

NOTES ON THE "ROMAN ROADS" OF THE ONE-INCH ORDNANCE
MAP OF SCOTLAND. WITH TWO MAPS. By JAMES MACDONALD,
LL.D., F.S.A. Scot.

(Read May 8, 1893.)

1. PRELIMINARY REMARKS.

Among the objects of archæological interest laid down on the Ordnance Map of Scotland, "Roman road," "Roman camp" and "Camp" printed in the characters used to denote Roman antiquities, often appear. Many persons are in consequence led to look upon these designations as stamped with an authority that makes them authentic. The fact is overlooked that the engineers of the Survey, when marking the position of relics of the past, gave them their local or traditional names, without assuming responsibility for what the names may imply. None of the alleged Roman roads or camps can be shown to have borne that epithet continuously from ancient times. If they are the work of the Romans, all recollection of their being so was apparently soon lost. The traditions now current can be traced to assertions freely made and readily accepted in times comparatively recent.

By itself this is not to be deemed conclusive against the truth of the popular opinion. The barrier that ran from the Eden to the Tyne, undoubtedly in whole or in part the work of Roman engineers, was known in the Middle Ages as the Picts' Wall. On it were stations shown by their ruins to have been something more than ordinary camps, the Roman names of which were long forgotten in the district and have been recovered from the *Notitia*. But the numerous antiquities found *per lineam valli* bear testimony, independent of this ancient record, to the presence of Roman garrisons on the isthmus. In the same way, the Antonine Wall became Graeme's Dyke. Here, again, the inscribed stones discovered from time to time along its course place its Roman origin beyond dispute.

Few, if any, ancient roads or camps are recognised as Roman by Scottish chroniclers or historians earlier than the beginning of the eighteenth century. After that date, however, "Roman roads" gradually

increase in number, till lines of them, with stations at intervals, stretch as far north as the Moray Firth. In the papers that follow, an attempt will be made to open up this question anew. With this view I shall trace, as impartially as I can, the history of the popular belief in regard to each of the roads of the Map, and then examine the archæological evidence relied on for its support. If nothing else is accomplished, others abler to deal with it may be provoked to a study of the whole subject. To prevent repetition, a few preliminary remarks, applicable to all the roads alike, are necessary.

During the last century, when an intelligent interest in the antiquities of Scotland was first awakened, scientific methods were little known or practised in such investigations. With one or two notable exceptions, the antiquaries of those days were either collectors of curiosities or writers of dissertations based on imperfect or erroneous assumptions of their own. Much of what they did is deserving of all respect. To undervalue it would be an unworthy return for the debt we owe them. They have preserved to us the knowledge of many objects of interest that but for them would have been irrecoverably lost. It is not, however, too much to say that their discretion was not always equal to their zeal. The Kaim of Kinprunes, if an imaginary, is yet a very instructive example of how often and how easily they were misled. But as they were supposed to speak with authority, their opinions obtained wide credence. In this way traditions arose that have secured a firm hold in the localities concerned, as well as a place in our historical literature.

Of late years there has been a wholesome change. Archæology now aspires to the dignity of a science. The conjectures and inferences of an uncritical age are no longer allowed to pass unchallenged as ascertained facts. Our "Roman" roads and "Roman" camps will have to submit to the same ordeal as our "Danish" sculptured stones and our "Druidical" circles. Should they come out of it Roman as before, good and well. But if the evidence produced for any of them is unsatisfactory, our conclusions must be modified accordingly.

The question to be answered is not whether the "Roman" roads and camps of the Map are on the line of march by which Roman armies at one time or another traversed certain parts of Scotland. They may be

so, and yet, as we now see them, belong to a different age. So little do we learn from ancient history of the movements of Agricola and his successors in command, when, at wide intervals during the first centuries of our era, they overran the country between the two walls, or carried their standards for brief periods into the wilds beyond, that we are left in great uncertainty as to the particular routes they followed. Where they fought their battles, and where, if we leave the Antonine Wall out of account, they stationed their forces, is nearly as doubtful. If still existing fragments of ancient roads and certain camps are Roman, we have something to guide us in our efforts to read aright what has been left so obscure. But the first step to be taken is to establish beyond reasonable doubt that these remains have a just claim to the title.

It may not be without some significance that the roads referred to are all to be found not far out of the track of one or other of the railways that now convey the traveller northward or southward. They take advantage of the river valleys, or oftener of the hilly ground that immediately bounds the valleys, as well as of the plains and the mountain passes that lie between. Their course, so far as we can now connect their fragmentary portions, is that which the experience of ages points out as the best adapted for opening and keeping up communication between Central and Southern Scotland, and between Scotland and England. Along the same valleys and hills, over the same plains Pict and Scot must have marched to harass the Romanised Briton of the South ; and along them the retainers of the great feudal barons often passed to and fro when mustered for war, the tournament or the chase. During a great part of the period that has elapsed since the Romans left Britain, Scotland was, with but few intervals of peace, the theatre of intertribal or international strife. At first, different peoples within itself struggled for the mastery ; later, partially united, they strove to resist first the Scandinavian invader, and afterwards their powerful Southern neighbour. It need not surprise us if, over a wide area of this great battlefield, we should meet with the remains of roads, camps and forts. During those centuries, unless the people were in a state of primitive barbarism, roads must have been required for various purposes, during peace and war alike. That the country was not altogether removed from

civilising influences, there is ample evidence. Art striving for expression in metal and in stone, baronial pile, cathedral and abbey testify that a civilisation of no mean type, partly of native and partly of foreign growth, existed in Scotland in early and mediæval times. It is difficult to believe that the builders of those edifices did not feel the need of roads, or that they were unequal to the task of supplying that need. We are surely not warranted in concluding that a disused road, of which the history may be forgotten, is Roman merely because it is quite possible Agricola or Severus entered or left Scotland by the route it takes, or because an ancient camp or fort in its neighbourhood has been pronounced by somebody to be Roman.

If such roads are really Roman in design and construction, we may expect to find that, with minor differences easily accounted for, they will show certain points of similarity ; so that on comparing them with one another and with roads elsewhere that are undoubtedly Roman, they will themselves afford some evidence as to their origin. Unfortunately, few portions of them are left us ; and these must have been more or less changed from their original state by repairs made on them during the long period when, by whomsoever they were built, they continued to be the only available roads in the district. Still, repairs, however extensive, ought not to obliterate from a properly constructed Roman road every mark of Roman workmanship. To show that this is so, it will be necessary to glance at the structure of imperial highways, as these are usually described to us by those who have seen them.

The conditions under which the Romans can be said to have held North Britain for a time, have also to be taken into consideration. If their occupation was a purely military one, often interrupted though maintained for centuries, they were likely to undertake but few public works of a substantial kind. As invaders they would use the trackways on which the natives drove the chariots from which they are said to have fought. They perhaps improved them so as to make them more passable, and they may have thrown temporary wooden bridges over the larger rivers. But statements sometimes made and supported by quotations from the classical writers, to the effect that in the course of their expeditions they constructed roads for themselves, can be shown

to be founded on a misapprehension of the meaning of the passages referred to. Cæsar in his Commentaries on his Gallic wars nowhere indicates that he had to open up the country with roads in order to facilitate his progress. The Roman roads of Gaul belong to a later period in its history, when, as a portion of the empire, it was subject to the civil as well as the military rule of its conquerors. Only if North Britain became part of a regularly constituted province, would the Romans leave within its limits enduring memorials of their presence. We may assume that their generals, when they sent their troops into winter-quarters, employed them, as other Roman generals did under similar circumstances, in connecting by means of roads the camps or forts they occupied. They would do so both in order to strengthen their own positions and to hasten the complete reduction of an island which, to its furthest shores, they hoped might one day be included within the boundaries of the empire. In this connection the few contemporary notices we possess of this period of our history are important, and the sources of Ptolemy's *Geography*, generally regarded as having preserved the names of various Roman military stations in North Britain, otherwise unknown, require to be carefully examined. If the changes made by man on the face of the country have not effaced every vestige of such roads, and if the evidence in their favour is clear or even strongly presumptive, they are objects of much interest to the archæologist as well as to the historian. On the other hand, should few of them now remain, there need be no surprise. The point, then, to be settled is not what this or that Roman commander may have done, but whether the Roman roads of the Map, or any of them, were planned at first by Roman engineers and constructed by the legionaries, with or without the help of the natives. In no other sense are they entitled to the name.

Attention will be chiefly directed to the roads of the one-inch Ordnance Map. The works of Gordon, Roy, Chalmers and Stuart are furnished with maps, on which are traced the routes by which, as they think, the Roman armies invaded Scotland and afterwards maintained communication between the garrisons planted there and the reserves in the stations on the two walls. The map of Roman Britain in the *Monumenta Historica Britannica* professes to give "all the Roman

roads of which traces exist at the present time." These are indicated on it by coloured lines, which are spread over England and extend into Scotland beyond the upper isthmus. "Roads of which the courses are only conjectural are distinguished by broken lines." Map No. I. is a part of this map on a reduced scale, and may be compared with Map No. II., which shows the portions of road marked as Roman on the Ordnance Map.

What may be called the "trunk lines" are nearly the same in them all, but there are considerable differences in other respects. As it is desirable to choose one authority as a guide, and as the Ordnance Map is the most accessible and best known, I have selected it, and shall refer to other maps only when it appears desirable to do so.

The observations on the general question that it thus seems necessary to make may be arranged under the following heads, each of which will be discussed as briefly as possible :—

- (1) The historical data furnished by the Roman writers regarding the Roman conquests in North Britain.
- (2) The value of Ptolemy as a guide to the Roman geography of North Britain.
- (3) The structure and uses of the great roads of the Roman empire.
- (4) The relation of the district between the Walls to the rest of Roman Britain.
- (5) The highways of Scotland from the twelfth to the middle of the eighteenth century.
- (6) The rise and growth of current beliefs regarding Roman roads in Scotland.

(1) *Historical data.*—Four Roman commanders are known to have attempted the subjugation of North Britain,—Agricola, Lollius Urbicus, the Emperor Severus, and Theodosius. Of these names the most familiar to us is that of Agricola, who, fortunately for his fame, found a biographer in his son-in-law Tacitus. As a piece of composition *The Life of Agricola* is perhaps unsurpassed of its kind. But the narrative, though copious and graphic, yields us little topographical information. A brief outline of it will show this.

Having pacified the North of England in the first two years of his

command in Britain (A.D. 78 and 79), and having built a number of forts in the conquered territory, the Roman general, in A.D. 80, broke new ground. Setting out from his winter-quarters, the site of which is uncertain, he marched northwards, laying waste the country as far as the estuary of the Tanaus.¹ As this is a river mentioned only in the *Agricola*, we have no clue to its modern name except what is there given. If we adopt the likely supposition that he entered Scotland by the east coast, the suggestion of Wex, that Tanaus is the North Tyne in Haddingtonshire, is not improbable. At all events, the reading "Taus" of the old editions, that led to the belief that he reached the Tay only to retrace his steps shortly afterwards, cannot now stand. As he advanced or after he halted Agricola erected forts, in which were placed garrisons furnished with a year's provisions. The succeeding winter was probably spent on the south shore of the estuary of the Forth.

In the summer of A.D. 81 Agricola occupied himself in defending with a chain of forts the isthmus which separates the estuaries of the Forth and Clyde. These forts are believed to have been erected nearly along the line afterwards followed by the Antonine Wall. On this theory his head-quarters at the close of the summer's operations and during the following winter may have been somewhere in the neighbourhood of Dumbarton.

The tribes along the east coast and for miles inland would no doubt be awed into a temporary submission during Agricola's march northwards. He now resolved to secure his rear against a sudden attack from the south-west by a display in that quarter of the power of Rome. Accordingly, in A.D. 82, crossing an arm of the sea, presumably the Firth of Clyde, "in the first ship,"² and landing at some point that cannot be fixed, he pushed southwards, subduing "tribes unknown before" and posting garrisons in a district which looked towards Ireland. This

¹ I follow Wex, Kritz, Baiter and Orelli (ed. Andersen), Schoene, Draeger, and other recent German editors, in reading Tanaus, Mons Graupius, Boresti, instead of Taus, Mons Grampius, Horesti, as in the older editions. Church and Brodrig have Tanaus and Boresti, but retain Grampius on grounds which do not seem to me to be decisive.

² However obscure "prima nave" of the MSS. may be, it is better to keep by it than have recourse, with some editors, to conjectural emendations.

accomplished, he returned with the rest of his troops to the shelter of his forts on the Forth and Clyde isthmus.

His rear thus secured on the west as well as on the east, Agricola, in the summer of A.D. 83, began operations against the tribes dwelling north of the Forth. The invaders had now the support of the Roman fleet, which must have been brought northwards for the purpose from its headquarters on the south-east coast of England. The ships, with orders to reconnoitre the coast, continued to accompany them; and, if it be the fact, as is distinctly stated by Tacitus, that during the campaign the soldiers and sailors kept thoroughly in touch with each other and often met in the same encampments, we must conclude that Agricola's line of march lay at no great distance from the shore of the German Ocean. The well-planned attack of the Caledonians on the ninth legion marked the operations of the summer of A.D. 84; and next year the victory of Mons Graupius brought the war to a close. The Roman general now led back his army first into the territory of a tribe named by Tacitus the Boresti, and then into winter-quarters, possibly the forts on the upper isthmus. With what Tacitus calls the circumnavigation of the island by the fleet, Agricola's career in Britain closed. Soon after the return of the ships to the port from which they had set out, he handed over the province to a successor and returned to Rome.

Regarding Lollius Urbicus very little information has come down to us. Sent into Britain by the Emperor Antoninus Pius to cope with some emergency, probably a wide-spread rebellion, he appears to have reconquered the country up to the Forth and Clyde isthmus about A.D. 140. Our only authority for this is Julius Capitolinus, who, in the oft-quoted passage in his *Life of Antoninus*, tells us that the latter "carried on many wars by the imperial lieutenants. For," he adds, "he even subdued the Britons by Lollius Urbicus, and driving back the barbarians, built another wall of turf." No indication is given of the position of this rampart. But inscriptions testify that it was the barrier that once stretched from the Forth to the Clyde, now known as the Antonine Wall. We are also left quite uncertain as to the part of the country that was the scene of the battles fought by Urbicus, and consequently, the Wall excepted, of where any traces of his encamp-

ments are to be sought. Pausanias refers shortly to the loss of a great portion of their land inflicted by Antoninus on the Brigantes, one of the most powerful of the British tribes, as a punishment for their having invaded the territory of another tribe that paid tribute to the Romans. Eburacum (York) was, we know, a Brigantian town. It had existed, according to one of its historians, "as a Celtic-British city before the subjugation of the Brigantes by Agricola and his legates," and was made by him a military station. From being a temporary camp it afterwards "became a permanent station, the head-quarters of a legion and the residence of the proprætor and the emperor when he visited Britain."¹ If we assume that Urbicus was the officer by whom the insubordination of the Brigantes was chastised, and that York was already the military capital of Roman Britain, we can hardly avoid the inference that it was from that city that he set out on his campaign against the Caledonians, and further that his line of march was probably that of Agricola.

Of the actions of the Emperor Septimius Severus in North Britain, we have much fuller but still very vague accounts. Notice has been taken of them at some length by Dion Cassius as abridged by Xiphiline, and by Herodian, both of whom wrote in Greek, as well as by Spartian, Eutropius and others, who wrote in Latin. From these authors we learn that Severus was provoked into the taking of hostile measures by insurrectionary movements on the part of the Caledonians and the Meatae, the latter of whom dwelt close to "the wall which divided the island into two parts," and the former still farther north. Authorities are divided as to what wall is meant, some holding it to be that on the upper isthmus, others, with more probability, that on the lower. The country of the Meatae seems to have been quickly subdued, but greater obstacles were encountered in the attempt to conquer Caledonia. According to the accounts brought back by the troops of Severus, as recorded by Xiphiline, woods had to be cut down, hills to be levelled, marshes to be made passable, and rivers to be bridged. The enemy avoided a general engagement, and even kept out of sight. Their policy was to lure the Romans onwards into their inhospitable country and allow the sufferings the soldiers had to endure to do the work of destruction for them.

¹ Wellbeloved, *Eburacum*, pp. 45, 46, 60.

Stragglers they cut off by ambuscades. After a toilsome march, in the course of which he is said to have lost 50,000 men—a loss, it must be supposed, greatly exaggerated—Severus reached the extremity of the island. Terms of peace were then arranged with the Caledonians, who agreed to cede a large portion of their territory, after which the emperor retreated to more friendly soil. Nothing is told us which enables us to determine what route he took, either in advancing or in retreating; nor can we say how far north he penetrated, for the expression "extremity of the island" can hardly be taken in its literal sense. But as he returned to York, which was then unquestionably the centre of the military resources of the province, we may take it as almost certain that it was from this city that he set out. If so, as far as the Forth at least, he would follow in the footsteps of Agricola and Urbicus.

Neither Herodian nor Xiphiline mention the building of a wall by Severus. His having done so, however, is set down by Spartian as the greatest glory of his reign, and is especially noted by other Roman historians, as well as by our own Nennius and Bede. It ran, we are told, from sea to sea. Estimates differ as to its length, some making it 32, other 132 miles across. Great variety of opinion also exists as to which of the two isthmuses it guarded, and whether it was a new erection or only a previously existing structure put into a state of repair.

For a period of more than a century after the expedition of Severus we find no notice taken of North Britain by the classical writers. From our next authority, Ammianus Marcellinus, we learn that the Picts and Scots, as the northern tribes were now called, had become such formidable enemies to the provincials of South Britain, that in the year 367 Theodosius, father of the emperor of the same name, was sent by Valentinian I. to put a stop to their ravages. In two campaigns he drove them back defeated, and established stations and outposts to defend the recovered territory, which, by desire of the emperor, received the name of Valentia.

The security thus gained was of short duration. Some thirty years later Stilicho, the general of the Emperor Theodosius, had to send reinforcements to Britain in order to enable the Romanized Britons to repel the attacks of their persistent enemies, the Picts and Scots. To

the poet Claudian we owe nearly all of the very little we know regarding the incidents of this period. The legionaries drove back the invaders, and seem to have once more repaired the barrier on the lower isthmus. They were then recalled. In response to subsequent appeals, the Emperor Honorius urged the provincials to look to their own safety. According to Gildas and Bede, their entreaties were renewed; aid was sent them oftener than once; and a wall of turf was built on the upper, and one of stone on the lower isthmus—an assertion that tends to perplex rather than enlighten us. Shortly after this, about the year 420, the Romans, no longer able to defend the extremities of their once powerful empire, left Britain, never to return.

Thus from ancient history we can gain but little exact knowledge of the particular route or routes usually followed by the Roman legions in passing between the walls, or in any incursions further north that they may have made. Roman remains, such as stations, camps and roads, have therefore been sought for with which to supplement and illustrate the statements of the historians, and these, as we shall afterwards see, are supposed to have been found. It is obvious that before evidence of this kind is admissible, it must stand any reasonable test of its genuineness that can be applied to it. An ancient author has been largely employed to strengthen it—the geographer Ptolemy. The value of his writings for this purpose may now be considered.

(2) *Ptolemy's Geography*.—Ptolemy, the most celebrated geographer of antiquity, lived at Alexandria in the second century of our era. The exact date at which his *Geography* was published is uncertain. It has been put down as early as 120 B.C. and as late as the middle of the century or shortly before his death, which took place about A.D. 160. In its plan it differs from the kindred work of any other Greek or Roman writer that has come down to us. A series of tables, giving for each country of the then known world the names of the tribes inhabiting it, with their cities and the chief features of the coast, where their territories were washed by the sea, is preceded by an introduction explaining the main objects Ptolemy had in view when compiling the *Geography*, and followed by certain astronomical details closely related to his subject. A set of maps accompanies some of the MSS. There seems little doubt

that when first published it was illustrated by such a series, drawn up under Ptolemy's own inspection. But, as Bunbury justly remarks, since "the material which he furnished in his tables would enable any one with a moderate amount of geographical skill to construct such maps for himself, it is very difficult to judge how far those which accompany the existing copies of his work are to be taken as representing the original."¹

Both in this country and on the continent, it is generally taken for granted that Ptolemy's information was mainly, if not altogether, drawn from Roman sources. Much of what he knew regarding North Britain is credited to the campaigns of Agricola and the supposed circumnavigation of the island by that general's fleet. To official reports and itineraries that may have been sent to head-quarters by Roman officers up to the time at which he wrote, or to their substance, Ptolemy had apparently got access. Many if not all of the towns in his tables of North Britain are therefore, on this supposition, to be regarded as Roman stations or permanent camps, intended to overawe the natives within whose territories they had been planted. Bertram's forgery *De Situ Britannia*, ascribed by its pretended discoverer to Richard of Cirencester, a monk of the fourteenth century, with its "Itinerary of a Roman General," mostly taken from Ptolemy, seemed to put this view beyond all question. In this way, by reading the ancient authors with the aid of the light believed to be cast on them from Ptolemy, "Richard," and certain alleged Roman camps and roads, it became possible for our Scottish antiquaries to construct, out of a few obscure sentences, a detailed narrative of Roman conquests in North Britain.

A study of Ptolemy's introductory book, an examination of his tables and a comparison of their contents with the writings of Roman historians and geographers up to the date of the abandonment of the island, will, I venture to think, throw great doubt on the legitimacy of the use to which the *Geography* has thus been turned. What follows is to be understood as applying primarily to North Britain. The Ptolemaic geography of South Britain may very well have been largely made up from Roman sources. That is a matter for separate investigation. It is impossible, within my present limits, to go fully into the various

¹ *History of Ancient Geography*, vol. ii. p. 578.

questions raised now, for the first time, I believe, at least in their present form. A few observations must suffice.

Ptolemy informs us that he adopted as the basis of his work the labours in the same field of one Marinus of Tyre, of whose name but for his mention of it we should never have heard. From the designation he attached to it, we may infer that Marinus was either a native of Tyre, or in some way closely connected with that city. Ptolemy gives high praise to the care with which his predecessor had collected all available materials, and the sagacity with which he had used them. He finds fault, however, with their arrangement and the haphazard manner in which the distances between certain places had been calculated. It was to correct these errors, and make the tables of Marinus more accurate in the longitudes and latitudes assigned to different places, that Ptolemy undertook the task of recasting the *Geography* of the Tyrian.¹

¹ It may be well to give the words of Ptolemy from which these inferences are drawn. After referring to the necessity of bringing geographical information down to the latest date, and of distinguishing what is worthy of credit from what may not be so, he says: "Marinus of Tyre is apparently the most recent writer on this part of the subject, and he seems to have worked at it in the most earnest spirit. For it is clear that he had access to various records over and above the generally known authorities, and that he went through the writings of almost all his predecessors with great care, taking note of the necessary corrections in cases where they had been misled, or rectifying his own view where he had been in the first instance mistaken, as may be seen from a comparison of the editions of his treatise on the improvement of the map of the world. Now, if we could regard the final form of his work as thoroughly satisfactory, it would have been unnecessary for us to do more than simply follow his directions in our delineation of the surface of the earth. There can, however, be no doubt that he himself adopted some statements without proper consideration; and further, that his system of delineation leaves much to be desired in respect both of convenience and of symmetry: it is therefore but natural that we should try to supplement his labours, where this seemed to be required, by improving on them both from the theoretical and from the practical point of view" (*Geog.*, bk. i. c. 6). Ptolemy then proceeds to give a somewhat lengthened criticism of Marinus, in which he justifies himself for differing from some of his calculations. These relate almost entirely to questions affecting the length and breadth of the inhabited world, and consequently of the latitudes and longitudes of some of the places on its surface. Incidental reference is made to expeditions by two Roman generals into the interior of Africa, and to the voyages and journeys of traders to southern and eastern Asia. But no clue is afforded as to the source whence Marinus (or Ptolemy himself) obtained such a minute knowledge as he shows of the shores of north-western Europe.

If the date at which Marinus lived could be fixed with any degree of certainty, some help would be afforded us in determining what he was likely to find in Roman authorities regarding the topography of North Britain. But all we have to guide us is the remark that he was the latest geographer of Ptolemy's own age. That may mean that he preceded Ptolemy by a few, or by thirty years or more. Taking into account the uncertainty as to the date of Ptolemy's own work, we have thus a range of nearly half a century within which the publication of the last edition of Marinus may be placed, *i.e.* between A.D. 100 and 140.

Owing to the loss of Marinus' work, it is impossible for us to assign to him and Ptolemy their respective shares in the *Geography* as we now have it. But we may safely infer from Ptolemy's introductory book that the lists of places and other names are taken mainly if not wholly from Marinus, while we owe to Ptolemy their better arrangement and the nearer approach to accuracy in their latitudes and longitudes. In estimating the value of the tables for the use so generally made of them by our Scottish historians, we ought to bear in mind, that Marinus, as Ptolemy assures us, was a diligent collector of materials from all possible quarters. The words employed must be read as including Eastern as well as Western sources. What the sources were we have no means of ascertaining in any particular case, except in so far as they may possibly be disclosed by an examination of the tables themselves. As for Ptolemy, he was a votary of pure science, concerned with mathematical and astronomical rather than with topographical facts, who found, we may justly conclude from his own explicit statements, all of the latter that he cared for ready to his hand in the work of his predecessor. What evidence then, if any, have the tables to offer on the point at issue?

In the tables, modern Scotland is the northern portion of Albion,¹ the larger of the two "Pretannic"² or "Britannic" Isles. It was under

¹ Ptolemy's mistake in making Scotland trend to the east instead of the north in no way affects the present argument. For an explanation of it, see "Was Burghead the Winged Camp of Ptolemy?"—*Archæological Journal*, vol. xlviii. pp. 372, 373.

² There is evidence that Ptolemy (Marinus) wrote *Pretannic*, and that Diodorus and Strabo probably did the same.

this name that these islands were first made known to the civilised nations of the world by the Phœnicians, or independently by Pytheas of Marseilles. Through one or other of these channels, chiefly through Pytheas, the early Greek writers became acquainted with them. The name Britain is first met with in Cæsar. By the Romans, this was henceforth adopted as the designation of the larger island. Greeks like Diodorus Siculus and Strabo, who wrote after Cæsar, and whose authorities were partly Greek and partly Roman, speak of the "Bretannic Isles" and of "Bretannia". Pliny tells us that in his day (A.D. 79) Albion had become an obsolete word. But many years afterwards, geographers whose sources were Greek or Ptolemaic (*e.g.*, Agathemer and Marcian, in the third century, and Stephen of Byzantium, circa A.D. 490) used only the old name, as did Festus Avienus writing in Latin, but translating into his own language a Phœnician poem.

In his tables Ptolemy calls the island Albion, but in his introductory book, the only time he mentions it, he names it Britain. In another work of his, *Syntaxis Mathematica* (the *Almagest*), it appears twice as Great Britain and once as Britain; and in the *Tetrabiblon*, an astrological treatise, it is also called Britain. How is this inconsistency to be explained? Very simply, if we suppose that he took the names in his tables from the work of Marinus, whose sources were Phœnician or Greek; while in his introduction and his mathematical and astrological writings, which were entirely his own composition, he deferred to Roman influences, then strong at Alexandria.

With Tacitus "those inhabiting Caledonia" are the tribes north of the boundary fixed on by Agricola as the *Limes Imperii* in Britain. When the tribes to the south of this line were in revolt, the Romans of a later day seem to have designated as Caledonians all who were hostile to them over almost the whole extent of country now known as Scotland. But in Ptolemy the Caledonians are merely a single tribe inhabiting part of the central Highlands. No towns are assigned to them. In no way are they marked out as superior to the other tribes around them. The difference between Tacitus and Ptolemy seems inexplicable if both were indebted to the expeditions of Agricola for what they knew of Scotland, but is at once satisfactorily accounted for

if the date of the information supplied to Marinus was earlier than the days of Agricola. In the interval the Caledonians, like the Scots of after times, had become through some means the premier tribe, and were able to impose their name, if not their suzerainty, on the other tribes of North Britain.

The contents of Ptolemy's tables, when put side by side with our other early geographical notices of the country, differ greatly both as to what they do and what they do not contain. They give us many more names than all other ancient authorities taken together. We have no means of judging how far the distinctive appellations and the towns of the various Ptolemaic tribes are correct and exhaustive; but, looking to what we are able to test—the comparative accuracy of Ptolemy's features of the coast—we cannot reject what he tells of the interior as purely conjectural. Another point deserving of still more attention is this: Roman authors have scarcely any names in common with Ptolemy. The writers who flourished between A.D. 80 and A.D. 420 need alone be taken into account in drawing the comparison. Pliny and earlier authors had a vague knowledge of the furthest shores of North Britain, evidently derived from the Greeks. Accordingly, they knew of the Orcades and the Ebudæ or Western Islands in common with Ptolemy, as well as of one or two islands which he does not mention. But Ptolemy gives the names of several of which they seem to have been ignorant, and which are found only in the *Geography*.

Of the eighteen northern tribes among whom the whole country is parcelled out by Ptolemy, and whose relative positions are noted, none are mentioned by any other writer, with, as we have already seen, the doubtful exception of the Caledonians. On the other hand, the Boresti of Tacitus, who must have been an important tribe, are not in Ptolemy. To such of these tribes as occupied the Lowlands, Ptolemy assigns seventeen towns or forts, not one of which is mentioned elsewhere. Nor do we learn from any other authority the name of a single town in North Britain except the station Blatum Bulgium of the Antonine Itinerary.

In the *Geography* nineteen river-mouths and gulfs are said to indent our shores. Two of these occur in Tacitus, Clota and Bodotria, the

Boderia of Ptolemy. This probably shows that the originals of these names had long been the native designations of the two firths. But the Trutulensian or Trucculensian harbour, the rendezvous of Agricola's fleet, now generally admitted to have been on the east coast of Scotland, is not in Ptolemy, nor is the river Tanaus, at least under that form of the name. Several prominent capes, as well as one easily recognised peninsula on the south-west coast, are in Ptolemy, but not elsewhere.¹

¹ Ireland, called by Ptolemy in his "Geography" *Ivernia*, but in his "Tetrabiblon" (teste C. Müller) *Britannia parva*, has assigned to it, in the former, ten towns (three of them on the coast), sixteen tribes, fifteen river-mouths, and five or six capes. Not one of these is to be found in any Roman writer. Of nine islands attached to it, most of which rather belong to England or Scotland, five or six are elsewhere named. These details, which are comparatively fuller than those given for the larger island, can hardly have been derived from the Romans. Tacitus (*Agr.* c. 24) speaks of Ireland's "harbours and approaches" being known through the intercourse of commerce. But he must be referring merely to the other side of the Irish and the North Channels, about which the natives of the corresponding shore of Britain would be able to give Agricola some information. Recently Dr W. Pfitzner, in his Essay, *Was Ireland ever invaded by a Roman Army?* (Neustrelitz, 1893) has endeavoured to answer in the affirmative the question he puts. But ingenious though some of his arguments are, he does not seem to me to have met the objections that can be fairly brought against such a conclusion from the narrative of Tacitus itself. (See also Thompson Watkins, *Archæological Journal*, vol. xliv. pp. 289-293.) To South Britain Ptolemy gives three islands, seven capes, twenty-eight river-mouths or estuaries and harbours, seventeen tribes and thirty-eight towns. Of the islands, probably one was known to Diodorus Siculus and two to Pliny. Diodorus has two of the capes, one of which is named by Strabo—two authors Greek rather than Roman in their information. The names of three South British rivers occur in Tacitus, only two of which are among the twenty-eight in Ptolemy. Of these two, Cæsar has one. The *Lemanis Portus* of the *Antonini Itinerarium* has been supposed to be the *Novus Portus* of Ptolemy; but this is uncertain. Ten of Ptolemy's tribes are noticed by the earlier Roman and Græco-Roman authors; on the other hand, they mention the names of eight that are not given by him. Of his thirty-eight towns, apparently no fewer than twenty-two are in the *Ant. Itin.*, which last authority has 141 South British towns in all. Thus, there are only twelve towns in Ptolemy not in the later compilation, though it has 115 not given by him. More than one explanation of their partial agreement is possible: (1) All Ptolemy's lists for South Britain may have been drawn from Roman sources; (2) his sources may have been Roman for the towns or for most of them, but not for the features of the coast; (3) the two lists may be of independent origin, but both compiled from information obtained on the spot and so equally authentic, yet of different dates. Ptolemy, though he calls them cities (*πόλεις*), may mean what were the chief strongholds of the natives for many centuries before the arrival of the

It is fair to say that the absence of names of places in Roman historians ought not to be pressed too far. The writings of Tacitus in particular are marked by a want of that attention to geographical details that would be demanded of a modern historian. What is much more significant is the difference between the *Geography* and all other ancient authorities in the case of such names as are to be found in the latter. Almost all of them seem to have been as unknown to Ptolemy as the bulk of his names were to them. It thus looks as if great changes, political and perhaps racial, had taken place in North Britain between the date of Ptolemy's information and theirs. This may or may not be the true explanation. But till such discrepancies between Ptolemy and Roman geographers, and between Ptolemy himself as a mathematician, astronomer and astrologer, and as editor of Marinus, are accounted for in accordance with the theory that the sources of the *Geography* were Roman, it ought to be quoted by us with great reserve. As perhaps embodying the contents of archaic documents that take us back, for aught we know, into the mists of antiquity, it is of the highest interest to the student of place-names; but as illustrative of the history and geography of Scotland in Roman times, and as a guide to where Roman roads and camps are to be looked for, it may be worse than useless—it may be misleading.¹

(3) *The Great Roads of the Roman Empire*.—Roads were an important feature in the economy of the empire, and the charges for their construction and maintenance generally formed a burden on the public funds. "With the exception," writes Dr Guest, "of some outlying portions, such as Britain north of the Wall (of Hadrian), Dacia and certain provinces

Romans in the island, on or near the sites of which, towns in the Roman sense were afterwards built that, like Eburacum, would bear the old designations. At first sight the names of certain legions, attached to Eburacum, Deva and Isca, in most editions and MSS. of Ptolemy, appear to stamp his authority as Roman. But, for reasons that need not now be stated, I strongly suspect the words referred to are additions to Ptolemy's text, transferred to it from the *Ant. Itin.* by some copyist. Notwithstanding this remark, no opinion is expressed here as to Ptolemy's sources for South Britain. Being early reduced to the form of a province and continuously occupied by the Romans for a long series of years, the southern part of the island stands, in respect of this question, in a somewhat different position from the northern.

¹ It is, of course, by no means improbable that most of the Ptolemaic towns or tribal strongholds may have continued to exist till Roman times.

east of the Euphrates, the whole empire was penetrated by Iters. There is hardly a district which we might expect a Roman official to be sent to, on service either civil or military, where we do not find them."¹

Roman roads were laid out in a straight line. "Two trenches, in the first place, indicated the breadth of the road. The loose earth between the trenches was then removed, and the excavation as far as the solid ground was filled with materials to the height fixed on for the road. Some Roman roads were twenty feet over the solid ground. The lowest course was composed of small stones; the second was a mass of broken stones cemented with lime; the third was composed of a mixture of lime, clay, fragments of brick and pottery broken together; on this was placed the fourth course, composed of a *pavimentum* of flat stones, selected for their hardness, cut into irregular polygons, and sometimes into rectangular slabs. When the fourth course or pavement was not put on, the surface was a mixture of pounded gravel and lime. The ordinary breadth of the principal Roman roads was from thirteen to fifteen feet; some, however, were only eight feet wide. Footpaths were raised on each side, and strewed with gravel."²

Temples, villas, and sepulchral monuments were often erected near the public roads. The care of the roads was intrusted by law to certain magistrates. Under the empire the head of the State concerned himself with them. The primary object they were intended to serve was the safe and easy movement of troops. But they were needed for other purposes. It was by them that "the postal and despatch system" between Rome and all parts of her dominions was kept up. This system was first established by Augustus, and developed by his successors. At regular intervals on the roads were posting-houses where horses were changed, and resting-places where the journey might be broken. There were also mile-stones, measured from the gate by which any particular road left the capital.³

It is not to be supposed that all Roman roads were constructed on a plan

¹ *Origines Celticæ*, vol. ii. p. 102.

² Westropp, *Handbook of Archæology*, p. 108.

³ *Smith's Dictionary of Greek and Roman Antiquities*, art. VIÆ, 3rd ed., 1891.

so elaborate and with such adjuncts. Many of them, doubtless, especially those outside of Italy, were either hurriedly built, or were, as remarked above, native roads repaired and improved. It may now be difficult or impossible to tell from an inspection of the remains of such a road what was its origin. The remark applies with still greater force to districts that the Romans merely overran, and held for a short time by force of arms. Roman antiquities, if not light and portable, found in connection with a road, would go far to prove its age. If it ran between Roman stations or camps, its claim to be a Roman road might be regarded as fairly made out.

Our chief authority for the roads of the Roman empire is still the two tomes of Bergier.¹ No separate work of importance has appeared on the subject since his day. His account of their history, management, structure, and the purposes, civil as well as military, they were intended to serve, is founded, not on an examination of those still existing, but on numerous passages in Strabo, Pliny, Vegetius and other ancient writers. In regard to their number and the stations on them he follows the *Antonine Itinerary*, supplementing it by the Roman historians and the Peutinger Table, or more properly, Chart, a large folding representation of which accompanies his first volume. Inscriptions are freely recorded when found along any of the roads. Bergier's chapter on those of Britain is short, and compiled from Camden. No Iters are given for England, although fifteen are specified in the *Antonine Itinerary*; and almost no mention is made of Scotland. With regard to the Peutinger "Table," it may be noted that from the one copy of it that now exists the greater part of Britain has been torn off. What remains includes only a portion of the south-east coast, from the station "Ad Taum," near Norwich, to the harbour at Lynne, on the coast of Kent.

(4) *The Roman occupation of Southern Scotland.*—As we have seen, the Roman writers leave us quite in the dark as to the character of this occupation. None of them have the names of any Roman town or station, Blatum Bulgium excepted, within or north of the limits of Southern Scotland. The names with which we are familiar are all taken from

¹ *Histoire des Grands Chemins de l'Empire Romain*, nouvelle édition, 1728.

Ptolemy's tables or from "Richard." By most modern authors it has been supposed that it was the district between the two walls that was recovered by Theodosius and named Valentia. But that is by no means certain. We know from the *Notitia* that in the beginning of the fourth century there were five subdivisions or provinces of Roman Britain instead of one, as there had been down to A.D. 197. Of their boundaries, however, we are entirely ignorant. Their position, as laid down on modern maps of Roman Britain, is unsupported by any ancient authority. We cannot say for certain that Valentia extended from the lower to the upper isthmus: its boundaries may have been very different. Undoubted traces of Roman encampments or settlements do occur in a few places between the walls; but no inscriptions have been found that preserve the names or reveal the particular character of these localities. Some of the sites have not yet been subjected to the careful examination they deserve. Were the remains of *colonix* or *municipia* to be discovered we should expect to find Roman roads that had connected them; or if we found Roman roads we might reasonably look for the sites of towns or permanent camps. Meantime, although Southern Scotland was from the time of Agricola onwards nominally included in the empire, we have no evidence, unless we accept as it stands what is offered to us by our older writers, that enables us to determine the exact nature of the tenure by which it was held.

The *Antonine Itinerary*, which furnishes a guide to the Roman roads of England, ends abruptly on entering Scotland. Only one station named in it lies north of the present border—Blatum Bulgium, usually identified with Birrens. This station, along with *Castra Exploratorum* (Netherby), guarded the approach from the north to the great English wall on the east, as did *Bremenium* (High Rochester) on the west. It is generally supposed that the *Itinerary* was compiled by order of Antoninus Caracalla, the son of Severus. Whether this is so, whether we have it in its original state, or whether it was enlarged from time to time as circumstances required, are questions that will probably never be settled. If it belongs to the age of the Antonines, some additions have certainly been made to it later. In the form of *Iters* it gives the lines of communication between the principal cities and towns of all the provinces of the empire. Dr

Guest is of opinion that it was only from the public archives that materials could be obtained sufficient for the compilation of a work at once so minute in its details and so comprehensive in its plan.¹ He further believes that in its aim it was civil rather than military.

If Southern Scotland was ever governed as an integral part of the Roman empire, why is it not represented in an official document like the *Itinerary*? This has been answered by the conjecture that at the time the *Itinerary* received its latest shape, the Romans may have abandoned North Britain. But the supposition is unsupported by the semblance of proof. If we take the fact as we have it, along with what historians tell us, it is much more likely that while the Romans continued to regard the upper isthmus as the line that divided the empire from the "barbarians," the country between it and the lower remained, during all the centuries they were in Britain, debatable ground that was never brought under the civil administration of prætor or proconsul, and consequently never furnished with a system of public roads, a postal service, or other parts of the organisation of a Roman province.

(5) *The Roads of Scotland in Mediæval and later Times.*—It has been remarked, probably with much truth, that "from the date of the provincial military roads made in Britain and elsewhere by the Romans, skilful roadmaking sank into the general oblivion of the dark ages, and was not revived till the beginning of the last century."² But the ages referred to are sometimes painted as darker than they really were. It is difficult to conceive of a country, in which civilising forces of any kind were at work, remaining for so long a time without efforts, however imperfect, being made by its inhabitants to extend the means of intercommunication beyond what had been left by the Romans. Accordingly, in England, "other roads besides were opened during the Middle Ages to provide for new fortified towns and castles, and to satisfy the needs of great landowners, religious or otherwise."³ The same is true of the Lowlands of Scotland.

¹ *Origines Celticæ*, vol. ii. p. 102.

² Rickman, *Life of Telford*, Pref. p. xv.

³ Jusserand, *English Wayfaring Life in the Middle Ages*, p. 37.

We know so little of the social condition of the country from Roman times till the accession of Malcolm Canmore that these centuries may be passed over. With the marriage of that King to the Saxon Princess Margaret, more than one influence from the South was brought to bear on the turbulent peoples of the North. Saxon families of rank took refuge in Scotland from the oppression of the Conqueror, and the ecclesiastical proclivities of Margaret raised the Church to the position of an estate of the realm. In the succeeding reigns, when England was distracted by internal disturbances, many Norman barons sought an asylum in Scotland, and were accorded a hearty welcome. Feudal castles, abbeys and religious houses sprang up all over the Lowlands, in the building of which, we may be certain, the more cultured strangers took a conspicuous part. A degree of civilisation was thus introduced into Scotland, which bore fruit after all friendly intercourse between the two countries was so unfortunately stopped by the ambition of Edward I.

There is documentary evidence to show that in England during the Middle Ages the construction and repair of roads and bridges was held to be a religious as well as a civil duty. They were among the wants of the poor wayfarer and the pious palmer, and therefore the supplying of them was a meritorious work. They were also a necessity for the great lords of the soil, who succeeded in getting those who used them recognised by law as chargeable to some extent with the duty of making and repairing them.

Early in the fourteenth century the Bishop of Durham granted forty days' indulgence to all "sincerely contrite and confessed of their sins who shall help, by their charitable gifts or by their bodily labour, in the building or in the maintenance of the causeway between Brotherton and Ferry-bridge, where a great many people pass by."¹ Lay brotherhoods, animated by the same spirit, repaired roads and bridges; and where religious zeal was not sufficient, taxes were levied, with the consent of those most interested;² and the sanction of the civil authority was invoked to legalise their collection.

In the thirteenth and fourteenth centuries "the Church was the great architect among the nations" of Europe, and the construction of bridges

¹ Jusserand, *English Wayfaring Life*, p. 44. ² *Ibid.*, pp. 79-81.

and roads as well as of cathedrals and abbeys everywhere received her attention. As other forces in a commonwealth rose to prominence, kings with their master masons, feudal barons and burghal communities, shared this function with the Church, and adopted methods of their own to supply themselves with the means of discharging it.

There is evidence that in Scotland the same influences were in operation and produced the same results as in England.

In the year 1250 Sir John Comyn, prompted by motives which are self-evident, grants to the monks of the Abbey of the Convent of Melrose "a free passage through the middle of his lands of Dalswinton to their lands in Nithsdale." He further grants and concedes that "if the aforesaid road, through inundations or its being long used for waggons, get out of repair, the monks and their dependants shall have full liberty to renew the same road by ditches and causeways, or in any other way they please."¹ The old bridge over the Nith at Dumfries, said to have been at one time the finest in the two kingdoms after London Bridge, was, according to a tradition there seems good reason for believing, built at the expense of Dervorgilla, Countess of Galloway. Here, again, the springs of generosity may easily be traced to their true source. For it was the same lady of pious memory that founded and endowed the Franciscan monastery of Dumfries, Sweetheart Abbey, and Balliol College, Oxford.

Early in the thirteenth century mention is made by Fordun of the bridge of Perth. It had a chapel on it. The burgess register of that city, which commences in the year 1452, contains notices of the efforts made by the Church and the town to obtain support for it. In some entries the works at the Church of S. John and at the bridge are regarded as part and parcel of one another. The fact is clear that the building and repairing of the bridge were matters of religious obligation.²

United action on the part of ecclesiastical and civil authorities in the building of bridges necessary to complete road communication did not end with the Reformation. In the records of the Presbytery of Dumfries we read:—

"September 16th, 1690. The heritors of Dunscore having desired

¹ *Liber de Melros*, vol. i. n. 319.

² Mylne, *The Master Masons to the Crown of Scotland*, p. 84.

and testimonial from the Presbytery, showing the necessity of a bridge over the Water of Cairn, the same is ordered to be written and subscribed by the moderator and clerk."

"August 2nd, 1692. The qh day the Presbytery having visited the church and manse of the parish of Dunscore . . . and having likewise visited the new bridge over the Cairn, the Presbytery is well satisfied therewith."

In the register of the Synod of Galloway, as constituted in the time of the episcopate established by law, there is the following minute:—

"28th April 1669. This day ye Bishop produced an Act of his Majestie's Privie Councill, of date at Edinburgh the granting warrant for collecting a voluntary contribution to be collected forth of the severall congregations on this side of Forth for building a stone bridge over the Water of Luce, as the said Act, of the date foresaid, doth at more length bear. In pursuance whereof the Bishop and Synod doth recommend it to ye severall Presbyteries within this diocese to take the most expedient course for the collecting and ingathering of the same against the next Synod."

Later still, we have in the Presbytery records:—

"December 23rd, 1714. Intimation to be made that a collection is to be gathered for building a bridge over the River Strong in Orkney, according to the Act of the General Assembly."¹

Similar entries are contained in the books of other Synods and Presbyteries.

In the records of the Scottish Parliament, we find local Acts for the upholding of bridges and "caseys" in various parts of the country. Its intervention was evidently sought in order that labour or taxation, imposed in accordance with established custom, might have legal authority. The Scottish burghs took care to see that the lands many of them possessed in those days were accessible by roads. In 1582 the town council of Ayr order "a hie strete and passage to be maid from Langshot Moss to Thriepland Dyke, of the breid of sex fallis."² What highways

¹ These extracts were obligingly got for me by Mr James Barbour, Dumfries.

² This extract from the Minutes of Ayr town-council I owe to Mr D. Murray Lyon, Edinburgh.

the great landowners caused to be made by forced labour in days when their power over their vassal tenants was supreme, may be known when the baron court books and other unpublished documents, stored up in the charter-chests of their present representatives, have been printed or examined.

Mediæval bridges now standing in Scotland are few, but their number must have been at one time considerable. A fairly long list of them could easily be made out, not a few being far from towns. This of itself is proof that there were roads. For there may be roads where there are fords or ferries, without there being bridges. But the existence of bridges implies corresponding roads, though it does not always follow that the age of a bridge is the same as that of a road which passes over it.

We thus see that, apart altogether from anything the Romans may have done in Scotland as road-makers, the country had highways and bridges that were built long after they took their departure from it, and which are yet far removed from the present time. Of the monks of Kelso, Cosmo Innes tells us: "They had waggons for their harvest, and wains of some sort for bringing peats from the moors and over-sea commodities from Berwick, which implies that there were roads passable for such carriages. But indeed we have evidence of the existence of such roads in that country a good deal earlier, as early as the time of William the Lion; and it is worth noting the mention of king's high roads in the time of the Alexanders, through all Scotland from Berwick to Inverness, although it may be doubted whether they were in all cases roads for wheel carriages, or rather in many cases only for horses, whether for saddle or for pack horses."¹

But notwithstanding all that has been just said, it must be acknowledged that the roads of mediæval times and of days not very remote from our own were often, if not generally, both in England and Scotland, in a bad condition, more particularly in wet weather and in winter. They were unskilfully made, and no precautions were adopted for protecting them from the disintegrating effects of water and frost. In Scotland all accounts represent their state during the sixteenth and seventeenth

¹ *Scotch Legal Antiquities*, pp. 242, 243.

centuries as well as the first half of the eighteenth, as deplorable. The unsettled condition of the country, long torn by civil and religious feuds, kept its material prosperity at a standstill, and sufficiently explains its downward rather than its upward progress in the arts of life. A new era dawned with General Wade and the Turnpike Acts for the different counties that so quickly followed each other after 1750. What it concerns us is to endeavour to ascertain whether any roads then superseded, or others of a much earlier but still only of mediæval age, have somehow got a place on the Survey map as "Roman."

(6) *The Growth of Current Beliefs*.—It was Sir Robert Sibbald who, to use his own words, "broke the ice first in this way of writing of our antiquities." The notices of the ancient divisions of Scotland given by Camden in his *Britannia* and by Gordon of Straloch in *Blaeu's Atlas* represent almost all that had hitherto been attempted in the field of Scottish antiquities. Nearly a century before Sibbald's day, Timothy Pont surveyed the Antonine Wall, with its stations and military way. He had also travelled over the more remote parts of Scotland when collecting materials for his projected Atlas. But his papers, except so far as used by Gordon of Straloch, remained unpublished.

In chapter eighth of Sibbald's *Historical Inquiries* we have "An Account of the Roman Forts, and Camps, and Towers, and Military Ways in this part of the Island," and in the following chapter "An Account of the Roman Colonies and Municipia of this Country." Another of his publications is entitled "Conjectures concerning the Roman Ports, Colonies, and Forts in the Firths (of Forth and Tay), taken from their Vestiges and the Antiquities found near them." In two Latin treatises he wrote at considerable length on the actions of the Romans in North Britain.¹

To the MSS. of Pont and of David Buchanan, Sibbald acknowledges his indebtedness. The Buchanan MSS. he very frequently quotes.

¹(1) *Introductio ad Historiam Rerum a Romanis Gestarum in ea Borealis Britanniae Parte quae ultra Murum Picticum est: in qua Veterum in hac Plaga Incolarum Nomina et Sedes explicantur*. Edinburgh, 1706. (2) *Commentarius in Julii Agricolaë expeditiones . . . in Boreali Britanniae Parte, quae Scotia dicitur, gestas in quo ex vestigiis Castrorum et Castellorum Romanorum, Monumentisque antiquis ibi repertis Textus Taciti illustratur*. Edinburgh, 1711.

Bishop Nicholson, Sir Robert's contemporary, says they were then "in safe custody, in bundles of loose papers, Latin and English;"¹ but they seem to have since disappeared. From answers to queries he addressed to clergymen and prominent persons in most of the counties of Scotland,² which are in part preserved in the Advocates' Library, Edinburgh, Sibbald obtained a large amount of miscellaneous information, of which he freely availed himself. Much of it was, no doubt, suggested by the nature of his queries; and its value must depend on the credibility of those who supplied it, and the judgment with which he extracted and used it. Of the camps and forts he recognises as Roman, the greater number are ascribed to Agricola. Ptolemy's *Geography* is largely drawn upon. Sibbald's opinions seem to have been hastily formed, and are often untrustworthy. A very cursory examination of his writings will bring out that in many cases he either was misled, or mistook native antiquities for Roman. "Perusing the accounts given by Sir Robert Sibbald in his books concerning the Roman antiquities in Scotland," writes Gordon, a few years afterwards, "I was surprised to observe that he places whole countries (*i.e.*, peoples), Roman garrisons, colonies, and forts in that country that never were there."³

Sibbald's notice of the Roman roads that connected his camps and forts is somewhat confused. "Vestiges of them," he tells us, "are to be found raised high above the ground in several parts of the country."⁴ He had evidently noted what he found in the various MSS. he consulted, without attempting to do more. But a beginning was thus made.

The next writer on our Roman antiquities is Gordon, just mentioned. His *Itinerarium* is chiefly devoted to the two walls; of roads he does not say much. A due share of attention is, however, given to the movements of Agricola, whom he supposes to have marched northward through Lower Annandale, Nithsdale, and Upper Clydesdale to Camelon, Stirling and Ardoch. On his map a Roman road is laid down as running in this direction. In his text Gordon makes no attempt to show that the Romans opened up the country by any other road.

¹ *Scottish Historical Library*, p. 16.

² *Ibid.*, pp. 19-21.

³ *Itin. Sep.*, p. 43.

⁴ *Hist. Ing.*, p. 39.

In Maitland's *History of Scotland*, published in 1757, the number of roads alleged to be Roman is largely increased, and made to reach beyond Ardoch. For this extension of them he gives no authority but his own. Thirty years later General Melville, aggrieved apparently by this oversight, took some trouble to put on record that he himself was the first discoverer of Roman antiquities north of the Tay, in his turn ignoring Maitland. He tells his own story at some length in Gough's *Camden*, and in fewer words in a letter to Captain Shand, a brother officer, which is printed in vol. vii. of the *Proceedings*.¹

In the summer of 1754, General, then Captain, Melville had set himself to study the *Agricola* of Tacitus. "An attentive perusal" of it convinced him that the Roman general had entered Scotland by a westerly route, and marched northwards, in successive summers, till he reached the Forth near Stirling. He must next have taken possession of the country between that river and the Tay, and secured it with stations having due communication with one another, Ardoch being probably his own head-quarters. Supported by detachments, as Melville conjectured, moving along the coast, Agricola afterwards crossed the Tay, and made his way through the eastern part of Perthshire, and then through Strathmore, till he met and finally defeated the Caledonians.

Impressed with these opinions, Captain Melville felt assured that some of Agricola's camps must yet be discoverable. Accordingly, he made many inquiries in the district north of the Tay, without getting any information in the least encouraging. The officer in charge of the engineers who had just surveyed Angus, though very desirous to delineate, in accordance with his instructions, all traces of camps or military works, had seen none of rectangular or Roman-like form, and was positive that none such existed there.

Nothing daunted, Captain Melville continued his inquiries, and was at last rewarded by discovering at Harefaulds, near Forfar, a camp that seemed to him of the description sought for. "To his great joy, there was very visible the greatest part of a vallum and ditch, with gates, of the usual breadth of a street in a Roman camp, and each of them

¹ *Proc. Soc. of Antiq. of Scotland*, vol. vii. pp. 29-31.

covered by a fit traverse or breastwork, quite observable." Soon after, three others were found—at Keithock near Brechin, at Battledykes near Finhaven, and at Lintrose near Cupar. All of them, he was satisfied, had been made and occupied by a division of Agricola's army. "Totally unknown or misunderstood" before, they now became, we are informed,¹ "a topic of curiosity and conversation everywhere near them." Melville, be it observed, condescends on no reasons for identifying the inclosures as Roman camps other than those just quoted; and he puts them confidently down as the work of Agricola's troops solely because, according to his reading of the narrative of Tacitus, Agricola must have been where they are. Of roads in their neighbourhood he makes no mention. But these were soon discovered by others.

Though Maitland is silent regarding Captain Melville and his discoveries, it must have been through them that he became acquainted with these four "great camps," of which he takes special notice in his "History." He, however, brings Agricola still further north, ascribing to him a large camp at Raedykes near Ury, two and a half miles north-west of Stonehaven. Here he supposes Agricola to have entrenched himself either before or after the battle of Mons Graupius.

Like Gordon, Maitland makes "the great and principal" Roman military way enter Scotland on the west, carrying it north through Annandale and Clydesdale to Camelon, thence to Ardoch and on to Raedykes, where he "imagines that the Roman conquests on this side terminated." The particular line, however, which it is made to follow is not quite the same as Gordon's; and several "vicinal ways" branch off from it. Besides this road, three others are said to have led into Scotland, the chief of them commencing at Berwick and running to Cramond on the Firth of Forth. In short, Maitland represents Roman roads as spread like a network over the whole of the southern and eastern Lowlands. Everywhere along their course he points to camps and forts, which he had no hesitation in pronouncing to be Roman.²

To come back to Captain Melville. On returning to Edinburgh, full of his discoveries in Strathmore, his "first proselyte was the present

¹ Gough's *Camden*, vol. iii. 416* (note). ² *Hist. of Scotland*, vol. i. pp. 191-205.

General Roy, then one of the Surveying engineers, who afterwards visited the camps, took their measurements, and entered them in the government map, with the addition of one at Grassy Walls."¹ The interview had important results. It suggested to Roy his writing *The Military Antiquities of the Romans in North Britain*. The Seven Years' war, in which he was engaged, prevented him for a time from entering on his task. Meanwhile, another impulse had been given to his study of the subject by the appearance in 1757 of the *De Situ Britannix*. Believing implicitly in the genuineness of this forged production, Roy trusted to it largely in carrying out his undertaking. Thus stimulated and influenced, he devoted the closing years of a busy life to his great work. At his sudden death in 1790 it was still in MS., but completed. Three years later it was published by the Society of Antiquaries of London.

The Military Antiquities consists of a series of essays, arranged in four books. The first book gives an account of the transactions of the Romans in Britain from their first arrival till their final departure. In the second, the temporary camps of one and also of two consular armies are described and illustrated from Polybius, Livy and Vegetius. It is pointed out in the third that the similarity between most of the camps that remain in Scotland and those of the Polybian system not only proves that the former are Roman, but enables us to trace the movements of Agricola, by whose troops, "there is every reason to believe," they must have been formed. The fourth book is occupied with a rectification of the ancient geography of North Britain, "Richard" being the authority chiefly relied on, a description of the Roman military ways leading into Scotland, and an account of the Antonine Wall and its forts. The antiquities treated of are classified by Roy thus: (1) Temporary Camps, occupied only for a night, or at most for a few days; (2) Stations, Forts, Posts, and smaller Castella or Redoubts; (3) The Wall, with its stations and military way.

Of the sixteen temporary camps that are described in Roy's text, and of which plans and sections are given, fourteen are assigned to Agricola. The "Roman" posts may, with one possible exception, be at once set aside

¹ *Proceedings*, vol. vii. p. 30.

as British. Other isolated positions claimed by him as Roman strongholds are of two kinds: (1) square redoubts and stations defended by single or double ramparts; and (2) forts protected by four or five lines of fortification, of which Ardoch and Birrens are the best known. The date of most of these he seems to leave to his readers to fix. The wall and its forts he very properly discusses by themselves. Though, like Melville, Roy takes no notice of the *History*, his military ways run in directions somewhat similar to Maitland's. He was obliged, however, to extend the Roman conquests beyond Raedykes. According to "Richard," the Romans subdued the country as far north as the Varar, commonly identified with the Moray Firth, and formed it into a province which was named *Vespasiana*. Of this province, a Roman station called *Ptoroton* was the capital. Its site had been previously fixed at Inverness or Tain. But Roy, finding in the promontory of Burghead in Moray the ruins of a very strong fortress, placed it there. Two of the *Iters* of "Richard," with stations on them, connect *Ptoroton* with the south, one running along the eastern part of the country and the other through the interior. The sites of these stations, which are almost all towns assigned by Ptolemy to the native tribes, Roy endeavours to determine, and regards them as Roman. He admits, however, that he had been unable to hear of any "vestiges" of Roman roads in those parts.

In addition to the Strathmore camps, Captain Melville discovered one at Channelkirk in Berwickshire. This led Roy to question at first if Agricola had marched through Annandale, as Gordon believed. But the subsequent discovery of "camps of the true kind" at Lockerby and Tassiesholm in Annandale, and at Cleghorn in Clydesdale, seemed to put it beyond doubt that one division at least of his army, or of some other that used the same form of camp, had marched by this road. Roy finally leaned to the opinion that Agricola's troops had invaded Scotland in two divisions, one taking the westerly and the other the easterly route, meeting again at the passage of the Tay, where, at a place called Grassy Walls, about three miles north from Perth, in 1771, on "proper search being made," a camp large enough to contain both divisions was discovered.¹

¹ *Military Antiquities of the Romans in North Britain*, Pref. p. viii.

The fourteen camps identified by Roy as belonging to the era of Agricola present considerable differences in form and size. Some of them are far from being rectilinear. But Roy regarded them all as laid out on the Polybian system of castrametation. He was further of opinion that this system was displaced in the Roman armies soon after Agricola's day by a widely different one, the Hygenian, which would be used by Urbicus and Severus.

It may be thought presumptuous to suggest any doubts as to the correctness of opinions given, in what is so far a military question, by officers of experience like Generals Melville and Roy. Civilians must, however, be permitted to judge for themselves of certain non-professional branches of the evidence as it is placed before them. Difficulties there certainly appear to be in accepting all Roy's camps and roads as Roman, or at least as made by Agricola, though some of these difficulties may be capable of solution. As pointed out, the camps vary greatly in form. Roy himself acknowledges that few, if any, of the same type had been found elsewhere. He hazards the explanation that this is because they have not been looked for with sufficient care. But that is hardly satisfactory. Strongholds, defended by a series of ramparts and ditches like Ardoch, are said to be scarcely known in the countries of the continent held in subjection by the Romans for many centuries. In none of the forts or camps, or in their neighbourhood, unless at Birrens and on the Antonine Wall, have properly authenticated examples of Roman antiquities yet been met with which can be produced for examination. The Ardoch stone may appear to be an exception; we cannot, however, tell exactly where or under what circumstances it was brought to light. The few places in Scotland where such antiquities have for certain been discovered, exclusive of Birrens and the Wall, are not among those said by Roy to be sites of Roman camps or forts. All this is not conclusive; but so far as evidence from antiquities may go, it leaves the question of the age and origin of the "camps" an open one, and deserving of further examination.¹

Much of what Roy wrote is instructive and valuable. His work will

¹ Dr W. F. Skene regards all the camps north of the Tay as made by Severus. If they are Roman, this opinion is more likely to be correct than Roy's.

always be a classic on his subject. But his "conversion" by General Melville gave a bias to his opinions at the outset of his researches, and his adoption of "Richard" as his chief guide is fatal to his authority on many important points. Should it be shown that any of his camps and forts are not Roman, the roads that have been associated with them are not likely to be Roman either. The presence of the one class of remains over a wide tract of country may be said to involve that of the other.

Plates 50 and 51 of the *Military Antiquities* contain plans of two camps unnoticed in the text. That on plate 50 is Raedykes of Ury described by Maitland. It is of a very irregular shape, but is called on the plate one of Agricola's camps. On plate 51 is a plan of a camp at Glenmailen or Ridykes, near the sources of the river Ythan in Aberdeenshire. Its discoverer was Colonel Shand, General Melville's correspondent mentioned above, who furnished the drawings of it, and probably also of the Raedykes camp. Shand, it may be remarked, was a native of the district.

There is nothing whatever to distinguish the Glenmailen camp from any of those ascribed by Roy to Agricola. But Roy has been careful to avoid giving it on his plate the designation he applies to the others. Evidently he saw the dilemma in which, if he did so, he was caught. It would have either obliged him to send Agricola where, on any interpretation of Tacitus, the Roman was not likely to have gone, or else seriously weakened his own chief argument in favour of the era of the other camps. With regard to Roman roads, Colonel Shand was of opinion that sufficient care had not been given to search for them in the North. "The investigation of the great *Via Consulares* and also the *Via Vicinales*" he considered to be "of more importance than a knowledge of the camps." He had heard of some very ancient roads passing in a N.W. direction through the parish of Deskford, which inclined him "to believe that the track of the (Roman) itinerary crossed the Ythan and the Deveron at Glenmailen and Auchingoul" respectively.¹

The last writer of this school that requires particular notice is George Chalmers, the author of *Caledonia*. In addition to the materials he found in Roy and Maitland, Chalmers had before him the Old Statistical

¹ *Old Statistical Account of Scotland*, vol. xii. p. 315.

Account of all the parishes of Scotland, then almost new. Most of these Accounts were written before Roy's work could have been known in Scotland. But the map in the *Military Antiquities*, on which all the towns of Ptolemy, the camps of Agricola, and the stations and iters of "Richard" are marked, had been engraved for private circulation in 1774. Through it and through Maitland's History, many of the Scottish clergy were made acquainted with the views that had been gaining ground among professed antiquaries as to the progress of the Roman arms in Scotland. Roman camps and roads were accordingly sought for in many Lowland parishes in the districts supposed to have been overrun by the Romans, and were generally found. Chalmers was thus enabled to present to his readers Roy's views worked out in greater detail than had been possible before, and supported by arguments that appealed to the sympathies of all who thought their country honoured by having been invaded by the Romans. Not only was he a firm believer in "Richard," but he places the authority of "the intelligent monk" above that of Ptolemy whenever they differ. Roy he follows closely, except only in some details. Occasionally he attempts, with much confidence, to clear up what Roy left uncertain. Thus he credits Lollius Urbicus with the reduction of the country between the Forth and the Moray Firth, devoting to his exploits sixty-nine quarto pages, while dismissing Agricola's with eleven and Severus' with five and a half. "There is cause to believe," he writes, "that this great officer carried his arms from the Forth to the Varar, and settled stations in the intermediate country, throwing the whole of that extensive country into the form of a Roman province."¹ In *Caledonia* the new ideas not only attained their greatest development, but, through the use soon made of them, became popularised and passed as genuine history.

Through Colonel Shand, "the great discoverer of camps in the north," Chalmers was able to record the discovery of a halting-place for the Roman armies in the long stretch between Raedykes and Glenmailen. At Normandykes on the Dee, near the church of Peterculter, Shand "examined in February 1801 the remains of a camp comprehending an area of 80 Scottish acres," that appeared to him in its profiles and the

¹ *Caledonia*, vol. i. p. 116.

dimensions of the ditch and ramparts to be the same as those of Glenmailen, Urie, Battledykes, and other camps in Strathmore."¹ Shortly before, another officer, Colonel Imrie, had found "a Roman encampment" on the bank of the Spey near Fochabers, "in form nearly a rectangular parallelogram," with a vallum and ditch of about the same size and depth as those of the camp at Battledykes, and, according to his opinion, "formed nearly about the same period."² But it is needless to give more instances of camps or details of the *iters* that were supposed to have traversed Roman Scotland and penetrated "into the very interior of *Vespasiana*."

It is unnecessary to carry this summary farther. Stuart, in his *Caledonia Romana*, accepts generally the conclusions of Roy and Chalmers, seeking only to present them with the attraction of a more picturesque style than that of either of his predecessors. Since he wrote, nearly half a century ago, few discoveries of alleged Roman antiquities have been made in Scotland that deserve any notice.³ The tendency has been to diminish rather than increase the number of such objects. But though doubts have been expressed here and there, Roy and Chalmers are still our chief authorities. The view continues to be widely held, without any inquiry into the nature of the evidence they furnish, that by means of camps and roads the footsteps of the Romans may be traced, as they assert, in certain parts of Southern Scotland and far north of the Tay.

A recent Scottish historian, who seldom pays much deference to popular notions, gives to Scotland "two great lines of Roman road." One of these left the southern wall near Carlisle and passed through Annandale to the western extremity of the northern wall; the other, a continuation of the great English Watling Street, proceeded onward by Jedburgh, the Pentlands and Cramond to the same wall, and thence, "for purely military purposes, appears to have been carried northwards into Aberdeenshire,"⁴ to which the same writer believes a line of Roman

¹ *Caledonia*, vol. i. p. 125 (*note*).

² *Ibid.*, p. 129 (*note*).

³ In 1867 the series of "great Roman camps" in the North was completed by the "recent discovery of a Roman camp at Kintore, Aberdeenshire, by Captain E. H. Courtney, R. E.;" *Proc. Soc. of Antiq. of Scotland*, vol. vii. pp. 387-394.

⁴ Hill Burton, *History of Scotland*, vol. i. pp. 81, 82 (1st ed.).

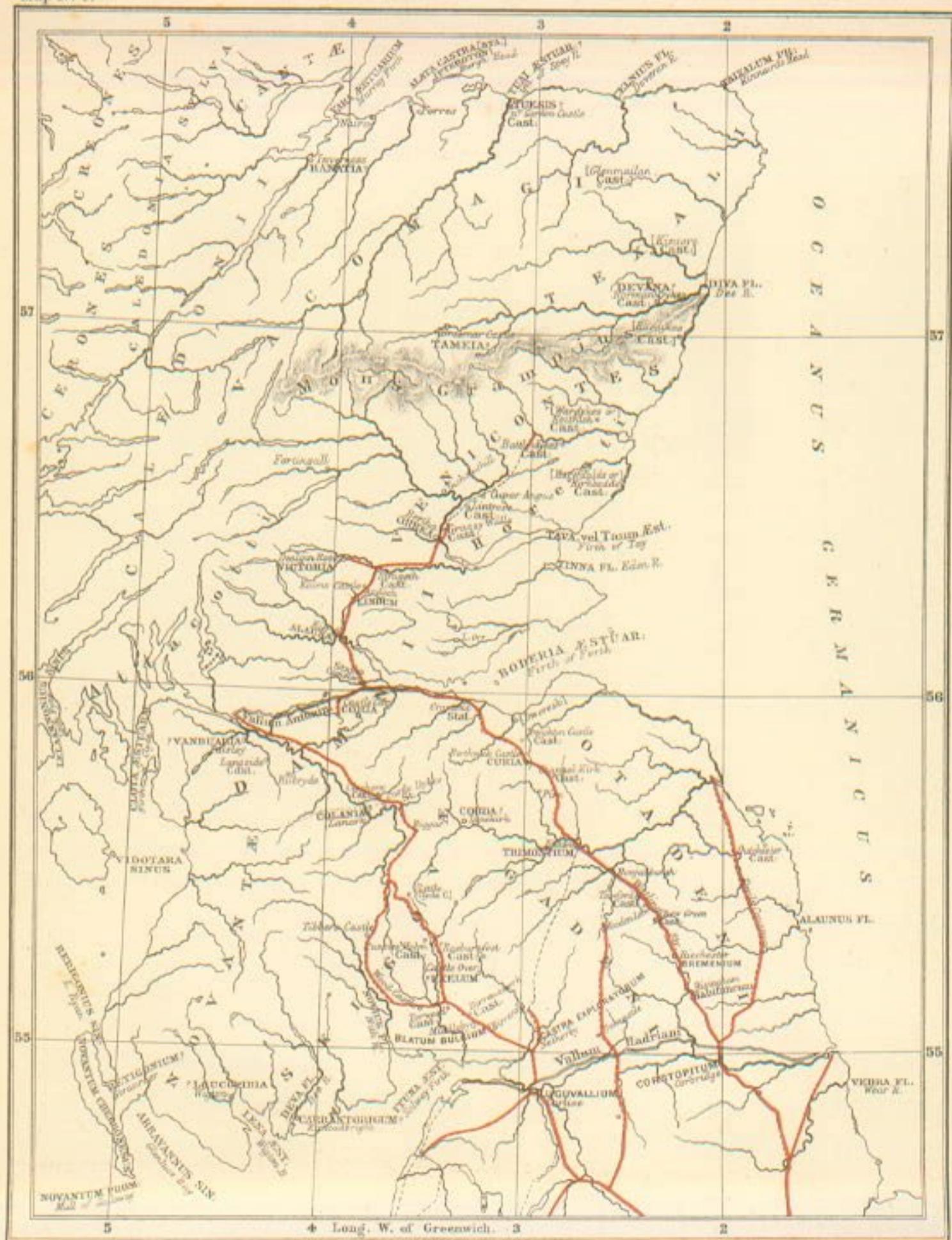
camps also reached. "To their extremities," he adds, Roman "roads were heavily paved, and as enduring in their structure as if the empire they belonged to would require them so long as the crust of the earth should keep together." As we proceed, it will be seen how far this is true of the roads in Scotland, to which he refers. "The fields of Fife and Angus," says the late Canon Merivale, "are seamed with numerous vestiges of Roman entrenchments."¹ Prof. Mommsen is more guarded. He brings "Roman imperial roads" no farther than the line of the Antonine Wall.²

The statements of these writers, all of them of the highest authority in their own proper walk, are evidently made on the faith of scarcely contradicted averments they are entitled to trust. If they have to any extent been misled, Scottish archaeologists of the past and present time are alike to blame. For it lies with the latter to see that the statements put on record by the former are in accordance with facts. The historian must be guided by those who have made the antiquities of the country their chief study. Now, whatever the desire of some may of late have been for a re-examination of our Roman antiquities—real and alleged—in the clearer light it may now be possible to throw on them, no attempt has yet been made to meet it. The task is perhaps beyond the opportunities of any single observer. But something may be done by treating even a subordinate branch of the subject. It is in the hope, as already hinted, that others may be induced to follow the example, that I propose laying before the Society some notes on the "Roman" roads of the Ordnance Map. It will be my aim to submit a full abstract of what has been written about each of them since the name "Roman" was applied to it; and then to give, from actual examination, an account of its mode of construction. In the case of several of the roads, neither this nor any other method may enable us to reach very definite results. But not a little will be gained if a just estimate can henceforth be formed of the value that ought to be attached to current beliefs.

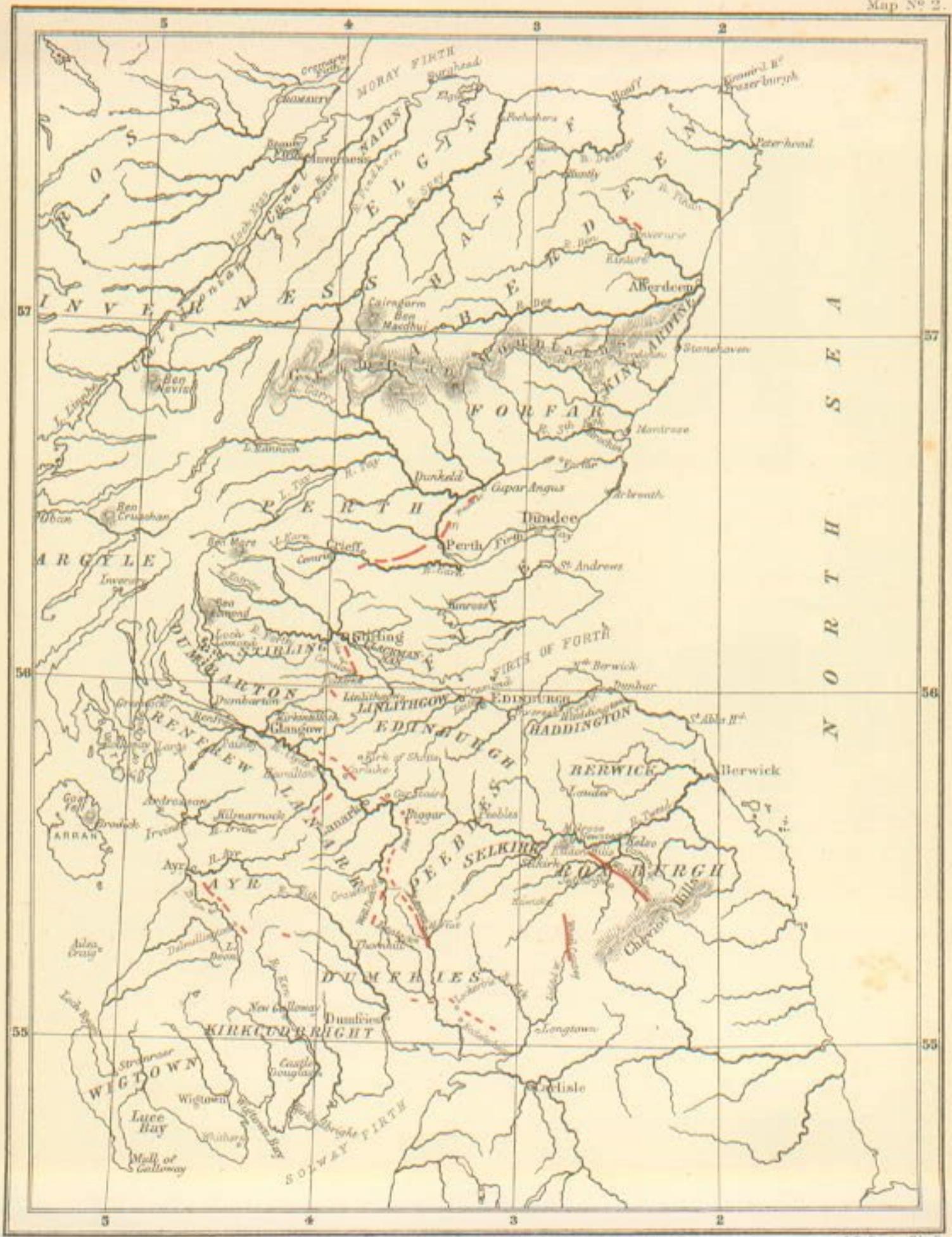
¹ *History of the Romans under the Empire*, vol. vii. p. 87.

² *Rome and Her Provinces*, vol. i. p. 187.

Map No 1.



BRITANNIA ROMANA. (Pars Borealis)
From Monumenta Historica Britannica.



ROADS MARKED AS ROMAN
On the Ordnance Map of Scotland.

J. D. Bower, Edin.

EXPLANATION OF THE MAPS.

MAP No. I.

(From the *Monumenta Historica Britannica*.)Modern names in small and light characters, thus—*Cramond*.Stations mentioned in the Antonine Itinerary, thus—*BLATUM BULGIUM*.Names taken from Ptolemy, thus—*ALATA CASTRA*.Names taken from Tacitus, &c., thus—*Horesti*.

Additional names from Chalmers, &c., are inserted within square brackets, thus—[].

“The word *Statio* (or *St.*) is attached to places that are the undoubted sites of Roman Stations, but of which the ancient names are unknown.”

“The letters *Cast* (or *C.*) indicate the site of a Roman encampment.”

“The modern names to which no ancient name is attached are those of places at which traces of permanent Roman occupation have been discovered.”

“Roman roads of which undoubted traces exist at the present time are indicated by red lines.”

“Roman roads of which the courses are only conjectural are distinguished by broken black lines.”

MAP No. II.

Same part of Scotland as in Map No. I., divided into Counties.

The “Roman” roads of the One-inch Ordnance Map are indicated by red lines.

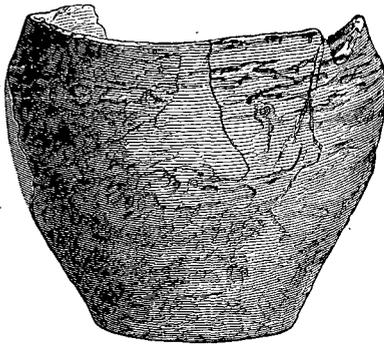
MONDAY, 8th January 1894.

GILBERT GOUDIE in the Chair.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By J. CAMPBELL NOBLE, R.S.A., Abbeyhouse, Ayton.

Ancient Chessman, apparently of deer-horn, made in the form of a truncated cone $1\frac{3}{4}$ inches in height, $1\frac{1}{2}$ inches in diameter at the base, and $1\frac{1}{4}$ inches diameter at the top, with a knob (which has been broken off) in the centre of the top. The front part of the piece instead of being round is cut down to a flat section of about $\frac{3}{4}$ inch from the top, and ornamented with small circles and central dots. The exterior surface



of the piece is divided into two bands by horizontal lines; the lower band is filled in with oblique parallel lines, the upper with chevrons of small circles and central dots; the top of the piece is covered by two concentric rows of circles with central dots. This curious and interesting piece was dug up in the graveyard at Coldingham, and is probably as early as 12th century.

Fig. 1. Urn found at Earnsheugh ($4\frac{1}{2}$ inches in height).

Small bowl-shaped Urn (fig. 1), imperfect, measuring $4\frac{1}{2}$ inches in height, $5\frac{1}{4}$ inches in diameter across the mouth, and $2\frac{3}{4}$ inches across the bottom. It is quite unornamented, but has a kind of rude bevelling both on the outside and inside of the slightly everted lip. It was found in a cist at Earnsheugh, Coldingham.

- (2) By ANDREW URQUHART, Rosehall Public School, Sutherlandshire.

Stone Ball, with six projecting discs, found in digging a grave in the Achness Graveyard, Creich, Sutherlandshire.

- (3) By J. H. CUNNINGHAM, *Treasurer*.

Seven Arrow-heads of Flint, with barbs and stem, found before 1860 at Rigmoor, Gretna, Dumfriesshire.

Seven Flakes and fourteen Gun Flints of recent manufacture, from Brandon, Suffolk.

- (4) By SIR GEORGE REID, LL.D., *P.R.S.A.*

Pair of Thumbikins, the upper part of the apertures notched.

Tinderbox of Tinned Iron, with candlestick lid and two Steels or "Fleerishes" and a bundle of Spunks or Matches tipped with brimstone.

- (5) By ROBERT PRINGLE STUART, The Spa, Tunbridge Wells.

Hair of Prince Charles Edward, enclosed in a small gold locket, in form of an early Christian lamp. In a letter to the Secretary, dated St Andrews Day, 1893, Mr Stuart says :—" Herewith I enclose and transmit to you these three hairs of a lock of Prince Charles Edward's hair, which I have worn for very many years; and as I am now just 90 years of age, and should be very sorry if they were lost, so I transmit them to you with the request, the earnest entreaty and solicitation, that the Society will do me the honour to accept them, to be placed in their Museum. They are enclosed in a model, in gold, of a lamp of the early Christian time, found in the Catacomb of St Calixta at Rome which I purchased there many years since, thinking it an appropriate relic for the reception of the three hairs." In an accompanying memorandum he mentions that he received the hairs from Mr Nichols, whose mother was a granddaughter of Mrs Macdonald of Kingsburgh, to whom the lock from which they were taken was given by the Prince on the occasion of his being brought there for concealment by Flora Macdonald.

(6) By T. R. MARSHALL, Jeweller, 134 Princes Street.

Electrotype Cast of Facsimile of Celtic Brooch, from a Viking grave at Snaasen, North Trondheim, Norway.

(7) By Dr W. CRAMOND, Cullen.

Photographs of Beggars' Badges of the Parishes of Keith, Comrie, Boharm, Forfar, Collace, and Rothesay.

(8) By the PROVOST, MAGISTRATES, AND COUNCIL OF DUMFRIES,
through PATRICK DUDGEON, of Cargen, F.S.A. Scot.

Two War-Scythes, part of the armament of the inhabitants of Dumfries in the time of the rebellion of 1715.

These formidable weapons are part of a number that were found in the Town House some time ago, and rescued by Mr Dudgeon from the lumber-room to which they had been consigned. Their probable origin is explained by the Rev. Peter Rae in his *History of the Rebellion of 1715*, when, in recounting the movements of that part of the Rebel Forces which had crossed the Firth of Forth and marched into England by way of Haddington, Duns, Kelso, Hawick, and Langholm, threatening Dumfries but passing it without an attack, for which, however, the inhabitants were fully prepared, he says:—"The Magistrates and Council, likewise considering that they had not arms for all the inhabitants who were fit for service, bought up 100 scyths, caused streight their docks, and fixed them sufficiently on shafts, delivering them to such of the inhabitants as had least skill of fire-arms, and added a certain number of these scythmen to every company, to be employed at the barricades and especially in the trenches, which were now carrying on with all expedition."

(9) By the DIRECTORS OF THE OBSERVATORY MUSEUM, Dumfries,
through PATRICK DUDGEON, of Cargen, F.S.A. Scot.

Casts of three Sculptured Heads, excavated by Col. Short from the ruins of a monastery destroyed in the Mahommedan invasion at Naograon, in Yusufzae, near Peshawur.

(10) By the FACULTY OF ADVOCATES.

Catalogue of Advocates' Library. Supplementary volume, 4to, 1879.

(11) By Sir ALEXANDER MONCRIEFF, K.C.B.

The House of Moncrieff. By George Seton, Advocate. Privately printed, 4to, 1890.

(12) By ERSKINE BEVERIDGE, F.S.A. Scot., the Author.

The Churchyard Memorials of Crail. Privately printed, 4to, 1893.

(13) By Sir JOHN EVANS, K.C.B., D.C.L., LL.D., &c., the Author.

The Forgery of Antiquities. Reprint of a Lecture delivered at the Royal Institution.

There were also Exhibited :—

(1) By the QUEEN'S REMEMBRANCER.

Fourteen Urns found in a Bronze Age Cemetery at Musselburgh. [See the Subsequent Communications by the Rev. George Lowe, B.D., and Dr Joseph Anderson.]

(2) By the Most Hon. the MARQUIS OF AILSA.

Flint Implement, slug-shaped, or like a slender Fabricator, broken at one end, but still $2\frac{3}{8}$ inches in length, slightly curved in the direction of its length, its under side being the flat surface of the flake, the upper side, worked to a more or less rounded ridge, becoming almost triangular towards the pointed end. The implement tapers from a width of $\frac{3}{8}$ inch and thickness of $\frac{1}{4}$ inch at the wider end to about $\frac{1}{8}$ inch, or rather less, in both dimensions at the point, and is finely worked throughout. The point bears evidence at the apex of the triangle of considerable wear by friction or pressure, suggestive of its having possibly been used in forming the notches between the barbs and the stems of barbed arrow-heads. It was found in the field adjoining the Mound known as Shanter Knowe, near Kirkoswald,

Ayrshire, the opening of which is described by the Marquis of Ailsa in the last volume of the *Proceedings*, p. 413.

(4) By G. PELHAM BURN, Piteroy.

An "Adder Stone," being a Bead of bluish glass $\frac{3}{4}$ inch in diameter, enamelled with yellow spirals. It was found on the Hill of Piteroy in 1803, by John Macdonald, who is said to have seen "a lump of adders writhing and tumbling over each other" on the very spot on which he subsequently found the bead. It is still used as a charm in cases of sheep bitten by adders.

The following communications were read :—