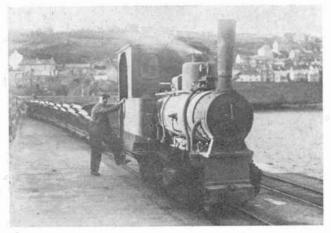
## MECCANO Magazine



Penlee Quarries Steam Train (circa 1935).

BETTER-KNOWN AS A TOURIST MECCA, when considering Cornwall most people conjure up a picture of yellow sands and surf-washed shores, but it is interesting to consider another and less-publicised aspect of this remote peninsula. This of course is Cornwall's unique contribution to the development of mining and the use of steam as a prime-mover. The two were synonymous, from the time the miners abandoned the recovery of metals from alluvial deposits by 'streaming' or 'panning' and started to excavate for minerals they were faced with the evergrowing problem of flooding. This stimulated the search for improved pumping techniques and the first steam engines were adopted to this work. But the early low-pressure engines were cumbersome and expensive on fuel and, with the nearest coal-fields some 200 miles distant, this was a constant worry.

The man who probably contributed most to overcoming these difficulties was Richard Trevithick. Many readers will be familiar with the story of his work on the development of steam traction. Known in the Southwest as the 'Cornish Giant' because of his huge stature, it was he, who by advocating the use of higher steam-pressure put Britain in the lead in the 19th century industrial revolution. Steam became the prime-mover in mills, mines, ships and on the railways. It thrust Britain forward on the crest of a wave of industrial prosperity such as the world had never known. His statue stands today outside the library at Camborne with a model of his first locomotive on his arm

Across the road, housed in a museum of mining relics owned by the engineering firm of Holman Bros.

Port of Par Railway ' Judy '.



## CORNWALL'S STEAM HERITAGE by Richard Angrove

Search out the history of steam in Cornwall when on holiday in the West country—the whisper and sigh of steam can still be heard in a few remote corners of the county

Ltd., and open to the public there is a full-size working beam engine. It is operated by compressed air supplied from a portable compressor. The whole area is saturated with the history of technical developments. Murdoch astounded the populace of nearby Redruth with his first 'magic flame' from gas.

Watt installed his first engines at the mines sur-

Watt installed his first engines at the mines surrounding the two towns, whilst a few miles away to the North, near Padstow is the birthplace of Sir Goldsworthy Gurney who, in the 1820s produced his celebrated 'steam coach' perhaps the most controversial of all vehicles. So, from the time, nearly 150 years ago, when the Liverpool and Manchester Railway was opened, the sounds and smell of steam spread to every corner of Britain. There can be few places in these islands which have not, at some time—perhaps only under certain climatic conditions—heard the first few exhaust blasts from a steam locomotive starting a heavy train.

Newton Abbot was one of the first West Region Sheds to go over entirely to diesels and from that time steam-haulage steadily declined in the West and over the whole of the B.R. network until, in August 1968 they ran their last standard-gauge steam-hauled train between Liverpool and Carlisle, ironically near the birthplace of railways in the 1820s. Thus closed a chapter of the steam saga but there remains a great interest in steam power. Thousands flock to traction engine rallies each summer and queue to ride on the 'Bluebell', 'Dart Valley' and other preserved systems. In Cornwall however, in addition to a wealth of

In Cornwall however, in addition to a wealth of preserved relics in the way of beam engines and mining equipment, steam is still in daily use on two privately-owned systems. There is at Falmouth, owned and operated by the Falmouth Docks and Engineering Co., a standard-gauge system running three steam locomotives which handle some 50 pieces of privately-owned rolling stock in addition to marshalling large trains of general goods traffic. They are all 0-4-0s—one each from the stables of Hudswell Clarke (works No. 1632 built in 1929) Peckett of Bristol (works No. 1530 built in 1919) and a third which is the only survivor by cannibalising of four Hawthorn Leslies purchased in 1926-27. Admission to the docks is restricted but a panoramic view of the layout can be seen from the road overlooking the extensive berthing

area where a convenient parking recess is provided for

observing both ships and trains.

Further Eastwards, at the China Clay Port of Par the second standard-gauge system can be seen operating on most working days. Although no elevated vantage point is provided here, a good view can be obtained of the trains from the nearby main road. This railway is owned by the English China Clays group of companies who export one of Britain's largest and most valuable dollar-earning bulk-exports from here. From their extensive excavations and refineries in the immediate vicinity two million tons of China Clay are produced every year, nearly 75 per cent of which is exported. The port was created about 130 years ago to serve the tin and copper industry but in 1946 was taken over by the clay company who now run it as a subsidiary of the group.

Bulk clay for the potteries is handled by B.R. liner trains, about 800 wagons being currently allocated to this traffic but all marshalling in the dock area is done by their two steam locomotives 'Alfred' and 'Judy'. Judging by the obvious care lavished upon them both are held in high esteem. Both were built by W. G. Bagnell Ltd. of Stafford, 'Judy' (works No. 2572 was built in 1937) and 'Alfred' (works No. 3053) is a comparative 'baby' born as recently as 1953. In their shining livery of light-green saddle-tank and cab, framed in a broad yellow line, with brown under-



Port of Par Railway ' Alfred ' hauling a line of wagons.

carriage, carrying the group's symbol and 'E.C.C. in gold and black-seen against the white back-cloth of china clay which envelopes the dock buildings, they present a visual treat to the steam lover rarely encountered in these diesel days. Because of low bridges within their operating area they are specially designed for a 7 ft. 6 in. head clearance. Initially this gives a somewhat stunted appearance but as one gets accustomed to seeing them an impression of streamlining and power is portrayed by the low dome and flat chimneys. They have a really robust exhaust blast which sounds most impressive re-echoing between the high port buildings as they happily haul 15 or 20 laden wagons around the extensive marshalling area-music indeed to the searching ear of the steam-lover!

Readers will know of Penzance being the end of the W.R. main line but few will realise that there is another and very active railway beyond the terminus. If your holiday takes you to this very Western end of Cornwall—and few visitors return from there without at least a 'flying visit' to Lands End—make a point of looking up this 2 ft. mineral railway at the extensive Penleee Quarries, between Newlyn and Mousehole about three miles West of Penzance. Owned and oper-



Ruston Hornsby 1935 Agricultural Engine.

ated by a branch of the Amalgamated Roadstone Corporation, traffic there is now handled by six Ruston Hornsby diesel locomotives. But, standing on a raised dais near the line is a German-built steam locomotive which, until 1941, handled all traffic. The system was then extended and diesel-traction introduced, had the changeover been more recently this unusual steam engine would probably have been welcomed into the fold of one of the many preservation societies but, alas! she has suffered the ravages of vandals and scrap metal hunters. Our photograph shows this historic locomotive in action over 30 years ago.

Many steam road vehicles too are preserved in Cornwall. The West of England Steam Engine Society stages an annual rally in the Camborne-Redruth area at the height of the summer holiday season. In addition to a show of veteran and vintage cars, about 50 steam vehicles take part. These include several well-known Showman's engines such as "The Iron Maiden" which was the "Star" in the film of that name and the 7 h.p. compound Burrell "Gladiator" (illustrated) and many others.

So if you are in Cornwall this summer and the weather renders sunbathing and other activities impossible, try the less-crowded byways and search out some of the sounds and smell of steam and take a nostalgic journey back to bygone days when steam was the motive power throughout the land and Britain, through the inventive genius of Trevithick, Stevenson, Brunel and others led engineering progress throughout the world.

7 h.p. Compound Burrell Showman's Locomotive 'Gladiator'.

