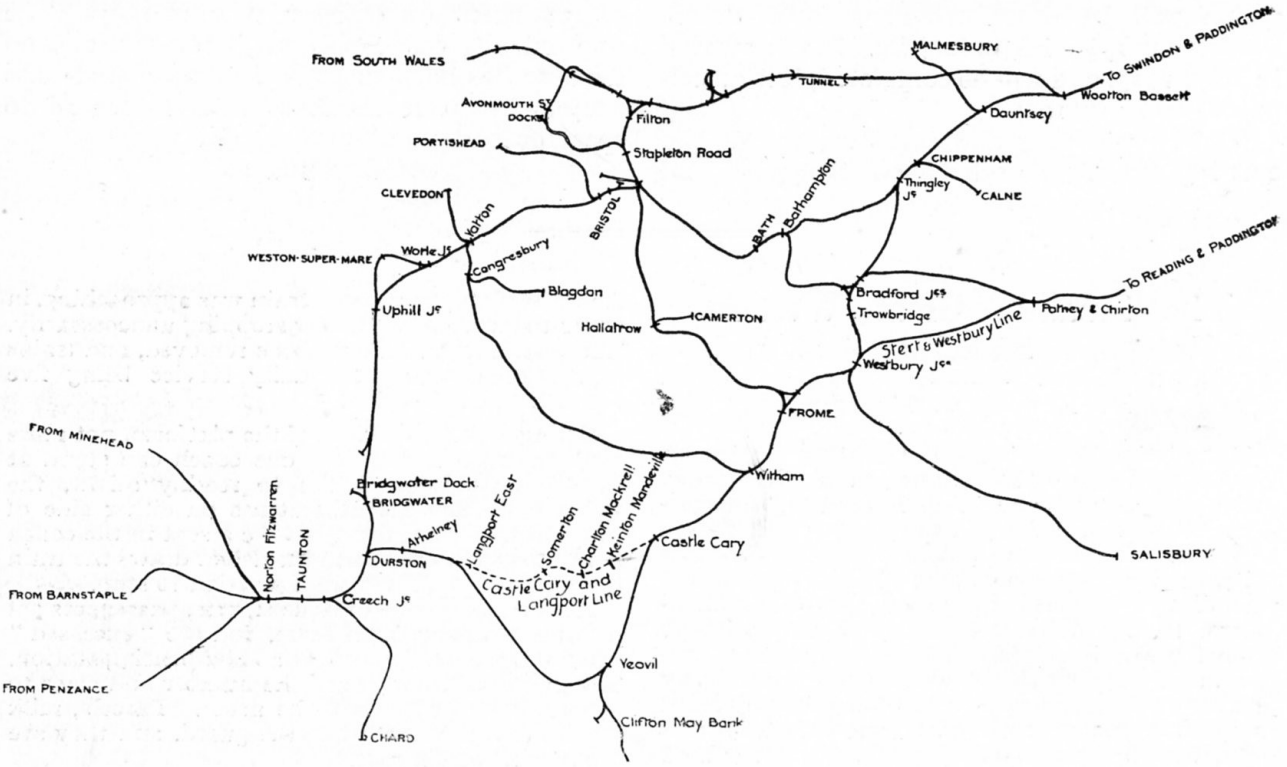
THE NEW ROUTE TO THE WEST OF ENGLAND.

By P. A. Anthony.

The opening of the first seven miles of the Castle Cary and Langport line on July 1st brings within measurable distance the completion of the scheme for a new and shortened route to the West. Under favourable conditions, Jan. 1st, 1906, should see its inauguration for goods traffic, and passenger trains will commence to use the line a few months later.



What difference this will make to the actual time occupied in the journey between Paddington and Taunton remains to be seen. In point of distance the saving in mileage *via* Newbury, Westbury and Castle Cary, as against the present route *via* Swindon and Bristol will be 20¼ miles.

The scheme is by no means a new one. It is 22 years since the Company first obtained powers for the construction of a line between Castle Cary and Langport, but the original proposal was abandoned, and a new centre line adopted, which would, it was thought, better serve the district and pick up more local traffic. The Bill was passed in the Session of 1898, but two important deviations were authorised the following year. The Bill for the construction of the line between Stert and Westbury (now in use) was deposited in 1883, and further powers for important deviations were secured in 1890. Briefly the history of the scheme is as follows:—

(*a*) The commencement, in 1897, of the widening and improvement of the Berks and Hants line between Hungerford and Stert; previous to 1897 a double line existed from Reading to Hungerford only, the line from the latter point to Devizes being single, and in many places both steep and tortuous. The length of the line to be doubled was 19½ miles, and the work was divided into two contracts—the first from Hungerford to Savernake, and the second from Savernake to Stert. Both contracts were carried out by Messrs. Pauling and Co., of Westminster, and were completed in sections, the last length being opened for traffic on July 29th, 1900.

(*b*) The construction of the connecting link between Stert (or Patney and Chirton) on the Berks and Hants line and Westbury Station on the Wilts, Somerset, and Weymouth line. The construction of this line was started in 1897, and it was opened for goods traffic on July 29th, 1900, and for passenger traffic on

October 1st of that year. It is 14½ miles in length, and whilst the country through which it passes is not a difficult one from an engineering point of view, some extensive slips both in the cuttings and on the embankments gave trouble, and delayed the completion of the line for some months. Messrs. Pauling and Co. were the contractors.

(*c*) The re-building of Westbury station, which was carried out simultaneously with the Stert and Westbury line, the contractor being Mr. W. J. Bloxham, of Banbury.

(*d*) The construction of the second connecting link between Castle Cary and Langport, which will be described in greater detail. This line is 15½ miles in length. It was started in May, 1903, and will be completed, it is anticipated, early in 1906.

(*e*) The widening and improvement of the existing branch line between Langport and Athelney, a length of four miles, and the construction of a deviation railway between Athelney station and the point of junction with the Bristol and Exeter railway, about ¾-mile west of Durston Junction. This deviation railway is three miles in length, and with the doubling is being carried out simultaneously with the Castle Cary and Langport Railway by Mr. C. J. Wills, of Westminster and Manchester.

It will thus be seen that the whole scheme, which has been spread over a period of nine years, has involved the doubling and reconstruction of 23½ miles of line and the building of 33 miles of entirely new railway. The approximate cost has been £1,100,000, and no expense has been spared to obtain a first-class route without restrictions either in regard to speed or load.

(*To be continued.*)

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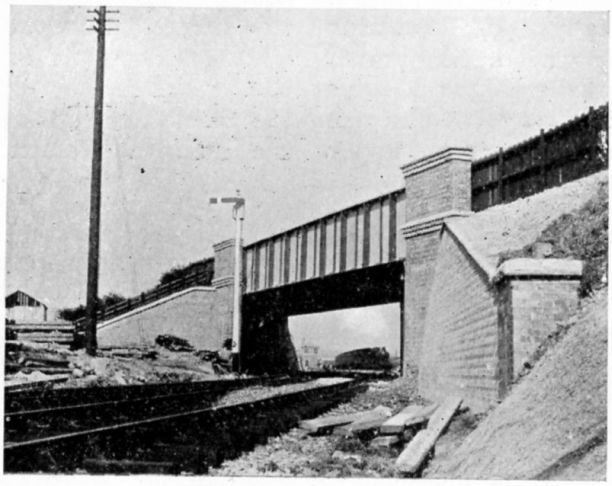
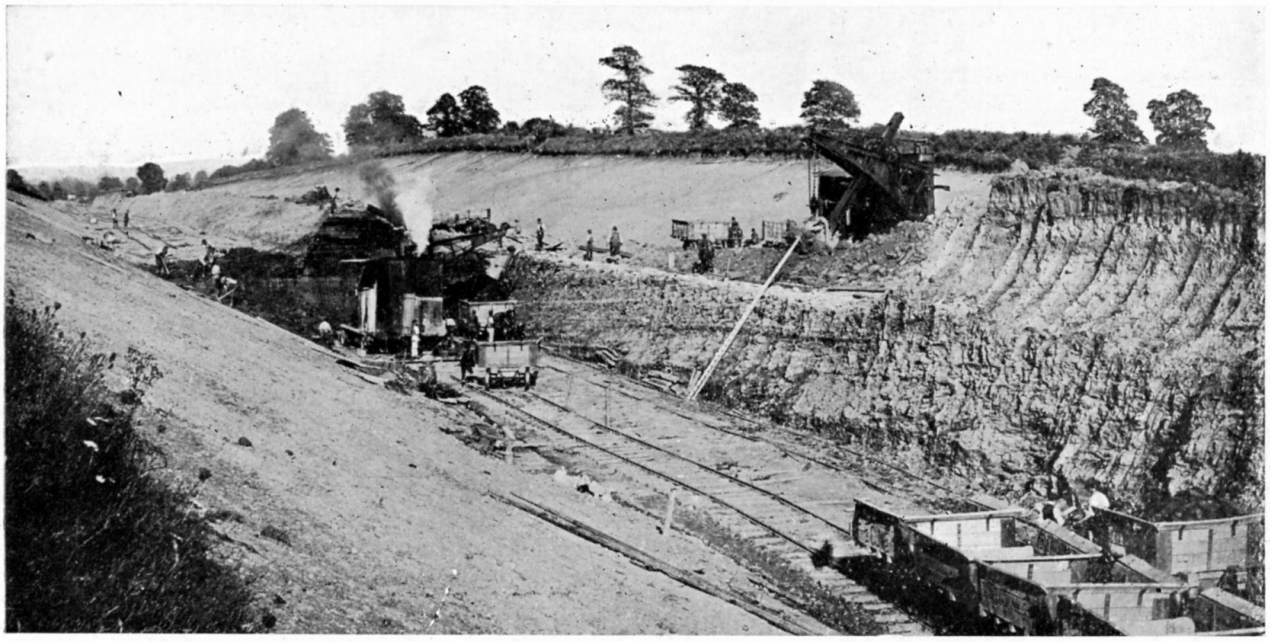
In the previous issue a brief history of the new route to the west was given. I will now describe the engineering and other features of the works still in progress, starting at Castle Cary. The station has been rebuilt, and the curve at the London end re-laid to 60 chains radius, so as to avoid any restriction of speed. From here to Keinton Mandeville, $4\frac{3}{4}$ miles, the line calls for no special comment, being for the most part on an embankment averaging 12ft. high, except between 3 miles and $3\frac{1}{2}$ miles where there is a cutting 40ft. deep through clay and shale, the excavation of which is illustrated. A halt has been erected at two miles to serve two or three neighbouring villages. On this section we have a length of $2\frac{1}{2}$ miles of continuously straight line.



Near the Junction with the Weymouth Line at Castle Cary.

The station at Keinton Mandeville, also illustrated, is of the usual type of wayside station, with goods lock-up, loading bank, crane, weighbridge and cattle pens, well provided for dealing with the agricultural and stone traffic which is looked for. The station at Charlton Mackrell is exactly similar. From Keinton Mandeville to Charlton Mackrell station is $2\frac{1}{4}$ miles. The only engineering feature of interest is a cutting in the lower or blue lias formation, 32ft. deep; the level beds of limestone, about 1 foot in thickness, are clearly to be seen in the illustration, with the intervening beds of black shale, a characteristic feature of this formation. The beds are practically level and continuous, and therefore steep slopes can be left in the cuttings with impunity, and the

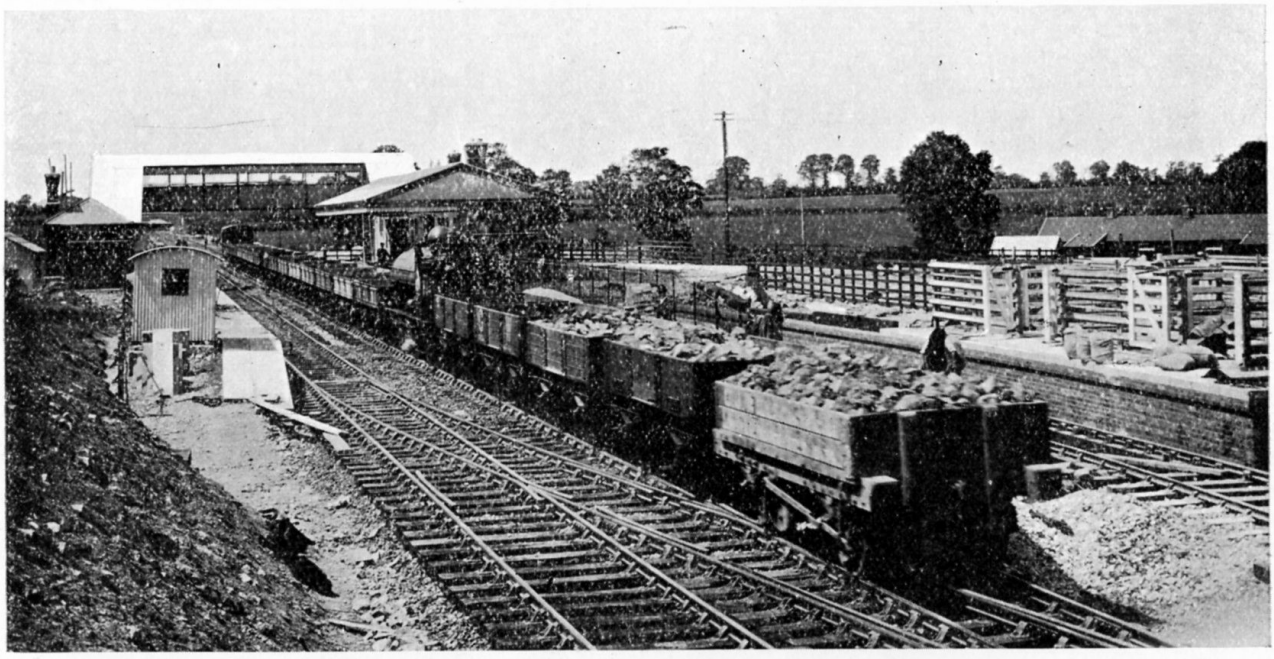


Wheathill Cutting (3-$3\frac{1}{2}$ Miles) in Course of Construction.

bridges constructed with flying arches—a cheap and effective design. The stone is largely quarried in the neighbourhood; the thin beds which are near the surface, and are from three to six inches in thickness, being used for kerbing, channelling and building stone, whilst certain of the lower and thicker beds are burnt for lime.

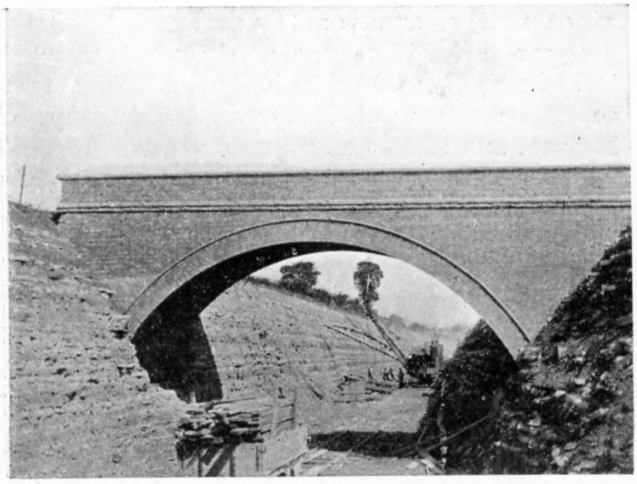
Directly after leaving Charlton Mackrell station the character of the country changes and the engineering features of the line are of greater interest. Geologically, too, the section cut by the railway is very varied. A quarter of a mile west of the station we enter a large cutting 65ft. deep at its highest point, through the Rhætic beds, and consisting of an upper layer of 18ft. of white lias rock, beneath which we find black shale. Following this are a high embankment on sloping ground, a cutting 50ft. deep through tea-green marls, and another embankment 45ft. high over the Castle Cary and Somerton road, the line passing over the road on a bridge consisting of six parallel arches, each 9ft. 6in. wide and 62ft. 1in. span. The embankment is followed by two small cuttings through Keuper marls, an embankment 38ft. high, and another cutting 40ft. deep, where the lower lias appears again. From this point to Somerton a valley 62ft. in depth and the little river Cary have to be crossed, the centre of the valley being spanned by a viaduct of five 50ft. arches. Some difficulty has been experienced in tipping the high embankment on either side of the viaduct owing to the soft nature of the ground underlying it, and it has been necessary to excavate the portion of the soft ground immediately adjacent to the viaduct, replacing it with rock so as to form a solid foundation for the embankment.

Somerton station (10¼ miles) is approached through a cutting 35ft. deep, where the white lias of the Rhætic beds are seen again. Somerton itself is an ancient and sleepy town. In the sixth century, and for long afterwards, it was the capital of the county, taking its name from the Saxon tribe, the Sumorsætas, from which the men of Wessex sprang. It boasts the remains of a castle, now the White Hart Hotel, where John, King of France, after being defeated by the Black Prince at Poictiers in 1356, was imprisoned. The church is a fine perpendicular building, the roof being especially worth notice. An interesting old market cross completes all that is to be seen here. The population is about 1,700. A brewery and a small collar factory are the principal industries.



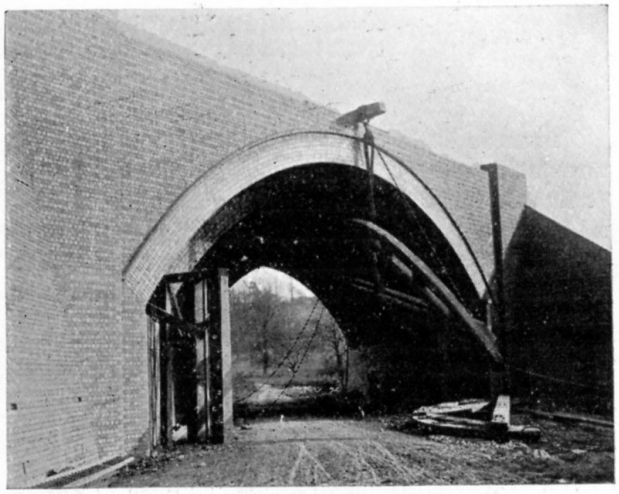
KEINTON MANDEVILLE STATION.

The station is similar to that at Keinton Mandeville and Charlton Mackrell, except that larger goods accommodation has been provided. From Somerton, Glastonbury is seven miles to the north, and offers an opportunity for a service of road motors. Leaving Somerton, the line enters a deep cutting in the lower



CUTTING IN LOWER LIAS WITH FLYING-ARCH BRIDGE.

lias, and reaches Somerton tunnel, 1,054 yards long, mainly through hard marl and shale. The side walls have been built of local stone, and the arches are of one ring of brindled brick and three rings of red brick, except where black shale has been met with, and the greater weight has made it necessary to increase the thickness of the arch to five and six rings. From Somerton to Langport the line descends on a gradient of 1 in 264, and from the West end of the tunnel it is straight for $2\frac{3}{4}$ miles. It passes through a succession of cuttings and embankments from 30 to 35ft. high through the lower lias, and Rhætic beds until at $14\frac{1}{2}$ miles we reach Langport station, where only passenger accommodation is provided, goods traffic being dealt with at the old station on the Yeovil Branch. Langport is a town of about the same size as Somerton. Messrs. Kelway, whose extensive nurseries adjoin the new station, are the principal employers of labour. The tower of Huish Episcopi Church, adjoining Langport, is a notable object from the line, being one of the finest in the county. Leaving the new station, the low-lying moors, characteristic of the district and known generally as Sedgmoor, are reached. These moors, all below high-water mark, were formerly covered with water, and formed a vast lake-like expanse in winter, and in summer-time a series of marshes, above which Athelney, Glastonbury, or any slightly elevated land stood as islands. In the seventeenth century a Dutch company obtained the right to drain the marshes, which they did by building banks at Burnham to keep out the sea, and cutting an elaborate series of dykes known locally as rhines. This system of drainage has been improved upon from time to time, and the land is now remarkable for its fertility, second perhaps to none in England. In the winter it is still subject to floods, and to prevent the new line (which between Langport new station and the point of junction with the Yeovil branch is on an embankment from 20 to 25ft. high), forming a dam which would hold back the flood water, it has been necessary to construct a viaduct, consisting of ten spans of 55ft., which will act as flood openings. The concrete foundations presented unusual difficulties, and it has been necessary to carry them down to a depth of 50ft. through the peat deposit of the moor before reaching the red Keuper marl, on which the piers and abutments could be safely carried. A few chains further to the west the river Parrett is crossed by means of a bridge, consisting of one girder span of 105ft., and four arched spans, each of 39ft. 6in., with foundations similar to those at the viaduct. At $15\frac{1}{2}$ miles the junction with the Yeovil branch is made, and from this point to Athelney the old branch line is being raised above the level of the winter floods, doubled, and in fact entirely reconstructed. Flood openings have had to be provided at frequent intervals from 6ft. to 12ft. in diameter, the structures being in nearly every case carried on piles driven to a depth of from 30 to 50ft. through the peat. Four miles from the junction we reach Athelney, where the station is being considerably enlarged and better accommodation provided for dealing with the traffic in baskets and chairs made from the withies grown on the moors, a rapidly-increasing industry, and the hay from the rich grass lands. "The Island" of Athelney, which King Alfred made celebrated, may be seen on the north of the line. History has it that he spent three



BRIDGE OVER THE SOMERTON-CASTLE CARY ROAD.

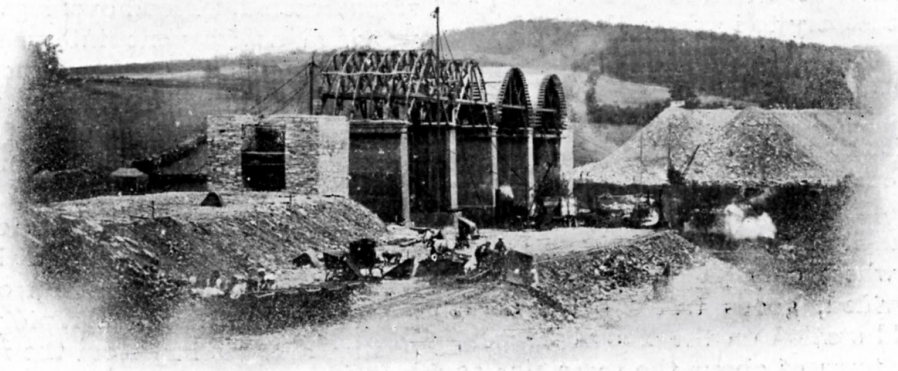
months hidden here in 878, preparing for his campaign with the Danes, and everyone is familiar with the famous story of the cakes :—

"Ca'sn thee mind the ke'aks man,
An doossen zee 'em burn ?
I'm boun thee's eat em vast enough
Ar zoon as 'tiz thee turn."

Mention, too, must be made of the famous Battle of Sedgmoor in 1685, when General Feversham defeated the ill-fated Monmouth. At a neighbouring village church can still be seen, built into one of the buttresses, the stone used by Monmouth's men to sharpen their scythes and pikes ; whilst the story of the fight and the memory of the terrible Judge Jefferys and the "bloody circuit" is kept green by numerous place names, such as "War Lane," "Judge Jefferys' field," &c.

The neighbourhood is, indeed, full of interest to the student of History, Archæology, or Nature, and must well repay a visit.

From Athelney to the Junction with the Bristol and Exeter line between Durston and Taunton the old Yeovil branch is left, and a new deviation railway is being constructed further to the south, making the actual point of junction three-quarters of a mile west of Durston. Passing along a low ridge of hills, the line calls for no special remark, being for the most part in cutting from 20 to 25ft. deep through red Keuper marl. Fast traffic will pass over the new line, whilst the stopping trains will continue to run through Durston Junction to Athelney and Yeovil as at present.



SOMERTON VIADUCT.