

**Ohio Canal.**

The Canal along the valley of the Muskingum, between the Portage summit and the lower level at Websport occupies ground favorable on the whole, for its construction. The crossing of the main stream above the mouth of Sandy, of Sugar creek, at Dover, and of the Walkonding, at Roscoe, presents difficulties which considerably enhance the cost of the work. Several formidable hills and wash banks, also of considerable size, and the great range of hills from low to high water, require in many places, for considerable distances, high guard banks, strongly fortified with stone on the exterior slope, to secure the canal from the effects of high freshets. Notwithstanding these obstacles, no portion of the canal, of equal length, has been constructed at so small expense.

In proceeding from the low level towards the Ohio, the canal leaves the first deep valley of the Muskingum, and pursuing a south westerly direction, it ascends the valley of the Watatoma about nine miles, and passing through a gap in the range of hills which separates this valley from that of the Licking, it enters and ascends the valley of that stream to Newark, in Licking county; thence continuing along the valley of the South Fork of the same stream, it reaches the Licking summit, 191 miles from Lake Erie.

The Licking summit is the highest ground over which the canal passes between the valleys of the Muskingum and the Scioto rivers; but the canal here occupies the point of greatest depression in the dividing ridge, or rather, table land, which separates the two valleys.

The total ascent in the canal, from the low level at Websport to the Licking summit, is 100 feet, which is overcome by means of nineteen locks, and the distance is forty-two miles.

The elevation of the Licking summit level is 317 feet above the level of Lake Erie; 413 feet above the level of low water in the Ohio, at Portsmouth; 881 feet above the level of tide water in the Hudson, and 78 feet below the level of the Portage summit.

The division which extends from Websport to the Licking summit, there are no locks, but of which occur between the Portage and the north end of the summit level, and those between the summit and the north end of the Licking.

Proceeding from Websport towards the summit, we meet with the first of these aqueducts where the canal crosses the main branch of the Wakatoma, 153 miles from Cleveland. The trunk of this aqueduct is 120 feet long, supported by two abutments and two piers of cut stone masonry, resting on double platform of timbers, sunk deep into the bed of the creek, and secured from undermining by large quantities of rough stone.

The second across the North fork of Licking, at the town of Newark, is 133 feet in length, having three piers and two abutments of cut stone masonry, founded on a floor of hewn timbers sufficiently long to extend across the reaches between the abutments and piers, so as to meet under the center of each pier. This floor extends entirely across the stream, and under the whole foundation of each abutment and pier, and is secured from undermining by means of sheet piling, and large quantities of brush and stone placed on the bed of the stream, both above and below the structure.

The third, across the middle, of Racoon fork of Licking, about one mile from that last described, is 128 feet in length, having two piers and two abutments, constructed, founded and secured in the same manner as that across the North Fork.

On the Licking summit level, a small aqueduct of one short reach, occurs at Hibernia; 95 miles; one of three short reaches at 187 miles; and one of four reaches across the South fork of Licking, 188 miles from Cleveland.

Immediately north of the ridge, which here divides the waters of the Muskingum from those of the Scioto, is situated the great Reservoir; from which the summit level of the canal, extending to Newark, in one direction, and to the junction of the main line with the Columbus Feeder, in the other, during the dry season, derive their principal supply of water.

The reservoir extends from west to east nearly eight miles. Its medium breadth is about half a mile, covering, when the surface is six feet above the top water line in the canal, an area of nearly 25000 acres. It is capable of furnishing the summit level and the other levels, dependent upon it, with water for three months without any rise from streams; and the water of occasional summer rains, which flows into it through various channels from the surrounding country, greatly increase its capacity for supplying the canal.

The drought of last summer was uncommonly severe in this region, having commenced unusually early, and continued long; yet the quantity of water

in the reservoir was found adequate to the demands of navigation.

The great reservoir on the Licking summit occupies a natural basin, the bottom of which is a tenacious soil, composed principally of clay.

The basin was surrounded by high ground except on the north-western side, where the ground was low and flat. A large portion of its area was originally occupied by a chain of small lakes, and an extensive marsh. Across the low ground on the north-western side, part of the waters of the South Fork of Licking in times of flood, flowed into the marsh, and as the flood subsided, returned again into that stream.

In order to confine the water in this basin an artificial bank of the Canal, of about four miles in length, two miles of which also forms the towing path bank of the canal, was raised across the low ground on the north-western side; and the waters of the South Fork taken from the stream several miles above, are conducted by a feeder of about six miles in length, on a higher level into the reservoir; near the south-western end of which, the feeder passes over the canal on an aqueduct and falls into the reservoir.

From the Licking summit, the Canal descends southwardly along the valley of Walnut creek, (a branch of the Scioto) which it crosses from the right to the left bank, 10 miles from the summit, and 201 miles from Cleveland, on a culvert of 50 feet chord, founded on platforms of timber resting on piles. At Carroll, 20 miles from Cleveland and the Lancaster Lateral canal unites with the main trunk; three miles from which, (207 miles from Cleveland) the canal recrosses from the left to the right bank of the creek by means of a dam 150 feet in length, the abutments and tumbles of which are of cut stone masonry, resting on a floor of hewn timber, which also serves for an apron to receive the sheet of water which flows over the dam; the whole supported and secured by bearing piles.

From this point, the canal continues on the right or north side of Walnut creek about six miles, gradually receding from its bank; thence passing over a remarkably level tract of country which separates Walnut from Big-belly creek it descends into the valley of the latter stream, about two miles above its junction with the Scioto, and receives the Columbus feeder at Lockbourne, 30 miles from Licking summit, and 221 miles from Cleveland.

Between the Licking summit and the junction, the canal descends 202 25-100 feet by means of 80 locks.

At Lockbourne, the canal receives the Columbus feeder, which extends the navigation to the town of Columbus, 113 miles. Its minimum breadth is 32 feet at the water line, 18 feet at bottom and its depth four feet. On half its length it has the same breadth as the main trunk; and its depth may be easily extended to five feet which will increase its least breadth to 27 feet.

The Columbus feeder enters the Scioto at the lower end of the town of Columbus, by means of a guard lock which excludes the floods of the river and admits into the feeder the requisite quantity of water. Through this lock boats pass into the river, the surface of which is raised to the necessary height for supplying the canal, and also for creating slack water, of sufficient depth for canal boats along the whole extent of the town.

This is effected by means of a dam which is extended across the river about 120 yards below the point of junction with the feeder. This dam is 320 feet in length, 44 feet in height, and is founded on rows of piles extending across the river.

From the point where the Columbus feeder joins the main canal, at Lockbourne, the canal pursues a course generally south, along the valley of the Scioto to the Ohio river. It first occupies the east side of the river, crossing Walnut creek near Bloomfield, 228 miles from Cleveland, by means of a dam (175 feet long 74 feet high) and guard lock of similar construction to those at the crossing Big-belly creek, by the Columbus feeder, where it again commands the water of the Walnut; thence continuing on the same side of the Scioto, to Circleville, 236 miles from Cleveland, it crosses that river on an aqueduct, and passes thence along the west side of the river to the Ohio.

The aqueduct by which the canal crosses the river at Circleville, is composed of a wooden trunk, 418 feet in length, supported by two abutments and four piers, presenting to the river a clear water way of 400 feet, divided into five spaces of 80 feet each. The piers and abutments are beautiful specimens of cut stone masonry, of the most substantial character, resting on double platforms of hewn timbers, supported by bearing piles, driven in the same manner as at the Wallhoning aqueduct. The reaches of the trunk are supported by wooden arches, upon each side of the trunk, from which the timbers on which the floor of the trunk rests, are suspended by means of iron bars, in such a manner as to prevent the

arches from being wet by the water which escapes from the trunk, and so as to permit the removal of the trunk, when it shall decay, without affecting the arches.

A lock is connected with the abutment at the west end of the aqueduct by which the canal descends 94 feet immediately after crossing the river.

Eleven miles below Circleville; 247 from Cleveland, the canal crosses Yellow Bud, a small branch of the Scioto by means of an aqueduct 100 feet in length, having two abutments and two piers of cut stone masonry founded on a floor of hewn timber extending across the bed of the stream, and under the walls of the piers and abutments.

The canal crosses Deer creek a large western branch of the Scioto, 14 miles below Circleville, 250 miles from Cleveland, by an aqueduct, the trunk of which is 172 feet in length, resting on two abutments and three piers of cut stone masonry, founded on piles, surmounted by platforms of timber on a plan similar to that adopted at the Wallhoning and Scioto aqueducts.

Two miles below the Chilicothe, 261 from Lake Erie, the canal crosses Paint creek, the largest tributary of the Scioto, by an aqueduct constructed on the same plan as that of the Scioto aqueduct at Circleville, except that the Paint creek aqueduct has but three reaches of 80 feet in the clear each, the trunk being 272 feet in length.

"Sun Fish" creek is crossed 21 miles from the Ohio, 287 miles from Cleveland, by a culvert of two arches of 40 feet chord each. Camp creek, 17 miles from the Ohio, 291 miles from Cleveland, by one arch of 50 feet chord; and the Scioto Branch creek by three arches of 50 feet chord each, 8 miles from the Ohio; and 300 miles from Cleveland.

All these arches are cut stone masonry—the two first founded on piles surmounted by timber platforms—the last on rock, of which the bed of the stream is here composed.

The canal, at its southern extremity, terminates in the Scioto river on its western side, about 200 yards from its junction with the Ohio.

The Scioto formerly united with the Ohio one mile further west than the present point of junction, which is now immediately at the lower or western end of the town of Portsmouth. A narrow isthmus, of 140 yards in breadth, at top, and 124 yards at the level of low water, separated the two rivers at this place. Through an artificial cut across this neck of land, the Scioto passes into the Ohio, having reduced its bed through this artificial cut, to the level of low water in the latter river.

The total descent from the junction of the Columbus feeder with the canal to low water in the Ohio, at Portsmouth is 241 feet, which is effected by means of 24 locks, in a distance of 87 miles.

The level of low water in the Ohio, at the southern termination of the canal, is 413 feet lower than that of the Licking summit—491 lower than that of the Portage summit—96 lower than the level of Lake Erie—98 lower than the level of low water in the same river at the mouth of the Muskingum—and 468 feet above the level of the ocean.

**FOREIGN NEWS.**

From the N. Y. Courier & Engr. April 10.

**Later from England.**

The packet ships Mary Howland Canada, and Stiefeld, arrived yesterday from Liverpool.

The editor of the Courier and Enquirer has received by these vessels, London papers to the 7th March, and Liverpool to the 3th.

The "Enforcing Bill," or as it is termed by Mr. O'Connell, the "Bill of Blood," was read a first time in the House of Commons on the 5th March—the vote for its passage 466, and against it 89. Friday the 8th was appointed for the second reading.

"It is admitted on all hands," says the London Chronicle, "that the outrages in Ireland are caused by the destitute condition of the great body of people. The competition for land is such, that the landlord takes literally the whole produce, and wretches are constantly driven from their possessions, burning with desire to take vengeance on those who have taken these possessions over their heads. The present bill may produce what other insurrection acts have produced before a temporary cessation from outrage. We admit this; but the compression removed, the disease will again exhibit itself with more malignancy than ever. Landlords may for a time carry on their processes of clearing that is, consigning their thousands to destruction by famine and disease; and this will again be met by organized outrage and murder. In short, the condition of Ireland seems to be a perpetual oscillation between destruction under the law and destruction above the law. The landlord one day consigns his thousands to destitution and despair; this is during the supremacy of the law; the next, a sense of common calamity leads these victims to the law to make victims of those whom the landlord used as his instruments under

the law. The forced tranquility under this bill may be described as merely a change of the mode of destruction which will in due time be succeeded by that which has been kept down by coercion."

**From the N. N. Journal of Com.**

**NINE DAYS LATER FROM EUROPE.** About 12 o'clock last night, our news boat came up from the packet ship Pacific, Captain Waite, bringing us London and Liverpool papers to March 16. (Saturday) both inclusive.

The Irish enforcing bill was ordered to a second reading in the House of Commons on the 13th, yeas 363, nays 84—Majority for Ministers, 276.

The Irish church reform bill was introduced on the 13th by the Chancellor of the Exchequer, and read a first time, by a vote of 186 to 46.

Unquestionable intelligence had been received of the conclusion of an armistice between the Porte and Ibrahim Pacha.

It is said (remarks the Liverpool Chronicle) that the value of property in every part of London, except what are called fashionable situations, has fallen one fourth, and in many instances one third.

London March 14.—Lord Althorp has postponed his motion for leave to bring in a bill for the commutation of tithes, till Thursday, 2d April.

A report is current that the combined squadrons of England and France are to proceed to the Scheldt.

Up to this time no fresh communication has been made to the West India committee by Lord Goderich on the subject of the proposed emancipation of the slaves in the West India Colonies. The committee augur favorably to their own interests from this delay—Sun.

Liverpool, March 16.—Notwithstanding the systematic procrastination—we cannot call it opposition—with which O'Connell and his junta persist in harassing and retarding the progress of the Irish coercive bill, it has successfully struggled into committee, and will no doubt as successfully struggle out of it. After seven nights' debate, it is not to be supposed that the supporters of the bill will feel called upon for any very extraordinary exertions in the way of reply, either in Committee or on the third reading. A few point black expositions of falsehood, a mild rebuke now and then from the Chancellor of the Exchequer, and, when "flesh and blood can bear it no longer," a short, indignant, searing philippic from Mr. Stanley, will, in all likelihood, constitute the aggregate of ministerial exertion during the remaining discussion on this important measure.

LONDON, March 14.—Ministers have announced their willingness to admit certain modifications of the Irish coercive bill, which are as follows:

1. All officers below the rank of captain to be excluded from sitting in courts martial.
2. When the court consists of more than seven members, then seven must agree in the verdict.
3. In a court composed of seven members, five must agree.
4. A court of five must be unanimous.

LONDON, March 16.—Very little progress was last night made in the Irish disturbance bill. Only three clauses out of forty-one were got through. Yet, notwithstanding this delay, the bill, we take for granted, will pass the House of Commons, in spite of the repugnance to its principles which pervades the whole liberal majority of that assembly, and which has been frankly acknowledged by the very ministers, who felt themselves constrained to bring in that unusual and most offensive measure. It is certain that in the progress of the discussions, both in doors and out, upon some of its obnoxious clauses, the symptoms of an increasing dislike to even the temporary admission of such intruders upon our domestic policy as courts martial, domiciliary visits, and suspensions of the habeas corpus act, became more perceptible every hour; and we had hopes, not many days ago, that the bill ere it passed, would have been cleansed of most of its unwholesome attributes. But unhappily, the activity of murderous outrage in Ireland has proceeded without a moment's relaxation.

**March of intellect.**—The following is to be seen on a window in Pool's Buildings, Gray's Inn-Lane, London:—"Day School kept hear nite and morning, Children taught reading, writin, siffrin, and rithmick. Books kept and closed. Caps, Gowns, Coats, and Pennyfoals made and Re-Paired. Letters rote, Petitions and Leases drawn."

**MORE TROUBLE IN GEORGIA.**—One of our new counties seems to be in a hopeful way; a gentleman of high respectability there, writes to us that, "The Federal and Indian parties united in this county, and succeeded in electing their officers.—Three of the Justices of the inferior court have Indian wives. The Sheriff refused to take the oath to support the laws and constitution of Georgia, or to leave the state. He was seen [or run] a number of times by the Guard, but they could never get hold of him. Having such a

sheriff and such a court, backed by the missionaries, we may reasonably expect many and serious difficulties. The Sheriff says he goes the whole amount for the Indians? And I am credibly informed that the missionaries are more unmeasured in their abuse of Georgia than ever."—*Milledgeville Journal.*

**COLD BLOODED MURDER.**

On the 2d of this month, in Sullivan county, a man of the name of Hugh Johnson was shot by Robert White, and died immediately. The deceased was engaged with his neighbours in rolling logs when White approached unseen from an opposite side of a bayou, not a word of altercation having taken place on that day.—The citizens of the country, being much excited by the cold blooded deed of White who immediately made his escape, have applied to the Executive for aid in his apprehension. White is represented to be about 45 years of age, six feet high having a dark complexion, dark hair, hazle eye prominent cheek bones, one of his fingers stiff and crooked, bold speech and strong voice. We are authorized by His Excellency the Governor to say that a reward of FIFTY DOLLARS, together with all reasonable charges, will be paid for the apprehension of the murderer.—*Indiana Journal.*

**A queer dose.**—Two farmers, having drunk too much ale at the last All Hallow fair at Edinborough, were obliged to take up their quarters for the night at the ale-house. One of them awaking very thirsty in the morning, seized a bottle of water that stood in the room and busily swallowed the greater part of its contents. The bottle, along with the water, contained eight leeches, seven of which went down with the stream. Great was the astonishment of the farmer, when he learnt what sort of dose he had taken. The landlord insisted on being paid for the leeches; the farmer stoutly refused, and it is thought the dispute must be settled according to law.

**Curious Mail Bag.**—We have heard but do not vouch for the truth of the report, that in a chest of tea received some time ago by a merchant of Baltimore from on board an East India-man, a letter was found of which the following is a copy:—"If this letter should go to America the person who gets it will confer a great favor by telling my brother John Wilson of New York, that I am a prisoner in Edinburgh." J. WILSON.

In Italy, the mourning was formerly white for women and brown for men; in China it is blue, in Egypt yellow; in Ethiopia gray. Each of these colors had originally its mystical signification. White is the emblem of purity; celestial blue indicates the space where the soul ranges after death; yellow or the tinge of dead leaves, exhibits death as the end of all human hope, and man falling like the leaf of Autumn; grey presents the color of the earth, our common mother;—and black, the funeral costume now adopted throughout Europe, is an allusion to the eternal night.

**REAL RELIGION.**—A poor slave was once thus addressed by a lively gentleman, in a peculiar way: "Well, uncle, I hear that you have become very religious lately, and I want to know what religion you are of." "Way, massa," said he, "my religion is, to cease to do evil, and learn to do well. What religion are you of? Could any one have returned a more appropriate answer?"

A new paper is to be published in Philadelphia, by Joseph R. Cannon. It will be called the American Statesman, and is to advocate Mr. McLean's claims to the Presidency.

**To the people of the Fourth Congressional District.**

**FELLOW-CITIZENS:**—My name has been announced as a candidate, to represent you in the next Congress. To many of you I am known, to others a stranger; with all it is my desire to seek an acquaintance before the first Monday of August next. The inquiry has been so often made, whether I intend to continue a candidate, that it became necessary to be informed of the source from whence the suspicions arose.—The author has been discovered, and while I withhold his name, his motives are referred to your honest and candid judgment.

In answer to the inquiry, I can only say, that my opponent has nothing to hope, or my friends to fear, from such a result. No change of situation or circumstances, in relation to the canvass, shall alter my determination. I am a candidate, (and life spared,) a candidate I shall be until the close of the election on the first Monday of August next. And no matter who shall enter the list as candidates, my pretensions are submitted to the generous and enlightened voters of the counties of Dearborn, Franklin, Rush, Decatur, Ripley and Switzerland, and to their decision I shall most respectfully bow.

April 9, 1833. AKOS LANE.

The negroes at Havana are said to be "dying in flocks." Physicians do not agree as to the nature of the disease.