By Doug Rusher

The Montana Power Company was formed on December 12, 1912, in Butte through the merger of the Butte Electric and Power Company with three of its subsidiaries: the Madison River Power Company, the Billings and Eastern Montana Power Company, and the Missoula River Power Company. A few months later, the two remaining large power producers in Montana, the Great Falls Water Power and Townsite Company, and the Thompson Falls Power Company, were taken into the company by acquisition of stock control. The properties owned by the formerly independent small companies included hydroelectric generating plants steam electric plants; many also had contracts to provide power for street railways, mills, and other interests. Montana Power Company continued to acquire companies after 1912, adding approximately fifty more companies by the early 1950s.

The company has since expanded into related businesses, including natural gas, oil, and coal, and providing telecommunications services. In 2000, it sold its generating and transmission assets in Montana and became Touch America, a telecommunications company.

From the finding aid for Montana Power Company Records 1892-1967 (Maureen and Mike Mansfield Library Archives and Special Collections)

The Montana Power Company was incorporated on December 12, 1912, as a result of a merger of the Butte Electric and Power Company, the Madison River Power Company, the United Missouri River Power Company, and the Billings and Eastern Montana Power Company. The merger was brought about by John D. Ryan, head of the Anaconda Copper Mining Company, and John G. Morony, president of the First National Bank of Great Falls. Each of the constituent companies had been formed as the result of mergers of earlier companies.

The Butte Electric and Power Company, was formed in 1901 to take over the assets and liabilities of the Butte Lighting and Power Company, which was, in turn, the successor to several local Butte power generating plants, including the Brush Electric Light and Power Company, the Silver Bow Electric Light Company, the Butte Electric Light and Power Company, the Silver Bow Electric Light and Power Company, the Butte General Electric Company, the Phoenix Electric Company, the Butte Gas Light and Coke Company, and others. The Butte Electric and Power Company's properties also included a hydro-electric power station on the Big Hole River from The Montana Power Transmission Company, successor to the Big Hole Improvement Company; and a majority interest in several Great Falls companies including the Great Falls Street Railway Company, the Boston and Great Falls Electric and Power Company, and the Great Falls Electric Properties.

The Missouri River Electric and Power Company, was organized in 1911, as a successor to the United Missouri River Power Company (UMRPC), which had gone into receivership. The UMRPC was itself a merger of the Missouri River Power Company, the Capital City Power Company, and the Helena Power Transmission Company. By 1912 the successor company owned most of the hydro-electric facilities on the Missouri River, including the first Canyon Ferry Dam completed in 1898 by the Helena Water and Electric Power Company; the Hauser Dam built in 1907 by the Helena Power Transmission Company; and the Holter Dam, begun around 1907 by the Capital City Power Company; and, due to financial difficulties, not completed until after the merger into Montana Power Company.

The Madison River Power Company was organized in 1905 by Butte Electric and Power Company interests to take over the Nunn power plant on the Madison River from The Power Company. The Madison River Power Company also constructed the Lower Madison Development in 1906 and transmission lines to Butte. In addition the Company acquired the Bozeman Electric Light Company, the Bozeman Street Railway Company, the Gallatin Light, Power and Railway Company, and the Livingston Water Power Company.

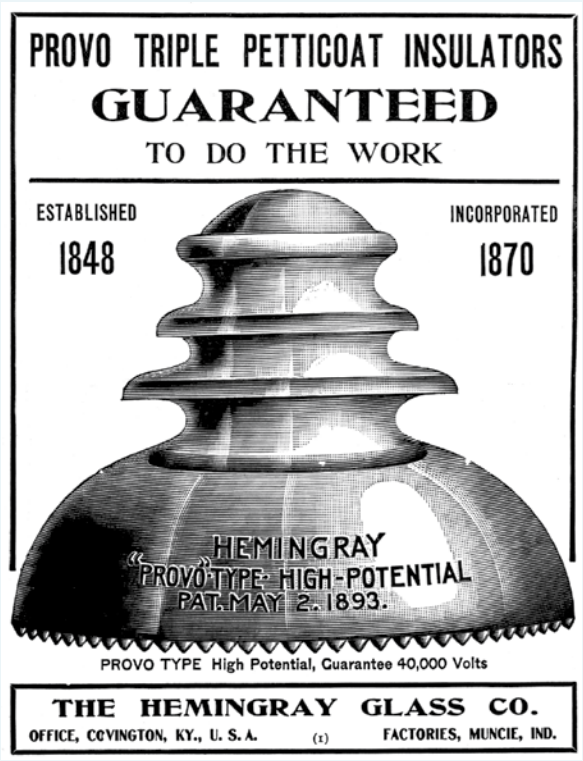
The Billings and Eastern Montana Power Company was organized in 1908 to take over various power developments along the Yellowstone River, including the Yegan Brothers properties, the Yellowstone River Power Company, the Billings Water Power Company, the Montana Trading Company, and the Big Timber Electric Light and Power Company.

After the organization of the Montana Power Company in 1912, the company continued to consolidate power developments around the state. In 1929 several major systems were acquired. The Missoula Public Service Company, was a merger of the Missoula Light and Water Company and the Missoula Street Railway Company both developed by William A. Clark. The various Helena properties which had been consolidated under the Helena Gas and Electric Company in 1927, also became part of Montana Power Company in 1929. A third major acquisition in 1929 was the Thompson Falls Power Company, including its predecessor the Northwestern Development Company. The Great Falls Townsite Company, the Great Falls Power Company, and the Great Falls Street Railway Company were all acquired by Montana Power Company between 1931 and 1936. The last major system acquired before World War II was the Union Electric Company of Dillon, which included the properties of its predecessors the Rife Electric Company and the Dillon Electric Light and Power Company. In addition, many local utilities were added for which there are no records in this collection.

One of the most early lines used all Hemingray products, such as the Canyon Ferry Line, the A and B Line which ran from Canyon Ferry Dam to Butte which used CD 303/310 Muncies and where more difficult span required the CD 304/310 Coolie Hats (because of the NO neck design), started construction in 1899 and was supplying power by 1902. This line supplied power to many mines along the way as well as power to many small mining towns. This Line was one of The Missouri River Power Company's first big lines and lasted well into the 1980's with a lot of the poles still in use today.

One of the earliest lines I wanted to highlight on is the Madison line. It began construction in 1899 from the Madison Dam (near Ennis) to Butte and used a special designed pole with a mortised cross arm and pin design that used pins that were 28” long for the center pin and a pin that was 24” long on each side of the cross arm and used CD 283 Hemingray No 1 Provos. Justin Martin has been on the line and made some great finds, and once in a while has a pin for sale. They are really something to see. Thanks to Justin for these great pics of a piece of Montana’s early power line history.

Photo from 1899 of the Madison Line. Note the pin length with the CD 283 No1 Provos



One of the Madison Poles. Note the Mortised Cross Arm and Pins

One of the last standing poles off of the Madison Line (still standing from 1899)

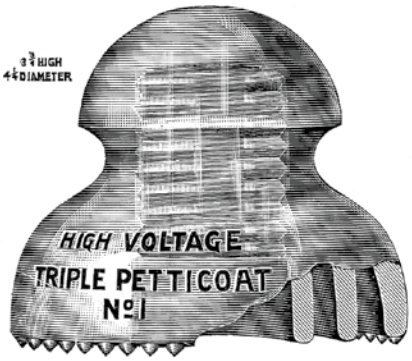
Center Pin 28” and Cross Arm Pin 24” Long

Here’s a photo of Justin with one of the original pole tops from the Madison Line. You can see how long the center pin stuck up above the pole top.

SEE THE

TEATS ON THE PETTICOAT

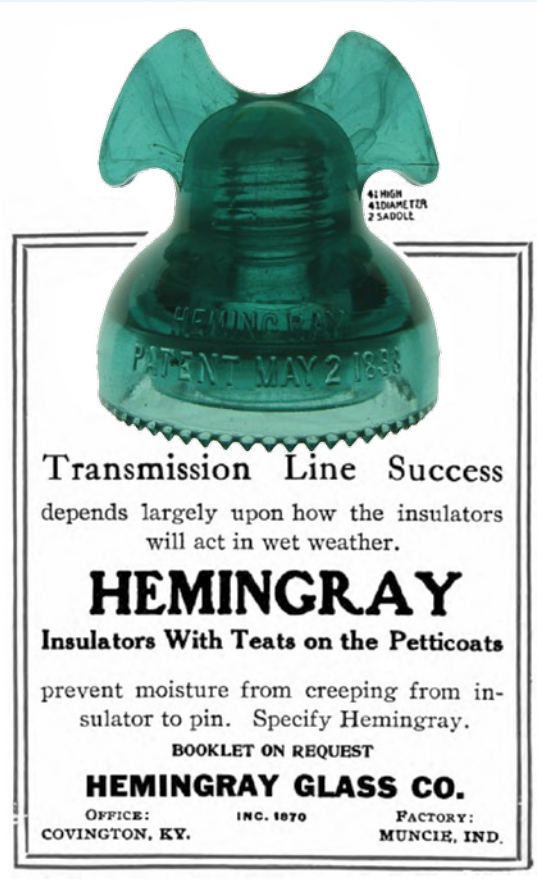
They take all the moisture from the inner and outer surface of the insulator and keep the pin dry.



HEMINGRAY GLASS COMPANY

Established 1848
Incorporated 1870
COVINGTON, KY.

Factories, - - MUNCIE, INDIANA



Transmission Line Success

depends largely upon how the insulators will act in wet weather.

HEMINGRAY

Insulators With Teats on the Petticoats

prevent moisture from creeping from insulator to pin. Specify Hemingray.

BOOKLET ON REQUEST

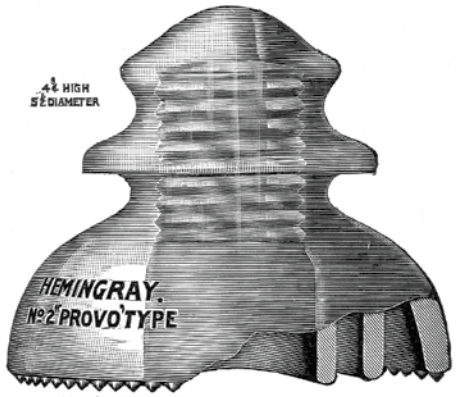
HEMINGRAY GLASS CO.

OFFICE: COVINGTON, KY. INC. 1870 FACTORY: MUNCIE, IND.

STANDARD

GUARANTEED

INSULATORS



No. 2 PROVO TYPE. Guarantee 25000 Volts

THE HEMINGRAY GLASS CO.

MANUFACTURERS

ESTABLISHED 1848 INCORPORATED 1870

OFFICE, COVINGTON, KY. [3] FACTORIES, MUNCIE, IND.

Transmission Line Success

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Insulators With Teats on the Petticoats

prevent moisture from creeping from insulator to pin. Specify Hemingray.

BOOKLET ON REQUEST

HEMINGRAY GLASS CO.

OFFICE: COVINGTON, KY. INC. 1870 FACTORY: MUNCIE, IND.

The World's Standard

"See the teats on the Petticoat"

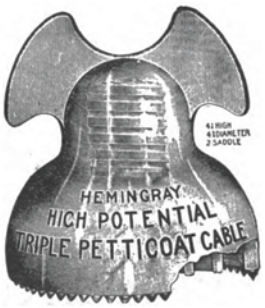
For High Tension Lines

No. 1 High Voltage

For Standard Lighting

Deep Groove Double Petticoat

For High Tension Cables



High Potential Triple Petticoat Cable

Hemingray Glass Company

Incorporated 1870

Office: Covington, Ky. Factory: Muncie, Ind.

Established 1848

TRADE MARK

HEMINGRAY

REGISTERED.

No. 60 Cable 6600 Volts.

Hemingray insulators owe their superiority to good design and material subjected to proper processes of manufacturing, and perfect annealing.

Specify Hemingray and you'll make no mistake.

Want our Catalog?

HEMINGRAY GLASS CO.

COVINGTON, KY.

ABSOLUTELY MOISTURE-PROOF

HEMINGRAY

STANDARD SCREW GLASS INSULATORS

TAKE ALL THE MOISTURE FROM THE INNER AND OUTER SURFACE OF THE INSULATOR AND KEEP THE PIN DRY.

SEE THE TEATS ON THE PETTICOAT

HEMINGRAY GLASS CO.

Est. 1848. Inc. 1870. COVINGTON, KY.

(2) Factories, MUNCIE, IND.

ABSOLUTELY MOISTURE-PROOF

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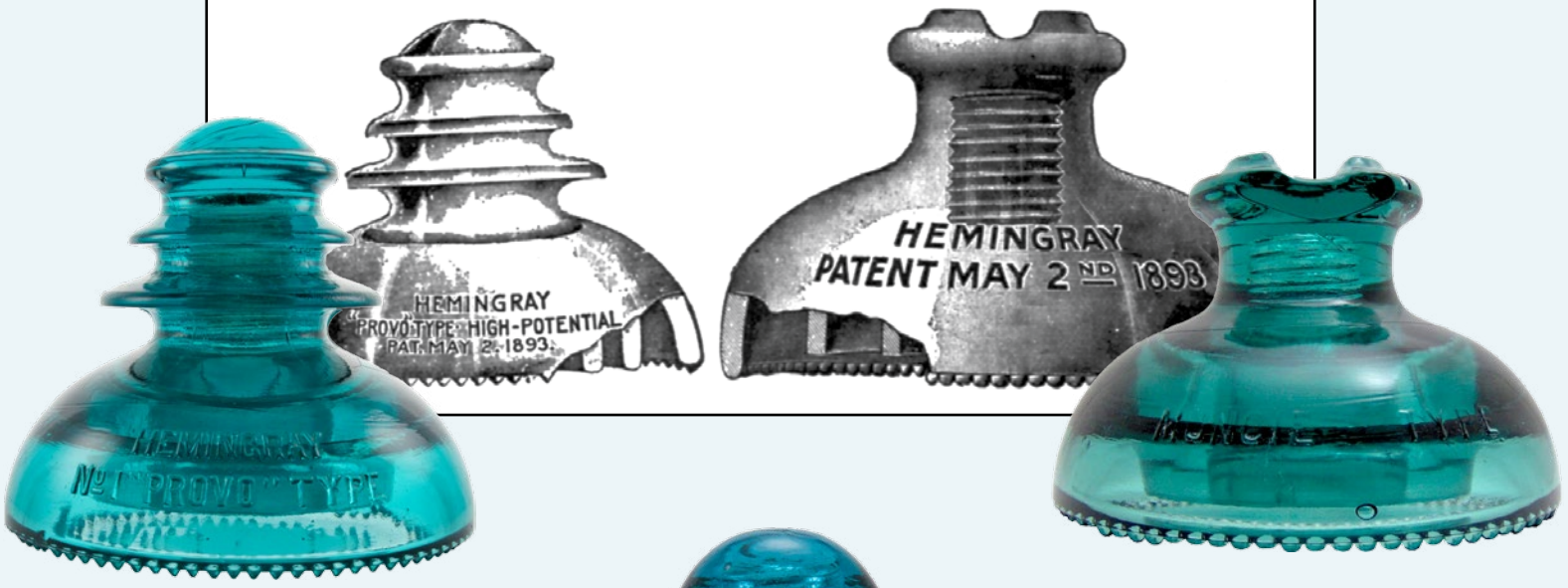
Factories, Muncie, Ind. Office, Covington, Ky.

Manufacturers of the Celebrated

Muncie and Provo Type High Tension

INSULATORS



HEMINGRAY GLASS CO.

POWER GLASS USED IN MONTANA

Some of the top Areas and Insulators Used

HILIPSBURG
CD 302 Hemingray Muncie Type Aqua
CD 162 HG Co Sage Green
CD 248/311/311 No 79 Aqua
CD 283 No 1 Provo

BUTTE
CD 295 HV Triple Petticoat Aqua
CD 263 Smooth Base Columbia
CD 295 Hemingray No 72 Aqua, bluish Aqua
CD 280 HV Triple Petticoat Aqua
CD 281 No 1 HV Triple Petticoat
CD 282 No 2 Provo Aqua
CD 248/311/311 No 79 Aqua
CD 162 No 19 Yellow Green
CD 162 HG Co Petticoat Ice Aquq
CD 257 Aqua, Greenish Aqua, Ice Aqua
CD 303/310 Muncie, No 76 Aqua, Bluish Aqua
CD 304/310 Coolie Aqua, Bluish Aqua
CD 283 No1 Provo Aqua, Bluish Aqua

ANACONDA
CD 257 Aqua, Bluish Aqua
CD 280 HV Triple Petticoat
CD 281 No 1 HV Triple Petticoat
CD 303/310 Muncie Aqua, Bluish Aqua
CD 304/310 Coolie Aqua, Bluish Aqua
CD 162 No 19 Forest Green, Sage, Celery Green, Ice Green

HELENA
CD 295 HV Triple Petticoat Aqua
CD 302 Hemingray Muncie type Aqua
CD 295 Hemingray No 72 Aqua, bluish Aqua
CD 241 No 23 Hemingray Blue, Aqua
CD 252 Hemingray No 2 Cable Aqua, Bluish Aqua
CD 282 No 2 Provo Aqua
CD 248/311/311 No 79 Aqua
CD 257 Aqua, Greenish Aqua, Ice Aqua
CD 303/310 Muncie, No 76 Aqua, Bluish Aqua
CD 304/310 Coolie Aqua, Bluish Aqua
CD 283 No1 Provo Aqua, Bluish Aqua

GREAT FALLS
CD 162 No 19 Root Beer Amber, Red Amber, Honey Amber, Orange Amber, Golden Amber & Yellow
CD 302 Muncie Type Aqua, Bluish Aqua
CD 252 Hemingray No 62 Aqua
CD 252 No 2 Cable Aqua, Bluish Aqua
CD 241 No 23 Aqua, Bluish Aqua

CONRAD
CD 283 No1 Provo Aqua

TRIDENT
CD 307 High Potential Triple Petticoat Cable Aqua, Aqua with Milky Swirls

BILLINGS
CD 162 HG Petticoat Lilac
CD 257 Aqua, Bluish Aqua, Greenish Aqua
CD 252 No 62 Hemingray Blue
CD 241 No 23 Hemingray Blue

SHERIDAN
CD 257 Aqua

ENNIS
CD 241 No 23 Aqua, Bluish Aqua

LEWISTOWN
CD 241 No 23 Aqua
CD 302 Muncie Type Hemingray Blue

ROUNDUP
CD 248/311/311 No 79 Aqua, Bluish Aqua

DEER LODGE
CD 248/311/311 No 79 Aqua with Amber Bases, Aqua
CD 303/310 Muncie Aqua, Bluish Aqua
CD 304/310 Coolie Aqua, Bluish Aqua

BELT
CD 302 Muncie Type Aqua, Bluish Aqua
CD 302 Muncie OHIO Aqua, Bluish Aqua

CRAIG
CD 302 Muncie Type Aqua

BELGRADE
CD 303/310 Muncie Hemingray Blue
CD 252 No 62 Hemingray Blue
CORBIN
CD 257 Aqua
CD 295 No 72 Aqua, Hemingray Blue
CD 303/310 Muncie, No76 Aqua
CD 304/310 Coolie Aqua, Bluish Aqua

DILLON
CD 303 Muncie (NO 310 Base) Aqua, Bluish Aqua

BIG TIMBER
CD 303/310 Muncie Aqua, Bluish Aqua

REED POINT
CD 248/311/311 No 79 Aqua, Bluish Aqua

WHITHALL
CD 280 HV Triple Petticoat Aqua,
CD 281 No1 HV Triple Petticoat Aqua

BASIN
CD 303/310 Muncie Aqua, Bluish Aqua

MARYSVILLE
CD 303 Muncie (NO Base) Aqua, Bluish Aqua

POLSON
CD 257 Clear

MADISON DAM
CD 280 HV Triple Petticoat Aqua,
CD 281 No1 HV Triple Petticoat Aqua
CD 283 No1 Provo

RED LODGE
CD 248/311/311 No 79 Aqua with Amber Bases, Aqua

SOME OF THE HEMINGRAY PRODUCTS USED IN MONTANA

CD 257 Mickeys and CD 252 Hemingray No 2 Cables on top Cross Arm CD 162 No 19 on Bottom Cross Arm which is a 4 KV Circuit from Butte MT Photo by Justin Martin

For you Insulator Hunters that like to Hike and hunt, here's some of the lines and a Brief Description of the Location:

From Hauser and Canyon Ferry Dam (by Helena) to Butte Canyon Ferry A and B line, Muncies, Coolies and a few Stackers Warm Springs Creek by Clancy mt to Elkhorn #2 provo Line

Belt Mt to East end of Great Falls 7" Muncies
Craig Mt 7" Muncies

Boulder Mt to Radersburg Mt Muncie with Bases

Boulder Mt to The Comet Mine Muncies with Bases

Madison Dam to three forks Muncies with Base

Madison Dam to Butte No 1 Provos

Madison Dam to Trident No 1 HV triple Petticoat and HV triple Petticoats

Trident Mt HV Potential Triple Petticoat

Butte and surrounding area, CD 263 Columbia, Muncies, Coolies, Stackers, No 1 Provo, Mickeys HG Petticoats and No 19's. Deer Lodge Mt Amber Base and Aqua Stackers

Red Lodge Mt Amber Base and Aqua Stackers

Reed Point to Aqua Stackers

Bozeman Mt to Belgrade Hemi Blue Muncies with Bases

Lewistown Mt 7" Muncies in Hemingray Blue

Billings Mt HG petticoat in Lilac, Mickeys, NO 23 in Hemingray Blue and Hemingray No95 Mine Insulator

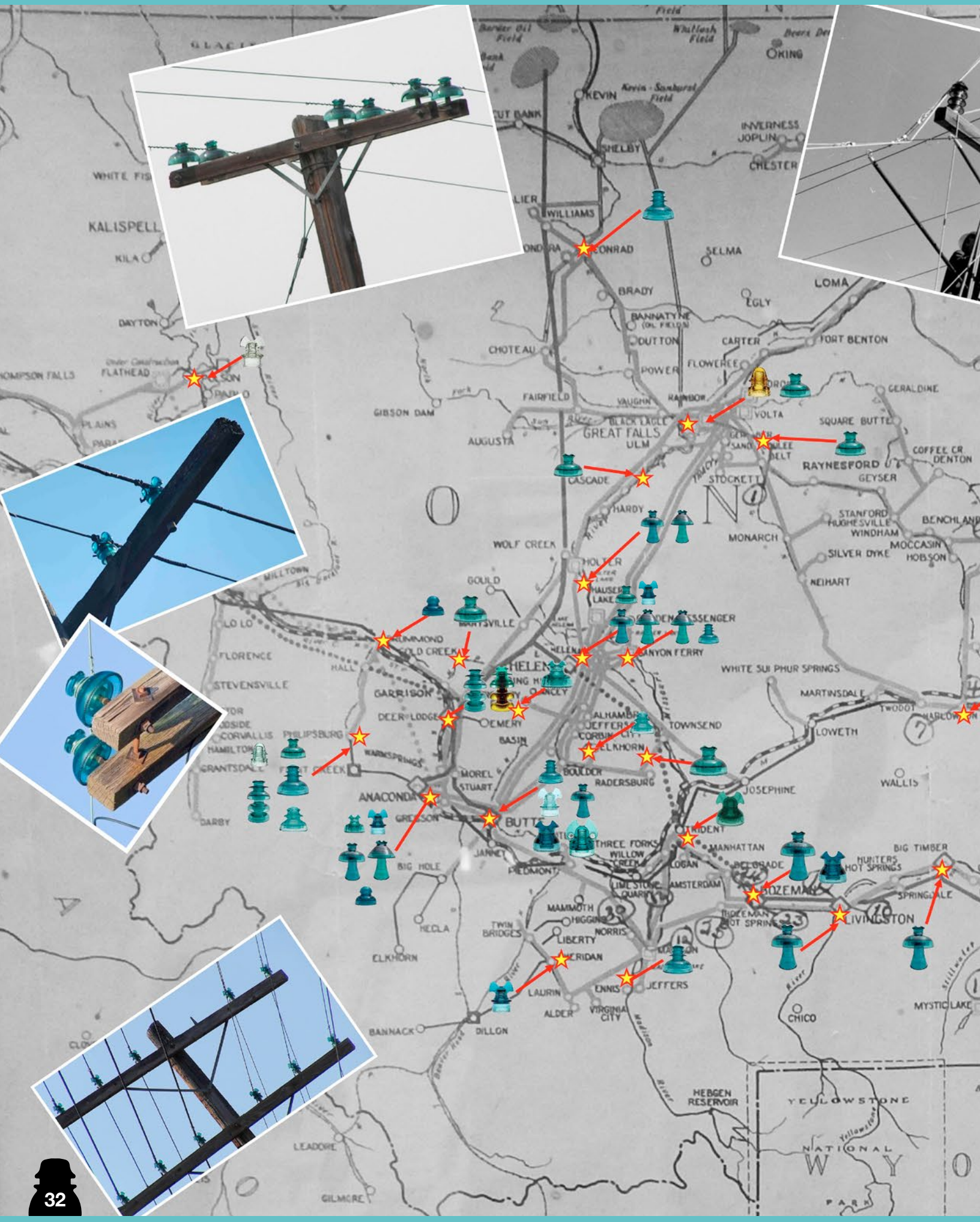
Great Falls Mt 162's in yellow amber, root beer amber and all different shade of dark amber, No 23 and 7" Muncies Livingston Mt to Big Timber Muncies with Bases

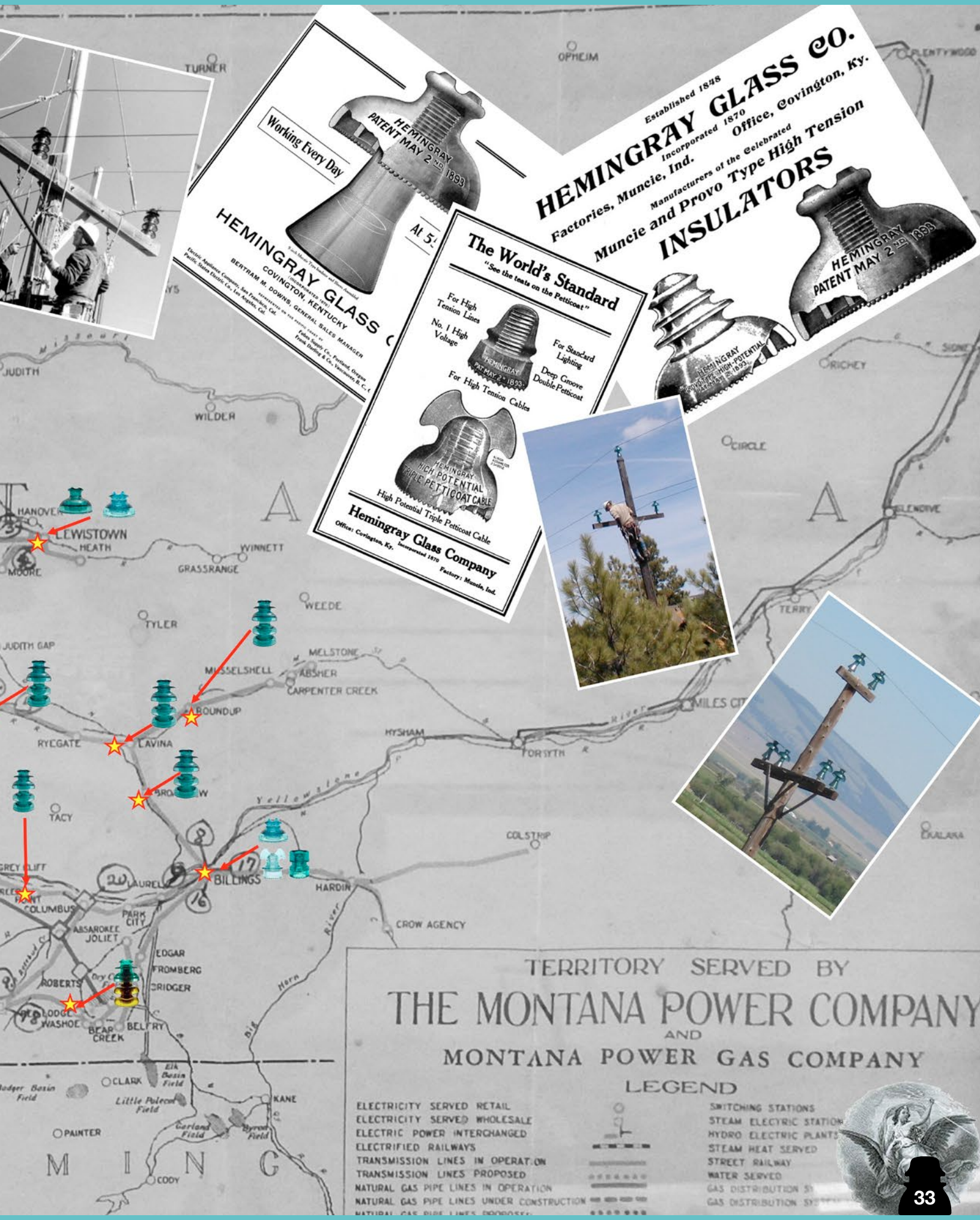
Corbin Mt Mickeys on line heading West

Georgetown to Philipsburg #2 Provos

Philipsburg and surrounding area #2 Provo, #1 Provo Stackers in Aqua, 162 in sage green

Polson Mt Mickeys in Clear
This is just a very Few places, and a few of the lines that ran thru the area. A BIG Thanks to Ron Yuhas and Justin Martin for helping me out on the Locations of these Historic Places and Lines.


KALISPELL
DAYTON
KILA
WHITE FISH
FLATHEAD
PLAINS
THOMPSON FALLS
GIBSON DAM
CHOTEAU
KEVIN
SHELBY
CUT BANK
OKING
INVERNESS
JOPLIN
CHESTER
WILLIAMS
CONRAD
SELMA
LOMA
EGLY
BRADY
BANNATYNE
DUTTON
CARTER
FORT BENTON
POWER
FLOWEREE
GERALDINE
FAIRFIELD
VAUGHN
RAINBOW
VOLTA
SQUARE BUTTE
AUGUSTA
BLACK EAGLE
GREAT FALLS
ULM
RAYNESFORD
COFFEE CR
DENTON
CASCADE
STOCKETT
GEYSER
HARDY
STANFORD
HUGHESVILLE
WINDHAM
BENCHLAND
MONARCH
MOCCASIN
HOBSON
SILVER BYKE
NEIHART
WOLF CREEK
HOLTER
LAKE
GOULD
MARYSVILLE
RAYMOND
GOLD CREEK
HELENA
CANYON FERRY
MESSENGER
LO LO
FLORENCE
HALL
STEVENSVILLE
GARRISON
DEER LODGE
EMERY
BASIN
WHITE SULPHUR SPRINGS
MARTINSDALE
TWODOT
LOWETH
ALHAMBRA
JEFFERS
CORBIN CITY
TOWNSEND
ELKHORN
CORVALLIS
PHILIPSBURG
HAMILTON
GRANTSDALE
WARMSPRINGS
FORT CREEK
MOREL
STUART
BOULDER
RADERSBURG
JOSEPHINE
WALLIS
ANACONDA
GREGSON
BUTTE
TRIDENT
THREE FORKS
WILLOW CREEK
MANHATTAN
LOGAN
BIG TIMBER
HUNTERS HOT SPRINGS
PIEDMONT
LIMESTONE QUARRY
AMSTERDAM
BOZEMAN
SPRINGDALE
LIVINGSTON
MAMMOTH
HIGGINS
NORRIS
TWIN BRIDGES
LIBERTY
MADISON
HECLA
ELKHORN
MERIDAN
ENNIS
JEFFERS
LAURIN
ALDER
VIRGINIA CITY
BANNACK
DILLON
CHICO
MYSTIC LAKE
HEBGEN RESERVOIR
YELLOWSTONE
NATIONAL
PARK
LEADORE
GILMORE


Working Every Day
HEMINGRAY PATENT MAY 2ND 1893
HEMINGRAY GLASS CO.
COVINGTON, KENTUCKY
BERTRAM M. DOWNS, GENERAL SALES MANAGER
Established 1848
HEMINGRAY GLASS CO.
Incorporated 1870
Factories, Muncie, Ind. Office, Covington, Ky.
Manufacturers of the Celebrated
Muncie and Provo Type High Tension
INSULATORS
HEMINGRAY PATENT MAY 2ND 1893
The World's Standard
"See the tests on the Petticoat"
For High Tension Lines
No. 1 High Voltage
For Standard Lighting
Deep Groove Double Petticoat
For High Tension Cables
HEMINGRAY HIGH POTENTIAL TRIPLE PETTICOAT CABLE
High Potential Triple Petticoat Cable
Hemingray Glass Company
Office: Covington, Ky. Incorporated 1870 Factory: Muncie, Ind.
TERRITORY SERVED BY
THE MONTANA POWER COMPANY
AND
MONTANA POWER GAS COMPANY
LEGEND
ELECTRICITY SERVED RETAIL
ELECTRICITY SERVED WHOLESALE
ELECTRIC POWER INTERCHANGED
ELECTRIFIED RAILWAYS
TRANSMISSION LINES IN OPERATION
TRANSMISSION LINES PROPOSED
NATURAL GAS PIPE LINES IN OPERATION
NATURAL GAS PIPE LINES UNDER CONSTRUCTION
SWITCHING STATIONS
STEAM ELECTRIC STATION
HYDRO ELECTRIC PLANTS
STEAM HEAT SERVED
STREET RAILWAY
WATER SERVED
TURNER
OPHEIM
PLENTYWOOD
JUDITH
WILDER
SIDNEY
RICHEY
CIRCLE
GLENDIVE
HANOVER
LEWISTOWN
HEATH
MOORE
WINNETT
GRASSRANGE
WEEDE
TYLER
JUDITH GAP
MELSTONE
MUSSELSHELL
ABSHER
CARPENTER CREEK
ROUNDUP
RYEGATE
LAVINA
MILES CITY
HYSHAM
FORSYTH
TACY
COLSTRIP
BILLINGS
HARDIN
CROW AGENCY
COLUMBUS
PARK CITY
ABSAROKEE
JOLIET
EDGAR
FROMBERG
ROBERTS
CRIDGER
LODGE GRASS
WASHOE
BEAR CREEK
BELFRY
CLARK
KANE
PAINTER
CODY
M I N G

Built in 1886, the Electric Building (later called the Electric Block) had coal-fired steam dynamos in the basement that generated Helena's electricity until 1898, when hydroelectric power from the first Canyon Ferry Dam came on-line. The 120-foot tall stone and brick chimney was subsequently removed, and an additional story was added to the building, the line that fed Helena from Canyon Ferry Dam to Helena used Hemingray #1 Provo's and was one of the First lines to supply power to Helena in 1898

HEMINGRAY GLASS INSULATORS

No. 71

No. 72

No. 73

No. 74

Nos. 75 and 76

No. 78 Insulator with No. 77 Sleeve

No. 71 HIGH VOLTAGE (OLD No. 1)

Trade No.	Voltage Test Dry	Wet	Line	Std. Pkg.	Wt., Lbs. per 1000	Price per 1000
036454	58400	31000	10000	100	2500	$82.50

Dimensions, inches: Height, 3¾; diameter, 4¾; groove, ⅝.

No. 72 HIGH VOLTAGE (OLD No. 4)

83917	64000	31400	10000	100	2700	82.50

Dimensions, inches: Height, 4; diameter, 4¾; top groove, 1 inch; side groove, ¾.

No. 73 PROVO TYPE (OLD No. 2)

036455	74400	43800	15000	60	3600	150.00

Dimensions, inches: Height, 4¾; diameter, 5½; top groove, ¾; bottom groove, ½.

No. 74 PROVO TYPE (OLD No. 1)

036453	93700	55200	19000	25	7000	225.00

Dimensions, inches: Height, 6; diameter, 7; top groove, ⅝; center groove, ⅜; bottom groove, ½.
Made for standard 1-inch and special 1⅜-inch pins.

No. 75 (7-INCH) MUNCIE TYPE

036452	86200	50100	17000	30	6200	225.00

Dimensions, inches: Height, 4⅞; diameter, 7; groove, ⅜.
Made for standard 1-inch and special 1⅜-inch pins.

No. 76 (9-INCH) MUNCIE TYPE

83918	95000	80000	22000	16	11250	375.00

Dimensions, inches: Height, 5⅞; diameter, 9; groove, ⅞.

No. 77 (9-INCH) MUNCIE SLEEVE

83919	.....	.....	.....	32	5400	262.50

Dimensions, inches: Height, 8; diameter, 5½.

No. 78 (9-INCH) MUNCIE TYPE ASSEMBLED

83920	110000	95000	33000	8	18125	637.50

Dimensions, inches: Height, 13⅞; diameter, 9; groove, ⅞.

Photo Credit:
Justin Martin - Vintage photos & Hemingray insulators "In use" photos
Doug Rusher - Hemingray insulators "In use" photos
Ron Yuhas - Hemingray insulators "In use" photos
Christian Willis - Insulator photos - http://hemingray.info
Nathan Lamkey - Insulator photos
Shaun Kotlarsky - Insulator photos - http://www.allinsulators.com
Shaun Kotlarsky - Vintage Hemingray Ads - http://www.hemingray.net