map, but, as I say, I think that time has hardly come yet. Therefore I am sure that the discussion this afternoon has done a good deal to throw light upon this subject, and we have certainly had interesting points of view placed before us in connection with it. Every one here is most grateful to the three authors of the joint paper for the time which they have given to placing it before us, and I express our gratitude to them.

The Geographical Journal, Vol.65, no.1, January 1925, p.78

The Quarter-sheets of the Six-inch O.S. Map.

THIS Society had been asked by several persons and associations to join in the protest against the withdrawal from publication of the 6-inch quarter-sheets: but after hearing the explanation of the Director-General the Council did not feel that it was a matter in which they could properly intervene. We are now informed that it has been decided to resume publication of these maps in quarter-sheets, and those counties which have been republished recently in full-sheet form will revert to quarter-sheet form on a reprint or revision, whichever occurs first. We understand that the original decision was taken entirely for reasons of economy in printing, storage, and distribution, and trust that the reversal of this policy is made possible by the liberality of the Treasury.

The Geographical Journal, Vol.65, no.2, February 1925, pp.160-162

Ordnance Survey of Scotland, "Popular" Edition. One-inch map. Sheets Nos. 90, 91, and 93. *Price* 1s. 6d. each.

Conventional Signs and Writing for the Revised One-inch Map of Great Britain (Popular Edition), 1924. Price 6d.

Index to the Popular Edition Sheets of Scotland, 1924. Price 2d.

The one-inch "popular" Ordnance Survey maps of Scotland are just beginning to appear, and are worthy of particular note because they are so happy a blend of traditional symbol and technical progress. The Scottish small-scale maps have always had their own distinctive features. For example, they have, in the past, been on Bonne's projection whilst the English were on Cassini's. The lettering too has been distinctive and more attractive. No doubt the experience of carrying a new style over England shows where change is advisable on beginning Scotland, and then again Scotland must always be a temptation to the cartographer with its special opportunities of mountain, loch, and forest. The popular edition, on reaching Scotland, is but following precedent in its introduction of modification.

Perhaps the most important divergence from tradition is in the alteration of projection. The whole of the one-inch map of Great Britain is now to be

based on the same meridian (Delamere),* and the sheets are carried forward on Cassini's projection so that there is no break at the border. The most important technical innovation is the total reliance upon heliozincography. The half-inch and the new quarter-inch are of course drawn and heliozincographed, but so far the outline of the one-inch has been engraved on copper.

The size of the sheets is to be substantially larger than that of previous editions of Scotland. Most of them will be the 27 by 18 inch to which the popular edition of England has now accustomed us, but certain sheets are to be much larger. One, for example, is to be 34 by 24 inches. Ninety-two sheets will now suffice for Scotland in place of the previous 131. We cover the ground so much faster these days that the enlargement is obviously desirable.

Each sheet includes an overlap strip of one mile on its east and south edges. This strip will therefore be found also on the sheets which lie to the east and south. There has been a persistent demand for "overlap" which has not been met in the past, principally on technical grounds. Reproduction by heliozincography must make it much easier of attainment.

It is not so long ago that the Ordnance Survey broke away from the repellingly official covers in which folded maps of the earlier editions were sold. The new one-inch of Scotland is to have an attractive cover, a little less topical than in the case of the English sheets, with the Lion in his proper shield and a border of crowns and thistles.

The beauties of the original engraved sheets are so often talked of, and the limitations of lithography so frequently deplored, that one is inclined to look anxiously for blemishes. But indeed they are hard to find in these maps. The lettering is bold but not obtrusive, and the outline too is bolder than heretofore, but both are justified because on a coloured map the outline must be bolder than on an engraved one in order to maintain its importance. On both the old large-sheet series and on the popular-edition sheets of England the names and detail are often too small—and the result is flat. Boldness may obviously be overdone. It is so sometimes, we think, in modern French maps, whilst German are inclined to retain the fineness of execution proper to an engraved map, and the flat effect of a black plate overshadowed by the other colours.

The increased size of lettering applies mainly to towns and villages. The names of "Large Towns" and "County Towns" are very much more prominent, but in general writing is better spaced out, and individual letters more rounded than on the engraved outlines. The sans-serif letters for hills and railway names and sloping lower case for minor headlands are also new, whilst parish names (and boundaries) omitted on the one-inch of England reappear. The larger-sized parish of Scotland is probably responsible for this difference.

A feature which strikes the eye at once is the blocked-in black for towns. So far it has been the custom to use a ruling ("hatching") for the centre portions of towns whilst the suburbs and scattered fringe of houses were shown in solid black. For small towns on a coloured map the solid black (throughout) is certainly preferable and maintains proper contrast with the surrounding parks and woods. It will be interesting to see the effect in Edinburgh and Glasgow.

^{*} It would appear likely that the Delamere meridian was originally chosen so as to allow of both England and Scotland appearing in the same series. Too far west to be central for England and Wales, it is just right for Great Britain.

Parks now reappear on the black plate in the form in which they were shown on the large-sheet series. It is an illogical sign, of course, for to one unacquainted with Ordnance Survey precedent it looks like a black variety of the ordinary sign for sand. But we must be illogical occasionally. For instance, the tree still appears in profile like the mountains, churches, and dolphins on a mediæval map, and yet one would hardly care to change these beautifully clear deciduous and coniferous tree signs for the circles and "crowsfeet" generally used in French cartography. Such signs as these for trees come under the general heading of "ornament" in the Ordnance Survey, and one cannot but agree that there is some justification for the word. "Rough Pasture" is naturally something of a feature on the Scottish sheets. It is pleasant to see the edges, or limits, given. In England the edges of rough pasture are left undefined.

Turning to the blue plate, we find the firm single and double lines reappearing for rivers and streams. All cartographers will welcome them back. The solid light blue stream on the one-inch of England has a wholly indecisive effect.

The contour plate too is a happy one. The "reinforced" 250-feet interval contours help the sense of relief, and the intermediate contours are firm and yet fine. The real difficulty in contouring comes of course when we have to do with gentle yet intricate folds like those of the home counties. "Reinforced" contours help but little there. Either a small vertical interval or some additional shading or hachuring is wanted. In Scotland, however, the 50-feet contours, drawn as they are, should be an admirable guide.

The road classification and colouring remains as before. Some of us will regret it. Few airmen would use a half-inch map, and equally few motorists a one-inch. It seems a pity, then, that these bright red roads should remain to sink the rest of the map into comparative insignificance. It seems to us that one map, and that the one-inch, should aim first and foremost at portraying the country generally and its physical features in particular. Neither the soldier nor the civilian will study the one-inch for his motor routes, but both will desire to follow on it the accidents of the ground.

Many of the alterations which have been mentioned have been made possible by the new fair drawing for heliozincography. Without redrawing it would, for example, have been very difficult and costly to rewrite so many names. Some of these names have, by the way, been stamped, and it would be interesting to know how many users of the map can distinguish between the stamped and the written names.

We think that the Ordnance Survey is much to be congratulated on this new model, and prophesy that it will be still more "popular" than the last edition of England and Wales.

H. S. L. W.

The Geographical Journal, Vol.65, no.5, May 1925, p.464

The New 1-inch Ordnance Map of England.

In the notice of the recently issued sheets of this map, printed in the February number of the *Journal*, the price of each sheet was given as 1s. 6d., this having been marked on the copies sent to us. The Director of the Survey informs us that this was a mistake, as it has been found necessary to fix the price at 2s., by reason both of the larger size of the sheets and the smaller edition printed.