

ON A REPRODUCTION OF A PORTION OF THE DOMESDAY BOOK  
BY THE PHOTO-ZINCOGRAPHIC PROCESS.

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THERE is no occasion to dilate upon the interest that attaches to the discovery of any means for executing faithful fac-similes of valuable MSS., and enabling them to be circulated at a very trifling expense. Those who take an interest in such matters well know how anxiously they have been sought for, and will appreciate their value and importance. Copies of interesting MSS. increase rather than diminish the attention which the comparatively unknown original would otherwise command.

But the external aspect of a MS. is in no way rendered by a copy, for it presents all documents precisely alike, however dissimilar they may be in character or other outward feature.

Fac-similes may be considered to bear the same relation to MSS. as *casts* do to works of art. No verbal description of a MS., any more than a work of art, can be compared to a faithful representation of it, and, where alterations have been made, our desire to be acquainted with the exact appearance presented is increased.

Fac-similes of MSS. were executed to some extent under the directions of the late Record Commissions, and are to be found in their Reports. They were made by means of tracings, which were etched upon the copper-plate and engraved with the graver, and then printed. Many of these are excellent specimens of skill; but in many instances the resemblance to the original writing is by no means good, and the reading is sometimes incorrect. They embrace examples of our most valuable public documents; but I need hardly say, that their circulation was exceedingly limited, and their expense very great.<sup>1</sup>

<sup>1</sup> A specimen page of the Domesday Book, so printed, was brought for examination at the meeting of the Institute, when these notices were read. The por-

The discovery of a greasy kind of ink by which the tracing could be transferred to stone was the next stage in the making of fac-similes of MSS. By this means the cost was greatly reduced, as the etching upon the copper-plate, the most expensive part of the process, was dispensed with ; and the transfer of the actual tracing to the face of the stone is a very simple operation. At a recent meeting of the Institute, when I brought this subject before the Society, I submitted for comparison a specimen of a fac-simile page of the Domesday Book, executed by this, the lithographic process. Its great superiority over the engraved examples, in rendering the character of the writing and peculiarities in the MS., could not fail to be at once noticed. The page exhibited on that occasion is a portion for the county of Kent, now in course of preparation for the Archæological Society of that county.

We now come to the last and most important stage which has been reached. Whatever may be the skill of the maker of the fac-simile, or his knowledge of the hand-writing, the work was after all *his reading* of the original. If there was any doubt about any part of that reading, his solution of it actually seemed to settle the question. In some instances his reading would convey a doubt where a skilled eye would see no occasion for it. Therefore, in cases of difficulty, where a real fac-simile would be of such essential service, confusion only might be produced.

But where the fac-simile is made by the document itself, and all its peculiarities pointed out by itself, such cavil could not hold. In several other respects, too, the value of the great art of photography applied to the making of fac-similes of MSS. has been apparent. Actual photographs of documents have been seen by perhaps most of our readers. Many of these are as good in every respect as possible, and their perfect re-production of the appearance of the MS. defies comparison with the result obtained by any other process.

To multiply photographs to any extent is, however, tedious, and, therefore, expensive ; and above all it is attended with great uncertainty as to their permanence.

tion selected was the first page of the county of Surrey. On examining it closely its general style appears bad, and the following variations have been noted—

28 dots, 7 contractions, 1 rubrication, omitted ; 1 wrong contraction, and one letter scarcely visible.

There was still wanting some means of combining the wonderful fidelity of the photograph with the permanence, facility, and consequent cheapness of printing either from the stone or plate.

To the Director of the Ordnance Survey of Great Britain (Col. Sir Henry James, R.E.) is due the merit of discovering a process by which the photograph can be taken from the glass negative in such a vehicle that it can be at once transferred for printing. The zinc plate, or stone, having been previously prepared in the usual way, a number of pages, sufficient to fill the plate, can be put upon it, and the whole "pulled off" at once. It is evident that this must be a very simple and inexpensive process. The intermediate stage consists of printing the photograph upon a paper saturated with an albuminised compound, which hardens under the light, so that the ink with which the whole is covered is retained firmly where the image of the MS. has been presented to it, and the other part is washed off. For complete particulars of the *modus operandi* I would refer to the pamphlet published by Sir H. James.<sup>2</sup>

On the occasion, to which allusion has already been made, when I sought to invite the attention of the members of the Institute to the importance of this discovery, as auxiliary to the purposes of the archæologist, I had the pleasure of presenting for their inspection two examples of the results of the photo-zincographic process. The first of these was a fac-simile of a leaf, one of the Anglo-Saxon MS. leaves discovered last year in the bindings of Episcopal Registers at Gloucester, being fragments of a metrical Life of St. Swythun, written about A.D. 1000. A memoir on these interesting relics was read at the meeting of the Institute in that city by the Rev. John Earle, late Anglo-Saxon Professor at Oxford, which he has announced for publication, accompanied by fac-similes obtained by aid of photo-zincography,<sup>3</sup> and of these a specimen was exhibited by his permission. The other example was the recently completed fac-simile of the Domesday Survey for the county of Cornwall.

<sup>2</sup> Photo-Zincography, by Colonel Sir Henry James, R.E., Director of the Ordnance Survey, Southampton; Forbes and Bennett, High Street, 1860, price, sixpence.

<sup>3</sup> This Memoir, doubly interesting as the earliest proof of the value of the

photo-zincographic process for archæological illustration, will be published by subscription, as announced in the last volume of this Journal, pp. 286, 334. Subscribers' names are received by the author, Swanwick Rectory, Bath, or by the secretaries of the Institute.

With regard to the Domesday Book the peculiar mark of emphasis there used has presented a serious difficulty, which has certainly doubled the cost of production. In many parts the fac-simile does not present the letters quite so clearly and sharply as in the original. It is slightly blurred and indistinct, owing to the nature of the process, in which however improvements will doubtless be made, but where clear the accurate delineation of every feature of the MS. is wonderful. Even this indistinctness is sometimes owing to corrections by erasure in the original, which are by no means uncommon, and which afford another evidence of the scrupulous care with which the record was made up. Had the weather at the time been brighter, so that the negatives could have been more quickly taken, the indistinctness apparent in places would not have occurred. Also, should a substance be discovered which will produce upon the prepared paper a surface which shall not soften under the effect of the bath necessary for removing the superfluous ink, the general effect will be considerably improved. As it is, where there is no colour in the MS. and the writing is clear and bold, as in the Saxon MS., a perfectly truthful representation is produced by this process. A copy of an early MS., equal to that of the page of the Life of St. Swythun, has never yet been produced by any other process of making a fac-simile. There are many portions of the Domesday copy which deserve equally high praise. It is necessary, however, to prevent *too much* being given. A small hole or a slight tear in the MS., a modern blot or mark, will all tell their tale, presenting themselves in the negative as decisively as though they had a right there, and this may influence the reading. In the specimen of the Domesday before us these variations from the true aspect of the original have not been dealt with in any way.

The opportunity for trying the process of "Photo-Zinco-graphy" upon a portion of the Domesday Book arose from the revival of the question as to the propriety of re-binding the great Survey. On account of the very rigid manner in which it has hitherto been bound, it has been extremely difficult to examine every portion of the MS. without disregarding the old and wholesome rule of the Exchequer that the hand should not be placed upon the writing. There are instances in which the ends of some lines which are longer

than others, have been bound up so closely that it was impossible to be certain that the entire reading had been obtained. It was not till long after the recommendation of its re-binding had been made, that Sir Henry James's proposal came before the Master of the Rolls.

I may be permitted to add, for the information of those who are anxious for the most zealous protection of so important a Record, that its safety was duly cared for in every way. It was most carefully packed for the journey,—the main building of the Ordnance Survey Office at Southampton is built on fire-proof principles and is under careful guard,—and a “Chubb's” safe was given to me to keep it in when there. The portion operated upon was kept by myself in a portfolio; the laying out of the pages was superintended by myself in a part of the building that was given up to me; and no portion of the book was out of my sight or removed from my charge.

There was no particular reason for the county of Cornwall being first taken. It was proposed to do one county only, and it was left to Sir Henry James to select which he pleased. The fac-simile of that portion may now be purchased at the cost of production, accompanied by a short introductory notice of Domesday, and of the application of photography to the reproduction of ancient documents, with woodcuts also representing the old Tudor binding of the book, and the iron-clamped chest with triple locks in which it was formerly kept.<sup>4</sup> Sir H. James states in this introduction that, if the publication of the whole Book by the same process should be ultimately decided on, it is intended to bring it out by counties, as Cornwall has been, so that any one may procure at a trifling cost an authentic copy of what relates to any part of the country in which he is more particularly interested. It is scarcely needful to observe how valuable a boon to the topographer and the archæologist such fac-similes would be, or to express the hope that the publication so successfully commenced may ultimately be extended to the entire text of the Domesday Survey. It is with

<sup>4</sup> The fac-similes of the part relating to Cornwall form eleven pages, small folio, of the same size as the originals; they are accompanied by a short introduction, list of names of places, &c. It

may be acceptable to our readers to be informed that this interesting publication may be obtained at the Ordnance Map Agents, at the small cost of 4s. 6d.

gratification that I am enabled to announce that instructions have been given to proceed with the portions of the Survey relating to Middlesex and Hampshire; and, whilst these pages have been in the press, the process of preparing the negatives may have actually been in progress at Southampton, with perhaps even more satisfactory results than in the case of the portion already achieved.