Funicular Railways in Bern

Richard Green

Gurtenbahn Car No. 2 nears the end of its ascent, June 2011. *All photos: Richard Green*

## Drahtseilbahn Marzili-Stadt Bern (DMB)

This funicular, informally known as the Marzilibahn, is situated in the centre of Bern, about 400m south of the station. It runs from the southwest corner of the Bundesstrrasse down to the Marzili quarter of the city, near the river. It has a length of only 105m, placing it amongst the shortest public railways in mainland Europe. It has a gauge of 800mm, a passing loop and falls 32 m on a gradient of 32% with a transit time of around 1 minute. Constructed in just four months and opened in 1885, this is the oldest funicular in the Bern area. It runs on an elevated steel bridge structure throughout its length. It was operated by water ballast until 1973, although the original green cars were replaced in 1914 in readiness for the Swiss National Exhibition held in Bern that year. In 1974 the facility was electrified by Doppelmayr-Von Roll and at the same time the official name was changed from Drahtseilbahn Aarziele to that currently in use. The red horizontal cars are mounted on grey enclosed triangular underframes, thus retaining the appearance of a water ballast system. The entire operation has recently been the subject of a renovation project.

The DMB operates from 06:15 to 21:00 daily, running according to demand. This typically results in a 3 min interval service. Each car carries up to 30 passengers, with seating for eight, who board from the west side and alight to the east, thus eliminating any conflict of movement. The one-way fare is CHF1.40, with numerous group and multiple journey concessions. The Swiss Travel Pass is usually honoured, albeit with a degree of suspicion. The line currently transports something approaching a million passengers each year, with an estimated 60 million journeys having been made since opening. It receives a considerable boost in the summer months when it is used to access the bathing areas on the banks of the Aare. Operation is controlled from the upper station, with most employees being retired railwaymen. There is an informative web site, in German only, at **www.marzilibahn.ch**. Preserved Car No.1, dating from 1914, is attractively plinthed close to the lower station. It reveals that in water ballast days the railway utilised a 750mm gauge, 3-rail configuration, with a passing loop and continuous Riggenbach racks for braking. Entrance and exit was necessarily at the ends of the cars. The complementary car is preserved in the Verkehrshaus at Luzern.

Gurtenbahn Bern (GB)

Gurten is an 864 m high "mountain" to the south of Bern, affording a splendid 360° panorama over the city and surrounding countryside towards the Jura Massive and the Alps. It is a popular amenity area that has been car-free since 1959. Other than on foot or cycle, public access is solely by funicular originally built in 1899 and, after numerous interim renovations, was totally rebuilt by Doppelmayr in 1999. The metre-gauge line is 1059m long with a passing loop at the intermediate station of Grünenboden, which is popular with walkers. The funicular climbs from 573m to 840m, a rise of 267m, with the gradient varying between 22% and 34%. It operates at speeds up to 8 m/s, surprisingly fast for a funicular, giving a transit time of about 5 minutes. Each red-liveried panoramic car runs on two bogies and can accommodate 120 passengers in five compartments. Until recently the timetable provided services at 10, 20 or 30-minute intervals at various times during the day, in an attempt to match the anticipated demand, but it has now been rationalised to provide a more convenient 15-minute interval service throughout the day, operating from 07:00 to 23:30 Mon-Sat. On Sundays and holidays service normally ends at 20:15, but there is sometimes later running in connection with special events. The single fare in either direction is CHF6.00, with a return ticket available at CHF10.50. A Swiss Travel Pass is accepted as a half fare card, reducing the return fare to CHF5.50.
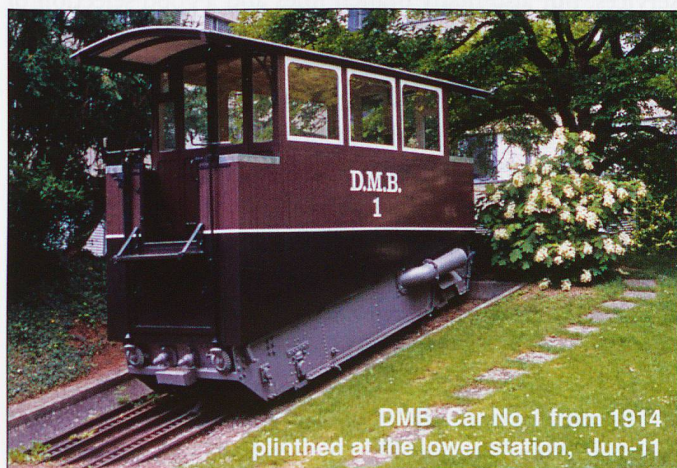
DMB Car No 1 from 1914 plinthed at the lower station, Jun-11

Access from the city is by S-Bahn line S3 to Wabern bei Bern, with trains every 30-minutes, three stops and a 9 minute trip from the Bahnhof in the direction of Belp. Alternatively, Tram Line 9 runs to Gurtenbahn, the penultimate stop on the route to Wabern, again a journey of 9 minutes from Bahnhof. A longer uphill walk to the base station makes this second option just a little more strenuous. The web site at **www.gurtenpark.ch** includes pages giving information on the funicular, which shows in translation as "Belt conveyor"! At the top there is a wide range of facilities, including an extensive 7¼" (184mm) gauge miniature railway featuring a 130m rack section. Both steam and battery electric locomotives are used. Operation is seasonal and weather dependent. Details are given on the above web site. There is also an observation tower, the effort required to climb its 123 steps being rewarded by a much enhanced view.
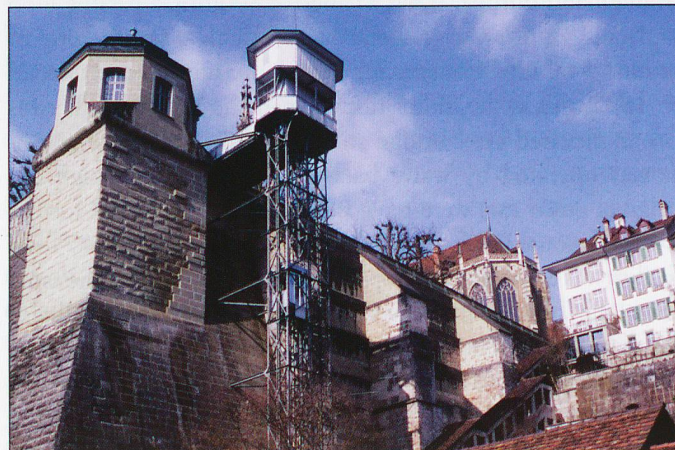
Matte Platform Lift

As a postscript, those interested in funiculars may also wish to experience Bern's Münsterplattform lift, known locally as the Senkaltram – vertical tram. The Münsterplattform is a small park occupying the area of the former graveyard on the south side of Bern Münster, or cathedral. It affords commanding views across the city and river and is popular with locals as a venue for pétanque and other games. In the southeast corner is a Personenaufzug or lift, dropping down to the Matte area of the city, close to the river. While not a funicular, the lift is an unusual public transport facility.

It opened in 1896, with the counterbalanced cars raising and lowering passengers through 31m, thus avoiding the many steps that make up the alternative route. Although not initially popular, being regarded as something of an eyesore, it transported 60,000 passengers in its first year of operation, despite several interruptions due to technical issues. In 1910 one cabin was locked out of service as an economy measure, to be replaced in 1920 by a 2,100 kg counterweight, which established its present-day configuration. There have been several major renovations in the intervening years. The lift is now used, ten-at-a-time, by about 850 passengers/day. It operates from 06:00 (07:00 on Sundays and holidays) through to 20:30. The fare is CHF1.20 (with few concessions) payable to the attendant. The Swiss Travel Pass is not recognised. There is a very informative web site at **www.mattelift.ch**. This is in German but it translates particularly well. 🇨🇭

DMB Car No. 2 descends past the crossing loop, June 2011

Bern Matte Plattform Lift with a glimpse of the Münster, February 2011

The European Rail Timetable
Robert H. Foster

I was sad to read Bryan Stone's article in the March *Swiss Express* of the demise of the SBB/CFF/FFS printed Kursbuch. It appeared for the last time covering the period from December 2016 to December 2017. This follows a similar decision in Great Britain a few months earlier. Bryan kindly obtained a copy for me at Basel SBB and mailed it on, as I concluded that it would probably have sold-out by the time of my April visit to Switzerland.

However, for those who still wish to plan a journey using a printed timetable (as I do) the European Rail Timetable (ERT) is an excellent substitute. I never plan a continental – or indeed British – rail journey without it. Even though I buy the majority of my tickets over the Internet, I always have the relevant page(s) of the ERT open at my side when doing so. In its 28 pages covering Switzerland, the level of detail in the ERT is remarkable. Not only does it include all main line services, but also many branch lines and a good selection of mountain and private railways both in Switzerland and throughout Europe. For example it includes the three metre gauge lines radiating from Aigle; the well-known mountain railways serving the Jungfrau, Gornergrat, Brienzer Rothorn, etc.; it includes all distances in kilometres, and has sections covering other countries of the world - these appearing on a rotational basis. Its 600 pages include maps of each country and of the location of stations in principal cities, plus numerous other items of relevant information, including how to get by public transport from airports to principal stations.

I first encountered the ERT, then known as Cook's Continental Timetable when, as a schoolboy in 1972, I travelled from (Victoria)-Oostende to Basel Bad on a German