

make a contribution and who had some suitable promontory or corner separated off by obliging sheet-lines, and yet suitable for the purpose. Sometimes, even for international treatment, the conventional divisions should be ignored. Undoubtedly the American Geographical Society did a wise thing in extending the eastern edge of sheet N.E.19 (Santo Domingo-San Juan) to include the whole of Puerto Rico.

There is a moral for map-makers in all this. If dividends are important, then sales must be coaxed. It is not much good to-day offering a man something he does not want, and he is quite right to consider that sheet-lines are made for his convenience and not he for theirs. Three things are however of great importance in all this jugglery. A good system of reference independent of sheet-lines, a rectangular pattern of sheets, and good marginal and end-paper information. Perhaps margins and end-papers deserve a note or two. A fifty-year-old margin is not very helpful. It may direct you to the neighbouring market town, but if it does the name and the distance will be given extremely small. In these days the quietest of folk move much faster and farther, and the margin directs them clearly and plainly perhaps to London, or perhaps to the county town. I cannot imagine much difficulty nowadays in passing from one map to another. End-papers help in their way, for in the extremely modern map will be found on, or inside, the cover, indexes which place the map in question on other scales and on the countryside. There is such and such a town and there is the sheet-line.

Some day perhaps we shall have A and B series, the one overlapping the other by halves in each direction. Even so there will still be sufferers. Meantime we must be content with a general overlap and the special sheets.

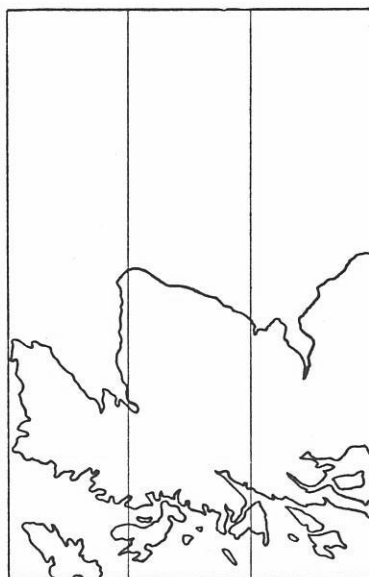
The Geographical Journal, Vol.81, no.5, May 1933, pp.438-439

THE NEW ROAD MAP OF GREAT BRITAIN

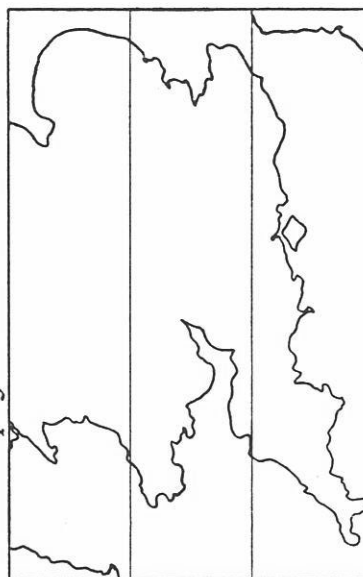
ROAD MAP OF GREAT BRITAIN (FROM JOHN O'GROAT'S TO Land's End) showing Ministry of Transport Road Numbers and Classification. *Scale: 10 miles to 1 inch. Ordnance Survey 1932. In two sheets, each 1s. flat; dissected and mounted on the Ansell folding, in covers, 6s 6d*

THIS map deserves notice for several very different reasons, not all of them suggested by the title. It is the first general map of our country to show the Road Numbers which are now painted on signposts. The map is therefore indispensable to judicious drivers, and has plenty of interest to those who are not, but like to browse on a map, and on this to speculate why the Ministry have exalted one road and degraded another. Class I roads are shown red, but in two grades, Nos. 1 to 99 heavier than the rest, and No. 1, the Great North Road, in a grade by itself. In choosing the first hundred the Ministry seem to have looked ahead to the time when the new arterial roads about London are finished, and perhaps to have classified for commercial heavy traffic rather than for private cars. The private driver may rather seek than avoid the thin purple of Class II, which are mostly, if not all, perfectly good roads and quieter than the roads in red.

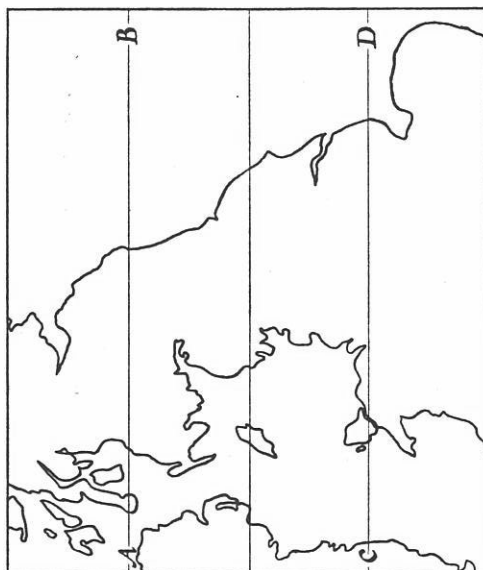
The map of Great Britain without railways, and with a light but effective brown hill shading, shows up very effectively which are the wilder parts of the country. The blue plate is a little pale; there are neither contours nor spot heights, these being among the "irrelevant detail" omitted from the "simple road map." But it is going a little far to treat as irrelevant those parts of France and Northern Ireland which come within the sheet lines. The explanatory leaflet within the back cover properly calls attention to the fully coloured layer map on the same scale which shows very much more detail, but not the road numbers; and remarks



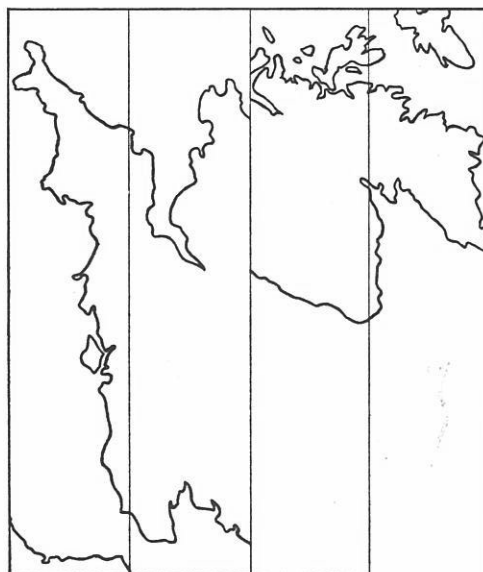
Map folded about AB.



Map folded about CD.



Front



Back

The Ansell method of mounting maps as applied to the new Road Map of Great Britain

that this map can now be obtained folded and mounted on the Ansell method, which is such a pleasant and amusing feature of the Ministry of Transport map.

The Ansell method of folding was, we believe, patented long ago and used to some extent during the war. But it is only now employed for the first time by the Ordnance Survey in a public issue. The two sheets of the map are dissected and mounted on linen as in the figure. If you want the south of England you fold over along AB, or for the north of Scotland along CD. The method is good for a single map, or what may be treated as such. For a series it is clearly not well adapted. The only serious disadvantage of the plan seems to be that it requires the expensive dissection and mounting on linen. Dissection makes it difficult to measure distances accurately, and this defeats the nicer use of the grid, which is another important feature.

The new grid appeared first on the Plymouth sheet of the new 1-inch; we see it on the road map for the first time in its full effect, and can realize a little what it may mean to us to have at last a national grid; every point in the country having definite rectangular co-ordinates in a system which covers the country and will be the same on any sheet of whatever scale. There was no particular reason why this should not have been done before, because with a system of rectangular sheet-lines, such as the Ordnance Survey have always employed, the co-ordinates of the sheet corners on the Cassini projection must always have been known, and it would have been simple to give these figures as the French 1 : 80,000 has always done for the Bonne Projection centred on the Panthéon. Instead of that the Ordnance Survey sheets have, when "squared," had the squaring system particular to each sheet, and a reference has been made to square A 6 of sheet 161 for example. To appreciate the new grid we have first to realize that the grid is continuous, with no special relation to the sheet lines, which may be anything convenient; and second, that a grid reference is a pair of rectangular co-ordinates, not an indication of a particular square. It would be sufficient, though not convenient, to have on each sheet merely the co-ordinates of one point, and a knowledge of "grid north." For convenience the map is gridded with lines at some convenient round number of yards apart; and strong differences of opinion on the proper size of this square have a little obscured the fact that the critical decision was in the choice of the unit of length, not of the multiples which should be shown by lines across the map—the visible grid.

In an afternoon discussion some years ago "On the choice of a grid for British maps," reported in the *Geographical Journal*, vol. 63, p. 491, there were arguments for the foot, the yard, and the mile as the unit of length. For horizontal distances we are accustomed to think in yards or in miles. The British standard of length is the yard; but the Ordnance Survey have always done their geodetic work in feet. It is a useful approach to some orderly use of our units that they have made the national grid in yards; but it will take some training before we think naturally of Great Britain as being about 1,100,000 yards by 600,000. Perhaps it is wrong to try, or we may forget that the grid is not adapted for measuring large distances accurately, since it is in fact only the squared paper, so to speak, upon which the projection is plotted.

The change over from the time-honoured Cassini projection to the Transverse Mercator has not, it appears, made any visible difference in the outline of the 10-mile-to-the-inch map: its benefits are more recondite, being largely in convenience of calculation, especially of bearings, in survey for artillery. In civil use its great advantage will be the invariable grid reference.