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A
CHRONOLOGY OF INLAND
NAVIGATION
IN GREAT BRITAIN

In Engraving

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A
CHRONOLOGY OF INLAND
NAVIGATION
IN GREAT BRITAIN

*BEING A RECORD OF THE DATES OF THE PRINCIPAL
WORKS AND EVENTS CONNECTED WITH INLAND
NAVIGATION TO THE PRESENT TIME*

COMPILED FROM VARIOUS SOURCES BY

HENRY RODOLPH DE SALIS

ASSOCIATE MEMBER OF THE INSTITUTION OF CIVIL ENGINEERS

WITH AN APPENDIX

GIVING THE MILEAGE TRAVELLED BY THE AUTHOR OVER THE
INLAND NAVIGATIONS OF ENGLAND



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PREFACE.



THE following pages endeavour to place the History of Inland Navigation in Great Britain from the commencement to the present time in a form suitable for ready reference.

So far as the author is aware, no record has been published since 1831, when Mr. Joseph Priestley, of the Aire and Calder Navigation, brought out his Historical Account of Rivers and Canals.

The author will be much obliged for any additions or corrections for a future edition.

H. R. DE S.

IVY LODGE, IVER HEATH,
NEAR UXBRIDGE.

A CHRONOLOGY OF
INLAND NAVIGATION
IN GREAT BRITAIN.

894

The Danes sail up the River Lee to the Town of Hertford.

1121

The Foss Dyke Canal (Lincolnshire), an ancient Roman work, scoured out by Henry I.

B

1296

Agreement between the Archbishop of York and Lady Sutton, for the removal of certain weirs in the River Hull, in order that vessels may approach the Town of Beverley.

1352

Act setting forth, that "whereas the common passages of boats and ships in the great rivers of England be oftentimes annoyed by inhansing Gores, Weres, Stakes, &c., in great damage of the people: it is established that the same shall be cut and utterly pulled down, without being renewed. And that writs be sent to the sheriffs to do execution."

1423

Act placing the River Thames under Commissioners.

1424

Act empowering the Chancellor for the time being to issue commissions for the purpose of cleaning, scouring, and amending the River Ley (Lee).

1425

Act placing the River Lee under Commissioners.

1462

Charter constituting the Lord Mayor and Aldermen of York conservators of the Rivers Ouse, Aire, Wharfe, Derwent, Dunn, and Humber.

1481

Locks known to the Italians.

1503

Act for preserving the passage of boats and vessels in the River Severn.

1514

Act placing the Canterbury or River Stour Navigation under the care of Canterbury.

1531

Act for pulling down and avoiding "fish garths," "piles," "stakes," "hecks," and other "engines" set in the river and water of Ouse and Humber.

1563

Exeter Canal commenced by the Council of Exeter, the cost being defrayed out of the Corporate Estates.

1566

Exeter Canal completed and opened.

1571

Act for making the River Welland (Lincolnshire) navigable.

1605

Unsuccessful attempt made by Lord Chief Justice Popham and others to drain the Fens. Under this scheme the cut called Popham's Eau was made ; the portion of which from the Sixteen Foot River to the Old River Nene is navigable at the present time.

1623

Act for River Colne Navigation (Essex).

1624

River Thames made navigable to Oxford.

1625

The Dutch River from Newbridge to Goole, cut by Cornelius Vermuyden, for the purpose of land drainage.

1629

Cornelius Vermuyden knighted.

1630

First partially successful attempt to drain the Fens made by Francis, Earl of Bedford, and thirteen others, advised by Sir Cornelius Vermuyden.

Under this scheme were constructed, amongst other drainage works :—the Old Bedford River, from Earith on the Ouse to Salter's Lode on the same river, 21 miles long and 70 feet wide, together with the Old Bedford and Earith sluices, which River, from the Old Bedford Sluice to the junction with the Forty Foot River at Welches Dam, is navigable at the present time.

And Salter's Lode Sluice at the junction of Well Creek with the River Ouse.

1636

William Sandys applies to Parliament for power to make navigable the River Avon from Tewkesbury to Coventry.

1638

A Commission of Sewers held at Huntingdon pronounced the drainage of the Fens, as executed by Francis, Earl of Bedford, to be defective.

1649

Drainage of the Fens undertaken by William, Earl of Bedford (afterwards Duke of Bedford), and others, advised by Sir Cornelius Vermuyden.

Under this scheme were constructed before 1653, amongst other drainage works, the following cuts, all of which are navigable to the present time.

The Hundred Foot River (or New Bedford River), parallel to the Old Bedford River, being a tidal cut a hundred feet wide, without sluices.

The present channel of the River Nene between Peterborough and Guyhirn (sometime called Smith's Leam).

The Forty Foot River (or Vermuyden's Eau) from the Old Bedford River at Welches Dam to Ramsey.

The Sixteen Foot River, from the Forty Foot River to Popham's Eau.

Hermitage Sluice on the Old River Ouse, just below Earith.

Denver Sluice on the Old River Ouse, just above the mouth of the Hundred Foot River.

1651

Works commenced to make the River Wey, in the County of Surrey, navigable from the Thames at Weybridge to Guildford. Capital £6000, of which one-half was provided by Sir Richard Weston.

1653

Public thanksgiving service held in Ely Cathedral, to celebrate the completion of the drainage of the Fens, as commenced by William, Earl of Bedford, and others, in 1649, March 27.

River Wey Navigation completed, from the Thames at Weybridge to Guildford.

1657

Act for amending the River of Ouse at or near the city of York.

1662

Act for River Itchin Navigation (Hampshire).

Act for River Wye Navigation.

1663

Bedford Level Corporation constituted.

1664

Act for making the River Avon navigable from Christchurch to the city of New Sarum.

Act obtained for River Medway (Upper) Navigation, but not carried into effect.

1670

Act for making navigable the Rivers Brandon and Waveney.

Act for River Ouse (Bedfordshire) Navigation (above St. Neots).

1671

Act for improving the River Witham, already in use as a navigation.

Act for settling and preserving the navigation of the River Wey in the County of Surrey.

1675

Exeter Canal lengthened at the cost of the Corporate Estates of the Council of Exeter.

1678

Act for making navigable the River Fal or Vale (Cornwall).

1686

Henry Ashley, of Eaton Socon, Bedfordshire, appointed undertaker of the River Ouse (Bedford) Navigation, from Holywell upwards to any place which was or is navigable in times of full waters; the river being made by him navigable to Bedford.

1695

Act for preventing exactions of the occupiers of locks and weirs upon the River of Thames westward, and for ascertaining the rates of water carriage upon the said river.

1697

Bedford Level divided into the three districts of the North, Middle and South Levels.

1699

Act for Aire and Calder Navigation, depth 3 feet 6 inches.
Tolls between Leeds and Wakefield, May 1 to
October 1, 10s. per ton ; October 1 to May 1, 16s.
per ton.

Act for keeping the River Trent, in the counties of
Leicester, Derby and Stafford, navigable.

Act for making the River Tone (Somerset) navigable from
Bridgwater to Taunton.

1700

Act granting power to Henry Ashley, of Eaton Socon,
Bedfordshire, to make the River Larke navigable
from Mildenhall to Bury-St.-Edmunds.

Act for River Dee Navigation.

Act for the better preserving the navigation of the Rivers
Avon and Frome, and for cleansing, paving, and
enlightening the streets of the City of Bristol.

1701

Act for River Derwent (Yorkshire) Navigation.

1702

Act for making the River Cam navigable from Cambridge to Clayhithe Ferry, and appointing conservators of the river.

1705

Act for River Stour (Essex) Navigation.

1712

Act for making the Avon navigable from Bath to Hanham Mills.

1713

Denver Sluice, on Old River Ouse (Bedford), blown up
by the tide.

1714

Act for making the River Nene, from Northampton to
Peterborough, navigable.

1715

Act for making the River Kennet navigable from the
Thames at Reading to Newbury.

1716

James Brindley born; Engineer of the Bridgewater, Trent and Mersey, Staffordshire and Worcestershire, Coventry, Birmingham, Droitwich, Oxford, and Chesterfield Canals.

Act for the preservation and improvement of the River Wear and Port of Sunderland, in the County of Durham.

1720

Act empowering three gentlemen of the County of Cheshire, to scour and improve the River Weaver, from Frodsham Bridge to Winsford, depth to be 4 feet 6 inches.

Act for making the Rivers Mersey and Irwell navigable from Liverpool to Manchester.

Act for making the River Douglas navigable from the River Ribble to Wigan.

Act for making navigable the River Dane from the River Weaver at Northwich, to the falling of Wheelock Brook in the county of Cheshire; but which was never carried out.

Act for making the River Idle navigable from East Retford to Bawtry.

1721

Act for making the River Eden (Cumberland) navigable to Bank End.

1722

Act for deepening and making more navigable the Rivers Bure, Yare, and Waveney.

c

1725

Mr. Goddard, who was Recorder of Lynn, describing the Rivers Ouse, Cam, Larke, Little Ouse, Wissey, and Nene, says, " The tide putting up so far into all these Rivers, and filling them twice in every twenty-four hours, they were not only competently supplied with water from Sea in the driest seasons to serve for the Inland Navigation, which by means of so many branches is the most extensive in England ; so that commerce and trade was constantly maintained up the River Nene to Well, March and Peterborow, above fifty miles from Lenne (Lynn) into Northampton, Rutland, Lincoln, Nottingham and Leicestershires, with vessels of fifteen tuns, which easily passed loaden in the driest seasons. And up the River Ouse they could sail with forty tuns freight thirty-six miles at least from Lenne at ordinary neip tides ; and great and constant commerce was hel to Cambridge, Bedford, &c., and between Cambridg and St Ives, Huntingdon, St. Neot, Bedford an places adjacent, with a burden of fifteen tun, whic is ninety miles from Lenne by water."

1726

Act for making the River Dun (Yorkshire) navigable from Holmstile in Doncaster to Tinsley.

Act for cleaning, deepening and widening Beverley Beck (Yorkshire).

1729

Act for making the River Stroudwater (Gloucestershire) navigable from the Severn at Framilode to Wallbridge, Stroud ; but not carried into effect.

1736

Francis, Duke of Bridgewater, "Father of Inland Navigation," born May 21: constructor of the Bridgewater Canal.

1737

Act for making Worsley Brook navigable to the Irwell, but not carried out.

Act for River Roden (Essex) Navigation.

1739

Act for River Medway (Upper) Navigation as carried out,
and the Company of Proprietors of the Navigation
of the River Medway incorporated.

1745

William Jessop born : Engineer of the Grand Junction,
Grantham, Barnsley, Nottingham and Cromford
Canals ; and of the Leicester, Horncastle, and River
Ouse (Sussex) Navigations.

1748

Denver Sluice, on Old River Ouse (Bedford), rebuilt.

1749

Act for River Lune (Lancashire) Navigation.

1750

1751

Act for the better regulating the navigation of the River Avon (Warwickshire), and for ascertaining the rates of water carriage upon the said river.

Act for making the River Narr (Norfolk) navigable from Lynn to Westacre.

1752

1753

1754

Act for improving and preserving the navigation of the Old River Nene from Salter's Lode Sluice, Norfolk, to Stanground Sluice, Peterborough, and from Floods Ferry to Ramsey High Lode, and also the navigation from the Old Bedford Sluice to the River Nene in the parish of Ramsey. All of which is now part of the Middle Level Navigation.

1755

Act for St. Helens, or Sankey, Canal, from the Mersey at the mouth of Sankey Brook to St. Helens.

1756

In May of this year the number of barges and trows on the River Severn, navigating from Welchpool and Poolstake downwards to Bristol, was 376.

1757

Act for River Blyth Navigation (Suffolk).

Act for making the River Ivel navigable from the Ouse at Tempsford to Shefford.

Thomas Telford, born August 9, Engineer of the Ellesmere, Caledonian, Birmingham and Liverpool Junction, and Macclesfield Canals, and other important canal works.

1758

Act for Calder and Hebble Navigation.

1759

First Act for Bridgewater Canal from Worsley to Manchester, with a branch to Hollin' Ferry, to cross the River Irwell by locking down to it on both sides; but not carried into effect.

First Act for River Stort Navigation from Bishop's Stortford to the Lee; but not carried into effect.

Act for Stroudwater Navigation; under this Act the navigation was constructed without locks, in order to prevent the mill-owners from being deprived of water, the cargoes being placed in boxes which were transferred into other boats at every mill by means of cranes. This scheme was persevered in nearly to the ruin of the projectors.

Act reconstituting the River Weaver Trust, whereby 105 gentlemen of the County of Cheshire were appointed Trustees.

1760

Act for extending the navigation of the River Wey from Guildford to Godalming.

Amended Act for Bridgewater Canal to cross River Irwell on the level by means of Barton Aqueduct ; also authorising short branch to Longford Bridge, and abandoning branch to Hollin Ferry.

Barton Aqueduct of Bridgewater Canal commenced, September.

1761

Bridgewater Canal from Worsley to Manchester completed.

Barton Aqueduct of the Bridgewater Canal opened, July 17.

John Rennie born, June 7. Engineer of the Kennet and Avon, Rochdale, and Lancaster Canals.

Nene River ; Upper Navigation, from Thrapston to Northampton, opened August 7.

1762

Act for extending the Bridgewater Canal from Longford Bridge to the Mersey at Runcorn.

Act for extending the St. Helen's, or Sankey Canal to Fiddler's Ferry on the Mersey.

1763

Act for Louth Navigation (Lincolnshire) from the Humber to the town of Louth.

1764

Great sluice on the River Witham at Boston constructed by Smeaton.

1765

1766

Act for Trent and Mersey Canal.

Act for Staffordshire and Worcestershire Canal.

Act for Chelmer and Blackwater Navigation, but not carried into effect.

Act for River Stort Navigation, as carried out, and works commenced September 24.

Act for Loughborough Navigation, but not carried into effect.

Act for Kidwelly Canal.

River Lee Navigation Improvement Act, under which Limehouse Cut was constructed.

First sod of Trent and Mersey Canal cut by Josiah Wedgwood, July 26.

1767

Act for Driffield Navigation (Yorkshire).

Act for Ancholme Drainage and Navigation (Lincolnshire).

Act for River Ure, or Ripon and Boroughbridge, Navigation (Yorkshire).

Bridgewater Canal from Longford Bridge to the top part of Runcorn opened.

Locks on Calder and Hebble Navigation, as originally erected by Smeaton, destroyed by floods, October 8.

1768

Act for Coventry Canal.

Act for Droitwich Canal.

Act for Birmingham Canal Navigations, canal from
Birmingham to Autherley.

Act for Forth and Clyde Canal.

1769

Act for Oxford Canal.

Birmingham Canal Navigations from Wednesbury to
Birmingham, completed November 6.

River Stort Navigation completed, two loaded barges
arriving at Bishop's Stortford, October 24.

1770

Act for Leeds and Liverpool Canal.

Act providing that all barges or other vessels going upon the River Trent from Wilden Ferry to Gainsborough should be numbered and have the name and residence of the owner marked thereon, under a penalty of five pounds, great irregularities and continual trespass on the lands adjoining the river having been committed by the boatmen.

Act for Monkland Canal (Scotland).

1771

Act for Chesterfield Canal.

Act for Bradford Canal.

1772

Act for Chester Canal Navigation.

Act for Market Weighton Canal.

Staffordshire and Worcestershire Canal completed ; contains first narrow boat lock constructed in England, which was also Brindley's first canal lock, at Compton, near Tettenhall.

Communication between Birmingham and Wolverhampton Canal, and Staffordshire and Worcestershire Canal, opened at Aldersley.

Chesterfield Canal commenced.

Act for improving and completing the navigation of that part of the River Trent called Newark Dyke, and appointing commissioners of the same and empowering that barges thereon be haled by men only.

James Brindley died, September 27.

Locks of Bridgewater Canal at Runcorn opened December 31, when the *Heart of Oak*, a vessel of 50 tons burden for Liverpool, passed through them.

1773

Act for making and extending the navigation of the River Bure (Norfolk).

Kinderley's Cut, at the mouth of the River Nene, constructed.

1774

Act for Sir J. Ramsden's, or Huddersfield Broad Canal.

Act for Bude Canal (Cornwall), but not carried into effect.

Bradford Canal completed.

First meeting of the commissioners for constructing the Stroudwater Canal held, December 24.

1775

Oxford Canal completed from Longford to Napton.

Leeds and Liverpool Canal opened from Liverpool to Newburgh.

Norwood Tunnel, Chesterfield Canal, completed, May 9.

Act for Gresley Canal.

1776

Act for Stourbridge Canal.

Act for Caldon Branch, Trent and Mersey Canal.

Act for Dudley Canal.

Act for Loughborough Navigation, as constructed.

Aire and Calder Navigation, size of locks increased and depth of water to 5 feet.

Chester Canal from Chester to Nantwich completed.

Chesterfield Canal completed.

1777

Act for Erewash Canal.

Harecastle Old Tunnel, on summit level of Trent and Mersey Canal, opened ; completing main line of the canal from Preston Brook to Wilden Ferry. This tunnel, which is 2897 yards long and has a minimum width of 8 feet 6 inches, and height above water-level of 5 feet 10 inches, took eleven years to construct.

Leeds and Liverpool Canal opened from Leeds to Holm-bridge, when work was stopped until 1790.

Stroudwater Canal partly opened, and first tolls received, April 3.

Louth Navigation leased for ninety years to Mr. Chaplin.

1778

Act for Basingstoke Canal.

Oxford Canal completed to Banbury, March, and work stopped until April 1786.

Branch from Haddlesey to Selby, Aire and Calder Navigation, completed.

First payment of £1500 made by the River Weaver Trustees out of the profits of the navigation, to the County of Cheshire for public purposes.

1779

Stroudwater Canal fully opened, July 24.

1780

Act for Thames and Severn Canal.

1781

1782

Foss Dyke Canal deepened to 3 feet 6 inches.

1783

Act for Birmingham and Fazeley Canal and Digbeth Branch of same.

Act for purchase of River Douglas Navigation by Leeds and Liverpool Canal.

Act empowering barges on the River Trent to be haled by horses between Wilden Ferry and Burton-upon-Trent.

Act for improving the navigation of the River Trent from Wilden Ferry to Gainsborough, authorising a depth of 24 to 27 inches, and empowering barges to be haled by horses between the above places.

River Thames made navigable to Lechlade.

1784

1785

Act for River Arun Navigation (Sussex).

1786

Work on Oxford Canal recommenced from Banbury towards Oxford.

1787

Canal between Fradley and Whittington Brook ($5\frac{1}{2}$ miles) constructed by Trent and Mersey Canal, conveyed to Coventry Canal.

Work commenced to cut down summit level of the Birmingham and Wolverhampton Canal of the Birmingham Canal Navigations at Smethwick, executed in $2\frac{1}{2}$ years.

1788

Act for Shropshire Canal.

Sapperton Tunnel, on summit level of Thames and Severn Canal, visited by King George the Third when in course of construction, July 19.

First canal inclined plane in England made by William Reynolds on Ketley Canal in Shropshire : a copper medal or halfpenny being struck to commemorate it.

1789

Act for Andover Canal.

First vessel passed through Sapperton Tunnel, Thames and Severn Canal, April 20.

Act for Cromford Canal.

First attempt at using steam power on canals made on Forth and Clyde Canal with Symington's boat.

Thames and Severn Canal completed, first vessel (30 tons burden) passing from the Severn into the Thames at Inglesham, November 19.

1790

Oxford Canal completed and opened to Oxford, January 1.

Act for Glamorganshire Canal.

Act for Stowmarket and Ipswich Navigation.

Act for River Ouse Navigation (Sussex).

Coventry Canal opened from Coventry to Fradley.

Birmingham and Fazeley Canal completed.

Work on Leeds and Liverpool Canal recommenced at Holmbridge.

Forth and Clyde Canal completed.

Ouse Haling Ways Commissioners incorporated to maintain the haling ways of the River Ouse (Bedford), between Denver Sluice and King's Lynn.

1791

Act for Royal Military, or Shorncliffe and Rye Canal.

Act for Leicester and Melton Mowbray Navigation.

Act for Worcester and Birmingham Canal.

Act for Hereford and Gloucester Canal.

Act for Manchester, Bolton and Bury Canal.

Act for Kington and Leominster Canal.

Act for Leicester Navigation.

Act for Neath Canal (Glamorganshire).

1792

Act for Nottingham Canal.

Act for Ashton Canal.

Act for Lancaster Canal.

Act for Monmouthshire Canal.

Act for Horncastle Navigation.

Act for Medway (Lower) Navigation, but not carried into effect.

Act for Wyrley and Essington Canal.

Shropshire Canal completed.

Act for Coombe Hill Canal.

1793

Act for Oakham Canal.

Act for River Foss Navigation (Yorkshire).

Act for Grantham Canal.

Act for Ulverston Canal.

Act for Nutbrook Canal.

Act for Derby Canal.

Act for Chelmer and Blackwater Navigation.

Act for vesting the Navigation of the River Avon (Warwickshire), late the property of Mr. George Perrott, in trustees.

Act for Grand Junction Canal, and the Northampton and Old Stratford branches of the same.

Act for Caistor Canal.

Act for Shrewsbury Canal, and purchase by them of 1 mile 188 yards of the Ketley Canal.

Act for Stainforth and Keadby Canal.

Act for Dearne and Dove Canal.

Act for Stratford-upon-Avon Canal.

Act for Brecon and Abergavenny Canal.

Act for Ellesmere Canal.

Act for Warwick and Birmingham Canal.

Act for Old Union Canal, alias Leicestershire and Northamptonshire Union Canal.

Act for Gloucester and Berkeley Ship Canal.

Act for Aberdare Canal.

Act for Barnsley Canal.

Act for Crinan Canal (Scotland).

1794

Act for Montgomeryshire Canal.

Act for Sleaford Navigation.

Act for Somersetshire Coal Canal.

Act for Wisbech Canal.

Act for Peak Forest Canal.

Act for Huddersfield Narrow Canal.

Act for Swansea Canal.

Glamorganshire Canal opened between Merthyr Tydfil
and Cardiff, February.

Leicester Navigation completed, February.

Act for branches to Buckingham, Aylesbury and Wen-
dover, Grand Junction Canal.

Act for Warwick and Braunston Canal, but not carried
into effect.

Act for Walsall Branch, Birmingham Canal Navigations.

Act for Rochdale Canal.

Act for Kennet and Avon Canal.

Act for Ashby Canal.

Act for deepening the Trent Navigation to 30 inches, and for making the side cuts at Sawley, Thrumpton, Beeston and Holme.

The cost of boats 70 feet long by 7 feet wide, carrying 20 to 22 tons, at this time stated to be from £90 to £100 each.

Grand Junction Canal opened from Brentford to Uxbridge, November 3.

1795

Act for extension of Bridgewater Canal from Stretford to Leigh.

Act for Paddington Branch, Grand Junction Canal.

Act for Wilts and Berks Canal.

Act for Newcastle-under-Lyme Canal.

Act for Ivelchester and Langport Canal.

Act for making a junction at Kingswood between the Stratford-upon-Avon and Warwick and Birmingham Canals.

First stone of Pontcysyllte Aqueduct of Ellesmere Canal laid, July 25.

Act for Eau Brink Cut, River Ouse (Bedford), and Eau Brink Navigation Commissioners incorporated.

1796

Act for Salisbury and Southampton Canal.

Act for Grand Western Canal.

Act for River Tamar Navigation.

Act for Warwick and Napton Canal.

Basingstoke Canal completed.

First vessel entered Chelmer and Blackwater Navigation,
February.

First vessel navigated Pontypool section of Monmouth-
shire Canal, March 2.

Foulridge Tunnel, Leeds and Liverpool Canal, opened,
May 1.

Braunston Tunnel, Grand Junction Canal, completed,
June 6.

First stone of Chirk Aqueduct, Ellesmere Canal, laid,
June 17.

Last arch of Lancaster Aqueduct, Lancaster Canal, com-
pleted, July.

1797

Act for branch canal to Leek, from the Caldon Branch of the Trent and Mersey Canal.

Steamboat tried on the St. Helens Canal.

Ashton Canal completed.

Shrewsbury Canal completed.

Westhill Tunnel, Worcester and Birmingham Canal, completed.

Grand Junction Canal completed from Braunston to north end of Blisworth Tunnel, November.

1798

Swansea Canal completed.

Huddersfield Narrow Canal, from Huddersfield to Marsden, and from Ashton to Staleybridge, opened.

Hereford and Gloucester Canal, from Gloucester to Ledbury, opened, March 30.

Kennet and Avon Canal, from Reading to Hungerford, opened, October.

1799

Warwick and Birmingham Canal completed.

Warwick and Napton Canal completed.

Barnsley Canal completed and opened, June 8.

Walsall branch, Birmingham Canal Navigations, completed.

Grand Junction Canal, from Brentford to Bulbourne (near Tring), completed; also Wendover Branch.

1800

Act for Thames and Medway Canal.

Grand Junction Canal opened from Brentford to the south end of Blisworth Tunnel.

Buckingham Branch of Grand Junction Canal commenced.

Peak Forest Canal completed and opened, May 1.

1801

Act for Grand Surrey Canal.

Act for Leven Canal.

Buckingham Branch of Grand Junction Canal completed and opened, May 1.

Kennet and Avon Canal opened from Bath to Devizes, May.

Gannow Tunnel, Leeds and Liverpool Canal, completed, May.

Paddington Branch of Grand Junction Canal opened, July 10.

Chirk Aqueduct, Ellesmere Canal, completed at a cost of £20,898.

1802

Act for Substitution of 22 locks for the inclined plane at Coombe Hay on Somersetshire Coal Canal (executed at a cost of £45,000).

Horncastle Navigation opened, September 16.

Act for River Axe Navigation (Somerset).

Act for Medway (Lower Navigation), as carried out.

Nottingham Canal completed.

1803

Act for Tavistock Canal.

Francis, Duke of Bridgewater, died, March 8.

Pontcysyllte Aqueduct, Ellesmere Canal, completed at cost of £47,069.

Act for Caledonian Canal.

The *Northampton Mercury* of December 24, describing the Smithfield Cattle Show, says, "Some of the oxen were uncommonly fine in their proportions. The oxen of Mr. Westcar (of Aylesbury) were universally allowed to be great beauties. They have also the advantage over those which travelled to town, that they were brought up unfatigued by their journey, as Mr. Westcar lives near the Grand Junction Canal."

Act incorporating "The Company of Proprietors of the River Severn Horse Towing Path Extension," and empowering them to construct a horse towing path on the banks of the Severn from Bewdly to Worcester.

1804

Dearne and Dove Canal completed.

Rochdale Canal completed, and opened December 21.

Caledonian Canal commenced.

1805

Ashby Canal opened.

Blisworth Tunnel, Grand Junction Canal, opened March 25, completing main line of the canal from Brentford to Braunston. The first boat to pass the tunnel was the *Marquis of Buckingham*, one of the Paddington Packet Boats.

Wolverton Aqueduct over the River Ouse, Grand Junction Canal, opened August 26; superseding eight locks, four down to and four up from the river on each side.

River Derwent (Yorkshire) made navigable from beyond New Malton to Yeadingham.

1806

Act for River Ribble Navigation.

Act for Glasgow, Paisley and Johnstone Canal.

The *Times* of December 19 contains the following announcement: "The first division of the troops that are to proceed by Paddington Canal for Liverpool, and thence by transports for Dublin, will leave Paddington to-day, and will be followed by others to-morrow and on Sunday. By this mode of conveyance the men will be only seven days in reaching Liverpool."

1807

Act for River Adur Navigation (Sussex).

Act for Weston Canal of River Weaver Navigation, and depth of the navigation increased to seven feet throughout.

1808

Act for River Tees Navigation (Durham),

1809

Patent perpendicular lift for canal boats, invented by John Woodhouse, erected on the Worcester and Birmingham Canal at Tardebigge.

1810

Act for Grand Union Canal.

Act for the erection of locks at Chertsey, Shepperton, Sunbury, and Teddington on the Thames by the Corporation of London.

Kennet and Avon Canal completely opened, December 28.

1811

Act incorporating "The Company of Proprietors of the Gloucester and Worcester Horse Towing Path," for constructing a horse towing path on the banks of the Severn from Worcester to Gloucester.

Act for Bridgwater and Taunton Canal.

1812

Act for Regent's Canal.

Act for the erection of a lock at East Molesey on the Thames by the Corporation of London.

Act for North Walsham and Dilham Canal.

1813

Act for Wey and Arun Junction Canal.

Act for North Wilts Canal.

Act to enable the Kennet and Avon Canal Company to raise money to purchase the shares of the River Kennet Navigation.

Ellesmere Canal and Chester Canal amalgamate, becoming Ellesmere and Chester Canal.

Aylesbury Arm of Grand Junction Canal constructed during this year and the next.

1814

Act for the erection of a lock at Penton Hook on the Thames by the Corporation of London.

Northampton Branch, Grand Junction Canal, commenced.

Grand Union Canal opened, August 9.

Grand Western Canal, section from Loudwell to Tiverton, opened August 25.

William Jessop died.

Act for Newport Pagnell Canal.

1815

Act for Pocklington Canal. This canal was completed for a less sum than the original estimate ; Mr. George Leather, engineer.

Act for Sheffield Canal.

Act for making a junction between the Birmingham Canal Navigations and the Worcester and Birmingham Canal in Birmingham, hitherto separated by a distance of 7 feet 3 inches.

Northampton Branch, Grand Junction Canal, opened, May 1.

1816

Leeds and Liverpool Canal completed, last section of main line from Wigan to Blackburn being opened.

1817

Act for Portsmouth and Arundel Canal.

Eau Brink Cut, River Ouse (Bedford), commenced.

Act for Edinburgh and Glasgow Union Canal.

1818

1819

Act for Leigh Branch of the Leeds and Liverpool Canal.

Act for Bude Canal, as constructed.

North Wilts Canal opened, April 2.

Act for Carlisle Canal.

Killington Reservoir, Lancaster Canal, completed, capacity 700,000,000 gallons.

1820

Works commenced for lengthening and widening Exeter Canal, at a cost of £113,000.

Act for Knottingley and Goole Canal, of Aire and Calder Navigation.

Aire and Calder Navigation, size of locks increased and depth of water to 7 feet.

Regent's Canal completed.

1821

Act for Guilsfield Branch, Montgomeryshire Canal.

Leigh Branch of the Leeds and Liverpool Canal completed.

Eau Brink Cut, River Ouse (Bedford), completed.

North Wilts Canal amalgamated with Wilts and Berks Canal.

John Rennie died, October 4.

1822

Caledonian Canal completed, October 30.

Edinburgh and Glasgow Union Canal completed.

1823

Act for Harecastle New Tunnel, Trent and Mersey Canal.

1824

Act for Kensington Canal.

Act obtained for the Hertford Union Canal, or Duckett's Canal, by the second Sir George Duckett (canal known afterwards as "Duckett's Folly").

Trent and Mersey Canal, Harecastle New Tunnel commenced.

Sixty-nine British and five foreign vessels entered the Port of Exeter by the Exeter Canal during this year.

The first Sir George Duckett, constructor and owner of the River Stort Navigation, died.

1825

Act for Halifax branch of Calder and Hebble Navigation
(cost £58,741).

Act for Baybridge Canal (Sussex).

Act for Liskeard Canal (Cornwall).

1826

Act for Birmingham and Liverpool Junction Canal.

Act for Macclesfield Canal.

Act authorising junction of Barbridge and Middlewich
Branch of Ellesmere and Chester Canal with Trent
and Mersey Canal at Middlewich, previously author-
ised to within 100 yards only.

Knottingley and Goole Canal, of Aire and Calder Naviga-
tion, opened.

Act for Alford Canal.

Lancaster Canal completed.

1827

Trent and Mersey Canal, Harecastle new tunnel completed April 30, at a cost of £112,681; 8,814,000 bricks used.

Trent and Mersey Canal, Act for branch to Hall Green.

River Thames, Watermen's Co. incorporated.

Act for Norwich and Lowestoft Navigation.

Gloucester and Berkeley Ship Canal completed.

Act for Newport branch of Birmingham and Liverpool Junction Canal.

Act for Glastonbury Navigation (Somerset).

Act for improving the outfall of the River Nene, and the drainage of the lands discharging their waters into the Wisbech river, and the navigation of the Wisbech river from the upper end of Kinderley's Cut to the sea.

The South Level Commissioners incorporated to improve the drainage and navigations of the portion of the Bedford Level called the South Level.

1828

1829

Oxford Canal, improvements commenced for shortening distance between Napton and Braunston by 14 miles.

1830

Act empowering Ellesmere and Chester Canal Co. to become carriers.

River Nene new outfall works authorised by Act of 1827 completed.

Act for extension of the St. Helen's, or Sankey Canal from Fidler's Ferry to Widnes.

1831

1832

Ellesmere and Chester Canal completed.

1833

1834

Birmingham and Liverpool Junction Canal completed.

Thomas Telford died, September 2.

Oxford Canal, improvements completed shortening distance between Napton and Braunston by 14 miles.

Grand Western Canal, section from Loudwell to Taunton constructed, during this and the two following years.

1835

Birmingham Canal Navigations. The present company incorporated on the dissolution of an older company.

Act for Titford Canal, Birmingham Canal Navigations.

1836

Act for Manchester and Salford Junction Canal, to connect Rochdale Canal with River Irwell.

Steam tugs first used on Aire and Calder Navigation.

Kensington Canal vested in West London Railway.

1837

Act for Stourbridge Extension Canal.

Ouse Banks Commissioners incorporated: to maintain and repair the banks of the River Ouse (Bedford) between Denver Sluice and the commencement of the Eau Brink Cut (divided into six districts).

1838

1839

Act for Tame Valley Canal, Birmingham Canal Navigations.

1840

Act for Rushall Canal and Bentley Canal, Birmingham Canal Navigations.

Wyrley and Essington Canal amalgamated with Birmingham Canal Navigations.

Act for Birmingham and Warwick Junction Canal.

Foss Dyke Canal, width increased to 45 feet, and depth to 6 feet.

Act to provide for keeping the peace on canals and navigable rivers.

Manchester and Salford Junction Canal purchased by Mersey and Irwell Navigation.

1841

1842

River Severn Navigation Trust formed, and old staunches on the river removed.

Birmingham and Warwick Junction Canal completed, at a cost of £170,036.

Act empowering River Weaver Trustees to build and endow three churches.

1843

Hatherton Branch, Staffordshire and Worcestershire Canal constructed (without an Act of Parliament).

1844

Diglis Locks, Worcester, on River Severn, completed.

Mersey and Irwell Navigation purchased by the Bridgewater Trustees, owners of the Bridgewater Canal.

1845

Huddersfield Narrow Canal ($19\frac{3}{4}$ miles) vested in Huddersfield and Manchester Railway and Canal Co.

Norwich and Lowestoft Navigation (30 miles) purchased by Eastern Counties Railway.

St. Helen's, or Sankey Canal ($16\frac{3}{4}$ miles), vested in St. Helen's Canal and Railway Co.

River Ure, or Ripon and Boroughbridge Navigation ($7\frac{3}{4}$ miles), purchased by Leeds and Thirsk Railway.

Thames and Medway Canal ($6\frac{3}{4}$ miles) purchased by Gravesend and Rochester Railway and Canal Co., portion of canal converted into a railway, and name of remainder altered to Gravesend and Rochester Canal.

Income of River Severn Navigation guaranteed by Oxford, Worcester and Wolverhampton Railway, to the extent of £14,000 a year.

Act passed to enable Canal Companies to become carriers.

Leeds and Liverpool Canal Co. become carriers.

1846

Ashby Canal (30 miles) purchased by Midland Railway Co. for £109,900.

Birmingham Canal Navigations (160 miles) guaranteed in perpetuity 4 per cent. dividend by London and North Western Railway.

Chesterfield Canal (46 miles) leased in perpetuity to Manchester, Sheffield and Lincolnshire Railway.

Foss Dyke Canal (10 $\frac{7}{8}$ miles) leased for 894 years to Great Northern Railway, at a yearly rental of £9570 5s. 3d.

Grantham Canal (33 miles) and Nottingham Canal (14 $\frac{3}{4}$ miles) acquired by Nottingham and Grantham Railway Co.

Stowmarket and Ipswich Navigation (16 miles) leased for 42 years to Eastern Counties Railway.

Macclesfield Canal ($26\frac{1}{4}$ miles) and Peak Forest Canal (15 miles) leased in perpetuity to Manchester, Sheffield and Lincolnshire Railway.

Manchester, Bolton and Bury Canal (16 miles) amalgamated with Manchester and Leeds Railway.

Monmouthshire Canal Co., owners of Monmouthshire Canal (20 miles) become a railway company under the name of Monmouthshire Railway and Canal Co.

Stratford-upon-Avon Canal ($25\frac{1}{2}$ miles) and Stourbridge Extension Canal (3 miles) purchased by Oxford, Worcester and Wolverhampton Railway, the former for £173,322 and the latter for £49,437.

Trent and Mersey Canal (116 miles) purchased by North Staffordshire Railway Co. for £1,170,000 5 per cent. Preference Stock.

Witham Navigation ($31\frac{3}{4}$ miles) leased for 999 years to Great Northern Railway Co. at a yearly rental of £10,545.

Gravesend and Rochester Railway and Canal Co. owners of Gravesend and Rochester Canal, purchased by South Eastern Railway.

Shropshire Union Railways and Canal Co., amalgamating the late Ellesmere and Chester Canal, Birmingham and Liverpool Junction Canal, Shrewsbury Canal, and Montgomeryshire Canal, incorporated.

Monkland Canal sold to Forth and Clyde Canal.

Dudley Canal amalgamated with Birmingham Canal Navigations.

Weirs on River Derwent Navigation between New Malton and Yeadingham removed, in order to improve the drainage of the district.

1847

Sir J. Ramsden's Canal, or Huddersfield Broad Canal ($3\frac{3}{4}$ miles) vested in Huddersfield and Manchester Railway and Canal Co.

Dearne and Dove Canal (15 miles), River Dun Navigation (39 miles), and Stainforth and Keadby Canal (12 miles), purchased by South Yorkshire Railway.

Unexpired portion of lease of Louth Navigation (12 miles), for 90 years from 1777 to Mr. Chaplin, purchased by East Lincolnshire Railway.

Market Weighton Canal (9 miles) and Pocklington Canal ($9\frac{1}{4}$ miles) purchased by York and North Midland Railway.

Huddersfield and Manchester Railway and Canal Co., owners of the Huddersfield Narrow Coal and Sir J. Ramsden's Canal, vested in London and North Western Railway.

Shropshire Union Railways and Canal Co. ($203\frac{3}{4}$ miles), leased in perpetuity under guarantee to London and North Western Railway.

Lancashire and Yorkshire Railway incorporated, absorbing Manchester and Leeds Railway, owners of Manchester, Bolton and Bury Canal.

Act for winding-up Kington and Leominster Canal Co.,
and for sale of the site of the canal.

Act to enable Canal Companies to borrow money for the
purpose of becoming carriers.

1848

Ashton Canal ($17\frac{1}{4}$ miles), leased in perpetuity to Manchester, Sheffield and Lincolnshire Railway.

Sheffield Canal ($3\frac{1}{2}$ miles), leased for 999 years to Manchester, Sheffield and Lincolnshire Railway.

East Lincolnshire Railway, lessees of Louth Navigation,
leased in perpetuity to Great Northern Railway.

Crinan Canal vested in Caledonian Canal.

1849

Vertical lift bridge of London, Brighton and South Coast Railway over Grand Surrey Canal, near New Cross, constructed.

Edinburgh and Glasgow Union Canal (32 miles) purchased by North British Railway for £209,000.

1850

Monkland Canal, inclined plane at Blackhill, completed
at a cost of £13,000, July.

1851

1852

Kennet and Avon Canal ($86\frac{1}{2}$ miles) purchased by Great Western Railway for £147,462 Rent-charge Stock, and £62,953, $4\frac{1}{2}$ per cent. Debenture Stock.

Act for Droitwich Junction Canal.

Droitwich Junction Canal leased to Worcester and Birmingham Canal for 99 years, at an annual rental of £1200.

Nene Valley Drainage and Navigation Improvement Act passed, under which Commissioners were appointed to improve the navigation between Northampton and Wisbech.

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1853

Merchandise traffic of the Leeds and Liverpool Canal leased to London and North-Western, Midland, and Lancashire and Yorkshire Railway Cos. for 21 years (from August 4).

Act for Runcorn and Weston Canal.

Section of Portsmouth and Arundel Navigation, between Hunston Bridge and the River Arun at Ford, Sussex, fell into disuse about this time.

River Foss Navigation purchased by the Corporation of York for £4000.

1854

Act for Cannock Extension, Netherton Tunnel Branch, and Two Lock Line, of Birmingham Canal Navigations.

Act for the better regulation of the traffic on railways and canals.

Leeds and Thirsk Railway, owners of River Ure or Ripon and Boroughbridge Navigation, acquired by North Eastern Railway.

York and North Midland Railway, owners of Pocklington Canal and Market Weighton Canal, acquired by North Eastern Railway.

Barnsley Canal leased to Aire and Calder Navigation for 21 years (from November 20).

1855

Rochdale Canal leased to the London and North Western, North Eastern, Lancashire and Yorkshire, and Manchester, Sheffield and Lincolnshire Railways for 21 years, the terms of which lease were subsequently continued year by year until 1888.

Last barge passed from the Thames and Severn Canal down the Thames to Oxford (March).

Act for purchase of Hertford Union Canal, alias Duckett's Canal, by Regent's Canal Co.

River Derwent Navigation (40 miles) acquired by trustees representing the North Eastern Railway, for £40,000.

1856

1857

Shropshire Canal Co. dissolved; portion of canal converted into a railway; portion vested in Shropshire Union Railway and Canal Co.; portion vested in London and North Western Railway.

Tramway between Lancaster Canal, north end and south end abandoned (about 5 miles long).

Conservators of the River Thames incorporated, and the control of the Lower River Navigation (from Staines to Yantlet) taken over by them from the Corporation of the City of London.

Messrs. Gurney and Co., Bankers, Norwich, take over the River Stort Navigation from the second Sir George Duckett.

1858

Lock and weir at Tewkesbury on River Severn, completed.

Andover Canal Co. dissolved, and canal sold to Andover and Redbridge Railway Co., and converted into a railway.

1859

West London Railway, owners of Kensington Canal, vested in West London Extension Railway on its incorporation ; who convert 1 mile 28 chains of the canal into a railway, leaving 33 chains open.

Act to enable the Corporation of York to abandon the River Foss Navigation, with the exception of the last two miles before its junction with the River Ouse.

1860

Steam tugs first used on Gloucester and Berkeley Ship Canal.

Churchbridge Branch, Birmingham Canal Navigations, constructed.

River Avon (Upper Navigation) from Evesham to Stratford-on-Avon purchased by Mr. Broughton, an officer of the Oxford, Worcester and Wolverhampton Railway, the railway company subsequently repaying him the purchase money.

1861

Nottingham and Grantham Railway; owners of Nottingham Canal and Grantham Canal, leased to Great Northern Railway for 999 years from August 1.

1862

Ulverston Canal ($1\frac{1}{4}$ miles) purchased by Furness Railway Co., for £22,004 15s.

Stover Canal, originally constructed by the Duke of Somerset, purchased by Moretonhampstead and South Devon Railway, for £8000.

St. Germain's Sluice, at mouth of Middle Level Drain, gave way, bursting western bank of the drain and flooding 6000 acres of land, May.

Great Eastern Railway incorporated, absorbing Eastern Counties Railway, lessees of Stowmarket and Ipswich Navigation, and owners of Norwich and Lowestoft Navigation.

Nene Valley Act passed, under which the incorporated Commissioners established in 1852 were dissolved, and two new sets of commissioners appointed: one set for the first and second divisions of the river from Northampton to Peterborough, and the other set for the third division of the river from Peterborough to Bevis Hall, two miles above Wisbech.

Act to separate the Middle Level from the Bedford Level Corporation, and incorporation of Middle Level Commissioners.

1863

Great Western Railway acquire Oxford, Worcester and Wolverhampton Railway ; owners of Stratford-upon-Avon Canal, Stourbridge Extension Canal, guarantors of River Severn, and controllers of the River Avon (Upper Navigation).

Act for sale of Newport Pagnell Canal to London and North Western Railway, portion to be converted into a railway.

Worcester and Birmingham Canal passes into the hands of a receiver.

1864

Grand Western Canal (30 miles) purchased by Bristol and Exeter Railway, for £30,640.

Newcastle-under-Lyme Canal (2 miles) leased in perpetuity to North Staffordshire Railway Co., owners of Trent and Mersey Canal, at an annual rental of £536 10s.

Lancaster Canal, north end, (60 miles) leased for 999 years to London and North Western Railway.

Lancaster Canal, south end, (14 miles) leased for 999 years to Leeds and Liverpool Canal Co.

St. Helen's Canal and Railway Co., owners of St. Helen's Canal, amalgamated with London and North Western Railway.

Last dividend paid by Thames and Severn Canal.

Grand Surrey Canal and Commercial Dock Co. amalgamate, becoming Surrey Commercial Dock Co.

1865

Brecon and Abergavenny Canal (34 miles) purchased by Monmouthshire Canal Co. (also a railway Co.), for £61,861.

Calder and Hebble Navigation leased to Aire and Calder Navigation for 21 years, and guaranteed a dividend of 8 per cent., with option of purchase at a guaranteed dividend of $8\frac{1}{2}$ per cent.

Duke of Bedford obtained a perpetual injunction against the Nene Navigation Commissioners (third division) to prevent them from removing the Northey Gravel Shoal in the River Nene below Peterborough.

1866

Bridgwater and Taunton Canal (15½ miles) purchased by Bristol and Exeter Railway, for £72,012

Thames Conservancy take over control of the Upper Thames Navigation, from Staines to Cricklade, from the Upper Thames Navigation Commissioners.

Injunction obtained against the Bradford Canal Co. to prevent them causing a nuisance by the canal, which had become much polluted.

Act for further improvement of River Weaver Navigation, and for locks 320 feet by 42 feet 6 inches, with 15 feet of water on sills.

Conservancy of the Rivers Bure, Yare and Waveney, vested in the Great Yarmouth Port and Haven Commissioners.

1867

Forth and Clyde Canal (53 miles) amalgamated with Caledonian Railway; the canal proprietors being incorporated as the Forth and Clyde Navigation Guaranteed Co., and being guaranteed by the Caledonian Railway Co. a fixed annuity of £71,333 6s. 8d., equal to $6\frac{1}{4}$ per cent. on the capital of the dissolved Canal Co.

Lease of Louth Navigation for 90 years from 1777, held by Great Northern Railway, and originally granted to Mr. Chaplin, expires.

Grand Western Canal, section from Loudwell to Taunton closed,

1868

River Lee Conservancy Board incorporated.

Fenny Compton tunnel (1200 yards long) on Summit
Level of Oxford Canal, removed at a cost of £15,000.

Act for abandonment of Wey and Arun Junction Canal.

1869

Act obtained for the erection of two locks and weirs at
Gloucester on the River Severn—Llanthony and
Maisemore.

Glasgow, Paisley and Johnstone Canal vested in Glasgow
and South Western Railway, and Canal Co. dis-
solved.

1870

Hereford and Gloucester Canal (34 miles) vested in Great Western Railway.

Cromford Canal (16 miles) purchased by Midland Railway, for £93,500.

The Radstock tramway of the Somersetshire Coal Canal purchased by the Somerset and Dorset Railway, for £20,000.

1871

Barnsley Canal, leased to Aire and Calder Navigation since 1854, purchased by them for £46,800.

Bradford Canal, lower part sold to a new Co., small portion at upper end sold off.

1872

Swansea Canal (17 miles) purchased by Great Western Railway, for £147,666.

Moretonhampstead and South Devon Railway, owners of Stover Canal, vested in Great Western Railway.

Act for the construction of a lift at Anderton, from the River Weaver to the Trent and Mersey Canal.

Bridgewater Canal sold by the Bridgewater Trustees to the Bridgewater Navigation Co., for £989,612.

1873

Railway and Canal Traffic Act passed, under which are appointed the Railway Commissioners.

Tavistock Canal transferred to the Duke of Bedford.

River Avon (Upper Navigation) from Evesham to Stratford-on-Avon ceased to be navigable.

River Stort Navigation sold by Messrs. Gurney & Co., Bankers, Norwich, to Messrs. Truman, Hanbury, Buxton & Co.

1874

Gloucester and Berkeley Canal Co. become Sharpness New Docks and Gloucester and Birmingham Navigation Co.

Sharpness New Docks opened.

Worcester and Birmingham Canal, also lessees of Droitwich Junction Canal, purchased by Sharpness New Docks and Gloucester and Birmingham Navigation Co.

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Droitwich Canal leased to Sharpness New Docks and Gloucester and Birmingham Navigation Co. for 999 years, at an annual rental of £1600.

South Yorkshire Railway, owners of Dearne and Dove Canal, River Dun Navigation, and Stainforth and Keadby Canal, vested in Manchester, Sheffield and Lincolnshire Railway.

Lease of merchandise traffic of Leeds and Liverpool Canal to London and North Western, Midland, and Lancashire and Yorkshire Railway Cos. for 21 years, lapsed on August 4.

Bridgewater Navigation Co. commence the use of steam tugs on the Bridgewater Canal.

Explosion of five tons of gunpowder on board Grand Junction Canal Co.'s boat "Tilbury," at Northgate Bridge, Regent's Canal, killing three men and doing great damage to surrounding property, October 2.

1875

Anderton hydraulic lift from River Weaver to Trent and Mersey Canal, completed at a total cost of £48,428.

Thames and Severn Canal Co. become carriers (June).

Act for Romford Canal.

Act for abandonment of Baybridge Canal.

River Avon (Upper Navigation) from Evesham to Stratford-on-Avon, abandoned.

Act for regulating the manufacture, keeping, selling and carrying of explosives.

1876

Bristol and Exeter Railway, owners of Grand Western Canal, and Bridgwater and Taunton Canal, amalgamated with Great Western Railway.

Act for abandonment of Coombe Hill Canal, and dissolution of Co.

Act for closing River Ivel Navigation.

Wilts and Berks Canal Co. incorporated, and the undertaking of the Wilts and Berks Canal Navigation transferred to them.

1877

First Canal Boats Act, providing for registration of boats and appointment of Inspectors of boats.

Act for abandonment of Leicester and Melton Mowbray Navigation, and dissolution of Co.

Application made by Messrs. Foster Brothers, Gloucester, to the Railway Commissioners, to compel the Great Western Railway to maintain the River Avon (Upper Navigation) from Evesham to Stratford-on-Avon, which application was dismissed on the ground that the appellants were unable to show that the respondents were the owners of the navigation.

1878

Act transferring Bradford Canal jointly to Leeds and Liverpool Canal and Aire and Calder Navigation.

Act vesting in the Great Western Railway Co. and the Severn Navigation Commissioners, the undertakings of the Gloucester and Worcester Horse Towing Path Co. and the River Severn Horse Towing Path Extension Co.

Act for closing the Sleaford Navigation, and for the dissolution of the Co.

1879

Foss Dyke Canal vested in Great Northern and Great Eastern Joint Railways.

Act for Slough Branch of Grand Junction Canal.

1880

Monmouthshire Canal Co. (also a Railway Co.) vested in Great Western Railway.

1881

Leicester Improvement Act, under which, to prevent floods, the Leicester Corporation, at a cost of £32,000, improved the channel of the River Soar through Leicester; the portion of which north of the West Bridge is part of the Leicester Navigation, and the portion south of the West Bridge part of the Old Union Canal.

Act to enable the River Narr Navigation Commissioners to sell their undertaking to the Narr Valley Drainage Board.

Act for discontinuing the Glasgow, Paisley and Johnstone Canal of the Glasgow and South Western Railway.

Forth and Clyde Navigation Guaranteed Co. dissolved, the proprietors receiving £1,783,333 *6s. 8d.*, 4 per cent. guaranteed annuities stock of the Caledonian Railway Co.

Conservators of the River Medway incorporated, in whom is vested the control of the river from Hawkwood to Sheerness.

1882

Regent's Canal City and Docks Railway Co. incorporated, and Regent's Canal ($9\frac{3}{4}$ miles) vested in them.

First meeting held at the house of Mr. Daniel Adamson to discuss the project of a Ship Canal from Manchester to the sea, June 27.

1883

House of Commons Select Committee on Canals.

Slough Branch of Grand Junction Canal opened.

Great Western Railway Co. acquire about four-fifths of the total shares in the Thames and Severn Canal Co., the offices of the Canal Co. being after this removed to Paddington Station.

Act for regulating the navigation of the Thames between Cricklade and Yantlet Creek.

Act transferring River Ribble Navigation to Corporation of Preston.

Ashton, Peak Forest and Macclesfield Canals previously leased to, vested in Manchester, Sheffield and Lincolnshire Railway Co., and dissolution of Ashton Canal Co., Peak Forest Canal Co. and Macclesfield Canal Co.

Act constituting the Regent's Canal a separate undertaking of the Regent's Canal, City and Docks Railway Co.

1884

Canal Boats Amendment Act passed.

Act to provide for the maintenance of the River Trent from Wilden Ferry to Gainsborough, dissolving the Company of Proprietors of the Trent Navigation, and the Trent Navigation and Carrying Co. Ltd., and incorporating the Trent Navigation Co.

Trent Navigation Co. become carriers.

Aire and Calder Navigation take over the Conservancy of the portion of the River Ouse (York) below Skelton Railway Bridge from the Corporation of York.

1885

Manchester Ship Canal Act passed (August).

Lancaster Canal Co. dissolved, and the whole undertaking vested in the London and North Western Railway Co.

Last dividend paid by Nutbrook Canal.

1886

Sheffield Canal Co. dissolved, and Canal vested in Manchester, Sheffield and Lincolnshire Railway Co.

Manchester Ship Canal prospectus issued, July 20.

Lease of Calder and Hebble Navigation to Aire and Calder Navigation for 21 years expires.

1887

Contract for Manchester Ship Canal let to Mr. T. A. Walker, June 8.

Bridgewater Canals purchased by Manchester Ship Canal Co. for £1,710,000, August 4.

First sod of Manchester Ship Canal cut by Lord Egerton of Tatton, November 11.

Act for the improvement of the navigation of the River Trent from Wilden Ferry to Gainsborough, dissolving the Trent Navigation Co., and incorporating the Trent (Burton-on-Trent and Humber) Navigation Co., and for leasing to them for 99 years the Newark Dyke.

1888

Railway and Canal Traffic Act passed, under which a new Railway and Canal Commission is appointed, having power to fix tolls and rates.

Conference on Canals held at the Hall of the Society of Arts, May 10 and 11.

Lease of Rochdale Canal to London and North Western, North Eastern, Lancashire and Yorkshire, and Manchester, Sheffield and Lincolnshire Railways expires. This lease was granted in 1855 for 21 years, and was renewed annually from 1876 to this year.

Rochdale Canal Co. become Carriers.

Lease of Stowmarket and Ipswich Navigation to Great Eastern Railway, originally granted in 1846 for 42 years to Eastern Counties Railway, expires.

River Stort Navigation sold by Messrs. Truman, Hanbury, Buxton & Co. to Mr. J. P. Davis.

Last dividend paid by Wilts and Berks Canal.

Naburn new lock, River Ouse (York), opened by Prince Albert Victor of Wales, July 27.

1889

Act incorporating Sheffield and South Yorkshire Navigation Co., to purchase the Sheffield Canal, Dearne and Dove Canal, River Dun Navigation, and Stainforth and Keadby Canal from the Manchester, Sheffield and Lincolnshire Railway.

Eastern Counties Navigation and Transport Co. incorporated, to restore the navigation of the River Larke to Bury St. Edmunds, and for trading on the river and other adjoining waterways.

Mr. T. A. Walker, the contractor for the Manchester Ship Canal, died November 25th.

Last boat passed from the Great Western Railway Co.'s Hereford and Gloucester Canal to the River Severn.

1890

Act incorporating the River Wharfe Navigation Co., for making the River Wharfe navigable from Tadcaster to the River Ouse.

Act to enable River Severn Commissioners to terminate arrangement whereby their income was guaranteed to the extent of £14,000 a year by the Great Western Railway, and to improve the river so as to give a depth of ten feet from Gloucester to Worcester, and seven feet from Worcester to Stourport, and to construct a dock at Diglis, Worcester.

Act for new lock and weir on the Thames at Richmond.

1891

Act obtained for a canal to connect the Aire and Calder Navigation at Sykehouse Bridge with the River Dun Navigation at Bramwith Lock (not yet commenced).

Water first let into the Manchester Ship Canal at Ellesmere Port, June 19.

Act for the abandonment of Bude Harbour and portion of Bude Canal, and for the use of portion of the canal and reservoirs as waterworks.

1892

Act for the transfer of the portion of the Portsmouth and Arundel Canal, between Chichester City and Chichester Harbour, to the Chichester Corporation ; and Portsmouth and Arundel Canal Co. wound up.

Act for the transfer of the River Colne Navigation, from the Hythe at Colchester to Wivenhoe, to the Colchester Corporation.

Regent's Canal, City and Docks Railway Co. change their name to North Metropolitan Railway and Canal Co.

Trent (Burton-on-Trent and Humber) Navigation Co. change their name to Trent Navigation Co.

The Company of Proprietors of the Navigation of the River Medway change their name to the Medway (Upper) Navigation Co.

Radcot new lock on the Thames, 26 miles above Oxford, completed.

River Stour Navigation (Essex) became a limited liability Company, December 31.

1893

River Ouse (Bedford) Navigation, from Holywell to Bedford, taken over by Mr. L. Simpson, January.

Richmond new lock and weir on the Thames, opened by the Duke of York, May 19.

Standedge Tunnel, on summit level of London and North Western Railway Co.'s Huddersfield Narrow Canal, closed for repairs for six months from June 10.

Act dissolving Eau Brink Navigation Commissioners, River Ouse (Bedford), and transferring their duties to the South Level Commissioners.

Manchester Ship Canal completely filled with water, November 25.

Thames and Severn Canal, from near Chalford to Ingleham, closed, December 30.

1894

Manchester Ship Canal opened for traffic, January 1.

Manchester Ship Canal formally opened by the Queen,
May 21.

Sheffield and South Yorkshire Navigation Co. purchase the Sheffield Canal, Dearne and Dove Canal, River Dun Navigation, and the Stainforth and Keadby Canal, for £1,140,000, from the Manchester, Sheffield and Lincolnshire Railway, as authorised by Act of 1889.

Grand Union Canal, and Old Union Canal (*alias* Leicestershire and Northamptonshire Union Canal), purchased by the Grand Junction Canal Co. for £17,500, July.

Eastern Counties Navigation and Transport Co. reopen the navigation of the River Larke up to Bury St. Edmund's, September.

Middle Level Commissioners (Bedford Level) prohibit steam traffic on the waterways under their jurisdiction.

Act to amend and consolidate the Acts relating to the Conservancy of the Thames, whereby the number of the Conservators is increased from thirty to thirty-eight.

Eastern Counties Navigation and Transport Co. passes into the hands of a receiver, December.

1895

Revised rates under Canal Rates, Tolls, and Charges Order Confirmation Acts, 1893 and 1894, come into force, January 1.

Thames and Severn Canal Trust, consisting of representatives of the Sharpness New Docks and Gloucester and Birmingham Navigation Co., the Stroudwater Navigation, the Staffordshire and Worcestershire Canal Co., the Wilts and Berks Canal Co., the Severn Commissioners, the County Councils of Berkshire, Gloucestershire, and Wiltshire, the Town Council of Gloucester, and the Urban District Councils of Stroud and Cirencester, take over the Thames and Severn Canal from the Thames and Severn Canal Co., the shares in which Co. were held to the extent of about four-fifths of the whole by the Great Western Railway.

River Ouse (Bedford) Navigation, from Holywell to Bedford, reopened after restoration.

Basingstoke Canal purchased by Woking, Aldershot, and Basingstoke Canal and Navigation Co.

Act to substitute for the existing Trustees of the River Weaver Navigation, a representative Trust, consisting of thirty-eight Trustees.

Northmoor new lock; on River Thames, $12\frac{1}{2}$ miles above Oxford, completed.

1896

Grafton new lock, on River Thames, 28 miles above Oxford, completed.

APPENDIX

*GIVING THE MILEAGE, ETC. TRAVELLED BY THE
AUTHOR ON THE INLAND NAVIGATIONS OF
ENGLAND DURING THE TEN YEARS 1887
TO 1896 INCLUSIVE; AND SOME
EXTRACTS FROM LOG-BOOK.*

STATEMENT OF MILEAGE TRAVELLED BY THE AUTHOR

During the Ten Years

NOTE.—This being a mileage statement, it offers

Name of Navigation.	In own Steam Launches.				In other Vessels.		
	Miles.	Locks.	Tunnels	Lifts.	Miles.	Locks.	Tunnels
Aire and Calder Navigation	103	45	..	..	..	..	..
River Avon (Warwickshire) Lower Navigation.	86½	24	..	..	..	..	..
Basingstoke Canal	77	58	4	..	..	..	..
Birmingham Canal Navigations ..	66½	118	2	..	..	..	..
Birmingham and Warwick Junction Canal.	2½	6	..	..	..	..	..
Calder and Hebble Navigation ..	22	33	..	..	..	..	..
River Cam .. .. .	..	..	..	..	15	3	..
Coombe Hill Canal (derelict) ..	..	..	..	..	..	..	..
Coventry Canal	112	52	..	..	..	..	..
Grand Junction Canal	689	740	14	..	18½	..	..
Great Western Railway Co.'s—							
Kennet and Avon Canal ..	89	96	5	..	..	..	..
Stratford-on-Avon Canal ..	11	20	1	..	..	..	..

THE INLAND NAVIGATIONS OF ENGLAND ;

187 to 1896 inclusive.

includes the same ground traversed more than once.

Walkg.	Total.				Principal Places visited on each Navigation.
	Miles.	Locks.	Tunnels	Lifts.	
..	103	45	..	..	Leeds, Castleford, Goole, Wakefield, Walton, Barnsley Junction.
..	86½	24	..	..	Tewkesbury, Pershore, Fladbury, Evesham.
..	77	58	4	..	Woking, Aldershot, Basingstoke.
..	66½	118	2	..	Birmingham, Oldbury, Tipton, Wolverhampton, Aldersley, Aston, Minworth, Curdworth, Fazeley, Whittington, Churchbridge, Pelsall, Catshill, Longwood, Perry Barr, Salford Bridge.
..	2½	6	..	..	Salford Bridge, Saltley, Bordesley.
..	22	33	..	..	Wakefield, Mirfield, Brighouse, Elland, Sowerby Bridge.
..	15	3	..	..	Cambridge, Clayhithe, Pope's Corner.
7	7	..	..	..	Junction with Severn near Wainlode, Coombe Hill.
..	112	52	..	..	Coventry, Hawkesbury, Nuneaton, Atherstone, Fazeley, Whittington, Fradley.
17½	724½	740	14	..	Brentford, Paddington, Slough, Uxbridge, Tring, Wendover, Aylesbury, Leighton, Fenny Stratford, Buckingham, Blisworth, Northampton, Long Buckby, Braunston, Crick, Welford, Foxton, Market Harborough, Leicester.
..	89	96	5	..	Reading, Newbury, Hungerford, Devizes, Semington, Bath.
..	11	20	1	..	King's Norton, Kingswood.

STATEMENT OF

Name of Navigation.	In own Steam Launches.				In other Vessels.		
	Miles.	Locks.	Tunnel.	Lifts.	Miles.	Locks.	Tunnels.
Great Northern Railway Co.'s—							
Nottingham Canal	2	2	..	..	..	..	..
River Lee	50	36	..	..	..	..	..
Leeds and Liverpool Canal	275	188	4	..	..	..	..
Leicester Navigation	31½	22	..	..	..	..	..
London and North Western Railway Co.'s—							
Huddersfield Narrow Canal ..	..	..	..	..	..	..	..
Loughborough Navigation	18½	14	..	..	..	..	..
Manchester, Sheffield and Lincoln- shire Railway Co.'s—							
Ashton Canal	6¼	18	..	..	..	..	..
Peak Forest Canal	8	16	2	..	..	..	..
Macclesfield Canal	26	13	..	..	..	..	..
Manchester Ship Canal	35	4	..	..	3¼	1	..
Ditto ditto (Bridgewater Canal) ..	102½	15	..	..	..	..	..
River Mersey Estuary .. .. .	..	..	..	..	6	..	..
River Nene Navigation, 1st and 2nd Division.	..	..	..	..	..	..	..
Ditto (3rd Division and Wisbech Corporation Jurisdiction).	..	..	..	..	..	..	..

FILEAGE—continued.

Walkg.	Total.				Principal Places visited on each Navigation.
	Miles.	Locks.	Tunnels	Lifts.	
..	2	2	..	..	Nottingham.
..	50	36	..	..	Old Ford, Tottenham, Ponder's End, Enfield Lock, Waltham, Broxbourne, Ware, Hertford.
..	275	188	4	..	Liverpool, Burscough, Wigan, Leigh, Blackburn, Burnley, Skipton, Bingley, Leeds.
..	31½ ^r	22	..	..	Leicester, Mountsorrel, Loughborough.
4¼	4¼	..	..	..	From top lock Diggle to top lock Marsden, over Standedge Tunnel.
..	18½	14	..	..	Loughborough, Normanton-on-Soar, Ratcliffe-on-Soar.
..	6¼	18	..	..	Dukinfield, Ancoats, Manchester.
..	8	16	2	..	Marple, Hyde, Dukinfield.
..	26	13	..	..	Hall Green, Congleton, Macclesfield, Marple.
..	38½	5	..	..	Manchester, Barton, Latchford, Runcorn, Ellesmere Port, Eastham.
..	102½	15	..	..	Runcorn, Preston Brook, Stretford, Manchester, Patricroft, Leigh.
..	6	..	..	..	Eastham, Liverpool.
2¼	2¼	..	..	..	Northampton Bridge and Lock, Peterborough Bridge, Orton Staunth.
1¼	1¼	..	..	..	Peterborough Bridge, Stanground Sluice, Wisbech.

STATEMENT OF

Name of Navigation.	In own Steam Launches.				In other Vessels.		
	Miles.	Locks.	Tunnels	Lifts.	Miles.	Locks.	Tunnels
North ^r Metropolitan Railway and Canal Co.'s—							
Regent's Canal	11	18	2	..	..	..	..
North Staffordshire Railway Co.'s—							
Trent and Mersey Canal ..	221½	167	13	..	1¾	..	1
River Ouse (Bedfordshire) .. ..	..	..	..	..	38½	1	..
Oxford Canal	557½	367	4	..	9	6	..
Rochdale Canal	33½	101	3	..	..	..	..
River Severn	197	24	..	..	..	..	..
Sharpness New Docks and Gloucester and Birmingham Navigation Co.'s Canals—							
Gloucester and Berkeley Ship Canal.	41	3	..	..	..	..	..
Worcester and Birmingham Canal.	69¾	146	10	..	..	..	..
Droitwich Canal	5¾	9	..	..	..	..	..
Droitwich Junction Canal ..	1½	6	..	..	..	..	..
Sheffield and South Yorkshire Co.'s Navigations—							
Dearne and Dove Canal ..	10	19	..	..	..	..	..
River Dun Navigation	19	8	..	..	..	..	..
Stainforth and Keadby Canal	13	2	..	..	..	..	..

ILEAGE—*continued.*

Walkg.	Total.				Principal Places visited on each Navigation.
	Miles.	Locks.	Tunnels	Lifts.	
..	11	18	2	..	Paddington, Islington, Old Ford, Limehouse, Hertford Union Branch Canal to the Lee.
..	223 $\frac{1}{4}$	167	14	..	Wilden Ferry, Shardlow, Fradley, Rugeley, Stone, Stoke-on-Trent, Hall Green, Middlewich, Northwich, Preston Brook.
..	38 $\frac{1}{2}$	1	..	..	King's Lynn, Denver Sluice, Littleport, Ely, Pope's Corner.
..	566 $\frac{1}{2}$	373	4	..	Oxford, Banbury, Napton, Braunston, Hillmorton, Hawkesbury.
..	33 $\frac{1}{2}$	101	3	..	Sowerby Bridge, Hebden Bridge, Todmorden, Rochdale, Newton Heath, Manchester.
..	197	24	..	..	Stourport, Holt, Hawford, Worcester, Upton, Tewkesbury, Gloucester.
..	41	3	..	..	Gloucester, Sharpness.
..	69 $\frac{3}{4}$	146	10	..	Worcester, Stoke Prior, Tardebigge, King's Norton, Birmingham.
..	5 $\frac{3}{4}$	9	..	..	Hawford, Droitwich.
..	1 $\frac{1}{2}$	6	..	..	Droitwich, Hanbury Wharf.
..	10	19	..	..	Barnsley Junction, Swinton.
..	19	8	..	..	Swinton, Mexborough, Doncaster, Stainforth.
..	13	2	..	..	Stainforth, Keadby.

Name of Navigation.	In own Steam Launches.				In other Vessels.		
	Miles.	Locks.	Tunnels	Lifts.	Miles.	Locks.	Tunnel
Shropshire Union Canals	343	208	10	..	..	..	..
Staffordshire and Worcestershire Canal.	55½	51	1	..	10	2	..
River Stort	27	30	..	..	..	..	..
Stroudwater Canal	6¾	11	..	..	..	..	..
River Thames	5729¾	1753	..	..	276	165	..
Thames and Severn Canal	46½	54	1	..	26½	24	..
River Trent	90	8	..	..	..	..	..
Warwick and Birmingham Canal ..	50	88	3	..	..	..	..
Warwick and Napton Canal	42¾	75	..	..	..	..	..
River Weaver	12	4	..	1 *	..	..	..
River Wey	37½	34	..	..	..	..	..
Ditto (Godalming Navigation) ..	10	8	..	..	..	..	..
Wilts and Berks Canal	224½	209	4	..	..	..	..
	9968½	4923	83	1	404½	202	1

Total 10,131 miles ;

* Anderton, 50 feet rise.

MILEAGE—continued.

Walkg.	Total.				Principal Places visited on each Navigation.
	Miles.	Locks.	Tunnels	Lifts.	
..	343	208	10	..	Atherley, Market Drayton, Nantwich, Ellesmere, Chirk, Pontcysyllte, Llantysilio, Llanymynech, Carreghofa, Welshpool, Newtown, Barbridge, Middlewich, Bunbury, Beeston, Chester, Ellesmere Port.
..	65½	53	1	..	Great Haywood, Penkridge, Atherley, Kidderminster, Stourport, Churchbridge.
..	27	30	..	..	Roydon, Harlow, Sawbridgeworth, Bishop's Stortford.
2	8¾	11	..	..	Stroud, The Junction, Framilode.
..	60c5½	1918	..	..	London, Richmond, Kingston, Windsor, Henley, Reading, Abingdon, Oxford, New Bridge, Lechlade, Inglesham.
24¼	97	78	1	..	Inglesham, Cricklade, Latton, Siddington, Chalford, Brinscombe, Stroud.
..	90	8	..	..	Wilden Ferry, Nottingham, Newark, Gainsborough, Keadby.
..	50	88	3	..	Birmingham, Kingswood, Warwick.
..	42¾	75	..	..	Warwick, Leamington, Napton.
..	12	4	..	1	Weston Marsh, Saltersford, Anderton.
..	37½	34	..	..	Weybridge, Guildford.
..	10	8	..	..	Guildford, Godalming.
..	224½	209	4	..	Abingdon, Wantage, Challow, Swindon, Cricklade, Latton, Wootton Bassett, Dauntsey, Melksham, Semington.
58¼	10131	5125	84	1	

5125 locks ; 84 tunnels ; 1 lift.

EXTRACTS FROM LOG-BOOK.

LONGEST VOYAGE.—61 days, from June 17 to August 16, 1895. From Oxford to Hawkesbury, Atherstone, Fazeley, Fradley, Rugeley, Great Haywood, Atherley, Market Drayton, Nantwich, Ellesmere, Welshpool, Newtown, Chester, Ellesmere Port, Run-corn, Leigh, Wigan, Liverpool, Blackburn, Burnley, Leeds, Goole, Wakefield, Sowerby Bridge, Rochdale, Manchester, Middlewich, Stoke-on-Trent, Fradley, Atherstone, Braunston, Wolverton, Leighton, Tring, Uxbridge, Brentford, Kingston-on-Thames, Windsor, Reading, Oxford: 1013 miles, 674 locks, 17 tunnels. Fuel consumed: Welsh coal, 2 tons, 10 cwt.; hard coal, 12 cwt.; coke, 6 tons 13 cwt.

GREATEST DISTANCE RUN IN ONE DAY.—51½ miles, from just above Sonning Lock (River Thames) to Kingston-on-Thames, including 19 locks. Time occupied, 11¼ hours. September 28, 1890.

GREATEST NUMBER OF HOURS' RUNNING IN ONE DAY.—13, from Thames Ditton (River Thames) to Hertford Lock (River Lee), 51¼ miles, and 24 locks, viâ Regent's Canal and Hertford Union Canal, February 12, 1896. Thames Ditton, depart 4 A.M., stop at Tottenham 1 hour and Waltham Common ½ hour, Hertford Lock, arrive 6.30 P.M.

GREATEST NUMBER OF BOAT (OR NARROW) LOCKS WORKED IN ONE DAY.—58, on Worcester and Birmingham Canal, May 21, 1896.

GREATEST NUMBER OF BARGE (OR WIDE) LOCKS WORKED IN ONE DAY.—55, on Rochdale Canal, July 29, 1895.

LONGEST TUNNEL TRAVERSED.—Sapperton, on summit level of Thames and Severn Canal, 3808 yards long; time taken to steam through, 50 minutes. October 22, 1891.

LONGEST TIME TAKEN TO TRAVERSE A TUNNEL.—3 hours, in a loaded narrow boat "legged" through Harecastle Old Tunnel, on summit level of Trent and Mersey Canal, 2897 yards long, August 1, 1895.

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