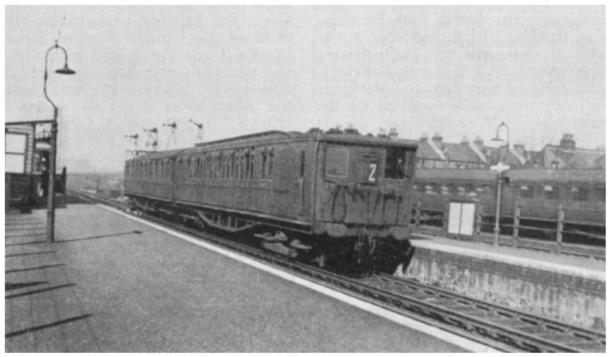
## The South London Line and its Traffic

By GERALD DRUCE, B.Sc. (Eng.), A.C.G.I.



Photo]

## Victoria-London Bridge train entering Wandsworth Road Station

¬HE South London Line was built by the former London, Brighton & South Coast Railway, and forms a rough crescent through the inner suburbs of South London from Battersea Park to London Bridge. The first section from London Bridge to Loughborough Park (now East Brixton) was opened on August 13, 1866, and the remainder on May 1, 1867. The work of enlarging London Bridge Station to handle the extra traffic was completed in the same year. The South London Line became the first section of the "Brighton," and, except for the Waterloo & City tube, of the present "Southern Electric" network to be electrified.

At Peckham Rye, a junction was made with the Peckham and Sutton line (opened October 1, 1868). The Sutton trains use the South London Line between Peckham Rye and London Bridge, and for some time a third track was provided for fast up trains. From Peckham Rye to Wandsworth Road, the line ran parallel to the London, Chatham & Dover Railway route to Loughborough Junction and

Victoria, Between Peckham Rye and East Brixton the L.B.S.C.R. had to construct all four tracks for the use of the two companies, and from this point to Wandsworth Road the L.C.D.R. owned all the tracks. Each company had exclusive use of one double line, but each maintained the other's track over the section it had constructed.

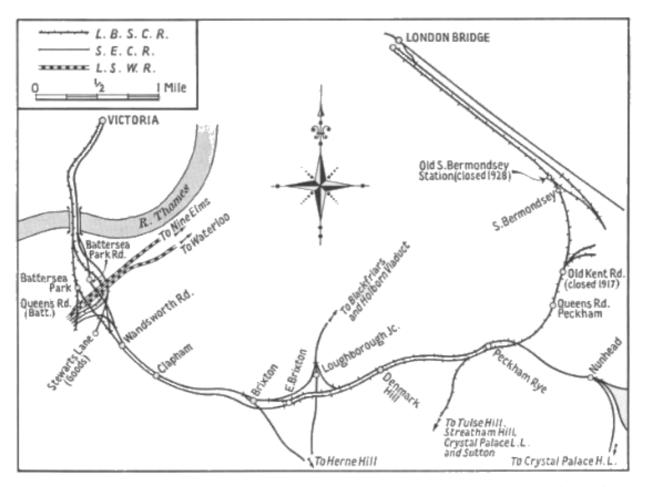
In its earliest days the line was not a financial success, but matters improved when Stroudley's famous "Terrier" 0-6-0 tank engines were introduced to work the line. At the same time, new sets of four-wheel carriages were put into service. To start with, they were close-coupled into eight-coach trains, but these were later lengthened to 11 and 12 coaches as the traffic increased. The "Terriers" worked the line for about 25 years, and were replaced by R. J. Billinton's "E4" class 0-6-2 tanks at the end of the century.

The passenger traffic was of a shortdistance nature, and for many travellers the route was circuitous. The introduction of the motorbus and the electrification of the L.C.C. tramways caused a considerable decline in the number of passengers carried, and the company decided to combat the increased competition by electrifying the line. After considerable investigation, single-phase alternating current at 6,600 chosen; the decision was influenced by the intention to electrify the main line to Brighton. The first scheme was to equip only the section from Peckham Rye to Battersea Park, but later it was decided to complete the electrification between Victoria and London Bridge. At the termini five and six platforms respectively were made available for the electric trains. The necessary powers were obtained in 1903, and the contract was let to the Allgemeine Elektricitäts Gesellschaft of Berlin two years later. Mr. E. J. Houghton was appointed Electrical Engineer and Mr. (later Sir) Philip Dawson was Consulting Engineer.

The first electric train ran experimentally on January 17, 1909, and the public service commenced on December 1, 1909. This was two months later than was first intended, but the delay arose from a late decision to alter the signalling

arrangements at London Bridge. The central track between the old South Bermondsey Station and London Bridge was re-signalled for reversible working, so that it could be used for up trains during the morning peak, and for down trains in the evening. The length electrified was 8.6 route miles, and 20.5 track miles. The depot was at Peckham Rye. The line was prominently advertised as the "South London Elevated Electric " and the desired results of the electrification were soon realised. number of passengers carried, which had fallen from 8,000,000 in 1903 to 3,500,000 in 1908, rose to 8,000,000 again in 1910, and to 12,000,000 in 1920.

Eight three-coach trains were built by the Metropolitan Amalgamated Carriage & Wagon Company of Birmingham. Second class was abolished on electrification, and each train consisted of two third-class motor coaches and a firstclass trailer. The motor coaches had four 115-h.p. motors, and were provided with two bow collectors (one for each direction) mounted above the guard's compartment. The coaches were of the



Map of the South London Line and its associated routes, showing the complicated pre-grouping ownerships

open compartment type, with a side gangway, and, unlike many electric coaches of that time, doors were provided for every compartment. It was soon found that excessive first-class accommodation had been provided, and the trailers were transferred to steam trains. The motor coaches were coupled to compartment control trailers to form two-coach units. At busy times these were coupled to form four- and six-coach trains.

After the formation of the Southern Railway, it was announced that, in the interests of standardisation, the a.c. a.c. arrangement with the driving compartment partitioned from the guard's van. First-class accommodation was provided by isolating two compartments in the trailer. Like all other Southern suburban stock, only third-class accommodation is now provided. Otherwise the coaches were little altered, and they still have the depression in the roof where the bow collectors were carried.

For many years, these units have had an almost complete monopoly of the line, but recently "2NOL" two-coach units, rebuilt from ex-L.S.W.R. steam stock, have been in regular service. For



Photo]

Two-coach unit of rebuilt L.B.S.C.R. stock entering Battersea Park Station on a Victoria-London Bridge train

equipment on the L.B.S.C.R. suburban lines would be replaced by the 660 V d.c. third-rail system, which had been used already by the London & South Western The d.c. electrics took over the South London Line on June 17, 1928, but the overhead equipment remained in position between Battersea Park and Peckham Rye, to enable other a.c. trains to have access to Peckham Rye depot. For the first year of d.c. operation, the standard three-coach units were used, but then the original South London motor coaches, rebuilt into eight two-car units with d.c. equipment, took over again. The rebuilt units consisted of a motor coach and trailer. The motor coaches were given a separate driving cab, but the trailers retained the a fortnight during October, 1952, the new four-coach unit with motor-generator control, No. 5001, appeared on the line, but it has now returned to the Waterloo-Guildford service.

The South London Line leaves the Victoria-Brighton main line at Battersea Park (1mile 20 ch. from Victoria), where it has separate platforms controlled by colour-light signals. A cross-over south of the station makes it possible to reverse the South London Line trains here without fouling the main line. The railway then diverges from the main line on a brick viaduct, and is carried over Queen's Road Battersea Station and the yards at Stewarts Lane. At the next station, Wandsworth Road (56 ch. from Battersea Park), the line is joined by the former

L.C.D.R. route from Victoria. There is a small shelter and a hut which serves as booking office on each platform. The line continues in a shallow cutting to Clapham (1 mile 7 ch.). The station has a large brick building on the down platform (trains are "down" from London Bridge to Victoria) but in contrast there is only a small shelter on the other side.

The line is carried on an embankment, and then another viaduct, and parts company with the L.C.D.R. line on a rising gradient to pass over Brixton Station. The L.C.D.R. is re-joined at East Brixton (2 miles 22 ch.). The platform and station buildings are of wooden construction, and, as at Wandsworth Road, the tickets are issued on the

and Sutton line. The two routes meet at the entrance to Peckham Rye Station, which also has wooden platforms and buildings. The former L.C.D.R. station is adjacent. There is a small goods yard at Peckham Rye, beyond which the railway to Nunhead is carried over the South London Line. This continues on an embankment to Queens Road Peckham, where, as at Peckham Rye, there is an unusually large space between the tracks resulting from the three-track layout. Old Kent Road (4 miles 73 ch.) was closed in January, 1917, and the station has since been dismantled. The island platform at South Bermondsev (5 miles 46 ch.) was opened in 1928 and is situated on the embankment. The



Photo]

The South London Line platforms at Peckham Rye, looking towards London

Bridge in March 1952

platforms. A viaduct carries the railway over Loughborough Junction, and the line then passes through a cutting and under a broad road bridge to enter Denmark Hill Station, which is shared with the L.C.D.R. line.

The South London Line trains wait up to two minutes at Denmark Hill to make connection with the Holborn Viaduct-Sevenoaks trains, and sometimes also with the Blackfriars-Crystal Palace (High Level) trains. Just beyond Denmark Hill is the short Grove Tunnel, on the far side of which a single line gives direct access to the Peckham Rye carriage sheds, which are situated between the South London Line and the Peckham

original station was a quarter-of-a-mile nearer London Bridge. This embankment periodically gives trouble through slipping; the last occasion was early in 1951. The remaining distance to London Bridge (7 miles 31 ch.) is on a brick viaduct at roof top level, and is controlled by colour-light signals.

When the line was steam-operated, a typical timetable showed 37 down and 38 up trains on weekdays between the termini. With two more stops than there are today (at Grosvenor Road and Old Kent Road) 36 minutes were allowed. The journey time was cut to 24 minutes with the introduction of the a.c. electric

(Continued on page 628)

## The South London Line (Concluded from page 624)

trains, and the number of trains was almost doubled. In 1924, there was a total of 68 down and 62 up trains on weekdays, with additional workings between Peckham Rye and each terminus. A few down trains called only at Queens Road, Peckham Rye, Denmark Hill, and Battersea Park to Victoria; others missed South Bermondsey.

The headway was increased to 30 minutes (20 minutes in the peak hour) after the conversion to d.c. traction. There are now 42 down and 41 up trains on weekdays; the Sunday service is half-hourly as in a.c. days. A two-coach unit usually suffices for the traffic, although some four-coach trains are now run during the morning and evening peaks. Two trains are required to maintain the half-hourly service, passing at Denmark Hill.

During the strikes of 1926, the South London Line services were completely withdrawn for four months, and some of the lost traffic never returned to the railway. Much more recently, the service on Saturday afternoons and Sundays was temporarily suspended during the fuel cuts made in the early months of 1951. The Festival Pleasure Grounds at Battersea Park brought additional traffic and four-coach trains were run on Saturdays.

The section between Peckham Rye and London Bridge is much busier than the rest of the line, because it is used also by the London Bridge circular route trains via Crystal Palace (Low Level) and via Selhurst, the London Bridge-Effingham Junction, and the London Bridge-Streatham Hill-Victoria (peak hour only) trains. Some of these run non-stop between London Bridge and Tulse Hill or Peckham Rye.