

ORDNANCE SURVEY.

INSTRUCTIONS

TO

FIELD EXAMINERS.

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1905.

P R E F A C E.

THE following Instructions are issued for the guidance of Examiners.

They have been compiled by Major J. C. Macpherson, R.E. Many were taken from those he wrote ten years ago, in preparing which he had the assistance of Sergeant T. Barry, R.E. Many have been added from recent Southampton Circulars. Some are taken from the Book of Captain Reynolds, R.E. (1881); some from that of Company Sergeant-Major Delamotte, R.E. (1884); and the compiler has throughout availed himself of the great experience of his Division-Sergeant, Company Sergeant-Major Bucklow, R.E., a thorough practical Examiner.

In issuing these Instructions as a text book for the guidance of Divisions of the Ordnance Survey, the Director-General, while approving them as a whole, considers it desirable that Division officers should act upon their own discretion in some of the minor details.

RICHD. H. STOTHERD,
Colonel, Royal Engineers,
Director-General.

Ordnance Survey Office,
Southampton,
3rd December, 1884.

REVISED TO JANUARY, 1905, BY CAPTAIN S. F. WILLIAMS,
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The Instructions generally apply to Revision, but a Supplement has been added dealing with points in which the practice on Revision differs from that of the original Survey.

DUNCAN A. JOHNSTON,
Director-General.

Ordnance Survey Office,
Southampton,
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SECTION I.

INSTRUCTIONS FOR EXAMINERS $\frac{1}{2500}$ SCALE.

These instructions do not profess to teach a man how to examine. That is best done by a course of surveying, plotting, and tracing, and by practical instruction under a trained Examiner on the ground.

The object of the instructions is to draw attention to points that are apt to be overlooked by Examiners, and to lay down rules on doubtful points of detail where there is apt to be an unnecessary variety of practice in the examination.

I.—GENERAL RULES.

1. The traces issued to Examiners are about 2 ft. long by about 1 ft. 8 inches wide; they contain, when complete, 160 acres within the trace-edge lines. The trace-edge lines are never to be altered by an Examiner. Trig stations are traced in blue, and the surveyors' main lines are shown in pencil on the traces, for the assistance of the Examiner. Doubtful detail is encircled in pencil by the tracer, and the Examiner's attention is drawn to it by the letters E.A. in pencil. Examination traces,

2. Special attention is required to the accuracy of the examination near trace-edges. To aid the Examiner, the tracer shows detail, such as fence junctions outside the trace-edge, if within 4 or 5 chains of it. A block of buildings or a farmsteading, when cut in two by a trace-edge, is traced and examined as a whole on one trace; and the Examiner of the work on the adjoining trace writes at this point "Examined on common trace." Testing trace-edges.

3. Should an Examiner on taking up a trace find that there is much bad or loose work on it, or that important detail is entirely out of position, he is not to attempt to correct it, but will bring it to the notice of his superintendent; who will send the trace to the office to have the plotting tested, encircling the doubtful portion in pencil. Occasional and minor corrections are tested in the office when the traces are sent in completed. Large errors to be reported, and tested in office.

Method of
indicating
corrections.

4. Examiner's corrections are made as follows:—

All detail traced in black, as fences, is corrected in red outline :

Outline of water, traced in blue, is also corrected in red :

Outline of buildings, traced in red, is corrected in black outline :

Omissions of fences or water are supplied by the Examiner in red outline ; omissions of houses, in black :

The work of the final Examiner on the trace is all in green, but as green colour does not indicate the nature of the buildings, the final Examiner should write "Brick," "Wood," &c., to buildings where necessary :

The work of the re-examination should be in blue.

Improve-
ments to be
shown.

5. All alterations in the detail on the ground made by the public between the survey and the examination of the work are shown by the Examiner, and marked on the trace as "Improvements."

Colouring
to be
limited and
narrow.

6. Colourings with the brush will be on the back of the traces. It is only allowed in the following cases:—

Band of green, round parks or large ornamental grounds :

Band of blue, round ponds, lakes, or on double streams and rivers :

Dotted yellow bands, round district names, hill and valley features, mud or sand :

Dotted neutral tint bands round "land liable to floods."

All such bands of colour are to be as narrow as possible, and the shade light.

Corrections
to be clear
and dis-
tinct.

7. It is essential that all corrections or additions by the Examiner should be clearly distinguishable on the trace, so that the draftsman can readily transfer them to his plan. The ink used must therefore be strong, the wrong work must be crossed out neatly and distinctly, and no line or mark must be used which has not a distinct meaning.

Undue
ornament.

8. Undue ornament on traces is to be avoided. A neat and correct trace which the draftsman can understand is much better than a more ornamental one which he cannot. Unnecessary flourishes only obscure the detail. At the same time the Examiner should endeavour to become a neat draftsman and writer.

9. If the Examiner in very close detail, such as the out-houses in a village, cannot make his corrections clearly on the trace, he is to use the margins for sketches as an aid to the draftsman. The corrections will at the same time be made to scale in position on the traces; the sketches need not be to scale. Such sketches are not to be made on the body of the trace: reference numbers may be used to show the point they refer to

Sketches on margins.

10. In close detail, such as villages, the Examiner will also use the margins for pencil sketches, to aid his memory when penning in. Should, however, any doubt still remain in such cases, the ground must be re-visited. Before leaving very close work, the Examiner should always look over his trace to see that nothing has been omitted.

10A. In the case of small gardens, enclosures, and yards which frequently surround adjoining farmsteads, the Examiner should brace them to that enclosure to which they rightly belong as an assistance to the computer.

11. Trivial and unnecessary alterations of fences are not to be made by Examiners. Some Examiners think it advisable to touch up every fence with red marks, which the draftsman cannot transfer. They get no credit for such work.

Avoid trivial alterations.

12. The last rule, however, is not to be extended to such work as straightening fences which are really straight but have been plotted with a slight bend, or rounding curves, or squaring up buildings, or showing symmetrical objects properly. In such cases corrections, however small, are to be made, as even a slight deviation in the form of the object offends the eye.

Symmetrical objects.

13. To straight or regular sided features it is often useful to the draftsman that the Examiner should write the words "straight," "circular," "octagon," &c.

Corrections explained in writing.

14. When an object on a trace is not clear, or does not explain itself, its descriptive name is to be written.

15. As soon as possible after the work on adjoining traces has been examined, the respective Examiners arrange with each other to have the common trace-edges compared and assimilated; and they initial their trace-edges to show that this has been done. For trace-edges common to the work of two sections, see para. 214.

Assimilating of common trace-edges.

16. Erasures on the traces are entirely forbidden. If a name has to be altered, it is to be crossed out like wrong detail, and the name written as altered.

Erasures forbidden

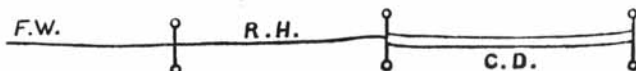
II.—BOUNDARIES.

(Pars. 17 to 21 give the procedure followed generally in the original $\frac{1}{2500}$ scale Survey of Great Britain.)

For Revision, see para. 254 Addendum.

Boundaries shown from office. 17. If the boundary documents have been received in the Division in time, the boundaries will be shown on the traces in the office.

Boundaries surveyed. 18. When boundaries have been surveyed, the initials will be shown in ink along the surveyed features, thus :

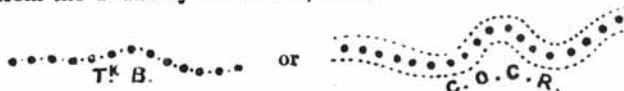


and the Examiner will see that they correspond with the ground both as to detail and the distances between the symbols. Should there be an error, either in the character of the detail or the distance, the Examiner will correct it. The Superintendent will see that this is done before sending the trace to the office.

Boundary stones, &c. 19. Boundary stones (B.S.), posts (B.P.), trees or other objects, will be inserted in pencil from the B.R. books in the office, and will be verified by the Examiner as to their position with regard both to each other and to the surrounding detail.

Names of objects on line of boundary. 20. The names of all objects which are shown on the line of boundary on the sketch maps, B.R. books, and reports, will be entered in pencil in position on the traces in the office. If the Examiner finds them correct he will pen them in and describe them. If the names are not known, he will cross them out and write "Not known."

Supplying boundaries not surveyed. 21. When boundaries have not been surveyed, they will be placed as nearly as possible in position in pencil on the traces from the boundary documents, thus :



and the Examiner's attention will be drawn to them by remarks on the margin of the trace.

If they agree with the ground he will pen them in, and enter the note "Attended to," with his initials, opposite the marginal remark.

If they do not agree with the ground he will correct them so as to be in accordance with it.

If the feature is not on the ground at all he will state so.

22. On foreshores the boundaries of parishes, &c., in England and Wales, are carried down to low-water mark of ordinary tides. In Scotland they extend to low-water mark of ordinary spring tides. In Ireland they extend to high-water mark of ordinary tides. Boundaries on foreshore.

23. When a boundary follows the centre of a tidal river, the Examiner shows the points to which high and low water of ordinary tides (in Scotland, ordinary spring tides) respectively flow, and the boundary between these points is described as C.C. at L.W. (Centre of Channel at Low Water). Boundaries in tidal rivers.

24. In the case of islands the name of the parish is written in brackets under the name of the island. Islands.

25. The symbol \int denotes the point at which a boundary changes its character, or crosses from one side of a fence to another. Change of boundary.

III.—REPRESENTATION OF DETAIL.

(1.) Fences.

26. Fences are a most important detail in the survey. Proved neglect to examine a fence is a grave offence, usually punished by loss of pay. Neglect in examining.

27. Temporary fences are not shown. Examiners must use discretion on this point. For instance, a hurdle fence whose position inside an enclosed field is moved every few days is certainly not shown, but a post and rail fence is often permanent and is shown. In all doubtful cases timber or iron fences are shown. Temporary fences.

28. Wooden or iron fences protecting a young quickset hedge are not shown. Protecting fences.

29. Ring fences protecting young single trees in parks, &c., are not shown.

30. Any fence dividing two areas under different kinds of cultivation is shown. Old banks should be shown if they appear as marked features on the ground, even if they do not form effective fences. Baulks are shown by dotted lines. Dividing cultivation.

31. For fences along railways, see para. 115.

32. For fences along streams and water, see para. 134.

33. To double fences the initials *d.f.* are written. Ragged hedges with brushwood on one or both sides are not to be Along railways.
Along streams.
Double fences.

shown as double fences ; the quickset fence only is to be shown by a single line along its centre. If the adjoining brushwood is of sufficient area, it may be shown in character inside dotted lines along the fence.

Gates.

34. Gates are shown as fences.

When they have been surveyed and plotted as gaps for the assistance of the Examiner, the latter will fill in the gaps.

(2.) *Buildings.*

Checking outer lines.

35. When examining a block of buildings on a farmstead- ing, the Examiner first checks the outer lines, noting whether they are square or otherwise. The interior details are then much more easily and accurately attended to.

Projections drawn to scale.

36. Small projections under 5 links in buildings should not be shown. Other projections should be carefully drawn to scale.

Symmetrical buildings.

37. Large modern mansions, hospitals, asylums, &c., are often built on a symmetrical plan, *i.e.*, with equal wings, parallel lines, &c. Examiners should be careful to show them symmetrical, if they are so on the ground. *See* para. 12.

Divisions between houses.

38. Divisions are shown between contiguous houses occupied by different families, and between parts of a building of different character ; for instance, between a dwelling-house and an outbuilding with a separate outside door.

39. Divisions between contiguous small outhouses, such as those in villages, are not shown ; but well-marked divisions between the different parts of farm-buildings are.

Open buildings shown by dotted lines.

40. Open buildings or sheds and the open sides of verandahs are shown by dotted lines ; but if a building has any walls, even if only a foot high (the upper part being open), continuous lines are used.

Etching of different buildings.

41. The general rule is that masonry buildings are etched in red, and wooden ones in black. There are, however, numerous doubtful cases, and on no point is there more variety among Examiners than on this. The following conventional rule is therefore to be followed :

If a building has three sides of masonry, it is shown in red ; if three sides of wood, it is shown in black.

If it has two sides of masonry and two of wood, it is etched in red if it has a slate or tile roof, in black if it has a wooden or thatch roof.

When the walls are partly of masonry, partly of wood, the masonry is to have the preference.

Mud or wattle and daub buildings are treated like those of wood.

42. Iron buildings are etched in black ; verandahs of wood or iron attached to houses are also etched in black.

43. Conservatories are shown by blue cross etching.

44. Small projecting roofs supported by corbels are not shown ; but when they are large as in connexion with a railway station, they are shown and etched in black, their open outline being drawn in dotted lines. Projecting roofs

45. Care is to be taken when etching buildings not to obscure the outline. If necessary the outline should be penned over again, but the practice of penning the outline of all the houses in a village in black, without altering the lines, is to be avoided, as giving unnecessary trouble to the draftsman. Etching not to obscure outline.

46. Public buildings in a village or town, such as churches, chapels, schools, and inns, are to be cross-hatched in red on the traces, to enable them to be more easily identified by the typer of names on the plans. Public buildings.

47. Archways and passages are shown thus,



the Archways and passages.

etching being continued over them. Small archways over footways are shown only by the division lines, the etching being continued over them.

48. Works of a distinctly temporary nature, or temporary buildings erected for the accommodation of workmen employed on new works such as railways, are not shown. Temporary works or buildings.

49. No detail within the enclosure walls of public gaols is allowed to be shown. Gaols.

50. For paths near buildings, see paras. 80 and 81. Paths.

51. For omission of trees near buildings, see para. 77. Trees.

(3.) *Cultivation and Description of Enclosures, &c.*

52. The following are the principal contractions used on the traces in describing the cultivation or appropriation of areas :— Contractions for cultivation

A. Arable.	P. Pasture.
R.P. Rough pasture.	H.P. Heathy Pasture.
V.G. Vegetable garden.	O.G. Ornamental ground.

For a large number of minor descriptive terms and contractions, used in describing enclosures, see under Names, paras. 203 to 206.

- Arable or pasture. 53. Land temporarily in pasture under a rotation system of agriculture is not shown as P., but as A.; P. is only applicable to permanent pasture.
- Divisions within enclosure by dotted lines. 53A. Arable and permanent pasture land in the same enclosure should be divided by a dotted line.
54. Arable or pasture land in the same enclosure with R.P., H.P., or marsh, is to be divided from them, if of sufficient area, by dotted lines, as they are then computed separately; but R.P., H.P., or marsh in the same enclosure are only divided from each other by pencil lines. If, however, the marsh is so large and distinct in character from R.P., &c., that it ought to be computed separately, then dotted lines are required.
- Commons to be named and described. 55. Commons have their names written and described, and it is to be stated if the public have grazing or other rights over them, or if they are the exclusive property of the lords of the manor.

(4.) *Trees, Woods, and Orchards.*

- Trees, shrubs, &c. 56. Trees in hedgerows will not be shown.
Single trees, shrubs, and bushes will not be shown, but single trees forming landmarks or of general interest, single trees in public gardens and parks, and in private parks, avenues of trees, clumps of trees, orchards, large shrubberies, woods and forests, will be shown.
Commons and parks are to be treated alike.
Small shrubberies in gardens will not be shown.
Single trees shown as being landmarks should be surveyed and shown accurately in position.
- Single trees. 57. Single trees are to be penned in neatly, and without flourishes. The root must always be clearly shown.
Young and old trees are shown of the same size on the $\frac{1}{1600}$ scale.
- Gaps between groups. 58. When single trees in avenues are so close to each other that they cannot be separately identified on the ground, they are not all shown in position. Gaps between groups of trees, however, must be correctly shown.
59. Trees will not be shown in nurseries.
- Thorns or bushes. 60. Single thorns or bushes are not shown unless they are connected with boundaries, or are objects of interest.
- Clumps of trees. 61. Unfenced clumps of trees *with underwood* are always defined by dots, being computed as wood.

62. Unfenced clumps of trees in arable land, although without underwood, are, for the same reason, defined by dots.

63. But unfenced clumps of trees in parks or pasture land, or unfenced margins of trees round parks or pasture fields, are not, if without underwood, to be defined by dots, as they are computed with the park or pasture field. If the surveyor has shown their outline by dots, the Examiner will cancel the dots.

63A. Wood and underwood should be divided by dotted lines (if no fence or bank exists) where the line of division is clear, so that separate areas can be given.

"It is most important that underwood and timber should be kept apart, as they are assessed differently for income tax, succession duty, poor rates, highway rates, &c."

64. When trees in clumps are so close to each other that they cannot be separately identified on the ground, they are not all to be shown in position; and the words "trees sketched" will be written on trace.

65. Although the character of woods need not be minutely shown, yet their general character should be truthfully shown. For instance, a fir wood should not be described as "mixed" wood because it has a few forest trees on its margin; nor a large wood of forest trees be shown as "mixed" because it has a small clump of firs in one corner. In such cases the general character of the wood will be written, and a few of the special trees will be sketched approximately where they occur on the ground. Character of woods to be shown.

66. Similarly when a strip of wood on the margin of a heath or common is dense at the outer edge but dies away to nothing towards the heath, it is to be shown accordingly, and not of equal closeness throughout.

67. The whole area of large woods is not penned in in character, but the margin only. Inside the margin a general description, such as "forest close," "fir medium," "mixed open," is to be written. Margins only of large woods to be penned in.

67A. Where the divisions of a large wood are known by different names, and the boundaries can be ascertained, they should be shown, so that separate areas can be given.

68. Clearings in woods, if permanent, such as for shooting purposes or grass drives, are shown by dotted lines. Temporary clearings are not shown. Clearings.

69. Private paths in woods, such as those for the convenience of gamekeepers, are not shown. Paths.

70. Extensive shooting rides in woods should be shown, but not mere private paths. Shooting rides.

Cart tracks. Temporary cart tracks should not be shown.

Orchards. 71. Orchard trees are penned in like forest trees, but of much smaller size. They are not shown in position. If the orchard is large and the trees are in rows, the rows on the outside only are approximately penned in, and "orch." is written inside. If the trees are not in rows, they are shown approximately like those on the ground.

(5.) *Parks and Ornamental Grounds.*

Parks. 72. Parks and ornamental grounds are, when large enough, defined by a narrow band of green; when they are small, the letters O.G. are written to them. Narrow grass plots in front of cottages are not shown at all.

Shrubberies. 73. Large shrubberies (laurels, rhododendrons, &c.) near lawns are, if unfenced, to be defined by dots; but as they are included in the ornamental ground the green band should include them, or if there is no green band they are braced to the other ornamental ground. This is especially necessary if, as often happens, large forest trees are grown in the shrubbery, which is then very apt to be mistaken for, and computed as wood. The word "shrubby" should also be written. No small shrubberies in gardens should be shown, and the practice of inserting them is particularly objectionable in towns or groups of houses.

Flower beds. 74. As a rule, flower beds on lawns are not shown. The exception is in large ornamental gardens or terraces, such as those belonging to "show" country houses, or those in large public gardens. In these the principal paths and the larger flower-beds are shown; and as they are generally laid out in symmetrical figures, they have to be shown carefully.

Cemeteries, &c. 75. Cemeteries, grave yards, grass orchards, village greens, and drying greens are not shown as ornamental grounds.

Unfenced clumps of trees. 76. For unfenced clumps of trees in parks with underwood, see para. 61; for the same without underwood see para. 63.

Trees near houses. 77. Trees near houses should not be shown.

(6.) *Gardens and Nurseries.*

Vegetable gardens. 78. Vegetable gardens have the letters v.g. written to them.

Market gardens and allotments. 79. Market gardens, and allotment gardens or allotments, have the words written to them. The gardens described in this and last para. include those occupied solely by the smaller fruit bushes, such as gooseberry, raspberry, &c., as well as those occupied by vegetables.

80. The *principal* paths in large gardens, and in market Paths and allotment gardens, are shown, and those only.

81. No foot-paths should be shown in private gardens and yards, except the principal ones in very large gardens.

82. Orchard trees in vegetable gardens are penned in in the Trees same way as in orchards. See para. 71.

83. The young trees in nurseries are penned in small. Only the outer trees are penned in, the word "nursery" being written inside. Only roads are shown in nurseries. Paths are not shown.

84. For ornamental gardens, see para. 74.

(7.) Roads and Foot-paths.

85. The Examiner should state on the tracing the classification of roads, &c., under the following headings, viz.:— Classing of roads.

First Class Roads, viz.: Main roads, generally leading from town to town, metalled and kept in good repair, and with a minimum width of metalled roadway, exclusive of edges and footway, of 14 feet.

Second Class Roads, viz.: Metalled roads in good repair, fit for fast traffic at all seasons, i.e., it should be possible to drive carriages and light carts over them at a trot. This class will, as a rule, include roads between villages, or between villages and towns, or between one first class road and another, and approaches to railway stations.

Carriage Drives, Second Class, viz.: Carriage drives, up to the standard of second class roads.

Public Roads, Metalled, viz.: Those other than first and second class.

Carriage Drives, Metalled, viz.: Those not up to second class.

Occupation Roads, Metalled.

Public Roads, Mud.

Occupation Roads, Mud.

Cart Tracks.

Bridle Roads.

Footpaths.

Roads should be classified according to their general character, and not with reference to their best or worst portions ;

but no road should be shown as second class unless throughout the part so shown it is fit for fast wheeled traffic at all seasons.

One-inch revisers deal with a larger area of country at a time than large-scale surveyors and revisers, and are more likely to arrive at a uniform classification. Hence, on the large scale, Examiners should, if possible, follow the one-inch classification. Should the latter in any case be found seriously and clearly wrong, the Examiner should report the fact in writing.

Side walks. 86. Side walks in towns and villages should not be shown unless the road from fence to fence is at least 50 links wide.

Grass edges. 87. Grass edges along roads are shown only if they are 15 links wide or upwards.

This rule only means that in narrow roads small grass edges are not shown; it does not mean that a wide grass edge along a road is stopped abruptly if it happens to come down to a width of 15 links. In such cases the Examiner must use discretion, and either run the dotted line defining the edge into the fence at the first convenient point, or if the portion under 15 links in width is short, the dots may be continued until the edge widens again.

Rough pasture, &c. 88. The symbols for rough pasture, furze, or brushwood are not to be shown along grass edges of the ordinary size, and only when they widen to about a chain or upwards, as in a small common.

Slopes. 89. The slopes of hollow and raised roads are carefully shown.

Mile stones or posts. 90. The distances recorded on mile stones or mile posts along roads are given on the trace by the Examiner in full; if they have become obliterated, the word "defaced" will be written, when one of a series is defaced, but if the distances are known they should be given to complete the series.

Guide posts. 91. Guide posts are shown, but not the names written on them.

Occupation roads. 92. Occupation roads are shown, whether made or unmade. This term includes roads leading from a public road to a farm or inhabited house, and roads over which there is a private right of way from a public road, through one or more fields, to other fields which have a different owner or occupier. They are more or less of a permanent character.

Cart-tracks 93. Temporary cart-tracks, such as those leading from a farm-stead to outlying fields or sheds on the farm, are not shown. For cart-tracks in woods, see para. 70.

94. Grass and mud roads have the words written to them. Grass roads
 These terms include public roads wide enough for wheeled traffic, but unmade. They are generally, but not always, fenced. The dots for cart-tracks, bridle roads, or foot-paths, are not to be shown inside a grass road, whether fenced or unfenced.

95. Bridle roads are shown to scale, and the words (or contraction B.R.) are written to them. Bridle roads. They are sometimes the width of the cart-tracks, sometimes only of foot-paths.

96. Except as specified below, all clearly marked and permanent footpaths (*i.e.*, gravelled, paved, or with gates or stiles), whether public or private, should be shown. Foot-paths.

The Ordnance Survey does not concern itself with rights of way, and Survey employes are not to enquire into them.

All gravelled and paved paths in public parks, gardens, and recreation grounds should be shown.

The principal paths in market and allotment gardens, and those only, should be shown.

No footpaths should be shown in private gardens or yards, except the principal ones in very large gardens.

Mere convenience footpaths for the use of a household, cottage, or farm; or for the temporary use of workmen, should not be shown; but paths leading to any well-defined object of use or interest, as to a public well, should be shown.

N.B.—A clearly marked track on the ground is not in itself sufficient to justify showing a path, unless it is in obvious use by the public.

Extensive shooting rides in woods should be shown, but not mere private paths.

Temporary cart tracks should not be shown.

Except in gardens, or where the omission is not likely to mislead, the initials F.P. should be inserted to foot-paths, with the object of avoiding the chance of their being mistaken on the plans for roads traversable by horses or wheeled traffic.

97. When occupation roads or cart-tracks are fenced on one side only, or are within 10 links of a fence, their outer line of dots only is shown; but when foot-paths run close to and parallel to a fence, both lines of dots are shown to distinguish them from roads. Roads or tracks fenced on one side only.

98. When a bridge with a proper name is kept in repair by the county, it is so stated in the name sheet, and (County bridges. is written below the name on the trace.

(8.) *Railways.*

- Rails.** 99. The grass edges along the flat part of a railway are surveyed and plotted; the Examiner has to examine them and supply the rails.
- Single lines.** 100. On single lines the flat space for the rails is often wide enough for two lines, and the exact position of the one line laid down has to be carefully shown.
- Straight portions.** 101. In the open parts of a railway, where it is straight from trace-edge to trace-edge, the rails need not be penned in throughout the trace. They are only shown in position where they enter and leave the trace, and at such points as bridges.
102. When a line runs straight through several traces or plans, it should be so stated on the trace, as "straight from *a* on this trace to *b* on Trace 4 of Plan 15."
- Curves.** 103. When a curve runs into straight, or vice versâ, the words "curve ends" or "curve begins" are written.
- Curve changes.** 104. When a curve changes, the position of the rails should be given at the point of alteration, and in all curves the rails should also be indicated about midway in each sweep, so that the draftsman may have sufficient data for fixing the radius.
- Switches.** 105. Switches (Sw.) are shown to aid the draftsman.
- Level crossings.** 106. Level-crossings have the words written to them; and gates at level-crossings are shown shut across the road, not across the railway, when a public road crosses the latter.
- Mile-posts.** 107. Names and distances are not to be written to mile-stones or mile-posts on canals and railways. The initials M.S. or M.P. only are to be written.
- Signal-posts and boxes.** 108. Signal-posts (S.P.) and signal-boxes (S.B.) are shown.
109. Surfacemen's huts, if substantially built, are shown along the line.
- Telegraph lines.** 110. Telegraph lines are not shown.
111. Minor details, such as R.P. or furze or temporary vegetable gardens, are not shown on the open spaces or slopes of the line.
- Tunnels.** 112. Tunnels are shown by dotted lines, and if they have a distinctive proper name it is written and described.
- Viaducts.** 113. Viaducts have the word written to them; if they have a distinctive proper name it is written and described.

114. The numbers of railway bridges, if any, are not given by the Examiner. Bridges.

115. When a railway is bounded both by a quickset hedge and a wooden paling, the Examiner is to ascertain if the paling is the real boundary of the railway property. If it is, the quickset and the paling are both shown; but if the paling is only a temporary protection to the quickset hedge, the latter only is shown. Boundary of railway.

116. Tramways are shown on the traces similarly to railways, but with the word "tramway" written. If the gauge is very narrow, it is stated in words. Tramways.

(9.) *Slopes, Pits, Rocks, Quarries, and Boulders*

117. Slopes are etched in neutral tint on the traces. Their top and bottom are not shown by dotted lines, but the penning in should show clearly which is the top and which the bottom, and the horizontal width covered by the slope should be strictly to scale. Etching of slopes.

118. Natural slopes are, as a rule, not shown unless the earth breaks away and the vegetation has no hold. Exceptions may sometimes be made in the case of high, steep, and well-defined grass slopes along the sea-coast or above a stream or river. Natural slopes.

119. The ordinary banks of streams and rivers are not shown as slopes.

120. The following artificial slopes, if large enough, are shown: Railway and road and canal cuttings and embankments; slopes of reservoir embankments; raised embankments along rivers to retain water in flood; ancient camps, entrenchments, dykes, or tumuli; ornamental slopes in very large gardens, pleasure grounds, or parks. Artificial slopes.

121. The slopes of clay pits are shown by the ordinary slope etching, and the words "clay pit" are written. Clay pits.

122. The slopes of sand pits, sand heaps, or of loose refuse heaps in mining districts are shown by heavy dots at the top, gradually thinning off to the bottom. To sand pits the words are written. Gravel pits are similarly shown, and the words are written. Sand pits &c.

123. But when the slopes in sand or gravel pits become old and grass grown from disuse, they are undistinguishable from other artificial slopes, and are etched accordingly, the words "old sand pit" or "old gravel pit" being written; these words need only be written to large pits. Old sand pits.

- Detail on slopes.** 124. Detail, such as wood, is to be penned in lightly on slopes, so as not to obscure them. Minor detail, as furze, R.P., &c., on slopes, is omitted altogether.
125. Unless they represent an antiquity, slopes in cultivated land are not shown if they can be ploughed over.
- Cliffs and stone quarries.** 126. Rocky scarps or cliffs, and the faces of stone quarries, are shown in the rock character. In mountainous country, where such features are numerous, cliffs should only be shown if over 50 feet high.
127. If the face is not perpendicular, the rock etching covers the horizontal width of the rock slope to scale; but many rock faces are nearly or quite perpendicular, and strictly speaking should be represented by a line. In such cases the Examiner, if it will not interfere with other detail, exaggerates a little, and indicates by a slight rock etching that the feature is not a fence, but a rock cutting.
- Description of quarry.** 128. The nature of the stone in a quarry is not given, unless it is an ore, as "ironstone quarry," "manganese quarry."
- Old quarry.** 129. To large exhausted and disused quarries "old quarry" is written.
- Boulder stones.** 130. Large boulder stones, either single or in groups, must be shown wherever they are isolated or conspicuous objects. The Examiner should represent them as near as he can in position and shape, writing the word "boulder" or "boulders" against them on the trace. This rule would not apply to rocks or stone blocks which have fallen from neighbouring cliffs, and are strewn about in any quantity.

(10.) *Water.*

- Edges of water.** 131. The unfenced edges of rivers, canals, or ponds, and narrow streams, represented by a single line, are shown on the traces by dark blue lines, not black.
- Streams.** 132. Streams 10 links and upwards in width are shown by double lines.
- Ditches.** 133. All permanent ditches in open fields are shown. Small agricultural drains in pasture land are not. Small catch drains along the line in railway cuttings are not.
- Fences along water** 134. When a fence runs along the side of a double-line stream, river, or pond, it is to have the preference, and is traced in black, not blue. If the Examiner finds that this

has not been done, he writes the word "fence" or the letter F. to the feature. This is important as affecting areas. If the interval between the fence and the water exceeds 10 links, both the black and blue lines are shown, but the width may vary in wet and dry seasons. If single streams and fences running alongside each other are not clearly or correctly shown on trace, the Examiner will write "S" and "F" to them respectively, and if the stream crosses the fence the point of crossing will be clearly shown.

135. In flat districts there is frequently, in wet seasons, water in the shallow narrow grips or ditches along hedges and banks. If the water is stagnant throughout, these ditches are not shown unless they are wide enough to require two lines; but care must be taken to ascertain whether they are stagnant parts of a running stream, in which case they would be shown

Stagnant
water.

136. All running streams are shown, and they can generally be traced to a source, which may be a pool, marsh, or well appearing on the plan, or the outlet of an agricultural drain. In the latter case the word "Issues" is written. Examiners are apt to omit parts of running streams where they run along hedges or in woods. The final Examiner should see that their course is complete through all the traces. On the ground it is generally indicated by a hollow, and the old one-inch map is usually very correct in showing streams. The direction of flow is indicated by an arrow on each trace.

Running
streams.

137. When a stream scatters on a sandy beach or in a marsh, the word "spreads" is written; if it disappears underground, the word "sinks" is written.

Spreading
or sinking
streams.

138. Marshes or bogs are shown in character on the traces.

Marshes or
bogs.

139. Reservoirs, mill ponds, and other portions of deep water often have reeds growing up through them, or parts of them. These must be shown like other deep water, with the reeds added.

Reeds.

140. In tideless rivers, an arrow should be inserted to show direction of flow; and the highest edge of the bed, where the line of vegetation ends and the water bed, mud, or shingle begins, is, as a rule, shown as the true margin of the river. But if the river wanders over a large shallow bed, the greater part of which is dry most of the year, the ordinary channel is to be shown in blue as well as the line before indicated, and if possible it should be surveyed when at its normal level.

Tideless
rivers.

141. Similarly in lakes, ponds, or reservoirs, the outline shown should, if possible, be that of the average level. Examiners often unnecessarily alter the surveyed lines of

Lakes,
ponds, &c.

water features merely because they see them at a more dry or wet season of the year. When the Examiner finds it necessary to alter or supply the outline of a lake or reservoir, he must take care that the line he shows is on the same level throughout.

- Land liable to floods.** 142. Land liable to floods is defined on the trace by a dotted band of neutral tint, and the words are written centrally. No streak or wavy lines are shown inside the dotted band.
- Canal locks, tunnels, bridges.** 143. The character for a canal lock should, if there is room, show in which direction the fall is. Canal tunnels are shown dotted. Aqueducts have the word written to them; if they have distinctive names they are described. The numbers of canal bridges, if any, are not given by the Examiners. Draw-bridges and swing-bridges have the words written to them.
- Fords and ferries.** 144. Fords, when over 10 links in width, and ferries, are shown by dotted lines across the stream, and the words are written. If they have special names, they are described.
- Weirs.** 145. Weirs are shown in character (sloping masonry shown in black lines with the slope shaded in blue as for water), and the word is written. When they are perpendicular they are shown by one line across the stream, and in this case are not to be called "Waterfalls," the latter term being only applicable to natural features. Sluices are shown, and the word is written. The number of sluices should also be stated, but this will not affect the MS. plan.
- Mineral wells.** 146. Inquiry is to be made by the Examiners whether there are any spa or medicinal wells in the neighbourhood. If so, they are noted on the traces, with the word, such as "chalybeate," "saline," "sulphur," "bromine," or "mineral," &c., which indicates their character.
- Wells, pumps, or springs.** 147. Care is to be taken to show wells or springs at farms or cottages, as they indicate the water supply. Natural springs should not be shown as wells, and artificial wells should not be called springs. Public pumps and water taps are shown—*i.e.*, those that discharge in roads, streets, or other public situations, but not those in back yards or private enclosures. Fountains are shown.

(11.) *Sea Coast.*

- H.W.M. and L.W.M.** 148. The lines of high and low water mark shown on the plans of England, Wales, and Ireland, are those of ordinary tides, that is, of tides half-way between a spring and a neap, and should be generally taken at the fourth tide before new and full moon. *

* And before first and third quarters, if exact tides to be used, worked out in accordance with Circular on Tidal Lines, Survey of, dated 21st July, 1906, cannot be supplied from the Division Office.

The lines of high and low water mark for Scotland are those of ordinary *spring* tides. These generally occur the third or fourth tide after new or full moon; but the tides at or near the Equinoxes are higher and should not be taken. †

149. On long flat foreshores the lines of high and low water mark are generally surveyed and plotted, and are shown on the traces in blue lines. The Examiner will check and if necessary correct them, and will write high (or low) water mark of ordinary tides along the lines. But if the foreshore has sandbanks, or difficulties which would make the survey expensive, or if it is steep and rocky with only small sandy bays, the low water mark will often be supplied by the Examiners; and as the area of foreshore is now included in that of the adjoining parish, it is important that it should be correctly shown. If the foreshore is supplied in the office from Admiralty Charts, the Examiners will be instructed whether they are to examine it or not.

150. In tidal rivers the Examiners will determine and show Tidal the highest points to which ordinary tides flow at high and rivers. low water respectively.

151. Coast cliffs are shown like inland cliffs. See para. 126. Coast cliffs.

152. In flat or sloping coast rocks the etching should, if Rocks. possible indicate whether the strata are inclined to the horizon or not.

153. Underground passages or arches under coast rocks are Caves or shown like tunnels by dotted lines. The entrance to caves is arches shown under.

154. Steep slopes are shown on the coast. See para. 118. Slopes.

155. Boulders, shingle, sand, mud, saltings, on the coast Boulders, have the words written to them. &c.

156. Sandhills are shown in character, and the word is Sandhills. written.

IV.—ANTIQUITIES.

157. Notes and extracts from county and other histories on the subject of antiquities will be sent from the office to Superintendents of Examiners, who will ascertain whether the objects still remain, or whether their sites can be identified. At the same time Examiners must make inquiry on the spot whether any local antiquities exist, and show them if they are well authenticated. Authority for.

158. Ancient earthworks, whether British, Roman, Saxon, or Danish; British and Roman roads; Roman stations or Various kinds shown

† And in all cases instructions should be obtained from Division Office as to tides to be used before taking up tidal work.

villas ; standing stones and so-called Druidical circles ; sites of battles ; old castles, halls, manor houses, abbeys or priories ; crosses ; town walls ; moats ; tumuli ; and all other objects of antiquarian interest, are represented on the plans in characteristic writing, which is as follows :—

Roman antiquities in Egyptian capitals.

Those not Roman constructed prior to 1066, in old English.

Those constructed between 1066 and 1688 in German text ; while the names of all buildings, &c., constructed since 1688 are in ordinary character. Examiners must therefore ascertain to which period the antiquity belongs. It is not necessary for them to write the names in the above characters ; if they give in the name sheets all the information they can obtain, the character of writing will be determined in the office for the plans.

Not to be written in character.

Cathedrals, &c.

159. Old cathedrals, abbey churches, and ancient parish churches still in use are not shown as antiquities.

160. If a building, although of ancient date, is not of historical importance or an object of interest, it may not be shown on the plans as an antiquity ; but this point can best be decided in the office. The Examiner will give any information he can obtain on the subject.

Inscribed stones.

161. Old inscribed stones with dates are sometimes built into the walls of modern buildings ; these are generally only to be noticed in the descriptive remarks. When stone crosses or other objects of antiquity have been moved from their original sites, both the old and the present sites are to be shown, and the circumstances connected with the removal will be stated in the name sheets.


New houses on site of.

162. When a new house with a new name has been built on the site of an old one of antiquarian interest, both the old and the new name are to be given on the traces and in the name sheets, as "Alton House on site of Holmby Castle."

163. When part only of an existing building is ancient, the old part is distinguished from the new by deeper or cross etching on the trace, or an enlarged sketch on the margin may be necessary. Old walls indicating the extent of ancient buildings should be shown by double lines and coloured red.

Slopes of,

164. Particular care is to be taken that the etching of slopes of ancient earthworks gives a true representation of their present extent and character. If part has become obliterated, and its former position can be well ascertained, it may be indicated by dotted lines. The present state of ruins, such as old castles, is briefly noted in the name sheets.

165. Sites of antiquities, when well authenticated, are indicated by a cross, thus  on the traces, and are described

in the name sheets. Supposed sites are, as a rule, not shown on the plans if they are disputed, or if the supposition is not shared by the best authorities. But the Examiner in such cases will give all the information he can obtain, and it will be decided in the office whether the evidence is sufficient.

The term "sites of antiquities" includes places where objects of antiquarian interest, such as Roman coins or pottery, have been found. Coins, &c.

166. Sites where human remains have been found are not shown, except in cases where they have been found in a cist of undoubted antiquity, or when there are good grounds for connecting them with British, Roman, Saxon, or Danish antiquities, sites of battles, or other historical events. Human remains.

167. The word "tumulus," not "barrow," is to be used as the descriptive term for an ancient mound. But if the object is locally known by a special proper name, the latter is to be written, with "tumulus" under it in parenthesis. Tumulus.

V.—NAMES AND NAME SHEETS.

168. Proper names are written on the traces in red; descriptive names in black. The names are not written on the traces in the character in which they appear on the plans, unless the Examiner can write in character as neatly and rapidly as he can in stump or sloping Egyptian capitals. These two characters are the easiest and most rapid to write, and should be generally used. Character of writing.

169. If possible, the names should be obtained or seen in a written or printed form; when taken down from word of mouth, errors are very liable to occur in the spelling. Estate maps, valuation rolls or rating books, tithe maps and their references, newspaper notices or advertisements, or other documentary evidence, should always be referred to when available. Authorities

170. For the name of a house, farm, park, wood, or other part of an estate, the owner is the best authority. For names generally the following are the best individual authorities, and should be taken in the order given:

Owners of property; estate agents; clergymen, postmasters, and schoolmasters, if they have been some time in the district; rate collectors; road surveyors; borough and county

surveyors ; gentlemen residing in the district ; Local Government Board Orders ; local histories ; good directories. Assistance may also be obtained from local antiquarian and other societies, in connection with places of antiquarian or national interest.

Respectable inhabitants of some position should be consulted. Small farmers or cottagers are not to be depended on, even for the names of the places they occupy, especially as to the spelling, but a well-educated and intelligent occupier is, of course, a good authority.

171. It is important that names which have already appeared on the Ordnance Survey maps should not be altered, or new names inserted, except on the best authority.

Whenever it is possible to do so, authority for names should be obtained in writing. O.S. 230 may be used, and a form of covering letter (O.S. 230a) may sometimes be found convenient.

In the case of names which already appear on the O.S. plans, the authority to whom they are submitted should be asked to approve of the O.S. orthography ; otherwise unnecessary changes in minor points may be introduced.

No existing name should be altered, or new name inserted, on authority of less weight than those given in para. 170, the authorities best suited to each particular case being consulted. New names, for which authority such as has been specified, cannot be obtained are probably not worth inserting, and existing names should not be altered on any less authority.

The number of authorities required for each name is as follows :—

(a.) One where the owner of an estate (or his agent) authenticates in writing the spelling of the names of houses, parks, and woods situated thereon.

One where the owner or chief official in charge of public halls, institutions, &c., states in writing the authorised name ; but if the name is found publicly posted up on the building it should be also quoted as an authority.

In the case of the names of streets, squares, &c., in towns, one representative of the municipal or local authority, in addition to the tablet or designation written up, will be sufficient.

(b.) For place names which have not previously appeared on the O.S. maps, at least two good authorities in writing will be required, and for important names, three.

- (c.) For names which already appear on the O.S. maps, whether place or property names, one authority, in addition to the original map, will be required to ensure that the name is not obsolete.
- (d.) For place names which have already appeared on the O.S. maps, and which it is considered necessary to alter or omit, the best possible authority should be obtained, and no place name should be changed unless at least two *good* authorities, of weight equal to those specified in para. 170, approve in writing of the change.

The forms of house, farm, and other property names are changed from time to time, and such alterations, if properly authorised, may be accepted without question, but place-names rarely alter or become obsolete, and place-names should not be altered merely as a matter of opinion, unless the original form is clearly wrong or no longer applicable.

Again, important place-names, such as those of hills, valleys, &c., should not be considered obsolete merely because they are no longer generally known, or unless good evidence is forthcoming that the original name never existed.

The original O.S. map, whether on the 6-inch, $\frac{1}{2500}$, or $\frac{1}{5000}$ scale, may be quoted, as an authority without making extracts from the old name book, which, however, should be consulted in all cases of change of name, in case of antiquities, &c., and in case doubt exists as to the extent to which a name applies.

172. Particular attention is required to the mode of spelling or compounding local names, and nothing shows an Examiner's intelligence or want of it more than the manner in which he attends to the spelling of names. Spelling or
compounding.

173. In the case of large estates, lists of names should be submitted to the owner or his agent; and if possible the traces should be submitted at the same time. The lists signed by owner or agent (with a note giving his designation or address) should be sent to the office with the traces, and with a statement whether or not the traces were submitted to him by the Superintendent.

173A. Papers signed by proprietors, agents, &c., or "bill-heads" given as authorities will be gummed on the name sheet containing the names to which they refer, by the Examiners. Long letters and correspondence which cannot be conveniently so placed in the name books will be quoted as authorities, and carefully guarded for reference if necessary.

- District names.** 174. The extent to which district names apply, such as those of groups of farms, cottages, or other objects is shown on the traces by a yellow dotted band, the name being written centrally.
- Forests.** When parts of a large chase or forest have different names, the limit of each name is similarly shown.
- Hills and valleys.** The names of hill and valley features are similarly shown. (Special attention is directed to these, as they are apt to be neglected altogether in English work.) In these cases care must be taken that the hill name is written on the top of the hill and the valley name at the bottom of the valley, and the band must correspond with that position of the name, *i.e.*, it must be drawn at equal distances on each side of the exact top or bottom. An occasional exception is that when a road goes up the face of the hill, the hill name sometimes applies to the slope along the road.
- In the case of curving mountain ridges the name should follow the watershed and not be written in a straight line.
- Names which extend over more than one trace are written on the body of the trace which is most central, and on the margins of the other traces.
- Names in villages.** 175. Names in villages are referenced 1, 2, 3, &c., and are written on the margin of the trace. Arrows are not to be used on the body of the trace to indicate names; they are apt to be mistaken for detail.
176. In villages and the suburbs of towns, special names of cottages and villas are not to be given unless they stand in their own grounds, and in these cases only when there is plenty of room for the names to be written on the plan. When they are numerous, only the most important are to be selected.
- Churches.** 177. Established Churches are described with the name of their dedicatory saint. The clergyman's or diocesan registrar's authority is to be obtained for the dedicatory name. St. John's Church is written when St. John the Evangelist is meant; St. John the Baptist's Church is written in full; St. Mary's Church is written when St. Mary the Virgin is meant; St. Mary Magdalen's Church is written in full. It is to be stated whether the living is a rectory or a vicarage. To the grave yard of an Established Church the words are written; it is not described.
- Rectory or vicarage.**
- Dissenting chapels.** 178. Dissenting chapels are described by the name of the denomination to which they belong, contractions being used if desirable, as Independent or Indt. chapel; Roman Catholic

or R.C. chapel ; Primitive Methodist or Prim. Meth. chapel ; Wesleyan Methodist or Wes. Meth. chapel ; Baptist or Bapt. chapel. If, however, the chapel has a special proper name, it should be given with the denomination in parenthesis, as Zion Chapel (Prim. Meth.). When N.C. places of worship are known as churches, they should be so described. If the denomination is obscure, or has a name of excessive length, the term "Nonconformist" may be used. When burial grounds are attached to chapels the words are written ; they are not described.

In Scotland, an Established Presbyterian Church will be described as "Church" only, unless there is a dedicatory name, in which case it will be written, as for English churches.

A United Free Church is described as a "U.F. Church."

179. Mortuary chapels are described as Church of England (C. of E.) or Nonconformist. Mortuary chapels.

180. Public Elementary Schools are written without any qualifying name, such as Board, National, &c. ; but Sunday and Infant Schools are described as such. Schools.

181. The names of inns and fully licensed public-houses in the open country are written and described. In market towns the principal one should be indicated, in order that, if there is room, it may appear on the 6-inch map ; otherwise an obscure pot-house may appear on the latter, and the other inns be left out altogether. Inns and public-houses.

In the names of inns and public-houses, the definite article is omitted, as,— Omission of definite article.

Bull Hotel, not The Bull Hotel.
White Hart (P.H.), not The White Hart (P.H.).

182. Beer-houses are not described unless they are in the country at a point where they take the place of a roadside inn. Their name is in that case written and described. Beer-houses.

183. The names of the different parts of large manufacturing works are not given, only the general name as applied by the proprietor and in use by the public. Manufactories.

184. The names of railways should be obtained from official sources. To a railway station in the country the full name is written ; to stations in or close to towns or villages from which they take their name, the word "station" is sufficient. Railway stations.

185. In the case of public reservoirs, waterworks, gasworks, electricity works, sewage farms, &c., the body to which they belong is stated. Reservoirs water-works, &c.

- Streams. 186. Careful inquiry should be made as to the names of brooks or streams. Sometimes, however, they are known in the successive parishes they pass through by the name of each parish; these successive names should not be given.
- Mansions and parks. 187. Where a mansion house is known by the name of the park in which it stands, the name is to be written both to the house and to the park, unless the park be small; in which case the name will only be written to the house.
- Deer park. 188. Deer Park is to be written to any part of a park which may be railed off for deer.
- Park names. Park names are not to be written in character; it will be decided in the office whether they are large or important enough to have the name written in character on the plan.
- Names of fields. 189. Names are not to be written to fields, unless they are applied to a special purpose, as "Fair Field" to a field where fairs are occasionally held; or unless they are connected with an antiquity, as "Black Grounds," supposed Roman station.
- "No name." 190. The words "no name" are written on the trace in ink to objects which apparently should have a name, but for which none can be ascertained.
- 190A. It is not necessary or advisable, either on $\frac{1}{16}$ or 6-inch scale, to write such names as "quarry," "chalk pit," "old gravel pit," &c., to such features, if small; the character on the plans is sufficient.
- Names to be simple. 191. Moats or ancient earthworks are not to have the words (remains of) added; they can seldom be anything but remains.
- 191A. All names are to be written on the traces as simply as possible, and according to the usage of the English language, which does not require unnecessary parenthesis; thus corn mill, not mill (corn); Highfield saw mills, not Highfield mills (saw), &c., &c. In some cases, however, as Windmill (corn); the parenthesis is hardly avoidable.
- Manufactories, &c. 191B. In the case of manufactories, mills, and works, it is to be stated what material is dealt with, as Charlton Electric Telegraph Manufactory, Oakfield Wire Works. But when the name in common local use does not include the material dealt with, the latter may be added in parenthesis, thus:—Grafton Mill (corn); Oakfield Works (wire). In the case of mines the ore is to be stated, as Crosby Lead Mines.

Compounding Names.

- Local usage. 192. Local usage is to be followed as to whether proper names should be compounded or not. Sometimes, however,

local usage may not be certain, or may be neutral ; in that case the following rules may be followed :

(1.) When a substantive in a name is descriptive of the object to which it is applied, it is not to be compounded ; thus :

Red Bridge should be written to a bridge ; not Redbridge.

Mill Brook do. to a brook ; not Millbrook.

Park Hill do. to a hill ; not Parkhill.

Stone Hall do. to a mansion ; not Stonehall.

(2.) But if the substantive in a name is not descriptive of the object to which the name applies, it is generally compounded ; thus :

Redbridge is written to village near the bridge ; not Red Bridge.

Parkhill is written to a farm on the hill ; not Park Hill.

Millbrook is written to a farm near the brook ; not Mill Brook.

Stonehall is written to a cottage ; not Stone Hall.

(3.) When a name consists of three words, it is also usual to compound the first two if they are short and simple ; thus :

Redbridge Hall ; not Red Bridge Hall.

Parkhill Farm ; not Park Hill Farm.

Stonehall Spinney ; not Stone Hall Spinney.

(4.) But names which would be unsightly, or would be liable to be mispronounced, if compounded, are not to be compounded. Local usage will always be against compounding them. Such cases are those where three consonants or three vowels would come together, or where the name would be very unwieldy if compounded ; thus :

Hall Lands Farm should be written ; not Halllands Farm.

Bee Eaters Copse do. ; not Beeeaters Copse.

Nettlebed Common Wood should be written ; not Nettlebedcommon Wood.

And Frogs Hall Spinney should be written ; not Frogshall Spinney, because the latter form might be liable to be mispronounced.

Numbers also should not generally be compounded ; for instance, Four Acre Wood should be written ; not Four-acre Wood.

192A. The use of the hyphen, however, is frequently advantageous, and should be followed if locally adopted, as :—

Bird-in-hand (P.H.)

Rest-and-be-thankful (P.H.)

Crows-i'-th'-wood.

193. When names end in s, it should be ascertained whether in local usage an apostrophe is added or not, and if it is, whether it comes before or after the s. Words ending in s in the singular have a second s added after the apostrophe, as

Burgess's House ; but if in the plural they have not, as Burgesses' House. In some cases the addition of an s will make the name difficult to pronounce ; local usage in such cases will be the safest guide as to the best form of writing the name. Apostrophes should rarely be added or removed on revision.

Name Sheets.

- Name sheets.** 194. Care is to be taken not to overcrowd the name sheets.
- Professions and addresses of authorities.** 195. The professions or trades and the addresses of all authorities quoted for names are given once on each name sheet.
196. If the authorities for all the names given on a page of a name sheet are the same, it is unnecessary to repeat them for each name ; the words "as above" may be written opposite the second and third place-names on the page.
- Names altered.** 197. If a name has to be altered, new authorities must be quoted for the altered name or the original authorities reconsulted.
- Names of proprietors.** 198. The owners of property are to be given in the name sheets. If there is only one owner for all the names on a sheet, his name need only be given in a note at the end.
- Descriptions in col. 5.** 199. The descriptions in the name sheets are to be as brief as possible, and to be confined to the column intended for them. In defining the position of an object, the description should not run in a circle ; for instance, if Lodge Farm is described as being half a mile north of Thornby, Thornby should not be described as being half a mile south of Lodge Farm.
- 199A. When a river, stream, hill, district, or other feature extends into several plans, the name must be described on O.S. 21 for each quarter sheet on which the name may occur.
- Antiquities, long extracts for.** 200. In the case of antiquities, long extracts from books of reference are not to be given ; a brief allusion to them will suffice. But if extracts are given at all, the source from which they are taken is to be stated.
- To be signed.** 201. The name sheets are signed on each page by the Examiner who collects the names and writes the descriptions, and by the final Examiner, and are initialled by the Superintendent.
- Four lists.** 202. The following lists show the objects of which the names are written on the traces, and are or are not described in the name books. The lists are probably not exhaustive.

203. The names of the following objects are both written on the traces and described in the name sheets, whether they have a special proper name or not, viz. :—

Almshouses.	Institutes, Literary.
Antiquities.	Libraries, Public.
Assembly Rooms.	Lighthouses (nature of light).
Asylums.	Market Houses.
Banks.	Market Places.
Barracks.	Meeting Houses.
Baths, public.	Moats.
Batteries.	Monuments (isolated).
Beerhouses in the country.	Municipal Offices.
Burial Grounds (isolated).	Museums.
Cairns.	Obelisks (isolated, <i>i.e.</i> , not in Grave Yards).
Canals.	Parks, Public.
Cattle Markets.	Parks, Deer.
Caves (if important).	Police Stations.
Cemeteries.	Post Offices (General).
Chapels.	Prisons.
Chapels, Mortuary.	Public-houses.
Churches.	Railways.
Commons.	Railway Stations.
Courts of Law.	Railway Junctions.
Custom Houses.	Reading Rooms, Public.
Docks.	Recreation Rooms, Public.
Electricity Works.	Rectories.
Exchanges.	Reservoirs, Public.
Forts.	Schools.
Fox Coverts.	Sewage Farms.
Gaols.	Sewage Works.
Gardens, Public.	Sites of Antiquities or Battle.
Gas Works.	Statues (not sculpture or orna- mental grounds).
Grave Yards (isolated) of Established Church.	Theatres.
Greens, Drying (public).	Tumuli.
Greens, Village.	Vicarages.
Halls, Town.	Water Works.
Harbours.	Workhouses.
Hospitals and Infirmarys.	
Hotels and Inns.	

204. The descriptive names of the following objects are written on the traces, but they are not described in the name sheets unless they have a special proper name, viz. :—

Aqueducts.	Brickworks.
Basins, Canal.	Coal Pits or Collieries.
Breakwaters.	Drains, large (in Fen dis- tricts).
Breweries.	

Written
and not
described
unless with
a name.

Ferries.	Quays.
Fords.	Race Courses.
Fountains.	Railway Crossings.
Golf Courses.	Rifle Ranges.
Lime Works.	Springs.
Locks, Canal.	Tile Works.
Lodges.	Tanneries.
Malthouses.	Tramways.
Manufactories.	Tunnels.
Marshes.	Viaducts.
Mills.	Waterfalls.
Mines.	Weirs.
Mosses.	Wells, Spa or Mineral, or ancient.
Nurseries.	Wharves.
Piers.	Works, industrial.
Ponds or Pools.	Yards, Timber, Coal, &c.
Post Offices.	
Quarries.	

Written
but not
described.

205. To the following objects descriptive names, or their contractions as given below, are written on the traces, but no description is given in the name sheets, viz. :—

Aviary.	Fence (F.).
Boathouse.	Flagstaff (F.S.).
Boulder.	Footbridge (F.B.).
Bridle Road (B.R.).	Footpath (F.P.).
Brick Kiln.	Furnace.
Burial Ground at a Chapel.	Furze.
Butt (Rifle Range).	Gasometer.
Capstan (Cn.).	Goods Shed.
Cart Track (C.T.).	Gravel Pit.
Cattle Pen.	Grave Yard at a Church (G.Y.).
Cattle Trough.	Guide Post (G.P.).
Chalk Pit.	Hedge (H.).
Cistern (Cis.).	Hydraulic Ram.
Clay Mill.	Icehouse.
Clay Pit.	Kiln.
Conduit (Cond.).	Letter Box (L.B.).
Crane.	Lime Kiln (L.K.).
Culvert (Cul.).	Lynch Gate.
Ditch.	Mile Post (M.P.).
Double fence (d.f.).	Mile Stone (M.S.).
Double stream (d.s.).	Mill Dam.
Dovecot.	Mill Lade.
Drain (Dr.).	Mill Pond.
Drawbridge.	Mill Race.
Draw Well (D.W.).	Mooring Post.
Drying Green, private (D.G.).	Mud.
Engine House.	

Occupation Road (Occ. Rd.).	Single Stream (S.S.).
Old Quarry or Pit.	Sluice (Sl.).
Osier Bed.	Smithy (Smy.).
Overflow.	Spring (sp.).
Pavilion.	Stack Yard (S.Y.).
Pheasantry.	Station.
Play Ground.	Statue (small, in orn. ground).
Post.	Steps (St.).
Pound.	Stream (S.).
Pump (P.).	Summer House (S.H.).
Reservoir (private).	Sun Dial (S.D.).
Rockery.	Swing Bridge.
Rope Walk.	Switch (Sw.).
Saltings.	Tank.
Sand.	Target.
Sandhills.	Threshing Mill (T.M.).
Sand Pit.	Towing Path.
Saw Pit.	Tramway.
Shaft.	Trough (Tr.).
Sheepfold.	
Sheep Pen.	Public Water Tap (W.T.).
Shingle.	Weighing Machine (W.M.).
Shrubbery.	Well (W.), if unimportant.
Signal Box (S.B.).	Wind Pump.
Signal Post (S.P.).	Yard (Yd.).
Sign Post.	

For Cultivation terms, see para. 52.

See also General Rules, para. 14.

Names will not be written to the following:—

Boilers.	} If private.
Bowling Greens.	
Latrines.	
Tennis Grounds.	
Urinals.	}

206. To the following objects merely descriptive names are not written on the traces, but when they have special proper names the latter are written on the traces and described in the name sheets, viz. :—

Avenues.	Districts of Houses, &c.	Not written nor de- scribed unless specially named.
Bays, Seacoast.	Dwelling Houses, single.	
Beaches, Seacoast.	Downs.	
Bridges, Road, &c.	Farms.	
Brooks.	Fens.	
Channels.	Fields.	
Cliffs.	Forests.	
Copses.	Gardens.	
Creeks.	Hill Ranges.	

Hills, single features.	Rivers and Streams.
Lanes.	Roads.
Lakes or Lochs.	Streets, Alleys, Courts, &c
Mansion Houses.	Valleys.
Moors.	Villages.
Parks, Private.	Woods.

VI.—SUPERINTENDENCE.

Responsibility of. 207. Superintendents are responsible for the whole of the work done by their sections. This does not mean that they are required to re-examine the whole of the work, but that, if they exercise proper supervision, they should so far check the work as to ensure that no serious errors exist in it, and they must soon ascertain, during their final examination, whose work can and whose cannot be depended upon; and it is their duty at once to report an untrustworthy Examiner.

Trace to be signed and dated. 208. The Examiner and final Examiner sign each trace, with entries of the dates on which their work on it was done. The Re-examiner, if any, signs and dates in blue.

Badly compiled name sheets. 209. If an Examiner compiles his name sheets badly, they are to be handed back to him to make new ones. The Superintendent revises all work connected with antiquities, names, and name sheets, and with this view places himself directly in communication with the best informed persons in the neighbourhood. He initials all name sheets, *see* para. 201; this duty is not delegated to an assistant.

Assistance in finally examining. 210. When an experienced Examiner in a section is allowed to assist the Superintendent in finally examining traces, the Superintendent initials such traces to show that he has inspected them, and is satisfied that they are complete.

Large corrections. 211. Large corrections are tested by the final Examiner.

Penning in, &c. in wet weather. 212. Examiners as a rule should keep back enough work for penning in and for writing and describing names to occupy a certain amount of wet weather. No deduction on the progress of Examiners is normally allowed for wet weather, except immediately after a change of station. But the Examiner must pen his work in before he has forgotten the detail; and for this reason very close work, such as in villages, should be penned in as soon as possible. It is the Superintendent's duty to regulate this matter.

Area returned to be completed. 213. No tracing should be returned as complete until penned in. The Examiner hands over the name sheets to the Superintendent with the finished traces.

Comparison of trace-edges. 214. All trace-edges are compared by the Examiner and by the final Examiner, and initialled by them. In the case of trace-edges between the work of two sections or divisions, it is shown in the office, on the margin of the Superintendent's

diagram, whether the adjoining work is in the office completed, or is in the hands of another Superintendent, or is not yet taken up. In the two former cases the Superintendent asks for the adjoining traces for comparison before sending his own completed work to the office.

215. The careful instruction of beginners is one of the most important duties of a Superintendent, and requires on his part much patience and consideration. They are to receive from him every assistance in field and office. They should be sent out for field training with only the most trustworthy trained men. When put on progress, attempts at too rapid work are to be checked, until accuracy and a good style of penning in have been attained. Their tendency at first is to exaggerate small corrections, and the Superintendent takes the earliest opportunity of finally examining their work and checking faults. Instruction of beginners.

216. The traces, complete with name sheets and finally examined, are sent to the office by the Superintendent as soon as possible, but seldom later than a month, after he has received them from the detail Examiners. Forwarding work to D.O.

217. With reference to paragraphs 159 and 168, Superintendents will only allow writing on the traces to be done in character when they are satisfied that the Examiner can do it neatly and rapidly; and, generally, they will impress upon their men that although accuracy is the main point, yet an Examiner will always get credit for neat penning in and writing. Writing in character.

218. Superintendents are required to ascertain, and send to the office on O.S. Form 123, the names and addresses of the principal proprietors of land in their work and their agents. The lists are made out for separate Quarter Sheets. Care has to be taken to get the correct spelling of the names and the actual postal addresses. Lists of landowners

SECTION II.

INSTRUCTIONS FOR EXAMINERS, $\frac{1}{300}$ SCALE.

I.—GENERAL RULES.

219. Many of the rules laid down for the $\frac{1}{100}$ scale apply also to this scale. These are not here repeated.

220. Traces on this scale usually contain one-sixth the full plan, or 6.4 acres. But in close parts of towns the work is often traced and examined by blocks bounded by convenient streets. Examination trace.

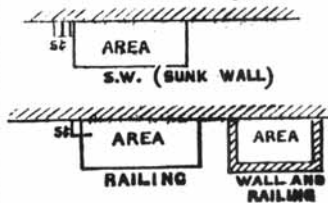
- Assimilation of edges.** In the latter case *both* sides of the street are traced, and compared when the edges are assimilated.
- Method of showing corrections.** 221. All detail, except water, is traced in red, water is traced in blue. All omissions and corrections supplied by the Examiner are in black.
- Limit of corrections.** 222. Detail down to half a link in width can be shown on this scale.
- Use of colour.** 223. Brush colour is only used to define ornamental ground in green, and water in blue. (See para. 6.)
- Boundaries** 224. Municipal and ward boundaries in cities and boroughs have to be examined on this scale in addition to parish or county boundaries.

II.—REPRESENTATION OF DETAIL.

225. $\frac{1}{300}$ scale surveys are now made only at the expense of the local authorities, and the latter should be consulted and their wishes met with reference to the detail to be shown. The following gives the normal O.S. rules on the subject:—

(1.) Fences.

Hedges, banks, and timber or iron fences have their centre shown by a single line. Walls down to half a link in width are shown by double lines and etched in red. Buttresses are shown if half a link wide. In sloping walls, if the scale admits, the batter is shown as sloping masonry. In sunk walls, such as the retaining walls of an area, the line of drop only is shown, if there is no fence on the top; but if there is a fence or railing on the top, that only is shown, and the drop is omitted. But if the wall is at all above the ground, if only a few inches, with the railing on the top, then the wall is shown in double lines and etched in red, the railing being omitted.



Gates and doors.

226. Gates and doors are shown thus in fences and walls:—

- Gate in single fence - - - - -
- Gate in a wall - - - - -
- Door in centre of wall - - - - -
- Door at side of wall - - - - -
- Door in wall, covered at top - - - - -

The term "gate" includes openwork gates only; the term "door" includes all solid doors, however great their width, such as those at the entrance of a stable yard.

The pillars of large gateways are shown, and etched in red or black according to the material.

(2.) *Buildings.*

227. Buildings are etched round the outline only; in red if of masonry, in black if of wood or iron; to iron buildings the word "iron" is also written. Etching.

228. Conservatories and glass verandahs only are to be cross etched in blue; all other glass roofed buildings to be etched in red if the building is of masonry, in black if of wood or iron. Glass roofs.

229. No interiors are shown except in cathedrals and any specially authorised buildings of exceptional importance, such as the colleges of Oxford and Cambridge. The sectional plan for representation of interiors will be taken at the ground level, but carried up so as to pass through and show those windows, doorways, recesses, &c., next above it. Interiors.

In large railway stations the area of the general roof is shown in red or black according to the material of which the station is built, and where it is not supported by continuous walls the line of eaves is shown dotted. Under the general roof details such as refreshment and waiting rooms are shown precisely as if no general roof existed.

230. In such cases as the large classical porticoes of public buildings, the columns in the open front and sides of the portico are shown in plan, although they are entirely under the roof of the portico; but in the ordinary porches of private houses the pillars are not shown unless they project beyond the roof, in which case the whole of them is shown; in the case of ordinary wooden sheds or open outbuildings, the supports of the roof are not shown at all; the line of eaves only is shown dotted. Porticoes and porches.

231. All divisions are shown between contiguous dwelling-houses and outbuildings when they have separate doors. Divisions between houses.

231A. Strict attention should be paid by the Examiner to the correct representation of partitions between contiguous houses. In cases where rows of houses are of similar build, partitions and walls dividing areas and yards are often parallel to one another, and should be carefully drawn on the

traces accordingly. For instance, a partition line on plan should sometimes meet the middle of an outside wall and sometimes should be carried along one side of it.

Small
detail.

232. The following detail will not be shown on O.S. maps on the $\frac{1}{5000}$ scales, or smaller town scales, unless at the request of the local authorities:—

- (a.) Cab stands, sewer gratings (S.G.), sewer manholes (M.H.), sewer ventilators (S.V.), water plugs (W.P.), private water taps (W.T.), water columns, private lamp posts (L.P.) or lamps, stopcocks (S.C.), gas plugs (G.P.), and gratings of all kinds, sinks and all detail relating to gas, water supply, sewage or drainage; in fact, all municipal details not of interest to the general public.
- (b.) Single steps, area gratings, cellar flaps, swing posts, trap doors, ventilators, gymnastic apparatus (except in public grounds), flagstaves (unless public or very prominent), signposts, small rockeries, small slopes and shrubberies, seats, and private statues.
- (c.) Small detail, such as hen houses, pigsties, kennels, &c., often found in gardens and yards, and other temporary erections of no great solidity. The latter may be roughly described as erections of wood or iron, having no solid foundations.
- (d.) Lines of caps used for drying purposes in brick and tile works, &c., which are of a temporary nature, sheds used for the same purpose, unless they are built in a substantial and permanent manner.

The ground round houses will be described on traces or cards as at present, viz.:—As garden, yard, pasture, O.G., &c., but the boundary between two different kinds of ground will not be shown by a dotted or other line.

(3.) *Trees and Orchards.*

Trees,

233. All trees on this scale are shown in plan, not in elevation, and they are shown large or small according to their actual size. The fruit trees in orchards, also trees in nurseries, are not shown in position, but all isolated trees are shown in position. Beyond this, the instructions regarding trees for the $\frac{1}{2500}$ scale apply also to this scale.

(4.) *Ornamental Ground, Parks, and Gardens.*

Flower
beds,
Shrub-
beries.

234. For flower beds, see para. 74.

234A. Shrubberies are shown by very light ornament in character, and the word is written.

235. Parks or spaces open to the public, and used as recreation grounds, are not shown as ornamental ground if they are not laid out as such with walks, shrubberies, &c. Recreation grounds.

236. Cricket grounds and play grounds specially prepared in a public park are shown, if unfenced, by dotted lines. Swing posts and gymnastic apparatus in play grounds are shown when they are in public, not in private grounds. Cricket grounds and gymnastic apparatus.

237. Footpaths are not shown in gardens or plots of ground near houses, except the principal paths in very large gardens. Carriage drives are shown. The ground is described as F.G. (flower garden), F.B. (flower bed), V.G. (veg. garden), "grass," "yard," &c., as the case may be. If used as drying grounds, the words are written, but no posts are shown. Paths in gardens, &c.

(5.) *Streets and Drainage, Water Supply, &c.*

238. Paved crossings and gutters are not shown in macadamised streets or roads. Street crossings, &c.

239. The following objects connected with drainage, water supply, lighting, &c., are shown in streets, &c. :— List of objects shown.

Fire Plugs (F.P.).	}	Public.
Hydrants (H.).		
Lamp Posts (L.P.).		
Lamps (L.).		
Public Water Taps (W.T.).		
Public Pumps (P.).		
Wells (W.).		

The City or Borough Surveyor should have the traces submitted to him with reference to the positions and local designations of all objects connected with drainage and water supply.

240. Stop-cocks, gas-plugs, small gratings for draining paths and sinks, are not shown. Sinks, &c.

241. Overhead bridges across narrow lanes or streets, from one part of a factory to another, that is, when not starting from the ground level, are shown by dotted lines ; if covered, they are etched. Factory bridges.

(6.) *Names.*

242. All names on this scale are written in black, names of streets in sloping Egyptian, those of subordinate terraces, courts, villas, or single buildings, in stump. Streets, &c.

- Villas, &c.** 243. Villas in a street may receive separate names if they stand in their own grounds; semi-detached houses, also, if they are of sufficient importance, but houses in a block are separately named only in very exceptional circumstances.
- Position of.** 244. Names are written on buildings when they apply only to the buildings, but on the street, or on a court or yard, when they apply to the street, court, or yard.
- Sittings in churches &c.** 245. The number of sittings in church or chapel is given on the traces as well as in the description.
- Authorities for street names.** 246. The City or Borough Surveyor, or clerk to the local authority, is always to be consulted as to the names of streets, and quoted as an authority; names of streets written up on the houses are also quoted as an authority. See para. 171A.
- Descriptive words and their contractions.** 247. The following are some of the most common descriptive words, and their contractions, used on the traces on this scale, for the information of the draftsman, in addition to those given in para. 239:—

Air Shaft.	Grass.
Area.	Latrine, unless private.
Ashpit.	Mooring Post.
Boiler.	Railing or Paling.
Bowling Green.	Sunk Wall (S.W.).
Chimney.	Public Tennis Ground.
Door (D.).	Turn Table.
Flower Bed (F.B.).	Public Urinal.
Flower Garden (F.G.).	Ventilator (V.).
Gate.	

Numerous other descriptive terms and contractions given on the lists for the $\frac{1}{3200}$ scale are also applicable to this scale, and need not be repeated here.

SECTION III.

REVISERS' ADDENDUM.

248. The traces issued to Revisers are prepared at Southampton from the original MS. plans.

Each trace is one-sixth part of a plan, and contains, when complete, 160 acres within the trace-edge lines. The trace-edge lines are never to be altered by a Reviser.

When a trace is issued to a Reviser, the corresponding portion of a published impression is also issued to him and is called a guide card.

249. Original detail is shown on the traces in red.

All Revisers' corrections are made in black, whether these corrections consist of the alteration of old, the cancelling of obsolete, or the insertion of new, detail; but brick houses are hatched in red, wooden houses in black.

The work of the Final Reviser on the trace is all in green; but, as green colour does not indicate the nature of the buildings, the Final Reviser should write "Brick," "Wood," &c., to buildings where necessary.

The work of any re-examination should be in blue.

250. Revisers must not alter the original survey without good reason.

All detail should be so far gone over that no alteration of detail is overlooked, but Revisers are not to re-test old work further than is necessary for the purpose above stated. Should they, however, while doing this, or supplying new detail, discover any large error or have reason to suspect an error, the work should be tested, and, if necessary, corrected.

Small alterations should not be made to detail which has not altered on the ground, and it is important that slight alterations affecting areas be not made if it can be avoided, as it is obviously important that altered areas should not be given to unaltered parcels.

Some Revisers think it necessary to touch up nearly every fence; this is not to be done unnecessarily.

251. The foregoing paragraph is not to be extended to cases in which a genuine alteration has been made in an old fence, or in which there has been a real and manifest error in the original survey, or to such work as straightening fences which have been shown bent but are really straight, or rounding curves, squaring-up buildings, or showing symmetrical objects properly.

In such cases, corrections, however small, are to be made, as even a slight deviation in the form of the object offends the eye.

252. In the case of a bench mark being shown on the guide card, the Reviser will ascertain whether it is still on the ground or not. In the former case, he will encircle it in blue; in the latter case, in red.

253. The original boundaries are shown on the traces issued to Revisers. It is the duty of Revisers to describe them correctly.

Any description which differs from that shown on the guide card should be initialled by the Superintendent. Any alteration in boundaries should be reported at once by the Field Superintendent to the Division Officer.

254. The work connected with boundaries will, in Great Britain, during revision or re-survey, be carried out by the Division Officers.

As the boundaries originally laid down have been before the public for many years they should not be altered unless a clear case is shown for doing so, and questions concerning them should not be unnecessarily raised.

All the documents connected with alterations which have been made by competent authority will be forwarded to the Division Officer from Southampton.

There will be no special perambulation of county and parish boundaries.

The Field Revisers will revise and verify in the ordinary course of their detail revision the boundaries as laid down in the original and published 6-inch or $\frac{1}{2500}$ scale plans, and will show any alterations in the descriptions or symbols that may have become necessary owing to alterations in the detail. They must not make any alteration in the direction of a boundary; or any alteration which will affect areas, without referring to the Division Officer.

All alterations in the descriptions and symbols will be made in black ink, and initialled by the Superintendent of Revisers by whom, or under whom, the alteration is made.

If any alteration has been made since the original survey in the boundaries either of a town, parish, or ward, the documents relating thereto will be obtained from the Division Office, and the Reviser will, with the help of the Borough Surveyor or other official of the corporation or parish, lay down the new boundaries. In this case, the boundaries will have to be perambulated.

In the case of Scotch Burghs the boundaries shown on the Ordnance Survey maps are

- 1st. Parliamentary voting boundaries, where such exist;
- 2nd. Police or rating boundaries;
- 3rd. Ward boundaries, except in the case of police burghs, which have no status except as police burghs.

Give and Take boundaries, if agreed to in writing by the local authorities and landowners concerned, may be accepted.

255. Fences are a most important detail in the survey. Proved neglect to insert a new fence, or cancel an obsolete one, is a grave offence, usually punished by loss of pay.

256. In cases where the original plans do not show grass edges along roads, it is not necessary to supply them on the revised traces.

257. In classing roads it must be remembered that one-inch Revisers deal with larger areas of country at a time than large-scale Revisers, and are therefore more likely to arrive at a uniform classification; hence the one-inch classification should be followed as far as possible.

If, in the course of large-scale revision, serious and palpable errors of classification be found on the one-inch scale, they should be reported, with a view to their correction on the one-inch map.

258. In revising the original plans, the tidal lines (especially of low water) should only be altered when considerable changes have taken place.

259. Unless it is manifest that no alteration has taken place, the Reviser will check and, if necessary, correct the lines of high and low water mark, and will write high (or low) water mark of ordinary tides (in Scotland, ordinary spring tides) along the lines.

260. The rules as to names are clearly laid down in paras. 169 to 171, but in view of their importance they are repeated here:—

If possible, the names should be obtained or seen in a written or printed form; when taken down from word of mouth, errors are very liable to occur in the spelling. Estate maps, valuation rolls or rating books, tithe maps and their references, newspaper notices or advertisements, or other documentary evidence, should always be referred to when available.

For the name of a house, farm, park, wood, or other part of an estate, the owner is the best authority. For names generally the following are the best individual authorities, and should be taken in the order given:—

Owners of property; estate agents; clergymen; postmasters and schoolmasters, if they have been some time in the district; rate collectors; road surveyors; borough and county surveyors; gentlemen residing in the district; Local Government Board Orders; local histories; good directories. Assistance may also be obtained from local antiquarian and other societies in connection with places of antiquarian or national interest.

Respectable inhabitants of some position should be consulted. Small farmers or cottagers are not to be depended on, even for the names of the places they occupy, especially as to the spelling, but a well-educated and intelligent occupier is, of course, a good authority.

It is important that names which have already appeared on the Ordnance Survey maps should not be altered, or new names inserted, except on the best authority.

Whenever it is possible to do so, authority for names should be obtained in writing. O.S. 230 may be used, and a form of covering letter (O.S. 230A) may sometimes be found convenient.

In the case of names which already appear on the O.S. plans, the authority to whom they are submitted should be asked to approve of the O.S. orthography; otherwise unnecessary changes in minor points may be introduced.

No existing name should be altered, or new name inserted, on authority of less weight than those given above, the authorities best suited to each particular case being consulted. New names for which authority, such as has been specified, cannot be obtained are probably not worth inserting, and existing names should not be altered on any less authority.

The number of authorities required for each name is as follows:—

- (a.) One, where the owner of an estate (or his agent) authenticates in writing the spelling of the names of houses, parks, and woods, situated thereon.

One, where the owner or chief official in charge of public halls, institutions, &c., states in writing the authorised name; but if the name is found publicly posted up on the building, it should be also quoted as an authority.

In the case of the names of streets, squares, &c., in towns, one representative of the municipal or local authority, in addition to the tablet or designation written up, will be sufficient.

- (b.) For place names which have not previously appeared on the O.S. maps, at least two good authorities in writing will be required, and for important names, three:
- (c.) For names which already appear on the O.S. maps, whether place or property names, one authority, in addition to the original map, will be required to ensure that the name is not obsolete.

(d.) For place names which have already appeared on the O.S. maps, and which it is considered necessary to alter or omit, the best possible authority should be obtained, and no place name should be changed unless at least two *good* authorities, of weight equal to those specified above, approve in writing of the change.

The forms of house, farm, and other property names are changed from time to time, and such alterations, if properly authorised, may be accepted without question, but place names rarely alter or become obsolete, and place names should not be altered merely as a matter of opinion, unless the original form is clearly wrong or no longer applicable.

Again, important place names, such as those of hills, valleys, &c., should not be considered obsolete merely because they are no longer generally known, or unless good evidence is forthcoming that the original name never existed.

The original O.S. map, whether on the 6-inch, $\frac{1}{180,000}$, or $\frac{1}{360,000}$ scale, may be quoted as an authority, without making extracts from the old name book, which, however, should be consulted in all cases of change of name, in case of antiquities, &c., and in case doubt exists as to the extent to which a name applies.

Railway names are not to be altered unless the alteration is supported by a letter from the railway company, stating that the original name is wrong or not applicable. Minor alterations in railway names, such as the addition of the apostrophe, &c., should not be made; in fact, apostrophes should rarely be added or removed on revision in the case of any names.

261. Names from the old books will be copied into the second column of the new books.

Should any name be found to have become obsolete, the word *obsolete* will be written in red under such name, the necessary authorities being obtained (para. 260).

GENERAL INDEX.

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