public sale September 1, 1822, at the public land office in Princeton, Caldwell County. This land was to be sold in tracts of a quarter section each at the established federal land price of \$1.25 per acre.¹⁵ This move placed additional pressure on Kentucky to bring about permanent location of its Tennessee boundary, and especially the secondary line at 36° 30'. In the legislative acts of 1820 and 1825 Governors John Adair and Joseph Desha were asked to employ either a surveyor or a capable mathematician who could determine the proper latitude and oversee the running of a line.

At that time Professor Thomas J. Matthews of the Transylvania University faculty was the most capable mathematician in the state, and Governor Desha sought to employ him. Professor Matthews at first did not wish to undertake the task, and then Governor Desha sought to employ Robert Alexander of Woodford County, and then William Steele, both experienced surveyors and well acquainted with the problems of the southern boundary. Professor Matthews changed his mind and accepted the assignment; he was to begin the survey early in the summer of 1826. Charles Bracken of Cynthiana was employed as surveyor. It was necessary to advance Professor Matthews \$500.00 so he could purchase instruments and other supplies; this possibly was the reason he did not respond to Governor Desha's first offer.¹⁶

Matthews and Bracken began their survey July 30, 1828, at the Cumberland Mountain point. Professor Matthews ran a test line eastward to Powell Valley in order to establish both celestial readings and the bearings of the Virginia-Tennessee boundary. From the seven pines—two black oaks point westward Matthews went ahead and established the proper latitudinal bearings, and Bracken surveyed the line between these points. Before the surveyor was long on the line he, like Walker and Smith, noted the declination of the needle because, he said, of the presence of iron ore in the ground. At one point the distraction became so serious that he had to move ahead and make a back survey from one of Matthews' advance points. At the final station near Clarksville, Tennessee, the Matthews-Bracken line came within 165 feet of coinciding with the Steele-Looney line, and when the survey reached the east bank of the Tennessee River it was practically opposite the marked trees of the Alexander-Munsell terminus on the west bank.¹⁷ From July 30 to October 8, the surveyors had established a line 238 miles and 73 poles long, and with apparent accuracy. This remarkable feat was accomplished at a cost of only \$2,601.37 1/2. The Kentucky General Assembly confirmed the Matthews-Bracken line "to be the true chartered line, the owners of land warrants purchased from the Commonwealth of Kentucky, are hereby authorized to locate the same on any waste and unappropriated land up to said line."¹⁸

Although the more recent survey was not made primarily to have a direct bearing upon the location of the permanent boundary between Kentucky and Tennessee, it did confirm the degree of error in the Walker survey west of Cumberland Mountain. It also confirmed the accuracy of the Alexander-Munsell survey, and now for the first time the two states had some dependable knowledge of the size of the area that had been in dispute.

The Walker line had yet to be located and marked before the two states could be at peace with a confirmed and plainly marked boundary. Every year that the states put off this task their problems became more complicated. The population increased in the area and land claims became more numerous, many of them falling into the two states, and as counties were organized along the border it became more imperative that officials know the location of their boundaries.



A map by Joseph Scott published in 1795 reveals the concentration of population in the north central region; eastern and southwestern Kentucky are sketched in without detail.

Much of the area in Kentucky between Obey's River and the Tennessee on the west was fairly level, fertile, and choice farmland. During the early decades of the nineteenth century this region had a relatively light population, but the situation was rapidly changing. Virginia Revolutionary War veterans and Carolina immigrants pushed west. This pressure was especially noticeable in the formation of new counties on both sides of the border. In Kentucky, Logan County was formed in 1792, Barren in 1798, Caldwell in 1809, Allen in 1815, Simpson in 1819, and Trigg in 1820.¹⁹ To the south were Sumner, Stewart, Montgomery, Robertson, Macon, Pickett,

and Scott in Tennessee. Problems arose among these counties over taxation, deed registry, enforcement of civil and criminal laws, elections, state militia service, and the working of roads. (Repeatedly the surveyors failed to get definite answers from persons living along the line as to which jurisdiction they lived in.)

By 1827 border confusion had become almost intolerable. Realizing this, legislatures in both states authorized a joint survey of the boundary from the point where the Allen and Monroe county lines cornered on the Walker survey westward to the Tennessee River. Luke Munsell, the Frankfort surveyor and cartographer, was employed by Kentucky and James

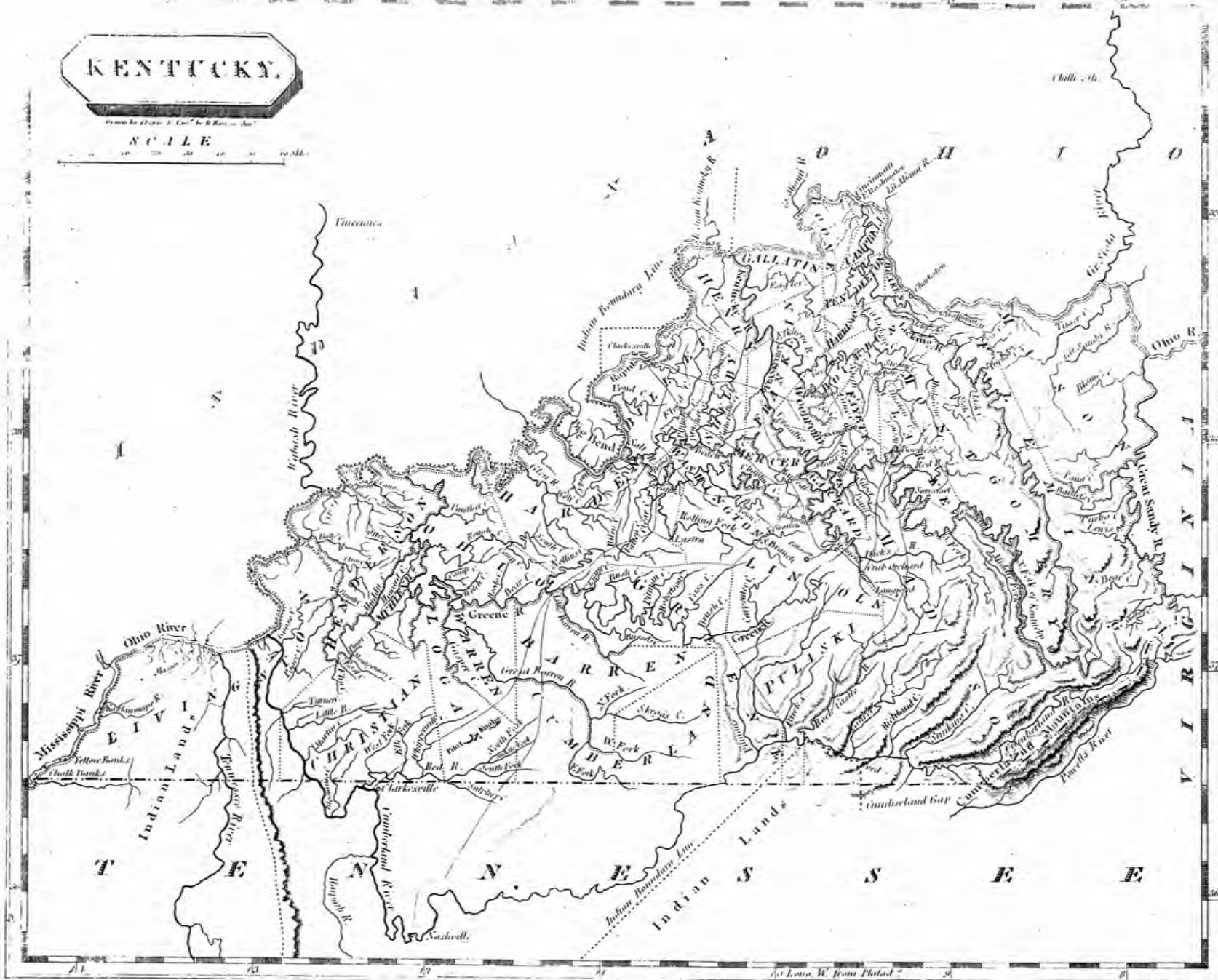
KENTUCKY.

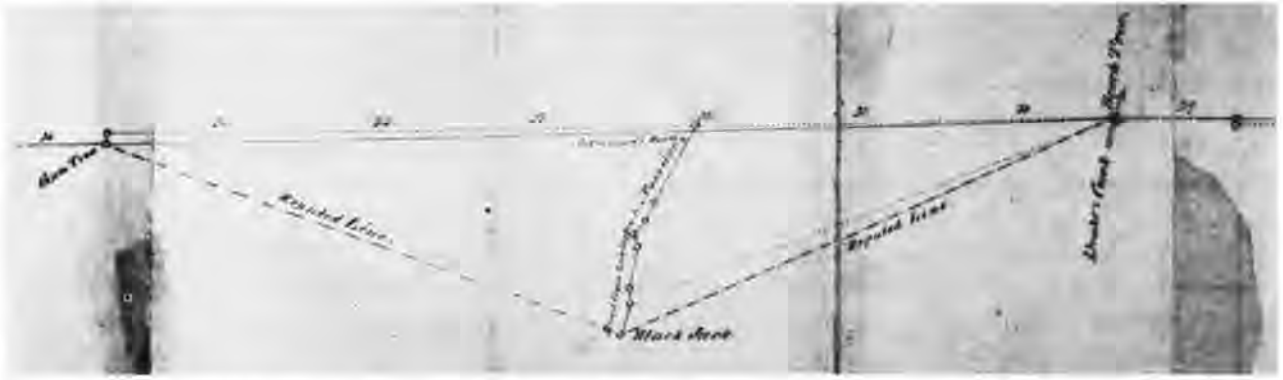
Drawn by G. W. Colton, & Engr'd by B. Ross - New York.

SCALE

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26





(Above) The black jack jog in Simpson County, as shown in the journal of Luke Munsell and James Bright.

(Opposite) A map of 1804 by Samuel Lewis shows a sharp increase in geographical knowledge over the Scott map. Several new counties have been formed and the Purchase area, though still "Indian Lands," is shown as part of Livingston County.

Bright by Tennessee. These surveyors began work on November 4, 1830, at a stake in the Monroe-Allen corner. By the 13th they had reached the famous beech tree marker in the old Walker line. This tree, 126 poles west of the mill dam on Drake's Creek, marked the point at which the Simpson County offset or jog took a southwesterly course to a black jack oak standing "in" the Nashville-Lexington road.²⁰

Over two centuries this jog was to generate an enormous amount of sentiment, folklore, humor, and ill-feeling. In later years it was good material for newspaper feature stories. Out of all the myth and legend two stories emerge, neither of which can be reliably documented. The first is that the surveyors in heavy, cloudy March weather allowed their compass to veer off course. General Daniel Smith says in his journal of the 1780 survey that when he returned from French Lick (Nashville) and a visit to Dr. Thomas Walker he discovered at the black jack oak that the line was off course. At this point he turned the compass back on a northwest course to a gum tree marker near the Red River, where the line was again set on a western course.²¹

The second story was that the surveyors were plied and bribed with a barrel of liquor to turn their line to the southwest course so as to favor some landholders who wished to live in Kentucky. This kind of bribe no doubt would have played havoc with the set of a compass on a precise course, but in this case the line ran relatively straight from the beech tree to the black jack oak. The surveyors marked this part of the line on March 19 and 20, a season when heavy cloud

cover would not be surprising and surveyors working in a forested area might become confused. From the only dependable documentary source now available it would seem that the jog was a surveyor's error, allowed to go uncorrected though all that was required was a back survey on the course of the Walker line between the gum tree on the west and the beech tree on the east. In light of later evidence it seems reasonable to suppose there was pressure by the local landholders to allow the erroneous line to stand. Thus it was that Munsell and Bright were confronted with the problem in their survey.

A much clearer light is cast upon the history of the jog in the manuscript of Munsell's and Bright's report to the governors of Kentucky and Tennessee on December 4, 1830. They explained that they had found and marked the Walker line without serious difficulty until they reached the Simpson County line. They wrote "We then in the same manner extended the same along the County of Simpson, until we came to a certain Beech tree in the line near Drakes Creek. Here we were informed by the citizens of both Kentucky and Tennessee that the 'reputed line' took an offset S 62° W to a certain black jack standing in the road leading from Nashville to Lexington, and thence again taking another offset, northwardly to a gum tree, standing in the original Walker line. Not conceiving it to be our duty, nor feeling disposed to settle the question relative to the true line of separation between the two States, adjoining this part of Simpson County, we concluded to lay down correctly every object necessary to be understood for its final

settlement by proper authority, and then to extend and mark Walker's original line which we readily found from the Beech to the Gum; and thence westward to the termination of the Simpson County line."²²

On November 30, 1830, the Munsell-Bright survey party reached what they believed to be the terminal mark of General Daniel Smith's line at a point one mile east of the Cumberland River. From that point they ran and marked a line directly west across the narrow neck of "between rivers" land to the west bank of the Tennessee River directly opposite the mouth of the Blood River. At the latter point they were made aware by local people that north of them was a marked Walker line.

In this area about fifty families were vitally concerned with which state they might be forced to live in by the location of the boundary. Munsell and Bright ran a test line directly north until it intersected with the marked Walker line. The surveyors blocked a witness tree at the point where they intersected the line and found precisely fifty growth rings over the original axe scars. They then back-surveyed the Walker line on an eastward course across the peninsula and the Cumberland River to a point a mile beyond. Then they turned south and intersected with their own line.²³

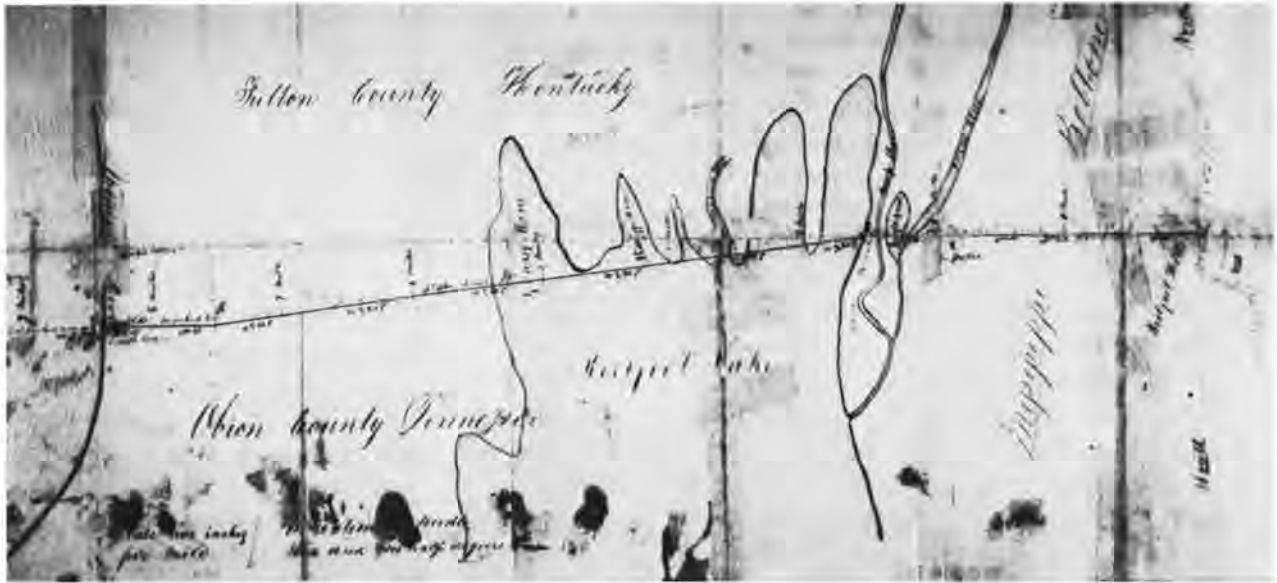
The surveyors recommended to the two state governors that Tennessee yield to Kentucky in the case of the jog in the Simpson County south line and that the ten or fifteen families living within its area be considered citizens of Kentucky. To the west they thought Kentucky should yield to Tennessee in the case of the jog off the southwest corner of Trigg County and on the northwest corner of Stewart County.²⁴

Munsell and Bright observed to the governors that they had found the terms of the Compact of 1820 ambiguous and inconsistent. They referred specifically to Section I, which directed "The line of boundary and separation between the states of Kentucky and Tennessee, shall be as follows to wit: the line run by the Virginia commissioners, in the year seventeen hundred and seventy-nine, and seventeen hundred and eighty, commonly call Walker's line, as the same is reputed and understood, and acted upon by the said states, their respective officers and citizens, from the southeastern corner of Kentucky to the Tennessee river."²⁵ It is not difficult to under-

stand why surveyors were baffled in trying to determine whether the line they found marked, or the line local citizens insisted was the "reputed" line, was the one surveyed by the Virginia commissioners.

Fearful that Kentucky and Tennessee officials, acting under the mandate of the Compact of 1820, would consent to a straight line being run across the southern border of Simpson County between the beech and gum trees, the inhabitants of that disputed area submitted a petition to Frankfort. They pleaded the common acceptance of the jog south to the black jack oak, and wanted to remain Kentuckians. Their county, they said, was created in 1819 with full knowledge on the part of the General Assembly that the triangle existed. Further, they said that no Tennessee constable or sheriff had ever attempted to serve a warrant in this area; Kentucky constables and sheriffs had performed that function as far south as the oak marker. This had been true of trials, payment of taxes, county levies, the performance of militia duties, the working of the public roads, the solemnizing of marriages, and duels. They told the Kentucky legislators that few or no places on the Walker line between Cumberland Gap and the Tennessee River had been "so notorious."²⁶

Eason Howell of Ruthford (sic) protested to the Tennessee Legislature in 1831 that the Munsell-Bright survey around the sides of the Simpson or black jack triangle cut off many "pore and hard-pressed" Tennesseans who "had to sell the only Cow or hors and some thar only bread they then owned to rase money enough to enter them a small peace of land to supporte their companion and children." Maybe Howell gave the clearest notion of all as to why there was so much reaction to the triangle survey. He informed the legislators that he had "one more itom" in which he asked to be considered. "We think," he wrote, "it reasonable and consistent with the rites of man as a free People that every person that resides in the State of Tennessee that manufactures or destills Spirits of any kind should be at liberty to Sell or Vend said Spirits as he may think proper without being lyable to Inditement so as not to keep a disorderly hous or houses and to prevent disorder of the kind let any two or more Jestices of the Peace be Cloathed with Authority to sess A fine for keeping such disorderly hous or houses."²⁷ Eason Howell no doubt had many neighbors just across the Kentucky boundary who shared his sense of independence, and



Part of the Duncan and Nance line from the surveyors' journal, showing the upper reaches of Reelfoot Lake.

who felt that any tampering with the lines on the Simpson County border might create a distinct element of uncertainty about legal matters. One argument advanced against changing the line was that pending cases in court might be affected by any shift in the beech-black jack-gum tree line.²⁸

In an effort to placate the Simpson-Trigg county petitioners the Kentucky General Assembly sanctioned the appointment of a special review committee to inspect the Munsell-Bright line as marked and to hear the testimony of people in the area. With the surveyors' notes and plat in hand the committee were satisfied the line was carefully located and marked. It also consulted "several gentlemen, whose knowledge of the subject, enable them to give us very necessary information, respecting that part of Walker's line, adjoining aforesaid counties, as the same reputed, understood and acted upon, by the said states, their respective officers and citizens."²⁹

This committee agreed unanimously that Tennessee should surrender all claim or jurisdiction over the Simpson Triangle to Kentucky; it would be both improper and unjust for Kentucky to surrender control of the area to Tennessee. On the western end of the line the viewers were equally positive that Kentucky should relinquish the mile-wide strip east of the Cumberland River and that between the rivers to Tennessee. Finally the Munsell-Bright line should be

legally recognized as the permanent boundary between the states. If Tennessee authorities refused to agree to these recommendations then the Governor of Kentucky should appoint an arbiter to establish the boundary by executive authority.³⁰

But the Munsell-Bright survey satisfied no one. This was especially true concerning the "black jack" or Simpson County jog. In 1833 the Tennessee Legislature adopted a resolution that the state's border should be extended on an east-west course from the beech tree on the west bank of Drake's Creek to the gum tree on the hillside about a mile and a half due west of the Lexington-Nashville road, and that all persons living south of this border should be required to obey the laws of Tennessee. Kentucky was asked to appoint commissioners to join with representatives of Tennessee to establish such a line. This Kentucky refused to do, and Tennessee surveyors went ahead and located a direct line. This new boundary, however, was unilateral and unacceptable by either the Commonwealth of Kentucky or citizens living within the black jack triangle, and the matter was left in suspension until the survey of 1849-1850.³¹

In the quarter of a century following the Chickasaw Purchase, lands were sold to private individuals in both Tennessee and Kentucky. Although internal surveys had been made, confusion remained as to the state boundary. People along the boundary were not

averse to marking their own lines and making local declarations of allegiance to one or the other of the states. To bring some order out of this chaotic situation the Tennessee legislature in 1844 enacted a law calling for another joint commission to resurvey the western part of the boundary. The Kentucky General Assembly responded in 1845 agreeing to a resurvey of "that portion of said line that divides the County of Stewart in the State of Tennessee, from the counties of Christian and Trigg in the State of Kentucky." Governor William Owsley was instructed to appoint two commissioners to serve with two from Tennessee. The Kentuckians were prompted in the action partly by the fact that two weeks earlier they had created the County of Fulton, whose southern boundary was to extend from the crossing on the road from Dresden, Tennessee, westward to the Mississippi.³²

Governor Owsley appointed C. W. Nance and W. P. McLain as commissioners, with McLain as the surveyor. The Tennessee governor appointed S. Duncan and C. A. Wilson. Like their predecessors, Duncan and Nance searched for original Walker markings, some of which they found buried under sixty-five or sixty-six growth rings on ancient trees. From the southeast corner of Trigg County they ran their line eastward to the northeast corner of Stewart County and the middle of the farm of Robert Hester. Proceeding eastward from this point they discovered discrepancies in marked borders caused, they believed, not by state authority but by private individuals tampering with the line.³³

Moving back to the southwest corner of Trigg County on the Stewart County boundary they located Munsell's and Bright's mark. Beyond this point westward they again found that local people had undertaken to deflect the line. At one mile from the

Cumberland, Duncan and Nance, like Munsell and Bright, had to survey the line due north to establish the eastern boundary of the Trigg-Stewart county jog.³⁴

West of the Cumberland the commissioners followed the Alexander-Munsell survey, discovering it to be off course by 6°30'. Beyond the Reelfoot Hills, and on the eastern border of the swamps and sloughs of the upper reaches of the lake they were forced to terminate the east-west direct line and establish a surveyor's offset because crossing the boggy ground was an impossibility. Duncan and Nance said in their report that they believed, despite the offset, their survey to be accurate. They found the line west of the swamp to the river poorly marked, but they did locate a witness tree or two that could be blocked, and the growth rings confirmed that they were hacked at the proper time. No other marks were discernible to the Reelfoot bogs, seeming to indicate that Alexander and Munsell discontinued their survey at that point. The commissioners arbitrarily ran a line from the established point of demarkation to the lake, and connected with the eastern terminus of their own line. Throughout their resurvey they found variations in the recorded compass bearings. They also reported vigorous local sentiments and actions that confused the location of the properly surveyed line.³⁵

Tennessee immediately ratified the Duncan-Nance line, but for some unspecified reason the Kentucky legislators failed to do so until 1848. The General Assembly then resolved to ratify the survey, adding an expression of "its true policy, to cultivate feelings of amity and kindness with all her sister states of this confederacy, and especially with the State of Tennessee, extending along her entire southern boundary, and united to her by a similarity of interests and political institutions."³⁶

5. *A Boundary in Equity*

TO A rational observer of the Tennessee-Kentucky boundary dispute in 1845 it would have seemed that the Duncan-Nance Survey should have at last settled the troublous border confusion. The commissioners and their surveyors had attempted to mix equity and precise surveying to please both states and their citizens living along the boundary. They had raised an interesting academic question: just what line were they to establish, a precedental or a reputed one? Later a closer check of their work revealed rather casual practices, which made following their established line well-nigh impossible.

Duncan and Nance repeated a serious mistake of their predecessors. They established no permanent monuments. They described the boundary line in terms of marked trees, houses, stream crossings, ridges, and even vague spots on the ground. Nowhere, with one exception, did they erect stones bearing pertinent boundary information. Actually they left the Kentucky-Tennessee boundary as indifferently marked as the lines of careless county surveyors.¹

By the latter part of the 1850s there were in Kentucky and Tennessee more competent surveyors, better surveying instruments, and improved mathematical skills. And citizens living on both sides of the line became more aware of the necessity to establish a definite boundary. As the roads were improved, railroads projected, and state tax systems better organized, it was important to know in which state one lived and held property. Also it became increasingly important for law enforcement officials to know in which state a crime was committed, a criminal arrested, and where to place all kinds of legal responsibilities.

Despite surveyors' questions about the Compact of 1820, a closer and more comprehensive reading of that document would have revealed that its authors expected commissioners and surveyors not to retrace precisely Walker's and Smith's old line, but to make reasonable and equitable adjustments on the basis of accepted local sense of boundary. It was historically plain from the outset that by 1850 there had been

too many surveys, magnetic deviations, calls, and measuring discrepancies to be reconciled in a single line under the guise of being precisely along the course of the original survey.

Three examples will suffice to illustrate the difficulties that arose in later years. It was believed at first that the Alexander-Munsell survey of 1819 was an accurate boundary across the Jackson-Shelby Purchase. This proved to be far from true. At various stretches along the original line east of the Tennessee River, Walker and Smith marked more than one course. In other places meddling settlers did their own marking so as to throw their property into the state of their choice.²

In October 1857 the Tennessee Legislature enacted a law providing that once again a joint commission would mark permanently the entire boundary east from the New Madrid Bend in the Mississippi River to Cumberland Gap.³ On January 9, 1858, the joint Kentucky-Tennessee Commission and their surveyors began their line on the east bank of the western loop of the New Madrid Bend at a point they labeled Compromise, Kentucky. The Kentucky commissioners were Austin P. Cox and C. M. Briggs, and Tennessee was represented by Benjamin Peebles and O. R. Watkins. They were instructed to survey a permanent boundary and to mark it every five miles with hewn stone monuments, the north face of each to bear the marking "Ky." and the south face "Tenn.," and the mileage from the beginning to be recorded on the shaft. On the west bank of the Tennessee at Compromise they placed a large stone bearing the names of the governors and secretaries of state, the commissioners, and the chief and assistant engineers.⁴

At the outset the surveyors not only discovered errors in the magnetic readings of the earlier surveys, but uncovered gross discrepancies in measurements. The first five-mile marker could not be placed because it would have been in Missouri at the tip of the first New Madrid Bend. The second five-mile site was on the edge of the upper arm of Reelfoot Lake, where the line entered the swamp from the west. Cox and



The author in search of boundary stones, on the bank of Drake's Creek, March, 1979.

Peebles experienced some of the difficulties that had caused previous surveyors to offset around the Reelfoot swamps. It took the surveying crews from January 9 to May 1 to run the line between the Mississippi and Tennessee rivers. They undertook to establish a straight line across the swampy stretch by locating a point every half mile and then taking bearings. They wrote in the report, "We also run the line across Reelfoot lake, and the swamps, ponds, and bayous adjacent thereto and marked it all the way—a work never performed before—and we were about four weeks engaged at it. We placed a stone at the end of the 274 poles before named, engraving upon it the course to the stopping point on the eastern shore of the lake, to-wit: 'N. 83° 40' E.'"⁵

The stones erected by the Cox-Peebles commission gave a high degree of permanence to their line. From the first one placed "319 feet west of the western shore of the eastage or western arm of the Reelfoot lake," the stones were planted approximately five miles apart; in many places where the marks fell

in inaccessible places the stones were erected at points of greater visibility. In all sixty-three of the engraved stones were placed, but eleven smaller stone markers were placed at such points as the crossing of the Mobile and Ohio Railroad, the Bowling Green-Nashville Turnpike, at the famous black jack marker in the apex of the Simpson Triangle, at the Glasgow Turnpike, and at some stream crossings.⁶

There were no stone outcroppings along the first leg of the survey and it was necessary to have the monuments cut and dressed in Bowling Green and shipped by river by way of Evansville, Paducah, Columbus, and Hickman, and then hauled inland by wagon. They were delayed at every transfer point, so much so that members of the surveying corps had to go and accompany them to the Tennessee River landing where they were transferred to wagons. This necessitated the surveyors' retracing their steps to the five-mile sites to place them in precise correlation to the field notes. As the party approached the limestone belt on the eastern end of the line they hired a stonemason to travel with them and hew the markers out of local stone, "but he could or would do nothing" so he was fired. Then S. W. Stanley of Warren County was given the contract to supply the stones at \$20.00 apiece. In their report the commissioners assured the auditors of the two states that Mr. Stanley more than earned his money. They wrote, "We are now stationed a short distance east of Cumberland Gap, in full view of both corners where almost all that you see except vegetation is stone, and all that you don't see, stone; yet, we have seen Mr. Stanley and two hands work six days in preparing our last stone, then abandon it; try another five days and abandon it; another one day and leave it; he then went across the mountain twelve miles, and has gotten one which will take him six days to prepare and put in the ground."⁷

The commissioners on the new survey adopted a radically different philosophy of their task from that of the Duncan-Nance commission, and they took rather sharp exception to that of the Bright-Munsell survey. They interpreted the language of the Compact of 1820 to be entirely clear. They conceived it to be a mandate to them not to make an exercise in recovery surveying by locating precisely the old Walker-Smith line, or what was "commonly called 'Walker's line,' but it is said line—not lines—it is the same, as it is 'reputed, understood, and acted

upon by the said states.' ” The commissioners adopted the view that they were required to run their line by that of Walker only when they covered precisely the same ground. The only line, however, that Cox and Peebles concerned themselves with was a sustainable boundary between the two states; this meant essentially, as they implied, making on the ground accommodations to the demands of their instruments and to the “reputed” boundary.⁸

The current surveyors had little time for blocking trees and counting growth rings to locate the 1779–1780 survey. There were too many chops and blazes along the line and too few witnesses who could supply substantial proof. Also, there was a conflict of information about whether the Walker-Smith party used three hacks, or two hacks, a blaze, and two hacks. They said they saw many trees that had been tampered with; all they needed was one reliable and warrantable tree with bona fide historical marks. “One solitary mark,” they said, “will show its age as well as a thousand. Millions can add nothing to its verity. The one mark speaks the truth, the whole truth, and nothing but the truth, as Heaven itself speaks it.” By this rhetoric the commissioners meant that they saw only one tree west of the Clear Fork of the Cumberland which they felt Walker’s party had marked. This was a large beech tree more than three feet in diameter, which stood on the east fork of Red River, a mile and a half below the mouth of Whipporwill (sic) Creek on the Logan County line. This tree bore the scars of hacks made by a narrow-bit hatchet such as the one Dr. Thomas Walker was known to have had in his possession. Like all beech trees standing in a fairly exposed position, this one bore many names, including those of James West and Isaac Bledsoe, March 11, 1780. These were corpsesmen with the Walker-Smith party.⁹

At the 110-mile mark the commissioners blocked a post oak, but the growth rings were so fine and the tree so badly decayed that it actually supplied no irrefutable evidence. The beech and oak were the only two trees blocked. The survey party reached the place where the gum tree had stood at the western point of the Simpson offset or jog on either July 5 or 6, 1859. There they turned their instrument on the bearing S 47° 53' E. They entered in their field notes that they surveyed to a large stone and the black jack, thence they turned N 68° 1' E. They ran up the latter bearing to N 7° 30' E, north latitude where they



One of the boundary monuments erected by S. W. Stanley for the Cox-Peebles commission in 1858-1859.

created a second boundary anomaly, the Middleton Offset. A search of the surveying and legislative record has produced no information to explain how this strange disruption of an already disrupted line occurred. The commissioners remained silent in presenting their report to the legislatures. One can only suppose that one of two things happened: the commissioners carried the matter of the “reputed” boundary to a ridiculous extreme, or in some way they were pressured into allowing a landholder to declare himself a Tennessean. The truth of the situation seems to have been buried with the commissioners and the landlord Samuel Middleton, of Sumner County, Tennessee. In resuming their survey approximately on the old and accepted line the surveyors mentioned the beech tree in their notes.¹⁰

The commissioners in 1859 were critical of the previous surveyors. Bright and Munsell, they said, ran their lines by the magnetic instead of the true meridian, and only once did they correct the variation of the compass needle. There was a considerable variation between the notes of the Bright-Munsell and Cox-Peebles surveys. It was said that when Bright and Munsell found themselves off course by the say-so of some adjacent landlord they corrected their line by surveying angular turns back to the Walker line.

They also said they were often in full view of trees blazed by the surveyors in 1831.¹¹

Cox and Peebles were no less critical of the Duncan-Nance survey of 1845. The earlier surveyors had left untouched five miles of the line west of the Reelfoot Hills, and west of the swamp they ran their line by the Alexander-Munsell survey. The latter commissioners boasted they were as long running eight miles of the swamp line as Duncan and Nance had taken to run the entire line, including travel to and from their homes.¹²

The surveyors in 1859 found that in 1821 Steele and Looney were off the 36° 30' line by as much as eight miles, and that their measurement was off by seventeen and a half miles. Of their own survey Cox and Peebles wrote, "We are fully persuaded that we are as nearly correct as men can reasonably expect to be when measuring through such a country—over hills and mountains, from a few to fifteen hundred or more feet high."¹³

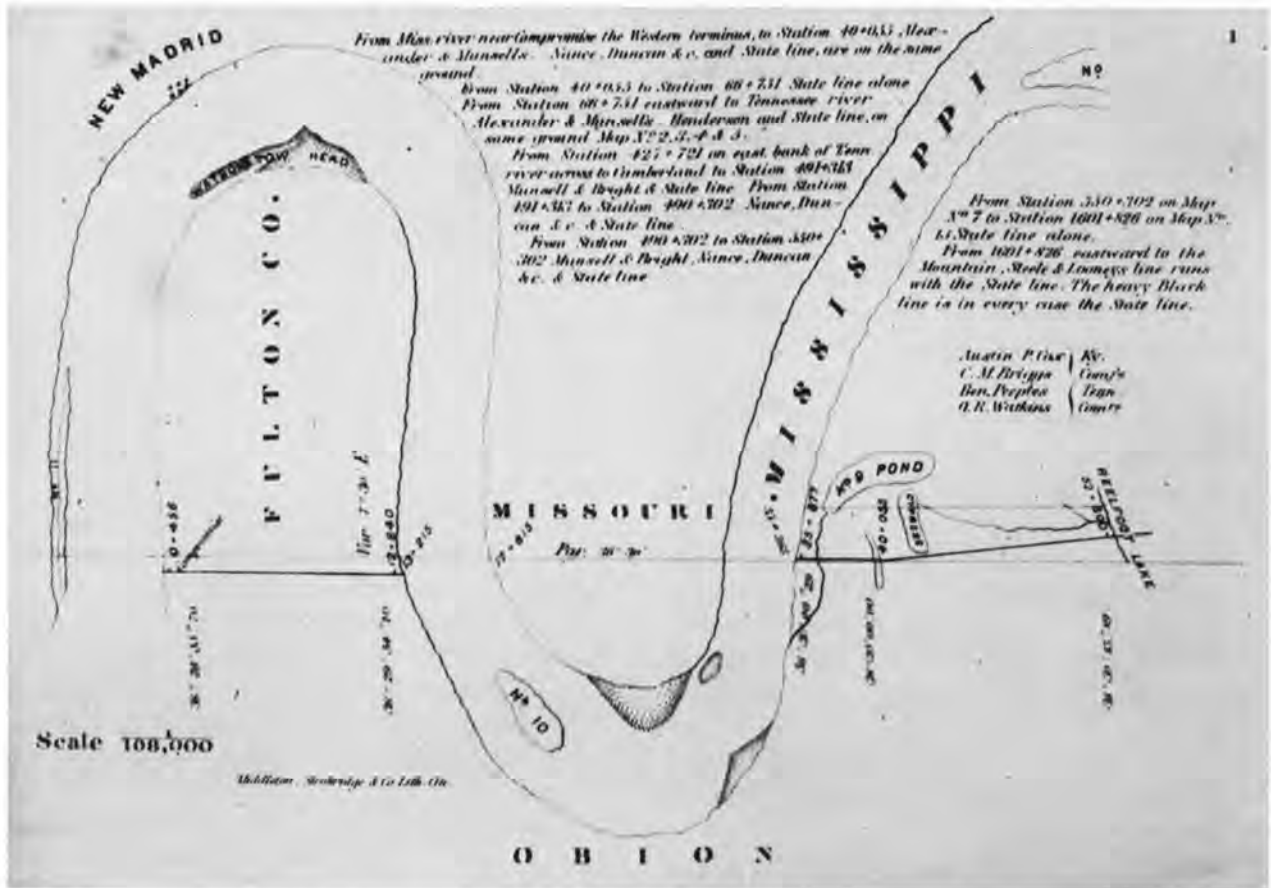
On the eastern and mountainous end of the boundary the commissioners were unable to locate any marks of the Walker-Smith survey. The reason for this was that the surveyors in 1779–1780 bypassed much of the rough country. The line in this part of the boundary was simply a directional one, a fact clearly revealed in the discrepancy in measurements. Steele-Looney reckoned the distance from the southeastern corner of Kentucky to the Cumberland River as being 114 miles, Walker-Smith recorded it as 119 miles, and Cox-Peebles 97 1/4 miles. The commissioners in 1859 made an interesting observation: they wrote, "Old men who then lived, and now live on it, say that they (Walker-Smith's party) walked around many miles, five, ten, or more—on the best ground, shown them by pilots, without marking a tree, stretching a chain, or sticking a jacob-staff. They give their distance in miles; and yet the course they ran, and the distances to various objects as they passed along, are given in the laws of both States as the established boundary between them, and are now obligatory on both, if anything can be found on the ground at all corresponding with what is said on paper."¹⁴

The last entry was made in the engineers' field book of the Cox-Peebles survey on October 29, 1859. The commissioners took deep satisfaction in the fact that they had run and marked every foot of the line. When they reached the Cumberland Moun-

tain terminus they ran on beyond the historical markers to the chestnut oak corner of Virginia and Tennessee to establish a witness point. Then they turned their line northeasterly and measured the distance precisely to Cumberland Gap, placing a large stone by the side of the old Wilderness Road bearing the names of governors Beriah Magoffin and T. G. Harris, the two secretaries of state, the commissioners, the engineers, and the commissary.¹⁵

At the old terminal marker established by Thomas Walker they found the two oak trees had long since rotted away, and most of the pines were gone. Here they erected a small native stone marker because a bigger one could not be transported to the rugged spot. They then cut and blazed a clear trail from the large stone on the Wilderness Road to the seven-pines corner, so that a person wishing to visit the spot might locate it by using a compass set on the bearing S 48° 14' W. Along the way they marked trees with four chops, fore and after, and carved on the west face the letter "K" and on the east face "T."¹⁶

The commissioners' formal report sings with pride. They took deep satisfaction in the fact that for almost a year they and their companions had prevailed against both human and physical obstacles to survey and mark every foot of the border. A human obstacle they faced was that "The precise position of the line was fixed in the minds of those living and owning lands on it, at comparatively speaking, very few points, and only where clever, intelligent, amicably disposed Gentlemen resided on each side." This was especially so from Drake's Creek eastward to the crossing of the Cumberland River. In many of the locations people along the border were indifferent as to where the line was run. East of the Cumberland the people were not only indifferent but they seemed to the commissioners to be too ignorant to know in which county or which state their homes were located. In this region there were at least a dozen corners to county lines and the natives could not show the commissioners a single one. In the more rugged mountainous sections this perhaps was not a justifiable criticism of the people because no county corners had ever been established. For the first time the blazed line and the establishment of the five-mile stone markers revealed the border to the inhabitants as well as to county and state officials.¹⁷



The western terminus of the Kentucky-Tennessee line, from the official report of the Cox-Peebles Commission.

Looking back on the work and experiences of the past months the commissioners wrote, "But we doubt exceedingly whether there was a solitary mile on the whole line where a murder might not have been committed, and men of intelligence and acknowledged integrity would not have sworn as some have sworn, some that it was committed in Tennessee, others, that it was in Kentucky; and thus many a case goes unwhipt of justice."¹⁸

At the eastern terminus of the long boundary the commissioners had established lasting physical evidence of the boundary and had brought to an amicable conclusion a senseless dispute of eighty years' duration. By no means had they run a perfect line or established a model boundary, nor had they removed the long-standing kinks in the line at the Simpson County border and just east of the last crossing of the Cumberland River. In fact they had added a kink of their own in the mysterious Middleton offset.

At the end of the survey on the ground it remained only for the commissioners to organize and prepare their report to the governors and legislators, and for the chief draftsman, G. Trafton, to arrange the field notes and to complete the sectional plats of the boundary. This, however, was too prosaic a conclusion to such a grand and pioneering undertaking. It deserved an eloquent and heroic valedictory. With a flourish of a Tennessee or Kentucky stump-speaking politician, the commissioners told their superiors, "We have been a long time, several months, almost a year, on the line, and have been several weeks bringing up the notes, and reducing the angles and astronomical observations. . . . It may appear unnecessarily long to those unacquainted with the country over which we have run the line—the difficulties encountered and overcome at many points—and the kind of service rendered; it appears especially long to those of us who had wives, chil-

dren, and friends at home, and debarred from their society all this while; and yet more especially does it appear long to men who have exchanged the comforts of the family circle, and the pleasures of social intercourse, for the companionship of beasts of prey, venomous serpents, and vile creeping things without number, as was the case with us on more than one third of the line.”¹⁹

The four commissioners had the warmest praise for the thirty-nine members of the survey party. They told the governors and legislators that these men “have cut their way through mud, mire, swamps, ponds, and brakes for miles; they have waded through mud, mire, swamps, ponds and lakes where the water was from a few inches to more than two feet deep, breaking as they went along, ice near an inch thick; they have groped their way through brambles and thickets over miles of sharp, flinty stone that tore their apparel to pieces in a very short time; they have clambered over hills from a few hundred to near two thousand feet high; and they have scaled and mounted over cliffs, to the manifest danger of life and limb, where tops reached above the lower clouds.” All of this to achieve the one big objective, “to run the whole line as it had never been run.”²⁰

Included in the report was a revealing commentary on health conditions in western Kentucky in 1860. The commissioners wrote, “we have passed over sections of the country where people were dying in numbers sufficient to attract not only the observation of residents but of strangers. We have run over the line—the whole line—from one end to the other, and through a country where diseases must prevail every year to a considerable extent. We have run it all unscathed and unharmed seriously; we have had a few cases of chills, which were easily managed.” Only one member, J. P. Wooton, assistant commissary of the Kentucky corps, was forced to leave the party because of illness.²¹

The exploits of the surveying party in 1860 were in some respects more heroic than those of the old frontier wanderers who came across the Cumberland in the latter quarter of the eighteenth century to visit Kentucky. The pioneers could select the paths they

traveled; the surveyors were driven by that heartless witch, the needle of the magnetic compass, a wench that had a beastly penchant for selecting the roughest brambles and thickets, the meanest stream crossings, and the most treacherous ravines and cliffs to be scaled. These Kentucky and Tennessee heroes have gone largely unsung. Nevertheless they made the physical sacrifice that brought peace between the two states.

On February 28, 1860, the Kentucky General Assembly enacted a law recognizing the Cox-Peebles line as the true and official boundary between the two states; the Tennessee legislature enacted a corresponding law. The auditors of the two states were instructed to draw warrants to pay the cost of \$39,330.60 for the establishment of the boundary. The Kentucky auditor was instructed to withhold \$300 of G. Trafford’s pay until he deposited in the office of the Secretary of State the finished map of the boundary. When this was done and a copy of the act of the Legislature was deposited along with the plats, “the same shall be accepted by the Governor as having been executed in the manner required by said act.”²²

Among the Kentucky corps were three commissary men, five axmen, two wagoners, and a cook. Ten of these were leased slaves who bore the brunt of much of the wading, climbing, chopping, and getting their clothes torn to shreds. The cook, interestingly named Cook, was on the job for 308 days. In the combined Kentucky-Tennessee corps there were four engineers and ten flagmen and chainmen.²³ In the length of time the corps spent on the boundary, the changing conditions of climate and geography they experienced, and the social contacts they formed along the way, these surveyors had a comparable experience to that of the surveyors who ran the Virginia-North Carolina dividing line in 1727–1728. Unfortunately the party did not include an observant journalist like William Byrd, who kept the famous history of the earlier survey party. Nevertheless, the ninety-eight-page published report of the commissioners constitutes an exciting piece of Kentucky-Tennessee history.

6. *The Ohio Low Water Mark*

AFTER the lapse of eighty years Kentucky had established its boundaries on three sides, and had agreed with Missouri to accept the midcurrent or thalweg of the Mississippi River as far upstream as the Illinois peninsula.¹ From that point north the boundary was the low water mark along the northern shore of the Ohio. Few questions in the history of the Ohio valley have been more controversial than that of where and when low water occurs. This river has been a constantly forming one, washing down from its headwaters millions of tons of sedimentary materials, depositing them one year and removing them the next. With recurring annual floods the stream has lain uneasily in its bed.

The Ohio has been more than a drainage system washing off the heartland of the eastern half of the continent. From the appearance of the first human beings along its shores it has been a dividing line. The river was treated as a boundary by northern and southern Indian groups, and when Europeans ventured out from the Atlantic and Gulf coasts it became a line of international demarcation. In an institutional and commercial sense the Ohio has had an enormous bearing on American history, and none of its roles has been more important than the dividing of "North" from "South."

The river early became an informally declared boundary between the expanding interests of colonial Britain and France. By the middle of the eighteenth century the last of the mist of uncertainty had melted away, and the Ohio and its valley had become both a political and geographical reality. By mid-century it had become a source of intense rivalry and contention between both European national groups and the native tribes, north and south. The Indian trade had become highly profitable, and the large areas of fertile lands tempted traders and land speculators alike. Inevitably the rivalry for possession of the Ohio River country would result in a bitter armed struggle. The French and Indian War, 1753–1759, was to be one of major decision-making in North America. The Treaty of Paris, 1763, established British control firmly on the West as far as the Mississippi, which

meant that the region that now includes Kentucky was opened to steady expansion of Virginia's population.

In two subsequent military contests the Virginia hold on the West was to be strengthened. The first of these was Dunmore's War, a conflict stirred deliberately by the land speculator and colonial governor of Virginia, Lord Dunmore, and his agent Dr. John Connolly. The troops in this war were not hard-pressed frontiersmen fighting to protect their doors, but largely speculators who hoped to lay claim to promising blocks of western lands. Active on this front were the various land companies, and especially the Ohio Company.²

To the south the doorway to Kentucky was being cracked by frontiersmen who planted the first settlement at Harrodsburg, and there followed in quick succession Boonesboro, Logan's, Lexington, and a growing list of semi-fortified and manned stations and blockhouses.³ The era of the Revolution saw the Kentucky settlements consolidate their footholds in spite of the exigencies of a bitter frontier struggle. George Rogers Clark's northwestern campaign, those across the Ohio to menace the Shawnee, and the struggle in the upper Tennessee Valley all served to create a firmly advancing western frontier line.

By 1781 the western settlers had held out against the worst of the British-Indian raids into central Kentucky from beyond the Ohio. The stream of emigrants across the mountains was renewed and the river became one of the main entries to the new settlements. It was also a defiant borderline between settlers and Indians, with each of them crossing it on occasion to carry out raids. Generally, however, the stream was a psychological barrier that impressed itself upon settler and Virginia official alike.

This was the situation along the western border in 1781 when the Virginia House of Delegates voted to cede its lands beyond the Ohio to the United States, with the two reservations that the Ohio River would be left within Virginia boundaries, and lands would be reserved with which to make grants to Virginia veterans of the American Revolution. The deed

of cession was signed by Thomas Jefferson, Thomas Hardy, Arthur Lee, and James Monroe on or near March 22, 1784. Throughout the deed there appears the phrase "the territory North-West of the Ohio River."⁴ Clearly the Commonwealth did not cede its claim to the river. The reasons for this developed as time passed. First was Virginia's dispute with the proprietary land companies; second, and by far the more important, was the intense rivalry between Virginia and Pennsylvania over their western interests. In a letter to James Madison, Jefferson on February 20, 1784, wrote that "the Ohio, and its branches which lead up against the Patowmac affords the shortest water communication by 500 miles of any which can be got between the Western waters and Atlantic, and of course promises us almost a monopoly of the Western and Indian trade. I think the opening this navigation is an object on which no time is to be lost. Pennsylvania, is attending to the Western commerce."⁵ This was written at the moment the House of Delegates was preparing the deed of cession. The Ohio also formed a safety barrier above the expanding Kentucky settlements. And after 1787 the stream gained further significance as the line between free and slave territory.

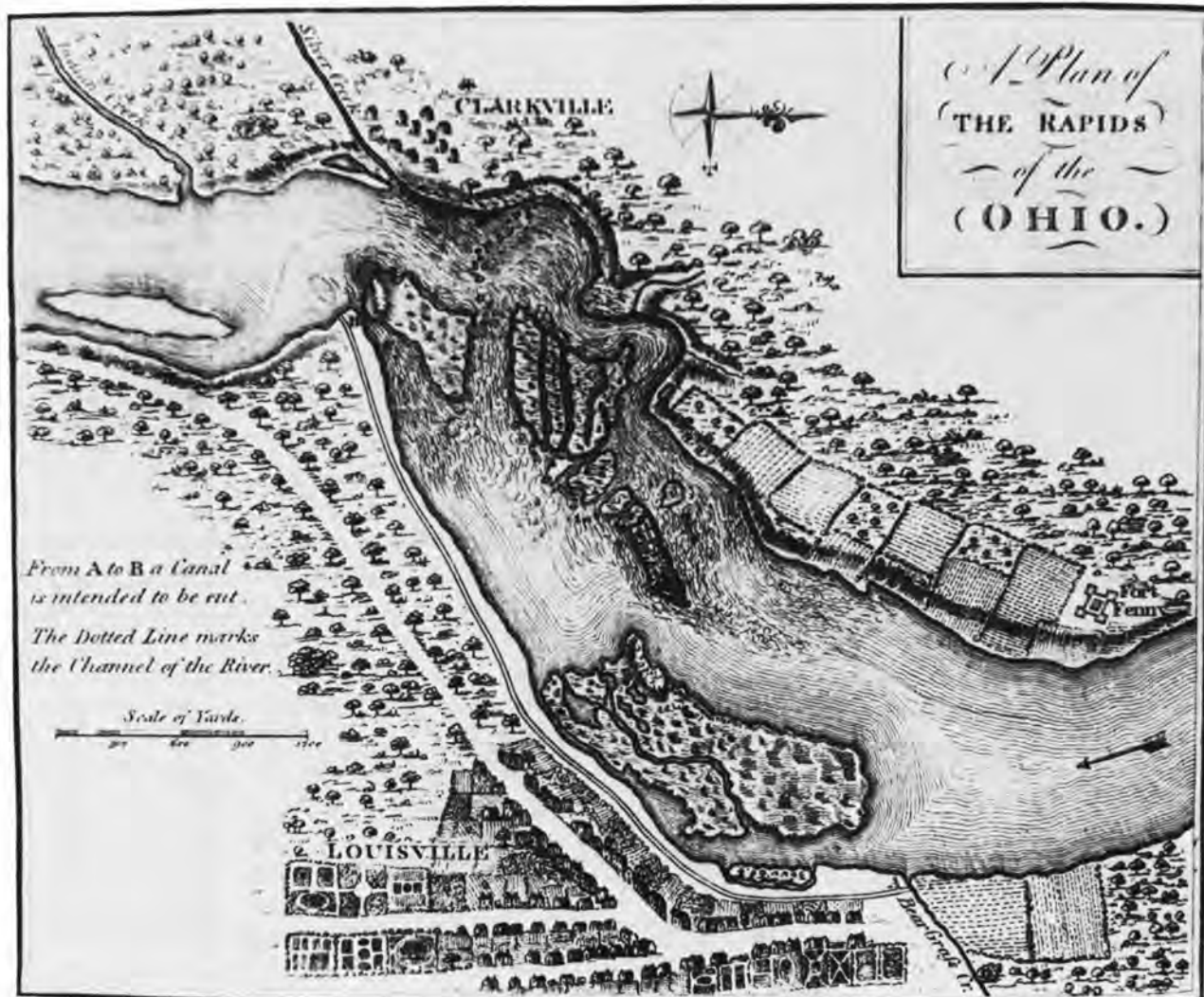
Virginia's claim to the Ohio River was formalized in 1789 in the Compact with Kentucky. This convention provided that "the use and navigation of the river Ohio, so far as the territory of the proposed state, or the territory which shall remain within the limits of this commonwealth lies thereon, shall be free and common to the citizens of the United States, and the respective jurisdictions of this commonwealth, and on the river as aforesaid, shall be concurrent only with the states which may possess the opposite shores of said river."⁶

This ambiguous section of the Virginia Compact simply says that the boundary on the northwest of the proposed State of Kentucky would be the low water mark of the Ohio. The document did not, however, say clearly what the limits of the jurisdictions of the adjoining states might be in the future. In 1820 the low-water-mark boundary was upheld by the United States Supreme Court decision in *Handley's Lessees v. Anthony*.⁷ Argument for the Republic was presented by the United States Attorney General, and Kentucky was represented by "Kitchen Knife" Ben Hardin of Bardstown. Chief Justice John Marshall wrote the opinion. At issue was the ques-

tion whether an area immediately southeast of Evarville in the new state of Indiana, called by some local people "Green River Island," was in fact neither an island nor a contiguous peninsula. Running northwest of the area was a wet weather bayou, slough, or shute in which the water rose and fell with the water level of the Ohio River. This "island," said Justice Marshall, was three miles long by air line, but by meander of the shute was in the neighborhood of nine miles in length. It was narrow, its width depending upon the meanders of the river and the shute, and the front along the northwestern shore of the river was fifteen to twenty miles.

In 1820 several families had moved onto the "island" and considered themselves citizens of Indiana; they paid their property taxes to that state. The question the Court had to decide in the *Anthony* case was which state had true jurisdiction over the area. In reviewing the history of the Virginia cession of 1784 Chief Justice Marshall, a Virginian himself, said, "It was intended then by Virginia when she made the cession to the United States, and most probably when she opened her land office, that the great river Ohio should constitute the boundary between the states which might be formed on its opposite banks. This intention ought never to be disregarded in construing the cession." He reasoned that when the Virginia House of Delegates ceded the territory first in 1781, confirmed the grant in 1783 and 1784, and then reconfirmed it in the Compact of 1789 it intended the boundary to be "the great river Ohio," not a narrow bayou into which water occasionally ran. The Chief Justice thought that this principle was based upon both the history of the cession and what seemed to have been the intent of Virginia, which "seems to us to require, that Kentucky should pass the main river, and possess herself of lands lying on the opposite side, although they should, for a considerable portion of the year, be surrounded by the water of the river flowing into a narrow channel." The Court held that the shore of the river Ohio at low water level was the boundary, and in doing so upheld a lower court judgment.⁸

Handley's Lessees v. Anthony established the two points that the Ohio River within its main-stream, not a shute or bayou, was the boundary intended by Virginia in 1781. The case did not, however, finally resolve the issue of jurisdiction over the river. Questions among the states over law enforce-

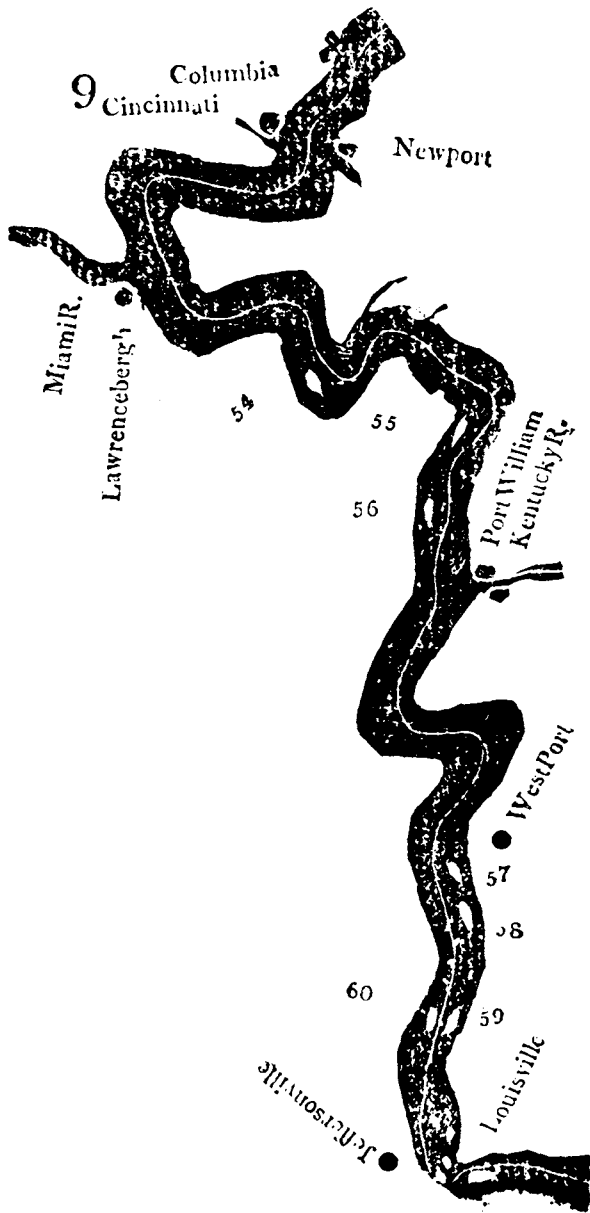


The Falls of the Ohio in 1793. At this early date, a canal to bypass the falls has been proposed.

ment, commercial uses, channel responsibilities, and taxation frequently came to the state courts for clarification, always hinging finally on the intent of the Virginia Compact. Many of the cases related to persons who sought to evade the laws of Ohio and Indiana by operating just beyond the low water mark. In *Dugan v. State* the defendant was charged with carrying passengers along the Indiana shore on Sunday in violation of the blue laws of that state. In *Welding v. Nieyler* Indiana asserted authority to serve a process on the Ohio River inside the Kentucky territorial low water mark, and in *State v. Savors* Ohio assumed the right to stop the illegal sale of liquor from a houseboat in violation of ordinances of East Liver-

pool.⁹ Mr. Justice Holmes in *Welding v. Nieyler* ruled, "Concurrent jurisdiction, properly so-called, on the rivers, is familiar to our legislation, and means jurisdiction of two powers over one and the same place."¹⁰ All of the cases brought to court, without challenging the validity of the low-water-mark boundary, reaffirmed that the adjoining states had common legal and commercial access to the Ohio River.

Before the end of the eighteenth century the Ohio River had become one of America's main inland channels of migration, trade, and travel. Some of the famous Kentucky long hunters had drifted their seasonal accumulations of skins and furs to New Orleans



The river from Cincinnati to Louisville in Cramer's *Navigator*, 1801.

aboard pirogues and canoes. But it was the opening of the rich flatboat trade in western produce to New Orleans after James Wilkinson's historic venture in 1787 that began an important commercial chapter of the western rivers.¹¹ As farmers in Pennsylvania, Ohio, Kentucky, and Tennessee cleared western lands, raised livestock, and developed domestic industries the common usage of the Ohio had far more practical meaning than merely the location of state boundaries.

Two events in 1811 were to prove enormously important in the development of the Ohio as a source of keen cartographical interest. First was the appearance of the earliest steamboat on the western waters, and second was the occurrence of the calamitous New Madrid Earthquake. The appearance of the steamer *New Orleans* almost immediately focused concern on the obstructions choking the river and on its general navigability. In 1811 the Ohio was narrow in places, shallow in dry seasons, and at all seasons blocked by shoals, sandbars, eddies, and large drifts of debris. The most important barrier of all was the exposed rocky ledge opposite present-day Louisville, at the fall line of the river. At certain seasons the water flow was insufficient to bear craft even of the shallowest draft over the Falls. When the steamboat arrived in Louisville, October 1, 1811, there was not enough stream flow to enable it to enter the lower river and it was not until early December that it could proceed southward.¹²

The first shock of the earthquake occurred early in the morning of December 16, 1811. It shook the river region from above Louisville to Memphis, causing banks to cave in, building sand bars, creating eddies of death-dealing swirls, and filling the channels with trees and driftwood. While the general course of the Ohio was little changed, the set of the current was redirected and in places the contour of the low water mark was changed considerably. In some places old shutes were opened and new ones created, all of which had a bearing on the Kentucky boundary.¹³

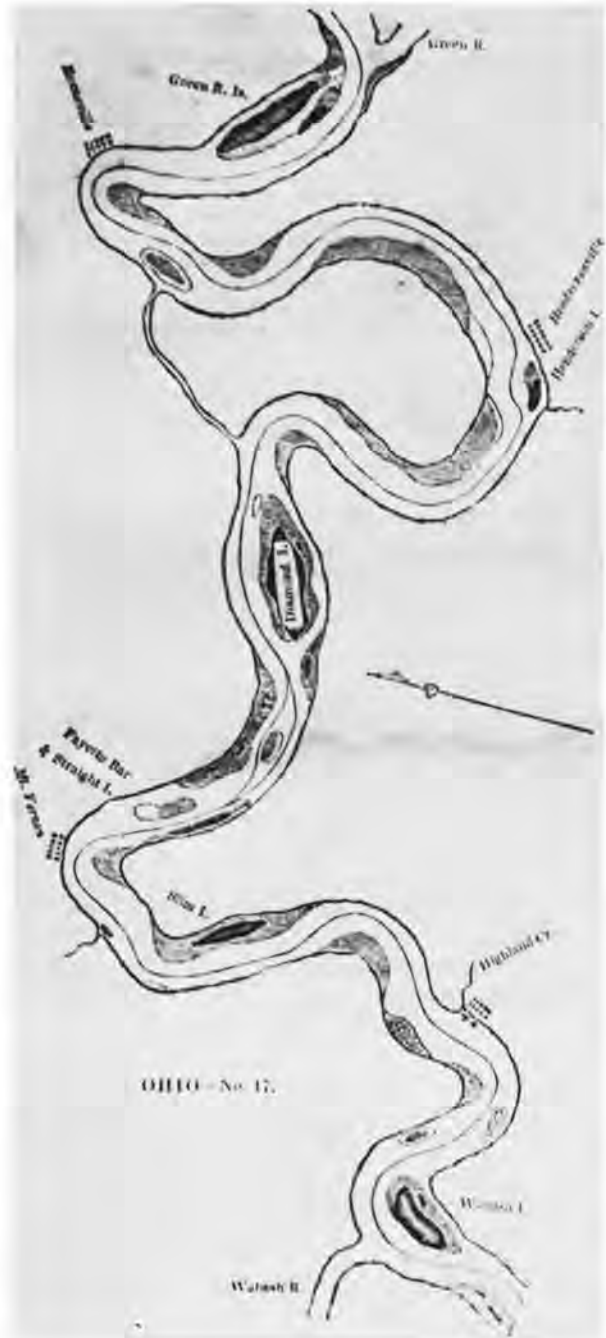
Five years before, in 1806, the United States War Department had made a survey of the Ohio for the purpose of determining its role in national defense. This survey had been stimulated by the uneasiness in the West over the Spanish, and subsequently French, occupation of New Orleans and the Louisiana Territory, and by the possible alienation of the riparian Indian tribes. New Orleans was vital to the con-

duct of western trade and any international aberration would have spelled ruin for the rapidly settling areas upstream. In 1795 the United States and Spain had reached an agreement in the Pinckney Treaty guaranteeing the right of deposit in the Spanish port of American produce. When the negotiations between the United States and France over the purchase of Louisiana became known, the Spanish acting intendant Juan Ventura Morales revoked the right of deposit, October 16, 1802, almost provoking war between Ohio Valley farmers and the Spanish colonials.¹⁴ An uneasiness on this subject remained even after the purchase of Louisiana and the transfer of title.

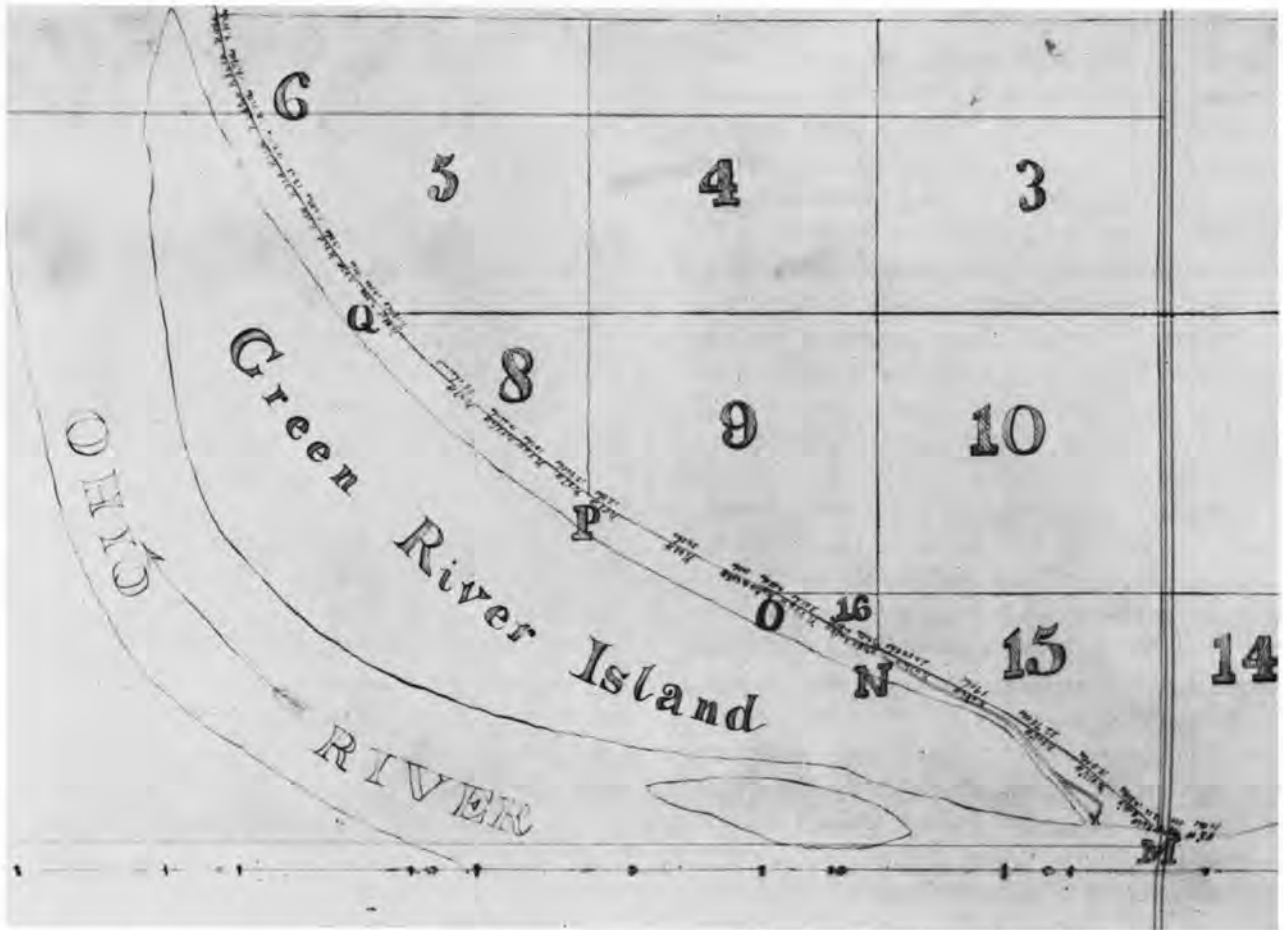
A second event that stirred United States military concern on the Ohio was the furore caused by the conspiracy of Aaron Burr and James Wilkinson. Again the river became a strategic line of national defense. From Blennerhassett's Island, just below Parkersburg, Virginia, to Cairo there was deep concern with the so-called conspiracy and its "revolutionary" forces. There was fear that Burr's army would attempt to wrest Mexico and the Southwest from Spain and even attack Americans in New Orleans and the Mississippi Territory. Never had military concern been greater for the Ohio River than in this era. Thus it was the United States sought to develop more precise knowledge of the stream in its survey.

There were scores of other surveyors on the river from 1787 onward. In a sense every flatboat captain was a modest cartographer, gathering and passing on by word of mouth information about the condition of the channel and the bordering countryside. The first formal navigational chart was published by Zadok Cramer of Pittsburgh in 1801. His guide, *The Navigator, containing Directions for Navigating the Monongahela, Alleghaney, Ohio and Mississippi Rivers* presented diagrammatic drawings of the channel, showing points, sandbars, islands, and towns, with accompanying textual instructions on navigational procedures.

In 1817, the legislature of Ohio enacted a law inviting Pennsylvania, Virginia, Kentucky, and Indiana to join that state in making thorough examination of the navigational channel of the Ohio River. The newly created state of Indiana failed to respond to the invitation, but the other states sent delegates to Pittsburgh to begin the survey. A steamboat and service barge were hired and equipment installed for remov-



A navigational chart by Samuel Cumings in *The Western Pilot*, 1832.



Green River Island and the Walker-Pfafflin line, from the commission report in the records of Henderson County.

ing snags, drifts, and other light obstructions. Magnus W. Murray was employed as engineer and the commissioners set off downstream. Murray was thorough in taking notes and making drawings of the parts of the river where obstructions threatened the safety of vessels. The survey extended no farther than Louisville and the Falls of the Ohio. There the engineer drew a careful plat of the stone barrier and its surroundings. He prepared an interesting contour diagram of the Falls.¹⁵ His plat established a clear picture of the river front before Louisville, and contained the tentative location of a bypass canal. Twenty years later the Portland Canal Company was chartered by the legislature to dig a canal generally on the route Murray outlined.¹⁶

The coming of heavy steamboat traffic placed the Ohio River in an entirely new legal context for Kentucky, as accidents, personal injuries, acts of crimin-

ality, and commercial litigation led to the invocation of state laws and police powers and often gave rise to boundary disputes.

In order to control some of the growing problems of the river the legislatures of Ohio, Indiana, and Illinois in 1847-1848 adopted resolutions asking that a joint commission be appointed from these states to meet with one from Kentucky "to negotiate for the settlement of the boundary or jurisdiction, or both, upon that part of the Ohio river, dividing the State of Kentucky from each of those States respectively." The Kentucky General Assembly responded to this invitation but there is no record that a commission was ever appointed.¹⁷

The General Assembly in 1849 reasserted the 1829 law on the recovery of drifting boats and rafts on the Ohio. Three years later when that body enacted the general law to adapt the statutes to the re-

quirements of the new constitution it reaffirmed Kentucky's control of the Ohio.¹⁸ This section said, "The Supreme Court in the case of *Handley's lessees vs. Anthony*, 5 Wheaton, 375, and the Court of Appeals in the case of *Fleming vs. Kenney*, 4, J. J. Monroe, 158, have decided that the boundary of Kentucky extends to the low water mark on the western or northwestern side of the Ohio. What effect the 11th section of the Compact with Virginia has upon the question of concurrent jurisdiction of the states of Ohio, Indiana, and Illinois over that portion on the Ohio river which forms the common boundary between them and Kentucky, has not been declared by any legislative act or judicial decision of the Court of Kentucky."¹⁹

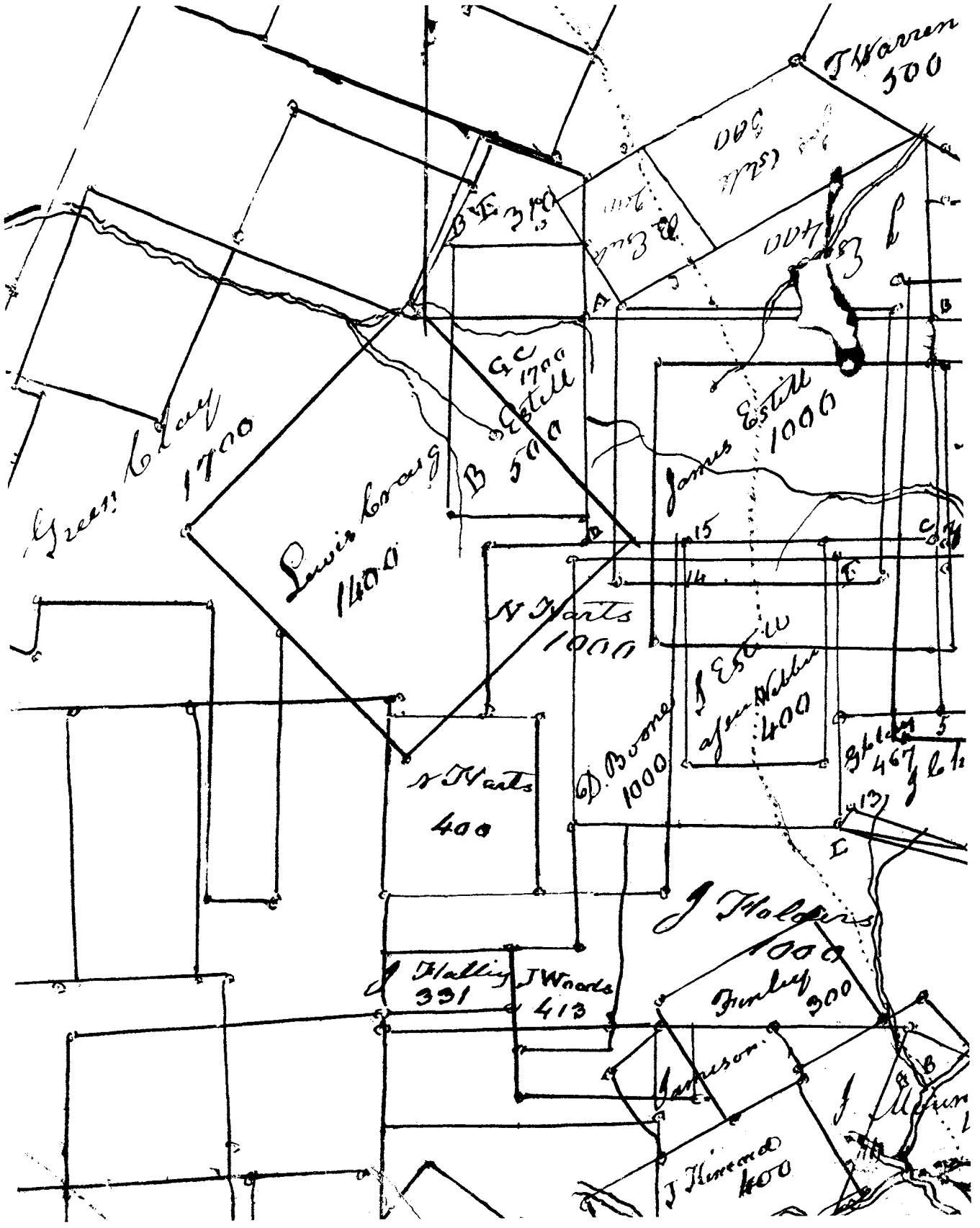
The boundary question along the Ohio remained quiescent from 1848 to 1873 despite the various inflammatory issues that arose over absconding slaves, the activities of abolitionists, and the campaigns of the Civil War. Once the emotional issues of the reconstruction period had simmered down the boundary question again came to the fore. Once more that plot of land involved in the 1820 *Handley's Lessees v. Anthony* was at issue between Kentucky and Indiana. In 1873 the Kentucky General Assembly authorized the appointment of a joint commission with Indiana to determine the precise land boundary east of the bayou or shute southeast of Evansville.²⁰ The Indiana Legislature responded favorably to this request in 1875. To carry out the mandate Kentucky appointed D. N. Walker of Henderson its commissioner, and Indiana appointed Augustus Pfafflin of Evansville. They were instructed to make a careful survey and permanently mark the boundary.²¹

When the commissioners began their survey they were governed by that made in 1806 by the United States. Despite the admonition of the legislature that the boundary should be permanently marked, the new boundary was described as beginning at a stake at the low water mark on the river and running northward. From that point the boundary of metes and

bounds followed the meanders of the bayou to a point just opposite the "foot" of the Green River Island. The various "turnings" of the line were marked in most places by stone corners bearing carved letters. Some of these markers coincided with the section corners of the Indiana land system survey. The boundary established by Walker and Pfafflin was confirmed by the two legislatures in April 1878. Copies of the field notes and plats were filed in the office of the county clerk in Henderson County and with the circuit court clerk of Vanderburgh County in Indiana.²² But in no way did the 1878 boundary survey resolve the broader boundary issue between Kentucky and its northwestern neighbors.

In 1820, when John Marshall defined the boundary as the "low water" mark he obviously referred to the ebb and flow of the natural stream. With the construction of high navigation dams and the creation of a series of slackwater pools, the Ohio River's bed has been significantly altered. The river now little resembles that which the Virginians indicated in the Kentucky enabling act of 1785, and subsequently in the Compact of 1789. And, in addition to the historical problems, new ones have arisen. These concern stream pollution, water withdrawals, changes in water temperature caused by the emission of hot water from steam electric generating plants, the construction of nuclear electrical generating facilities, the dumping of industrial wastes, and the administration of modern criminal laws. So at this late date in the twentieth century the boundary question between the states seems to be on the way to a hearing in the Supreme Court of the United States.

Meanwhile, however, the Kentucky boundary remains, technically and cartographically, along the raised low water mark created by modern high-rise locks and dams erected to facilitate the passage of heavy commercial cargoes. Only an adverse decision pertaining to the strip of land above Evansville would make a consequential difference in present-day map descriptions of the Commonwealth's outline.



7. Patterns on the Land

ONE of Kentucky's most vexing and costly tributes to the British tradition inherited from Virginia was the attempt to extend the ancient land system of a small, densely settled country to a sprawling western land empire where space and distances seemed limitless. The failure on the part of the Crown and then Virginia to devise a systematic scheme of western land survey before settlers crossed the Cumberland mountains led to a chaotic situation. In the endless expanse of virginial wilderness, where tracts of land in any size a claimant chose were available, it was inevitable that land-greedy settlers would generate endless confusion and causes for litigation.

Virginia officials sensed this at the outset but were not ingenious enough to devise a better scheme of land grants and platting. Rather they sought a political solution. Between 1776 and 1779 the House of Delegates undertook to establish order by enacting two land laws pertaining to Kentucky. There is no way to estimate the harm done Kentucky in the long run of history by the land law of 1779. Henry Clay denounced it as late as 1829 as a "vicious system, a calamitous system."¹

Virginia legalized several types of land claims in its western district. One was the cornpatch and cabin right of title, enunciated in 1776, the year of the common man. It is said that Thomas Jefferson favored this plan so as to plant the state's population firmly on the land. Under this law, if a claim was registered by January 1, 1779, and the claimant had built a cabin and grown a "patch" of corn, he could claim 400 acres.²

A second manner of establishing title to land was by the purchase of a land warrant stipulating the number of acres a claimant might search for and register with the county clerk. In time literally thousands of these warrants were brought to Kentucky bearing the signatures of the Virginia governors. A third

method was by securing a military warrant, which entitled the holder to acquire land in any part of the western district or in the special military reserve in the southern and western section of Virginia's western counties.

Methods of locating tracts of land and marking boundaries were casual. A claimant established a boundary, no matter how general, and registered the claim. He might mark the boundaries by driving down stakes or "stobs," chopping notches on trees and even bushes, turning up stones, and following the meanders of streams and combs of valleys or the watersheds of ridges. As the country became settled, boundary descriptions might include references to houses and outbuildings, even to pigpens.³ In most cases where speculators laid claims to large tracts, they had base lines surveyed and left more detailed boundaries to be described in the future. In some instances these old base lines were printed on early maps. They served surveyors and cartographers as internal bearing lines, often giving some notion of distances.⁴

This ancient English-Virginian system of metes and bounds enclosures led to overlapping claims, inadequately described boundaries, and highly deficient surveys.⁵ The original surveyors of Kentucky were largely self-trained, stubborn and individualistic, and incapable of making astronomical readings both from lack of knowledge and lack of instruments. Some of them marked corners by driving down stakes, piling up rocks, and placing chops and slashes on surrounding trees. In large numbers of surveys the lines went unmarked except for the corners. A measure of the confusion of the Kentucky land system is to be found in the voluminous legislation enacted over the past two centuries in efforts to protect and clarify titles.

Meanwhile the tenor of Kentucky politics was revealed in the creation of an astonishing number of local governing subdivisions and in constant revisions of districts and boundaries. William Littell in his semihumorous *Festoons of Fancy* (1811) attributed Kentuckians' penchant for the organization of new counties to the desire either to hold public office or to

(Opposite) Some of the best known names in early Kentucky history appear on this plat, which illustrates the disastrous confusion resulting from inadequate surveys and the lack of a workable land system.



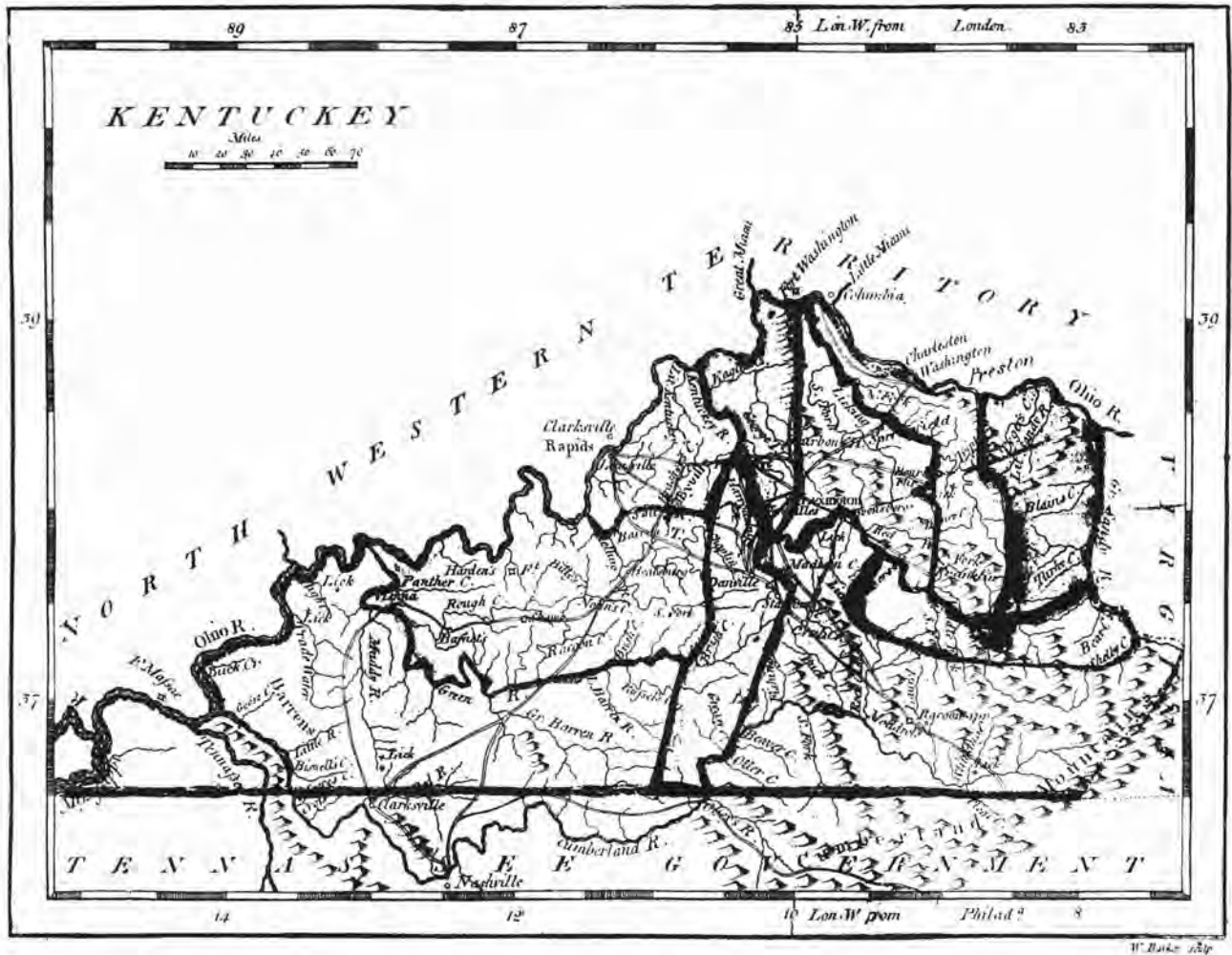
have control over the administration of justice.⁶ And county boundaries were no more precisely located than those surrounding individual tracts of land. One such description fairly exemplifies most other county boundaries. The General Assembly in 1819 created Simpson County from portions of Logan, Warren, and Allen along the disputed Walker boundary of Tennessee. In setting the boundaries of the new subdivision it seems that the legislators did what Henry Clay said was so common in Kentucky: they made a fireside survey. The beginning point on the southern state boundary might actually have been any one of a hundred precise spots on the ground, so long as the northern course of the boundary passed twelve miles due east of a longitudinal line to Scottsville, thence due north to an unspecified point twelve and a half miles to the north of Bowling Green. Then the boundary was to run west to an intersection with the Logan County line, which no doubt depended upon some landholder's say-so; then it was to follow "along the course of that line, to Colonel Douglas' former residence; thence to Hugh McCutchins'; thence to Thomas Neal's, leaving the last two houses in the present county of Logan, thence to a point mid-way between Bryan's spring and Robert May's present residence; thence south to the present state line." This description did not include a single compass reading, there was no mention of a mark of any kind that could be called a suitable boundary monument, and most important of all no mention was

made of measurements either of lines or of the area of the new county. Nor was any mention made of areas by which the three older counties were reduced. In the same session the General Assembly created Owen County, using the word "about" several times in the description of its generalized boundaries.⁷

In establishing most county boundaries the truth was that surveyors, if in fact surveyors ran the lines, made their surveys in a fast walk. They did few or none of the things a careful delineation of a permanent border required. This was true in the running of both county and property lines. Surveyor's fees were stipulated by law, and they were extremely low. Although the state required county surveyors to exhibit some knowledge of their trade, the competence of nineteenth-century Kentucky county surveyors may well be questioned.⁸ Moreover, no official and authoritative source existed in Kentucky that could certify the definitions of county boundaries.⁹ At various times the General Assembly sought to have outline maps made for the purposes of redistricting the state, making readjustments in boundaries, and locating internal improvements. In 1849 a resolution was adopted to cooperate with the lithographers and engravers Boner and Klyng, of Louisville, in the preparation of a five-and-a-half-by-six-foot map of the state. County surveyors were asked to prepare outline sketches of their counties locating the county seats, roads, internal improvements, and streams. If the surveyor failed to comply with this request the deputy surveyor or any properly informed person could report. For their trouble Boner and Klyng would give each informant a free map.¹⁰ But apparently no such map was ever completed.

In sharp contrast to the average county-line locator, the surveyors who platted Lexington and Louisville demonstrated genuine engineering competence. In 1791 Lexington, within the bounds of Seventh and Maxwell streets north and south, and Locust and McGowan streets east and west, was laid off in "in lots" and "out lots," with streets blocked in squares. The surveyor in this case adapted the eighteenth-century English village scheme to the frontier West. Louisville was platted on a grid pattern that conformed to the contour of the Ohio River channel. It too was laid off in "in lots" and larger "out lots."

An astonishing amount of legislation, surveying, and registering of claims arose from the purchase of the

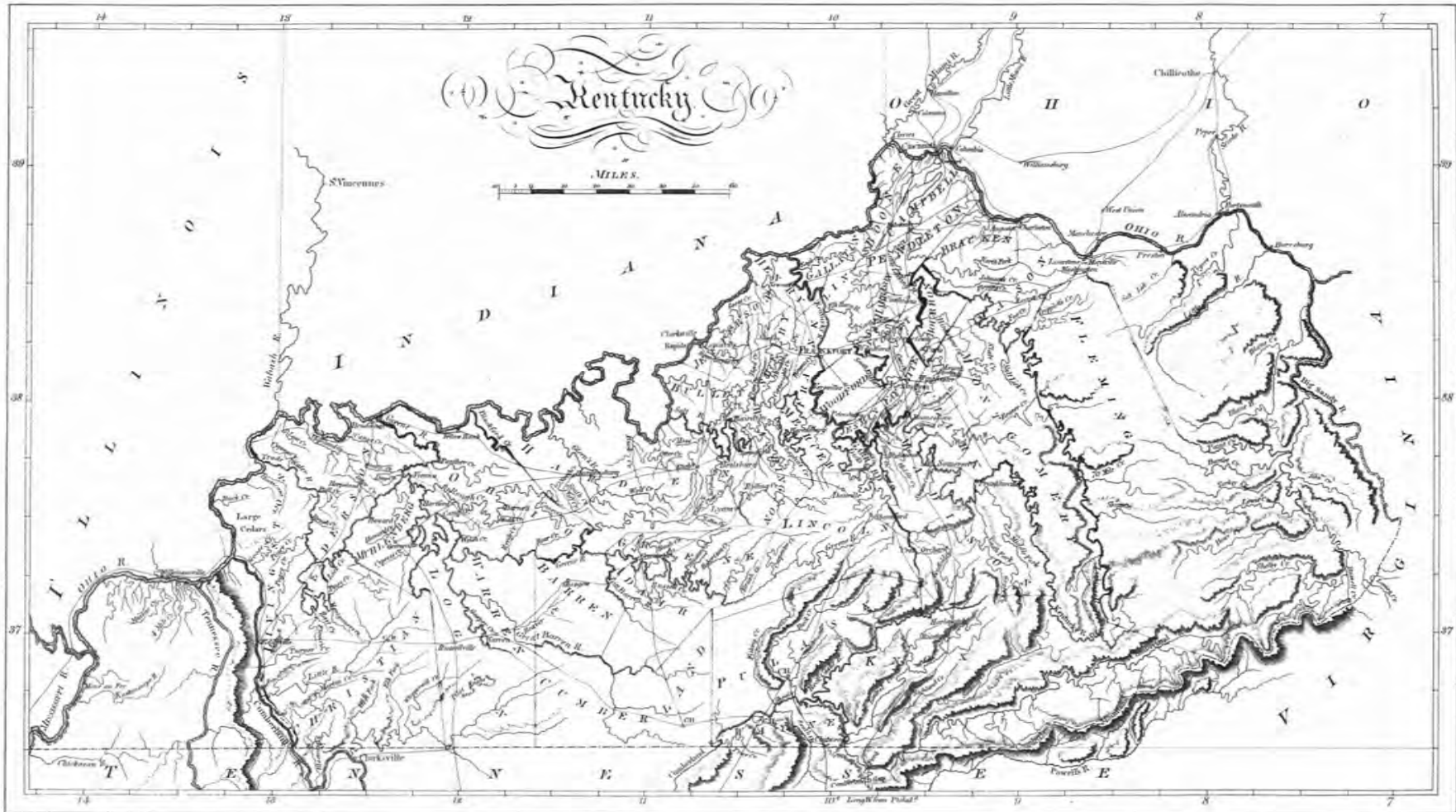


A map of about 1810 by Will Barker shows the developing road network reaching out from the Bluegrass region. The county outlines superimposed on the map are those of the ten counties of 1792.

Tellico lands from the Shawnee Indians in 1805. This strip of land, including the present areas of Whitley, McCreary, and Bell counties, was opened to settlement in 1810, but some settlers had invaded the lands much earlier and had to secure special consideration from the General Assembly. Fortunately the lands were located in rugged country, so that the early settlers were not numerous.¹¹

The final cession of Indian lands was made in 1819 when the Chickasaws accepted the terms of the treaty negotiated with them by Andrew Jackson and Isaac Shelby at Old Town. The Purchase area, Kentucky's last public land frontier, was opened to sale on the first Monday of January, 1822.¹² This was the first time that any part of Kentucky—with the exception of the 200,000 acres in present Henderson

County granted to the Transylvania Company in 1776¹³—had been surveyed before settlers were permitted to enter. These surveys were made on the township and section plan initiated in the federal Land Ordinance of 1785, an entirely new pattern of land division for Kentucky. (There is sharp contrast in land patterns between the Jackson Purchase area and older parts of the Commonwealth.) Until 1821 the Purchase area had appeared on Kentucky-Tennessee maps as blank Indian country; eight new counties, along with as many county seats, connected by new highways, were to be added to the Kentucky map in the new territory. On the face of it the law of 1821 seemed narrowly confined to the advance of settlers into the new region. This was not so; like earlier land laws, it was to become highly litigious.



Almost every succeeding year after 1779 either the Virginia or Kentucky legislature undertook to unscramble the confusion of land claims. Literally hundreds, maybe thousands, of settlers moved to the new West and settled on lands to which, under the law, they were unable to establish a sustainable title; they made no formal survey, and obviously could produce no official warrant. In the politer terms of the law these errant settlers were called "occupying claimants"; later they were called, properly, "squatters."¹⁴ These humble poachers were the pioneer forerunners of hordes of frontiersmen who moved all the way across the continent establishing their "cabin and corn patch" claims to land.

Occupying claimant lawsuits arose by hundreds, and boundary disputes provoked by them were almost numberless. For the first half century of their existence the circuit courts and the Kentucky Court of Appeals were almost overwhelmed by land cases. The omnipresent Virginia Compact provided that all private rights in lands in the Kentucky District were to be secure under the prevailing Virginia laws and those to be enacted in the future state of Kentucky.¹⁵ Kentucky lawyers, including Henry Clay, were to draw much of their livelihoods from this practice. Two of the most famous cases of dispossession by occupying tenants were those of Simon Kenton and Daniel Boone, both of whom lost large claims to smaller tenants who had established their hold on the land by building cabins and growing patches of corn.¹⁶

So pressing did the occupying claimant issue become that it was considered by the United States Supreme Court in *Green v. Biddle* (1821). In several laws enacted by the Kentucky General Assembly prior to that date squatters had been enabled to lay claim to vacant lands simply by settling on them. In 1821 the Assembly enacted a law outlining terms under which settlers could acquire title to lands in the Jackson Purchase. Sections 18-20 of this act ensured the rights of occupying tenants by stipulating terms under which they might defend themselves.¹⁷ The *Green v. Biddle* case sought to undermine this and all

other Kentucky laws that seemed to give the tenants in occupancy prior claims. Justice Story along with his colleagues held that the Kentucky law of 1821 violated terms of the Virginia Compact in which that state's rights, guarantees, and interests "shall be exclusively determined by the laws of Virginia, and that their sanctity and validity shall not in any way be impaired by the laws of Kentucky."¹⁸ In practice, however, the theory of the occupying tenant having prior rights prevailed in large measure, and Kentucky's land mass continued to be slashed into a drunken patchwork of small yeoman-homestead landholdings.

As Kentucky society matured economically and politically, it was necessary to open connecting and trade roads. Everything produced on the land had to be transported to the outside before it became economically profitable. Field crops became heavy freight, and livestock a self-propelled commodity. From the first years of settlement the trails back east swarmed with hogs, cattle, sheep, and mules.

The evolution of trails into roads in the history of Kentucky is a somewhat involved matter. For two decades, 1775-1795, the way from Cumberland Gap to central Kentucky remained a primitive woodland trace. There were difficult fording places across the streams, boggy stretches, and steep grades. In November 1795 the Kentucky General Assembly enacted a law ordering the opening of a wagon road to Virginia by way of Crab Orchard and Cumberland Gap. The road was to be made safe for the passage of wagons and carriages bearing up to a ton of cargo. This act set a thirty-foot standard width for future Kentucky public roads. Bridging and grading was to be done at major stream crossings, and some grading over difficult ridges. Among the bidders to perform this task was Daniel Boone, who had blazed the road initially, but Governor Isaac Shelby awarded the contract to James Knox and Joseph Crockett. These contractors spent the summer of 1796 surveying, relocating, and improving the hundred-mile link of the road south from Crab Orchard. A year later Knox and Crockett were authorized to open the road from present-day Pittsburg in Laurel County to Milford in Madison County. The same legislation authorized the placing of tollgates on the road, establishing the first of many toll roads in Kentucky.¹⁹ Thereafter, at almost every session from 1797 to 1890 the General Assembly considered some kind of legislation either

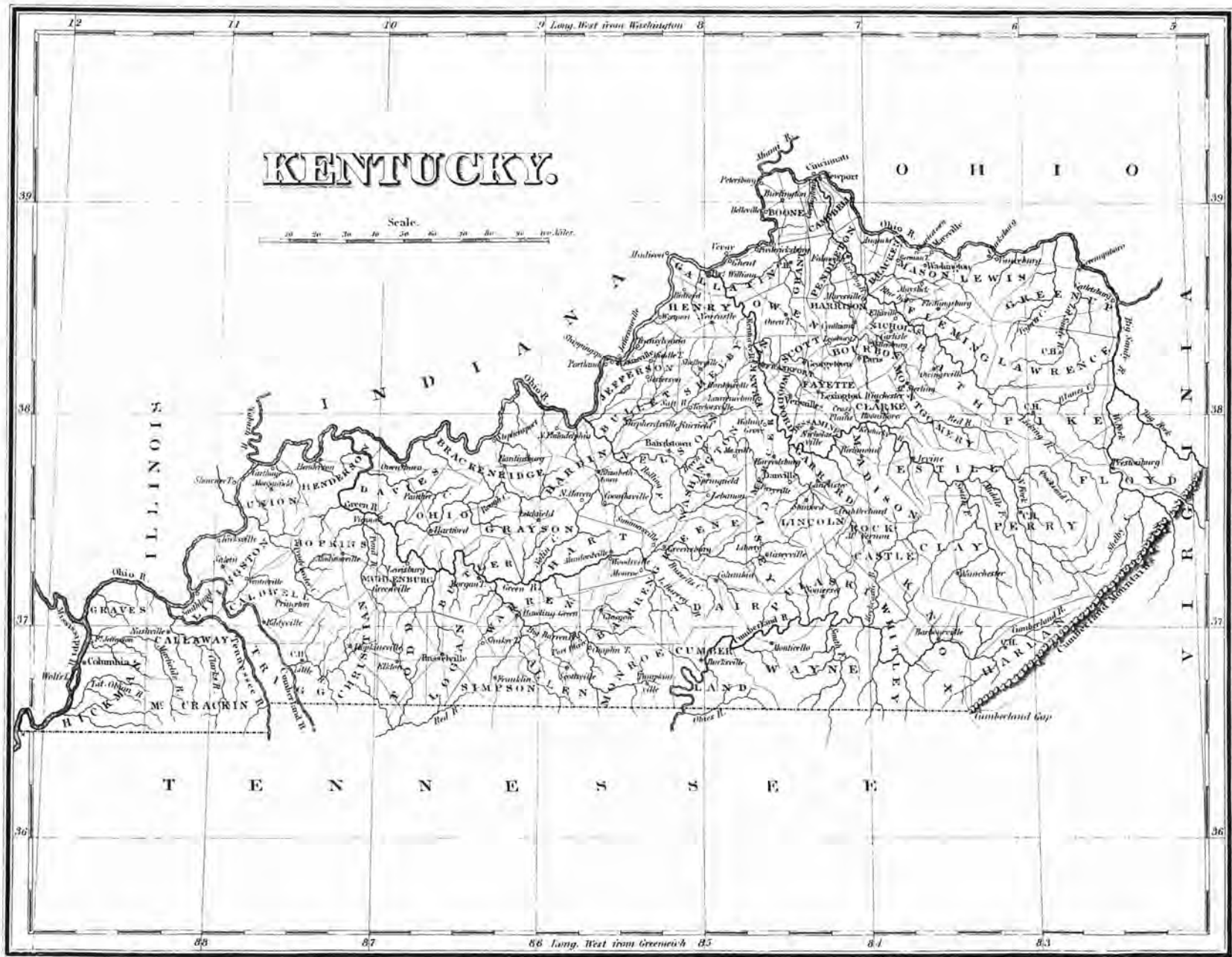
(Opposite) Kentucky in 1814 by Samuel Lewis. Forty counties are shown (there were legally fifty-six by that date), but Nelson County is omitted from the central region, and eastern Kentucky seems to be beyond the cartographer's ken. The Purchase area is correctly shown as no-man's-land.

KENTUCKY.

Scale.



50



granting charters for toll road companies or revising those that had been granted. Much of the pressure for development of this system of road management was generated in the Bluegrass and along the Ohio River.

In October 1796 the rejuvenated Wilderness Road was open to travelers.²⁰ This was the beginning of a long history of internal improvements in Kentucky. In 1797 the location and maintenance of roads were placed in the hands of the county courts. When the opening of a new road was proposed the route was to be "viewed" by a group of surveyors who either rode or walked over the way to decide whether the road was needed. They were also entrusted with the power to negotiate the passage of the new road over private property. Roads of fairly long mileage were divided into precincts, and commissioners were appointed to oversee the opening and future maintenance of the new highway. These quasi-officials were instructed to "call out" every white male inhabitant above sixteen years of age to perform a certain number of days' labor each year on the road.²¹ This system of forced cooperative labor resulted in the opening of an impressive mileage of public road in Kentucky, though it did little to assure adequate maintenance or passability.

As Central Kentucky farmers brought large acreages of land into production, roads to river landings became an absolute necessity, especially after 1811 and the appearance of the first steamboat at the Falls of the Ohio. By 1827, the General Assembly had greatly amplified the turnpike laws, and in that year it granted a charter to the expanded Maysville and Lexington Turnpike Company "for the purpose of forming an artificial (macadam) road from Maysville to Lexington."²² This was one of the earliest and most heavily traveled roads in the state, passing through a series of prosperous farming villages. Over it came immigrants, merchants, foreign travelers, and national politicians.

In May, 1830, the United States Congress approved a federal subsidy of \$100,000 to aid in the construction of the Maysville Road. But President Jackson vetoed the Maysville Bill, arguing that any internal improvement project supported by the

federal government should be of a general rather than local nature.²³ The president's view of the matter was shortsighted, for although the Maysville Road was in title a local highway it was in fact a vital link in the emerging national road system, between Zane's Trace and the National Road on the North and the Lexington and Nashville Road, the Natchez Trace, New Orleans and the Gulf of Mexico on the South.

Despite President Jackson's veto, the Maysville and Lexington Turnpike Company proceeded to improve its road. By early November, 1830, four miles of this important highway had been macadamized. By 1875 most of the main connecting roads in the Bluegrass had either been macadamized or had been conditioned by application of an all-season coat of crushed stone. Likewise bridges had been built.²⁴

In time most of the more populous parts of Kentucky were to be connected by private turnpikes and toll bridges. Arterial roads were built from Maysville to Lexington, Lexington to Louisville, and the Wilderness Road southward; Louisville was connected by a series of toll pikes with Nashville; Danville and Harrodsburg were connected with Lexington on the North and Nashville on the South. By 1860 cartographers had begun showing the main turnpiked roads in bolder lines on the maps of Kentucky.

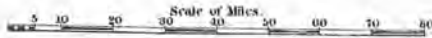
The coming of the steamboat strengthened the belief that the streams of the state offered the most certain solution of the transportation problem. Early it became a boast that Kentucky was blessed with a generous distribution of navigable and seasonally navigable rivers. The Virginia House of Delegates before the organization of the Commonwealth of Kentucky had undertaken to maintain the western streams open to navigation.²⁵ Laws were enacted regulating the building of mill dams, lakes, and obstructing bridges. Repeatedly the Kentucky General Assembly enacted laws declaring local streams navigable channels, even though they contained enough water to float crafts only during rainy seasons.

The most dramatic internal stream improvement project in Kentucky before 1875 was the construction of the Portland Canal at the Falls of the Ohio. Canalization of the Falls was a subject of discussion almost from the time the Falls area was settled, and the first of a series of companies formed for that purpose was organized in 1804. This was the Ohio Canal Company, which in the following year had a scientific sur-

(Opposite) Kentucky in 1824 by Anthony Finley. The county outlines begin to have a modern look. In the Purchase (open to settlement only two years!) four of the eventual eight counties are shown, though not correctly placed.

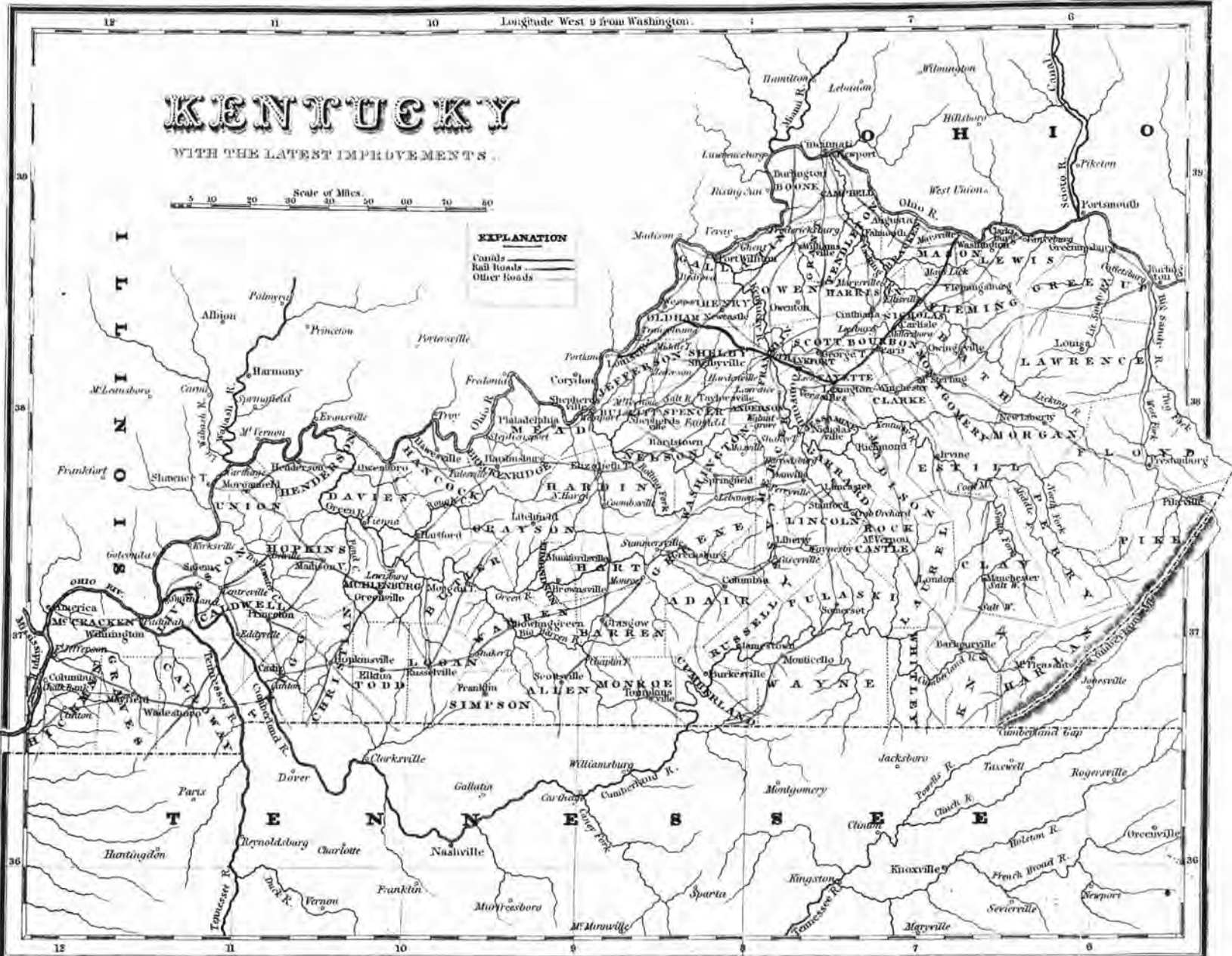
KENTUCKY

WITH THE LATEST IMPROVEMENTS



EXPLANATION

- Canals
- Rail Roads
- Other Roads



vey of the site made by Louisville surveyor Jared Brooks (see map No. 9 and pages 77-78, below). Although the company failed, it had set a detailed proposal for the canal before the public, and discussion continued in ensuing years. Progress was impeded by the difficulty of obtaining sufficient capital, especially after the panic of 1819, and by controversy over the site, but in 1825 the General Assembly granted a charter to the Louisville and Portland Canal Company, formed by sixteen Louisville businessmen, including James Guthrie, Charles M. Thruston, James Brown, Robert Ormsby, and Robert Breckinridge. This corporation was capitalized at \$600,000 and was obligated to begin construction of the canal within eighteen months.²⁶

The General Assembly was optimistic. The Portland Canal was not to be constructed either in so short a period or for so little money. The two-mile project cost \$750,000, and the contractors in this short distance had to remove a tremendous amount of earth and stone and bolster the ditch with substantial walls. They had to reduce the elevation of the Ohio River in this distance by twenty-four feet. On December 5, 1830, the steamer *Uncas* passed through the locks and began a new era of western navigation. By 1843, 13,776 steamboats had passed through the canal and 4,701 flatboats had drifted through. These vessels bore 2,500,000 tons of freight and an unlisted number of passengers.²⁷

This was the age of river and water transportation. The General Assembly in 1816 adopted, with some modification, the Virginia statutes for the improvement of navigable streams.²⁸ Again legislators were reluctant to place a tax burden upon the people and undertook to solve Kentucky's navigational problems by adapting the highway scheme of surveyors and overseers to the clearance and maintenance of navigable channels. This meant that men and boys from sixteen years upward, living near a river or creek, were subject to being called out by the surveyors to contribute several days' work each year. The surveyor was held responsible for removing mill dams, water weirs, drifts, and overhanging brush, and for deepening riffles.

In 1818 the General Assembly appropriated

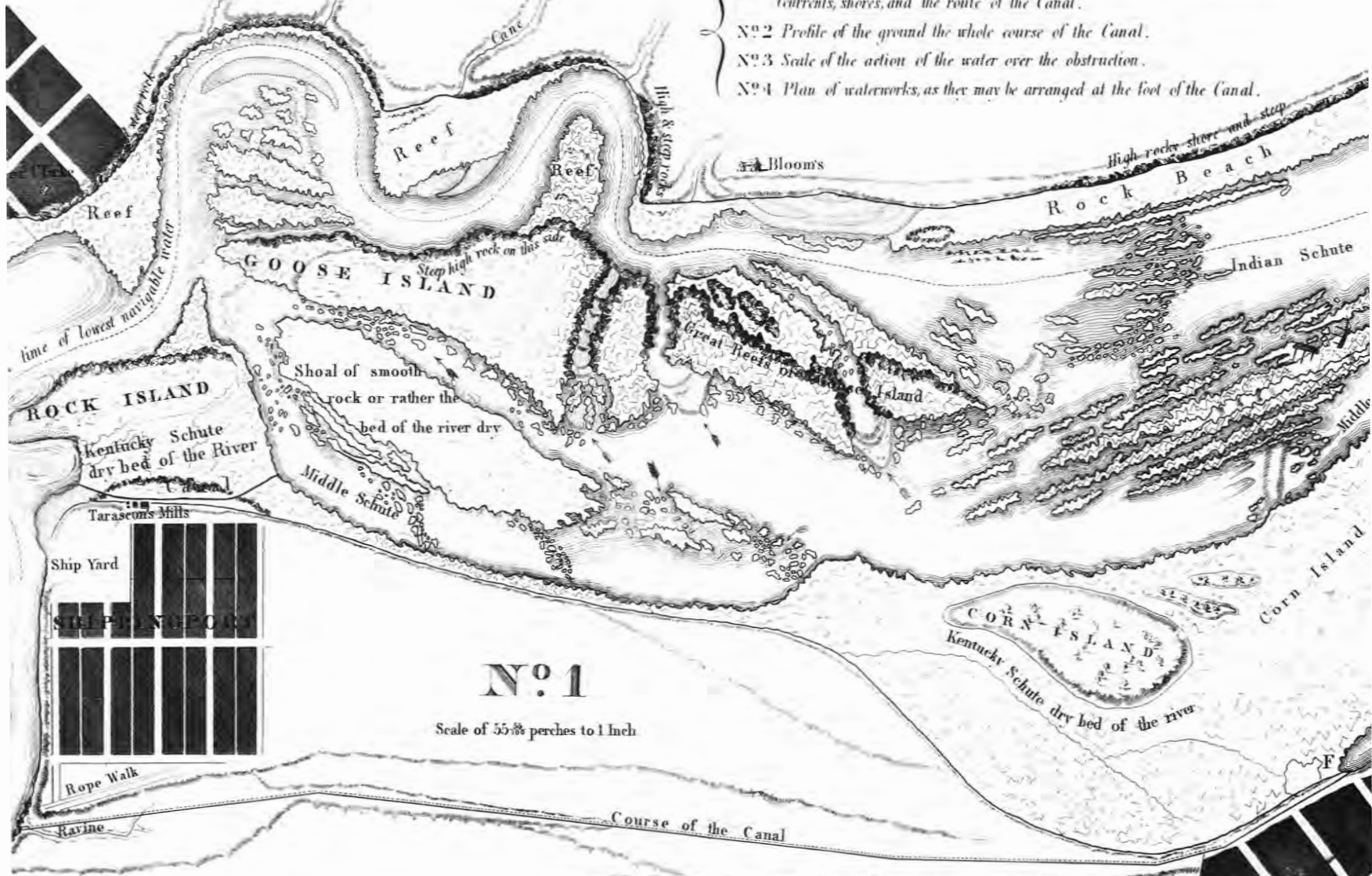
(Opposite) A map published by S. C. Atkinson about 1837 shows internal improvements including turnpikes, the Portland Canal on the Ohio, and the beginning of the railroad system.

\$40,000 of the Commonwealth's share of the dividends returned by the Bank of Kentucky to improvement of the channels of the Cumberland, Kentucky, Licking, Green, and Salt rivers.²⁹ A commissioner was to be appointed for each stream and he was to report directly to the Assembly how he spent the money and what he had done to improve the rivers. This system, like that of the road overseers, was ineffective. A decade later a board of internal improvements was created and given a larger appropriation of state funds.³⁰ By 1835 most Kentuckians were convinced that a major effort and expenditure of money was needed for transportation. The authority of the Board of Internal Improvement was broadened and its appropriation increased. The Governor and four private citizens composed the Board, and the state subscribed to the stocks of toll navigational companies. The 1837-1838 Report of the Board described an amazingly extensive list of stream and road improvements then under way.³¹ It revealed how deeply Kentucky had focused its attention and funds on the development of waterways to the neglect of the dawning age of the railroad.

There were serious obstacles to the building of any appreciable mileage of railway in Kentucky before 1850. The agrarian state had not developed the necessary amount of capital to undertake the building of a railroad. The terrain in most directions required high expenditure to grade and prepare a roadbed, bridge streams, and to purchase rolling stock. Nevertheless, the future appeared bright to most Kentuckians, and internal improvements were supported with revivalistic fervor. "Who can predict," wrote a prophet, "the aspect Kentucky will present when her streams become permanently navigable, and when her roads through the interior become commodious channels of trade? The day is fast approaching when the difficulties of transportation and travel which have been encountered by this community, will live in tradition only, and be listened to with incredulity by the rising generation. Not long ago it was, at many seasons of the year, a hard day's ride from Frankfort to Shelbyville, a distance of twenty-two miles, while for wheel carriages the road was absolutely impassable. The road from Frankfort to Maysville, the great thoroughfare of the state, was in the same condition. Now, at all seasons, and in day or night, large and commodious coaches pass with safety and rapidity. Such in a few years, will be the situa-

I N D I A N A

- Nº 1 *Is a Plan of the rapids of Ohio, at low water, showing the islands, rocks, sands, currents, shores, and the route of the Canal.*
- Nº 2 *Profile of the ground the whole course of the Canal.*
- Nº 3 *Scale of the action of the water over the obstruction.*
- Nº 4 *Plan of waterworks, as they may be arranged at the foot of the Canal.*



K E N T U C K Y

tion with all leading highways of the country. We have begun the good work, it is true, at a late day; but this consideration should only stimulate to greater effort in order to enable us to overtake those states who have got so many years the start of us."³²

Even a casual investigation of the Kentucky laws before 1880 reveals the obsession of the General Assembly with internal improvements. Despite the fairly generous support this body gave the improvement of the streams of the Commonwealth, it failed to achieve its main objective. Most of the internal rivers were navigable only under highly circumscribed conditions. Few of them were wide or straight enough to sustain steamboat traffic. Most even of the larger streams were broken by fall-line barriers or riffles and shoals. All of them were subject to excessive flooding or low-water stages during drouths. Added to these real physical drawbacks they served no important commercial center directly. Lexington, in the center of the most fertile and advanced agricultural area in the state, was too far away from a navigable stream to escape heavy overland transportation costs. By 1825 Louisville and the rise of steamboat traffic threatened stifling competition. The only way the land-locked city in the center of a rich agricultural belt could escape defeat was to build a railroad. Between 1827 and 1830 there was local agitation to undertake such a solution. Both Baltimore and Charleston had initiated projects to reach out into the vast inland trading areas. Lexington could use the same means to reach the steamboats on the Ohio River. In 1830, after much wearying debate as to the location of such a road, the Kentucky General Assembly chartered the Lexington and Ohio Railroad Company to build westward to an undesigned junction with the Ohio River. There was a scramble to find local capital enough to build the road, and to find an engineer who could oversee the location of the route and the laying of a track. The first horse-drawn car was sent hustling over the first mile and a half of track on August 15, 1832, an event celebrated with eloquent oratorical visions of the future, but too little realism for the moment.

The Lexington and Ohio Railroad as chartered never reached the Ohio. Repeatedly legislation was

necessary to modify the ambitions of the promoters. In fact the road was not completed to Frankfort until 1834 and only then by overcoming major financial and engineering handicaps.³³

Almost two decades after the original charter to the Lexington road was granted, the General Assembly chartered the Louisville and Frankfort Railroad Company, thus giving Louisville promoters an edge over those of Lexington.³⁴ Five years later the two roads had been built into Frankfort, but the bridge across the Kentucky River was too weak to bear the weight of locomotives of more than six tons. Finally, by 1855 the combined Lexington, Frankfort, and Louisville companies had begun to operate a fairly effective rail service between the towns. This fact appeared on some maps as a red line of advance in travel in Kentucky.

In a broader sectional sense Kentucky was a borderland keystone between the cotton South on the Atlantic and the Gulf Coast and the Middle West. In 1837 Robert Y. Hayne and a company of promoters stirred considerable publicity and some internal Kentucky bitterness by promoting a South Carolina railroad from that state across Kentucky to the Ohio at Cincinnati or Louisville. Kentucky editors became highly agitated over this proposal and generated considerable damaging rivalry in the state.³⁵

Even though Louisville was strategically located on the Ohio River at the Falls, it was not nearly so fortunate for the development of inland trade. In order to retain its southern trade by tapping the expanding cotton belt and to stave off competition from its river competitors, Cincinnati and St. Louis, Louisville had to promote and build a railroad south toward Nashville and its railway connections.

Agitation for the building of a southern road was begun as early as 1832 when the editor of the Bardstown *Herald* suggested the idea. Louisville had twin interests in such a project; it could connect itself with the South and with the Western Kentucky Coalfield. It desperately needed the certain supply of fuel the latter offered. The *Herald* had suggested that a railroad should be built parallel to the old Louisville and Nashville boat road, which connected with the Natchez Trace. John L. Helm, later to be governor, was an active advocate of this project before the Kentucky General Assembly.³⁶ The biting depression of 1837, however, almost halted all Kentucky internal improvement undertakings, and it was not until the

(Opposite) Part of Jared Brooks's plan of the Falls of the Ohio, which illustrated the first fully articulated proposal for the construction of a canal.

latter part of the next decade that the Louisville and Nashville railway proposal was revived.

The Kentucky General Assembly granted the Louisville and Nashville Railroad a charter in March, 1850 and a month later the Tennessee General Assembly approved a charter.³⁷ There followed a decade of frustrating search for engineering talent, capital, and materials with which to build the road. Between Louisville and Nashville the Muldraugh Hills barrier was almost as forbidding as the Falls of the Ohio had been to river traffic. Beyond this range it was necessary to bridge the Salt, Barren, Green, and Cumberland rivers along with numerous smaller streams. On October 31, 1859, the first train ran the entire distance from Louisville to Nashville.³⁸ The Louisville and Nashville road, including the Memphis and Lebanon branches, had cost \$7,221,204.91, a sum well beyond the capabilities of Kentuckians to supply.³⁹ It was necessary to pro-

vide support from European bankers and investors.

The building of the Louisville and Nashville Railroad was the most significant internal improvement undertaken in Kentucky before 1860. It connected the Commonwealth with the expanding South, and immediately became economically profitable. Not even the Ohio River was potentially so vital a channel of trade. With its branches this railroad added significantly to the economic dimensions of Kentucky. It not only appeared on the maps as a new landmark, but it was to have tremendous impact on the development of the state's resources.

In 1860 Kentucky had under construction eleven railroads projected over a distance of 570 miles, an increase of 490 miles since 1850.⁴⁰ As war approached, no single fact emphasized more the strategic border position of Kentucky than the directional patterns of its navigable streams, roadways, and railroads.

8. Years of Conflict

THE Ohio River, more than a political and sectional dividing line, contributed strongly to the psychological awareness of Kentucky as a border and southern state. This tradition had deep historical roots. Originally the river was a boundary between the northern and southern Indian groups, the area of Kentucky being largely a common hunting ground. In the era of thrusting open the anglo-American frontier west of the Appalachian highlands, the Ohio separated settlers from the antagonistic Indian villages to the north. Later, as settlers came to occupy both banks of the river, the stream separated people of common origins by both the narrow water barrier and legalities created by an expanding nation. From 1787, and the adoption of the Northwest Ordinance, down to 1865 it divided slave and free territories, and thereby became a barrier of social consciousness, traces of which still survive.

Scarcely a traveller who took the pains to keep a

journal was unmindful of the fact that he breathed the air of freedom north of the Ohio, while on the southern shore the social atmosphere was stifled by the existence of slavery. The British journalist Alex MacKay wrote in 1847: "The same difference was all along observable between Virginia and any of the northern states. Whilst the one side presented every appearance of industry, enterprise, and activity, a sleepy languor seemed to pervade the other, which was not a mere fancy resulting from preconceived opinion, but real and palpable. The Ohio, for almost its entire course, separates from each other the realms of freedom and slavery."¹

Kentuckians themselves, even more than foreign visitors, were conscious that the Ohio River offered a constant threat to the institution of slavery. It stretched across too much remote frontier to be protected against a rising tide of fugitive escapes. A fairly large number of slaves had moved westward with

the flow of settlers from Virginia and Maryland in the early years of the westward movement. Many of the immigrating white families brought blacks with them to aid in the creation of new homesteads.² Later the older states reduced their slave populations by exporting excess laborers to the West. The Virginia House of Delegates may have been foresighted enough to have in view the export of slaves when it retained control of the Ohio in its cession of the Northwest Territory in 1781.

A fairly reliable indication of the proportions of the movement of slaves from east to west is contained in the census reports after 1790. By the first United States Census there were 11,830 slaves in Kentucky, and by 1830 this number had grown to 165,213, or 24 per cent of the entire population.³ By the latter date the rapid increase in the number of slaves, the changing pattern of land holdings, and the rise of a self-sufficient yeoman farmer class had reduced demand for slave labor in Kentucky. This date also coincided with the expansion of the rich cotton belt in West Tennessee, Alabama, Mississippi, and Louisiana, where there prevailed an almost insatiable need for cheap labor.⁴ After 1820 the role of the Ohio River shifted from that of a channel of importation to one of exportation. Increasingly Kentucky slave traders shipped slaves south aboard the Ohio River steamboats to be sold in the lower southern market. So alarming did this distasteful trade become that the Kentucky General Assembly enacted the famous Anti-Importation Law of 1833, which forbade the importation into Kentucky of slaves for the purpose of reselling them south; this law became a highly controversial one, an issue in nearly every political campaign and in the Constitutional Convention of 1849.

Almost from the turn of the nineteenth century down to the end of the Civil War the Ohio River remained an open threat to the stability of slavery in Kentucky. Every ferry boat, steamboat, and hidden skiff was a potential means of escape to the northern bank and freedom. Periodically the General Assembly undertook to control fugitive losses by enacting laws forbidding ferry and steamboat operators, or any other persons, from setting slaves across the Ohio. In time attempts to recapture and reclaim fugitive property became one of the tensest issues in regional history.⁵

Progressively after 1840 the Ohio River became

a more troubled boundary. As the abolition movement gained momentum the spiriting of slaves away from Kentucky became both an economic and emotional threat. Along the northern shore appeared havens of safety like the Rankin House below Ripley, Ohio, where runaway slaves could find friends and aid to make good their escape. Whatever the historical facts may be about the actual existence or myth of the underground railroad, some Kentucky slaves did escape across the Ohio, and some of them were even escorted out of the state by abolitionist friends. There was no way that effective legal or geographical barriers could be maintained against this human crusade.

In effecting the great compromise of 1850, which attempted to reconcile national and sectional issues, Congress enacted the Fugitive Slave Law, the central object of which was the capture and return of fugitive slaves to their southern owners. Attempts to enforce that law stirred deep resentments on both sides of the Ohio; stories of the hunting and kidnapping of blacks in free territory especially gave rise to indignation. In the emotional atmosphere engendered by the Fugitive Slave Law, *Uncle Tom's Cabin* was a sensation. In the novel's Kentucky setting, the Ohio River played a symbolically appropriate role. Eliza's husband, George Harris, had escaped across the river; then Eliza, holding her child close to her breast, escaped her pursuers by leaping from ice block to ice block, leaving bloody footprints behind. The Kentucky public had already been aroused by the publication of Cassius M. Clay's *True American* in 1845; *Uncle Tom's Cabin* added fuel to the fire of resentment.

The rumblings of national unrest threatened the commerce of the Ohio Valley, and Cincinnati merchants especially were anxious to retain close and cohesive relations with Kentucky and the South. It was their desire, along with that of much of Ohio political leadership, to ward off threats to the Union. Kentucky and Tennessee formed a solid insular bloc along the Ohio to be united with the Middle West in exerting a strong unionist sentiment.

North of the Ohio Cincinnati merchants and Ohio officials made an effort in January 1860 to cement friendship and loyalty with Kentucky and Tennessee. At the time of the completion of the Louisville and Nashville Railroad the governor and legislators of Tennessee came to Louisville to celebrate the

event. At the instigation of the Cincinnati mayor and merchants Governor William Dennison invited the governors and legislators of the two states to come to Cincinnati and Columbus for a general intersectional meeting as an expression of solidarity in support of the Union and the commercial growth of the Ohio Valley. Captain Zach Shirley invited the delegations to be his guests aboard the steamer *Jacob Strader*.⁶

From the moment the first visitor's foot touched ground in Cincinnati until the departure of the *Jacob Strader*, orators undertook to outdo one another in eloquent proclamations of eternal friendship and national loyalty. Judge Bullock of Cincinnati said in a toast: "There is nothing mean in the union of Tennessee and Kentucky. It is as pure as a sister's love. All that each holds most dear would lose more than half its value if it could not be shared with the other. If there be a political union, which is so strongly cemented that it can not be severed, it is that which binds together the people of Tennessee and Kentucky." Not to be outdone, Representative John K. Goodloe of Versailles further scattered the sweet petals of brotherly love upon the rippled bosom of the Ohio. He also thought that Ohio and Kentucky, sprung from a common mother, had every reason to love each other. "It is true," he said, "that a broad sheet of water flows between us, but instead of dividing it only unites us and forms a common highway for the transportation and passage of the products and commerce of fruitful and wealthy states. And the same Ohio river is but a type of our nationality and oneness. . . . May the Sovereign States of this Union, like the drops which compose 'The Beautiful River,' unite and flow in unruffled and harmonious association to the accomplishment of our great destiny."⁷

The jubilant border outpouring of fidelity and brotherly union faded as rapidly as it had bloomed. Within eighteen months the Ohio, which John K. Goodloe had so eloquently proclaimed "that broad sheet of water," became a broad channel of border anxiety and strife. In 1861 Confederate forces were attempting to thrust the Civil War onto Kentucky soil by forming a slender line of military occupation from the Mississippi bluffs at Columbus to the saddle of Cumberland Gap. Thus was begun the military process of planting upon the map of Kentucky new landmarks and bloody monuments.⁸

On all sides Kentucky was strategically vulner-

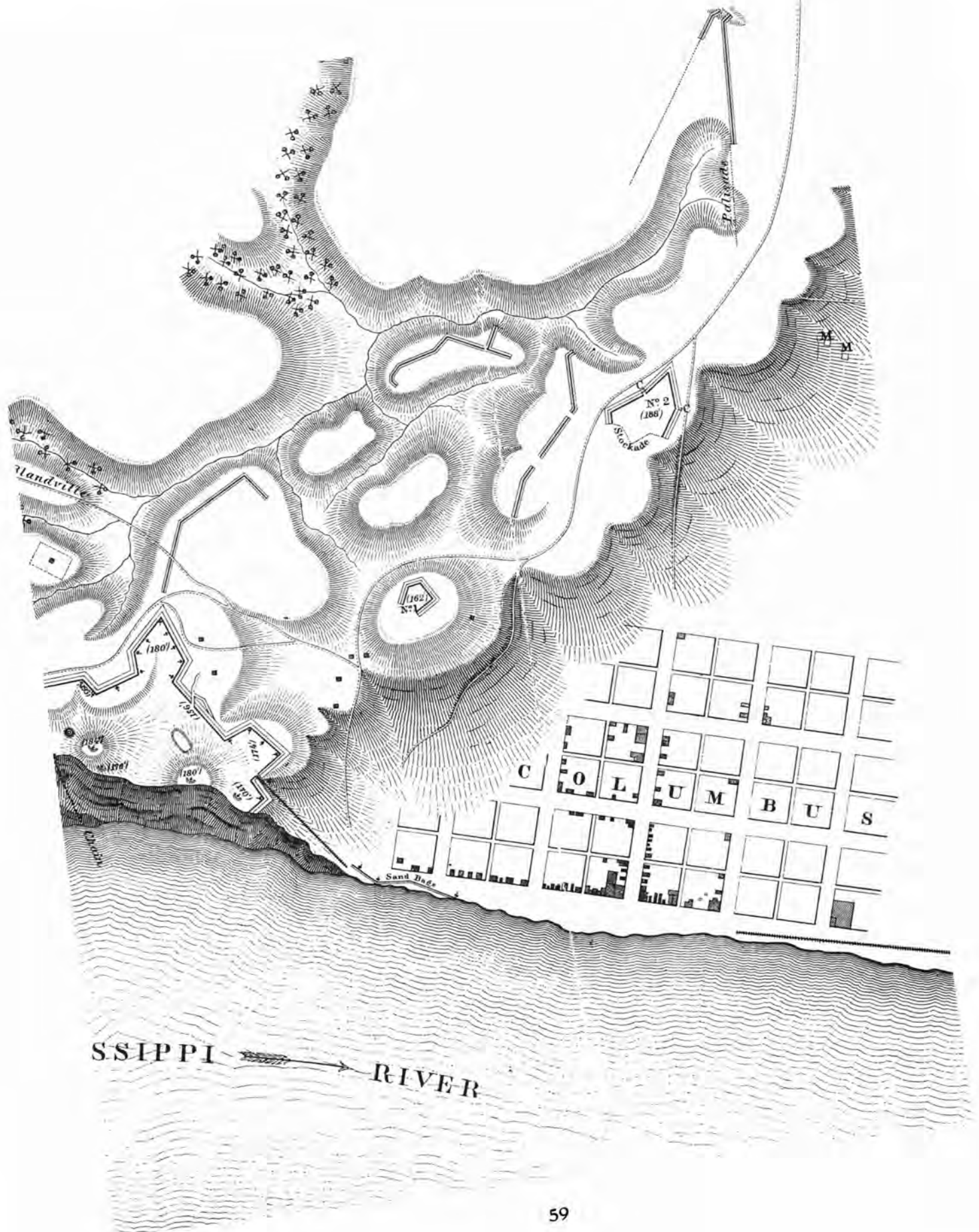
able to invasion by armies from the North and South. Occupation of Kentucky was vital to both sides, but especially so to the South. In the opening months of the Civil War the Confederacy attempted to string a loosely manned and fortified line from the strategic Mississippi River frontier at Columbus eastward to the Cumberland Gap. On the western anchorage of this line were such vital points as Paducah at the mouth of the Tennessee, Smithland at the mouth of the Cumberland, and in the middle of the line Bowling Green and Russellville.⁹

Almost impulsively General Leonidas Polk violated Kentucky's neutrality by moving his Confederate command, September 4, 1861, to the village of Columbus overlooking the Mississippi and the willow flats near Belmont, Missouri. Soon thereafter Albert Sidney Johnston moved to Bowling Green and the command of Confederate forces in the region. On the eastern end of the line General Felix Zollicoffer attacked Union forces under the command of Colonel Theodore T. Garrard, Colonel Frank Wolford, and General Schoepff in the battle of Wildcat or Rockcastle Hills, October 21, 1861. This was an inglorious battlefield unworthy of defense, and was a Confederate defeat.¹⁰

By the latter date Kentucky's neutrality had been destroyed and the state swarmed with Union, Confederate, and Home Guard troops. Several points of military concentration came into existence, among them Louisville, Paducah, Bowling Green, Smithland, Camp Dick Robinson on the Kentucky River, Danville, and Logan's Crossroads. Kentucky's map was now becoming spotted with locations of troop encampments, minor skirmishes, and lines of invasions and marches. On January 19, 1862, a fairly significant secondary skirmish-battle occurred at Mill Springs in Pulaski (Wayne) County. Here Union forces under the command of General George H. Thomas defeated the Confederates led by General Zollicoffer and Major General George B. Crittenden. This action badly shattered the eastern section of the Confederate line.¹¹

On the Mississippi, Union forces under the command of General Ulysses Grant bypassed Columbus and moved up the Mississippi and Ohio to Paducah

A detail from the map of the "Rebel Fortifications" at Columbus, prepared by United States Army Engineers of the Department of the Mississippi.



MISSISSIPPI RIVER

and Smithland. Early in 1862 Grant moved up the Tennessee and Cumberland rivers forcing Johnston and General Simon Bolivar Buckner to withdraw from Bowling Green and Russellville into Tennessee.¹²

At the Falls of the Ohio the city of Louisville, by then an important mercantile and manufacturing center, in 1861 was of sharply divided loyalties. The unionist spirit ran stronger, largely because of the powerful influence of George D. Prentice and the *Louisville Journal*, Joshua Speed, Congressman Robert Mallory, James Guthrie, and John Hopkins Harney. General Robert Anderson, of Fort Sumter fame, moved into Louisville early in September, 1861, and assumed command of the Union headquarters of the Department of the Cumberland. On October 8, Anderson was replaced by General William Tecumseh Sherman and Louisville remained under Union control to the end of the war.¹³

Withdrawal of the Confederate forces and the movement of Grant's command up the Tennessee and Cumberland rivers early in 1862 only temporarily removed the war from Kentucky's borders. Following the Battle of Shiloh on April 6 and 7, a drive was reopened to push the war northward to the Ohio River front.¹⁴ In July General John Hunt Morgan and approximately 900 mounted men entered Kentucky on the 9th and rode north by way of Glasgow, Harrodsburg, Lawrenceburg, Midway, Georgetown, Cynthiana, and then back southward by way of Richmond and Somerset to Eastern Tennessee. Behind them they left a faint tracery of war at least in their stops in the town and the minor skirmish at the Cynthiana bridge on the 17th. That September Morgan's men again rode north, this time as a part of General Braxton Bragg's drive into Kentucky to recruit support for the Confederacy and to establish a defense line on the Ohio.¹⁵ Of all the military actions in Kentucky none seems to have followed a more random course than Bragg's advance toward the center of the state. From the southeast, General Kirby Smith's command rode up the old Wilderness Road from Cumberland Gap, moved into Lexington on September 1, 1862, and reconnoitered about the town until early in October, waiting for General Bragg. General Don Carlos Buell followed Bragg up from Tennessee, advancing northward along the Louisville and Nashville Turnpike and the Louisville and Nashville Rail-

road. The Union forces had a safe anchorage in Louisville, which Buell no doubt believed to be Bragg's destination. By late September southern and central Kentucky were overrun by troops.

From the perspective of later years it would appear that although Braxton Bragg had excellent reconnaissance units in his command, he used them ineffectively if at all. The inadequacy of the Kentucky maps he had in hand may also have a bearing on the events that followed. He could scarcely have advanced on a less strategic spot than tiny Perryville, tucked away in the southwest corner of Boyle County, where on October 8, 1862, Union and Confederate forces were joined in battle in the dry, brush-covered countryside. (See Map No. 10 and pages 78-79.) Perryville marked the turning point of the second major Confederate withdrawal from Kentucky. General Bragg and the Confederates dragged their floundering wagon train back to Tennessee by way of Somerset and the crossing of the Cumberland River.¹⁶

Conclusion of the Civil War thrust Kentucky headlong into an era of feverish change. Every phase of life in the Commonwealth was to feel the influences of a new industrial and political age in which internal and external relationships were realigned. Both shifts in population and the presence of thousands of newly freed slaves necessitated fundamental reworking of political patterns. The great public land frontier continued to draw away from Kentucky a heavy flow of population, depleting the native labor force. With a growing awareness of the social responsibilities of the state and the counties, accurate mapping became a necessary adjunct to planning and administration.

After 1865 it was impossible for Kentucky to expand its economy without more complete knowledge of its resources and their location; in the years immediately following the war the lack of adequate maps had an incalculable cost in capital and human well-being. No legislation, constitutional revision, educational planning, or institutional organization could be carried out intelligently without dependable maps. In this era maps had become as much instruments of progress as improved implements and industrial machines, or application of new sciences.

THE MAPPING OF KENTUCKY

From the eastern limit of this state, where it bounds upon Virginia, to the mouth of the Ohio is between six and seven hundred miles. In this whole distance, the northern limit of the state is upon the Ohio. Thence it bounds upon the Mississippi between fifty and sixty miles. Almost the whole of the state, therefore, in its configuration, belongs to the Valley of the Ohio. The eastern and southern front of the state touches upon the Alleghany mountains, and their spurs descend, for a considerable distance into it.

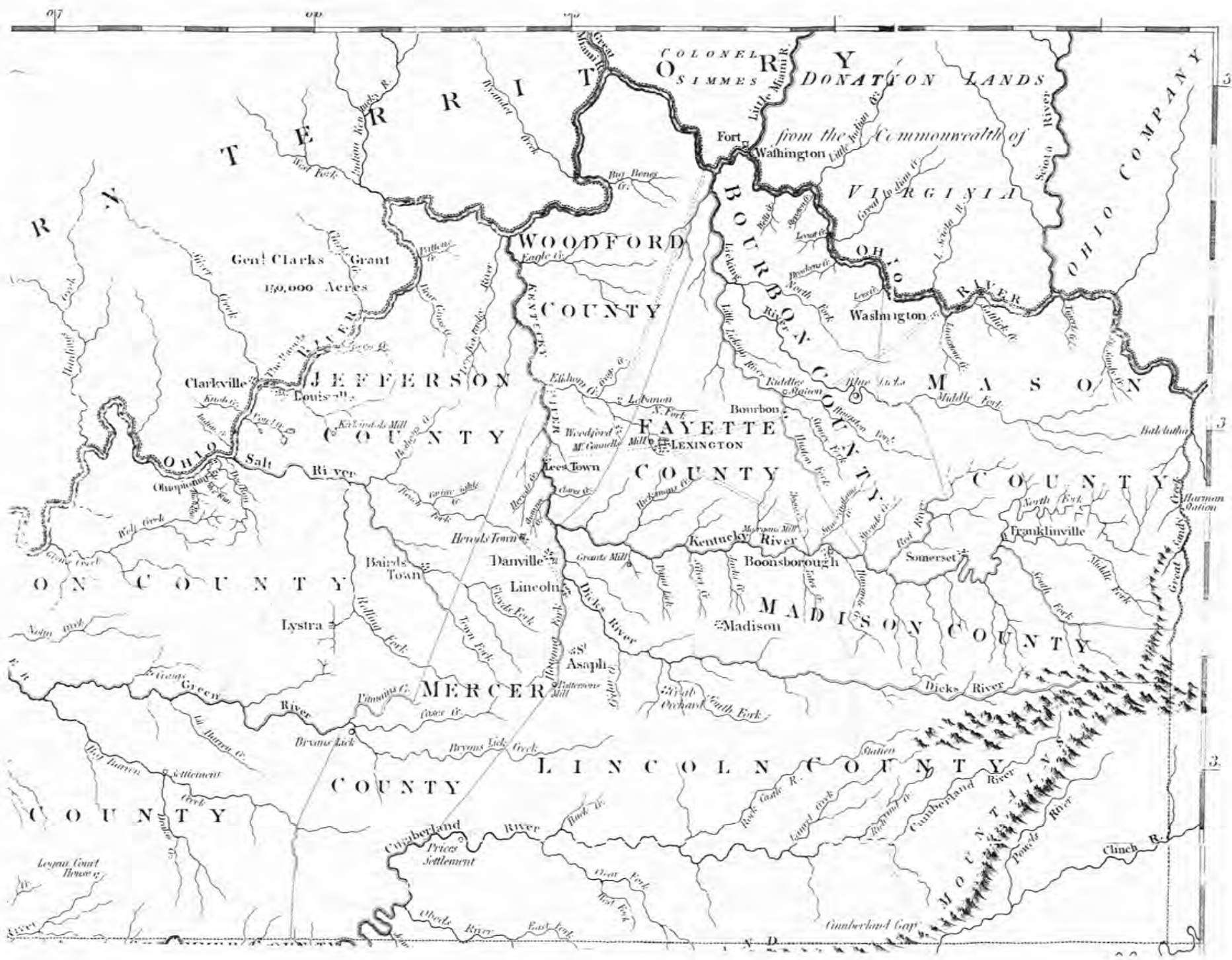
Timothy Flint, *Condensed Geography and History* (1828)

THE mapping of Kentucky was begun well before the region became a political entity, and even before it bore a localized name. As a borderland lying across the southern half of the Ohio Valley and across the upper South, it has occupied a strategic geographical position. The spreading settlements formed in central Kentucky were located directly in the path of the moving frontier in late eighteenth- and early nineteenth-century America. As Cumberland Gap in the southeastern corner of the Commonwealth and the river passage to the northeast poured settler-immigrants into the region, landmarks sprang up in the location of forts and stations. Along the Ohio such famous landmarks as Limestone Creek, the mouth of the Kentucky River, and the Falls of the Ohio appeared on the early maps.

Large numbers of these early maps were copies of still older maps, many were outright plagiarisms, and some almost seem to have been drawn from the imaginations of their engravers. Out of this mass of cartographic materials there are some maps of genuine historical significance. Among them is the Lewis Evans map, published in Philadelphia in 1755 and revised and republished in London in 1776 under the signature of Thomas Pownall, member of Parliament. This map is of the central colonial area, including the Ohio Valley, in which the Kentucky country was noted.

In 1784 John Filson published his map of Kentucky, which was engraved by Henry D. Purcell and printed by T. Rook of Philadelphia. There has been a running debate as to whether or not Filson published his map as an integral part of his book, *The Discovery, Settlement and Present State of Kentucky* (Wilmington, 1784). As perverted as Kentucky geography appears on this map, the document formed an important basis for the drafting of future maps and it has been reproduced in numerous editions over the past two centuries.

Elihu Barker of Philadelphia created, probably in 1792, the most reliable and comprehensive map of the Commonwealth up to that time (No. 3, below). He projected his work partly upon the Filson map. Barker established with amazing accuracy the outer boundaries of the Commonwealth, and located the general stream system, good land and natural resources, settlements, and roads. John Russell published his "Map of the State of Kentucky; with Adjoining Territories" with H. D. Symonds of London in 1794. The contents of this map were apparently prepared at about the same time as Barker's. Barker shows eight counties, Russell ten. Actually, by 1794 there were fifteen. Unlike Barker, Russell had little grasp of the physiographic features of Kentucky; except for a token patch of mountains and the outer Cumberland Range, the state appears on his map to



COLONEL OSIMMES DONATION LANDS

from the Commonwealth of VIRGINIA

Genl Clarks Grant
150,000 Acres

WOODFORD COUNTY
Eagle Cr.

FAYETTE COUNTY
LEXINGTON

MADISON COUNTY
Madison

LINCOLN COUNTY

MERCER COUNTY

COUNTY

JEFFERSON COUNTY
Clarksville

ON COUNTY

COUNTY

Lesau Court House

OHIO COMPANY

MASON COUNTY

COUNTY

MADISON COUNTY

LINCOLN COUNTY

COUNTY

CUMBERLAND RIVER

POWELL RIVER

CLINCH R.

CUMBERLAND GAP

MOUNTAIN

W. VA.

be a flat plain penetrated by an intricate maze of streams. The eastern-northeastern boundary is shown as the spine of the Cumberland Mountain and the "Great Sandy" River, which is shown running on a direct north-south course.

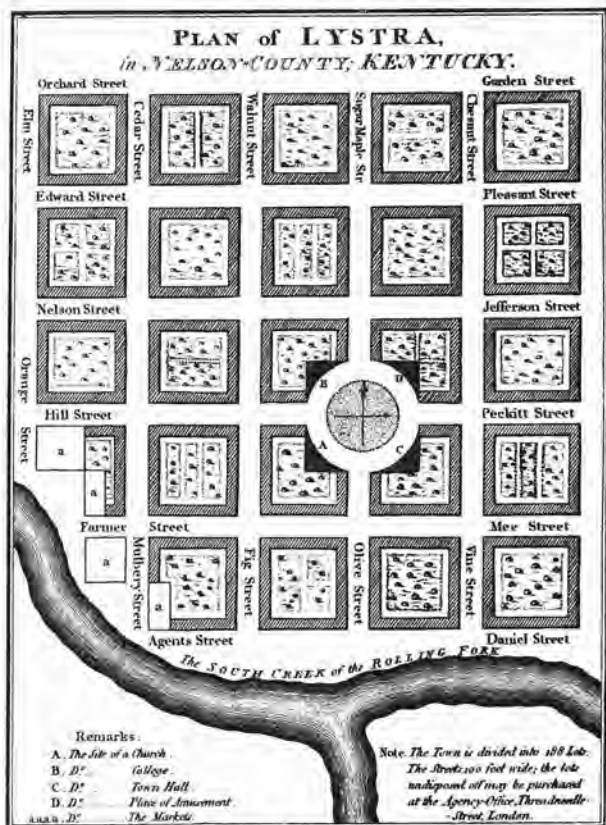
By 1794 Kentucky map-makers had gained a fairly accurate knowledge of the location of roads and trails. All of them were aware of the Wilderness Road, its forks, and its points of termination; the road south from Louisville by way of the crossings of the Salt and Green rivers to Nashville; and the Mountain Leaders Path, now the Natchez Trace. All seem to be well informed likewise on the location of the model utopian towns invented by British promoters in their efforts to attract European immigrants to Kentucky. Lystra, located in Nelson, later Grayson County, on a branch of the Rolling Fork of Salt River, was formed on paper in 1794 for a group of London speculators. The town was to be built on plans drafted by a London engineer, in the middle of 15,000 acres of virgin land. Like others of these mythical metropolises, it was to reflect the aspirations of the time in the classical precision of its plan. Twenty-five squares were to be developed about a circus or central park, with streets a hundred feet wide and houses set back twenty-five feet from the curbs. In a restricted area business houses might be set flush with the street. There was to be a college, a church, a theater, and a town hall.

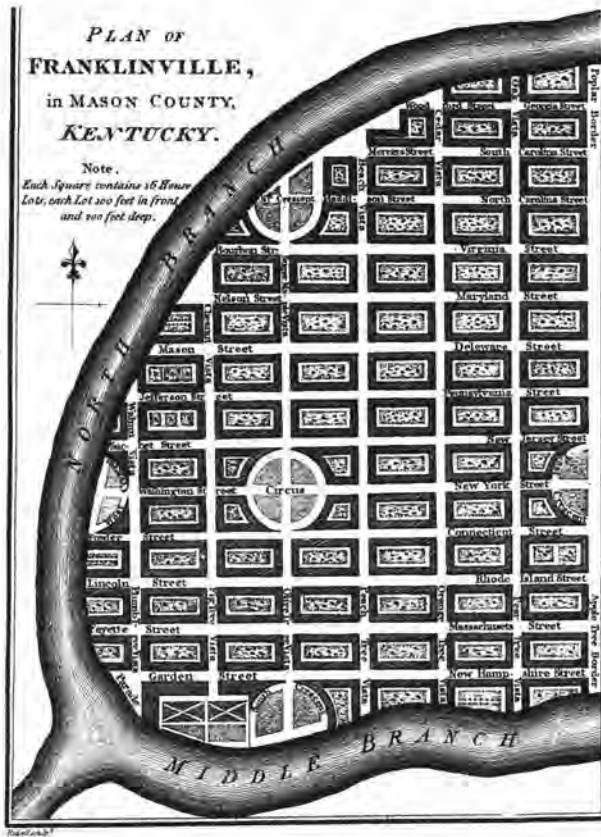
Nearby on a glorious site overlooking the Ohio River on the Meade County bluffs, other English speculators planned the wilderness utopia of Ohio-piomingo. Here the college was designed to educate white and Indian youths, and in tribute to the noble red man for whom their city was named there was to be a statue of Chief Piomingo. This metropolis of a thousand houses on forty-three precisely designed streets was to be built of "Choate's artificial stone." Ohio-piomingo, like its neighbor Lystra, gave way to less nobly inspired and less elegant backwoods villages. It was a far cry from the paper plan of Ohio-piomingo to the reality of tiny Rockhaven, located five miles from Brandenburg and unrecorded on modern maps.

(Opposite) John Russell's map of Kentucky and surrounding territories was a separate publication in 1794. It accurately reflects the development of Kentucky up to the time of statehood, but shows less knowledge of topography than Elihu Barker's map.



Cartouche for an early edition of John Filson's map. The dedication to General Washington did not produce the hoped-for endorsement, but Filson's map was widely influential nevertheless.





On the North Fork of the Kentucky River, Franklinsville was no less ambitiously planned. These idyllic paper cities were marked on Kentucky maps and even maps of North America for decades. But surely prudent prospective immigrants would wonder how one reached these towns, for no roads were shown connecting them with the other Kentucky settlements.

John Melish's map of Kentucky (No. 4, below) was one of four published in his volume of travels in the United States. It was printed by Thomas and George Palmer of Philadelphia in 1812 and was the most recent map available to Governor Isaac Shelby and General Andrew Jackson when they negotiated the Treaty of Old Town with the Chickasaw Indians in October, 1818. Later that year, with the backing of the Kentucky General Assembly, one of the greatest of Kentucky maps was published by Luke Munsell (1790-1854) of Frankfort.

Munsell's map, on a scale of five miles to the inch, measured seven by three feet and was handsomely and elaborately produced. Engraved by H. Anderson of Philadelphia (presumably Hugh Ander-

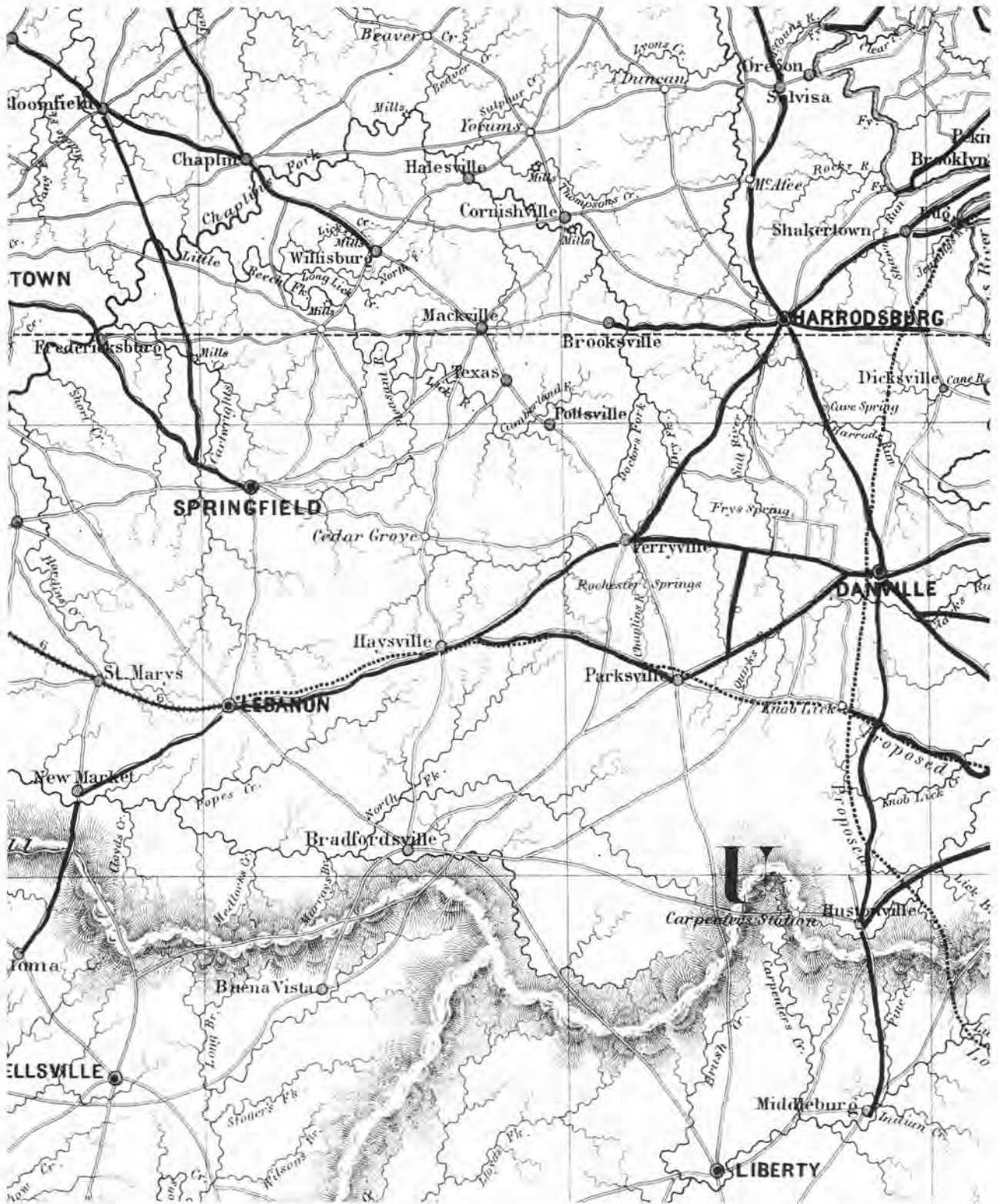
son, a prominent artist and illustrator), it was decorated with elegant vignettes by Thomas Sully. Copies of the Munsell map of 1818 are extremely rare. One is to be seen at the Kentucky Historical Society in the Old Capitol at Frankfort, and there are at least two copies in the Library of Congress. (The Thomas Sully vignettes are shown on the cover and colophon page of this booklet.)

After 1820, with the advent of the age of internal improvements in America and greatly increased travel, maps of Kentucky and the surrounding territories appeared at frequent intervals. The Commonwealth became almost inseparably linked with Tennessee on the new maps. After 1835, the large folding map bound in hard covers became almost as constant a companion of travellers as their purses.

Perhaps the most prolific producer of travel maps of the period was Henry Schenck Tanner, whose four travel guides and statistical geographies went through numerous editions. Tanner's "New Map of Kentucky" (No. 5, below) was revised and reissued in four or five editions from 1839 to 1850. Two other popular maps published after 1830 were those of Samuel Augustus Mitchell (Philadelphia, 1839) and J. H. Colton (Philadelphia, 1850).

At the outbreak of the Civil War the most recent maps available were those by Edmund J. Lee, published by Colton in 1856, and the Kentucky-Tennessee map published by Johnson and Browning, New York, in 1859. Of the two possibly Lee's was the most useful. Both maps were reasonably adequate as travellers' guides and for postal and other governmental uses, but both lacked vital topographical information. The cartographers and publishers were oblivious to the fact that their maps would be consulted as sources of military information.

Lack of cartographical information doubtless accounted for some of the poor planning and execution of Civil War campaigns in Kentucky, since maps available to the contending armies were basically commercial in nature. No one was more conscious of this than General Don Carlos Buell, who in 1862 ordered preparation of a military map of Kentucky. This chore was turned over to Lieutenant Colonel J. H. Simpson of the Department of the Ohio, who collected a variety of geographical information including surveys prepared by S. S. Lyon for the David Dale Owen geological survey, the Cox-Peebles Kentucky-Tennessee boundary survey, right-of-way maps for



A detail from the military map of Kentucky prepared by J. H. Simpson at the order of General Don Carlos Buell. This map incorporated more information than any prepared earlier. The vagaries of the boundary with Tennessee are accurately shown, probably for the first time.

the Louisville and Nashville and Louisville and Frankfort railroads, field notes of General Samuel P. Carter's reconnaissance from Lexington to Manchester and Goose Creek, the recently drawn Kentucky Central Railroad plans, the 1861 five-county map of the area about Lexington, and the one of the Danville area. No cartographers to that time had had available to them as much information as did the army engineers. They completed their work under the administrative command of General Ambrose E. Burnside. This excellent Kentucky map may never have had any public circulation. There is a copy in the Samuel M. Wilson Collection at Margaret I. King Library.

S. S. Lyons finished the geological survey begun under the guidance of David Dale Owen in the late 1850s, but it was far from being a full inventory of the state's natural resources or a mapping of the various topographical and geological regions. Actually the Lyons maps covered only small segments of the state's surface. It was not until 1865 and the publication of Nelson Saylor's "Geological Map of Kentucky" that the various topographical and geological formations were finally made visible on paper. Pro-

fessor Saylor (who was professor of geography and chemistry in the Mt. Auburn Female College of Cincinnati) cast his map within the boundaries shown on the maps of the 1850s, but his internal portrayal of the state was more accurate. He included the usual economic, political, and social features. A significant feature of the Saylor map was the vertical or sectional profile, portraying the state on two vertical projections, one between Cincinnati and Nashville, Tennessee, and the other from Cincinnati to Cumberland Gap. The profiles were based, he said, on personal observation. Saylor's was the first map to present a fairly accurate notion of the highly sectionalized nature of Kentucky's topography, land, and resources.

In 1873, the General Assembly under the guidance of Governor Preston H. Leslie enacted a law creating a new geological survey to be directed by a competent geologist. Nathaniel Southgate Shaler, a native of Campbell County and a Harvard professor of geology, was employed as state geologist. A composite map, created from the numerous sectional maps prepared by the survey and constituting the first comprehensive and reliable map of the Commonwealth, was published in handsome format in 1877.

1. North America, Thomas Conder

"A New Map of North America agreeable to the most approved Maps and Charts, By Thos. Conder." Size: 37.3 x 33.5 centimeters. In: R. Wilkinson, *A General Atlas Collection of Maps of the World and Quarters, the Principal Empires, Kingdoms, e'c. with several Provinces, & other Subdivisions, currently delineated*. London, 1794. Map in Special Collections, Margaret I. King Library, University of Kentucky.

THE map of North America in 1794 remained a physical puzzle to British cartographers, even after the signing of two international treaties. It was not that the government was entirely ignorant of the physical and political details of the continent. In at-

tempts to administer Indian affairs, the colonial governments, the fighting of two continental wars, and vigorous exploration of the Atlantic shoreline, crown offices had accumulated a vast amount of detailed information. This, however, seems not to have been available to the commercial map-makers.

Thomas Conder was an English cartographer and engraver whose birthdate and other biographical details are unknown. He drew the map of the Irish Maritime Survey in 1775, and prepared maps for several books and atlases including Moore's *Voyages*, 1778; Stobie's *Perth*, 1783; Walpole's *Traveller*, 1784; and Wilkinson's *General Atlas*, 1794.

The "New Map of North America agreeable to the most approved Maps and Charts" was drawn and

engraved for the *Wilkinson Atlas*. Conder made two maps of North America for this publication; the one reproduced here appeared as Plate 45 and the other as plate 46. Conder had a general notion of the topography of North America and its political and commercial development to date. Looked at superficially his map seems to be almost grotesque, but closer examination reveals an amazing grasp of details. For instance, he had a fairly accurate concept of the location of the various Indian tribes and nations, especially the southern groups.

The Atlantic coastline is shown in considerable geographical and commercial detail. State boundaries are reasonably accurate. Conder must have had access to some colonial records and reports. He must also have been aware of the various territorial shiftings in the treaties of Paris, 1763 and 1783, and with those between Britain and Spain pertaining to the Gulf coastal region.

In relation to American expansion into the Ohio Valley Conder was obviously ignorant of the existence of the Filson, Barker, and Russell maps, and of Gilbert Imlay's *A Topographical Description of Western North America*. Kentucky appears as an occupied land west of the "Appalachean" Mountains.

The only features labeled in the region are the Ohio, Kentucky, Cumberland, and Tennessee rivers, and the eastern range of the Cumberland Mountains. Otherwise a contemporary British viewer would have assumed Kentucky was still an unexplored wilderness instead of an organized state of the Union with fifteen counties and a population of nearly 100,000 persons. Likewise Conder seems to have been oblivious to the fact that the American westward movement was then in full swing.

It is interesting that Thomas Conder did not locate some of the well known British military points that had such an important bearing on Kentucky history. He did not include on his map Detroit, Fort Pitt, Vincennes, Kaskaskia, and St. Louis. But he did locate the French post of Little Ouiatenon ("Lit. Wiaut.") on the Wabash. He was oblivious to the important gateway of Cumberland Gap, the Big Sandy and Licking rivers, and the Falls of the Ohio, all well known landmarks in both British colonial and American frontier history. Nevertheless this map reflects the fact that the Kentucky country and the great western valleys were coming into partial focus for British cartographers.

2. *The United States, John Russell*

"The United States of America, according to the Treaty of Peace of 1784. Russell delict. sculp." Size: 20.2 x 18.2 centimeters. In: William Guthrie, *A New Geographical, Historical, and Commercial Grammar; and Present State of the Several Kingdoms of the World*. London, 1805. Map in Special Collections, Margaret I. King Library, University of Kentucky.

AMONG the engravers or sculptors of maps in the last quarter of the eighteenth century was John Russell. He seems to have been a humble artisan tucked away in a corner of the London publishing house of H. D. Symonds and J. Ridgeway. He was a British subject, and more than likely a Scotsman. His career

seems to have been of short duration, and he did all of his work for one publisher.

Either Russell was freely pirated or he generously permitted other engravers and publishers to exploit his work. For example, Alexander Anderson's map of Kentucky, published by John Reid of New York in 1795, is so similar to Russell's map of 1794 that it takes close scrutiny to distinguish between them.

The map of "The United States of America According to the Treaty of Peace 1784" was reproduced in possibly three or four different editions. The date "1784" was corrected properly in later editions to "1783," and again Alexander Anderson seems to have used Russell's draft with few or no changes. The several versions of the United States map ap-

peared in various sizes, the size no doubt depending upon the publication in which it appeared. William Guthrie adapted the map to use in his *A New Geographical, Historical, and Commercial Grammar* (London, 1805) without correcting the obvious errors or changing the colophon.

This is an amazing map, which contains numerous anachronisms and chronological puzzles. There seems to be no relationship whatever between it and the same engraver's "Map of Kentucky." If it was drawn to represent the United States in 1783, at the signing of the Treaty of Paris, which formally concluded the American Revolution, then the author neither consulted available and reliable sources nor made an attempt to correct obvious errors. The map seems to indicate a reliance on information extracted from wholly inaccurate cartographical sources. Russell apparently was either ignorant of the British official map collection or it was not open to him. There are too many anachronisms to be listed. The listing of Vermont and Kentucky as states, and the appearance of Washington, District of Columbia, are sufficient to indicate that the map is of a later date than is implied by the title.

The Kentucky River is shown emptying into the Ohio opposite the Falls, and the Louisa or Big Sandy into the Great Kanawa (Kanawha). Only three actual settlements, Lexington, Boonesboro, and St. Asaphs, are located. Russell, no doubt under the spell of the English land speculators, located Lystra and Somerset, but left off Ohiopiomingo and Franklinville. He labeled the area of present-day Trigg and Christian counties "army lands," indicating the Virginia reservations for Revolutionary War veterans.

An errant spine of the Appalachians is shown sweeping into central Kentucky almost to Boonesboro. It is interesting that Russell indicated that the line 36° 30', decreed as the dividing line between Virginia and North Carolina, extended from Currituck Sound or Inlet westward to the Tennessee River.

Tennessee is shown to be a vacant land, despite the existence of the Watauga Settlements and Nashville. The southern Indian nations are fairly accurately placed. The area of the subsequent Jackson Purchase, then the hunting ground of the Chickasaws, is labeled "Broken Ground." No doubt to an Englishman any ground with river bottoms and alluvial deltas was "broken."

Whatever his geographical whimsicalities, J. Russell was successful in giving his maps an artistic caste. His typography is chaste, the lines are clear and delicate, and even the caption bearing the erroneous date has an eighteenth-century charm. One wonders, however, about William Guthrie's ignorance of the geography of the United States. It is difficult to explain why he would use this map in his pioneering geographical work, unless he or his printers lacked skill in engraving maps and found this one available for pirating.

With a map like this one in hand it is no wonder that English and European travellers were often startled when they set out to explore the new nation. They might as well have had a map of the Holy Land to guide them. Nevertheless, this is an important historical document, which reflects in its gross errors the foggy notions of Kentucky and the United States held by provincial British geographers and publishers in the closing decade of the eighteenth century.

3. *Kentucky, from Elihu Barker, W. Barker*

"Kentucky, Reduced from Elihu Barker's Large Map. W. Barker Sculp." Engraved for Carey's American Edition of Guthrie's *Geography improved*." Size: 50.9 x 23.8 centimeters. In: William Guthrie, *A New System of Modern Geography; or, A Geographical, Historical, and Commercial Grammar*. . . . 1st American edition, corrected, improved, and

greatly enlarged. Philadelphia, 1794-1795. Map in Special Collections, Margaret I. King Library, University of Kentucky.

ELIHU BARKER's map of Kentucky is the most important one produced in the eighteenth century, John Filson's notwithstanding. It was prepared

sometime before 1793, possibly early in 1792, and presents the new state at the time of its admission to the Union. Without the distortions that characterize the Filson map, it gives a sense of the settlement patterns and conveys with almost unbelievable accuracy the physiographic features of the state, especially the myriad ganglia of the Commonwealth's stream system.

The evidence of Barker's life and cartographical work is meager. It seems reasonably certain that he was either an Englishman or a Scotsman. Other information has to be drawn from inference, in part from evidence on the map itself. A posthumous advertisement, in which Oliver Barker offered rights to use the map (then in manuscript form) appeared in Dunlop's *American Daily Advertiser* (Philadelphia) January 8, 10, and 11, 1793. Oliver Barker was presumably a son and the administrator of Elihu's estate. His advertisement may have attracted the attention of the ubiquitous Irish publicist Matthew Carey, who was to give the map the wide publication that made it influential. Carey, an Irish militant, had arrived in Philadelphia a decade earlier, having barely escaped the clutches of the British police by boarding ship in women's clothing. He had established a thriving publishing house, which in time made several uses of the Barker map.

The first version of the map was published separately on a seventeen-by-forty-inch sheet carrying the legend "Elihu Barker engraver for M. Carey." This edition asserts that the map was prepared "from actual survey by Elihu Barker of Philadelphia," suggesting that the author was living in that city at the time of his death, presumably in 1792. Will Barker, apparently another son who inherited his father's talent for cartography, found employment with the Carey publishing house and prepared several smaller editions of Elihu's map, one of which is reproduced here. Another was published in Carey's *American Pocket Atlas* (Philadelphia, 1796, 1800, 1804, 1814, and 1818). It was also used in Carey's edition of William Guthrie's *A New System of Modern Geography* (Philadelphia, 1794-1795). To conserve space Will Barker left out some details (including a few place names) in his smaller versions of the map. Otherwise he copied the earlier work with almost photographic accuracy. The stream system on the smaller map is not traced out in such fine detail; in the Purchase area, for instance, it shows only the

"Kaskinompa" River between Fort Jefferson and the Iron Banks on the Mississippi.

Later the Barker map was reproduced by the engraver J. Conder for J. Debrett's third edition of Gilbert Imlay, *A Topographical Description of the Western Territory of North America* (London, 1797). The only discernible differences between the American and the English edition were the measurement of longitude west from London rather than Philadelphia, and the use of a fleur-de-lis on the compass rose.

Elihu Barker appears to have lived for a time in Kentucky, and may have been living in the Commonwealth when he prepared his map. No information has survived about the methods he used to conduct his "actual survey," but the map demonstrates that in some way he assembled a remarkable body of factual information about the physiographic features of Kentucky. Indicative of the fact that the map was prepared in 1792 or earlier is that it shows only nine counties; those of Scott, Shelby, Washington, Clark, Logan, and Hardin, not shown on the map, were created in that year.

Barker located twelve towns and villages along with numerous forts and frontier stations, and he located several projected but unbuilt towns. Among these were Bealsburg in Hardin County, Charleston at the mouth of Lawrence Creek on the Ohio and in Mason County, Vienna on the Green River in present-day McClean County, Marys Tirore on the north fork of Rough River in Breckinridge County, and Rochdown in Logan County. (Charleston was to be built on eighty acres of Ignatius Mitchell's land. Houses were to be no smaller than sixteen feet square and were to have either rock or brick chimneys. Each was to be erected on a half-acre lot.)

The cartographer also located numerous other places that long ago disappeared from the Kentucky map or have undergone name changes. Among the latter were Madison Courthouse, which became Richmond; Bourbon County Courthouse, Paris; Harden's Fort, Hardinsburg; and Langford's, Mount Vernon. Barker located salt licks, barrens, glades, iron furnaces, springs, cane brakes, and areas of fertile land. It is almost certain that he was the first map-maker to indicate the landmark "Large Cedars" in southwestern Livingston County on the Ohio. For decades afterward, cartographers were to indicate this point on their maps. He located two barren areas, the one in

the Allen-Barren county region, and one which he labeled "barren naked land" between the Tradewater and Cumberland rivers in Livingston County. The Henderson Grant was correctly located in the upper half of present Henderson County. Along the southern border of this tract Barker indicated several unidentified bodies of water or swamplands.

Six early Kentucky roads are drawn on the map, but none west of the Louisville-Bardstown axis. The Pennyroyal, Purchase, and Appalachian areas were displayed as wild uninhabited lands. Barker was fairly precise in locating the Appalachian highlands along the spine of the Cumberlands, and the courses of the Licking and Big Sandy rivers.

For nearly a century the Barker map had a bearing on the works of other map-makers. Many of its features were drawn repeatedly onto other maps by both American and European cartographers. Historically, however, one of its most important contributions was that for the first time a cartographer presented the State of Kentucky within its physical boundaries. Barker did this with uncanny accuracy. There are no serious distortions of the boundaries, except that the southern border is shown to be along approximately the 36° 60' parallel. On the northeast the Tug Fork of the Big Sandy was indicated as the boundary seven years before Virginia and Kentucky established it officially.

4. Kentucky with Adjoining Territories

"The State of Kentucky with the adjoining Territories from the best Authorities 1800. Engraved for Payne's Geography Publish'd by I Low New York." Size: 21.4 x 18.6 centimeters. In: John Payne, *A New and Complete System of Universal Geography; . . . Describing Asia, Africa, Europe and America. . . .* New York, 1798-1800. Map in The Filson Club, Louisville.

AT THE opening of the nineteenth century in America there was a throbbing interest in the land. Geographers, cartographers, and statisticians not only were measuring the young nation's accomplishment to date, but they were busily projecting it into the future. This was the age of geographers such as Jedidiah Morse, *The American Geography*, 1789; Charles Volney, *Views of the Climate and Soil of the United States*; and Thomas Jefferson, *Notes on the State of Virginia*, Charlottesville, 1787, which contains J. M. Randolph's map, printed in London, and which describes the western country. Payne's *Geography* belongs in this category.

The map of "The State of Kentucky with the adjoining Territories from the best Authorities," which appeared in this geography, was engraved by Scoles

especially for the volume. The map shows ten counties (in fact at that date there were twenty-five), and it shows only a few partial county boundaries. Some county seats are not located and Frankfort does not appear. A viewer can only guess at the points of settlement and population concentration at the turn of the century.

Of primary concern was the location of the roads. Among these are the Wilderness Road, which follows a fairly accurate path from Cumberland Gap to Boonesboro, Lexington, and Danville. The historic fork of the road is located on this map in the middle of the Rockcastle River, with the western branch passing through Crab Orchard, Danville, and continuing to Louisville at the Falls of the Ohio. The main central roads ran from Lexington by way of Leestown to Louisville, and from Lexington north through Bourbon County by way of the Blue Licks to Washington and the mouth of Limestone Creek on the Ohio. The Lexington-Louisville-Nashville boat road is indicated on this map along somewhat the same routes the modern roads follow. Beyond Nashville this famous southern road appears on Payne's map under the title "Mountain Leaders Path." Subsequently it was to be called the Natchez Trace. There

is a slight trace of the road that eventually ran from Danville to the Tennessee line. No notice was taken of the historic Warriors Path or any of the other pre-European trails west of the mountains.

This map locates the Kentucky boundary on the northern bank of the Ohio, and also on the western bank of the Mississippi. The boundary between Virginia and Kentucky is indicated as a fairly regular line following the spine of the Cumberland Mountain north to a central Big Sandy stream, and thence to the Ohio along this river as if it were a single main-stream. The southern border appears as a straight line from Cumberland Gap to the Mississippi River, despite the fact that the boundary of the Jackson Purchase was not set until the Alexander-Munsell survey of 1818-1819. The Jackson Purchase appears as a blank area except for the tracings of Indian and Tract creeks and two unnamed streams.

Place names are indicative of the pioneer conditions and of an era of rapid economic changes: Price's Settlement, Howard's Settlement (Logan County), Riddles (Ruddles) Station (Bourbon County), Lebanon (Woodford), the Blue Licks (Bourbon), Boonesboro and Madison (Madison), and Herod's Town (Mercer). The rise of the rich grain-milling trade in the opening years of the nineteenth century is signalled by the appearance of Morgan's, McConnell's, Grant's, and Patterson's mills. With the exception of Harmon's Station and Cumberland Gap no place names appear in eastern Kentucky. Towns lo-

cated are Lexington, Danville, Louisville, Crab Orchard, Logan's Courthouse, Bairdstown, and Washington. Four promoter towns are also located. These were Ohiopiomingo on the Ohio in Meade County, Lystra in then Nelson County, Franklinville in then Mason County at the site of present-day Beattyville, and Somerset on the North Fork of the Kentucky River at the site of present-day Jackson.

In the western end of Kentucky Payne's cartographer located Fort Massac, Wilkinsonville, and Fort Jefferson. The Henderson Grant is located properly in Henderson County. As on Barker's 1792 map, a point in Livingston County is labeled "Large Cedars." No contemporary sources have been found to identify this point specifically. It may have been the place where the Saline Trace forked, with one branch going north across the Ohio by way of Cave-in-Rock, and the other by way of the Yellow Banks; this was approximately on the site of Smithland.

The location of the main streams in Kentucky is fairly accurate. An amazing number of lateral streams appear that bear names unknown today. Fairly accurately located are the Obeds (Obey) and Clear Fork branches of the Cumberland River, which figured so prominently in the Walker-Smith survey of 1780. The map appeared as a single fold in the *Geography*, and apparently the copy owned by the Filson Club of Louisville was carefully removed to become a separate map for framing. At that time or later it was decoratively tinted.

5. Kentucky, John Melish

"Kentucky." Size: 36.3 x 18.4 centimeters. In: John Melish, *Travels through the United States of America, in the years 1806 & 1807, and 1809, 1810, & 1811; Including an Account of Passages betwixt America and Britain, and Travels through Various Parts of Great Britain, Ireland, and Upper Canada*. . . . Philadelphia, 1812. Map in Special Collections, Margaret I. King Library, University of Kentucky.

JOHN MELISH, 1771-1822, was born in Methven, Perthshire, Scotland. He served an apprenticeship with a wealthy cotton factor, took the examinations in the University of Glasgow, and became an employee, later a partner, of his master. Melish arrived in Savannah, Georgia, in 1806, and between 1809 and 1811 he traveled extensively in the United States. He left the business field to become a writer and geographer. He was a self-taught draftsman and

cartographer, drawing many of the maps appearing in his various books.

In 1811 he traveled down the Ohio River by skiff and then went overland on horseback from Louisville to Frankfort and Lexington. His map of Kentucky was one of four that appeared in *Travels through the United States of America, in the Years 1806 & 1807, and 1809, 1810, & 1811*. Melish served as his own cartographer and publisher, but the evidence seems clear that Henry Schenck Tanner was the engraver of the Kentucky map. G. Palmer of Philadelphia printed the two-volume *Travels*. It was not until 1818 that Samuel Harrison became Melish's engraver. After 1815 the traveller-author became primarily a publisher and map-maker.

Melish's map appeared three years before Governor Isaac Shelby and General Andrew Jackson negotiated the Treaty of Old Town with the Chickasaw Indians, in which the Jackson Purchase area of Kentucky and that part of Tennessee west of the Tennessee River were ceded to the United States. The map, however, was drawn six years before that event, and shows the Kentucky Purchase as a blank territory with the exception of two or three small streams. The rest of the map of Kentucky gives no notion of the irregularity of the boundary line or the ruggedness of the country. The Big Sandy was made to appear a single mainstream with no hint of the existence of the Russell and Tug forks or their relationship with the parent stream.

To the south the disputed boundary between Kentucky and Tennessee from Cumberland Gap westward to the Mississippi River appears as a straight line on an unstated latitude. Neither of the famous jogs is indicated in the boundary, and the Jackson Purchase boundary is far off the line surveyed in 1818-1819 by Robert Alexander and Luke Munsell. On the north the Ohio River appears without a hint of the Falls or any of the islands.

Melish did make note of such historic landmarks

as Big Bone Creek, Limestone Creek, the Swiss Vineyards or Vevay, Beargrass Creek, and Forts Massac, Wilkinson, and Jefferson. Internally he located some county boundaries, while other counties are indicated by name only in their general regions. The overall conformation of the map is fairly accurate, and so are the locations of the towns. The presence of Petersburg on the Kentucky River in Woodford County, Middletown in Nelson County, Roadforks in Rockcastle County, and Eddy Grove in Livingston County will pique imaginations. Also the location of the Barrens on the Ohio River in Breckinridge indicates that the cartographer had heard of this natural phenomenon, but was ignorant of its location.

The roads are not precisely located. The Wilderness Road is fairly well placed as are the roads between Maysville and Lexington, Lexington and Louisville, and between Danville and the south. Melish, however, failed to locate the famous "boat road" used by flatboatmen returning from New Orleans by way of Nashville to Louisville and Lexington, which passed around the black jack corner in the Walker-Smith jog.

Some contemporary artist undertook to delineate the county boundaries more clearly by using varicolored markings. These give the map a slightly bizarre appearance, and he was no more successful than the original author in placing all of the county boundaries.

Since John Melish was particularly interested in enticing immigrants to move to America to take advantage of abundant cheap lands, he gave attention to the location of streams. These are remarkably well placed, and in most cases their courses are shown with some accuracy. Melish rightly portrayed eastern Kentucky and the Purchase as all but unknown territory. He made no attempt to indicate the topographical features of Kentucky, or the presence of natural resources.

6. A New Map of Kentucky, H. S. Tanner

“A New Map of Kentucky with its Roads & Distances from place to place along the Stage and Steam Boat Routes. by H. S. Tanner. Entered according to Act of Congress in the year 1839 by H. S. Tanner, in the Clerks Office of the Eastern District of Pennsylvania.” Size: 34.4 X 28.5 centimeters. Insets: [The Bluegrass Region]; “Falls of Ohio”; [The Maysville Vicinity]. In: Henry Schenck Tanner, *A New American Atlas; containing Maps of the Several States of the North American Union, Projected and Drawn on a Uniform Scale from Documents found in the Public Offices of the United States*. Philadelphia, 1839. Map in Special Collections, Margaret I. King Library, University of Kentucky.

THIS map of Kentucky appeared in the 1839 and final edition of Henry Schenck Tanner’s *New American Atlas*. It is the most precisely drawn and artistically executed map of the Commonwealth published to that date. Tanner was the ablest of the American cartographers of the first half of the nineteenth century, and in many respects was a pioneer in making cartography a precise science. He was one of the first map-makers to project his work upon a global scale rather than upon local measurements and distances.

Tanner was born in New York City in 1786, but early in childhood moved to Philadelphia to live with his brother Benjamin. He lived in that city until his death in 1858. Benjamin was a printer of maps and travellers’ guides, and this vocation early attracted his younger brother. The printing firm was the famous Tanner, Vallance, Kearny and Company, which in time developed one of the most important map-making businesses in North America.

Henry Tanner’s earliest published work as an engraver was an atlas of the United States, published in 1812. He also engraved that year the John Melish map (No. 5 in this series) and then most of the maps that appeared in Melish’s *A Military Atlas of the United States* (1813, 1815). Between that date and 1829 the young cartographer-engraver accumulated a large body of information about the country. He was both diligent and meticulous in the accumulation of

the data he used in the preparation of the large map of the United States. This was to be a landmark in American cartography and printing.

In the opening years of the age of internal improvements Tanner prepared a guide to the rising cities, towns, and villages, to the counties of the nation, and to canals, roads, and railroads. This appeared in 1829, and in time served the multitude of domestic and foreign travellers who moved about the country. In preparing these materials for publication he had solicited local geographical information pertaining to political subdivisions, changes, and projections, to economic developments, and population shifts. He was especially concerned with locating roads, streams, canals, and railroads.

The map of Kentucky published in the series in 1829 was one of the most highly refined of Tanner’s maps of the American states. It was prepared, published, and distributed by Tanner, Vallance, and Kearny. On the whole the boundaries of the Commonwealth are accurately located, including the controversial Green River Island near Evansville, Indiana. The southern boundary, however, was shown as a straight east-west line between Cumberland Gap and the Tennessee River along approximately the 36° 40’ parallel. Neither the Simpson County–black jack nor the Trigg County–Cumberland River jog appears on the map. Also, there is no indication of the wobbling in and out of the true Walker boundary.

In 1839 Kentucky had a population of approximately 779,000 persons, and there were ninety counties. It was predominantly rural, with the principal towns being Covington, Frankfort, Louisville, Lexington, and Maysville. Louisville had a population of 21,210, and each of the others fewer than 5,000 except for Lexington with 6,997. The state had to all intents filled out its political map, even though thirty politically inspired counties were to be created later. Throughout the state a large number of farming and crossroads villages had come into existence. The road system had been vastly extended, the Portland Canal at the Falls was in operation, and three railroads were projected. Tanner showed the

proposed route of the famous Charleston and Cincinnati Railroad, the location of which had caused such a stir between Lexington and Louisville. This early interstate railroad was promoted by Robert Y. Hayne and Charleston, South Carolina, merchants until the depression of 1837 killed it.

This is an accurate map, which not only locates places and streams in detail, but gives some suggestion of the topography of the Commonwealth. For the first time eastern, southern, and western Kentucky are brought into full cartographic focus. The inset of the Lexington–Bluegrass area covers portions of nine counties, showing Lexington to be a hub of the Kentucky highway system. It locates some of the mills that figured so prominently in the agricultural economy of early Kentucky. In the inset showing the Falls of the Ohio, the location of the six Falls-area towns is shown, and so is the route of the canal, but

there is no indication of the population concentration or development of Jefferson County and Louisville. The Mason-Lewis county inset of the Ohio River area is more precise. The distance chart was prepared with the traveller in mind.

Tanner's map is a monument to the rapidly maturing nation and the Commonwealth of Kentucky. It is a highly respectable documentation of the remarkable changes that had occurred in the Ohio Valley in the two preceding decades. The frontier had moved well beyond the state's borders and Kentucky was now engaged in a race to develop both its land and its resources in such a way as to take advantage of the rising new industrial age in America. From 1829 to 1860 the maps of Kentucky were to have a distinct Tanner cast to them no matter who the publisher was. Either other map-makers acquired rights to copy Tanner's handiwork or they plagiarized him.

7. *Kentucky & Tennessee, John Bartholomew*

"Kentucky and Tennessee. Drawn and Engraved by J. Bartholomew. Edinburgh. Published by A. & C. Black." Size; 38.5 x 26.9 centimeters. In: *Black's General Atlas of the World. New edition, containing the latest discoveries, new boundaries and introductory description.* Edinburgh, 1867. Map in Special Collections, Margaret I. King Library, University of Kentucky.

ADAM and Charles Black of Edinburgh were engravers, printers, and publishers who specialized in the creation of international atlases and geographies. They were associated also with the famous map publisher John Bartholomew, whose name appears on the map reproduced here. His house has continued down to the present time, and John Bartholomew and Son are major suppliers of cartographic materials. Together the Blacks and Bartholomew published in 1867 a new edition of *Black's General Atlas of the World*. They included in this work sixty-six maps,

thirteen of which were of American regions and states. The Kentucky-Tennessee map was 43H in the series.

It is difficult to identify the sources of information the cartographer had at hand in the preparation of the state maps. He was inspired, no doubt, by the age of expansion beyond the Atlantic, which saw the rush of hundreds of thousands of immigrants to the public lands west of the Mississippi. It was an era when rising industry all across the continent beckoned to immigrants as laborers. Passage of the Homestead Law in 1863 had the effect at war's end of drawing population away from the older states when they needed a labor supply the most.

Since the late 1830s Kentucky and Tennessee had been mother states, feeding population into the new territories beyond the Mississippi. Neither had advanced far in the development of its rich natural resources, nor had fully tapped its agricultural lands. Along with their postwar southern neighbors they

conducted advertising campaigns in efforts to attract some of the tide of European immigrants to their borders. Although the Blacks and Bartholomew were international geographers and publishers, they nevertheless catered to Scottish and Irish customers who were emigrating to America in large numbers. This was an important market for their atlases and maps.

The Blacks' map of Tennessee and Kentucky reflects use of the latest geographical references. Among these were the Samuel Augustus Mitchell "County Map of Kentucky and Tennessee," the Colton "Tennessee and Kentucky Map," Alvin Jewett Johnson's map of the two states, and the various military maps that had now become available. Various sectional maps appeared in the report of the Ninth Census, which gave both cartographical and statistical information. Various contemporary magazines such as Leslie's and Harper's published maps of the war, which also had local significance aside from the military campaigns.

The newer and more scientific maps of Kentucky, such as the one published by the Nathaniel Southgate Shaler geological survey, were not to appear for another decade. The Blacks published their two-state map in contrasting but subdued colors. Major features of the Kentucky map were location of state and county boundaries, of county seats and villages, the internal stream system, the highways, and railroads, built and projected. In places it is difficult to distinguish between roads and railroads in operation and those projected.

Kentucky's boundaries are presented in general lines. That along the spine of the Cumberland Mountain between Cumberland Gap and the headwaters of the Tug River is shown as a slightly curving but regular line. The Kentucky-Tennessee border follows the traditionally straight line from Cumberland Gap to the Todd-Christian county line, and then jogs upward between Trigg County, Kentucky, and Stewart County, Tennessee, to the Cumberland River. There is indication of the other curvatures or jogs in the border.

This map, like all of its commercial predecessors, was drawn primarily as a traveler's guide; it resembles one published for a modern oil company by Rand-McNally. It presents the Commonwealth in a state of advanced social and political expansion. Aside from town and village locations, the courses of streams, and of transportation systems, it gives only a hint of topography. A user of the map could have derived only a suggestion that to the east was the Cumberland Mountain range, but he would have received no notion of its elevation or depth. Because of emphasis on the procurement of salt during the Civil War this resource was indicated by location of works in Clay, Knox, Breathitt, and Casey counties. There are no indications of iron deposits in Estill, Bath, Boyd, and Muhlenberg counties. Neither coal field is shown, nor is there any indication of the sharp variations of the agricultural sections.

This map locates a fairly large number of places that have either disappeared or have changed their names. Among these are Mt. Pleasant, now Harlan; Bush's Store, Laurel County; State Line, Allen; Pace's Postoffice, Barren; Horseshoe Bottom, Wayne; Indian Vale, Bath; and Blue Spring Grove in Hart. Obviously the cartographer had at hand the United States Postal Directory and map as a source of local information.

Generally the map of Kentucky is as accurate as a map of that period could be made. It reflects the map-making experience of the Blacks, and scholarly Scottish attention to details. Despite the aberrations in describing the boundaries, the internal locations of roads, streams, and places seem surprisingly accurate. The printer performed his task with artistic grace both as to the clarity of typography and the imaginative use of subdued colors. The appearance of Kentucky and Tennessee in a world atlas in this vastly improved form indicates the importance the publishers attached to the border states of America.

8. *The Limestone Road, Victor Collot*

“Road from Limestone to Frankfort in the State of Kentucky.” Size: 37.4 x 38.1 centimeters. In: Georges Henri Victor Collot, *A Journey in North America containing a survey of the countries watered by the Mississippi, Ohio, Missouri, and other afflu-ing rivers; with exact observations on the course and soundings of these rivers; and on the towns, villages, hamlets, and farms of that part of the New-world*. . . . Paris, 1826. Map in Kentucky Library, Western Kentucky University.

THIS fascinating profile of the Limestone-Washing-ton-Lexington-Frankfort Road in 1795 is essentially a topographical survey of this arterial entryway. It traces the route through a five-mile-wide corridor of virginal country. The survey was made by two highly observant French military officers, General Victor Collot and Adjutant General Waring.

Collot had served on Marshall Rochambeau’s staff in the American Revolution. While in this service he became interested in possibilities of trade between Europe and the new nation. After the surrender at Yorktown he became governor of French-controlled Guadelupe, a position he held until 1794 when the British overran the island. Collot was sent a prisoner to Philadelphia, and from there, separated from France by the Revolution, he traveled in the Ohio and Mississippi valleys gathering data to further European trade.

On their inland travels Collot and Waring gathered extensive geographical and commercial information. They visited Kentucky and took field notes on topography, location of settlements, and commercial development. On the journey west Waring lost his life. Collot was finally able to return to France, where he prepared both his travel journal and the maps and plates for publication. They were written in French and English. The English edition was transcribed by an Englishman under the scrutiny of Collot. Collot died before his work could be published, although the maps had been engraved and printed. The

administrator of his estate sold the maps to a publisher who destroyed all but 300 copies of the French version and 100 copies of the English, making the originals extremely rare.

The data on the Kentucky plate, which appears in the atlas volume of the three-volume *A Journey in North America*, was gathered in 1795. This map is one of thirty-eight maps and views prepared by Collot. Some interesting aberrations appear on this otherwise carefully drawn topographic map of the famous Kentucky road. May’s Lick appears as “Maze-leak,” Hingston’s Creek as “Hughston Creek,” and Elkhorn Creek is labeled “Elk Creek.” There is no indication in either the narrative text or the map of the name of the “Old Fort” located on a branch of the Elkhorn. This possibly was the station established by Elijah Craig in this vicinity in 1783.

With the observant eyes of military officers the two Frenchmen were able to gather a faithful representation of the nature of the country through which the Limestone Road passed. The locations of villages and towns are accurate, and the indication of farmsteads adds a fascinating dimension. Careful attention was given to ridges, rocky ledges, stream crossings, and crossroads.

An informative historical feature of the Collot map is its indication that the route all the way from the mouth of Limestone Creek on the Ohio to Frankfort was heavily forested. Especially interesting is the cover of trees indicated on the link of road from Paris to Lexington, on the short section of the Georgetown Road, and along the Frankfort Pike. Abutting farmsteads, if in proper scale, were small. They appear to have been freshly slashed out of the woods, and none is shown back away from the road. Remarkably few were located in the vicinity of Paris.

The road from Lexington to Frankfort is shown without homesteads or settlements. One location given is that of “Hunters Hut,” which doubtless was a loghouse in the neighborhood of present-day Midway. A tavern was located on the plateau above Frankfort, and the travelers located all of Frankfort

northeast of the river, with no houses appearing on the west bank. Surprisingly, Leestown is not shown.

This map was drafted in France by Victor Collot from the detailed notes he took in 1795 and was printed in 1826. Its style is that of a French drafts-

man, engraver, and printer. The typography has a chaste clarity, and the printer did an extraordinarily fine job of presenting the meticulous engravings. Collot's travel narrative is as precise and informative as the map.

9. *Rapids of the Ohio River, Jared Brooks*

"A Map of The Rapids of the Ohio River, and of the Countries on each side thereof, so far, as to include the routes contemplated for Canal Navigation Engrav'd & Printed by John Goodman Frankfort Kentucky 1806 Respectfully Inscribed to His Excellency Christopher Greenup Governor of Kentucky by His very Obedient Servt J. Brooks." Size: 50.3 x 38.6 centimeters. Insets: "Plan of the work below L including all the Locks and aqueducts for the supply of water works, situations marked from 1 to 12, which may be extended to any required distance"; "View of Louisville from near Clarksville." Lilly Library, Indiana University

JARED BROOKS, a Louisville surveyor who had laid out that part of the city located on the escheated tract of the famous tory land speculator Dr. John Connolly, prepared this map of the Falls area on the Ohio. Brooks made this survey at the request of the newly chartered Ohio Canal Company. He may also have been instructed to make the survey by the United States War Department. A map drawn by Brooks in 1805 was transmitted to Congress in 1807. In the meantime he prepared this version of the map, in somewhat more picturesque design, which was apparently submitted to neighboring governors and other officials by Governor Christopher Greenup.

The map reproduced here was engraved and printed by John Goodman of Frankfort in 1806, and is said to be the first map printed in Kentucky. In his letter accompanying the more technical map which was transmitted to the Congress by Secretary of the Treasury Albert Gallatin, Brooks said he prepared it

in four days and transcribed it on a small square of parchment because he lacked paper of a suitable size. His accompanying note assured the legislators that a canal could be constructed around the rocky barrier of the fall line on a natural level. He said stone for lining the canal could be quarried from the site for as little as a dollar a yard. He also said that he was certain the bypass could be constructed from the head of the Louisville boat basin to the lower river just below Shippingport for as little as \$200,000.

The Ohio Canal Company had been chartered on December 20, 1805, by the Kentucky General Assembly, which authorized the sale of limited amounts of stock in Pennsylvania, Maryland, New York, Virginia, and Ohio. Sales in New York and Ohio were to be limited to \$20,000 each, and speculators in the other states might invest up to \$30,000. The General Assembly instructed Governor Greenup and officials of the Canal Company to inform the governors of states directly interested in the navigation of the Ohio about the project. They were to send copies of the map and a sheet of specifications.

In the preparation of his map, Brooks revealed a keen sensitivity to the growing rivalry between Kentucky and Indiana promoters for the location of a port at the Falls. In his location of the natural passages he indicated the Indiana, Kentucky, and Middle shutes. Admittedly the Indian, or Indiana Shute was the safest but longest of the three. The Middle Shute was passable only in stages of high water, and the Kentucky Shute had its disadvantages and hazards. The route for the canal indicated by Brooks was followed closely by the engineers who built the facility on the Louisville side of the river after 1825. But Brooks far

underestimated the engineering problems that ultimately would be encountered in the construction of the canal.

There are some important differences between the map printed by John Goodman and that sent to Congress. The latter located the three shutes, labeled elevations, points along the projected canal, and contained several elevational tables. The one used by Governor Greenup is a much handsomer map, which gives a minimum of details, but in no way lessened the emphasis of the route of the canal. On this map Brooks added features that give a graphic sense of the locations of the Falls towns and the neighboring woodlands, and an inset of the waterfront of Louisville as viewed from the perspective of Clarksville, Indiana.

The more technical version of the Brooks map was published in 1834 in *American State Papers* (Miscellaneous) XX. This map became a base map for future topographers. The map that appears in M'Murtrie's *Sketches of Louisville* (1818) shows a direct dependence upon the earlier projection. There

is fairly clear indication too that the drawing of the Falls area that appears in the Murray report of the Interstate Shoals Commission (1818) was based upon the Brooks map.

Topographically Brooks no doubt accurately portrays the rocky barrier of the fall line in 1805, before there had been any tampering with the site and all of the islands and stream mouths were in their original settings. The surveyor apparently drew on his first-hand topographical and hydrological knowledge of the river and falls, and he must have made some reasonable guesses in the preparation of the tables of elevation and geological formations. The map portrays graphically more than narrative texts can tell of the treacherous routes of passage at various seasons for pirogues and flatboats. Six years after Brooks prepared this map, Nicholas Roosevelt would anchor the *New Orleans*, first steamboat on the western waters, before the town of Louisville. From 1811 on the steamboat was to dominate Ohio River traffic, and shippers could no longer entrust growing cargoes to the rocky barrier before Louisville.

10. *The Perryville Battlefield, Edward Ruger & Anton Kilp*

"Map of the Battlefield of Perryville Ky. Major General Don Carlos Buell Commanding the U. S. Forces. General Braxton Bragg Commanding the Confederate Forces. October 8th, 1862. Surveyed and Compiled By order of Major General George H. Thomas U. S. A. by Edward Ruger and Anton Kilp. Published by authority of the Hon. the Secretary of War in the Office of the Chief of Engineers U. S. Army 1877." Size: 32 x 28.7 centimeters Special Collections, Margaret I. King Library, University of Kentucky.

GENERAL George B. McClellan made the observation that when the Civil War began the United States War Department had no precise maps of the country.

To the south the Confederacy was even more handicapped. The Kentucky maps then in popular use had been drawn with political administration, commerce, and travel in mind. Not until the war had ended was an adequate military map of the Commonwealth made available.

During and immediately after the war the War Department collected approximately 750 maps prepared by field officers and cartographers of both armies. In the late 1880s Captain Calvin D. Cowles, 23rd United States Infantry, was assigned the task of organizing these maps and plans into an atlas to accompany the other records of the war. Among the maps was the one of the Perryville Battlefield, drawn in 1877 by Edward Ruger and Anton Kilp. The copy

reproduced here was once the property of the Department of State, but in 1926 it was transferred to the Map Division of the Library of Congress and some years later was acquired by the King Library.

The Perryville map was produced as a separate document with elaborate topographical details. When Captain Cowles and his staff organized the *Atlas to accompany the Official Records of the Union and Confederate Armies* (Washington, 1891-1895) they adapted it for inset 2 of plate XXIV, the Tennessee-Kentucky campaign map. The latter shows in detail the movement of the Army of the Cumberland under General Braxton Bragg's command and the pursuit by General Don Carlos Buell's army. The inset map is much smaller than this map of 1877, the typography is different, the topographical shadings are toned down, and the legend is slightly revised. The military details of the two maps are the same.

Perryville was the only major engagement of the Civil War fought on Kentucky soil. The Confederates had invaded Kentucky ostensibly to recruit fresh troops and to place a Confederate in the governor's office in Frankfort. Beyond this there may have been plans to establish a line of attack along the Ohio. Buell's forces pursued the Confederates, looking for a time and place to engage them in battle. The military orderliness with which Ruger and Kilp depict the troop deployments may give the impression of planned strategy, but in reality neither Bragg nor Buell was adequately informed as to the other's position, and neither expected to engage the other in such a notably unstrategic location.

The village of Perryville is near the geographical center of Kentucky, and at that time was somewhat isolated in the southern end of Boyle County. It had not the slightest military significance, strategic or

otherwise. The only road of any importance in this area was the one leading from Danville by way of Springfield to the Tennessee line. Danville and Harrodsburg were small rural county seats with no industry, railroads, warehousing facilities, or other military attractions. (The map shows the Lebanon and Stanford Railroad, but this was a projection rather than a reality.) It has been said that the hilly, wooded terrain muted the sounds of cannon, a fact that contributed to tactical blunders by both generals. Visibility was severely limited by the heavy undergrowth of scrubby trees and thornbushes. The season had been unusually dry, and there was a woeful shortage of water for men and animals except for pools in the Doctor's Creek branch of the Chaplin River. For this reason the creek became an important objective, a fact that largely accounts for the apparently haphazard pattern of engagement.

Perryville resulted in the death of 1,395 men and the wounding of 5,486 others. In all there were approximately 79,000 men engaged in battle, with somewhere in the neighborhood of 100,000 troops in the area.

Historically this map of Perryville is of prime importance. Only one other military campaign map of Kentucky during the Civil War is comparable to this one. That is the diagram of the redoubt on the bluff at Columbus, overlooking the Mississippi River. (A copy is in Special Collections, Margaret I. King Library.) But Columbus was never assaulted and had no campaign significance. Ruger and Kilp show with a high degree of precision the nature of the ground over which the two armies fought, the deployment of troops, and the progress of this controversial Civil War battle.

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NOTES

1. A Virgin Borderland

1. The Lewis Evans map was prepared in a year when there was a rash of North American maps because of the impending French and Indian War. This map was first published in Philadelphia, 1755, and has been reproduced several times. One of the best later and revised versions is in Thomas Pownall, *A Topographical Description of the Dominions of the United States of America*, ed. Lois Mulkearn (Pittsburgh, 1949).

2. Robert Beverley, *The History and Present State of Virginia*, ed. Louis B. Wright (Chapel Hill, 1947), pp. 26-32; Mattie Erma Edwards Parker, ed., *North Carolina Charters and Constitutions, 1578-1698* (Raleigh, 1963), pp. 19-29.

3. Clarence W. Alvord and Lee Bidgood, *The First Explorations of the Trans-Allegheny Region by the Virginians 1650-1674* (Cleveland, 1912), pp. 30-31.

4. *Ibid.*, pp. 35-36. 5. *Ibid.*, p. 53; pp. 187-93.

6. William P. Cumming, ed., *The Discoveries of John Lederer* (Charlottesville, 1958), pp. 15-43.

7. Alvord and Bidgood, *First Explorations*, 209-26.

8. *Ibid.*, pp. 231-49.

9. John Dawson Gilmary Shea, *The Bursting of Pierre Margry's LaSalle Bubble* (New York, 1879), pp. 10-16; Isaac J. Cox, *The Journeys of René Robert Cavalier, sieur de la Salle* (Allerton, 1922), pp. 112-13.

2. The Royal Boundary & the Westward Movement

1. George A. Wood, "Céleron de Blainville and French Expansion in the Ohio Valley," *Mississippi Valley Historical Review*, 9:310-12.

2. Lucien Beckner, "Eskippakithiki: The Last Indian Town in Kentucky," *The Filson Club History Quarterly*, 6:355-82.

3. Thomas D. Clark, *Frontier America* (New York, 1969), pp. 92-96.

4. Robert S. Cotterill, *History of Pioneer Kentucky* (Cincinnati, 1917), pp. 47-61; John Bakeless, *Master of the Wilderness, Daniel Boone* (New York, 1939), pp. 62-63.

5. Thomas Speed, *The Wilderness Road* (Louisville, 1886), p. 29; Felix Walker, "Narrative of an Adventure in Kentucky in the Year 1775," *DeBow's Review* (February 1854), 16:150-55; William Calk's journal, original in possession of the Calk family, Mount Sterling, Kentucky.

6. Kenneth Bailey, *The Ohio Company of Virginia and the Westward Movement 1748-1792* (Glendale, California, 1939) pp. 17-31; William M. Darlington, ed., *Christopher Gist's Journals* (Pittsburgh, 1893), pp. 29-32.

7. Josiah Stoddard Johnston, *First Explorations of Kentucky* (Louisville, 1898), pp. 48-50.

8. *Ibid.*, pp. 72-75. 9. *Ibid.*, p. 67.

10. Darlington, *Christopher Gist's Journals*, pp. 32-41.

11. *Ibid.*, map opposite p. 136; Johnston, *First Explorations*, map opposite p. 33.

12. William K. Boyd, ed., *William Byrd's Histories of the Dividing Line betwixt Virginia and North Carolina* (Raleigh, 1929), pp. 13-30.

13. Parker, *North Carolina Charters*, p. 19.

14. Boyd, *Byrd's Histories*, pp. 60-86.

15. *Ibid.*, p. 235.

16. James W. Sames, III, comp., *Four Steps West* (Versailles, Kentucky, 1971), p. 14.

17. Temple Bodley and Samuel M. Wilson, *History of Kentucky* (Louisville, 1928), pp. 51-82; Samuel M. Wilson, *The First Land Court of Kentucky, 1779-1780* (Lexington, 1923), pp. 3-4.

18. William Waller Hening, *The Statutes at Large: Being a Collection of All the Laws of Virginia, 1619-1792* (New York and Philadelphia, 1819-1823, 8:600-601).

19. Walker, "Adventure in Kentucky," 151-53; William Calk's journal, March 13 to April 7, 1775.

20. Hening, *Statutes*, 9:257-61.

21. Sames, *Four Steps West*, p. 29.

22. *Ibid.*, p. 14.

23. Report of Thomas Walker and Daniel Smith to the Virginia House of Delegates, 1780, in Hening, *Statutes*, 6:561-64.

24. Walker-Smith report to the House of Delegates.

25. Richard Henderson to Governor Richard Caswell, November 17, 1779, quoted in Sames, *Four Steps West*, p. 30.

26. Map of Walker line as constructed from Daniel Smith's field notes, in Sames, *Four Steps West*, pp. 36-37.

27. Walker-Smith report to the House of Delegates.

28. *The Constitutions of the United States*, pp. 277-78.

29. *Statistical View of the United States . . . Compendium of the Seventh Census* (Washington, 1854), p. 40.

30. Hening, *Statutes*, 9:257-61.

31. Lewis and Richard H. Collins, "A Dictionary of the Stations and Early Settlements in Kentucky," *History of Kentucky* (Covington, Kentucky, 1874), 2:17-24; John Filson, "Map of Kentucky," 1784.

32. Hening, *Statutes*, 12:89-91, 118-20.

33. Hening, *Statutes*, 13:17-21; Richard H. Stanton, *The Revised Statutes of Kentucky* (Cincinnati, 1860), 1:81-85; William Littell, *The Statute Law of Kentucky with Notes, Praellections, and Observations on the Public Acts* (Frankfort, 1809-1818), 1:17-21.

34. Littell, *Law of Kentucky*, 2:276-78.

35. *Ibid.*

36. *Ibid.* No field notes of the boundary commission sur-

vive. There is a folk story that at the time the commissioners undertook to determine which was the larger stream, the Tug or the Levisa Fork, the Tug was flooding and this accounts for the added territory to Kentucky.

37. Henry P. Scaff, *Kentucky's Last Frontier* (Chicago, 1966), pp. 161-72; William Ely, *The Big Sandy Valley, a History of the People and Country (Catlettsburg, Kentucky, 1887)*, pp. 11-268.

38. Littell, *Law of Kentucky*, 2:277.

3. The Walker Line & the Jackson Purchase

1. George Washington to the House of Representatives (November 10, 1791), Thomas Jefferson to President George Washington (November 8, 1791), report of the Secretary of State on public lands not claimed by Indians (November 8, 1791), *American State Papers* (Public Lands) 1:22-24.

2. George Washington to the Senate and House of Representatives (November 9, 1792), Thomas Jefferson to the President of the United States (November 2, 1792), Henry Lee to the Secretary of State (October 22, 1792), *American State Papers* 1:53-54.

3. Hening, *Statutes*, 10:643-44.

4. Littell, *Law of Kentucky*, 2:434; 3:86.

5. *Acts of Kentucky*, 1 December 1817, p. 576.

6. 7 *United States Statutes*, January 10, 1786, pp. 24-26; Thomas Jefferson to the Senate and House of Representatives, January 18, 1803, in James D. Richardson, comp., *Messages and Papers of the Presidents*, 1:353. The other presidents reiterated this view.

7. Charles C. Royce, comp., *Indian Land Cessions in the United States* (Washington, 1900), pp. 694-5. 7 *United States Statutes*, 7 January 1819, pp. 192-95.

8. *Acts*, 4 February 1817, p. 245.

9. *Acts*, 8 February 1819, pp. 719-21; *Annals of Congress*, 15th Congress, 2nd Session, 193-94, 200.

10. 2 Haywood and Cobb, *Statute Laws of Tennessee*, pp. 229-30.

11. William Robertson Garrett, *History of the South Carolina Cession and the Northern Boundary of Tennessee* (Nashville, 1884), p. 26.

12. Joseph H. Parks, *Felix Grundy* (Baton Rouge, 1940), pp. 122-23; *Acts*, 8 February 1819, pp. 719-21; Mrs. Chapman Coleman, *The Life of John Jordan Crittenden* (Philadelphia, 1871), 1:48-56; John D. Carroll, *The Kentucky Statutes Containing All the General Laws of Kentucky* (Louisville, 1909), 189-98.

13. *Acts, Resolutions*, 1818, pp. 576-79.

14. *Constitutions of the United States*, pp. 277-78.

15. Coleman, *Life of Crittenden*, 1:55-56.

16. Garrett, *South Carolina Cession*, p. 26; *Acts*, 11 February 1820, pp. 922-27.

17. *Acts*, 22 November 1821, pp. 267-68; 21 December 1821, pp. 409-15.

18. Sections 9 and 10 of the Virginia Compact of 1789 made land reservations in the military reserve, and guaranteed the validity of land deeds granted by Virginia. Stanton, *Revised Statutes*, 1:83.

4. Dr. Walker's Legacy

1. *Acts*, 8 February 1819, pp. 719-21.

2. Bright-Munsell Journal, December 4, 1830.

3. *Acts*, 27 November 1821, pp. 266-67.

4. *Ibid.*, 27 November, pp. 266-77; December 10, 1821, pp. 316-17. 5. *Ibid.*

6. Payson J. Treat, *The National Land System, 1785-1820* (New York, 1910), pp. 395-400.

7. Henderson Papers, Kentucky Historical Society. There is an original plat and report of this survey in the State Library and Archives of Tennessee, Nashville. The Kentucky microfilm copy is too dim to be read.

8. The Kentucky-Tennessee Convention, 2 February 1820, Carroll, *Statutes*, p. 193.

9. *Acts*, 14 February 1820, pp. 272-73.

10. The various laws enacted, 1821-1830, are in C. S. Morehead and Mason Brown, *A Digest of the Statute Laws of Kentucky* (Frankfort, 1834), 2:1048-65.

11. *Acts*, 28 December 1824, pp. 65-72; 8, 10, 12 January 1825, pp. 85-90, 129-30, 182-83.

12. *Ibid.*, 8 January 1829, pp. 45-47.

13. Morehead and Brown, *Digest of Laws*, 2:1035; *Acts*, 21 December 1825, p. 98.

14. *Acts*, 19 and 22 January 1827, pp. 68, 72.

15. *Acts*, 1 December 1821, pp. 409-20.

16. *Acts*, 21 December 1825, p. 135; Robert S. Henry, "The Extension of the Northern Line of Tennessee to the West of the Cumberland River, 1819," *Tennessee Historical Magazine*, 5:177-84.

17. Matthews and Cassell report to the Governor of Tennessee, 1 December 1826, quoted in Henry, "The Extension," pp. 181-84.

18. *Acts*, 8 February 1828, p. 93.

19. (Logan), 1792, p. 19; (Christian), 1796, p. 13; (Barren), 20 December 1798, pp. 53-57; (Caldwell), 1809, p. 40; (Allen), 11 January 1815, pp. 262-64; (Simpson), 1819, p. 633; (Trigg), 1820, p. 853. Laura Brown Logan, "The Origins of the Counties of Kentucky," University of Kentucky thesis, 1951.

20. Report and Plat of the Survey to Ascertain & Mark the Dividing Line between the States of Kentucky and Tennessee, 4 December 1830. Includes plats of the Tennessee-Kentucky boundary along Logan, Todd, and Christian counties on the Walker Line.

21. The Smith Journal quoted by Sames, *Four Steps West*, p. 38.

22. Bright-Munsell Report, 4 December 1830.

23. *Ibid.*, pp. 11-18.

24. *Ibid.*, pp. 15-18, 20. 25. *Ibid.*

26. *Acts*, 16 January 1831, pp. 222-24.

27. Quoted in Sames, *Four Steps West*, pp. 100-101.

28. *Acts*, 15 January 1831, pp. 222-23.

29. *Ibid.*, p. 222. 30. *Ibid.*

31. *Public Acts, Twenty-first Assembly of the State of Tennessee*, 12 February 1836, pp. 202-203.

32. *Acts, Tennessee*, 1844, pp. 159-60; *Acts, Kentucky*, 15 January 1845, pp. 11-12.

33. Report of W. P. McClain, C. W. Nance, S. Duncan, and C. A. Wilson to Governor Aaron V. Brown, 8 November 1845.

34. *Ibid.*, map accompanying the report. This jog contained 27 families.

35. *Acts*, 20 February 1846, p. 240.

36. *Acts*, 28 February 1849, pp. 452-54.

5. A Boundary in Equity

1. The Duncan-Nance surveyors in their report to Governor Brown complained that people along the line had either hacked trees to suit themselves, or they had destroyed marks. This has ever been a fault of the border dwellers. They have destroyed many of the four or five hundred markers erected by the Cox-Peeble surveyors in 1858-1859.

2. Report of the Commissioners appointed to run the boundary line between Kentucky and Tennessee, *Legislative Documents*, 1860, pp. 93-94.

3. *Ibid.*, p. 1; *Acts*, 17 February 1858, pp. 82-83.

4. Report of Commissioners, 1860, pp. 14, 56. Citations relating to the Cox-Peebles Survey refer to the published report. I used the original manuscript report from the Tennessee Archives and Library. Apparently the original was lost by the Kentucky Secretary of State.

5. *Ibid.*, p. 5. 6. *Ibid.* 7. *Ibid.*, pp. 6-7.

8. *Ibid.*, pp. 7-11. 9. *Ibid.*, p. 8.

10. *Ibid.*, notes to Map 8, p. 47. The field notes indicate the size of this offset as 2484 x 1927 x 1256 feet.

11. *Ibid.*, p. 92. 12. *Ibid.*, pp. 92-95. 13. *Ibid.*

14. *Ibid.*, pp. 10-11. 15. *Ibid.*, pp. 90-92.

16. *Ibid.*, p. 93. 17. *Ibid.*, pp. 92-95.

18. *Ibid.*, p. 94. 19. *Ibid.*, pp. 94-98.

20. *Ibid.*, p. 95. 21. *Ibid.*, p. 98.

22. *Acts*, 28 February 1860, pp. 71-73; *Acts*, Tennessee, pp. 60-79. In Carroll's *Kentucky Statutes* (1909), in a footnote on p. 189, appears an unbelievable statement: "For reasons unknown to me, the boundary as run by these commissioners (1860) was omitted from the General Statutes, and I have not deemed it necessary to insert it in the Statute, nor do I know to what extent, if any, it varies from the boundary here inserted, which is the boundary found in the General Statutes adopted as the law of the State in 1873. (Ed.)" Later editions of Carroll's *Statutes* omit any mention of the Cox-Peebles survey of 1860. Strictly speaking a lawyer consulting this source would assume that the boundary described in the Compact of 1820 is the true boundary.

23. The report was prepared in longhand, and along with the engineers' field notes it was submitted to the two governors. Kentucky authorized the printing of fifty copies of the report along with the maps to be distributed to the county clerks' offices in those counties bordering on Tennessee. *Acts*, 28 February 1860, p. 72.

6. The Ohio Low Water Mark

1. Carroll, *Kentucky Statutes* (1909), p. 198.

2. See Bailey, *The Ohio Company and the Westward Movement*.

3. Collins, *History of Kentucky*, 2:17-22.

4. Hening, *Statutes*, 11:326-28.

5. *The Papers of Thomas Jefferson*, ed. Julian P. Boyd et al. (Princeton, 1950-), 6:577-80.

6. Hening, *Statutes*, 13:19-20; *Constitutions of the United States*, pp. 304-308.

7. Henry Wheaton, *Report of Cases argued and adjudged in the Supreme Court of the United States* (New York, 1820), 5:374-85.

8. *Ibid.*, pp. 377-84.

9. *Ohio Circuit Court Reports*, New Series, 15:65-72.

10. *Welding v. Nieyler*, 192 U. S. Reports, 573.

11. John W. Monette, *History of the Discovery and Settlement of the Valley of the Mississippi* (New York, 1846), 2:347; Ornon Shreve, *The Finished Scoundrel* (Indianapolis, 1933), pp. 61-67.

12. John H. B. Latrobe, *The First Steamboat Voyage on the Western Waters* (Austin, Indiana, 1961), p. 18. Benjamin Casseday, *The History of Louisville from Its Earliest Settlement* (Louisville, 1852), p. 121.

13. Sir Charles Lyell, *A Second Visit to the United States of North America* (New York, 1849), 2:246-47; Timothy Flint, *Recollections of the Last Ten Years* (Boston, 1826), pp. 219-28.

14. William E. Huling to Governor W. C. C. Claiborne, 18 October 1802, Dunbar Rowland, ed., *The Mississippi Territorial Archives, 1798-18* (Nashville, Tennessee, 1905), 1:207-208.

15. Commissioners' Report on the Shoals in the Ohio in 1819. The drawings are included in the report opposite the text describing barriers to river transportation.

16. *Acts*, 12 January 1825, pp. 167-73.

17. *Acts*, 28 February 1848, pp. 484-85.

18. *Acts*, 7 January 1852, pp. 219-27.

19. Repeatedly Congress and the Supreme Court have refused to become involved in boundary suits between the states. John Jordan Crittenden in 1819 undertook to persuade the Senate to act as arbiter among the states, but the proposal was rejected. *Annals of Congress* 15 Cong., 2 Sess., pp. 193-94, 199-200. In *Handley's Lessees v. Anthony*, the contention was between citizens and not the states. Thus far no court has dealt with the provisions of the Virginia Compact.

20. *Acts*, 18 April 1873, pp. 51-52.

21. Carroll, *Kentucky Statutes* (1909), pp. 254-55, Commissioner's Report, Henderson County Book I, 1-6.

22. *Ibid.*; *Acts*, 15 March 1878, pp. 56-58.

7. Patterns on the Land

1. Hening, *Statutes*, 9:355-57; Wilson, *First Land Court*, pp. 4-6, 32, 56.

2. Hening, *Statutes*, 9:355-56.

3. Every county clerk's office in Kentucky contains deed books documenting these facts. For specific deeds see James Hughes, *A Report of the Causes Determined by the late Supreme Court for the District of Kentucky* (Lexington, 1803), pp. 54, 109, 332.

4. One such line is the Walton base line which runs from

the mouth of Dog Creek on the Kentucky River northwestward into Madison County.

5. Hughes, *Supreme Court of Kentucky*, pp. 54, 171, 197, 213, 339.
6. pp. 79-81.
7. *Acts*, 28 January 1819, pp. 633-37; 6 February 1819, pp. 702-705.
8. Morehead and Brown, *Digest of Laws*, pp. 1494-96.
9. Many of the quadrangular maps showing county lines contain the legend "indefinite boundary." Specifically: Allensville, Todd-Logan, Sandgap, Jackson-Estill, Berry Grant-Harrison, and Amandaville, Russell-Cumberland.
10. *Acts*, 19 February 1849, p. 451.
11. Royce, *Indian Land Cessions*, pp. 670-71, map 54; 7 *U. S. Statutes*, pp. 93-94; Littell, *Law of Kentucky*, 4:167.
12. 7 *U. S. Statutes*, 7 January 1819, pp. 192-95; *Acts*, 29 May and 11 December 1822, pp. 12, 231.
13. Hening, *Statutes*, 9:571-72.
14. Paul W. Gates, "Tenants of the Log Cabin," *Mississippi Valley Historical Review*, 19:3-31; Humphrey Marshall, *History of Kentucky* (Frankfort, 1824), 2:207-11.
15. Hening, *Statutes*, 8:37.
16. Bakeless, *Daniel Boone*, pp. 340-50; Edna Kenton, *Simon Kenton, His Life and Period, 1755-1836* (New York, 1930), pp. 151-52; Hughes, *Supreme Court of Kentucky, McConnell vs. Kenton*, pp. 257-322.
17. *Acts*, 1821, pp. 456-69.
18. Gates, "Tenants," p. 22.
19. *Acts*, 17 December 1795, pp. 54-55, 1 March 1799, pp. 203-205.
20. *Kentucky Gazette*, 15 October 1796.
21. Morehead and Brown, *Digest of Laws*, 1:388, 506; 2:1393-1410.
22. *Acts*, 22 January 1827, pp. 81-95.
23. *Annals of Congress*, 1 Sess., 21 Cong., Part 2, 16:827-42; Richardson, *Messages and Papers of the Presidents*, 2:483-93.
24. J. Winston Coleman, Jr., *Stage Coach Days in the Bluegrass* (Louisville, 1935), pp. 233-34.
25. *Acts*, 21 December 1799, pp. 68-70; William Littell and Jacob Swigert, *A Digest of the Statute Law of Kentucky* (Frankfort, 1822), 2:943-45.
26. *Acts*, 12 January 1825, pp. 167-73.
27. Casseday, *History of Louisville*, pp. 166-72.
28. *Acts*, 10 February 1816, pp. 607-10.
29. *Ibid.*, pp. 396-99.
30. *Ibid.*, 28 February 1835, pp. 285-95.
31. Report of the Board of Internal Improvements, *Legislative Documents, 1837-1838*.

32. *Niles Weekly Register*, 4 April 1835, p. 75.

33. Edward W. Hines, *Corporate History of the Louisville and Nashville Railroad Company* (Louisville, 1905), p. 208.
34. *American Railroad Journal*, 29 November 1849.
35. The General Assembly chartered the Louisville, Cincinnati and Charleston Railroad Company 29 February 1836. *Acts*, pp. 426-43.
36. Thomas D. Clark, *The Beginning of the L & N* (Louisville, 1933), pp. 17-18.
37. *Acts*, 4 March 1850, pp. 354-69.
38. *Louisville and Nashville Employee's Magazine*, 1:24.
39. *Louisville and Nashville Annual Report, 1860*.
40. *Preliminary Report of the Eighth Census* (1862), p. 225.

8. Years of Conflict

1. Alexander MacKay, *The Western World* (London, 1849), 2:144.
2. Ivan E. McDougale, *Slavery in Kentucky 1792-1865* (Westport, Conn., 1970), pp. 4-10.
3. *Statistical View of the United States* (1854), p. 82.
4. Lewis C. Gray, *History of Agriculture in the Southern United States to 1860* (Washington, 1933), 2:650-61.
5. Morehead and Brown, *Digest of Laws*, 1:259-60, 2:714-16, 1302.
6. *Report of the Excursion . . . on the 26th, 27th, & 28th Jan., 1860*, p. 6; *Acts*, 2 February 1860, 1:179.
7. *Ibid.*, pp. 12, 36.
8. E. Merton Coulter, *The Civil War and Readjustment in Kentucky* (Chapel Hill, 1926), pp. 108-12. Lowell H. Harrison, *The Civil War in Kentucky* (Lexington, 1975), pp. 22-29.
9. Coulter, *Civil War and Readjustment*, pp. 132-36; Harrison, *Civil War*, pp. 23-25.
10. Collins, *History of Kentucky*, 1:96.
11. *Ibid.*, p. 99.
12. *Louisville Daily Journal*, February 20, 1862; Arndt M. Stickles, *Simon Bolivar Buckner* (Chapel Hill, 1940), pp. 108-23.
13. Robert E. McDowell, *City of Conflict: Louisville in the Civil War, 1861-1865* (Louisville, 1962), pp. 1-15.
14. *Louisville Daily Journal*, April 8, 12, 15, 1862; James Lee McDonough, *Shiloh—in Hell before Night* (Knoxville, 1977), pp. 152-95.
15. Cecil F. Holland, *Morgan and His Raiders*, pp. 118-31; Edison H. Thomas, *John Hunt Morgan and His Raiders*, pp. 34-45.
16. Collins, *History of Kentucky*, 1:113-14.

A NOTE ON SOURCES

In conducting research for this treatment of Kentucky's maps and boundaries I kept in mind that there were documentary sources that had not been fully exploited, and that there is a fairly voluminous official printed record, much of which has been overlooked in past treatments of the boundary issues. A legislative committee that had to deal with the Indiana-Kentucky boundary issue made the justifiable criticism that responsible Kentucky officials had been shamefully negligent in the preservation of the documents relating to the boundaries of the Commonwealth. I found this to be true. Fortunately many of the most pertinent documents have been preserved by Virginia and Tennessee. The Governors' Papers preserved in the Kentucky Historical Society are rich sources of information, but those earlier placed on microfilm are now all but illegible in that form. This work will have to be redone.

Three graduate theses were prepared in earlier days at the University of Kentucky on the subject of boundaries, but these are of indifferent quality, largely because of inadequate research. This is true to some degree of publications on the subject, as well. The best of these is W. R. Garrett, *History of the South Carolina Cession and the Northern Boundary of Tennessee* (Nashville, 1884). Robert Selph Henry, "The Extension of the Northern Line of Tennessee to the West of Cumberland Gap," *Tennessee Historical Magazine* (1919) 5: 177-84, is a rather full treatment of the Matthews survey. Ben T. Davis, "The Kentucky-Tennessee Line," *Proceedings of the Twenty-Fourth Annual Meeting of the Kentucky Bar Association*, (1925) p. 175-91 is of a general nature; so is J. F. Gordon, "History of the Jackson Purchase," *Ibid.* (1916), pp. 147-63.

The original documentary sources are fairly numerous. Among these the journals of Thomas Walker and Daniel Smith and their plats in the collection of the Virginia Historical Society, the documents relating to the establishment of the Pine Mountain-Big Sandy Valley in 1799, the collection of documents pertaining to the Bright-Munsell Survey, those of the Duncan-Nance Survey in 1845, the collection of correspondence from citizens along the middle section of the Kentucky-Tennessee boundary, and the field notes, journal, and plats of the Cox-Peebles Survey of 1858-1859, all in the Tennessee Library and Archives, Nashville, are indispensable. Microfilm of this material is available in the Kentucky Historical Society Collection, Frankfort. The Kentucky State

Archives contain the original journal and plat of the Bright-Munsell Survey of 1831, and the Commissioners' Report on the Shoals in the Ohio River in 1819. The latter report contains plats of the river at the sites of the various shoals including the Falls of the Ohio. W. L. Henderson's field notes made in the survey of lands west of the Tennessee River are available on defective microfilm in the Kentucky Historical Society; the original is in the Tennessee State Library and Archives Collection. The Report of the Kentucky-Indiana Commissioners' survey of the boundary on the west side of the Green River Island is recorded in Commissioners' Report I, 1-6, county clerk's office in Henderson County, and also in the county clerk's office, Vanderburg County, Evansville, Indiana.

The Acts of Kentucky, Kentucky General Assembly, 1792-1878, contain the numerous laws pertaining to the boundaries of the Commonwealth. Supplementary references include: for the laws of 1792-1819, William Littell's *The Statute Law of Kentucky with Notes, Praelections, and Observations on the Public Acts . . .*, 5 vols., (Frankfort, 1809-1819); C. S. Morehead and Mason Brown, *A Digest of the Statute Law of Kentucky*, 2 vols. (Frankfort, 1834); Richard H. Stanton, *The Revised Statutes of Kentucky* (Cincinnati, 1860); Harvey Myers, *A Digest of the General Laws of Kentucky*, (Cincinnati, 1866); J. Barbour and John D. Carroll, *The Kentucky Statutes containing all the General Laws of Kentucky*, (Louisville, 1894); and John D. Carroll, *The Kentucky Statutes Containing all General Laws of Kentucky*, (Louisville, 1922). All the Virginia laws pertaining to Kentucky are contained in William Waller Hening, *The Statutes at Large: Being a Collection of All the Laws of Virginia, 1619-1792*, 13 vols. (New York and Philadelphia, 1819-1823); the *Journals of the Kentucky Senate, 1820-1873*, give an insight into the progress of boundary legislation through the General Assembly. The *Legislative Documents, 1838-1860*, contain materials pertaining both to the boundary and internal improvements. The volume 1859-1860 contains the full report of the Cox-Peebles survey. The legislative history of Tennessee's concerns with the boundary is contained in the *Public Acts of the General Assembly, 1803-1860*, and in Robert T. Shannon, compiler and editor, *A Compilation of the Tennessee Statutes* (Nashville, 1917). The report on the Kentucky-Tennessee boundary dispute, 1818, was transmitted to the United States Senate and appears in the

American State Papers (Public Lands), II (Washington, 1834). James Hughes, comp., *A Report of the Causes determined by the Late Supreme Court of Kentucky for the District of Kentucky, and by the Court of Appeals* (Lexington, 1803), is indispensable for information pertaining to land surveys and disputes. The *American State Papers* (Miscellaneous) (Washington, 1834), contains the United States survey of the Ohio in 1806. Materials pertaining to the disputes between Kentucky, Ohio, and Indiana are contained in *Ohio Jurisprudence*, 49 (Cincinnati, 1942); *Ohio Circuit Court reports* vols. 8, 15 (Cincinnati, 1874, 1913); L. J. Crutchfield, comp., *Reports of Cases Argued and Determined in the Supreme Court of Ohio*, new series, vol. III (Cincinnati, 1874). The question of bridges is discussed in *Brown's Annotated Statutes*, vol. 2 (Indianapolis, 1926). The important Marshall decision in *Handley's Lessees v. Anthony* is contained in Henry Wheaton, ed., *Reports of Cases argued and Adjudged in the Supreme Court of the United States*, vol. 5 (New York, 1820). The Kentucky Legislative Research Commission prepared two reports, *Kentucky's Ohio River Boundary from the Big Sandy to the Great Miami*, and *Kentucky's River Boundary from the Great Miami to the Wabash* (Frankfort, 1969, 1972). The attempt of John Jordan Crittenden to get the United States Senate to adjudicate the Kentucky-Tennessee dispute is to be found in the *Annals of Congress*, 15th Congress, 1st session, vols. 31-32 (Washington, 1818).

James W. Sames, III, comp., *Four Steps West* (n. p., 1971), has brought together a highly useful documentary history of the Virginia-North Carolina and Kentucky-Tennessee boundaries. Charles II's Carolina Charter of 1665 is contained in the *Colonial Records of North Carolina*, vol. 1, and in Hugh Talmadge Lefler, ed., *North Carolina History told by Contemporaries* (Chapel Hill, 1948). William K. Boyd, ed., *William Byrd's Histories of the Dividing Line betwixt Virginia and North Carolina* (Raleigh, 1929), gives the background of the eastern part of the 36° 30' boundary.

The early history of the beginnings of the western movement toward Kentucky is contained in Clarence W. Alvord and Lee Bidgood, *The First Explorations of the Trans-Alleghany Region by the Virginians, 1650-1674* (Cleveland, 1912); William P. Cumming, ed., *The Discoveries of John Lederer with the Unpublished Letters by and about Lederer to Governor John Winthrop, Jr.* (Charlottesville, 1958); Laurence H. Gipson, *The Great War for Empire, the Years of Defeat, 1754-1757; The Years of Victory 1758-1760* (New York, 1946, 1949); J. G. M. Ramsey, *Annals of Tennessee to the End of the Eighteenth Century* (Charleston, S. C., 1853); John Filson, *The Discovery, Settlement and Present State of Kentucke* (Wilmington, 1784); Samuel M. Wilson, *The First Land*

Court of Kentucky 1779-1780 (Lexington, 1923).

The land system of Kentucky is discussed in Paul Wallace Gates, "Tenants of the Log Cabin," *Mississippi Valley Historical Review* (June 1962) 49: 3-31; Thomas Perkins Abernathy, *Western Lands and the American Revolution* (New York, 1937); James R. Robertson, *Petitions of the Early Inhabitants of Kentucky to the General Assembly* (Louisville, 1914); Willard R. Jillson, *Old Kentucky Entries and Deeds* (Louisville, 1924); Payson J. Treat, *The National Land System, 1785-1820* (New York, 1910). The Kentucky statutes are filled with laws pertaining to land titles and ownership.

The opening of roads and canals and the building of railroads in Kentucky are treated in these sources: Report of the Secretary of War, 14 Feb. 1853, Executive Document No. 42, 22nd Cong., 2nd Sess.; James Oliver, *A History of the Canal Projects at the Falls of the Ohio River* (University of Kentucky thesis, 1937); William Allen Pusey, *The Wilderness Road to Kentucky* (New York, 1921); Thomas Speed, *The Wilderness Road* (Louisville, 1886); Robert L. Kincaid, *The Wilderness Road* (Indianapolis, 1947); Report of the Board of Internal Improvements, *Kentucky Legislative Documents, 1837-1838* (Frankfort, 1839); Mary Verhoeff, *The Kentucky River Navigation* (Louisville, 1917) and *The Kentucky Mountains* (Louisville, 1911); J. Winston Coleman, Jr., *Stage Coach Days in the Bluegrass* (Louisville, 1935); Thomas D. Clark, *Beginning of the L & N* (Louisville, 1933); Kincaid A. Herr, *The Louisville & Nashville Railroad, 1850-1942* (Louisville, 1943); E. M. Coulter, *The Cincinnati Southern Railroad and the Struggle for Southern Commerce, 1865-1872* (Chicago, 1922).

Kentucky was almost from the beginning of settlement on the "Grand Tour." Both American and foreign travelers came to Maysville and turned southward overland to Lexington, and then to Louisville. Among the most important early travelers were Thomas Pownall, *A Topographical Description of such Parts of North America as are contained in the Map of the British Colonies, &c., in North America* (London, 1776); Gilbert Imlay, *A Topographical Description of North America* (London, 1793); Francois André Michaux, *Voyage a l'ouest des monts Alleghanys, dans les etats de l'Ohio, du Kentucky et du Tennessee. . .* (Paris, 1804); Henry Bradshaw Fearon, *Sketches of America* (London, 1818); Timothy Flint, *Recollections of the Last Ten Years* (Boston, 1826); Victor Collot, *A Journey in North America. . .*, 3 vols. (Paris, 1826); Alex MacKay, *The Western World; or, Travels in the United States in 1846-47* (Philadelphia, 1849).

Several biographies and autobiographies have a bearing on the history of the mapping of Kentucky. Among

these are *The Autobiography of Nathaniel Southgate Shaler* (New York, 1909); Joseph H. Parks, *Felix Grundy, Champion of Democracy* (Baton Rouge, 1940); Mrs. Chapman Coleman, *The Life and Times of John Jordan Crittenden*, 2 vols. (Philadelphia, 1871); Albert D. Kirwan, *John Jordan Crittenden and the Struggle for the Union* (Lexington, 1962); Walter McCaleb, *The Aaron Burr Conspiracy* (New York, 1936).

Pertinent material relating to Kentucky geography is contained in W. Winterbotham, *An Historical, Geographical, Commercial, and Philosophical View of the United States of America, and of the European Settlements in America and the West Indies*, 3 vols. (New York, 1796); George M. Wrong, *The Rise and Fall of New France*, 2 vols. (New York, 1928).

Local and state histories that are useful in the study of maps include: Humphrey Marshall, *History of Kentucky*, 2 vols. (Frankfort, 1824); Richard H. Collins, *History of Kentucky*, 2 vols. (Covington, 1874); M. M'Murtrie, *Sketches of Louisville and Its Environs* (Louisville, 1819); Benjamin Casseday, *History of Louisville* (Louisville, 1852); Charles R. Staples, *History of Pioneer Lexington* (Lexington, 1939); William E. Connelley and E. M. Coulter, *History of Kentucky* (Chicago, 1922); Frank P. Scaf, *Kentucky's Last Frontier* (Prestonsburg, Ky., 1966); William Stewart Lester, *The Transylvania Colony* (Spencer, Ind., 1935); Kelly Morgan, *History of Clay County Kentucky 1767-1976* (Manchester, Ky., 1976); Thomas D. Clark, *Kentucky, Land of Contrast* (New York, 1968).

Specialized works that contribute materially to the understanding of Kentucky cartography are Jacob Burnet, *Notes on the Early Settlement of the North-Western Territory* (Cincinnati, 1847); Reuben T. Durrett, *The Centenary of Louisville*, (Louisville, 1880); Boynton Merrill, Jr., *Jefferson's Nephews: Frontier Tragedy* (Princeton, 1976); Otto A. Rothert, *The Outlaws of Cave-In-Rock*, (Cleveland, 1924).

Reference works useful in connection with this topic are: Philip Lee Phillips, *A List of Geographical Atlases in the Library of Congress*, 4 vols. (Washington, 1901); Ronald V. Tooley, "Dictionary of Mapmakers," *Map Collector's Circle* Nos. 16, 28, 40, 50-(London,

1966-); Henry Schenck Tanner, *A Brief Description of the Canals and Rails of the United States*, (Philadelphia, 1834) and *A Geographical, Historical and Statistical View of the United States; Containing Accounts of Their Early Settlements; Natural Features; Progress of Improvements; Form of Government; Civil Divisions; and Internal Improvements* (Philadelphia, 1841); Calvin D. Cowles, comp., *Atlas to Accompany the Official Records of the Union and Confederate Armies. Published under the Direction of the Hon. Redfield Proctor, Stephen B. Elkins, and Daniel S. Lamont, Secretaries of War . . .* (Washington, 1891-1895); James W. Sames III, comp., and Lewis C. Woods, Jr., ed., *Index of Kentucky and Virginia Maps, 1562 to 1900* (Frankfort, 1976); Thomas Pownall, *A Topographical Description of the United States of America*, edited by Lois Mulkearn (Pittsburgh, 1949); Thomas P. Field, "Kentucky and the Southwest Territory, 1794," map and index (Fayette County Geographical Society, 1966). The three Kentucky maps published by the Kentucky Geological Survey in 1927, which include the "Geological Map of Kentucky," "Base Map of Kentucky," and the "Relief Map of Kentucky" are definitive. The collection of detailed county maps prepared by the Department of Planning of the Kentucky Department of Highways (Frankfort, n. d.) proved most useful in locating specific points in the Commonwealth and near its boundaries. Indispensable are the sectional topographical maps of the United States Geodetic Survey, which are now available for the entire Commonwealth.

Useful articles include "Kentucky Roads," *Niles Weekly Register*, 4 April 1835; in *The Filson Club History Quarterly*: Willard Rouse Jillson, "Historical Sketch of the Geological Map of Kentucky," 19:173-78; Lucien Beckner, "Eskippakithiki, the Last Indian Town in Kentucky," 6:355-82; Brent Altsheier, "The Long Hunters and James Knox Their Leader," 6:169-85; Samuel M. Wilson, "West Fincastle—Now Kentucky," 9:65-94; in *Register of the Kentucky Historical Society*: Willard Rouse Jillson, "Elihu Barker Map of Kentucky," 21:322-23; Thomas D. Clark, "The Lexington and Ohio Railroad—a Pioneer Venture," 31:9-28.

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