Telephone Companies and Their Insulators

In the early years of the development of the telephone, companies used a special insulator design for their long distance service. This style of insulator is referred to as the "toll" insulator (CD 121) and became synonymous with telephone transmission. These insulators were offered by most of the major insulator manufacturers between 1890 and 1920. A number of telephone companies ordered the toll insulators embossed with their company name which helped to identify their lines along communication right-of-ways. In addition, telephone companies branched out into several other insulator styles to accommodate various business applications.

American Telephone & Telegraph Company

During the late 1880's the American Telephone and Telegraph Company began using the toll insulator on their lines between central office locations. These units are embossed with either "AM. TEL. & TEL. CO." or the abbreviated "A.T. & T. CO." American Telephone and Telegraph Company was the largest purchaser of the CD 121 toll insulators. The earliest units were produced by Brookfield and are embossed "AM. TEL. & TEL. CO." on the front crown of the insulator. These units appeared predominantly in various shades of aqua and green. Production of both the crown-embossed and the "A.T. & T.CO." versions appear to have been limited, for the most common examples are subsequent production runs found with "AM. TEL. & TEL. CO." on the front skirt.

Besides Brookfield, A.T. & T.'s insulators were also manufactured by Hemingray and several other smaller companies. The tolls manufactured by Brookfield usually are identified by the presence of a dome number. The Hemingray units had slightly smaller embossing and are more uniform in mold style.

Another supplier for A.T. & T. also appears to have been the insulator manufacturers from the Denver, Colorado, area. The distinctive dome shape of the Colorado manufacturers (See Robert Good, Jr. and the Valverde Glassworks chapter) is found on some of the AM. TEL. & TEL. CO. skirt-embossed tolls.

In all, CD 121's are found in various shades of aqua and green, blue and green milkglass, and purple. Due to the widespread manufacture of these units by different glassworks, they display a wide variety of mold shapes and colors.

Another American Telephone and Telegraph insulator made on special order with their company name was the Hibbard Transposition (CD 190/191) made by both Hemingray and Brookfield. These insulators were installed on the long distance toll lines and were used to transpose the wires to eliminate "cross-talk." "AM. TEL. & TEL. CO." and "A.T. & T.CO." embossings can be found on the skirts of both tops and bottoms and are common in blue aqua, aqua, and green.

A much less common style of the AM. TEL. & TEL. CO. insulators is the CD 160.6 "pilgrim hat" made by Brookfield and used in field testing for long distance lines. This unique style never met with the success of the CD 121. The pilgrim hat is most often found in light aqua, but there are a few units in a beautiful yellow green color. The rarest A.T. & T. style is the CD 106, skirt-embossed "AM. TEL. & TEL. CO.", and found in aqua. This style appears to be a Hemingray product and would have been used on rural lines. However, since so few examples have been located, we assume that these specimens were a trial run and never went into full production.

Contract production for A.T. & T. probably ended some time prior to WWI. Both Brookfield and Hemingray retooled some of the AM. TEL. & TEL. CO. toll and transposition molds, embossing over the blockout of the phone company name with their own company markings.

Bell Telephone of Canada

An enormous number of insulators were manufactured for Bell Telephone of Canada, A.T. & T.'s counterpart "north of the border". The earliest Canadian tolls made for Bell of Canada are embossed "B.T.C. / MONTREAL". Related embossings that followed were "B.T.C. / CANADA" or "B.T.Co. / CANADA" and "B.T.Co. of Can." Most of these units were manufactured by the Excelsior Glass Company of St. Johns, Quebec, and the Diamond Glass Company of Montreal, Quebec, who eventually made toll insulators embossed with an outlined "DIAMOND" shape for their own company recognition. A wide range of aqua colors, some filled with milky swirls, and a variety of shades of purple are available.
The Canadian phone company also special-ordered a large number of pony type (CD 102) insulators with the same variety of colors and embossings available in the tolls. The Hibbard transposition was also used for telephone company installations, but is embossed with only a “DIAMOND” and not with the telephone company name.

Central District & Printing Telegraph Company

Although an apparent misnomer, this organization became the communications company serving the Pittsburgh, Pennsylvania, area with its formation in 1874. Its original purpose was to provide a local telegraph service for the western part of Pennsylvania, parts of West Virginia and eastern Ohio. The general office was listed as "Room No. 6, First National Bank Building, Corner Fifth Avenue and Wood Street, Pittsburgh. The name was selected by Thomas B.A. David, its founder. The "central district" refers to the Central District of the Western Union Telegraph Company. Mr. David was superintendent of the district. The "printing telegraph" portion of the name was selected because the Gray Printing Telegraph machine was used by the company to transmit communications. This machine was a forerunner of the teletype and made it possible to send messages without the knowledge and use of the Morse Code.

In 1877 the telegraph instruments were replaced with telephones and the name of the company retained until 1913 when it was changed to the "Central District Telephone Company". In 1918 it is become part of the Bell Telephone Company of Pennsylvania.

Insulators are embossed in one of two ways: "C.D. & P. TEL. CO." or with the shortened version "C.D. & P.T. CO.". The units are a Brookfield product and are found in aqua and green.

Chesapeake & Potomac Telephone Company

This company, organized in the 1880's, served the District of Columbia and the surrounding states of Virginia and Maryland. The Chesapeake & Potomac Telephone Company later became part of A.T.&T. and the Bell System, and the C&P name remains in use today even though its subscribers are now part of the Bell Atlantic holding company, following A.T. & T.'s divestiture of the local telephone companies in 1984.

Their insulators were embossed: "C.&P. TEL. CO." and are found in shades of aqua and green. The units are not abundant and were made by Brookfield for the company's long lines construction.

New England Telephone & Telegraph Company

This company was organized in 1883 and special-ordered CD 121 toll insulators. The insulators are embossed "NEW ENG. TEL. & TEL. CO." and are embossed in an arc on the skirt. They were manufactured by Brookfield. Apparently a moldmaker error produced the same units with a backward "N" in "ENG." Both aqua and green colors were found in the production runs.

New England Telephone and Telegraph Company

A 1919 New England Telephone & Telegraph Company letterhead.

Other styles also special-ordered were the CD 104 pony style and the CD 112 double groove pony style. The CD 104's are embossed in an arc on the skirt and are found in shades of aqua and olive green, as well as a rare purple variant. The CD 112's are embossed "NEW ENG. TEL. & TEL. CO." on the skirt and are found in aqua.

Less common styles are the CD 102.4 base-embossed "N.E.TEL. & TEL. CO." pony in aqua. These were manufactured by an unidentified New England glassworks. CD 110.5 styles were also produced with "NEW ENG. TEL. & TEL. CO." embossed on the skirts. In addition to the "National" base embossing, two major embossing variants (arc and two line straight) have been located. (See The New England Manufacturers - National Insulator Company and Lawrence B. Gray chapter)
New Westminster & Burrard Inlet Telephone Company

Little is known of this Vancouver and Western Canadian provincial company. No tolls were produced for this company, and only a limited number of CD 102 pony styles in a clear or light purple color have been found. These specimens are lettered "N.W. & B.I.T. Co." on their skirt.

According to Colin McIntosh, author of Canadian Insulators, the first telephone company which operated on the British Columbia mainland was the New Westminster and Port Moody Telephone Company, Limited. This company was organized in 1883, was incorporated a year later, and on April 8, 1886, became the "New Westminster and Burrard Inlet Telephone Company" upon amending their charter.

The manufacturer of N.W. & B.I.T. Co.-lettered insulators remains unknown. However, during 1906 the Crystal Glass Company located in Sapperton, British Columbia, was formed. According to McIntosh, this organization "was to manufacture all types of insulators as well as various other lines in the glass field." It is not known what became of this company or whether they ever produced any insulators. However, since the Crystal Glass Company existed in the proximity of N.W. & B.I.T. Co.'s service territory, there is a possibility they produced special-order insulators for them.

United States Telephone Company

Cleveland, Ohio, was the site of the August 1898 organization of the Union Suburban Telephone and Telegraph Company. The name changed to "United States Telephone Company" in October of the same year. Their construction of long lines from Cleveland to other large cities in Ohio was in direct competition with A.T.&T. A subsequent merger into the Ohio State Telephone Company in 1914 led to a final merger with the Bell System giant in 1921, when it became part of the Ohio Bell Telephone Company. The CD 121 insulators are embossed "U.S.TEL.CO." and are found in aqua and yellow green. They appear to be Brookfield products.

Southern Bell Telephone Company

The Southern Bell Telephone and Telegraph Company special-ordered insulators lettered with their company initials. S.B.T.&T. began offering service during 1880 and served nine southern states. Although the economy within their service territory was not as prosperous as in other parts of the country, the Southern Bell Telephone & Telegraph Company grew and continued to extend its lines.

Even though the company served a wide geographical area for a long period of time, only one style, the CD 112 double groove pony, was special-ordered and embossed "S.B.T.&T. CO." They are found in shades of aqua and green. The greenish shades are not common. Two embossing variants were produced -- one is skirt-embossed and the other is embossed on the mid-rib between the two wire grooves.

Apparently, at no time did the company purchase large numbers of special-order insulators, for S.B.T.& T.Co.-embossed specimens are not plentiful. These units appear to have been produced some time between the late 1880's and about 1910.

The manufacturer of the insulators remains unknown, and it is apparent from their overall appearance that they originated from more than one source. Some specimens appear to have been threaded by James Pennycuick's threading process. (See New England Insulators - The Influence of James G. Pennycuick chapter)

S.B.T.& T. Co. insulators have been found predominantly in the Southern states, although some have been located in other parts of the country. Several were found on a private telephone line in central Massachusetts in the 1970's, all of which had the Pennycuick-style threading. Geographically far removed from the South, the manufacturer or supplier of the insulators probably used an overrun of the S.B.T. & T. Co.-embossed units to fill a customer's order, since it was the style that mattered to the user and not the insulator's lettering.

Southern Massachusetts Telephone Company

Unusual examples of glass insulators made for a telephone company on special order are those lettered "SO, MASS. TEL. CO." on their skirts. (Figure 1.) In contrast to other telephone company names found on glass insulators, So. Mass. Tel. Co. specimens are of particular interest because they are rare examples of insulators produced on special order for a non-Bell-owned company.
Edmund Grinell and several other very progressive pioneers in the early days of the telephone founded the Southern Massachusetts Telephone Company. Their earliest known activity was in February 1878, when they opened the company’s first exchange in Taunton, Massachusetts, with 181 subscribers. The company was formally organized on January 20, 1880, and within a month, a second office was opened in New Bedford, serving 457 subscribers.

The company grew as the number of subscribers increased in other southeastern Massachusetts and Cape Cod towns. During 1883 the organization had 1,160 subscribers in New Bedford and Fall River, Massachusetts, 419 in Brockton and Taunton, and somewhat fewer numbers in Oak Bluffs, Hyannis, and Plymouth. The year 1883 also marked the beginning of the New England Telephone and Telegraph Company, a Bell System company, whose organization had 14,400 customers throughout their service territory.

Through the years 1899-1910, the Southern Massachusetts Telephone Company opened central offices in numerous other cities and towns within southeastern Massachusetts and on Cape Cod. It is also known that for a period of time they also had customers in Portsmouth, Rhode Island.

New England Telephone and Telegraph Company’s acquisition of Southern Massachusetts Telephone Co. subscribers began in 1899 when they purchased operations in New Bedford, Taunton, and Mansfield. For some period of time after its acquisition, the Taunton system was still known as the “Southern Massachusetts Telephone Co.” as the accompanying 1901 Taunton City Directory advertisement attests. (Figure 1.)

In 1912, the Whitman exchange was purchased by New England Telephone and Telegraph, followed by operations in Plymouth, North Rochester, and Nantucket Island during the next year. All Southern Massachusetts Telephone Co. exchanges had been acquired by New England Telephone and Telegraph Co. by December 5, 1939.

Insulators made for this company are of the CD 102 pony style which was designed for subscriber-to-central office open wire lines. All are rather boldly lettered “SO. MASS. TEL. CO.” on their skirts, and very probably were made by the Brookfield Glass Company. These specimens appear to have been made between 1890 and 1910. Although most are aqua, a few have been located in near clear and light green glass, both of which are considerably less common.

Despite the fact that So. Mass. Tel. Co. insulators were probably widely used within their service territory in their day, they are not commonly found, largely due to the early removal of open wire telephone lines within the cities and towns that the Southern Massachusetts Telephone Company served. With very few exceptions, all So. Mass. Tel. Co. insulators have been found in the company’s service area.

(Figure 1.) Advertisement from 1901 Taunton City Directory.

Ken House of Deltona, Florida, has been a long-time CD 121 toll collector. His contributions to this chapter were based upon his extensive study and research of telephone insulators in his personal collection.