HISTORIC AMERICAN ENGINEERING RECORD
INDEX TO PHOTOGRAPHS

Morris Canal
Warren, Sussex, Morris, Passaic,
Essex and Hudson Counties
New Jersey

HAER No. NJ-29

All photographs in this file are historic views of the Morris Canal. The exact dates of these photographs are unknown but it can be assumed that they were taken during the late 19th and early 20th century. They were made available by the members of the Canal Society of New Jersey and were photocopied by Jack E. Boucher in 1971.

NJ-29-1 CANAL BOAT OF 96 TONS PASSING OUT OF LOCK INTO THE DELAWARE RIVER.

NJ-29-2 CANAL BOAT ENTERING THE DELAWARE CANAL FROM THE CONFLUENCE OF THE LEHIGH RIVER. BOATS COULD BE FERRYED ACROSS THE DELAWARE RIVER TO THE MORRIS CANAL BY A CABLE SUPPORTED TROLLEY.

NJ-29-3 INCLINED PLANE 11 WEST. POWER HOUSE (LEFT) AND CRADLE (RIGHT) ARE VISIBLE IN FOREGROUND. ENTRANCE PORTAL TO DELAWARE RIVER VISIBLE IN BACKGROUND.

NJ-29-4 POWER HOUSE OF INCLINED PLANE 11 WEST.

NJ-29-5 POWER HOUSE AT INCLINED PLANE 11 WEST.

NJ-29-6 CONSTRUCTION OF COAL CHUTES BY THE LEHIGH VALLEY RAILROAD ON THE MORRIS CANAL AT PORT DELAWARE.

NJ-29-7 CANAL BOATS ON THE MORRIS CANAL AT PORT DELAWARE. NOTE THAT THE BOATS ARE EMPTY AND RIDING HIGH IN THE WATER.
TOLL COLLECTOR'S HOUSE AT THE NORTH END OF PORT DELAWARE VICINITY.

COOPER'S FURNACE, PHILLIPSBURG VICINITY. ONE OF MANY INDUSTRIAL SITES ESTABLISHED ALONG THE CANAL ROUTE.

COOPER'S FURNACE, PHILLIPSBURG VICINITY. CANAL IS VISIBLE IN TOP OF PHOTOGRAPH.

LOCK 9 WEST, GREEN'S BRIDGE VICINITY.

LOCK 8 WEST. LOCK TENDER'S HOUSE IS VISIBLE IN CENTER OF PHOTOGRAPH.

INCLINED PLANE 9 WEST. PARTIALLY SUBMERGED CRADLE IS VISIBLE IN FOREGROUND. POWER HOUSE IS VISIBLE AT TOP OF HILL.

INCLINED PLANE 9 WEST. POWER HOUSE IS VISIBLE IN CENTER OF PICTURE. PLANE 9 WAS THE LONGEST PLANE OF THE CANAL SYSTEM. IT IS ALSO ONE OF ONLY THREE DOUBLE TRACKED PLANES (ALLOWING BOATS TO ASCEND AND DESCEND SIMULTANEOUSLY) ON THE CANAL.

MORRIS CANAL IN THE VICINITY OF BROADWAY, NEW JERSEY.

LOOKING DOWN INCLINED PLANE 7 WEST. FLUME THAT CARRIES WATER TO PENSTOCK IS VISIBLE AT RIGHT. WATER POWER WAS USED TO OPERATE LIFTING MACHINERY.
NJ-29-17  LOOKING UP INCLINED PLANE 7 WEST.

NJ-29-18  GENERAL VIEW OF CANAL AT BRASS CASTLE, NEW JERSEY, NEAR PORT WASHINGTON.

NJ-29-19  COOK ON A CANAL BOAT (PROBABLY THE CAPTAIN'S WIFE).

NJ-29-20  GENERAL VIEW OF THE CANAL IN THE VICINITY OF PORT COLDEN.

NJ-29-21  LOCK 6 WEST AT PORT COLDEN, NEW JERSEY.

NJ-29-22  LOCK GATE AT LOCK 6 WEST.

NJ-29-23  PORT COLDEN, NEW JERSEY, JUST PAST LOCK 6 WEST.

NJ-29-24  APPROACHING INCLINED PLANE 6 WEST. POWER HOUSE AND FLUME ON RIGHT.

NJ-29-25  PLANE 6 WEST, PORT COLDEN. NOTE THAT PLANE 6 WEST IS A DOUBLE TRACKED PLANE. POWER HOUSE AND TAILRACE ON RIGHT.

NJ-29-26  TAILRACE OF INCLINED PLANE 6 WEST.

NJ-29-27  HEAD OF PLANE 6. CANAL TENDER'S HOUSE IS ON LEFT, AND WATER POWERED SAW MILL IS AT CENTER OF PHOTO. SUMMIT OF PLANE IS ON EXTREME RIGHT.

NJ-29-28  MORRIS CANAL EAST OF PLANE 6 WEST. POWER HOUSE TO PLANE 6 IS VISIBLE IN CENTER OF PHOTOGRAPH.
NJ-29-29  GENERAL VIEW OF CANAL IN THE VICINITY OF PORT MURRAY.

NJ-29-30  GENERAL VIEW OF CANAL IN THE VICINITY OF GREAT MEADOWS, NEW JERSEY.

NJ-29-31  GENERAL VIEW OF CANAL IN THE VICINITY OF GREAT MEADOWS, NEW JERSEY.

NJ-29-32  GENERAL VIEW OF THE CANAL NEAR HACKETTSTOWN, NEW JERSEY. PCHATCONG MOUNTAINS IN BACKGROUND.

NJ-29-33  GENERAL VIEW OF CANAL WEST OF HACKETTSTOWN.

NJ-29-34  CANAL WEST OF HACKETTSTOWN, NEW JERSEY.

NJ-29-35  GENERAL VIEW OF CANAL EAST OF HACKETTSTOWN. BRIDGE IN BACKGROUND IS TYPICAL OF THOSE CROSSING THE CANAL.

NJ-29-36  QUEEN POST BRIDGE WITH DIAGONAL BRACING CROSSING OVER THE CANAL EAST OF HACKETTSTOWN.

NJ-29-37  GENERAL VIEW OF CANAL EAST OF HACKETTSTOWN.

NJ-29-38  GENERAL VIEW OF CANAL, SHOWING LOCK 3 WEST NEAR LOWANCE'S LANDING.

NJ-29-39  LOOKING ACROSS THE MUSCONETCONG RIVER TOWARDS INCLINED PLANE 4 WEST. BRIDGE IN FOREGROUND WAS USED BY MULES AS PART OF TOWPATH.

NJ-29-40  VIEW OF CANAL AT STANHOPE PARALLELING THE MUSCONETCONG RIVER.
INCLINED 2 WEST AT STANHOPE.

FURNACES AT STANHOPE ALONG THE MORRIS CANAL.

INCLINED PLANE 1 WEST. IN THE BACKGROUND CAN BE SEEN THE TOWPATH WHICH CROSSES LAKE MUSCONETCONG.

A HINGED BOAT ON THE CANAL. PART OF THE MULE TEAM CAN BE SEEN ON THE EXTREME LEFT SIDE OF THE PHOTOGRAPH.

GENERAL VIEW OF THE CANAL IN THE VICINITY OF PORT MORRIS, NEW JERSEY.

FEEDER CANAL NEAR THE LAKE HOPATCONG RAILROAD STATION. BRIDGE OF THE DELAWARE, LACKAWANNA & WESTERN RAILROAD CAN BE SEEN IN BACKGROUND.

FEEDER CANAL AT WILL'S BASIN. BOATS IN THE FOREGROUND SHOW THE CONTRAST BETWEEN A FULLY LOADED CANAL BOAT (LEFT) AND AN EMPTY ONE (RIGHT). D, L & W RAILROAD'S DOUBLE INTERSECTION PRATT TRUSS BRIDGE IS VISIBLE IN BACKGROUND.

SUMMIT OF THE MORRIS CANAL, 914 FEET ABOVE MEAN HIGH TIDE AT NEWARK, NEW JERSEY. TRACKS OF THE D, L & W RAILROAD CAN BE SEEN AT LEFT. EDGE OF THE LAKE HOPATCONG STATION IS ALSO VISIBLE AT LEFT. PASSENGERS AND FREIGHT COULD BE TRANSFERRED TO SMALL BOATS FOR TRANSPORT THROUGH THE FEEDER CANAL TO LAKE HOPATCONG.

FEEDER LOCK OR "BROOKLYN" LOCK TO LAKE HOPATCONG. THE NAME BROOKLYN COMES FROM THE NEARBY BROOKLYN FORGE (AN IRON WORKS). THIS LOCK CONNECTS DIRECTLY WITH LAKE HOPATCONG.
NJ-29-50 BOAT GOING THROUGH FEEDER LOCK FROM LAKE HOPATCONG. A BYPASS FLUME (LEFT OF LOCK) ALLOWED A CONTINUOUS FLOW OF WATER INTO THE FEEDER WHILE THE LOCK WAS IN USE TO MAINTAIN THE LEVEL OF THE MORRIS CANAL.

NJ-29-51 LOOKING THROUGH STOP GATE TOWARD FEEDER LOCK. STOP GATE COULD BE CLOSED TO ALLOW DRAINAGE OF LOCK AND FEEDER CANAL FOR REPAIRS.

NJ-29-52 FEEDER LOCK AT A LATER DATE SHOWING ABANDONMENT. LOCK WALLS ARE SHORED WITH TIMBER AND LOCK GATE IS CLOSED.

NJ-29-53 CANAL VIADUCT, LEDGEWOOD VICINITY.

NJ-29-54 HEAD OF PLANE 2 EAST.

NJ-29-55 LOOKING EAST FROM HEAD OF PLANE 2 EAST. POWER HOUSE AND FLUME VISIBLE TO RIGHT, TAILRACE RUNNING THROUGH CENTER OF PHOTOGRAPH. CRADLE TO INCLINED PLANE 3 EAST IS VISIBLE IN BACKGROUND TO LEFT.

NJ-29-56 LOOKING DOWN TAILRACE TO PLANE 2 EAST. CABLE OF INCLINED PLANE VISIBLE ON RIGHT.

NJ-29-57 LOOKING UP TAILRACE OF PLANE 2 EAST. WATER DISCHARGING FROM CULVERT ON LEFT HAD JUST PASSED THROUGH THE FLUME AND POWER HOUSE IN ORDER TO OPERATE THE LIFT MACHINERY. TAILRACE ON RIGHT IS A BYPASS FLUME SO THAT LEVEL OF CANAL BELOW PLANE 2 EAST CAN BE MAINTAINED.

NJ-29-58 LOOKING UP AT PLANE 2 EAST. LIFTING CABLE AND TRACKS ON LEFT, POWER HOUSE AT CENTER, AND TAILRACE ON RIGHT.
NJ-29-59  PLANE 2 EAST.

NJ-29-60  APPROACHING LOCK 1 EAST.  LOCK TENDER'S HOUSE IS ON LEFT.

NJ-29-61  CANAL BOAT IN LOCK 1 EAST.  MULE TEAM USED FOR TOWING IS ON TOWPATH ON LEFT SIDE OF LOCK.

NJ-29-62  BOAT HEADING WEST ASCENDING PLANE 4 EAST.  FLUME AND POWER HOUSE ON RIGHT.  A WARREN TRUSS BRIDGE IS VISIBLE IN THE BACKGROUND.

NJ-29-63  CANAL BOAT IN CRADLE AT TOP OF PLANE.  TO PASS OVER THE SUMMIT (THE HUMP OF LAND AT THE TOP OF THE PLANE TO HOLD BACK THE WATER AT THAT LEVEL), THE BOATS HAVE BEEN HINGED AND TWO CRADLES ARE USED TO CARRY THE BOAT UP THE PLANE.

NJ-29-64  WATER SPILLING FROM FLUME.  POWER HOUSE IS VISIBLE IN UPPER LEFT HAND SIDE OF PHOTOGRAPH.

NJ-29-65  LOCK 2 EAST, APPROXIMATELY HALF WAY BETWEEN PLANE 4 EAST AND WHARTON, NEW JERSEY.


NJ-29-67  CANAL TENDER'S HOUSE AT LOCK 2 EAST.  DUE TO DETERIORATION OF THE BUILDINGS WALLS AND FOUNDATION, CABLES FROM AN INCLINED PLANE WERE WRAPPED AROUND THE HOUSE AND FASTENED TO PLANE RAILS PLACED ON OPPOSITE ENDS OF THE STRUCTURE.
NJ-29-68  CANAL PLANE 5 EAST. CANAL BED IS VISIBLE WHILE FOOT OF CANAL IS UNDERGOING MAINTENANCE. NOTE HOW LARGE AMOUNTS OF DIRT ARE HAULED FROM PLACE TO PLACE USING A CANAL BOAT AND CRADLE.

NJ-29-69  CANAL IN THE VICINITY OF DOVER SHOWING THE PETER'S OVERALL FACTORY.

NJ-29-70  GENERAL VIEW OF CANAL IN DOVER LOOKING EAST. WHAT APPEARS TO BE A SWING BRIDGE IS VISIBLE ACROSS CANAL ON RIGHT SIDE OF PHOTOGRAPH (NOTE THAT THIS MAY ALSO BE A LIFT BRIDGE WITH THE LIFT EQUIPMENT REMOVED).

NJ-29-71  GENERAL VIEW OF THE MORRIS CANAL IN THE VICINITY OF ROCKAWAY, NEW JERSEY.

NJ-29-72  CANAL PASSING THROUGH ROCKAWAY LOOKING SOUTHEAST.

NJ-29-73  AN AQUEDUCT OVER THE ROCKAWAY AT DENVILLE. TOWPATH IS VISIBLE ON THE LEFT.

NJ-29-74  GENERAL VIEW OF CANAL IN THE VICINITY OF DENVILLE.

NJ-29-75  CANAL BOAT IN THE BASIN AT LOCK 9 EAST. LOCK AND TENDER'S SHED ARE VISIBLE ON RIGHT HAND SIDE OF PHOTOGRAPH.

NJ-29-76  CANAL BARGE WAITING TO ENTER LOCK 9 EAST. CANAL GATE MECHANISM IS VISIBLE ON LEFT SIDE OF PHOTOGRAPH.

NJ-29-77  CANAL BOAT 769 (NUMBER MEANS IT WAS OWNED BY THE CANAL COMPANY). BOATS HAD ONLY SIX INCHES TO SPARE ONCE THEY WERE IN THE LOCK.
NJ-29-78  APPROACHING LOCK 10 EAST.

NJ-29-79  BRIDGE AT POWERVILLE BASIN. LOCK 10 EAST IS VISIBLE TO LEFT.

NJ-29-80  POWERVILLE BASIN. LOCK TEN EAST IS VISIBLE TO LEFT AT FAR END OF BRIDGE.

NJ-29-81  LOCK 11 EAST. THIS LOCK IS A GUARD LOCK FOR POWERVILLE BASIN. ITS PURPOSE IS TO MAINTAIN THE WATER LEVEL OF THE BASIN.

NJ-29-82  CANAL WEST OF LOCK 12 EAST NEAR BOONTON. STORAGE BUILDING AND CHUTE ON LEFT SIDE OF CANAL MAY BE A COAL FACILITY. COAL WOULD BE UNLOADED FROM THE BOAT AND PASSED UP THE CHUTE INTO THE COAL STORAGE BIN. COAL COULD THEN BE LOADED INTO WAGONS FROM THE BOTTOM OF THE BIN ON THE OPPOSITE SIDE OF THE STRUCTURE WHEN NECESSARY.

NJ-29-83  CANAL WEST OF BOONTON.

NJ-29-84  SUMMIT OF PLANE 7 EAST. ROOFTOPS OF BOONTON ARE VISIBLE ON RIGHT SIDE OF PHOTOGRAPH.

NJ-29-85  INCLINED PLANE 7 EAST. FLUME AND STONE POWER HOUSE ARE ON RIGHT SIDE OF PHOTOGRAPH. NOTE THE CABLE LEAVING THE POWER HOUSE. THIS CABLE IS ATTACHED TO A DRUM ON THE INSIDE THE POWER HOUSE WHICH IS TURNED BY MEANS OF A WATER POWERED TURBINE.

NJ-29-86  PLANE 7 EAST. CRADLE IN FOREGROUND.

NJ-29-87  CANAL TENDER AT PLANE 7 EAST.
NJ-29-88  CANAL EAST OF BOONTON. LOCK 13 EAST IN BACKGROUND.

NJ-29-89  LOCK 13 EAST. WOODEN TIMBERS (FOREGROUND LEFT AND RIGHT OF LOCK ENTRANCE) ARE BEING USED AS BUMPERS TO HELP GUIDE SHIP INTO LOCK WHILE AVOIDING CONTACT WITH WALLS.

NJ-29-90  LOCK GATES AT LOCK 13 EAST.

NJ-29-91  GENERAL VIEW OF CANAL IN THE VICINITY OF BOONTON, NEW JERSEY.

NJ-29-92  GENERAL VIEW ALONG CANAL SHOWING MODIFIED QUEEN POST BRIDGE IN BACKGROUND.

NJ-29-93  UNLOADING AREA ALONG CANAL IN THE VICINITY OF BOONTON. GIN POLES (BOOMS) USED IN UNLOADING LIE TO LEFT AND RIGHT OF CENTER.

NJ-29-94  CANAL EAST OF BOONTON.

NJ-29-95  LOOKING EAST TOWARD MONTVILLE, NEW JERSEY FROM THE HEAD OF PLANE 8 EAST. FLUME IS ON LEFT SIDE OF PHOTOGRAPH, POWER HOUSE IS AT CENTER. THE PLANE CABLE RUNS ALONG RECESSED PULLEYS (VISIBLE IN LOWER LEFT HAND CORNER) IN ORDER TO CREATE A SMOOTH AND UNOBSTRUCTED PATH.

NJ-29-96  PLANE 8 EAST. TRACK IS ON RIGHT, TAILRACE IS ON LEFT. ABOVE TAILRACE CAN BE SEEN THE RETURN PATH OF THE CABLE. IN BACKGROUND CAN BE SEEN THE PARTIALLY SUBMERGED CRADLE AT THE HEAD OF PLANE 9 EAST.

NJ-29-97  LOOKING DOWN PLANE 9 EAST AT MONTVILLE. A BOAT IN ITS CRADLE IS VISIBLE BELOW THE BRIDGE AT THE FOOT OF THE PLANE.
NU-29-98  LOOKING UP PLANE 9 EAST. POWER HOUSE VISIBLE TO LEFT OF CENTER AT THE TOP OF THE PLANE.

NU-29-99  GENERAL VIEW OF THE CANAL IN THE VICINITY OF MONTVILLE.

NU-29-100 GENERAL VIEW TOWARDS BEAVERTOWN. CANAL IS RUNNING HORIZONTALLY ACROSS PHOTOGRAPH AT CENTER.

NU-29-101 LOCK 14 EAST, SHOWING HIGHWAY BRIDGE AT LINCOLN PARK.

NU-29-102 GENERAL VIEW OF CANAL AT LINCOLN PARK.

NU-29-103 CANAL AT THE ENTRANCE TO THE POMPTON FEEDER NEAR MOUNTAIN VIEW, NEW JERSEY. THE POMPTON FEEDER ALLOWED BOATS TO TRAVEL NORTH 4.26 MILES TO TO POMPTON AS WELL AS PROVIDING THE MAIN CANAL WITH WATER FROM GREENWOOD LAKE. A MODIFIED QUEEN POST TRUSS BRIDGE SPANS THE CANAL IN THE FOREGROUND.

NU-29-104 A VERTICAL LIFT BRIDGE CARRYING THE MAIN LINE OF THE DELAWARE, LACKAWANNA AND WESTERN RAILROAD OVER THE POMPTON FEEDER AT MOUNTAIN VIEW.

NU-29-105 MORRIS CANAL AT MOUNTAIN VIEW EAST OF THE POMPTON FEEDER. DRAWBRIDGE OF THE NEW YORK AND GREENWOOD LAKE RAILROAD IN FOREGROUND. IN THE BACKGROUND CAN BE SEEN THE AQUEDUCT OVER THE POMPTON RIVER.

NU-29-106 AQUEDUCT SPANNING THE POMPTON RIVER AT MOUNTAIN VIEW, NEW JERSEY.

NU-29-107 POMPTON RIVER AQUEDUCT
 NJ-29-108    POMPTON RIVER AQUEDUCT.

 NJ-29-109    CANAL BOATS LADEN WITH COAL UNLOADING AT A DOCK IN THE VICINITY OF BLOOMFIELD.

 NJ-29-110    GENERAL VIEW OF THE CANAL NEAR LITTLE FALLS.

 NJ-29-111    GENERAL VIEW OF CANAL IN THE VICINITY OF LITTLE FALLS.

 NJ-29-112    CANAL EAST OF THE POMPTON IRON WORKS, LITTLE FALLS IS VISIBLE IN THE DISTANCE.

 NJ-29-113    INSIDE THE LITTLE FALLS AQUEDUCT, SPANNING THE PASSAIC RIVER. THE AQUEDUCT WAS CONSTRUCTED OF STONE. THE WOODEN FRAMEWORK VISIBLE IN THE PICTURE WAS ADDED TO SHORE UP THE DETERIORATING STONE WORK OF THE ORIGINAL AQUEDUCT.

 NJ-29-114    CANAL PASSING THROUGH THE PATerson AREA.

 NJ-29-115    GENERAL VIEW OF THE CANAL IN THE VICINITY OF VAN WINKLE'S TAVERN, PATerson, NEW JERSEy.

 NJ-29-116    GENERAL VIEW OF THE CANAL IN BLOOMFIELD. BASIN AND HEAD OF INCLINED PLANE 11 EAST IS VISIBLE IN BACKGROUND.

 NJ-29-117    FOOT OF PLANE 11 EAST. POWER HOUSE IS LEFT OF CENTER IN PHOTOGRAPH. BOAT IN PHOTOGRAPH IS ASCENDING THE PLANE TRAVELLING WEST.

 NJ-29-118    ROAD BRIDGE OVER CANAL IN BLOOMFIELD.

 NJ-29-119    LOCK 15 EAST, BLOOMFIELD, NEW JERSEY.
NJ-29-120  GENERAL VIEW OF CANAL IN BLOOMFIELD. LOCK 15 IS VISIBLE IN BACKGROUND.

NJ-29-121  GENERAL VIEW OF CANAL, BLOOMFIELD VICINITY.

NJ-29-122  MORRIS CANAL AND SECOND RIVER RUNNING PARALLEL NEAR BLOOMFIELD.

NJ-29-123  CANAL CROSSING OVER THE SECOND RIVER.

NJ-29-124  CANAL EAST OF BLOOMFIELD.

NJ-29-125  BRANCH BROOK PARK AT ORANGE ST. IN NEWARK, NEW JERSEY. CANAL IS IN UPPER LEFT HAND SIDE OF PHOTOGRAPH. BRANCH BROOK IS AT RIGHT.

NJ-29-126  CANAL WEST OF PLANE 12 IN NEWARK. ROOFTOPS OF NEWARK ARE VISIBLE IN THE BACKGROUND.

NJ-29-127  LOOKING WEST AT SUMMIT AVE. IN NEWARK.

NJ-29-128  LOOKING EAST TOWARD SUMMIT AVE. BRIDGE. HEAD OF PLANE 12 EAST CAN BE SEEN IN BACKGROUND PAST BRIDGE.

NJ-29-129  HEAD OF PLANE 12 EAST AT HIGH ST. IN NEWARK. FLUME AND POWER HOUSE ARE IN RIGHT HAND SIDE OF PHOTOGRAPH. THIS IS THE LAST DOUBLE TRACKED PLANE ON THE MORRIS CANAL.

NJ-29-130  FLUME AND POWER HOUSE OF PLANE 12 EAST. CABLES OF BOTH TRACKS CAN BE SEEN IN THE FOREGROUND.

NJ-29-131  LOOKING WESTWARD AT CANAL PASSING UNDER BROAD ST. IN NEWARK.
NJ-29-132  CANAL PASSING THE RIPLEY AND COMPANY LUMBER YARDS IN NEWARK.

NJ-29-133  GENERAL VIEW OF THE CANAL PASSING THE VALBESH SMELTING AND REFINING COMPANY, IN NEWARK.

NJ-29-134  CANAL AND TOWPATH PARALLELING THE PASSAIC RIVER IN NEWARK.

NJ-29-135  GENERAL VIEW OF THE CANAL IN NEWARK, NEW JERSEY. CENTRAL RAILROAD OF NEW JERSEY RAILROAD BRIDGE CROSSING CANAL IN BACKGROUND.

NJ-29-136  CANAL AT THE POINT WHERE IT REACHES NEWARK BAY.

NJ-29-137  CANAL PARALLELING THE LEHIGH VALLEY RAILROAD IN JERSEY CITY (POSSIBLY IN THE GREENVILLE SECTION OF THE CITY).

NJ-29-138  TOWPATH SHOWING GALLERY FOR THE PASSAGE OF BOATS AT JERSEY CITY.

NJ-29-139  LEHIGH VALLEY RAILROAD BRIDGE ALONG THE PATH OF THE MORRIS CANAL IN JERSEY CITY.

NJ-29-140  SCHENZEN PARK IN THE GREENVILLE SECTION OF JERSEY CITY, NEW JERSEY.

NJ-29-141  CANAL BOAT ENROUTE FROM JERSEY CITY TO NEWARK.

NJ-29-142  GENERAL VIEW ALONG THE CANAL IN THE VICINITY OF AVENUE D (NOW BROADWAY), BAYONNE, NEW JERSEY.
NJ-29-143  HENDERSON ST. DRAWBRIDGE (IN OPEN POSITION). THE BRIDGE CARRIES THE TRACKS OF THE LEHIGH VALLEY RAILROAD AND THE CENTRAL RAILROAD OF NEW JERSEY.

NJ-29-144  STRUCTURE BUILT OVER THE CANAL IN JERSEY CITY.

NJ-29-145  GENERAL VIEW OF THE WHITLOCK CORDAGE COMPANY ALONG THE CANAL IN JERSEY CITY.

NJ-29-146  GENERAL VIEW OF THE CANAL AT GROVE ST. IN JERSEY CITY.

NJ-29-147  LIFT BRIDGE AT GROVE ST. CROSSING THE MORRIS CANAL IN JERSEY CITY.

NJ-29-148  LIFT BRIDGE AT GROVE STREET.

NJ-29-149  LIFT BRIDGE IN JERSEY CITY.

NJ-29-150  GENERAL VIEW OF THE CANAL IN JERSEY CITY. A RAILROAD BRIDGE CAN BE SEEN PASSING OVER THE CANAL IN BACKGROUND.

NJ-29-151  DREDGE ON THE EIGHT MILE LEVEL (A LEVEL IS A STRETCH OF CANAL UNINTERRUPTED BY LOCKS OR PLANES).

NJ-29-152  VIEW OF THE MORRIS CANAL LOOKING WEST TOWARD JERSEY CITY.

NJ-29-153  BASIN OF 1867 AND THE INNER BASIN OF THE MORRIS CANAL AT JERSEY CITY.

NJ-29-154  VIEW SHOWING THE BASIN OF 1867 AND THE INNER BASIN AT THE HUDSON RIVER.
NJ-29-155  VIEW OF THE HUDSON RIVER BASIN (C.1828) WITH LOCK 22 EAST (TIDEWATER LOCK) IN CENTER FOREGROUND. CITY OF NEW YORK CAN BE SEEN IN BACKGROUND.

NJ-29-156  CANAL INSPECTION PARTY, JULY 1, 1913. TAKEN IN THE VICINITY OF THE HUDSON RIVER BASIN.

NJ-29-157  HINGED CANAL BOAT IN THE VICINITY OF THE HUDSON RIVER PORTAL.

NJ-29-158  VIEW OF THE HUDSON RIVER BASIN WITH HUDSON RIVER AND NEW YORK CITY IN THE BACKGROUND.


NJ-29-160  VIEW FROM NEW YORK HARBOR SHOWING THE JERSEY WATER FRONT. PLEASE NOTE THAT ARROWS WERE ON THE ORIGINAL PHOTOGRAPH AND WHAT THEY POINT OUT IS NOT CERTAIN.

NJ-29-161  HINGED CANAL BOAT IN CRADLE ATOP INCLINED PLANE.

NJ-29-162  INCLINED PLANE POWER HOUSE (POSSIBLY PLANE 9 EAST).

NJ-29-163  TOUR GROUP IN CANAL BOAT PASSING THROUGH LOCK.

NJ-29-164  UNIDENTIFIED VIEW ALONG MORRIS CANAL.

NJ-29-165  GENERAL VIEW OF CANAL IN THE VICINITY OF WHITEHALL.
NJ-29-166  UNIDENTIFIED LOCK TENDER'S HOUSE ALONG THE MORRIS CANAL.

NJ-29-167  GENERAL VIEW OF CONTROL ROOM IN AN INCLINED PLANE'S POWER HOUSE.

NJ-29-168  DETRAILED VIEW OF CONTROLS IN POWER HOUSE ON THE MORRIS CANAL

NJ-29-169  BOAT ENTERING LOCK FOR LIFT ALONG THE MORRIS CANAL. NOTE THAT LITTLE GIRL IS OPERATING THE MACHINERY.

NJ-29-170  VIEW OF UNIDENTIFIED LOCK SHOWING DOORS PARTIALLY OPEN. IRON RODS STICKING UP FROM GATES OPERATE PADDLES THAT ALLOWS WATER IN LOCK TO EQUALIZE WITH WATER IN CANAL DURING THE LOCKING PROCEDURE.

NJ-29-171  GENERAL VIEW OF LOCK ON THE MORRIS CANAL SHOWING GATES AND THE MACHINERY THAT OPENS AND CLOSES THEM.

NJ-29-172  VIEW OF CANAL BOAT LEAVING LOCK.

NJ-29-173  CANAL TENDER OPERATING LOCK MACHINERY ON THE MORRIS CANAL. AS THE LOCK TENDER TURNS THE CRANK, A SMALL COGGED WHEEL (PINION) ON THE CRANK SHAFT TURNS A LARGER COGGED WHEEL (MAIN GEAR). THE MAIN GEAR ENGAGES A COGGED BAR CALLED A TRAVERLLER WHICH MOVES FORWARD OR BACK DEPENDING ON WHICH WAY THE CRANK IS TURNED. CONNECTED TO THE TRAVERLLER ARE TO LONG RODS (GATE ARMS) WHICH IN TURN ARE CONNECTED TO THE GATE'S TOP BEAM (ONE ARM FOR EACH GATE). AS THE TRAVERLLER MOVES FORWARD THE GATE ARMS EXTEND PUSHING THE GATES OPEN.