ARMORY ON WESTERN WATERS.

KOLLILEA

Sundry Inhabitants of Pendleton County,

IN THE

STATE OF KENTUCKY,

UPON THE SUBJECT OF

A National Armory in the West.

DECEMBER 19, 1825. Read, and referred to the Committee on Military Affairs,

WASHINGTON:

PRINTED BY GALES & SEATON

1825.

PETITION.

To the Congress of the United States.

The undersigned petitioners of the county of Pendleton, in the state of Kentucky,

REPRESENT:

That, having understood that your honorable body contemplated the establishment of a National Armory on the western waters, beg leave to call your attention to a proper situation in this county, on the Licking River, called the Horse Shoe Bend, about 26 miles from Cincinnati, and about 11 or 12 miles below Falmouth, in the state of Kentucky; about 30 miles from Cinthiana, on the South Fork of Licking River; about 40 miles from Paris, and about 60 from Lex-That your petitioners will furnish to your honorable body evidence as authentic as can be required, as to the advantages of such a location: 1st. Theyrefer to documents hereto annexed, marked A, B, C, and D; and they refer to Col. James Johnson, their Representative in Congress, who has made the examination and survey personally; that their representative has had great experience in water works; and the facts which he will detail to your honorable body will be founded upon personal knowledge and long and matured experience.

2d. Your petitioners assert that a fall can be obtained of 21 feet

water, with a dam of ten feet.

3d. That the water of said river is always competent to carry on all the works of a national armory at the dryest season of the year.

4th. That said works will never be interrupted by the back water

from the Ohio.

5th. That, from the Ohio River, the twenty-six miles, there is a safe navigation to said Horse Shoe Bend.

6th. That the nearest point of the Horse Shoe Bend, on Licking

River, to the Ohio River, is eight miles only.

7th. That twenty acres, to include the site and water, will be given to Congress.

8th. That any quantity of woodland can be obtained at a low price; say one or two dollars per acre.

9th. It is in a healthy situation.

10th. The country affords iron ore and stone coal, and iron works.

11th. The site is very much in the centre of the population of the West, being contiguous also to three states, Ohio, Indiana, and Kentucky.

12th. And without going into more detail, they invite a comparison with any other point on the western waters, and if the facts are doubted, they wish an examination to be made by officers properly

appointed, and to let the establishment depend upon these facts; and, in duty bound, your petitioners will ever pray.

James Sothard,
James Kirby,
Wm. Wheeler,
Enos Daniel.
Robt. Taylor,
Drummond Wheeler,
Wm. Yellon,
Pope Williams,
John Ellis,

Charles Yelton,
Horatio Willette,
Gabriel Amiss,
Henry Ellis,
James Fryer,
Silas Shoemaker,
Charles Williams,
Benjamin Shoemaker,
S. Lockwood,

(A.)

We certify that we will give to the United States a sufficiency of ground to establish the United States' Western Armory, provided it is established at the Horseshoe Bend, on Licking River; and provided it does not exceed twenty acres of land. The title of the land is good. We know of no conflicting claim on the land. Witness our hands, this 12th November, 1825.

JAMES KIRBY, WM. WHEELER.

(B.)

September 24, 1825.

DEAR SIR: Agreeable to information from you, received by Mr. Joseph Deacons, to measure and level Licking river, at a certain place known and described as the Horse Shoe, in Pendleton county, about eleven miles below Falmouth, (on the forks of Licking,) we, the undersigned, proceeded, on the 23d instant, to level the same the distance of two miles round, and find there to be eleven or twelve feet fall; we then measured across from where we commenced levelling, to where we ended or stopped, and find the distance to be about one hundred and thirty poles through a common licking beach bottom; there is also two ravines, or guts, or, otherwise, deep gulleys, that head together, which will greatly assist in digging or opening a way through or across. We can, also, inform you, that the place lies about twenty-six miles from Newport, or Cincinnati, and across to the Ohio, at the mouth of Stepstone, about eight miles, where a good way may easily be had; the place lies adjacent to a well timbered part of the country; and we can further certify to you that no commissioner was ever on the place, nor were we, while they were in

that part of the state, ever informed any thing concerning it, that we know of. We are informed that one of the commissioners stated, while he was at Newport, that he was told that the back water from the Ohio river frequently came to this place; there is some of us that have lived in the neighborhood upwards of twenty five years, and we can certify that we never saw the back water from the Ohio there at all.

With the highest respect, we remain yours, &c.

Robert Taylor, Drummond Wheeler, Silas Shoemaker, William Yelton, Pope Williams, John Ellis. Charles Yelton, Horatio Willette. Gabriel Amiss, Henry Ellis,

James Fryer, Charles Williams. Benjamin Shoemaker, Samuel Lockwood, James Sothard, James Kirby. William Wheeler.

To Colonel JAMES JOHNSON.

[C. is a Map of the Country.]

The Horse-shoe Bend, on Licking river, contains between two and three hundred acres of high bottom land, the average height of which above low water mark, is, along the line of the canal, considered about forty-two feet; the natural fall is eleven feet. A dam, then, across Licking river, at the head gates, ten feet high, will produce a fall of twenty-one feet. The bed of the river where the dam will be built, is a smooth limestone rock, over which a strong, tight, and permanent dam can be erected. The timber and rock are so near, and so abundant, that a dam can be built with but little cost. The length of canal is 825 yards, from actual measurement. The depth of the canal, and that entirely of earth, will not exceed thirty-seven feet. The bottom of the canal will be twelve feet wide, and the top eighty feet wide.

A deep ravine runs along the line on which the canal will run, which reduces the expense of excavation very considerably. It is not even probable, from the appearance of the ground, and from an examination of the deep ravine. it confirms the probability, that in excavating the canal there will be any interruption of rock. missioners report, that the highest rise of water in Licking river, a few miles below the Horse-shoe Bend, was about thirty feet. This may be the fact, but it is equally a fact that such a rise does not happen oftener, upon an average, than once in ten years, if as often; and when it does happen, such is the regular descent of Licking river, that in a few days the water runs off and leaves it in its common stage. A dam ten feet high, when added to the natural fall of eleven feet, will make the aggregate fall, where the water wheels will be

placed, twenty-one feet; eight feet of this head will be all-sufficient to operate on and drive the works. At Harper's Ferry they retain eight

feet head-water, which produces all the power needed.

From this data it will be seen that there remains of the twentyone feet head, thirteen feet between the lowest part of the waterwheels and the surface of low water in the bed of the river. The river then must rise thirteen feet before the back water will interfere with the water-wheels, which will very seldom happen, and when it does so happen, it is of very short duration, on account of the regular de-

scent of the bed of the river.

But this casual circumstance can be effectually remedied by the use of reaction wheels. The back water from the Ohio never reaches the Horse-shoe Bend by some five or six miles, as admitted and stated by the commissioners; Cruiser's creek, and Bernen's creek, which is some miles below the Horse-shoe Bend, are the highest points that the back water from the Ohio ever reaches; reaction wheels will run with sufficient power at this site to drive all the wheels and machinery, when the river rises to its highest point. When the water rises at the toll-race, it will also rise at the head-gates in nearly an equal proportion, so that the head and fall continues entirely sufficient to drive reaction wheels.

The ground where the buildings will be erected, is never inundated by freshets from the river; it is elegant level land, and houses can be laid off in regular order, with streets, and every house can, with great convenience, have a good garden attached to it. which makes it vastly superior, in this respect, to Harper's Ferry. There, the houses for the work-hands, are built in groups, without the least order or system, and not a foot of ground can be occupied for gardens for the work-hands, except one or two, and such is the narrow state of the

low ground, that the whole establishment is much confined.

At the Horse-shoe Bend no such difficulty exists; the owners of the land and water have agreed to give both to Government, (see docu-

ment marked A.)

The whole of the sixty one houses necessary for the establishment, and the land occupying the canal, will not exceed eight acres, which will have twelve acres for gardens and yards. Any quantity of land may be purchased at, and near the site, at a price not exceeding two dollars per acre.

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D.

Estimate of	Expense of locating	the National	Armory	on Licking River,
at th	e Horse-Shoe Bend,	in Pendleton	County,	Kentucky.

Excavations of earth for forebays, race tire of shops and foundation,	\$ 1,620	44	
For Cana	L		
155,9162 cubic yards, at 20 cents, -		31,183	383
Walls for forebays, races, and wall ne	xt the river, -	5,000	00
For arches, &c		758	36
Canal wall at the shops,		4,000	00
Head gate, near the dam of canal, incl	luding wall, -	1,000	00
Two bridges over the canal, at \$10			
do. over forebays, at \$ 25 each, -		300	00
Dam, ten feet high, 462 feet long, mac	de of stone ham-		
mered,		14,040	
Sixty-one buildings, including quarters	for officers and		
workmen, workshops with fixtures	for machinery,		
&c		137,556	10
Machinery, tools, patterns, &c		14,522	00
Miscellaneous articles, -		1,549	00
Add for contingencies 10 per cent		21,152	09
One thousand acres of land contiguous	to works, -	1,500	00
		234,181	031
Delegat Con marries		5,000	
Deduct for ravine,		3,000	
	Aggregate,	5229,181	231
	Secretary Control of the Control		-

I do certify, that the facts contained in the foregoing petition, and the documents marked A, B, C, D, are correct; and this I know of my own personal knowledge: That I did, at the request of the petitioners and many others, attend upon the premises and superintend the survey; examined the ground, and the volume of water, in November last, and in the driest season that ever has been known in the state of Kentucky, and made the levelling myself. The estimate of expense has been made upon the best data that could be obtained; and I have no doubt the estimate is amply sufficient.

JAMES JOHNSON.

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The following Estimate, taken from the Report of the Commissioners, showing the aggregate amount of expense which the Armory would eost at each site, viz:

page 16,			232,365 25
page 19,	300-000		357,940 41
page 25,		10 mg	394,813 66
page 28,		-	505,067 72
page 31,			319,479 25
page S4,		199	374,572 40
page 35,			312,973 65
, page 40,			279,849 91
page 45,			204,699 66
page 155,			398,535 31
	page 19, page 25, page 28, page 31, page 34, page 35, page 40, page 43,	page 19, - page 25, - page 28, - page 31, - page 34, - page 35, - page 40, - page 43, -	page 19,

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