

THE TINTO INDICATOR.

BY J. A. PARKER.

IN the *Journal* for January 1930 I gave a list of the view indicators in Scotland that were known to me at that time. Since then a number of old ones have been brought to my notice, and no fewer than nine new ones have been erected, the total number to date being thirty-two. A list of them arranged chronologically is given at the end of this note. Fuller details will be found in "Wayfaring Around Scotland," by Mr B. H. Humble, which is reviewed in this issue.

The indicator on Tinto Hill, Lanarkshire, is the latest, and the Editor has asked me to give a description of it, as I was responsible for its design and erection. The inception of the scheme was due to a local committee, which raised the funds, obtained the proprietor's permission, and persuaded me to do the work.*

Beyond the records of the Ordnance Survey Triangulation there was no information available as to what could be seen from the hill, and my first difficulty was to find out what could actually be seen. This proved to be practically impossible owing to consistent bad weather and the constant smoke screen in the north, due to the industries of Glasgow and other places in the central valley of Scotland. Recourse, therefore, had to be made to maps and calculations. Incidentally, this led me to thoroughly investigate the subject of curvature and visibility, the outcome of which was the preparation of a long article on the subject, which appeared in the *S.M.C.J.* for April 1935 (Vol. XX., p. 317). This article was really an elaboration of that on "Curvature and

* Tinto is the fifth indicator which Mr Parker has designed and erected, the others being Lochnagar (1924), Ben Macdhui (1925), Ben Nevis (1927), and the Blue Hill (1929).—ED.

Refraction," by the late Mr G. Gordon Jenkins, which appeared in the *C.C.J.* for July 1917 (Vol. IX., p. 27). While I consider that my article is a simplification of that by Mr Jenkins, others may disagree and think that it is much more complicated. In any case, my article is accompanied by a big general diagram, with the aid of which, a good map, and a couple of bits of thread, any problem of intervisibility may be readily solved "in a few seconds." At least, so it is stated in the article!

However, diagram or no diagram, the calculations, etc., for the visibility of hills which ought to be seen from Tinto in clear weather were somewhat laborious. No doubtful hills were inserted on the final drawing. One or two tempting possibilities were omitted, such as the very top of Ben Cruachan (just to the right of Ben Ime) and the *light* of the Lighthouse on the Isle of May.

The actual field-work was unexpectedly brief, as only three ascents of the hill were necessary, and it was just a simple climb of 1,500 feet by a good path from the main road near Thankerton. My first visit was in May 1934, when I examined the local conditions on the upper part of the hill for building stones and water supply and tried to see the surrounding hills. Visibility was restricted to about twelve miles, and I saw practically nothing of any use. My second ascent was in March 1935, when I took a plane-table to the summit and succeeded in checking the bearings of about twenty-five hills in the south-east sector of the final drawing and verified the magnetic variation of the compass. My third visit was on September 13, 1935, when I supervised the erection of the indicator. Three visits only, compared with which the indicators for Lochnagar, Ben Macdhui, and Ben Nevis involved eight, six, and ten ascents respectively.

The indicator diagram is similar to those of Lochnagar and Ben Macdhui, with the important difference that a useful outline map occupies the centre of the drawing in place of the long-worded inscription on the others. There are seventy-four pointers giving direction, height, and distance. The most distant hills indicated are Lochnagar

(95 miles), Ben Lawers (70 miles), Ben Laoigh (71 miles), the Mull of Kintyre (85 miles), and Knocklayd in Co. Antrim (106 miles).

In the *Journal* for January 1912, Mr M'Connochie gave a list of the twenty counties which he considered could be seen from Tinto. I make the number to be twenty-two, viz., Aberdeen, Angus, Antrim, Argyll, Ayr, Bute, Clackmannan, Cumberland, Dumfries, Dumbarton, Fife, Kinross, Kirkcudbright, Lanark, Linlithgow, Midlothian, Haddington, Peebles, Perth, Renfrew, Selkirk, and Stirling. This list differs from Mr M'Connochie's by excluding Berwick and Roxburgh, which I calculate are completely hidden by intervening hills and by including Aberdeen (Lochnagar), Angus (Ben Tirran), Kinross (Benarty), and Linlithgow (Torphichan Hill).

The materials used for Tinto were similar to those for the other indicators erected by me, viz., a lower pillar of local stone, a circular granite capstone, and a disc of Doulton stoneware, on the upper surface of which the design had been burned in. As regards details, Tinto is a slight improvement on the others. The pillar was built with a batter on 1 in 6 and looks better in consequence, but took a much bigger quantity of building sand and cement. The capstone, a beautiful bit of Aberdeen granite from Corrennie Quarry, is in one piece, whereas the others had to be cut up into sections to suit pony transport. The Doulton disc is 4 inches deep by $23\frac{1}{2}$ inches diameter, and is not so highly glazed as the others. The lettering on the disc is exceptionally well done, and was the work of one of Messrs Doulton's younger artists.

The indicator was erected on Friday, September 13, 1935. Transport was simple as the hill is an easy one, with a comparatively short ascent, about 1,500 feet from the nearest road. All the materials were taken up on a two-wheeled trolley which had rubber-tyred wheels, and was pulled by a big Clydesdale horse. Water was obtained within a reasonable distance of the summit. Mr John Angus, builder, of Thankerton, made all the transport arrangements and carried out the work of construction.

Tinto is a proverbially windy hill, and on September 13 it lived up to its reputation and treated us to a regular gale from the south-west, which hampered the masons a good bit and rendered the correct orientation of the stoneware disc just a bit troublesome. There was no rain to speak of, but visibility was restricted to about twelve miles, and check observations were only possible on to a couple of prominent hills. On completion the structure was covered with a big sheet of sacking, and one of the masons was told to come back in a week's time and take it off.

On account of the hill being a valuable grouse moor, there was no formal unveiling ceremony. The mason just went to the top of the hill and removed the sheet, as instructed, and reported that all was well. Rather a tame finish, in fact, almost an anticlimax, to what had been throughout a very interesting, though at times laborious, undertaking.

LIST OF SCOTTISH INDICATORS, ARRANGED ACCORDING
TO YEAR OF ERECTION.

- ? Stirling, The Ladies' Rock. (p).
- ? Abbey Craig. (p).
- 1900. Dundee Law. (b) 572 feet.
- 1909. Balmashanner Hill, Forfar. (b) 572 feet.
- 1910. Arthur's Seat. (b) 822 feet.
- 1911. Gleniffer Braes, Paisley. (b) 550 feet approx.
- 1912. Douglas Park, Largs. (p) 600 feet.
- 1913. Corsiehill, Perth. (p) 500 feet approx.
- 1914. Grantown-on-Spey. (p) 1,000 feet.
- 1915. Craigie Hill, Kilmarnock. (b) 507 feet.
- 1917. Brimmond Hill, Aberdeen. (b) 870 feet.
- 1922. Gormack Hill, Blairgowrie. (br) 690 feet.
- 1924. Lochnagar. (s) 3,786 feet.
- 1925. Ben Macdhui. (s) 4,296 feet.
- 1927. Ben Nevis. (s) 4,406 feet.
- Bridge of Weir Golf Course. (p) 420 feet approx.
- Eildon Hill. (b) 1,385 feet.
- 1928. Falkland Hill. (b) 1,471 feet.
- 1929. Ben Lomond. (p) 3,192 feet. Renewed. (cr) 1933.
- Blue Hill, Aberdeen. (s) 467 feet.
- Goatfell. (p) 2,866 feet.
- Tillicoultry Hill. (z) 600 feet.

1930. Ben Cleugh. (p) 2,363 feet. Renewed. (cr) 1934.
— Knock Hill, Crieff. (m) 793 feet. Renewed. (cr) 1934.
— Pulpit Hill, Oban. (s) 242 feet.
1933. Auchengillan Hill, Milngavie. (cr) 650 feet approx.
— Corstorphine Hill. (b) 602 feet.
— Dumbarton Castle. (b) 240 feet.
1934. Inverkip, Everton. (cr) 350 feet approx.
— Laggan Dam, Glen Spean. (b) 850 feet approx.
1935. Falkirk, Princes Park. (cr) 375 feet.
— Tinto Hill. (s) 2,335 feet.

Explanation: (b), bronze; (br), brass; (cr), chromium plated;
(m), metal; (p), paper; (s), stoneware; (z) zinc.