

ACCURAIL'S NEW SHORT BOXCAR MODEL AND ITS MATCHES

PART 5: THE 1100-SERIES FOWLER BOXCARS

By Ray Breyer

(all photos from the author's collection, unless noted)



Preproduction model, Accurail photo.

Accurail made a surprise new product announcement at the November 2017 [Trainfest](#), when they displayed an assembled, pre-production example of a new kit: a Fowler-type, 36-foot long, single sheathed [boxcar](#). This particular freight car has been sorely needed in mass-produced plastic, and is one of a handful of “iconic” boxcar types missing from most steam and transition-era modeler’s fleets. With well in excess of 100,000 examples made it’s amazing that most manufacturers have completely ignored this important short boxcar type.

The Prototype

Railroads knew before 1880 that steel structural components would make freight cars stronger, more durable, and longer-lived. Railway Age Magazine ran a series of articles in the early 1890s about the long term durability of all-steel freight cars in French service which had been built in 1875, and the Master Car Builder’s Association began recommending the building of steel framed freight cars as early as 1889. But tradition, frugality, and the skill sets required to work with steel took time to overcome: besides a few all-steel hoppers and gondolas wood car construction continued to dominate the industry. It wasn’t until 1902 that freight cars with composite steel and wood bodies were finally built in quantity, when C.A. Seley designed a group of boxcars and gondolas for the Norfolk & Western.

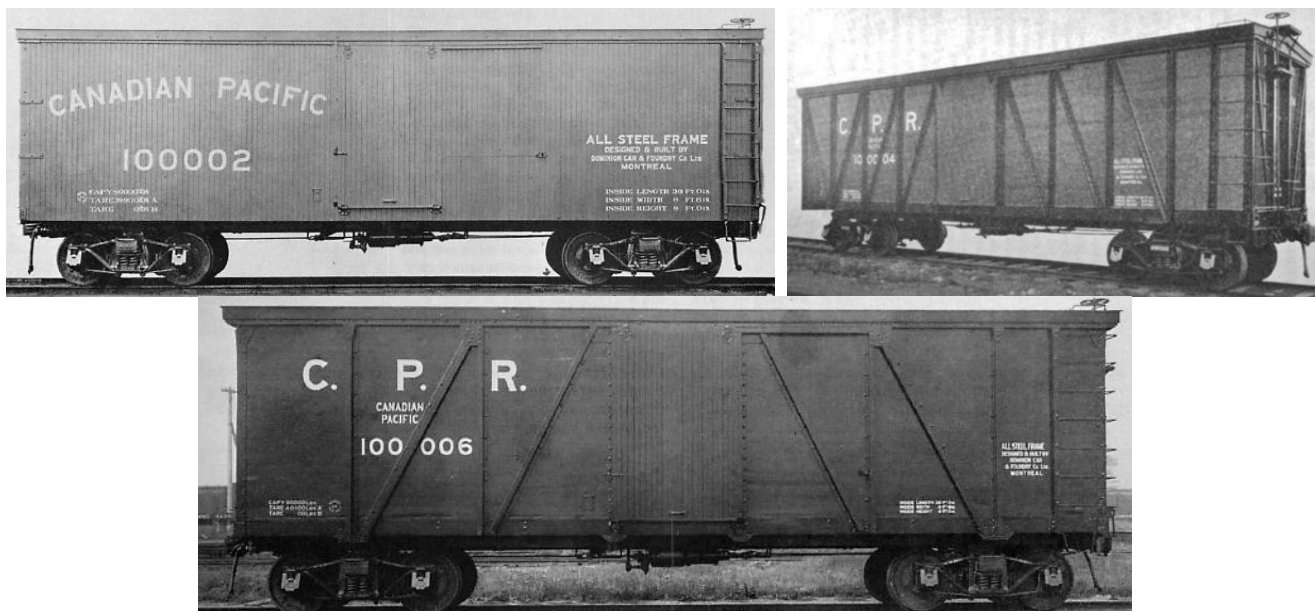


Built by ACF's Huntington Shops in 1904, these double sheathed N&W boxcars were among the first in the country built with steel body framework. ACF builder's photo, St. Louis Mercantile Library collection.

Those first steel braced boxcars were double sheathed construction however, and it wasn’t until 1907 that the idea of eliminating the outside wood sheathing was introduced. The idea came from the Canadian Pacific Railroad, which was looking for an affordable way to build a large number of grain-carrying cars to keep up with increased freight car demand due to westward expansion.

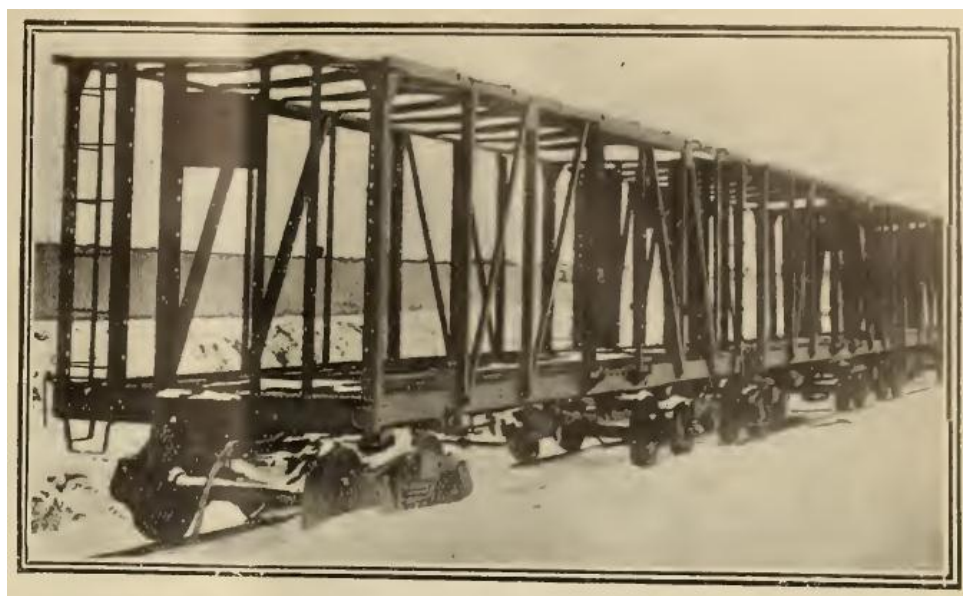
It’s unclear as to who exactly came up with the idea of the true single sheathed boxcar. The first two cars, both slightly different, were built in Montreal by the Dominion Car & Foundry Co., with W.S. Atwood acting as project

engineer. The CP side of the project was led by W.E. Fowler, that railroad's chief mechanical engineer and past president of the MCBA (1906 to 1907). Dominion was the only car builder in Canada that could build steel-framed freight cars, and Fowler knew everyone in the industry and was well versed in thorough examination of problems and their solutions. Between the two companies plans were drawn up for three prototypes, built in 1908: a steel-framed, double sheathed boxcar similar to Seley's cars built for the N&W, Rock Island, and C&EI; a single sheathed steel-framed boxcar; and a "simplified" single sheathed boxcar which was built based on what was learned from the previous two cars.



Canada's first domestically-built, steel-framed boxcars were three cars built by Dominion C&F. CP 100002 was built in July 1908, CP 100004 in August, and CP 100006 in October.

The time between designing, building, and evaluating the three cars was surprisingly short, and the Canadian Pacific placed an order for 500 copies of CP 100006 at the end of 1908. Dominion began delivering the partially built cars to the CP's Angus shops in the spring of 1909, and an order for 1,000 more cars was placed almost immediately. Orders exceeded Dominion's capacity, so that same year the company bought two other Canadian freight car firms and reorganized as the Canadian Car & Foundry Company.



Some of the first Dominion-built cars head from Dominion's plant to the CP's Angus Shops to be sheathed and painted. Demand for the new cars quickly outpaced Dominion's capacity to build them, causing that company to reorganize as CC&F, Canada's largest freight car manufacturing company. Photo from Railway and Marine World magazine, January 1910.

In July, 1908 Fowler applied for a patent on a box car design that was very similar to the CP's new cars. Focusing on methods of tightening the sides of a single sheathed boxcar, Fowler's patent drawings bear a striking similarity to CP 100006. Fowler quit the CP in 1909 citing health reasons, and his patent was approved in June, 1910. Fowler quickly formed the Fowler Car Co. and began advertising "The Fowler Car".

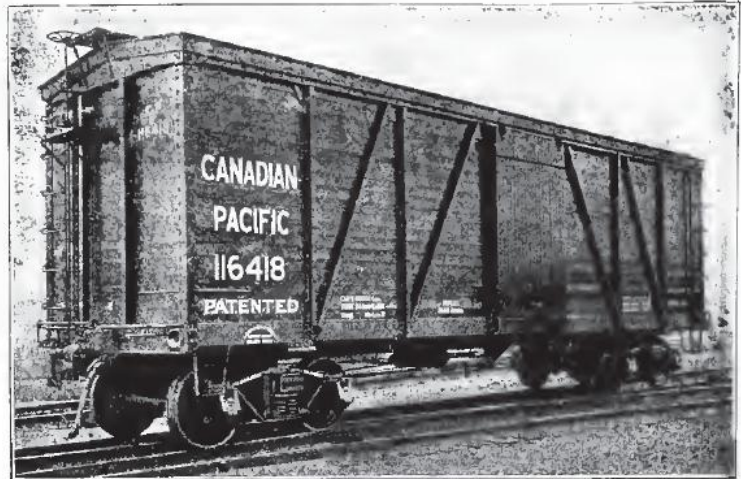
Production of this car type was brisk in the years just before World War One, and by 1915 over 75,000 cars had been built to his general plans, including a few thousand 40-foot versions. The car design was soon overshadowed by a larger Bettendorf designed single sheathed boxcar in 1916 and by the USRA's single sheathed car in 1918. But there were still around 100,000 Fowler-type boxcars on North American railroads through most of the 20th Century. By comparison, there were only 25,000 USRA single sheathed boxcars built, most of which were scrapped or converted to steel cars by 1955. And the cars were long-lived: the last revenue service short Fowlers didn't come off the CN and CP revenue rosters until 1981, and some Fowlers continued working for various railroads in maintenance of way service through the late 1990s.

THE FOWLER CAR

STRONG, LIGHT, SMOOTH INTERIOR

Easy to Build and Maintain
Suitable for any Lading

THE FOWLER CAR CO.
1135 Monadnock Block
CHICAGO, ILL.



An ad for the Fowler boxcar as it appeared in the 1916 Car Builder's Dictionary.

The model railroading hobby generally calls this type of 36-foot single sheathed boxcar either a Fowler or Dominion car. The industry rarely called these boxcars anything more than a "steel frame box car", aside from the few railroads that actually built cars to any of Fowler's patents. In practical terms it's appropriate to call any of these cars built with a five foot wide door opening a "Dominion car", as they were built exclusively for Canadian railroad service by either Dominion Car Co. or CC&F, and primarily to haul grain. Cars built with six foot wide door openings were mostly built for American railroad service for general cargo handling, and are most appropriately called "Fowler cars" since no railroad built any before W.E. Fowler incorporated the Fowler Car Co. and began peddling his design to various railroads in that country. Since Accurail has produced a six foot door version, I'll call these boxcars "Fowlers" throughout this article.

Accurail has announced 19 different road names for this model, which they've placed in the 1150 series. Most of these cars were delivered to their owners before WWI and lasted into the 1950s or beyond, so be careful with which decorated versions you buy. Wood-sided freight cars tended to be repainted every eight to 12 years, so old lettering styles wouldn't be seen for very long. That means that while the road name may be appropriate for your layout, the lettering might not be. As usual, Accurail is also releasing this kit in an undecorated version, and two versions painted mineral red and oxide red, printed with post-1927 dimensional data only.

The Model



The new Accurail Fowler on the author's home layout. Note the larger Accurail cars to either side; the prototype Fowlers were small boxcars, which will add welcome height variety to car fleets in the 1910-1980 periods.

This new model from Accurail features a one piece injection molded body with clean, crisp details. Some may bemoan the cast-on grab irons, but the vast majority of the hobby won't. The cars come with Andrews trucks and Accurail's new short, straight sill [underframe](#) as featured on their 1400 and 1800 series models. That underframe is patterned after a Fowler design, so is perfect for these models. The underframe comes with a separate KC brake cylinder and one piece brake levers and rods, which may well be the most welcome early rail detail parts to have come out this century.

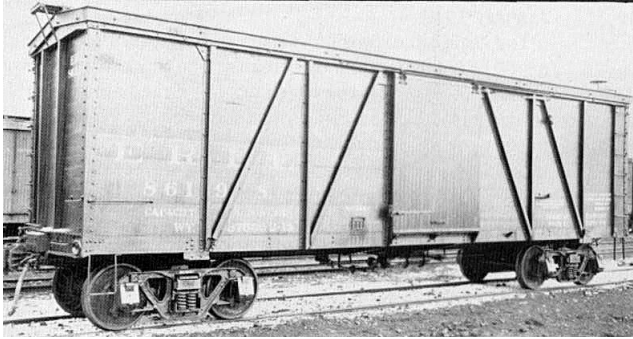


A close up view of the new model shows that they come with finely cast details, and thin profile, cast on grabs. The wood grain is slightly exaggerated, but not cartoonish. Jeremy Dummier photo

What's less than perfect about this model is that it's a compromise that doesn't exactly match any Fowler boxcar built. When Al Westerfield and Paul Clegg researched these cars in the 1980s they identified almost a dozen discrete "phases" to the car type's construction. I don't quite like the use of that term since phases assume a continuous evolution of the car type that didn't actually happen, but their classifications are useful in identifying

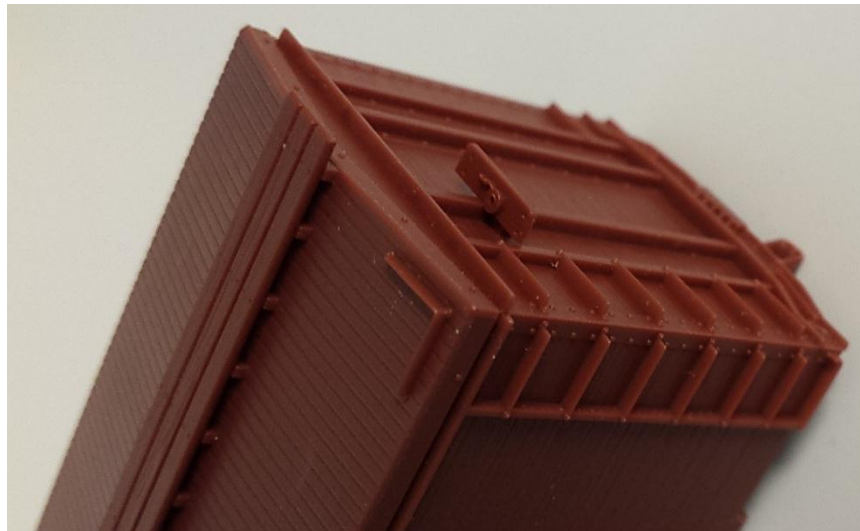
which cars has what appliances. Each of the major design elements on this model did come from actual Fowler boxcar mechanical drawings, just not all from the same car.

To cover the most bases for this general car type Accurail decided to model them with typical sides, a plain door without braces, and a “wood” roof (actually an inside metal roof whose sides were protected by a large fascia along the sides). They also modeled the cars with four end braces. The main issue with the model is that no cars with four brace ends were built with a wood roof. So from the side the model looks most like an early Erie or Grand Trunk car, while from the ends it best matches a NC&StL or TStL&W car.



Two braced end, wood roof and wide fascia on the left, and four braced end, steel roof and narrow fascial on the right.

From a purely prototypical perspective this mix of detail elements is problematic, but given the model’s price point most modelers will choose to ignore these issues, especially if they need a large fleet of these cars. And since the cars will come with a nice flat roof and doors, it’ll be easy enough to add prototype-specific details to bring the model closer to a particular car.



The models come with a nicely executed wood-sheathed inside metal roof. With a little work with a hobby knife and some Evergreen siding it’ll be a simple process to add a steel roof to make the base model more appropriate to most road names,

Another potential issue is the door. The model comes with plain, all-wood, six foot wide side doors. The lack of braces is actually a very nice feature, since it means that prototype-specific braces can be added as a modeler desires. The issue is the door width: most Canadian Dominion cars were built with five foot wide doors, while almost all American-service Fowlers were built with six foot wide doors. The largest number of these cars were built by Canadian railroads, meaning that the model is only appropriate for American railroads, plus a few thousand used by the CN and GT/GTW. Again, in a large fleet “runner” context where freight cars are mostly chess pieces to be moved, this may not be a problem. If you want cars with the five foot doors, there are other options.

The Road Names Announced

Twenty one announced decorated models is an ambitious start for these models, but very welcome given that the Fowler type short boxcar has been missing from far too many steam and transition era model fleets. To date only three paint schemes have been shown: the dimensional data only cars with post-1927 standard lettering, the Monon car with a 1937 reweigh date and pre-WWII paint, and the Soo Line boxcar with a 1947 reweigh date and WWII-era paint. I'll review each of the road names in order, and will later examine other potential road names for this general car type. Remember that these cars usually had long service lives, so would have worn various different paint schemes over the decades. What Accurail will release in the future may not be appropriate for your layout because of this, but that's why there are decal suppliers!

1151: Soo Line

12800-14298 (evens), ACF 1912, 750 cars.



ACF builder's photo, St. Louis Mercantile Library collection.

The Soo Line's first modern boxcars were 750 short Fowlers that were identical to Canadian Pacific cars. These cars were quickly overshadowed in the minds of Soo fans by the road's signature 40-foot sawtooth cars ordered just one year later, but the 36-foot cars were just as long lived. 730 of the cars were still on the roster at the beginning of the Depression in 1930, there were 288 on the roster in 1955, and 17 in 1960. The cars were off the revenue roster by 1972, but a few lasted into the early 1980s in MOW service.

The Accurail model will be a "sincere stand-in" for these cars; the prototype differed by having 5-foot doors, a metal roof, and T-section trucks. And of course, several different paint schemes over the decades.



Preproduction art courtesy of Accurail.

1152: New York, Susquehanna & Western

1500-1999, Standard Steel Car Co. 1913, 500 cars.



Bob's Photos, Ted Culotta collection

While under Erie ownership, the NYS&W received its largest group of identical steam-era freight cars, in the form of 500 Fowlers. Identical to the Erie's 89000-90499 series built the same year, except for the cut levers (Carmers on the Erie cars, plain bars for the NYS&W), the cars were used for everything on the railroad, including REA express service. 453 cars were on the roster in 1930, but the group was down to just 40 by 1950. 11 cars survived the road's bankruptcy in 1957, but were all scrapped by the early 1960s.

The Accurail model represents these cars passably well, the main exception being the ends and roof. Erie and NYS&W cars only had two steel crash posts on the ends, while the model has four, and it's likely that while the cars were delivered with wood roofs matching the Erie cars they got outside metal roofs early in their lives.

1153: Nickel Plate Road

97000-97999, Haskell & Barker 1914, 1,000 cars (ex-TStL&W).



A brace of NKP Fowlers are seen here in the Cleveland Produce Yard on 6/30/1930. John Corns collection.

The Nickel Plate Road never bought Fowlers. What they did do was buy the Clover Leaf (TStL&W), which did have them. The NKP bought the Clover Leaf in 1922 and assumed control in 1924, at which time the cars began being repainted. Oddballs on the Nickel Plate, which preferred double sheathed boxcars, they worked in virtual anonymity for almost three decades; the above photo is the only clear photo I can find of these cars in revenue service. There were still 976 of these cars on the NKP roster in 1930, but between 1931 and 1933 the NKP scrapped or sold off half of their freight car fleet, and these "odd" cars were among the first to go. 15 cars survived through the end of WWII but were quickly converted to doorless & roofless coke cars for use around Toledo. The last as-built boxcars were dropped from the roster in 1948, and the last of the coke cars were scrapped in 1952. A few did manage to hang on to the N&W takeover of 1964 in MOW use.

These models will need a steel roof added to them, but are otherwise a decent representation of a NKP boxcar that few know about.

1154: Canadian National



CN car with six foot door. The cars was built in 1923, and by the time of this 1957 photo had been modernized with an outside metal roof, cast steel trucks, and AB brakes.

The short Fowler-type boxcar should go down in railroad history as THE Canadian boxcar. Designed for the Canadian Pacific and built before most railroads had any structural steel in their boxcars of any kind, the cars served on Canadian railroads from 1909 to 1981. There were so many of them and they served for so long that it's difficult to track them all effectively. Al Westerfield wrote that in excess of 75,000 cars of this general type were built for Canadian railroads; in 1930 there were 60,657 of them serving on the three largest Canadian railroads alone, so this number is quite believable.

The Canadian National is a relatively young railroad, having been created at the very end of 1918 as a government-owned consolidation of several bankrupt railroads, most significantly the Grand Trunk and Canadian Northern. The nationalization effort was completed in January 1923, and the Canadian National moved from being a paper to an actual railroad. The CN inherited Fowlers from several of these bankrupt railroads, and built others new after being created, and owned both 5' and 6'door cars as well as 36-and 40-foot long cars. I've attempted to make some sense of the CN short Fowler fleet below.

SIX FOOT DOOR CARS:

344700-346699, former GT 24500-26499 built 1912/1913, 2,000 cars.

1,764 (1930), 53 (1950), 0 (1959).

420150-422149, former GT 103000-104999 built 1913, 2,000 cars.

422150-422749, former GT 105000-105599 built 1913, 600 cars.

2,384 (1930), 1,376 (1950), 41(1959).

429000-430399, former GT 105600-106999 built 1913, 1,400 cars.

430400-430408, former GT 107001-107009 built 1914, 9 cars.

430500-431499, former GT 107100-108099 built 1917/1918, 1,000 cars.

2,112 (1930), 1,690 (1950), 225 (1959).

426500-426999, Eastern Car Co. 1923, 500 cars.

427000-427999, National Steel Car Co. 1923, 1,000 cars.

428000-428999, CC&F 1923, 1,000 cars.

2,487 (1930), 2,401 (1950), 2,042 (1959).

FIVE FOOT DOOR CARS:

402000-417149, former Canadian Northern and Intercolonial cars, built 1918/1919, 15,150 cars.

14,243 (1930), 13,158 (1950), 4231 (1959).

422750-726499, former Canadian Government Railway cars, built 1920/1921, 3,750 cars.

3,695 (1930), 3,502 (1950), 2,006 (1959).

OTHER:

516000-516242, a new number series for all remaining Fowlers, created in the mid-1960s. 58 cars in 1970, 54 cars in 1972, 12 cars in 1975, 6 cars in 1979. The last car on CN roster was six foot door car #516196, retired in late 1981.

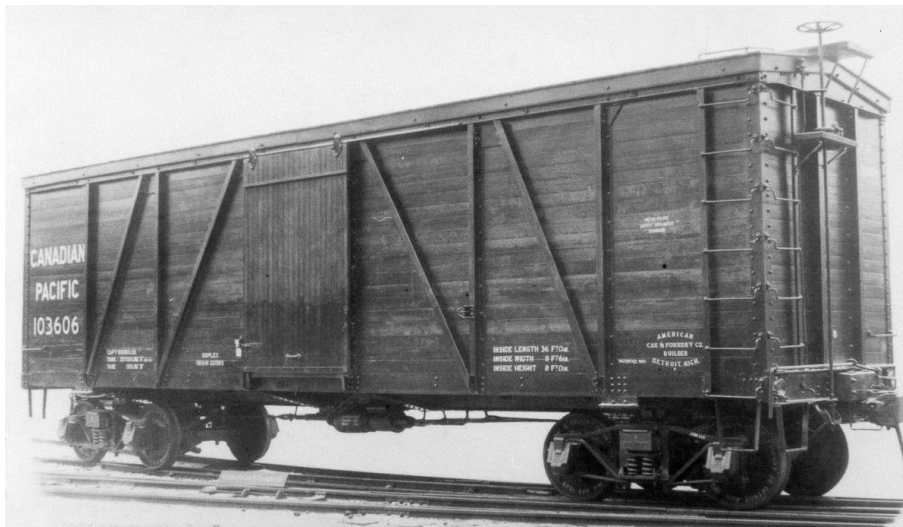


CN short Fowler with five foot wide door.

Overall, the CN ended up with 18,900 5-foot door cars and 9,509 6-foot cars, or 28,409 short Fowlers total. CN cars don't seem to have been upgraded a whole lot, besides new outside metal roofs in the 1930s, cast steel sideframe trucks in the 1940s, and AB brakes in the 1950s.

The Accurail model does a good job representing 1/3 of the CN Fowler fleet. Obviously, some changes may need to be made: archbar trucks for pre-Depression era layouts, steel roofs and Bettendorf-type trucks for WWII-era layouts, and AB brakes for "transition era" or beyond. There's no need to use these models as stand-ins for their 5' door cars; use the excellent Westerfield [models](#) for Canadian National cars with narrow doors to give yourself a mixed fleet of cars.

1155: Canadian Pacific



ACF builder's photo, St. Louis Mercantile Library collection.

When William Fowler designed his namesake boxcar for the Canadian Pacific in 1908, it was specifically as a grain transporting freight car. Canadian railroad traffic was dominated by high bulk, low revenue wheat tonnage, and the CP needed an economical way to move it. They found the solution with the Fowler-designed cars, and began building them in huge numbers, ultimately building more than 52,000 examples. All of their cars featured 5-foot wide doors, but had a variety of end styles when built (two, three or four vertical braces, and diagonal braces on the early prototypes). And while they were all built with either double layer wood or inside steel roofs, various modernization programs saw many rebuilt with outside metal roofs of at least two styles, as well as Youngstown doors and cast steel sideframe trucks. As on the CN these cars lasted an astonishingly long time, with a few stragglers lasting into 1981.

100000-139998, various builders between 1909-1913. 40,000 cars.

17,418 (1930), 4,138 (1950), 8 (1959).

200000-212499, various builders between 1910-1914. 12,500 cars.

13,914 (1930), 2,636 (1950), 4 (1959).

213000-213249, ACF 1914. 250 cars.

(quantity included in the 200000-series ORER listings).

170000-189999, renumber series for cars when modernized.

0 (1930), 15,594 (1950), 2,023 (1959), 23 (1972), 14 (1979). Last cars gone by 1981.

The Accurail model is a stand-in for these CP boxcars, since the model has 6-foot doors that the railroad never owned. In a fleet context where a modeler needs dozens of these cars that should be an acceptable compromise, especially if some modeling work is done to the cars to make them otherwise match the car type's succession of upgrades over the decades. As you can see by the three photos below the CP made many modifications to their cars, and not at the same time or in any "logical" succession. Archbars and K brakes lasted far longer in Canadian service, but be sure to not use them on an American-themed, late steam era layout. For truly accurate models of the CP Fowlers, Westerfield has recently re-issued their excellent [kits](#).



All three photos above Bob's Photos, Ted Culotta collection

1156: Bangor & Aroostook

9000-9799, unknown builder or date. 248 cars in 1930.

10000-10139, Pullman 1925, 140 cars in 1930.

10140-10999, unknown builder or date. 210 cars in 1930.

By 1950, all cars lumped into the 9000-10399 series. 525 cars in 1950, 268 in 1955, gone by 1959.



Pullman builder's photo

The BAR cars are what I'd consider to be modernized clones of the Fowler type car. Their sides are slightly different, and they were built with 7/7 corrugated steel ends. When built in the 1920s new short boxcars were a rarity; these cars were purchased to handle heavy & bulky loads of potatoes and railroad management likely didn't think they needed larger cars for that service. By the end of their service lives some had been equipped with plug doors and the BAR's trademark red, white & blue paint scheme. None lasted into 1960.

The Accurail model is definitely a stand-in for these cars, and without extensive work to the ends, roofs and sides (especially removing the ladders in favor of individual grabs) won't do a very good job representing the prototypes.



1157: Chicago Great Western

27000-27998 (even numbers), ACF 1914, 500 cars. 486 cars in 1930, gone by 1945.



ACF builder's photo, St. Louis Mercantile Library collection.

Sawtooth Fowler type boxcars were generally only found on the Soo Line and SLSF, and as 40-foot long cars. But during the pre-WWI years freight car technology advanced rapidly, and a few roads experimented with designs before any one or two were accepted by the industry as a whole. That was the case with these 36-foot long sawtooth cars bought by the CGW. The Great Western didn't buy any more cars of this type, preferring double

sheathed cars until they started buying 1923 ARA-type steel boxcars. The car series survived the 1920s pretty much intact, but were scrapped or converted into cabooses and MOW equipment by the railroad during the Depression. Obviously, this is a stand-in model at best, to be used as a placeholder until some brave manufacturer decides to make these truly unique cars in resin.

1158: Grand Trunk



ACF builder's photo, Al Westerfield collection.

The Grand Trunk was a sprawling railroad covering southern Canada and the northern United States, and had a larger freight car fleet at the beginning of WWI than most modelers imagine (just over 53,000 cars; the 15th largest fleet in North America). While a large amount of their traffic came from the industrial centers of Chicago and Detroit, and in bridge traffic to Canada, the railroad also did its fair share of moving grain. It was probably natural that the GT would follow the example of the CP and buy examples of the Fowler boxcars, but because of the large amount of finished goods that the road carried they opted to buy 6' door cars.

24500-26499, Pressed Steel 1912/1913, 2000 cars.

100000-102999, WSC&F 1913/1914, 3000 cars

103000-104999, CC&F 1913, 2000 cars

105000-105599, Eastern Car Co. 1913, 600 cars

105600-106999, Eastern Car Co. 1913, 1400 cars

107001-107009, WSC&F 1914, 9 cars

107100-108099, ACF 1917/1918, 1000 cars

All rolled into the CN roster by 1922. 209 cars still lettered for the GT in 1930.

The Grand Trunk overextended itself financially by attempting to become a transcontinental railroad with the construction of their Grand Trunk Pacific subsidiary, and its ensuing bankruptcy was a major factor in the Canadian government's decision to nationalize many struggling railroads under a single line. The Canadian government nationalized the GTP in 1919 and its parent the GT in 1920, and their cars represented over a third of the CN's giant Fowler boxcar fleet.

The base model is pretty accurate for a Grand Trunk/Grand Trunk Pacific Fowler because of the correct door and roof, but the model has four end braces, not two as on the prototype. This railroad disappeared as a corporate entity in 1923, and the road name was completely gone by 1932, so hopefully Accurail will release GTW-lettered models at some point.



GT 106926 is in Toronto in 1927. Behind and to the left of the car is a relatively new six foot door CN short Fowler, built in 1924.

1159: Nashville, Chattanooga & St. Louis

15100-16099, unknown builder 1913, 1,000 cars. 967 cars in 1930, 132 in 1950, gone by 1955.
16100-16599, ACF 1923, 500 cars. 500 cars in 1930, 445 in 1950, 31 in 1955, gone by 1959.



Duke University collection.



ACF builder's photo, St. Louis Mercantile Library collection.



Two photos above Bob's Photos, Ted Culotta collection

The NC&StL purchased 1,500 American-style Fowlers in two groups ten years apart, and besides the doors the cars seem to have been built to the same plans, and aside from a wide variety of paint schemes the cars were never materially changed through their lives. Starting after WWII the numbers of this group of cars decreased rapidly, with cars either being scrapped or converted into all-steel boxcars, a rarity for a 36-footer. The cars were all long gone by the time the L&N bought the road in 1959.

Except for the roofs, the Accurail model is a decent representation of the NC&StL's Fowlers. Do keep in mind that as demonstrated by the four photos above, the NC&StL's Fowlers wore a lot of different lettering schemes over the years, and that Accurail is likely to only offer one of them. If you need a specific car for a specific time, you may need to do a little paint & decal work. Additionally, these cars were built with "split K" brakes, which lasted on the cars into the early 1950s.

1160: Pacific Great Eastern

3500-3599, Unknown builder, 3/1914. 49 cars in 1930, 44 in 1950, gone by 1955.



The PGE purchased a small number of Fowlers, which look to be copies of conventional Canadian Pacific cars with 5-foot door openings. As such, the Accurail model is a stand in for these cars.

1161: Wabash

75000-75699, ACF 1912

75700-76199, Haskell & Barker 1912

1,200 cars. 1,143 cars in 1930, gone by 1945.

76200-77199, ACF 1916, 1,000 cars. 970 cars in 1930, gone by 1945.

77200-78199, unknown builder, 1916/1917, 1,000 cars. 972 cars in 1930, gone by 1945.



ACF builder's photos, St. Louis Mercantile Library collection.

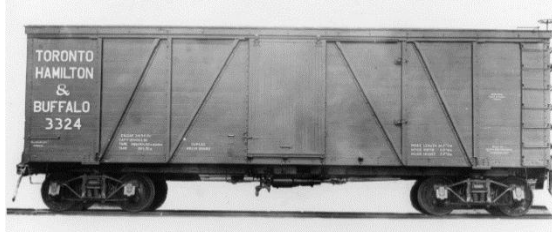
The Wabash was an early adopter of the single sheathed car design, and owned 3,200 nearly identical short Fowlers built to two slightly different designs (mostly the roofs and doors). While the Wabash returned to purchasing double sheathed boxcars during and immediately after USRA control, the road quickly re-adopted the single sheathed concept and began buying thousands of 40-foot long, single sheathed auto boxcars beginning in 1924. These cars quickly became the dominant boxcar type on the Wabash, and although their Fowler fleet survived intact into 1930 it's doubtful that more than a handful saw the beginning of WWII; photos of the cars are extremely rare after the mid-1920s.

The Accurail model does a good job representing the Wabash Fowlers, except of course for the roof and trucks. The model is better at representing the newer 1916/1917 cars due to the roof fascia.

1162: Toronto, Hamilton & Buffalo

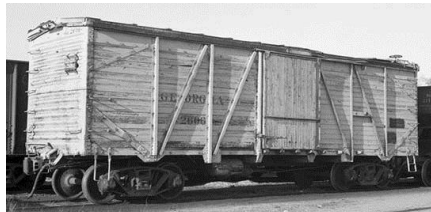
3000-3999, assorted builders and dates. 965 cars in 1930, gone by 1950.

4000-4299, assorted builders and dates. 0 cars in 1930, 81 cars in 1950, gone by 1955.



Another CP subsidiary, the parent of the TH&B assigned assorted Canadian-standard Fowlers to the road to cover local traffic as needed. The 3000-series group of cars were completely as-built, while the 4000 series were modernized with outside metal roofs and cast sideframe trucks. Again, the Accurail model is a stand-in for these cars due to the too-wide door.

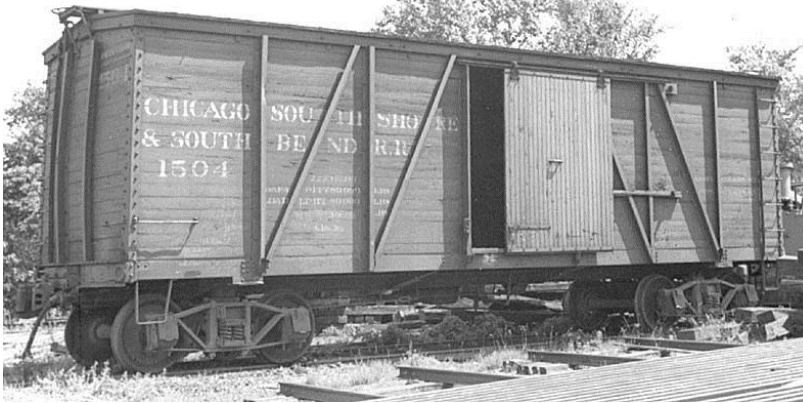
1163: Georgia RR.



Besides a few photos of MOW equipment, I can't find any evidence for these cars at all. Even the ORER listings aren't any help, so I can't even tell if these are 36 or 40-foot cars. If they actually are 36-footers that would make the Georgia one of only three roads that I found that bought short sawtooth cars (the others being the CGW and StLB&M). For all I know these might even be CGW cars that the Georgia picked up used on the secondhand equipment market. In any event, the photos above show that the GA at one time did own two different types of Fowlers, at least in MOW service, and that the Accurail model does reflect one of the types fairly well, aside from the roof.

1164: Chicago, South Shore & South Bend

1501-1509, unknown builder or date. 7 cars in 1930, gone by 1945.



At one point the South Shore saw a need for a few boxcars. Since Pullman was a neighbor and equipment supplier it's likely that the road asked to have ten cars "tacked onto" an existing order for Fowlers as a cost saving measure. The one photo I've been able to find is dated to 1940, and shows a completely stock, early design car. The group didn't survive to the end of WWII. Besides the ends and trucks, the Accurail model matches this prototype well.

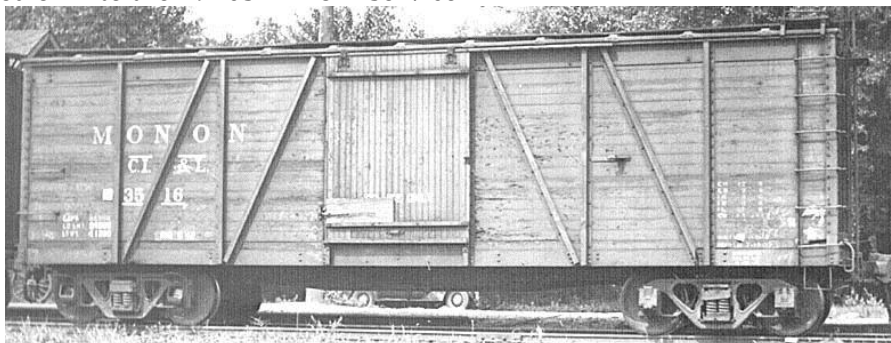
1165: Chicago, Indianapolis & Louisville

2000-3699, Pullman 1913, 1,700 cars. 1,016 cars in 1930, 589 in 1945, gone by 1950.



As-built Monon Fowler. Pullman builder's photo.

The Monon bought into the single sheathed boxcar idea early on, and bought 1,700 Fowlers in 1913. But it seems as though the road's master mechanic didn't quite trust the newfangled design, which is why they ended up being the only short Fowlers to sport fishbelly underframes. The cars were built with outside metal roofs and husky Andrews trucks, and seem to have been indestructible: although the cars were off the revenue roster by 1950 many of them soldiered on into the 1970s in MOW service.



Late period Monon Fowler seen during WWII, showing the cars with reinforced doors and post-1927 lettering.

Modeling these cars will require a little planning, but shouldn't be too difficult. Replace the underframe with one from an Accurail 1300-series kit, add a steel roof, and add a couple of door braces if desired.

1166: Toledo, St. Louis & Western

7000-7999, H&B 1914, 1,000 cars. To NKP in 1924, all repainted by 1930.



Steve Grigg collection.

The Clover Leaf, in a rare moment of financial prosperity, bought 1,000 American-style Fowlers from Haskell & Barker in 1914. These were thoroughly modern boxcars for the time, featuring an outside metal roof and cast steel trucks, as opposed to contemporary Canadian Fowlers that were still being built with all-wood or inside metal roofs and archbar trucks. It seems as though the Clover Leaf's master mechanic couldn't make up his mind on which newfangled appliances to buy, so the cars were delivered with three different configurations of Murphy and Chicago-Cleveland roofs, and Andrews and Bettendorf trucks. These cars only ever wore ONE paint scheme while under Clover Leaf ownership: by the time the cars were due to be repainted the Clover Leaf was nearly broke and was about to be bought by the Van Sweringen Brothers. The Nickel Plate took control of the TStL&W in 1924, and the new owner quickly began repainting everything in sight. Over half of the cars had been repainted by 1926, and the last stragglers had all been repainted by 1930.

Except for the roofs, the Accurail model represents these Clover Leaf boxcars very well; the prototypes had four brace ends.

1167: Erie



Bob's Photos, Ted Culotta collection

The Erie Railroad owned the fourth largest fleet of short Fowlers (third, once the Grand Trunk became part of the CN). Al Westerfield suggests that the railroad purchased so many of the cars because the company's president, Frederick Underwood, worked for the Canadian Pacific and helped create the Soo Line, and kept track of what his

former employers were doing. When he saw thousands of progressive, sturdy and relatively inexpensive boxcars being built for both of his former railroads, he wanted them too.

Over the span of eight years, the Erie purchased 8,550 short Fowlers, as well as 1,500 40-foot and 75 50-foot “semi Fowler clones”. Like the Canadian Pacific, the Erie had many different small variations in Fowler boxcars. Unlike the CN, these were due to the Erie’s mechanical department constantly improving the design in small ways.

85000-85999, ACF 1912, 1,000 cars. 479 in 1930, gone by 1945.

86000-87499, WSC&F 1913, 1,500 cars.

87500-88999, ACF 1913, 1,500 cars.

89000-90499, SSCC 1913/1914, 1,500 cars.

90500-91499, SSCC 1917, 1,000 cars.

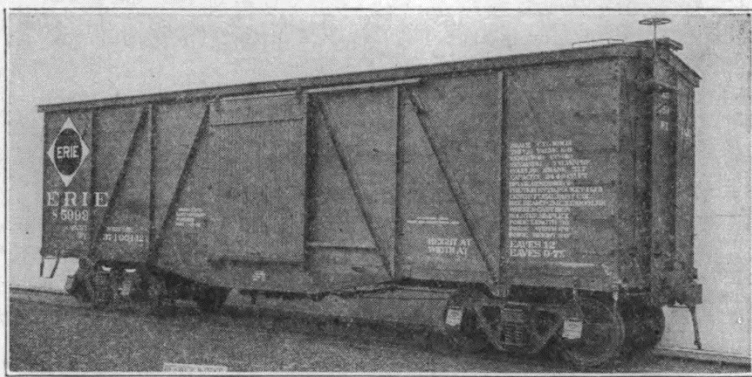
91500-92499, ACF 1917, 1,000 cars.

91551-91575, Erie Shops 1917, 25 cars (Wells Fargo express boxcars).

92475-92499, ACF 1917, 25 cars (Wells Fargo express boxcars).

All above: 6,138 cars in 1930, 8 in 1950, gone by 1955.

93000-93999, Pressed Steel 1920, 1,000 cars. 987 cars in 1930, 882 in 1950, 2 cars in 1959, gone by the end of 1960.



The first group of Erie Fowlers was the 85000-85999 series built by ACF’s Berwick Shops in 1912. The cars appear to be similar to Canadian-built six foot door Fowlers, but as with many early freight car designs the Erie’s master mechanic seemed to not completely trust the steel’s strength, and so added short fishbelly stiffening plates under the door. The cars also had grab irons leading to the roof rather than ladders.

The next group of Fowlers for the Erie were 4,500 cars built by three builders in 1913. These were completely typical Fowlers with two brace ends, much like the bulk of the Grand Trunk’s cars. This view of Erie 86830 shows the car in 1938, a few years after receiving a new Murphy outside metal roof.



The Erie built another 2,050 Fowlers in 1917 that were virtual clones of the 1913-built cars. Starting in early 1926 many of these cars were rebuilt with an early version of Youngstown steel doors.



Bob's Photos, Ted Culotta collection

The final group of short Fowlers were 1,000 cars built for the Erie by Standard Steel in 1920, ordered immediately after USRA control ended. The best known of the Erie type cars since they lasted the longest, the cars aren't really Fowlers at all, just cars that are thematically similar.

These cars diverged dramatically from the Fowler design in most ways, most apparently in their hat section braces, extra diagonal side braces at the end panels, and door guides. The cars were rebuilt with outside metal roofs and Youngstown doors in the mid-1930s, and while off the revenue roster by 1960 worked for the Erie-Lackawanna in MOW service and into the first years of Conrail.



The Accurail car best represents the Erie's mid-production cars from 1913 and 1917, and the 1920-built cars very poorly; the hat section ribs make that car impossible to effectively kitbash.

1168: Illinois Terminal

8100-8199, Mt. Vernon 1928, 100 cars. 100 in 1930, 97 in 1950, 86 in 1959, 3 in 1972.



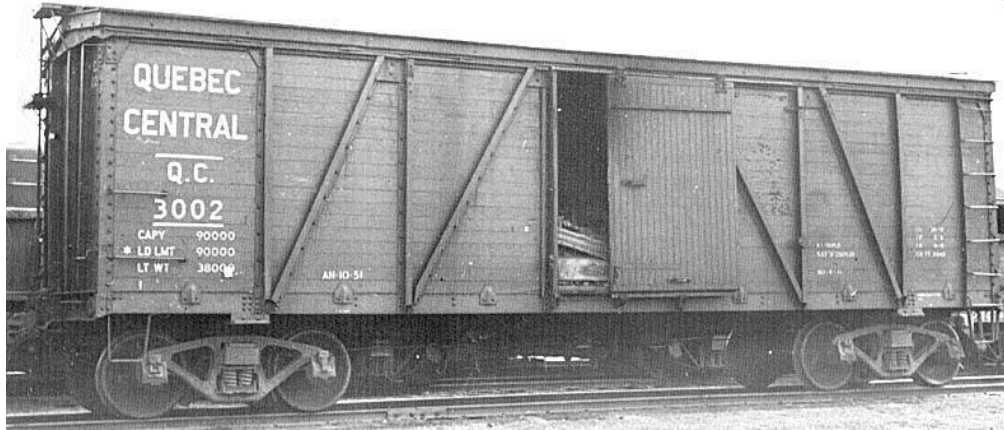
Bob's Photos, Ted Culotta collection

The Fowler boxcar design was an early transitional boxcar, and besides the short-lived short sawtooth design was just about the only short single sheathed boxcar type built. But in late 1928 the Illinois Terminal ordered 100 unique cars that were taller than a Fowler, but shorter (less long) than a standard ARA boxcar design of the time. The road needed "modern" boxcars to replace their ageing fleet of all-wood double sheathed boxcars, and their mechanical engineers came up with an odd compromise boxcar design that was both familiar (short, and comparable to the rest of their boxcars) and modern (single sheathed). The cars were remarkably long-lived, with a few stragglers running into the early 1970s. That makes this little group of cars the last American-owned short single sheathed cars in operation.

The Accurail model is an OK stand-in for these cars, especially since the only other way to effectively model them is with a long out of production Sunshine Models [kit](#).

1169: Quebec Central

2900-3198, various builders and dates. 0 cars in 1930, 75 cars in 1950, 1 car in 1959 (#3064).



The QC was a minor subsidiary road of the CP, and the parent road usually assigned a few cars to it over the years. As with all Canadian Pacific cars, the Accurail model is a stand-in.

OTHER SHORT FOWLER ROAD NAMES

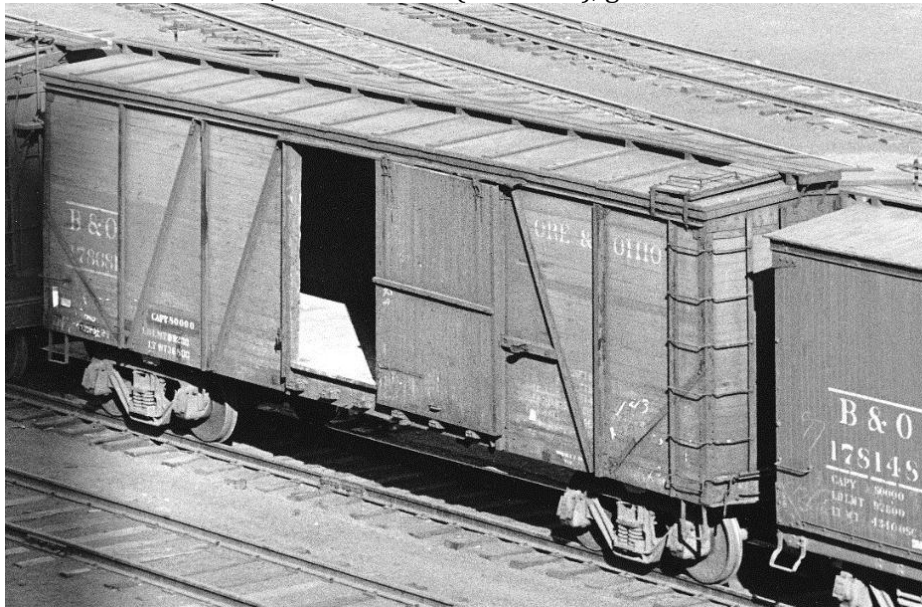
Accurail covered a lot of ground with their announcement of nineteen different road names for their new Fowler model, but these cars were owned by far more railroads than most realize. Here's a brief look at thirteen other railroads and their short Fowler fleets.

Cincinnati, Indianapolis & Western

18301-18650, H&B 1915 through 1917, 350 cars (to B&O in 1927).

Baltimore & Ohio

178500-178841. 341 cars in 1930, 1 car in 1945 (#178542), gone before 1950.



Eric Hansmann collection

The CI&W bought 350 Fowlers from Haskell & Barker when the road reorganized in 1915. The cars seem to be identical to the Clover Leaf cars built by H&B a year earlier. The B&O bought the CI&W in 1927, and the cars were quickly repainted and incorporated into the B&O's roster. Although the car group was nearly intact at the beginning of the Depression, the series didn't survive to the end of WWII. As with the CL cars, the Accurail is an acceptable way to model these cars, so long as you replace the roof.

Grand Trunk Western

417150-420149 series cars, formerly GT 10000-102999, 3000 cars. 2,640 cars in 1930, 286 in 1950, 18 cars in 1955, gone by 1959.

440300-440627 (reassigned from general CN car pool during WWII), 139 cars at peak. 0 cars in 1930, 111 cars in 1950, 1 car in 1959, gone by 1960.



When the US lines of the former Grand Trunk Railway were reformed by the CN as the Grand Trunk Western in 1928, the CN gave the new road an assortment of used equipment including some of the GT's 6-foot door Fowlers. The GTW received a few more from the CN during WWII, apparently more ex-GT cars. The cars were scrapped as they came up for major repairs, and the last ones finally fell off the roster in 1959.

Intercolonial RR

61643-61922, 1912, 280 cars.

61973-62345, 1912, 373 cars.

62396-63395, 1913, 1,000 cars.

63646-64145, 1913, 500 cars.

80801-81610, 1914, 810 cars.

81611-84610, 1914, 3,000 cars.

5,963 cars total.



The Intercolonial's fleet of Fowler boxcars were all based on the Canadian Pacific car design, including 5-foot wide doors. Built just before WWI these cars were rolled into the Canadian Government Railway's fleet in 1915, which was later reorganized into the Canadian National between 1919 and 1923. These 5,900 cars formed the bulk of the CN's 5-foot door Fowler fleet. Since the cars are CP-standard, the Accurail models would be stand-ins.

Canadian Government Railway

250000-250999, CC&F 1916, 1,000 cars.

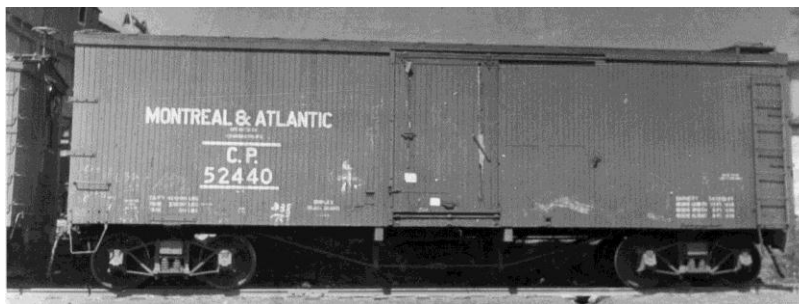
550000-554999, CC&F 1917, 5,000 cars.

Plus some assorted cars from the bankrupt GTR, INT, CNOR, and other roads.



The CGR was formed in 1915 to preserve essential rail services of bankrupt railroads in Canada during a time of extreme national crisis. The short-lived railroad was reorganized into the CN in 1923. The railroad did build 6,000 short Fowlers (and some 40-foot versions as well) during WWI, and those cars became part of the CN's 5-foot Fowler fleet. These Fowlers seem to have been repeat orders of Intercolonial boxcars.

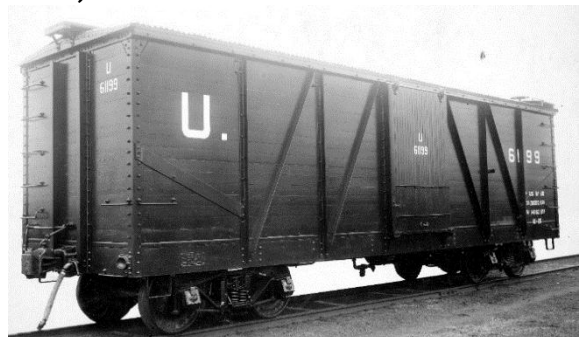
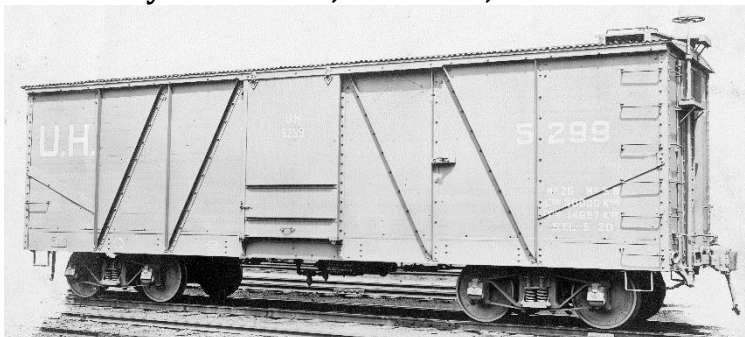
Montreal & Atlantic



Definitely not a Fowler!

As shown in the photo above, cars marked M&A actually ran under CP reporting marks. No car series or quantities are indicated in any ORER listing, so the overall number of these cars is unknown. Based on old hobby decal offerings the M&A cars were all pulled from the CP's 213000-series.

Union Railways of Havana, ACF 1920, 300 cars and ACF 1925, 250 cars



ACF builder's photos, St. Louis Mercantile Library collection.

The Cuban railways aren't listed in the ORERs, so all I know about these cars are what I found in the ACF builder's photo collection and in their lot lists. They're not Fowlers, but the design was definitely influenced by the car type. Given the economic state of Cuban railways, I wouldn't be surprised if some of these cars were rolling on the island nation's railways in the 1990s.

Hershey, ACF 1925, 25 cars



ACF builder's photo, St. Louis Mercantile Library collection.

More ACF cars for Cuban service, these Fowler-inspired boxcars do have a distinctive paint scheme. Oddly enough these cars aren't the same as the Havana Central cars that were ordered and built at the same time. And again, it's doubtful that these cars ever left the island.

A.A. Merrilees & Co. (AAMX)



Andrew A. Merilees, Ltd. was a used railroad equipment reseller in Toronto, and at one time apparently had a small collection of ex-CP Fowlers that they leased out on short term contracts in the late 1950s and 1960s. AAMX doesn't show up in any ORER that I have in my collection, but from photos it appears that there were at least 50 cars in this leasing pool.

British Columbia Electric



The BCE never owned any revenue service boxcars, but it did own a few Fowlers bought secondhand for MOW service. This car appears to have been re-sheathed either in steel or plywood, and has a very unusual door.

Piedmont & Northern

12000-12074, unknown builder 1914, 75 cars. 71 cars in 1930, gone by 1945.



A long string of P&N Fowlers pose for a promotional photo in 1928. Frank Hicks collection.

The Piedmont & Northern was a small interurban railroad in North Carolina, created by Duke Power in 1914 by buying several smaller lines and connecting them with new track. Based on the above photo the cars seem to be typical “American” type Fowlers with six foot doors and steel roofs, but have two brace ends.

Ontario Northland

80200-80398 (even numbers). 0 cars in 1930, 52 in 1950, 23 in 1959, gone by 1972.

80400-80498 (even numbers). 0 cars in 1930, 37 in 1950, 10 in 1959, gone by 1972.

(no photo found)

The only information I have on these cars is from the Westerfield datasheet and ORER listings. Likely, they were standard CP designs with 5-foot doors, inside metal roofs, and archbar trucks.

Dominion Atlantic

1400-1450, assorted builders and dates. 2 cars in 1945, gone by 1950.



Dominion Atlantic boxcars in Halifax in 1925. The Fowler to the far left with the odd paired support ends is possibly a DA car.

The DAR was purchased by the Canadian Pacific in 1912, but kept its corporate identity through the 1940s. After WWI the CP transferred a few of its common Fowler boxcars to the DAR. Placed in the 1400 series, there were only two cars left on the roster by the end of WWII.

MODELING NOTES



You "probably" won't have to go to this extreme to kitbash these cars into more accurate prototypes!

As mentioned previously, this new model is a combination of various Fowler prototypes, so right out of the box doesn't exactly match any car built. But with some mostly simple conversions and a little modeling skills added to this otherwise nice base model, most of the prototype cars can be effectively modeled. I've created a chart of all of the road names that I found, and their core detail features.

<u>ACCURAIL P/N</u>	<u>ROAD</u>	<u>STEEL ROOF</u>	<u>RUNNING BOARD LATERALS</u>	<u>END BRACE QTY</u>	<u>DOOR WIDTH</u>	<u>DOOR BRACES</u>	<u>TRUCK TYPE</u>	<u>TRIM BOLSTER ENDS</u>	<u>END STIRRUPS</u>	<u>OTHER</u>
1150	BASE MODEL	NO	NO	4	6-FT	0	ANDREWS	(HAS)	NO	
1151	SOO	YES	YES	2	5-FT	1	T-SECTION	NO	NO	Stand-in due to door width.
1152	NYS&W	YES	YES	2	6-FT	0	ANDREWS	NO	NO	Cars may have been delivered with wood roofs.
1153	NKP	YES	YES	4	6-FT	1	various	YES	NO	
1154	CN	YES	YES	4	6-FT	1	various	NO	YES	For 6 foot door versions only.
1155	CP	**	**	**	5-FT	**	various	NO	YES	Stand-in due to door width. Large number of other mods as marked ** if desired.
1156	BAR	YES	YES	N/A	6-FT	1	ANDREWS	YES	NO	Stand in. Steel ends & grabs instead of ladders if desired.
1157	CGW	YES	YES	2	6-FT	0	ANDREWS	NO	NO	Stand-in; sawtooth.
1158	GT	YES	YES	2	6-FT	0	ARCHBAR	NO	YES	Some early cars had wood roof. Some later cars had door braces.
1159	NC&STL	YES	YES	4	6-FT	0 or 1	BETTENDORF	YES	NO	
1160	PGE	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
1161	WABASH	YES	YES	4	6-FT	0 or 2	ARCHBAR	NO	NO	
1162	TH&B	**	**	2	5-FT	0	various	NO	YES	Stand-in due to door width. Some later cars had steel ends and roofs.
1163	GA	YES	YES	0	6-FT	1	ANDREWS	NO	NO	Stand-in; sawtooth.
1164	CSS&SB	NO	NO	2	6-FT	0	ARCHBAR	NO	NO	
1165	CI&L	YES	YES	4	6-FT	0 or 2	ANDREWS	YES	NO	Needs fishbelly underframe.
1166	TSTL&W	YES	YES	4	6-FT	1	various	YES	NO	
1167	ERIE	**	**	2	6-FT	0	ANDREWS	NO	NO	Some later cars had steel roofs or doors.
1168	ITC	YES	YES	4	6-FT	1	DALMAN	YES	NO	Stand-in due to height.
1169	QC	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	CI&W/B&O	YES	YES	4	6-FT	1	ANDREWS	YES	NO	
none	GTW	YES	YES	2	6-FT	1	BETTENDORF	NO	NO	Early cars had wood roofs.
none	INTERCOLONIAL	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	CGR	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	M&A	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	HC	YES	YES	2	6-FT	2	ARCHBAR	YES	NO	Stand-in. Corrugated roof. Grabs instead of ladders.
none	HERSHEY	YES	YES	2	6-FT	2	ARCHBAR	YES	NO	Stand-in. Corrugated roof. Grabs instead of ladders.
none	AAMX	YES	YES	0	5-FT	0	BETTENDORF	NO	YES	Corrugated ends.
none	BCE	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	P&N	unk	unk	unk	6-FT	unk	unk	unk	NO	No photo, so no data. Likely, 2 brace ends, wood roofs, archbars.
none	ON	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.
none	DAR	NO	NO	2	5-FT	0	ARCHBAR	NO	YES	Stand-in due to door width. Add lumber door on A end.

If you're planning any modifications to these models at all it's best to refer to as many prototype photos as you can find for your target, and review all of the small changes that may need to be made. Door braces and stops, specific makes of each truck type, and Canadian law mandated end stirrups may all be "minor" details, but are all easy to add onto a styrene model and help improve their overall look.

The two most important changes that can be done to improve the general accuracy of most of these cars are the addition of a steel roof and changing the trucks. Scratchbuilding a Murphy or Hutchins roof may seem to be a major undertaking, but it's really not, and shouldn't take more than 20 minutes to fabricate and add to a car.



All you need is a rectangle of .020" thick Evergreen [#9020](#) plain sheet styrene, Evergreen [#8204](#) 2x4 stock, and some MEK. Lay out the roof centerline and rib locations with a Sharpie, glue down the ribs, and score & snap the roof when the glue's dry. Use Tichy [#3081](#) roofwalk supports once done, add the Accurail running boards, and fabricate the end platforms.

Obviously, there are some things that can't realistically be changed on these models, like adding a five foot wide door or removing two end braces. If those details worry you it's best to stick to a more accurate model of these prototypes, as offered by Westerfield. True Line Trains and Kaslo Shops also offered accurate Canadian prototype cars at one time, and hopefully will again in the near future.

Westerfield CP and Erie kits:

https://id18538.securedata.net/westerfieldmodels.com/merchantmanager/index.php?cPath=100_374

Westerfield CN kits:

https://id18538.securedata.net/westerfieldmodels.com/merchantmanager/index.php?cPath=100_378

True Line Fowlers: <http://www.truelinetrains.ca/freight-cars/fowler-36-box-and-stock-cars>

Kaslo Shops kits:

<https://www.kasloshops.com/products/hk-06?variant=9414627461>

<https://www.kasloshops.com/products/hk-09?variant=9414627525>

<https://www.kasloshops.com/products/hk-11?variant=9542798597>

<https://www.kasloshops.com/products/hk-12?variant=9542800133>

AFTERWORD

This article couldn't have happened without the help of several individuals and resources. I'd especially like to thank Al Westerfield, Paul Clegg and Stafford Swain for their excellent research work and articles on the Fowler/Dominion boxcar type, which they did in the early 1980s before anything was digitized and easily complied.

Westerfield Model [History Sheets](#) #4301, 4302, 4305 and 4202.
Mainline Modeler [Magazine](#), 6/1985, 7/1985, 11/1985, 1/1986 and 4/1986
Assorted Official Railway Equipment Registers, [1910 through 1979](#)
Car Builder's Dictionary, 1913 edition
Assorted US [Patents](#) filed by William E. Fowler, 1908 through 1917
Railway Master Mechanic Magazine, 6/1913
John W. Barriger III National Railroad Library, [ACF Builder's Photo Collection](#)
Al Westerfield [ACF Builder's Photo Collection](#)
Fallen Flags [ACF Builder's Photo Collection](#)
Manitoba Agricultural Museum, [CPR Boxcar](#)

I'd like to also thank the "Pre-Depression Modeling Pirate Crew" for their continued support (prodding?) for my own research efforts, and Eric Hansmann for providing us with his great [website](#) as a place to discuss all things early rail modeling. And finally, special thanks to Dennis Storzek and everyone else at Accurail for taking a chance on producing these badly needed early rail freight cars in an affordable and accessible way.



*CN 9460 rolls through Bay View, Ontario in July 1980.
The sixth car back, just before the MOW cars, is a 1914-built CP Fowler.*