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ARCHÆOLOGICAL ESSAYS

BY THE LATE

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ON LEPROSY AND LEPER HOSPITALS IN SCOTLAND AND ENGLAND.¹

PART I.

Few subjects in pathology are more curious, and at the same time more obscure, than the changes which, in the course of ages, have taken place in the diseases incident either to the human race at large, or to particular divisions and communities of it.

A great proportion of the maladies to which mankind are liable have, it is true, remained entirely unaltered in their character and consequences from the earliest periods of medical history down to the present day. Synocha, Gout, and Epilepsy, for instance, show the same symptoms and course now, as the writings of Hippocrates describe them to have presented to him upwards of two thousand years ago. The generatio de novo of a really new species of disease "is (says Dr. Mason Good²) perhaps as much a phenomenon as a really new species of plant or of animal" Dr. Good's remark is probably too sweeping in its principle; for, if necessary, it might be easy to show that, if the particular diseases of particular animal species are liable to alteration at all, they must necessarily alter more frequently than those animal species themselves. In pursuing such an inquiry, the pathologist labours under comparative disadvantages. The physiologist can, by the aid of geological research, prove that the individual species of plants and animals inhabiting this and other regions of the earth, have again and again been changed. The pathologist has no such demonstrative data to show that, in the course of time, the forms and species of morbid action have undergone great mutations, like the forms and species of normal life. But still we have strong grounds for believing that, in regard to our own individual species alone, the diseases to which mankind are subject have already undergone, in some respects, marked changes within the historic era of medicine. Since the first medical observations that are now extant on disease were made and recorded in Greece, various new species of human maladies have, there can be little doubt, made their original appearance. I need only allude to small-pox, measles, and hooping-cough. Again, some diseases which prevailed formerly, seem to have now entirely disappeared from among the human race—as, for example, the Lycanthropia of the Sacred Writings, and of Oribasius, Aetius, Marcellus, and various old medical authors.3 Other maladies, as that most anomalous affection, the English sweating-sickness of the fifteenth century, have only once, and that for a very short period, been permitted to commit their ravages upon mankind. And lastly, we have still another and more extensive class, including maladies that have changed their geographical stations to such an extent, as to have made inroads upon whole districts and regions of the world, where they were formerly unknown, leaving now untouched the localities which, in older times, suffered most severely from their visitations.

Among this last tribe of diseases no one presents a more curious subject of inquiry than the European leprosy, or tubercular elephantiasis of the middle ages. This malady is now almost entirely, if not entirely, unknown as a native endemic disease on any part of the Continent of Europe; and yet from the tenth to the sixteenth century it prevailed in nearly every district of it. Laws were enacted by Princes and Courts to arrest its diffusion;—the Pope issued bulls with regard to the ecclesiastical separation and rights of the infected;4—a particular order of Knighthood was instituted to watch over the sick;—and leper hospitals or lazar-houses were everywhere instituted to receive the victims of the disease. The number of these houses has certainly been often erroneously stated, in consequence, as far as I have been able to trace it, of a strange mistake committed by Ducange, in quoting from Matthew Paris a passage in which that historian contrasts the respective possessions belonging in the thirteenth century to the Hospitalarii, Knights Hospitallers, or Knights of St. John, as they were termed, and the Knights Templars. The 19,000 lazar-houses in Christendom, as interpreted by Ducange, mark in Matthew Paris' work merely the number of manors or commanderies of the Hospitalarii, and have no reference whatever to leprosy or lazar-houses.⁵ But still that an immense number of leper-houses existed on the Continent at the period mentioned, is abundantly shown in many of the historical

documents of that age. Louis VIII. promulgated a code of laws in 1226, for the regulation of the French leper hospitals; and these hospitals were at that date computed to amount, in the then limited kingdom of France, to not less than 2000 in number—(deux mille leproseries).6 They afterwards, as is alleged by Velley, veven increased in number, so much so that there was scarcely a town or burgh in the country that was not provided with a leper hospital. In his history of the reign of Philip II. Mezeray uses the same language in regard to the prevalence of leprosy and leprous patients in France during the twelfth century.8 Muratori gives a nearly similar account of the extent of the disease during the middle ages in Italy; and the inhabitants of the 5 kingdoms of Northern Europe, equally became its unfortunate victims. 10

I have no desire, however, to enter at present into the extensive history of the leprosy of the middle ages, as seen in the different quarters of Europe. My object is a much more limited and a much more humble one. I wish only to adduce various evidence to show that the disease extended to this the most western verge of Europe, and at one time prevailed to a considerable extent in our own kingdom of Scotland, which, at the period alluded to, was one of the most remote and thinly-populated principalities in Christendom. I shall have frequent occasion, at the same time, to illustrate my remarks by references to the disease as it existed contemporaneously in England. 11

In following out the object adverted to, I shall commence by an enumeration of such leper hospitals as I have detected any notices of in old Scottish records. The knowledge of the mere existence of most of these hospitals has been obtained more by the accidental preservation of charters of casual grants to them than by any historical or traditional notice of the institutions themselves. The information, therefore, which I have to offer in regard to most of them is exceedingly slight. The following meagre notes regarding the two first Lazar or Leper-houses, Spitals, Spetels, or Spitles, 12 which I shall mention, show the truth of this remark.

SCOTTISH LEPER HOSPITALS.

Aldcambus, Berwickshire.--A Leper Hospital existed at Aldcambus, in the parish of Cockburnspath, Berwickshire, as far back as the reign of William the Lion.

In the Chartulary of the Priory of Coldingham is preserved a charter by which that monarch confirms a grant of half a carrucate of land to this hospital. I shall give a transcript of the charter, which has hitherto remained unpublished. I do so that it may serve as a fair specimen of the various similar charter documents to which I shall have occasion to allude in the course of the "Confirmatio donationis Hospitali de Aldcambus following remarks. It is entitled facta:"—"Willelmus Dei gratia Rex Scottorum omnibus probis hominibus totius terre sue Clericis et laicis salutem. Sciant presentes et futuri me concessisse, et hac cartâ meâ confirmasse donationem illam, quam David de Quicheswde fecit Hospitali de Aldcambus et Leprosis ibi manentibus, de illa dimidia carucata terræ in Aldcambus quam Radulfus Pelliparius tenuit: tenendam in liberam et puram et perpetuam eleemosinam, cum omnibus libertatibus et aisiamentis ad predictam terram juste pertinentibus, ita liberé et quieté sicut carta predicti Davidis testatur: Salvo servicio meo. Testibus Willelmo de Bosch. Cancellario meo, Waltero Cuming, Davide de Hastings. Appud Jeddewrith, xvi. die Maij."13

Aldnestun in Lauderdale.—At Aldneston another leper-house existed. It was under the control of 7 the Abbey of Melrose. In the Melrose Chartulary there is preserved a charter headed "Carta Leprosorum de Moricestun" In this charter, Walter Fitzallan, Steward of Scotland, granted to this hospital of Auldnestun and its inmates (Hospitali de Auldnestun et infirmis fratribus ibidem residentibus), a carrucate and a half of land in the village of Auldnestun; another carrucate and a half, which Dame Emma of Ednaham held (tenuit per suas rectas divisas), with the common pasturage and easement (asiamento) of the forests of Birkenside and Ligarrdewude (Legerwood), and a right to grind at his mill without paying multure. 14

Kingcase, Ayrshire.—At Kilcais or Kingcase, on a bleak muir in the parish of Prestwick, and about two miles from the town of Ayr, stood, for several centuries, an hospital for Lepers. The general tradition of the surrounding country avers that this hospital was founded by King Robert the Bruce. In the article on Ayr, recently published by the Rev. Dr. Auld and Mr. Cuthill, in the New Statistical Account of Scotland, 15 the foundation charter of Robert Bruce is said to have been purchased by the Magistrates of that town in 1786. I am obligingly assured, however, by Mr. Murdoch of Ayr, that no such document is known to exist among the archives of that town. It is probable that the hospital existed before the time of Bruce. In a charter to the monastery of Dalmulin, contained in the Chartulary of Paisley Abbey, 16 and of the date of the reign of William I. of Scotland, among other lands and localities in Kyle and the immediate neighbourhood of Kingcase, the term Spetel-Crag occurs. Now the term Spetel was a prefix applied, both in Scotland and England, to all hospital lands and possessions, and to these alone; and history records no other hospital whatever in Kyle, from which this appellation of Spetel Craigs could be derived. But whether Bruce was the original founder, or, what is more probable, a liberal endower of the hospital, we know this at least of the history of the Kingcase Leper Hospital, that it possessed at one time pretty extensive lands and property in the parish of Dundonald, and in Kyle Stewart.¹⁷

These, like many other hospital grants, came after a time to be perverted from their original objects of charity, and applied to the aggrandisement of particular individuals. Thus the family of Wallace of Newton obtained from James II. a feu-charter of the Kingcase estate of Spittalshiels, for the annual payment of eight merks Scots, and sixteen thrave of straw. In reference to this, the

land of Spittalshiels has yet (observes Sir Walter Scott, in a note to his *Lord of the Isles*¹⁸) to give, if required, a quantity of straw for the lepers' beds of Kingcase, and so much to thatch their houses. Along with Spittalshiels the Wallaces acquired the office of Hereditary Keeper or Governor of the Hospital itself, and of the other lands pertaining to it. In the family of the Wallaces of Craigy this right of patronage and presentation to Kingcase was long held, with all the remaining endowments of the hospital. These privileges were exposed at a judicial sale of the estate of Craigy, and purchased, 1784, by the burgh of Ayr, for £300. The magistrates, from this right, exact feu-duties from the lands formerly belonging to Kingcase, to the annual extent of sixty-four bolls oatmeal, and eight merks Scots money. This revenue has been made over to the poor's house of Ayr. In virtue of it the magistrates have the privilege of presenting a certain number of inmates to this latter institution.¹⁹

No records remain as to the original extent of the Kilcais Hospital. The number of lepers supported was, during the latter years of the institution, limited to eight. Before the hospital revenues and lands were despoiled the number might have been greater. The only remnants of the buildings which are now left consist of the massive side-wall of a house 36 feet long and 17 wide. This is generally alleged to be the ruins of the chapel merely of the hospital; and under this view it is certainly calculated to give us a high opinion of the ancient extent and endowments of the institution. Sir Robert Gordon, in a description of Kyle, published in 1654, in Bleau's *Atlas*, states that the persons admitted to the charity were then lodged in huts (*tuguria*) in the vicinity of the chapel.²⁰

Glasgow.—In 1350, in the reign of David II., the Lady of Lochow, daughter of Robert Duke of Albany, erected a leper hospital at the Gorbals of Glasgow, near the old Bridge. She endowed this hospital with some lands and houses in the city. The magistrates of Glasgow seem to have exercised the privilege both of searching for lepers among the inhabitants, and of consigning them to this hospital. From the Burgh Records, presented some time ago by Mr. Smith to the Maitland Club, it appears that in 1573 the magistrates ordained four persons, named as lepers, "to be viseit (inspected), and gif they be fund so, to be secludit of the town to the Hospital at the Brigend." A similar edict was issued in regard to two other individuals in 1575, and in 1581 eight more seem to have been dealt with in the same manner. The Bishops of Glasgow appear also to have had a right to present patients to the hospital. In 1464, Andrew Muirhead, who then held the bishoprick, availed himself of the privilege by presenting one patient.

On the 9th August 1589, a report was given in to the magistrates of Glasgow, stating that six lepers were at that time in the house. As late as 1664, the ground-rents of this hospital were uplifted by the water-bailie, an official who, according to an entry in the city records of Glasgow, was in the custom of giving in annually the number of lepers in the hospital at the Brigend. This hospital, like that of Kingcase, was dedicated to the Gallovidian Saint, St. Ninian.

Edinburgh.—A leper hospital formerly existed at Greenside, which was then a suburb, and not, as now, a constituent part of the city of Edinburgh. The history of the hospital and its laws are preserved in the Town-Council records. In 1584 the city Magistrates issued orders for finding a commodious place for a leper-house.²⁶ In 1589, they passed an Act for building such an institution at Greenside, and apparently with money granted to them for that purpose, by John Robertson, a merchant in Edinburgh, and others, in pursuance of some previous vow.²⁷ On the 23d November 1591, five leper inhabitants of the city were consigned to this hospital.²⁸ Two of the wives of the lepers voluntarily shut themselves up in the hospital along with their diseased husbands. I shall afterwards recur to the strict laws which the inmates were bound to observe. In a charter of rights given to the city in 1636 by Charles I. there are enumerated among the other grants which he confirms to them, "the lands of old called the Greenside, with the leper-house and yard situate on the same, arable lands, banks, and marishes thereof, for the present occupied by the lepers of the said house."29 The hospital, however, does not appear to have been of long duration. In 1652, the magistrates ordered that the roof of the leper-house be taken off, and its wood, slates, etc. used to repair the town milns and other public buildings;30 and in 1657, a similar appropriation was made of the stones contained in the walls of the leper-house, and in the fence around its yard or garden.31

Aberdeen.—In an old manuscript Description of bothe Touns of Aberdeen, by James Gordon, as quoted in the entertaining Book of Bon Accord, the following notice of a leper hospital at Aberdeen occurs:³² "Such as go out at the Gallowgate port towards Old Aberdeen, haff way almost, may see the place where of old stood the lepers' hospital, called the seick-house, hard by the way syde. To which there was a chappell adjoyned, dedicated to St. Anna, quhome the Papists account patronesse of the lepers. The citizens licencit one Mr. Alexander Galloway, the person of Kinkell, for to build that chappell anno 1519. Now both these buildings are gone, and scarcely is the name knowne to many" "On the 18th August 1574, the Regent Morton, and the Lords of the Privy-Council commanded the Magistrates of Aberdeen to uptake fra James Leslie, present possessioure of the croft and myre pertening to the Lipperfolk, the yeirle dewtie tharof off the five yeiris bypast; and thairvith, and sic vthir collectioune as may be hade, to caus the said house be theikkit (thatched, roofed) and reparit for the resett of the said Lipperfolk in tym cuming: and to caus roup the said croft and myre, to quha vill giff maist yeirle dewtie tharfor fra thre yeir to thre yeir: And to caus the haill proffeit to be employit vpon the upolding of the said hous, and sustentation of the Lipperfolks that salbe tharin."³³

In the beginning of the eighteenth century the hospital and grounds were sold under the direction of the magistrates, and the money received appropriated to the establishment of a fund for a proposed lunatic asylum. The leper croft now belongs to King's College.³⁴

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Rothfan, Elgin.—A leper-house seems to have existed from an early period at Rothfan, near Elgin. John Byseth made a gift to this hospital at Rothfan of the Church of Kyltalargyn, for the avowed purpose of maintaining seven lepers, a servant and chaplain. The donor retained to himself and his successors the privilege of preserving the number complete, by filling up the vacancies. On his request and presentation, William, prior of the hospital, was admitted to the church in 1226.³⁵

The precise date of Byseth's charters is not preserved, but they seem to have been drawn out during the reign of Alexander II. or III. From their phraseology the hospital evidently was in existence previous to that time.

The lands pertaining to this hospital are still known under the name of the Leper Lands,³⁶ though the institution itself has been long obsolete.

Shetland.—Lastly, we have records of several small and temporary lazar-houses in Shetland. Thus, long ago, Brand (the honest missionary, as Hibbert terms him) states that in that country the "scurvy sometimes degenerates into leprosy, and is discerned by hairs falling from the eyebrows, the nose falling in, etc., which" (he adds), "when the people come to know, they separate and set them apart for fear of infection, building huts or little houses for them in the field. I saw the ruines of one of these houses about half-a-mile from Lerwick, where a woman was for some years kept for this reason. These scorbutick persons are more ordinarily in Dunrossness and Delton, and more rare in other places." 37

"Formerly" (says Dr. Edmondston, another and more recent author on the Shetlands), "when leprosy was very prevalent, the unfortunate individuals who were seized with it were removed to small huts erected for the purpose, and there received a scanty allowance of provisions daily, until the disease put a period to their miserable existence."³⁸

Number of Hospitals, and Extent of the Disease.

The Scottish lazar-houses that I have thus enumerated, though few in number, are still sufficient to show that the disease for which they were instituted was generally diffused over the extent of the kingdom. Thus, we have found the establishments in question spread from Berwickshire to Shetland, and from Aberdeen to Ayr. More research than I have been able to bestow upon the matter would no doubt bring to light notices of various additional hospitals. In some Scottish towns names and notices still exist sufficient to lead to the probability of lazar-houses having formerly existed in them, though that evidence is in other respects altogether incomplete.

In the immediate neighbourhood of Edinburgh a leper station probably existed at a date greatly earlier than that of the Greenside Hospital. In his Caledonia, 39 the late excellent antiquary and philologist, George Chalmers, expresses his belief in the opinion suggested by the Rev. Mr. White, that the name of the village of Liberton (two miles south of Edinburgh) is merely a corruption of Liper town,—liper being the old Scotch term for leprosy; and, as is well known, the letters p and b being constantly interchanged for one another in the composition and transmutation of words. This idea is certainly in no small degree countenanced by the circumstance that the lands of Upper Liberton (Libertune) in some old writs are described under the name of "terrarum de Spittle town" (Hospital town.) 40

Besides, the "Oily or Balm Well of St. Catherine's at Liberton," had been long held in high estimation in curing cutaneous diseases, and still maintained great repute as late as the sixteenth and seventeenth centuries. In his brief but interesting Cosmography and Description of Albion, Boece, Canon of Aberdeen, at the commencement of the sixteenth century, states that the oil of this well "valet contra varias cutis scabricies."—Historiæ Scotorum (1526), p. xi. 41

J. Monipennie alleges that its oil or "fatness is of a sudain operation to heal all salt scabs and humors that trouble the outward skin of man." Dr. Hare makes mention of it to the same purpose. After the institution of the monastery of St. Catherine of Sienna (*Scotticé*, Sheens) on the Burrow Moor, at a short distance south of the city walls of Edinburgh, the Dominican nuns belonging to it made, in honour of St. Catherine, an annual solemn procession to the chapel and balm well of Liberton.

This "oily or balm well" of Liberton was sufficient to excite the admiration and engage the protective care of the credulous King James VI. In a curious monograph⁴⁵ on the virtues of the well, published at Edinburgh in 1664, the author, "Mathew Mackaile, Chirurgo-Medicine," indulges himself (p. 117) in the following historical eulogium and anathema in regard to it:—

"His Majesty King James the Sixth, the first monarch of Great Britain, of blessed memory, had such a great estimation of this rare well, that when he returned from England to visit this his ancient kingdom of Scotland in anno 1617, he went in person to see it, and ordered that it should be built with stones from the bottom to the top, and that a door and a pair of stairs should be made for it, that men might have the more easie access unto its bottom for getting of the oyl. This royal command being obeyed, the well was adorned and preserved, until the year 1650, when that execrable regicide and usurper, Oliver Cromwell, with his rebellious and sacrilegious accomplices, did invade this kingdom, and not only deface such rare and ancient monuments of Nature's handwork, but also the synagogues of the God of nature."

But it is unnecessary to insist further upon such problematical evidence in regard to the probable extent and prevalence of the disease in Scotland. A proof of this, of a much stronger character, is afforded by the simple fact that, as late as the reign of James I. the victims of the disease were

made the subject of a direct and special legislative enactment in the Scottish Parliament held at Perth in the year 1427. I shall quote one short clause from this act "anent Lipper Folke" (as it is termed), to illustrate both the apparent prevalence of the malady at that time, and this circumstance, that the burghs of the kingdom are then spoken of as possessing, or obliged to possess, lazar-houses of their own. The second clause is to the following effect: "Item, that na Lipper Folke sit to thig (beg) neither in kirk nor kirkzaird, nor other place within the burrowes, but at their own hospital, and at the port of the towne and other places outwith the burrowes."

It is impossible to form any approach as to the number affected in this country. The hospitals that I have enumerated do not seem calculated to contain many patients. As we have already seen, that of Ayr contained at least eight patients; Rothfan, seven; five were admitted into the Greenside hospital at its first opening in 1591; and in a report of the Glasgow hospital, submitted to the magistrates in 1589, six lepers were reported as then belonging to that institution. These data are entirely inadequate to draw any conclusion from, and the more so, that here, as in England, the disease was probably more extensively spread during the eleventh, twelfth, and thirteenth centuries than afterwards; and it is exactly at that remote period that all our Scottish records are most defective.

In these early times the very words employed to designate the disease show its extent and severity. Somner, Lye, and Bosworth, in their several Dictionaries of the old Anglo-Saxon language, all quote the remarkable expression, "seo mycle adl," "the mickle ail" or great disease, as signifying "elephantiasis" or "leprosie;" and it is worthy of observation, in reference to the same point, that the delightful old French chronicler, Sir John Froissart, who visited Scotland in the time of Robert II., applies, as we shall afterwards see, the analogous term of "la grosse maladie" to one noted case of leprosy in this country. Some further idea may be formed of the frequency of the disease, at least in the border counties of Scotland, when I state that, before the year 1200, there existed various hospitals for the exclusive reception of lepers in the immediately adjoining English counties of Northumberland, Cumberland, and Durham. Three alone of these hospitals contained as many as ninety-one lepers in all—viz. the hospital of Sherburne, near Durham, ontained sixty-five; St. Nicholas, Carlisle, contained thirteen; and Bolton, in Northumberland, founded, as its charter bears, by Robert de Roos, "pro salute animae meae et omnium antecessorum et successorum meorum," was endowed for other thirteen.

I may here take the opportunity of stating that the labours of different English antiquaries, and more particularly the investigations of Leland, Dugdale, and Tanner, into the Monastic History of England, tend to show that at an early period many leper-houses were scattered over England and Wales. In searching through the works of these authors, and more particularly through the late splendid edition of the *Monasticon Anglicanum*, with the numerous additions of Caley, Ellis, and Bandinel, I have found references to between eighty and ninety English lazar-houses.⁵⁰

In the second and third volumes of the *Monasticon Anglicanum* (1st edition) above ninety⁵¹ charters or other notices of English hospitals are published, and of these twenty-one at least were hospitals for the reception of lepers. Bloomefield⁵² mentions eighteen leper-houses in Norfolk alone; and Taylor,⁵³ in his *Index Monasticus*, enumerates twenty in that single county. Six of these were placed in Norwich or its immediate vicinity, and five at Lynne Regis.

OBJECTS, CHARACTER, AND GOVERNMENT OF THE LEPER HOSPITALS.

The leper hospitals, both in Scotland and elsewhere, were intended merely as receptacles to seclude the infected, not as houses in which a cure of them was to be attempted. They were charitable and hygienic rather than medical institutions.

At the present day tubercular leprosy is still regarded as a disease which sets at defiance all the powers of the medical art. Our ancestors had so firm a belief in the same doctrine, that, in the case of one of the unfortunate wretches who was tried in Edinburgh in 1597 for witchcraft, amongst the gravest of the accusations brought against the panel was this, that she (Christian Livingstone) "affirmit that she culd haill (cure) leprosie, quhilk (the libel adds) the maist expert men in medicine are not abil to do." Some of the means of cure she had employed have never, I am afraid, been allowed a place in any of our pharmacopæias. I may allude, therefore, as a specimen to one of them amongst others—viz. (and I quote the words of the libel) "she took a reid cock, slew it, baked a bannock (cake) with the blude of it, and gaf (gave) the samyn to the Leper to eat." ⁵⁴

I leave it to the dogmatism of the pharmacologists to decide whether more potent virtues should be ascribed to this recipe of Christian Livingstone's or to that deliberately offered with the same purport by our celebrated countryman Michael Scott. "It ought to be known" (says the great Fifeshire philosopher) "that the blood of dogs and of infants two years old or under, when diffused through a bath of heated water, dispels the Leprosy without a doubt" (absque dubio liberat Lepram). 55

The miraculous properties of the relics of saints were in some instances strongly relied upon as an article of the Materia Medica, fit among other things to cure this incurable malady. Fosbroke⁵⁶ mentions a fountain near Moissac, described by Peyrat (abbot of that place, in the fourteenth century), the waters of which were so medicated by the relics of a saint contained in the neighbouring abbey that the crowds of lepers who resorted to it bathed and were immediately cured. But the valued fountain was not sufficiently powerful to avert the disease being communicated to the monks, or to save them even when once they were contaminated; and at

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last, according to the confessions of the abbot, it was shut up in consequence of some of the order dying of the very malady which their famed waters could infallibly remove.

In the sequel, when considering the causes of the disease, and the regulations of medical police, adopted in regard to the infected, I shall have occasion to speak at length of the strict rules to which the inmates of most of the leper-hospitals were subjected—not for the sake of medical treatment, but with the purpose only of preventing the dissemination of the malady.

Besides being places for the isolation of the infected, the leper-hospitals of Scotland and England were often, like the corresponding institutions of the continent of Europe, founded and endowed as religious establishments; and, as such, they were generally submitted to the sway of some neighbouring abbey or monastery. Semler⁵⁷ quotes, indeed, a Papal bull, appointing every leper-house to be provided with its own churchyard,⁵⁸ chapel, and ecclesiastics—(cum cimiterio ecclesiam construere, et proprio gaudere presbyterio)—an order against the latter part of which the poverty of many of the hospitals in Great Britain formed a very secure guarantee. The Greenside Hospital in Edinburgh, being founded at a very late period, partook, perhaps, less of the character of a religious establishment than most others in the kingdom.

The rules established for the domestic and religious duties of the inmates belonging to it, by the commissioners appointed by the magistrates of the city, were few and simple, viz.—

"That the said persons, and ilk ane (every one) of thame leif (live) quetlie, and gif (give) na sclander, be banning, sweyring, flyting, skalding, filthie speaking, or vitious leving, or any oyder way, under the paynes to be enjoynit by the counsall.

"That thair be appoyntit ane ordinair reider to reid the prayer sevrie Sabboth to the said lepperis, and are commodious place appoyntit to the said reider for that effect." 59

Over some of our Scotch lazar-houses, chaplains, and religious officers with the high-church title of priors, were placed.

The prior of Rothfan Hospital was, at the intercession of the founder of the house, admitted to the church. There was one chaplain under him.

In the records of the burgh of Prestwick there is an incidental entry, showing that there was a prior placed over the Kingcase Hospital near Ayr in 1507, for "George Yong, Prior of Kingiscase, accusyt Thome Greif of four barrels of beyr, and the said Thomas grantyt 24 shillings, but denyit ye beer." We have already seen that there were chapels annexed to the Kingcase and Aberdeen Hospitals. Our history of the other lazar-houses in Scotland is so imperfect as not to enable us to state whether they were equally well provided; but certainly many of the richer leper and other hospitals in England had, as appears from their better preserved records, free chapels attached to them, with resident regular or secular canons. In the Sherburne Leper Hospital, near Durham, there were, besides the prior, four priests and four attendant clerks. The hospital of St. Giles, Norwich, was provided with a master or prior, and an establishment of eight regular canons acting as chaplains, two clerks, seven choristers, and two sisters; while the only permanent residents to whose wants they were required to minister were eight poor bed-ridden subjects!

Both the ecclesiastical officers of the leper hospitals, and the leprous inmates themselves, were in general strictly enjoined, by the foundation charters and regulations of their institutions, to observe strict religious formulæ, and especially to offer up prayers for the souls of the founder and his family. That the duties connected with this last office were in some instances by no means slight, will be sufficiently apparent by the following extract from the laws of the leper hospital at Illeford, in Essex, which I translate from the regulations established for the house in 1346 by Baldok, Bishop of London:—⁶³

"We also command that the Lepers omit not attendance at their church, to hear divine service, unless prevented by grievous bodily infirmity; they are to preserve silence there, and hear matins and mass throughout, if they are able; and whilst there, to be intent on prayer and devotion, as far as their infirmity permits them. We desire also and command that, as it was ordained of old in the said hospital, every leprous brother shall, every day, say for the morning duty a Pater noster and Ave Maria, thirteen times; and for the other hours of the day respectively, namely, the first, third, sixth hour of the vespers, and again at the hour of the concluding service, a Pater noster and Ave Maria seven times; and besides the aforesaid prayers, each leprous brother shall say a Pater and Ave thirty times every day for the founders of the hospital and the bishop of the place, and all his benefactors, and all other true believers, living or dead; and on the day on which any one of their number departs from this life, let each leprous brother say in addition, fifty Paters and Aves, three times, for the soul of the departed, and the souls of all deceased believers. But if any one shall openly (manifeste) transgress the said rules, or any one of them, for each transgression let him receive a condign punishment according to the amount of the offence, from the Master of the said hospital, who is otherwise called the Prior. But if a leprous brother secretly (occultè) fails in the performance of these articles, let him consult the priest of the said hospital in the Penitential Court."

In several of the hospitals the passions of the inmates were endeavoured to be restrained by the laws laid down by their Superior. Thus the articles of the leper-house of St. Julian, at St. Albans, contain the following significant regulations of Abbot Michael *de accessu Mulierum*. "And since by the access of women scandal and evils of no slight nature arise, we above all things forbid that any woman enter the hospital of the brothers, with the exception of the common laundress of the house, who must be of mature age and discreet manner of life (maturæ aetatis et bonae

conversationis), so that no suspicion can attach to her. And she must not presume to enter the house at suspicious times, but at the proper hours, so that her entrance and exit may be seen by all. But if a mother or sister, or any other honest matron, come there for the purpose of visiting the infirm, she may have access to the one with whom she wishes to speak, and this may be done by the permission of the Custos; without which they are not to enter, whatever may be their rank. But women of light fame and evil reputation are by no means to enter the houses."⁶⁴

The Custos, Master, Dean or Prior, and in some houses the Prioress, 65 seems in general to have had full control over the leprous inmates of the hospital. Thus, in the laws which have been transmitted to us of the Sherburne Hospital, it is laid down that members were to be punished for disobedience or idleness, at the discretion of the prior, by corporal correction with the birch, "modo scholarium." Offenders who refused to submit to this chastisement had their diet reduced to bread and water, and after the third offence were liable to be ejected. 66

Matthew Paris has left us a copy of the vow which the lepers of the hospital of St. Julian, at St. Albans, were obliged to take before admission. I append a translation of it as a document highly illustrative of this part of our subject:—

"I, brother B, promise and, taking my bodily oath by touching the most sacred Gospel, affirm, before God and all his saints in this church, which is constructed in honour of St. Julian the confessor, in the presence of Dominus R. the Archdeacon, that all the days of my life I will be subservient and obedient to the commands of the Lord Abbot of St. Albans for the time being, and to his archdeacon; resisting them in nothing, unless such things should be commanded as would militate against the Divine pleasure. I will never commit theft, nor bring a false accusation against any one of the brethren, nor infringe the vow of chastity, nor fail in my duty by appropriating anything or leaving anything by will to others, unless by a dispensation granted by the brothers. I will make it my study wholly to avoid all kind of usury, as a monstrous thing, and hateful to God.⁶⁷ I will not be aiding and abetting, in word or thought, directly or indirectly, in any plan by which any one shall be appointed custos or master of the Lepers of St. Julian, except the person appointed by the Lord Abbot of St. Albans. I will be content, without strife or complaint, with the food and drink, and other things given and allowed me by the master, according to the usage and custom of the house. I will not transgress the bounds prescribed to me, without the special license of my superiors, and with their consent and will; and if I prove an offender against any article named above, it is my wish that the Lord Abbot or his substitute may punish me according to the nature and amount of the offence, as shall seem best to him, and even to cast me forth an apostate from the congregation of the brethren, without hope of remission, except through the special grace of the Lord Abbot."68

I have only very briefly to advert to one other subject, before closing these remarks on the government of the English leper hospitals. I have already alluded to a special order of knighthood having been established at an early period for the care and superintendence of lepers. Belloy⁶⁹ carries back the origin of this order in Palestine to a very early period in the history of the Christian church. We know as a matter of greater historical certainty that the knights of St. Lazarus separated from the general order of Knights Hospitallers about the end of the eleventh or commencement of the twelfth century.⁷⁰

From the locality of their original establishment, and from their central preceptory being near Jerusalem, they were at first generally designated Knights of St. Lazarus, or of St. Lazarus and St. Mary of Jerusalem. Latterly they were conjoined by different European Princes with the Military Orders of Notre-Dame, Mount Carmel, and St. Maurice.⁷¹

Saint Louis brought twelve of the Knights of St. Lazarus into France, and entrusted them with the superintendence of the Ladreries or leper hospitals of his kingdom.⁷² The first notice of their having acquired a footing in Great Britain is in the time of King Stephen. During the reign of that sovereign their head establishment in England at Burton Lazars, Leicestershire, was built by (as Nicols⁷³ states) a general collection throughout the kingdom, but chiefly by the assistance of Robert de Mowbray. Here they gradually acquired considerable wealth and possessions. 74 I find that the Hospitals of Tilton, of the Holy Innocents at Lincoln, of St. Giles, London, the Preceptory of Choseley in Norfolk, and perhaps various others, were betimes annexed to Burton Lazars as cells containing "fratres leprosos de Sancto Lazaro de Jerusalem." Nicols has printed not less than thirty-five charters relating to the House of Burton Lazars. Its privileges and possessions were confirmed by Henry II., King John, and Henry VI. It was at last dissolved by Henry VIII.⁷⁵ The only settlement of the Knights of St. Lazarus in Scotland that I have been able to find, was in the town of Linlithgow, and the notice of it is very imperfect and unsatisfactory. It is contained in a document of the reign of Alexander II., and preserved in the Chartulary of Newbottle, in which reference is expressly made to land held "de Fratribus de Sancto Lazaro" at Linlithgow. 76 That the Lazarites had an establishment or establishments in Scotland as well as in the sister kingdom, appears borne out by a fact recorded by Helyot,77 that in 1342, John Halliday, a Scotsman, was appointed Governor of the Knights of St. Lazarus both in England and Scotland, by the Grand Master of Boigny in France, who was at that period the reputed head of the order. Indeed Pennecuik, on the authority of Maimbourg (Histoire des Croisades), asserts that the "Knights of St. Lazarus were numerous everywhere, but especially in Scotland and France."

The first and original object of the Knights of St. Lazarus seems to have been the care probably of the sick generally, but in a special manner of those affected with leprosy.⁷⁹ They received lepers into their order, superintended the inmates of the lazar-houses, and, till the standing rule to the contrary was allowed to be changed by Pope Innocent IV., they were obliged to elect a leper to be

their Grand Master; 80 "eatenus consuetudine observatâ ut Miles leprosus domûs Sancti Lazari Hierosolymitani in ejus Magistrum assumeretur." 81

Toussaint de S. Luc, in his History, Ceremonials, etc., of the Order of St. Lazarus, after it was united in 1608 by Henry IV. of France to those of Notre-Dame and Mount Carmel, states that the candidates for this united knighthood were obliged, upon the Holy Evangelists, to swear *inter alia*, "to exercise charity and works of mercy towards the poor, and particularly lepers" (et particulièrement les lepreux.)⁸²

What extent and what kind of sway, if any, the Lazarite Knights of England and Scotland were ever allowed to exert over the lepers of the kingdom generally, or over the inmates of these leper cells and hospitals that more especially belonged to them, I have not been able to ascertain from any of the British historical records of the middle ages that I have had an opportunity of consulting. It is, however, only too probable that the Lazarites, like most of the other early orders of knights, were induced by pride and avarice to turn from their original objects of love and charity to others,—to views of power and aggrandisement for themselves.

EXTENT OF ENDOWMENT OF THE HOSPITALS, DIET, ETC.

Most of the Scottish leper-houses were very poorly or not at all endowed. Their principal subsistence seems to have been derived from casual alms. Each of the doomed inmates of the hospitals was, like the leper-struck heroine of the old Scottish poet, Henryson, by

 \dots cauld and hounger sair Compellit to be ane rank beggair.⁸³

The inmates of the Greenside or Edinburgh lazar-house were allowed four shillings Scotch (about fourpence sterling) per week, and for the remainder of their subsistence they were, according to the original rules of the institution, obliged to beg at the gate of their hospital. The leper-house at Aberdeen was supported from the public funds of the town; but in 1591 James VI. granted a charter to "Robert Abell and remanent of the pure (poor) leprous personis and thair successors" in the hospital, to draw one peat of custom from every load of them brought to the markets of Aberdeen, in consequence (as the words of the original charter bear) "of the smallness of the rent appointit for the leprous personis in the Hospitall being unable to sustene thame in meet and fyre, quhairthrow they leif verie miserablie."

Other Scottish lazar-houses, however, were comparatively wealthy. Thus, I have already mentioned that the Kingcase Hospital, near Ayr, had some large and extensive landed properties attached to it.

The inmates of most of the smaller English leper-houses seem also to have principally depended for their subsistence upon the precarious contributions of the charitable. One of the lepers of the hospital at Beccles was, by a royal grant, empowered to beg for his leprous brothers. Several of the larger English hospitals, however, were well endowed, and the food, clothing, etc., of the inmates amply provided for.

In some instances these endowments consisted of the accumulations of large and voluntary charities; in others they were made up of rich grants, left for the avowed purpose of founding chantries for the spiritual peace and pardon of the donor and his family; and in other cases, again, they were originally obtained as direct propitiations to the church for misconduct and crime. Indulgences⁸⁷ of forty days' pardon seem to have been occasionally granted by the bishops and other ecclesiastical dignitaries to all the benefactors of the hospitals.

A bull of Pope Alexander III., which has been already referred to, granted all leper hospital possessions an exemption from the payment of tithes. 88 The canon was not universally adhered to in England, for, in the account which Archbishop Parker drew up in 1562 of the hospitals in the diocese of Canterbury, while Herbaldone and Bobbing leper-houses are reported as "not charged with the taxes of the tenths," it is declared of the leper hospital of St. Laurence, Canterbury, that "the same is taxed and payeth the perpetual tenth."

From the *Valor Ecclesiasticus*, taken in the time of Henry VIII., it appears that whilst forty-eight hospitals, leper-houses, and lazar-houses in the diocese of Norwich and county of Norfolk possessed only a revenue of about £158 in all, ⁹⁰ the rentals, on the other hand, of certain individual hospitals were comparatively great for that period. Thus, the revenues of Herbaldone Hospital, Kent, and St. James', London, ⁹² were each rated at £100; of Sherburne above £140; ⁹³ of Maiden Bradley at near £200; ⁹⁴ and those of the establishment and "veri fair hospital" (as Leland terms it), ⁹⁵ of Burton Lazars were valued above £260. ⁹⁶ In some of these richer institutions the inmates were, as I have just remarked, well provided for. As illustrative of this, I may quote the diet-table, etc., of one or two of the wealthier leper hospitals. Thus, among the rules published in the Additamenta to Matthew Paris, as established about the middle of the fourteenth century by the Abbot Michaele for the leper-house of St. Julian, near St. Albans, we find the following regulations laid down with regard to the commons of the leprous brothers (de distributionibus fratrum leprosorum):—⁹⁷

"Let every leprous brother receive from the property of the hospital, for his living and all necessaries, whatever he has been accustomed to receive by the custom observed of old in the said hospital, namely, every week seven loaves, of which five shall be white and two brown, made from the grain as thrashed from the ear; also, every seventh week, fourteen gallons of beer, or eight-pence (octo denarios) for the same. Let him have, in addition to this, on the feasts of all the

saints, on the feast of Saint Julian, the purification of the Blessed Mary, the Annunciation, the Trinity, Saint Albans, Saint John the Baptist, the Assumption of the Blessed Mary, and the Nativity of the same, for each feast, one loaf, one jar of beer, or a penny for the same, and one obolus, which is called the charity of the aforesaid hospital; also, let every leprous brother receive, at the feast of Christmas, forty gallons of good beer, or forty pence for the same. Also, let each receive on the said feast his share of two quarters of pure and clean corn, which is called the great charity. Also, at the feast of St. Martin, each leper shall have one pig from the common stall, and that there may be a fair division of the pigs amongst the brothers, according to the custom observed of old, we desire that the pigs, according to the number of the lepers, may be brought forward in their presence, if it can conveniently be done, otherwise in another place fit for the purpose, and there each, according to the priority of entering the hospital, shall choose one pig (otherwise a sum of money to be distributed equal to the value of the pigs). Also, each leper shall receive on the feast of Saint Valentine, for the whole of the ensuing year, one quarter of oats. Also, about the feast of St. John Baptist, two bushels of salt, or the current price. Also, at the feast of St. Julian, and at the feast of St. Alban, one penny for the accustomed pittance. Also, at Easter one penny, which is called by them 'Flavvonespeni.' Also, on Ascension-Day, one obolus for buying potherbs. Also, on each Wednesday in Lent, bolted corn of the weight of one of their loaves. Also, on the feast of St. John the Baptist, four shillings for clothes. Also, at Christmas, let there be distributed in equal portions among the leprous brothers, fourteen shillings for their fuel through the year, as has been ordained of old for the sake of peace and concord. Also, since, by the bounty of our Lord the King, thirty shillings and fivepence have been assigned for ever for the use of the lepers, which sum the Viscount of Hertford has to pay them annually at the feasts of Easter and Michaelmas, we command that the said 30s. and 5d. be equally divided among them in the usual manner; and we desire the brothers to be contented with the aforesaid distributions, which have been accustomed to be made amongst the leprous brothers of old: But the residue of the property of the said hospital we order and decree to be applied to the support of the Master and Priests of the said Hospital."

The dress of the lepers is laid down in regulations equally precise. "The brothers are to have a tunic and upper tunic of russet, with a hood cut from the same, so that the sleeves of the tunic be closed as far as the hand, but not laced with knots or thread after the secular fashion. They are to wear the upper tunic closed down to the ankles, and a close cape of black cloth, of the same length with the hood, as they have been accustomed of old." A particular form of shoe was also ordered, and if the order was disobeyed, the culprit was "condemned to walk daily barefooted until the Master, considering his humility, said to him—enough."—P. 168.

The diet-roll of the large hospital at Sherburne is still more complex than that of St. Julian's. I extract the heads of it, and of some other particulars with regard to the internal economy of the house, from Surtees' elaborate work, in which copies of the original documents are given at full length.

The daily allowance of the lepers of Sherburne was a loaf weighing five marks, and a gallon of ale to each; and betwixt every two, one mess or commons of flesh three days in the week, and of fish, cheese, or butter, on the remaining four; on high festival, a double mess; and, in particular, on the feast of St. Cuthbert, in Lent, fresh salmon (salmones recentes), if it could be had; if not, other fresh fish; and on Michaelmas day four messed on one goose. With fresh fish, flesh, or eggs, a measure of salt was delivered. When fresh fish could not be had, red herrings (allecia rubea) were served three to a single mess; (and it was specially enjoined that they, or aught that was served up, was not to be putrid, nor corrupt, nor from animals that had died of disease)⁹⁸; or cheese and butter by weight; or three eggs. During Lent each had a razer (rasarium) of wheat to make furmenty (simulam), and two razers of beans to boil; sometimes greens or onions; and every day, except Sunday, the seventh part of a razer of bean meal, but on Sunday a measure and a half of pulse to make gruel. Red herrings were prohibited from Pentecost to Michaelmas, and at the latter each received two razers of apples. The lepers had a common kitchen, and a common cook, fuel, and utensils for cooking, etc.—viz. a lead, two brazen pots, a table, a large wooden vessel for washing or making wine, a laver, two ale vats, and two bathing vats.

The sick had fire and candle, and all necessaries, until they either convalesced or died; and one of the chaplains was assigned to hear the confessions of the sick, to read the gospel to them on Sundays and holidays, and to read the burial-service for the dead. The old woman who attended on the sick had every week three wheaten loaves, and one mess of flesh or fish; and when a brother or sister was buried, the grave-digger had his meat and drink. Each leper had a yearly allowance for his clothing of three yards of woollen cloth, white or russet, six yards of linen, and six of canvass, and the tailor had his meat and drink the day on which he came to cut out their clothes. Four fires were allowed for the whole community. From Michaelmas to All Saints they had two baskets of peat on double mess days, and four baskets daily from All Saints to Easter. On Christmas eve they had four yule logs, each a cart-load ("unusquisque erit unius quadrigatae"), with four trusses of straw; four trusses of straw on All Saints eve and Easter eve; and four bundles of rushes on the eves of Pentecost, St. John Baptist, and St. Mary Magdalene; and on the anniversary of Martin de Sancta Cruce, every leper received five shillings and fivepence in money.

The good food, lodging, and raiment provided by the rich endowments of Sherburne were not without some alloy. The rules of the house were strict, and the religious duties enforced upon the inmates were of an austere character. "All the leprous brethren, whose health permitted, were every day expected to attend matins, nones, vespers, and complines. The bed-rid sick were

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enjoined to raise themselves, and say matins in their bed; and for those who were still weaker, let them rest in peace, et quod dicere possint dicant." During Lent and Advent all the brethren were required to receive corporal discipline three days in the week, and the sisters, in like manner, donec omnes vapulent. And all these, and other laws, Bishop Kellaw "did by his charter confirm and order ever thereafter 'inviolabiter observari.'" 99

On the Continent the lazar hospitals partook of the same differences in regard to poverty and wealth as we have traced in Britain. In France, some of them, however, had become so very amply endowed by the commencement of the fourteenth century that they at last excited the avarice of Philip V., who subjected many of their inmates to the flames. They were burned alive (on les bruloit tout vifs), says the historian Mezeray, in order that the fire might purify at one and the same time the infection of the body and that of the soul. The ostensible cause for this act of fiendish barbarity was the absurd allegation, that (as the original ordonnance of Philip bears the lepers of France and other parts had been bribed to commit the detestable sin and horrible crime (detestabile flagitium et crimen horrendum) of poisoning the wells, waters, etc., used by the Christians. The real cause, there is little doubt, was a desire, through this flimsy excuse, to rob the richer hospitals of their funds and possessions; and this appears only too strongly in the anxiety displayed in the special wording of Philip's original edict, that all the goods of the lepers be lodged and held for himself, (ordinavimus, inter alia, quod omnia bona eorum ad manum nostrum ponerentur et tenerentur.) The persecution of them was again temporarily renewed in 1388, under Charles VI. of France.

Dates of the Appearance and Disappearance of Leprosy in Great Britain.

Much has been written regarding the date of the first appearance of Leprosy in western Europe.

By Astruc,¹⁰⁵ Bach,¹⁰⁶ and others, it has been averred that the leprosy of the middle ages was introduced from the East by those who returned from the crusades. Some of our own historians, as Fuller¹⁰⁷ and Heron,¹⁰⁸ allege that by this means it first reached Great Britain. It is quite possible, allowing the disease for the sake of argument to be contagious, that through the increased international intercourse of that period, it may have been propagated more rapidly and widely than would otherwise have occurred; but there are ample reasons and proofs for believing that it existed on the continent of Europe, and even as far westward as England, before the crusade fanaticism had drawn any converts from this country.

The first relay of Englishmen engaged in the crusade left in 1096, and returned two years afterwards. Several English leper-houses were founded before that period.

Lanfranc, Bishop of Canterbury, and the ecclesiastical favourite of William the Conqueror, died, according to the evidence of the Saxon Chronicle in 1089,¹⁰⁹ seven years previous to the first crusade. During his lifetime he founded two hospitals near Canterbury, one a house built of stone (lapideum domum decentem et amplum) for patients affected with various descriptions of diseases (variis infirmitatum qualitatibus), and the second an hospital constructed of houses of wood, and specially set aside for lepers (ligneas domos ad opus leprosorum.)¹¹⁰ Somner states that this latter institution still exists at Canterbury as a charitable establishment.¹¹¹ Other English lazar-houses were probably of as early a date, or at least earlier than the first emigration for the crusades. Brigges alleges that the leper-house of St. Leonards in Northampton, was founded in William I.'s reign,¹¹² or before 1087; and one at Chatham was, according to Tanner, in existence before the termination of the short reign of his son, William Rufus.¹¹³

But more than a century even previous to the date of which we speak, leprosy had been made a subject of legislation in Great Britain. In a parliament held by Pepin, King of France in 757 at Campiegne, it was enacted that leprosy in a husband or wife be regarded as a cause of separation, and that the sound party might again remarry. Lobineau, in his history of Brittany, 115 tells us as one of the effects of this law of divorce, that among the higher ranks of the city of Dol, there were a number (quantité) of husbands who had as many as three wives living at the same time. Now among the earliest extant code of laws enacted in any part of Britain, those, namely, of the celebrated Welsh King, Hoel Dha, who died about the year 950, 116 there is a canon to the same effect as that referred to, viz. that a married female was entitled to separation, and the restitution of her goods, provided her husband was affected with leprosy. There is, however, as we shall afterwards see, great reason to believe that the word leprosy was then used as a generic term, including under it many different varieties of cutaneous affections.

I can offer nothing precise in regard to the exact period of the first introduction of Leprosy into Scotland. If, as I have already shown to be highly probable, the term Liberton is merely a conversion from leper town, it would render it likely that the disease was an early visitant of this country; for we know that Liberton is mentioned in various old charters of the reign of David I., who died in 1153. In the Foundation Charter of Holyrood (1128) the mill and chapel "de Libertune" are mentioned, and in the chartulary of Kelso, "William, parsona de Liberton," signs as witness to some charters dated during the latter half of the twelfth century. At a later date there figures repeatedly, in the ancient and well-known verses of Blind Harry, as an occasional companion of Wallace—

"Thomas Gray, parsone off Libertone,"

a member of the church militant, who in more than one instance seems to have thrown aside his bell and book for the purpose of sharing in the brave struggles and hardy adventures of the Scottish patriot.

But I can adduce much more solid proof than this unstable philological basis affords, for stating that, as far back at least as the latter half of the twelfth century, the disease was not only known in Scotland, but that hospitals were by that time actually erected for the seclusion of the victims of it. The hospital of Auldnestun, in Lauderdale, had, as I have already stated, three carrucates of land granted to it, as appears from the Melrose Chartulary, by Walter, the son of Alan. The date of this grant, as of most others in the old chartularies, is not preserved, but it is a fixed and well-ascertained fact in Scottish history that the donor of it, the first of the illustrious, and afterwards royal line of Stewarts, died himself as a Cluniac monk in Melrose Abbey in the year 1177. ¹²¹

William the Lion, who died in 1214, confirmed, as we have seen, a grant to the leper-house of Aldcambus; and the hospital of Rothfan, near Elgin, was evidently established during, if not prior to, the reign of his son and successor, Alexander II. In the chapter of gifts to this Rothfan hospital, by John Byseth, Alexander is spoken of as the reigning prince, the preamble to the grant declaring that the endowment was bestowed "for the love of charity, for the soul of King William, and for the salvation of my noble lord King Alexander" (pro salute dominis mei Alexandri nobilis Regis). Alexander II. died in 1249, so that by this time the disease was certainly spread to the more northern parts of the kingdom.

All Scottish records of these earlier times are almost, as I have already observed, so entirely lost, that it now seems impossible to ascertain whether any leper-houses existed in this kingdom at a date antecedent to those to which I have thus alluded. That this was the case, however, is not improbable.

Before the first notice of the earliest Scotch leper-house that I have been able to trace—viz. that of Auldnestun, about 1170, similar establishments were abundant in England. The charters of many of them appear to have been either granted or confirmed in the reign of Henry I., who died in 1154, and was a contemporary of the Scotch Kings, Edgar, Alexander I., and David I.; and it is not unworthy of remark that two, if not more, lazar-houses were founded in England by natives of Scotland prior to the date of the earliest Scotch leper-house that I have been able to discover. For Malcolm IV. founded and endowed one in his principality of Huntingdon in 1165;¹²³ and sixty years earlier, or in 1101,¹²⁴ Matilda, the "gode Queene Maud" of Henry I., and daughter of Malcolm III. of Scotland, established the hospital of St. Giles, Bishopsgate, for forty lepers, a chaplain, clerk, and messengers.

But at whatever respective periods the disease first appeared in England and Scotland, there are strong reasons for believing that it continued to prevail in the latter kingdom long after it had ceased, or almost entirely ceased, in the former. In the preface to the statutes of the leper-house of St. Albans, drawn up about 1350, and already referred to as published in the supplement to Matthew Paris' history, 125 it is stated that the number of lepers that presented themselves for admission had diminished so much by that time, that their expense of maintenance was below the revenue of the institution; "in general," it is added, "there are now not above three, sometimes only two, and occasionally only one." In exactly the same year (1350) that this report was drawn up for St. Albans, was it thought necessary to institute the leper-house at Glasgow; and nearly one hundred years later, or in 1427, the Scottish Parliament deemed it proper to legislate on the subject of lepers.

The hospital of St. Mary Magdalene, at Ripon, was established in 1139 for the relief of all the lepers in that district. In the time of Henry VIII, it contained only two priests and five poor people to pray for all "Christen sowlez." 126

At Illeford, in Essex, an hospital was instituted in the reign of Henry II. or Richard I. for thirteen lepers. In one of the reports of the commissioners for suppressing colleges, hospitals, etc., in the time of Edward VI., it is observed, in regard to the state of this Illeford Hospital, that though founded "to find 13 pore men beying Lepers, 2 pryests, and one clerke—thereof there is at this day but one pryest and 2 pore men." 127

By the same commission most other lazar-houses were reported as having no leprous patients, and yet only a few years previously was the leper-house of Aberdeen built, and forty or fifty years afterwards (in 1591) the Edinburgh hospital at Greenside was established. We have several later notices of the disease among us. In the Aberdeen Kirk-Session Register, vol. i., it is stated that, on the 13th May 1604, the kirk-session ordained "Helene Smythe, ane puir woman infectit with leprosie, to be put in the hospitall appoyntit for keeping and haulding of lipper-folkis betwixt the townis; and the keyis of the said hospitall to be deliverit to her." 128

As late as 1693 we have some records of the lepers of Kingcase. On the 11th March of that year a complaint was lodged by the procurator-fiscal "anent the intruding of the lepers of Kingcase upon the priviledges only propper to the burgess and freemen (of Prestwick) by there resorting to the shoar, and taking up certain timber and other wrack, and casting greater quantities of peats and turf off the common and moss, &c., which, being seriously pondered by the magistrates, &c., they ordained that none of the said lepers of Kingcase do so under the penalty of ane hundredth pund, toties quoties, to be paid by ilk ane (each one) of them in caise of failyie (failure)." 129

The disease appears to have continued in the northern islands of Scotland long after it had disappeared from the mainland, and, indeed, all other parts of Great Britain. In Shetland it has been known for centuries. I have already made a quotation from Brand to show that it was at Lerwick as late as the latter part of the seventeenth century. In some districts of Shetland it

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continued still later. Apparently most of those there affected either belonged to or were sent to the Island of Papa. I have in my possession a MS. extract from the Session-books of Walls, showing the expenses incurred in keeping the lepers at Papa from 1736 to 1740. Four of them appear to have died during these years, and two of the entries are for the "tobacco" used at their funerals. In 1742 there is a long entry in the Session Records of Walls, earnestly enjoining a day of public thanksgiving for the supposed total deliverance of the country from the effects of the leprosy.

The disease, however, was not eradicated entirely. Mr. Jack, the resident clergyman, who wrote the account of the parish of Northmaven for the Statistical Account of Scotland, published in 1798, seems to have seen what he terms several miserable cases of the disease, and adds, that in many instances there is reason to suspect a hereditary taint. Dr. Thomson urged his pupil, Dr. Edmondston of Lerwick, to trace out the history of the disease in the north, and that gentleman has made the following observations upon it in his work on the Zetland Isles:—

"Elephantiasis, known by the name of leprosy, was very frequent in Zetland about sixty years ago, but its occurrence since that time has only been occasional, and at present scarcely an instance of it is to be met with. A native of Zetland, a few years ago, was received into the hospital of Edinburgh, labouring under true elephantiasis. I have seen obscure degrees of it in Zetland, where the face was bloated, the skin scaly and rough, and the voice slightly hoarse; but they did not terminate fatally, nor was the affection apparently communicated to others. The last instance I saw of it was in the person of a boy. His friends could assign no cause for its appearance, and said that it had come on spontaneously, and proceeded gradually. The disease had been stationary for some time before it fell under my observation." 132

As so far confirmatory of the disease having thus longer remained in Shetland than in the more southern parts of these kingdoms, I may here mention that in the middle ages it was very common, 133 and has since long continued to linger in the neighbouring Faroe Islands, and in Iceland. It appears, from Debes' 134 evidence, that true tubercular leprosy, as we shall see in the sequel, continued to prevail in the Faroe Islands (the nearest land north of Shetland) in the middle of the seventeenth century. Still later—viz. in 1768, Petersen¹³⁵ found 280 lepers in the hospitals in Iceland. Olafsen, ¹³⁶ Troil, ¹³⁷ Holland, ¹³⁸ and Henderson, ¹³⁹ have each, from personal observation, described the disease as existing in that island; and the French Government expedition in 1836, under Gaimard, 140 have, in the beautiful work they are at present publishing, already given several excellent coloured sketches of natives affected with tubercular leprosy. The disease, according to various authors, still prevails in the northern kingdoms of Norway and Sweden. I am not by any means sufficiently intimate with the literature of the Scandinavian radesyge, to venture to offer any decided opinion with regard to its nosological nature, and its alleged relation to the leprosy of the middle ages. As far, however, as I am acquainted with the subject, it appears to me that under the name of radesyge, two, if not more distinct species of disease were, by Holst and the other authors who first wrote upon it, confounded and described together. One of these, the radesyge properly so called, is probably nearly allied to, if not identical with the sibbens of Scotland. Another of the supposed varieties of the disease, the spedalskhed or spetälska, seems on the other hand to be a different nosological species, hereditary, non-contagious, chronic, incurable, and identical in many, if not in all its characters, with true tubercular leprosy. The spetälska seems confined to particular and more limited localities in the north than the radesyge; and when we look to the descriptions of it as seen at Ostrobothnia by Udmann, 141 or as given by Hünefeld, 142 in regard to the disease at Bergen, we certainly find these descriptions very exactly answering to the definitions of tubercular or Arabian leprosy given by our best nosologists and pathologists, and which I shall have occasion afterwards to discuss at some length. Besides, radesyge is a disease which is believed by many to have made its first appearance in Sweden and Norway during the last century, while the spetälska was known at a greatly earlier date. The present hospital for it at Bergen was, as Hünefeld¹⁴³ informs us, founded as early as the year 1268.

In the Second Part I will take an opportunity of considering at length the nosological nature of the leprosy of the middle ages, particularly as it was seen prevailing in Great Britain. I will inquire into the rank, age, etc., of those attacked, and point out some of the causes which have been considered as connected with the dissemination of the disease; and lastly, I will endeavour to bring together some of the strange regulations of medical police that were adopted in England and Scotland with regard to the infected.

PART II.

THE NOSOLOGICAL NATURE OF THE DISEASE.

In the preceding Part we have shown the extent to which leprosy prevailed during the middle ages in Great Britain; the number of hospitals that were instituted for the reception and seclusion of the infected; the government and regulations of these hospitals; and the dates of the commencement and disappearance of the disease in the kingdoms of England and Scotland. Before proceeding farther, we propose,—in this Second Part,—to pause and discuss the strictly medical question of the specific nosological nature of the malady, whose history we have thus far considered.

I have already taken occasion to speak of the leprosy of the middle ages, as identical with the species of cutaneous disorder, which has been variously denominated the tubercular leprosy, (Lepra tuberculosa); the leprosy of the Arabians (Lepra Arabum); and the elephantiasis of the Greeks (Elephantiasis Græcorum). The particular form of chronic cutaneous disease, to which these different appellations have been severally applied, is an affection very distinctly marked in its more leading symptoms and course. Before, however, attempting to prove that the European and British leprosy of former times was specifically identical with the malady in question, it will expedite our investigation of the question if, in the first instance, we obtain a precise and perfect picture of the tubercular or Arabian leprosy itself. By adopting this plan, we shall have placed before us a standard, as it were, by which we can judge of and test those more or less imperfect descriptions of the leprosy of the middle ages, which we may in the sequel have occasion to quote and animadvert upon. And in order to obtain such a standard of comparison as we have now in view, and that without any possibility of prejudging the subject, I shall cite the description of this species of disease from Dr. Bateman of London, and Dr. Schedel of Paris;—from the first, because the characters which he has given of this and other cutaneous affections are generally and justly looked upon by British pathologists as the most clear and distinct that can anywhere be referred to; -- and from the last, because his account of tubercular leprosy is, I believe, the latest that has issued from the medical press, and the author has already, by a former work, 144 distinguished himself by the excellence of his descriptions, and the precision of his diagnosis of cutaneous diseases.

Modern Descriptions and Definitions of Tubercular Leprosy.

"The elephantiasis," says Dr. Bateman¹⁴⁵ "(as described by the Greeks), is principally characterised by the appearance of shining tubercles, of different sizes, of a dusky red or livid colour, on the face, ears, and extremities; together with a thickened and rugose state of the skin, a diminution or total loss of its sensibility, and a falling off of all the hair, except that of the scalp.

"The disease is described as very slow in its progress, sometimes continuing for several years, without materially deranging the functions of the patient. During this continuance, however, great deformity is gradually produced. The alæ of the nose become swelled and scabrous, and the nostrils dilate; the lips are tumid; the external ears, particularly the lobes, are enlarged and thickened, and beset with tubercles; the skin of the forehead and cheeks grows thick and tumid, and forms large and prominent rugæ, especially over the eyes; the hair of the eyebrows, the beard, the pubes, axillæ, etc., falls off; the voice becomes hoarse and obscure; and the sensibility of the parts affected is obtuse, or totally abolished, so that pinching or puncturing them gives no uneasiness. This disfiguration of the countenance suggested the idea of the features of a satyr or a wild beast; whence the disease was by some called *Satyriasis*, and by others *Leontiasis*.

"As the malady proceeds, the tubercles begin to crack, and at length to ulcerate: Ulcerations also appear in the throat, and in the nose, which sometimes destroy the palate, and the cartilaginous septum; the nose falls, and the breath is intolerably offensive. The thickened and tuberculated skin of the extremities becomes divided by fissures, and ulcerates, or is corroded under dry sordid scabs, so that the fingers and toes gangrene, and separate, joint after joint."

The description of the course and symptoms of the disease, as given by Schedel, is more minute and detailed.

"Lepra tuberculosa, or Greek elephantiasis, is" (he observes), 146 "characterised by the eruption of fawn-coloured or yellowish-brown tubercles, various in size, irregular in shape, somewhat shining, and soft and smooth to the touch. These tubercles are preceded by erythematous patches, in which the sensibility of the skin is diminished: slightly elevated at their outset, they become afterwards more projecting, whilst the sensibility of the parts is usually quite lost, although they are sometimes painful when touched. They more frequently occur upon the face, the nose, the ears, the lips, etc.; and being accompanied with a thickened and rugose state of the skin, they cause a most hideous distortion of the features, and frightful deformity.

"The evolution of the leprous tubercles is usually preceded by that of slight erythematous patches of a tawny red hue in whites, and blacker than the surrounding integuments in negroes. These patches are worthy of attention, since they announce the dreadful disease which is about to appear. When they are of some duration, the skin in these points already begins to lose its sensibility. Sooner or later, in some cases quickly in others very slowly, small soft, livid red tumours appear, varying in size from that of a pea to that of a walnut, or even larger. When these tubercles come out, the erythematous patches, on which the sensibility of the integument had become lessened, sometimes become painful; so much so, that we have heard patients declare that the pain produced by the handling of the small tumours at this period was similar to that felt when the cubital nerve receives a blow at the elbow. When they appear on the face, they are generally accompanied by a puffy swelling of the surrounding parts.

"Sometimes only small surfaces are attacked. We have seen the nose and ears alone affected, and much swollen and enlarged. When the disease occurs on the lower extremities only, it is found on the inferior part of the thigh, and around the ankles.

"After remaining stationary for a longer or shorter time, the disorder increases: instead of a few tubercles to be met with here and there, the whole face is covered with large dusky red lumps, separated by deep furrows; the features are horribly distorted; the alæ of the nose are thickened and swollen; the nostrils dilated; the eyebrows tuberculated and overhanging; the lips

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enormously thickened; the skin of the forehead and cheeks is thick, uneven, and tumid; the chin much increased in size, and the whole of the affected surfaces appear as if smeared with oil, and of a dusky livid red; the external ears, especially the lobes, are much enlarged and thickened, and beset with tubercles; the eyebrows and eyelashes and beard fall off; the sense of smell becomes impaired or totally lost; that of touch is often strangely affected; the voice grows husky, and is frequently lost; the eyesight is greatly weakened; the unfortunate patient is dejected; and the muscular powers depressed in a singular manner. With regard to the libido inexplicabilis, so much spoken of, our observations do not coincide with those of Dr. Adams, who mentions actual wasting of the generative organs. In the cases which have come under our notice we have witnessed quite the reverse, and yet several were young men in whom the disease was not too far advanced.

"At a still later period the symptoms are even more dreadful; the tubercles become the seat of ulceration, and sores of an unhealthy character succeed, and discharge an ichorous fluid, which, on concreting, form dark adherent scabs of various extent and thickness; these incrustations are sometimes followed by cicatrices, but this is unfortunately a rare occurrence. On the extremities the thick and tuberculated skin becomes divided by fissures, and ulcerates or is corroded under the dry scabs, so that the fingers and toes mortify and separate, joint after joint, the miserable patient surviving these horrid mutilations. Those individuals whom we have seen perish from this disease were carried off by enteritis; large ulcerations were found in the ilium, cæcum, and colon, excepting in one case, in which death was caused by tubercular phthisis."

In studying the phenomena of this, as of any other disease, it will simplify our recollection of its more leading and more constant characters, if we have the principal symptoms of it embodied in a concise nosological definition, instead of being spread through a long and detailed description. Two of our last and best British nosologists give the following definition of tubercular leprosy or Greek elephantiasis (for I use these terms here and elsewhere as words perfectly synonymous).

"Elephantiasis" (says Dr. Cullen), "is a contagious disease, with (1) the face deformed with tubercles; (2) the skin thick, wrinkled, rough, unctuous, and divested of hair; (3) loss of feeling in the extreme joints; and (4) the voice is hoarse and nasal."147

In defining the genus elephantiasis, Dr. Good selects the second and third characters of Cullen as the most distinctive, and adds to these two others—viz. "(1) eyes fierce and staring; (2) perspiration highly offensive." In defining the first species of this genus (or the Greek elephantiasis of other authors), he introduces as its three pathognomonic symptoms, the first and fourth characters of Cullen and a part of the second. 148

Nomenclature of the Disease.

Leprosy, such as it is portrayed in the descriptions and definitions which we have quoted from Bateman, Schedel, Cullen, and Good (and I might have cited any of our modern medical writers to the same effect), has had at different times, and by different authors, a great variety of appellations applied to it. In order to understand the nosological nature of the disease, as it formerly prevailed in Europe, it is requisite to state a few uninteresting but indispensable facts, in regard to the changes which have occurred in its nomenclature.

In the medical writings of Aretæus, Aetius, and the later school of Greek physicians, the disease is described under the title of elephantiasis, for (says Aretæus) "it is disgusting to the sight, and terrible in all respects (est visu fœdus et in omnibus terribilis), like the beast of the same name."149 The Arabian medical authors applied the corresponding term of "Das Fil," "elephant disease," or elephantiasis, to an affection entirely different, and one apparently unknown to the Greek physicians, namely, the tumid, Barbadoes, or Cochin leg of modern pathologists. At the same time the Arabian authorities described the disease, known to the Greeks under the name of elephantiasis, by the Arabic terms "Judam," or "Juzam" and "Aljuzam." 150 The confusion thus apt to arise from describing two different diseases under a corresponding name was greatly increased by the errors committed by the Latin translators of Avicenna, Rhazes, and other Arabic authors. These translators rendered the Das fil or Elephant disease of the Arabic original, by the words elephanta and elephantiasis; and having thus, first, by an improper adaptation, appropriated the use of the latter Greek term to a disease very different in its specific characters from the elephantiasis of the Greeks themselves, they subsequently added to the intricacies of the subject by translating the Arabic "Juzam" (the disease that was in reality identical with the elephantiasis of the Greeks) by the term lepra—a term which the Greek physicians had generally applied to different forms of scaly eruption, but never to any form of tubercular disease.¹⁵¹

By these unfortunate mistakes medical men were betrayed into great confusion in the use of these several terms. An identity in names did not signify an identity in objects. The tumid leg, das fil, or elephantiasis of the Arabians, is a disease perfectly different from the tuberculous face affection or elephantiasis of the Greeks.

Again, the term lepra, as used by the Greek physicians themselves, signifies morbid changes in the skin, marked by the presence of scales, and which changes in the skin have no relation whatever to either the Arabian or Greek elephantiasis; but the same term lepra, as used by the Arabic translators, was applied to designate the latter of these two affections, viz. the Arabic "Juzam," or elephantiasis of the Greeks. Hence, the elephantiasis of the Greeks and the lepra of the Arabians, or more properly of the Arabian translators, are expressions altogether

synonymous, as being employed to designate the same individual disease; and it is of the first importance to hold this fact in view in studying the histories of the European leprosy, which have been left us by our own and by other medical authors of the middle ages. 152 For we must further recollect that the knowledge of the Greek tongue was almost entirely lost during the dark ages, and that nearly all learning being then confined to the Moors and Arabs, the scholastic language was principally the Arabic. Thus it happened, that when the love of literature and the pursuit of science began to revive about the twelfth century, the medical as well as the philosophical writings of the ancient Greeks were read and studied by the inhabitants of Western Europe through the medium of Arabic translations of them, or in Latin versions made from these translations. 153 The designations of individual diseases were known to the learned student, and to the medical practitioner and author of the times in question, by the names only under which they were described in these versions. The elephantiasis of the Greeks, or corresponding juzam of the Arabians, was rendered by the term lepra in almost every Latin translation from the Arabian or Saracenic school; and hence it is that we find this term lepra used by the medical and other authors of the succeeding period, as the common appellative for the individual disease to which the two former designations were originally applied. In many medical works of the middle ages the single name "lepra" 154 is employed; in the writings of others, and more particularly of later authors, it has the distinctive designation (Lepra Arabum) added to it, 155 in order to discriminate it from the Lepra Græcorum or scaly eruptions, to which that term was primarily applied by the Greeks. In still more modern times, and with the same view, the Elephantiasis Græcorum, Juzam, or Lepra of the Arabians, or rather of the Arabian translators, has been very frequently termed (as I believe was first proposed by Vidal)¹⁵⁶ tuberculous leprosy (Lepra tuberculosa), in order to distinguish it from the other very different disease, the scaly leprosy of the Greeks (Lepra vulgaris, Lepra squamosa, etc.) But, whatever may be the difference in the nomenclature of different authors, we are to hold this in recollection, that the various terms of the elephantiasis of the Greeks (Elephantiasis Græcorum), the juzam or leprosy of the Arabian translators (Lepra Arabum), the tuberculous leprosy of modern European authors (Lepra tuberculosa, Lepra nodosa), and the simple leprosy (Lepra) of most authors of the middle ages, 157—all signify that same specific and individual disease, whose distinctive characters we have already traced from Bateman and Schedel, and from Cullen and Good.

Specific Character of the Leprosy which prevailed during the Middle Ages.

Having premised the preceding tedious but necessary digression upon the nomenclature of leprosy, we now proceed to consider the question whether the particular form of disease that prevailed on the Continent and in Great Britain during the middle ages, and for the victims of which so many hospitals were built, and so many laws enacted, answered or not, in its nosological characters, to the *Elephantiasis Græcorum*, *Lepra Arabum* or Arabian leprosy, such as we have found that malady depicted in the standards already referred to, and such as it is known to prevail at the present day in different localities in the new and old world, that I shall afterwards take occasion to specify. We begin our inquiry into the nature of the disease, by considering the characters of the leprosy as it was seen prevailing, almost epidemically, in the middle ages.

1. *Upon the Continent of Europe.*—To obtain a solution of this part of our problem, let us turn to the works of the medical authors of these early times, and endeavour to ascertain from them the nature of the disease which they denominated leprosy.

Various minute descriptions of leprosy (lepra) have been left us in the writings of different European physicians and surgeons of the middle ages, who had an opportunity of studying the disease in different kingdoms upon the Continent during the period of its actual prevalence. Amongst others we may especially refer to the accounts of it, written during the thirteenth century, by the monk Theodoric, ¹⁵⁸ afterwards a distinguished surgeon of Bologna; by the celebrated Lanfranc, who was first a practitioner in Milan, ¹⁵⁹ and subsequently in Paris; and by Professor Arnold Bachuone, ¹⁶⁰ of Barcelona, reputed in his day the greatest physician in Spain. Valescus de Taranta, ¹⁶¹ a physician of Montpellier; Bernhard Gordon, ¹⁶² Professor of Medicine in the same city; the famous French Surgeon, Guy de Chauliac; ¹⁶³—Vitalis de Furno, ¹⁶⁴ Cardinal of Albany; and Petrus de Argelata, ¹⁶⁵ a practitioner of Bologna, have each left us descriptions of leprosy drawn up during the fourteenth century; and during the two succeeding centuries, we have more or less accurate accounts of the disease given by Professors Montagnana ¹⁶⁶ of Padua and Matthew Ferrari de Gradi¹⁶⁷ of Pavia, by Ambrose Paré, ¹⁶⁸ Joannes Fernelius, ¹⁶⁹ Palmarius, ¹⁷⁰ Hildanus¹⁷¹ and various others. ¹⁷²

Each of the several authors just now named has described, with greater or less precision, the symptoms of the prevailing leprosy, or chronic incurable cutaneous disease, for the reception and seclusion of the victims of which the numerous lazar-houses in Europe were established. The details which they all individually give of the leading characters of the malady¹⁷³ are in their essential points altogether similar; and the symptoms which they describe it as presenting are exactly those which distinguish Greek elephantiasis. The disease is portrayed with brevity and precision by some of them. Others enter into a detail of its phenomena, greatly more minute than the descriptions I have quoted from Bateman and Schedel; and several give a history of the marks to be derived from the blood, urine, extremities, eyes, face, voice, etc., in a manner so very elaborate and minute, as might surprise us at the present day, did we not recollect the immense importance that depended in these times upon a just and faithful distinction of the disease, when, in a suspected case, a fellow-being might,—by the absence of the more characteristic signs—be saved, or—by their presence—be condemned, for the remainder of life, to all the horrors of a

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lazar-house. A few, as Guy de Chauliac, Argelata, etc., in the thirteenth and fourteenth centuries, and in still later times, Gregory Horst, Forrestus, etc., add a most minute and detailed account of the various symptoms which the physician ought to look for in examining a suspected person, and point out the exact mode in which he ought to proceed with this examination before venturing to consign a suspected person to the seclusion of a leper hospital, and thus for ever doom him to be a despised "child of St. Lazarus."

In an essay such as the present, it would be out of place to attempt to show, by the exact words of each of the authors to whom I have just now alluded, the truth of the proposition that the lepra in their writings, and consequently the lepra of Europe in their times, was strictly identical with the elephantiasis of the Greeks, and that the leper hospitals were specially intended for those affected with this disease. As examples, however, of the whole, I may cite the observations of two of the authors whom I have named; and I shall select for this purpose Gordon and Guy de Chauliac, principally from their two names standing higher in medical history than most of the others that I have enumerated—from their living at a time when the disease was most prevalent, —and from their descriptions of the malady itself being on the whole more than usually concise and methodic.

Bernhard Gordon was, at the commencement of the fourteenth century, one of the first, if not the first Professor of Medicine in the newly-established school of Montpellier. "He has left us," says Dr. Freind, 174 "a large volume called *Lilium Medicinae* (for in that affected age everything writ in Physick, was either a Lily or a Rose), a book mightily celebrated in those times." This volume is generally stated to have been written about the year 1305¹⁷⁵ or 1309. 176 From the very long chapter which is devoted in this work to the consideration of leprosy, I shall translate the account which the author gives of his threefold stages or classes of symptoms of the disease—viz. the occult, the infallible, and the last or terminating signs.

- 1. "The occult premonitory signs (signa occulta in principio) of leprosy are (he states) a reddish colour of the face, verging to duskiness; the expiration begins to be changed; the voice grows raucous, the hairs become thinned and weaker, and the perspiration and breath incline to fœtidity; the mind is melancholic with frightful dreams and nightmare; in some cases scabs, pustules, and eruptions, break out over the whole body; the disposition of the body begins to become loathsome, but still, while the form and figure (forma et figura) are not corrupted, the patient is not to be adjudged for separation, but is to be most strictly watched (nondum est judicandus ad separationem, sed est fortissime comminandus.)
- 2. "The infallible signs (signa infallibilia) are enlargement of the eyebrows, with loss of their hair; rotundity of the eyes; swelling of the nostrils externally, and contraction of them within; voice nasal; colour of the face glossy (lucidus), verging to a darkish hue; aspect of the face terrible, with a fixed look, and with acumination and contraction of the pulps of the ears. And there are many other signs, as pustules and excrescences, atrophy of the muscles, and particularly of those between the thumb and forefinger; insensibility of the extremities; fissures and infections of the skin; the blood, when drawn and washed, containing black, earthy, rough, sandy matters, and other marks which authors prominently mention, but for me, those suffice which are to be found in the face. The above are those evident and manifest signs, which, when they do appear, the patient ought to be separated from the people (quibus apparentibus patiens est a populo sequestrandus), or, in other words, secluded in a leper-house.
- 3. "The signs of the last stage, and breaking-up (*naufragium*) of the disease are, corrosion and falling-in of the cartilage forming the septum of the nose; fissure and division (*scissura*) of the feet and hands; enlargement of the lips, and a disposition to glandular swelling; dyspnæa and difficulty of breathing; the voice hoarse and barking; the aspect of the face frightful, and of a dark colour; and the pulse small and imperceptible." 1777

After giving the above accurate description of the leprosy, Gordon, in a subsequent page, ¹⁷⁸ earnestly states, "No one ought to be adjudged as a leper unless there manifestly appear a corruption of the figure (*corruptio figurae*), or that state which is indicated by his *signa infallibilia*. And I repeat to you this (he adds), as often as I have occasion to mention the *corruptio figurae*, because, as it appears to me, lepers are at the present day very injudiciously adjudged. Whoever, therefore, has ears, let him attend to this, if he will."

The other medical author whom I particularised for quotation, Guy de Chauliac, practised first at Lyons, and afterwards at Avignon. He was one of the most celebrated surgeons in the fourteenth century, ¹⁷⁹ and was successively medical attendant upon Popes Clement VI. and Urban V. ¹⁸⁰ From the notice which he gives of the Black Death Pestilence of 1363, it would seem that he was then stationed at Avignon, and engaged in the Composition of his "Inventarium sive Collectorium Partis Chirurgicalis Medicinae." In the long disquisition on lepra, contained in the 6th treatise of this work, ¹⁸¹ De Chauliac, after stating the usual subdivision of the disease into four varieties or species (Elephantia, Leonina, Tyria, Alopecia), goes on to describe the common signs of all the varieties of leprosy, (signa communia *Omnium* specierum Lepræ). The signs or symptoms indicating the actual presence of the disease are, he says, some unequivocal, others equivocal (*quædam univoca*, *quædam equivoca*). Among the former set (*signa univoca*) he ranges the six following symptoms:—"(1.) rotundity of the ears and eyes; (2.) thickening and tuberosity of the eyebrows, with falling off of their hair; (3.) dilatation and disfiguration of the nostrils externally, with stricture of them within, and fœtidity of the lips; (4.) voice raucous and nasal; (5.) fœtidity of the breath, and of the whole person; (6.) fixed and horrible satyr-like aspect."

I question if any of our modern nosologists, or any recent writers on cutaneous diseases, have

proposed a more correct definition, or accurate and concise diagnosis of the $\it Elephantiasis$ $\it Græcorum$ than is presented in the above enumeration of its pathognomonic symptoms by the old French surgeon.

De Chauliac adds a list of sixteen signs of leprosy, which, from their not being constant, he terms equivocal (equivoca). Among these he gives tuberosity and hardness of the flesh, particularly of the joints and extremities; insensibility and feeling of torpor in the limbs; falling off of the hairs; tubercles (grana) under the tongue and palpebræ, and behind the ears; an unctuous condition of the skin, as seen when water is thrown upon it; with symptoms from the blood, urine, etc. "By these unequivocal and equivocal signs, lepers (says he) are examined; but (he judiciously goes on to observe), in the examination and judgment of lepers there must be much circumspection, because the injury is very great, whether we thus submit to confinement those that ought not to be confined, or allow lepers (leprosos) to mix with the people, seeing the disease is contagious and infectious. Therefore ought the physician repeatedly to examine the affected, and consider and re-consider those signs which are unequivocal, and those that are equivocal, and let him not venture to judge by one sign, but by a concourse of many, and particularly of those that are unequivocal."

De Chauliac subsequently details at great length the precise mode in which the physician ought to conduct the examination of every suspected case of leprosy referred to him. The patient is, first of all, as we shall afterwards see, recommended to be consoled upon his unfortunate lot, and sworn in to tell the truth in answer to all the interrogatories put to him. In immediately afterwards proceeding to the examination itself, De Chauliac orders inquiries to be instituted into the predisposition, hereditary or otherwise, of the suspected individual; if he were exposed by intercourse with the infected; if his mind were clear and tranquil; if he feels punctures in the flesh, etc. He then recommends the pulse to be examined, and some blood drawn, and treated in such a manner by inspection and straining, as to ascertain its colour, its sediment, the quality of its coagulum, etc. After this he recommends the countenance to be considered, and the patient dismissed for the day, with an order to bring a specimen of his urine with him on the following morning. "In the meantime," he adds, "let the physician cogitate upon what he has seen, and what he may yet see in the case.

"On the morrow, when the suspected person returns to the physician, let the latter, in the first place, examine the urine, and consider if it shows any sign of disposition towards leprosy. All this being done, let him next again consider the face, and ascertain in regard to the eyebrows if they have lost their hair, and if they are swollen and tuberose; if the eyes themselves are round, particularly towards the internal angles, and if the whites of them are of a darkish hue; in regard to the nose, if it be deformed, enlarged, and internally ulcerated; in regard to the eyes, if they are rounded and shortened; in regard to the voice, if it is raucous and nasal; in regard to the lips and tongue, if they are ulcerated and tuberculated; if the breathing be difficult and fœtid; and if the features be changed and frightful. And let the examiner consider these things deeply, because the signs from the face are more certain than the others. Afterwards make the person strip himself naked (ipsum expoliare), and examine concerning the colour of the whole body, if it is darkish and morphous; concerning the substance of the flesh, if it is hard and irregular, and tuberose, particularly about the joints and extremities; if it is scabrous, pruriginous, or serpiginous and ulcerous; if its corion is rough, like the skin of the goose; and if the muscles are consumed; if there is a feeling of sleeping in the limbs; if he feels perfectly when pricked along the back of the leg, and is certain in respect to the spot and kind of instrument. Then pour water upon his body, and see if it is unctuous, and if salt adheres to it when it is thrown upon its surface. Lastly, let the physician return again to the consideration of the face and countenance, and with that dismiss the person.

"Let all the ascertained signs (cautiously, adds our author) be pondered over, and let the physician deliberate naturally concerning these signs, both individually and in concourse. If he should find that the suspected person has, along with a disposition to leprosy, some of the slighter equivocal signs of the disease, the individual is to be watched at his own house, and secretly, that he may be placed upon a good regimen, and have the advice of medical men, otherwise he will truly become leprous. If, however, he presents many equivocal with a few of the unequivocal signs, he is vulgarly termed *cassatus* (marked, denounced); and such individuals must be narrowly watched, in order that they take a proper regimen, and have the good advice of physicians; and in order that they confine themselves within their own houses and mansions. Let them not freely mix with the people, because they are sinking into leprosy. If, again, they are found with many, both of the unequivocal and equivocal signs, they must be separated with kind and consoling words from the people, and committed to the leper hospitals (*in Malanteria ducendi*). But if they are sound they must be set free (*absolvendi*), and sent with a medical certificate to the Rector."

It would, I believe, be considered altogether a work of supererogation to append to the preceding details by Gordon and Guy de Chauliac any formal remarks in the way of comparing the *Lepra* of the fourteenth century with the *Elephantiasis Græcorum* of Bateman, Schedel, or any of our modern standards, and thus insisting further upon the perfect and entire identity of the individual disease passing under these two different designations. The accounts given of the malady by the two ancient and the two modern writers just named, undoubtedly agree as exactly as we ever find the accounts of one and the same disease by four different authors do; and, as I have already said, the same remark might be extended to the relative early descriptions of the lepra, as left by numerous other authors in these times, and the recent descriptions of the

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Elephantiasis Græcorum, as drawn up from personal observation in different parts of the world by Kinnis, Ainslie, Heineken, Casan, Cazenave, and the other modern writers that I shall afterwards have occasion to refer to when speaking of the present geographical *habitats* of the disease.

But indeed the intrinsic evidence which is afforded by the extracts that I have given from Gordon and De Chauliac, and by the other similar descriptions to which I have referred in the works of the medical authors of the thirteenth and fourteenth centuries, renders it unnecessary to add here any further comment to prove the double proposition, *first*, that the leprosy of the middle ages, as the disease prevailed upon the continent of Europe, was identical with the *Elephantiasis Græcorum*; and, *secondly*, that it was for the victims of this specific malady that the numerous leper hospitals were established, they alone being the individuals who were intended to be (in the language of Gordon and De Chauliac) adjudged, separated from the people, and consigned to the lazar-houses ("judicati"—"a populo sequestrandi"—"in Malanteria ducendi").

So far with regard to leprosy, as seen and described by the early continental authors. Let us now return to the nature of the disease as it prevailed in Great Britain.

2. Nature of the Leprosy in England.—Reasoning analogically, it may certainly, with the greatest probability, be presumed that the incurable disease which is known in the lazar-house charters and older histories of this country, under the same name as on the continent,—which prevailed here during the same periods as on the continent,—and for which the same systems of medical seclusion and police were adopted,—was entirely the same disease as that described by and known to the continental medical authors of the middle ages.

To some minds, such considerations may in themselves be sufficient to fix the identity of the disease, as it prevailed on the continent, and as it prevailed in our own country; and certainly they tend very strongly to show that if, as I have attempted to prove, the epidemic leprosy of continental Europe was the tubercular or Arabian leprosy, the leprosy of England and Scotland was of the same specific nature. But I believe I can adduce still more direct and satisfactory evidence to establish this important point.

The first valuable medical work by an English author that has been transmitted to us is the $Compendium\ Medicinae$ of Gilbert. ¹⁸²

This author is generally supposed to have lived about 1270, in the reign of Henry III. or Edward $I.^{183}$ Bale places him even much earlier. $I.^{184}$

Gilbert has a chapter headed "De Lepra." In this chapter he describes very minutely the four usual modifications of lepra (the Elephantia, Leonina, Tyria, and Alopecia), varieties which, he himself observes, are rarely found pure and simple, but generally mixed together (*compositas*).¹⁸⁵ To quote in proof of this his long and very detailed account of the disease would occupy much space and only lead to repetition. That the description, however, which Gilbert has drawn of the leprosy of the middle ages is one of the most just and accurate penned during these times, has been often and freely admitted by Sauvages, Sprengel, and other competent judges. Further, that the lepra as described by Gilbert, and as understood by him and his contemporaries in England, meant the elephantiasis of the Greeks, is evident (without going into particulars) from the simple fact, that the sagacious Sauvages refers to and quotes this chapter of Gilbert's on lepra as one of the best descriptions extant of Greek elephantiasis. 186

In an official report given in to the Royal Society of Medicine of Paris in 1782, upon the Greek elephantiasis, the reporters, MM. Chamseru and Coquereau, specially allude to Gilbert's description as the most clear exposition of it to which they could refer. Again, in an analysis of the works of this early English author, the learned Professor Sprengel observes, "Gilbert sometimes relates, though very rarely, observations which are proper to himself, and which deserve to be quoted. In this number I include particularly those concerning leprosy. We may almost look upon them as the first exact description which has been given of that malady by the Christian physicians of the west. The spots which foretell it, and the signs of its first invasion, are at least described by him in a manner agreeable to nature," etc. 188

Here, then, we have the direct and positive evidence of an English physician of the thirteenth century, that the term lepra was then used in this country specially to designate the varieties of Greek elephantiasis; and I might adduce (if it were at all necessary), to demonstrate exactly the same circumstance, the chapter which John of Gaddesden, Professor of Medicine in Merton College, Oxford, 189 and Court physician to Edward II., has devoted to lepra or elephantiasis in his famous Rosa Anglica, a work written towards the commencement of the succeeding or fourteenth century. 190 In this "Opus luculentum et eruditum" (as at least Leland terms it), 191 the author describes at considerable length the nature, causes, and premonitory signs, etc., of lepra and its varieties, and enters minutely into the pathognomonic signs (signa demonstrativa infallibilia) of the disease, as respectively taken from the face, from the extremities, from the blood, and from the humours of the body. A quotation from his signs of leprosy, as taken from the face, will at once show that by that term (lepra) he meant the Greek elephantiasis. I shall give the passage in his own words. "A Facie, rotundatio oculorum, contractio palpebrarum, lacrimositas multa et aquositas oculorum, depiliatio superciliorum et grossities eorum; dilatatio narium exterius et constrictio interius, et coartatio anhelitus, quasi si cum naribus loqueretur. Et color faciei lividus vergens ad fuscedinem mortificatam. Terribilis aspectus faciei cum fixo intuitu. Contractio et palpebrarum et aurium. Infectio cutis maculosa. Tuberositas et pustulae in facie et nodositas. Ista omnia et major pars sunt infallibilia signa lepræ actualis." ¹⁹² In a subsequent part of his chapter

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on Lepra, John of Gaddesden strongly states, that "no one is to be adjudged a leper, and separated from intercourse of mankind (*ab hominum conversatione separandus*), until the figure and form of the face is actually changed. Hence cancer (gangrene?) in the feet, or foul scabbing, must not be considered as arguing the presence of leprosy, nor nodosities, unless they appear on the face and with the aforesaid conditions."¹⁹³

The testimony of Bartholomey Glanville, an English author of the latter part of the fourteenth century, ¹⁹⁴ may be adduced in support of the same view. In his work "De Proprietatibus Rerum" he describes persons affected with leprosy (lepra) as having "redde Whelkes and Pymples in the Face, out of whome oftenne runne Blood and Matter: in such the Noses swellen, and ben (become) grete, the vertue of Smellynge faylyth, and the Brethe stynkyth ryght fowle." When, he further observes, the disease is so advanced that the infected are "unclene, spotyd, glemy, and quyttery (ichorous), the Nosethrilles ben stopyl, the Wasen of the Voys is rough, and the Voys is horse, and the Heere [hair] falls." ¹⁹⁵

In addition to the preceding direct medical evidence, it may not be considered irrelevant to the present question to remark that, in most of the lazar-house charters and notices in England and Scotland that I have had access to, the inmates of these institutions are described by the adjective *leprosus*, or by some application of the corresponding noun *lepra*, as "lepra percussi," "infecti lepra." I have, however, met with one very striking exception to this general rule, and I allude to it here as confirmatory of what I have stated with regard to the nature of the disease for which these leper hospitals were instituted in our own country. The leper hospital of Sherburne was, as I have already had occasion to mention, endowed for sixty patients, and was hence one of the largest in England. It was founded in 1181 by Hugh Pudsey, "the jollie Bishope of Durham." In a MS. History of the Durham Cathedral and Diocese, in the Bodleian Library, ¹⁹⁶ the inmates of the Sherburne Hospital, instead of being termed *Leprosi*, are directly designated *Elephantuosi*. In speaking of the acts of Bishop Pudsey, the MS. states, amongst other things, that he constructed the hospital of Sherburne, and planted in it lepers collected from all parts of the bishoprick. (*Elefantuosos*, in Episcopatu suo circumquaque collectos, ibidem instituit.)

NATURE OF THE LEPROSY OF SCOTLAND.

I have hitherto said nothing to show that the disease in Scotland was of the nature of Greek elephantiasis. During the earlier ages at which it prevailed in this country, medicine was little cultivated, and we have no professional work of any kind left us by the Scottish physicians of that period, from which to derive any evidence on this subject.¹⁹⁷

Amidst this dearth, however, of medical writings during the middle ages in Scotland, it gives me pleasure to refer to a passage in one of our earliest Scotch poets, affording proof that the leprosy of this country was, as on the continent, truly the Greek elephantiasis.

It is well known to the lovers of early Scotch literature that Henryson, a schoolmaster of Dunfermline, who wrote before the year 1500, composed, among other things, *The Testament of Cresseid* as a sequel to the *Troilus and Cresseid* of his immediate predecessor Chaucer. ¹⁹⁸ Indulging, like his English prototype, in the wildest forms of anachronism, the Scottish poet confessedly subjects, in almost every particular, the ancient and foreign characters of the piece to the manners, incidents, and institutions of his own times, and of his own country. In this spirit he afflicts, at last, the fickle and unfortunate Cresseid with leprosy, as perhaps the most appalling of dooms to which he could consign her. The poet afterwards sends her "unto yone hospitall at the tounis' end." The particular symptoms which he makes Saturn invoke upon Cresseid, to transform her into a leper, are exactly the most marked symptoms of Greek elephantiasis:

Thy cristall ene (eyes) minglit with blude I mak, ¹⁹⁹ Thy voice sa cleir unpleasand, hoir, and hace, Thy lustie lyre (fair skin) ouirspread with spottis blak, And lumpis haw (livid²⁰⁰) appeirand in thy face; Quhair thow cummis, ilk (each) man sall fle the place; Thus sall thow go begging fra hous to hous, With cop and clapper like ane Lazarous.

In this remarkable passage, those more striking symptoms, the swellings, lumps, or livid tubercles on the face, the morbid alteration of the voice and skin, and that turgid and injected appearance of the eye, which Dr. Good has given as one of his characteristic symptoms of the *genus* elephantiasis, are all tersely, yet accurately described. Indeed, if Sauvages, Swediaur, Cullen, or any of our great nosologists of the last or present century, had been poets, I greatly doubt whether, with all their medical knowledge to boot, they could, in four fettered lines of rhyme, have described the Greek elephantiasis more faithfully and briefly than we have it described in the four first lines that I have just quoted from the Dunfermline schoolmaster of the fifteenth century. Henryson's account of a leper may not be so poetically beautiful, but it is pathologically much more true than that which the American poet, Willis, has recently given of the disease in his well-known poem of *Helon*. We shall afterwards find that "the cop and clapper," alluded to in Henryson's two last lines, were badges commonly carried by the inmates of the leper hospitals of Scotland.

In passages subsequent to that which I have quoted, Henryson reiterates some of the more prominent symptoms. Thus, the hapless Cresseid afterwards describes what is elsewhere termed

"her uglye lipper face, the whilk before was quhite (white) as lilie flour," as "deformed in the figour;" and again also she describes and laments the characteristic morbid change in the voice:

"My cleir voice and my courtlie carrolling. Is rawk (rank) as roke, full hideous, hoir, and hace.".

But I have still further and stronger proof to adduce that the leprosy of the Scotch was the tubercular lepra or Greek elephantiasis. It has been already stated that the disease continued to prevail in the Shetlands, apparently long after it had left all the more southern parts of the British Islands. We have found Brand stating in 1700,²⁰¹ the disease to be "discovered (I quote his own words) by hairs falling from the eyebrows, the nose falling in," etc. I have shown also that in some districts of Shetland the disease continued to a later date, and that, down to 1742, the infected were kept in the island of Papa, or, as it is sometimes written, Papastour. Through Mr. Charles Duncan, who has kindly exerted himself in Shetland to procure me information on the present subject, I have been favoured with the sight of an old but important document relative to the lepers of Papa, and the symptoms under which they laboured. The document in question was, as Mr. Duncan informs me, drawn up for Sir John Pringle, by the Rev. Andrew Fisken, minister of Delting, Walls, and Sandness. The old copy I refer to belongs to the Rev. James Barclay (son of the late Dr. Barclay of Lerwick), and I publish its contents with his permission. The minute description which it gives of the symptoms in the lepers of Shetland can leave no doubt as to the disease under which they suffered being the true tubercular leprosy, or *Elephantiasis Græcorum*, and the value of the evidence which it affords on this point is only increased by the fact, that the writer did not himself belong to the medical profession. The importance of the document must plead as an excuse for its length. The copy which is quoted below, is marked on the back, in an old handwriting, "Case of the Lepers in Papa, as drawn up by Mr. Andrew Fisken, about the year 1736 or 1737." It proceeds as follows:-

"There are in the Island of Papastour in Zetland five women who labour under a disease that, generally in this place, gets the name of Leprosie, though others alledge it deserves rather to be called a scurvy. The disease has the following appearances, viz.—

"The persons affected at first find an unusual itching in their skin, with small, knotty, hard lumps to be felt under the cuticle; their whole body appears plumper than ordinary, and their eyes are observed to be clearer coloured, with a look more piercing than formerly. Their face and legs are full of small lumps or hard tumours, which in a little suppurate and throw out a black, thin, ichorous matter, and gradually encrease, especially in the face, till they turn confluent. It is also observed that where these lumps do not appear, the skin feels hard and callous, like a piece of unwrought leather, and the cuticle smoother than ordinary, and unctuous or greasy, which appears from pouring water into the palms of their hands, where it will separate into small globules, such as appear when water is poured out of a greasy vessel. The extraordinary plumpness, or rather swelling of the body, observed in the beginning of this disease, does, in a few months, disappear, and they turn very lean and weak, only their face always, and sometimes also their legs, continue swelled. A great many little lumps like small hard seeds are then to be felt everywhere under their skin, which gradually increase till they break out externally, throwing out a fœtid thin ichor, which ceases to run in a little time, and a hard scab covers the part, which sometimes dries, and falling off, leaves the skin entire; at other times breaks out again, and runs as before. The hair falls off from their eyebrows, and they have their throats much inflamed, especially the uvula, which is gradually (and after some years continuing under the disease) entirely destroyed. Their voice is so weakened that they cannot speak louder than one whispering. They have frequent flushes of heat in their skin, which is succeeded by an universal chilliness, and they are not at that instant able to suffer the cold air without a very acute soreness in their skin. As the disease encreases, it appears still the more frightful and loathsome; their face full of large and deep ulcers, resembles somewhat a lump of rotten cork; their gums and teeth are quite rotten, and in the night-time they are much troubled with deep-seated pains in their bodies, and have in the day-time frequent stitches and pains in all parts of their body, with a general weight and inactivity of their limbs. The women also cease to have their menstrua upon their being seized with this distemper. Their appetite and digestion is as good as ordinary; their stools regular; nothing extraordinary to be observed in their urine. They sleep pretty well, but seldom or never sweat any.

"This disease is found by experiment to be very infectious, and seems also to run in blood, most people that have taken it without infection from another having been related to three families in the isle. It affects any age or sex, and it is observed that young persons bear it longer than those of a more advanced age, some having lived ten years under it, others only two, some four, some six, etc., but none ever recover after the symptoms above-written do appear. The persons that fall into this direful case are, as soon as it is observed, obliged to retire to a solitary little hut, built on purpose for them, at a distance from all houses, and are not allowed any converse with their husbands, wives, or nearest relations, but have their necessaries of life furnished them by a contribution from all the inhabitants of the isle, and brought to their hut, which they take in when the person who brought it has retired to the windward of their house at some distance.

"There has never been any cure of this disease attempted here, save that a few years ago a young woman in a neighbouring parish had some bolusses of mercury given her in order to a salivation; but some dangerous symptoms appearing, the administrator thought fit to proceed no further, and the patient continues still alive in the same case she was before taking the mercury."

In the voluminous MS. Medical Notes, bequeathed by Sir John Pringle to the College of

Physicians of Edinburgh, 202 I find a copy of the above account of the Papa lepers. Sir Andrew Mitchell of Westshore seems to have transmitted the account to him without giving any notice of the writer of it. It is entered in Sir John's notes under the date of 1759; but it was without doubt drawn up many years previously. I have already alluded to an entry in the Session Records of Walls, regarding the disappearance of leprosy from that parish and district in 1742. The entry seems to have been made at a sitting of the session "at North-house in Papastour;" and its expressions²⁰³ show that at the date of it (17th March 1742) there were no lepers in Papa. From the MS. extracts furnished to me by Mr. Rannie, session-clerk, it appears that there is only mention of one other instance afterwards in the Session-books of the parish, viz. in December 1772 and 1776. The female who was the subject of it, and whose case is represented in the records as "singularly clamant," was ordered to be provided, at the expense of the session, "with back and bed clothes, a house fit for her to lodge in, and maintenance to be brought to her daily at the house." Mr. Rannie further states, "I have been informed by old persons that she lived but a short time after she was put into the house built for her in the common, at a distance from other houses." He adds, "It has been reported to me that in Papa, about the year 1778, a leprous woman was put out and died in the fields before a house could be built; and that about the same time there were leprous persons in the district of Watness, and that the son and daughter of a man Henry Sinclair were infected and sent to the hospital at Edinburgh."

At a still later date a case of Shetland leprosy was detected in the Edinburgh Infirmary. In 1798, a male patient from Shetland was for some time in the hospital wards, under the care of various physicians. As the form of disease under which he laboured was considered as very anomalous, Dr. Thomson was requested by Dr. Hamilton to visit the patient, and detected the case to be one of Greek elephantiasis. I am kindly permitted to extract the following notes of the case from Dr. Thomson's manuscripts:—

"His face was studded all over with small subcutaneous tubercles. The skin over these tubercles was of a reddish colour, intermixed with blotches, like those which occur in the *pityriasis versicolor*. The hair of the eyebrows and eyelids had fallen off, and the skin of the face, as well as of most of the rest of the body, seemed as if smeared with oil. His voice was weak and hoarse, so that he seemed to speak as in a whisper. On inspecting the fauces, they appeared in some places raw and excoriated, and in others rough and puckered. A slight ulceration was perceptible on the *septum narium*, and the nose seemed a little depressed. In various parts of the body, particularly on the arms, thighs, and legs, besides the small subcutaneous tubercles, other larger ones were to be perceived by feeling for them. These larger bumps or tubercles, which were not perceptible to the eye, and which did not occasion any discoloration of the skin, were without pain, and had a striking resemblance to the tubercles occurring in the flesh of those affected with scurvy."

The patient, John Berns, was 28 years of age. On making inquiry, it was found (as I am informed by Dr. Thomson) that some of his ancestors had been affected with the same disease.

An accurate drawing of the morbid appearances presented by Berns' face was made at the time by Mr. Syme, now Professor of Drawing in the Dollar Academy. A copy of this drawing, with a history of the patient's ailments, was forwarded to the late Dr. Willan; and I have Dr. Thomson's authority for stating that Dr. Willan at once declared it also as his opinion, that Berns' case was a genuine instance of the tuberculous leprosy or *Elephantiasis Græcorum*; a disease of which, as he informed Dr. Thomson, he had only seen one example in a patient shown him by Dr. Baillie.

Let us for a moment recapitulate the preceding evidence, with regard to the nosological nature of the English and Scottish leprosy:—First, various authors who personally witnessed the leprosy of the middle ages upon the Continent of Europe, in describing it, have described a disease having all the most characteristic symptoms of Greek elephantiasis. Secondly, in England a cutaneous disease prevailed at the same period, bearing the same name,—presenting the same chronic incurable character,-having its victims subjected to the same civil laws and restrictions,marked (as we know from Gilbert, Gaddesden, and Glanville's observations and writings) by the same train of nosological symptoms—and hence identical in nature with the continental disease and with the elephantiasis of the Greeks. Thirdly, in Scotland we find a malady having the same similarity in its general date,—in its name,—in its course,—and in the civil regulations enforced regarding it, with its symptoms, as they are accidentally described by Henryson in the sixteenth century, identical with those of Greek elephantiasis. Fourthly, in a part of the country where the disease has continued to prevail down to a later period, the infected, as described by eyewitnesses in the earlier part of the last century, presented the most unequivocal signs of the affection alluded to. And, lastly, we have as high medical evidence as could be adduced in regard to cutaneous affections (the evidence, namely, of Drs. Willan and Thomson), for asserting that the malady was seen in the members of a Shetland family in which it had been hereditarily transmitted,—and hence, in one of the last, if not the very last Scotch leper, was decidedly marked by the true and genuine characteristics of the *Elephantiasis Græcorum*.

LEPROSY IN THE NORTHERN COUNTRIES LYING NEAREST TO SHETLAND.

On a former occasion I alluded to the existence of true tubercular leprosy in the neighbouring Faroe Isles, in Iceland, and the nearest coast of Norway, as corroborative of the disease which has long existed in the Shetlands being of the same nosological nature. I might now, if additional proof were necessary, reverse the order of the evidence which I have just brought forward, and proceed to show at length that the disease which long existed, and still does remain, in Bergen and Iceland, and for which leper hospitals also are still maintained in these localities, is, in

reality, the tubercular leprosy or Greek elephantiasis; and, from this point, argue back, that the disease which formerly prevailed in Shetland,—and, if in Shetland, in Scotland generally,—was of the same nosological nature. On this head, however, I shall content myself with offering a very few observations in proof of the specific character of the malady in the districts lying most contiguous to Shetland, and leave without further comment the inference deducible from such evidence.

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In the Faroe Isles.—These islands form the nearest land north of the Shetlands. The great cutaneous disease which formerly infected the inhabitants of Faroe had all the characters of tubercular leprosy. In proof of this, I may appeal to the description of the malady, given in the seventeenth century by Debes, who was Provost of the churches in these islands, and wrote an account, which was much esteemed at the time, of the country and its inhabitants. He observes, "As for the Leprosye itself, I would not omit, for the reader's sake, to mention something of its nature. Physicians write that there are three sorts of Leprosies; namely, Tyria, from the serpent Tyrus. In this leprosy, the patient's skin is soft, and sometimes falleth off in shells, and they have many spots and white wartes thereon. The second is called Alopecia, by reason the hairs fall off as those of a fox; he that is infected with this leprosy hath a red face, and his beard and eyebrows fall off. The third sort is called Elephantiasis, from the elephant, to whom they become like in their skin; the body and face of him that is infected with this disease is full of knobs. The Leprosie wherewith they are troubled in this country is usually Elephantiasis, for the face and limbs of almost all the infected are full of blue knobs, that break out sometimes as boyls, whereby they look very deformed in the face, being besides all hoarse, and speaking through their noses." 204

Iceland.—That the leprosy of Iceland (the next land north of the Faroe Isles) is of the nature of the *Elephantiasis Græcorum*, is a point which might be proved by any of the descriptions of it by Petersen, Troil, Henderson, and Holland. Dr. Holland's account is more concise than the others. He states—

"The leprosy of the Icelanders (*Likthra, Holdsveike*, or *Spitelska*), exhibits in many instances all the essential characters of the genuine elephantiasis or *Lepra Arabum*; and is a disease of the most formidable and distressing kind. Indolent tumours of the face and limbs are, generally, among the first symptoms of the complaint, attended by swellings of the salivary, inguinal, and axillary glands. The nostrils, ears, and lips are progressively affected with swelling deformity. The skin over the whole, or different parts of the body, becomes thick and hard; sometimes exhibiting a shining or unctuous surface, sometimes one rough and scabrous, which at a more advanced period of the disease displays numerous cracks or fissures. The senses are usually much enfeebled; and anæsthesia of the extremities generally occurs. The voice assumes a peculiar hoarseness and nasal tone, frequently with swelling of the tonsils, but without any hindrance of deglutition until the disease has made great progress in the habits of the patient: the breath and perspired matter are extremely fetid; and the hairs and nails frequently fall off. The tumours in different parts of the body gradually pass into malignant ulcers, which discharge an acrid unhealthy matter; in this state the patient often lingers during a long time; or where the

The lepers in Iceland are received into four different hospitals, which have been long established for that purpose.²⁰⁶

disease has a more speedy termination, all the symptoms are rapidly aggravated, and he is

carried off in a state of extreme debility and wretchedness." 205

Norway.—Returning again to Shetland as a starting point, we find that the part of the continent of Europe which lies nearest to Shetland, and that in nearly a direct line westward, is the district of Bergen in Norway. The distance between Shetland and the seaport of Bergen does not exceed thirty geographical degrees. In the first part of the present essay I offered some reasons for believing that the spedalskhed prevalent in Bergen was a disease different, on the one hand, from the radesyge of other parts of Norway, and probably identical on the other hand with the Greek elephantiasis or tubercular leprosy.

The descriptions of those authors who had observed the disease at Bergen seemed to justify this view. In 1751 Pontoppidan, the Bishop of Bergen, cites the account and words which we have above quoted from Debes in reference to the Faroe Isles, as exactly applying to the disease in the district of Bergen. When it at last (he states) breaks out in ugly boils on the face, they are generally sent to hospitals erected for that purpose, of which there is one at Bergen and another at Molde in Romsdalen.²⁰⁷ The excellent account of the disease in the Bergen hospital, which was drawn up a few years ago by the preacher Wellhaven, shows the malady to correspond in every important particular with the Greek elephantiasis;²⁰⁸ and the long and more strictly medical description of the Bergen disease given in 1786 by Buchner, 209 appeared to be altogether confirmatory of the same opinion. I have lately become acquainted with a proof to the same effect, of such a strong character as to render it supererogatory to adduce the detailed descriptions of Buchner or Wellhaven in evidence. The Norwegian Government has recently (and with an anxiety towards the promotion of medical science that reflects little honour on the other richer courts of Europe) commissioned some of its more distinguished physicians to institute a complete inquiry into the nature of the endemic cutaneous diseases both of Norway and of other localities. Since the former part of the present paper was printed, Dr. Fäye of Christiania has, as one of these commissioners, visited this country with the purpose of examining into the nature of the Scottish sibbens, etc.; and I have learned from him with pleasure that the physician sent to Bergen to examine the spedalskhed, is prepared, after a careful study of the disease there, to report it as tubercular leprosy, and hence a species of malady perfectly distinct from the more general Scandinavian radesyge.

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The date of the first appearance of leprosy in the Faroe Isles and in Iceland seems to remain undetermined.²¹⁰ In both localities it appears to have prevailed severely in the fifteenth and sixteenth centuries.²¹¹ In all probability, however, it was introduced long previous to these dates. At all events, it appeared much earlier in Bergen, for, as I have already stated in the first part, one of the leper hospitals in that city was founded as early as the year 1268.

There is no evidence, as far as I know, of the period of its first appearance in Shetland. It had reached, however, as far as the north of Scotland early in the thirteenth century; for, as we have already shown, the leper hospital of Elgin was in existence in the year 1226,²¹² or more than forty years, at least, previously to the institution of similar receptacles for the diseased in Bergen.

Errors in adjudging Individuals to the Leper Hospitals—Cautions inculcated by the Medical Authorities.

While arguing, as I have done in the preceding paragraphs, to show that the epidemic leprosy for which so many lazar-houses were formerly founded in Europe and in Great Britain was the Greek elephantiasis, I by no means wish to insist that patients affected with that disease alone were admitted into these receptacles. There is only too great probability for the belief that persons who had the misfortune to be affected with any foul and inveterate cutaneous malady were isolated and shut up along with those actually labouring under true leprosy. After syphilis appeared, towards the commencement of the sixteenth century, with some analogous symptoms, and when the elephantiasis itself was already disappearing from most localities, we know for certain that a large proportion of the inmates of the continental lazar-houses consisted of cases of secondary venereal and other severe skin-affections. Dr. Bateman²¹³ adduces the strongest possible evidence in proof of this from the direct and personal observations made in the sixteenth and seventeenth centuries in the leper hospital at Ulm by Horst, at Alcmaer by Forrestus, and by Reedlin at Vienna. Similar errors were in all probability only too common even when the elephantiasis was more common and better known, and mistakes in the selection of the proper inmates of the hospitals would constantly occur in these times, from the kind of persons to whom the responsible and important task of selecting the infected was entrusted. The Act that we have already quoted of the Perth Parliament "anent lipper-folk" defines those who were charged in Scotland with the duty of searching out the affected. In the third clause it is statute "That the Bishoppes, Officialles and Deanes, inquyre diligentlie in their visitation of ilk (each) Paroch Kirk, gif ony be smitted (affected) with Lipper, and gif ony sik (such) be foundin, that they be delivered to the king gif they be Seculares, and gif they be Clerkes, to their Bishoppes, and that the Burgesses gar (oblige them to) keepe this statute under the paine conteined in the statute of Beggers [namely, gif they have broken it (the statute of beggars) they sall be in fourtie shillings to the King]; and quhat leprous that keepis not this statute, that he be banished for ever off that Burgh, quhair he disobeyis, and in likewise to Landwart."214

In extenuation of the above edict, we must recollect that, at the period at which it was enacted (in 1427), the ecclesiastics to whom in this country it entrusted the selection of lepers were in reality the only existing physicians of the general community, and some of them seem to have devoted themselves as much to the practice of medicine as to the study of theology. But, even to a strictly non-medical observer, the diagnosis would, in the latter stages, be less free from doubt than might be at first supposed. For when once the tubercular leprosy became in any case completely developed in all its distinctive deformity, and with its full concourse of marked and peculiar external characters, as falling off of the hairs of the eyebrows, swelling and thickening of these parts, tubercles of the face, hoarseness of the voice, etc., there were few or no diseases for which it could be readily mistaken, provided any proper degree of care was observed. In the earlier stages and less marked cases of the disease, errors in the adjudgment of cases, in all probability, often occurred, and affections that had no relation to elephantiasis, except in their obstinacy and locality, were, we cannot doubt, frequently mistaken for true instances of tubercular leprosy.

Such errors, it has been often averred, would be almost as apt to happen in the hands of the truly medical, as of the non-medical examiners, in consequence of the knowledge and distinction of cutaneous diseases being exceedingly imperfect at these early periods of medical history. And it is certainly true that, in the writings of the older Arabian, Continental, and English physicians, we find almost all the different species of chronic cutaneous disease mixed up and described together under a few general heads and designations, as Lentigo, Impetigo, Morphea, Albaras, Gutta Rosea, etc. Indeed,the proper discrimination and diagnosis of different cutaneous affections was little known and studied until the end of the last century. At the same time, however, it must be recollected that the tubercular lepra, or Greek elephantiasis, certainly forms a striking exception to this general observation. For, in the medical writings of the thirteenth, fourteenth, and early part of the fifteenth century, the leprosy is almost uniformly described with a care and a minuteness that strangely contrasts with the superficial manner in which the whole remainder of chronic cutaneous diseases are either passed over or confounded together.

I would willingly appeal, in support of this last allegation, to the different chapters on lepra, as compared with those on the other cutaneous diseases, in the works of the Arabian physicians, and of those European medical authors of the middle ages whose writings I have already referred to. Indeed, the accounts and diagnosis of tubercular lepra, as given by Rhazes, Theodoric, Lanfranc, Arnold de Villeneuve, Gilbert, etc., might well stand as models of medical description even at the present day. And if, in France, the strong and earnest injunctions of Bernhard Gordon

were in any degree respected, that no person be adjudged as requiring separation for leprosy until the second stage (according to his division of the disease) had supervened, and the *signa infallibilia* of the malady had already shown themselves in the usual marks traceable in the *corruptio figurae et formae* of the suspected individual, cases of unjust condemnation to the lazar-houses would be much less common than might be otherwise imagined. We have already seen that in England, in the fourteenth century, John of Gaddesden inculcated the same salutary rules and precautions, and insisted that no one be separated from the general community as a leper, unless already "figura et forma faciei corrumpantur."

Certainly, on some occasions, the examination to which the patient was subjected, in order to ascertain if he were truly a leper or not, seems to have been of the most searching and scrutinising nature. I have already alluded to the strict rules of examination that have been preserved for us in the works of different authors, and quoted the method recommended by Guy de Chauliac to be followed by physicians before they remitted suspected patients with medical certificates to the magistrates (cum literis medicorum ad rectores). In the Examen Leprosorum, published by Gesner, and which appears to have been drawn up as an official formula, if I may so term it, for examining into suspected cases, the details are most elaborate and searching. There are between fifty and sixty signs of the disease which the examiner is requested to look for. Twelve of these signs are taken from the general state of the body; seven or eight of them from the hands and feet; six from the blood; five from the face; six from the mouth; eight from the eyes and eyebrows, etc. etc. The document commences by stating, "that it is the duty of the physician to be versed in, and attentive to, the signs of the disease, and to ponder often (revolvere multoties) upon them. He should put his trust (it adds) not in one sign, but in many, and he should see what signs are proper (propria) to the leprosy, and what are equivocal." Before making the examination, the document states that (as is also recommended by Guy de Chauliac²¹⁵ and others), the physician should, in the first instance, give some words of encouragement and consolation to the patient, and show that this disease is the salvation of his soul, and that Christ has not despised such, although the world may shun them (quod haec aegritudo salus est animae, et tales Christus non despexit, licet mundus cos fugiat). Further, in order to have more certainty in the examination, it is added that the patient should be made, in the first place, to take oath to tell the truth on those points on which he is interrogated. We have already found De Chauliac recommending the examining physician to take the same precaution, "faciat eos jurare veritatem dicere de interrogendis" (p. 310).

A decree, issued in the year 1314, by Milo, Bishop of Orleans, shows that it was occasionally necessary to guard the examinators against being imposed on in other more serious ways, than by direct prevarications or misstatements on the part of the suspected individuals who are subjected to their scrutiny. "Whereas it happens that in the examination of lepers mistakes as to identity, and deceptions, are caused by the interposition of other persons, we enact and command that whenever any person is suspected of the infection of leprosy, he be sent at his own charge if he have effects, but if not, that two responsible men of the parish having been sworn (*jurati*) before the priest and the officers of the church (*gajariis ecclesiae*), be sent at the expense of the parish with the suspected person to obtain the examination; they shall conduct the said suspected person to the said examination, and cause him to be faithfully examined, and bring certificates to us, that it may not be possible that, for the future, collusion should take place in the aforesaid matters."²¹⁶

I have not hitherto been able to find any evidence showing to whom the examination and seclusion of lepers was, in olden times, entrusted in England; or to trace out in that kingdom any special laws relative to this subject. There exist, however, upon record, in reference to one English case in the fifteenth century, some details that are particularly interesting in regard to the present point of our inquiry. The details in question have been preserved in Rymer's Fædera. The case to which they refer appears to have been brought under the cognisance of the Crown by the neighbours of the suspected female, in consequence of her being alleged to be affected with leprosy, and yet refusing to seclude herself, as was the usual custom, from intercourse with society in consequence of it. The reigning monarch, Edward IV., issued, in 1468, a Chancery warrant for the proper medical examination of this supposed case of the disease. The royal warrant, and the medical certificate which it called forth, have both been preserved by Rymer. I append a translation of these curious documents, as illustrative both of the general dread then still entertained of the malady, and of the minute care which, in this country, was occasionally taken, in order that a just and accurate judgment might be arrived at in cases of doubt and difficulty. The documents are entered by Rymer under the title of "Medicorum Regis, super morbo Lepræ, Certificatio." They proceed as follows:-

"To the most Excellent and most Serene Prince and Lord in Christ, Edward, by the Grace of God, King of England and France, and Lord of Ireland, We, William Hatteclyff, Roger Marshall, and Dominus de Serego, Doctors of Arts and Medicine, your physicians, and sworn to watch over the health of your Person, send due Reverence with humility and worship:—

"Whereas a Petition was made to You in Your Court of Chancery, with regard to removing *Johanna Nightingale*, of Brentwoode, in the County of Essex, from general intercourse with mankind (*a communi hominum consortio*), because it was presumed by some of her neighbours that she was infected by the foul contact of Leprosy, and was, in fact, herself a Leper: Upon which Your writ was then prepared, and afterwards directed to the Sheriff of the said county, in these words:—

"Edward, by the Grace of God, King of England and France, and Lord of Ireland, to the Sheriff of

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Essex, Greeting: Whereas We have heard that *Johanna Nightingale* is a leper, and is commonly holding intercourse with the people of the aforesaid county, and mixes with them both in public and private places, and refuses to retire to a solitary place, as is customary and befitting her (*et se ad locum solitarium, prout moris est, et ad ipsam pertineret, transferre recusat*), to the grievous injury and, on account of the contagion of the aforesaid disease, the manifest perils of the aforesaid inhabitants: We, willing to guard against such dangers, as far as in us lies, and as is just and customary in such cases, Do charge You, that having taken with You certain discreet and loyal men of the county of the aforesaid *Johanna*, in order to obtain a better knowledge of this disease, You go to the aforesaid *Johanna*, and cause her to be diligently viewed and examined in the presence of the aforesaid men. And if You find her to be leprous, as was reported of her, then that You cause her to be removed, in as decent a manner as possible, from all intercourse with other persons, and have her betake herself immediately (*indilate*) to a secluded place, as is the custom, lest by common intercourse of this kind injury or danger should in any wise happen to the aforesaid inhabitants. Witness my hand, at Westminster, this day of July, in the eighth year of Our reign."

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"Wherefore The Reverend Father in God, Robert, by the Grace of God, Lord Bishop of Bath and Wells, Your Chancellor of England, consulted us on this subject, and determined to bring the same Johanna to us, with the intention that, according to what we have learned from our knowledge of Medicine, we should give information to Your Highness in Your Chancery, whether the said Johanna be in fact a Leper or not. We, therefore, wishing to obey Your Highness, in order that the truth on this subject might be made most plain and clear, have proceeded after this manner. First, we examined her person, and as the older and most learned medical authors have directed in these cases, we touched and handled her (*ipsam tradavimus et palpavimus*), and made mature, diligent, and proper investigation, whether the symptoms, indicative of this disease, were in her or not; and after an examination and consideration of each of the points, which appeared necessary to be examined and considered, in order to arrive at a true knowledge of this doubtful matter, We found that the woman neither had been nor was a Leper, nor ought, on that account, to be separated from ordinary intercourse with mankind.

"We are taught by Medical Science that the disease of Leprosy is known by many signs, also that each species of the disease, of which there are four, viz. Alopecia, Tiria, Leonina, and Elephantia, should be known and characterised by particular signs, and each should be specifically distinguished from the rest. Therefore, in the case of the woman brought before us, on going through upwards of twenty-five of the more marked (famosiora) signs of general leprosy (Leprae in communi), we do not find that she can be proved to be leprous, by them or a sufficient number of them. And this would suffice, generally, to free her from the suspicion of leprosy, since it is not possible for any to labour under the disease, in whom the greater part of these signs are not found. But, in order to give our opinion on the individual species, going through upwards of forty distinctive signs of the different varieties of leprosy, we do not find that this woman is to be marked as suffering under any of the four kinds, but is utterly free and untainted, as we have signified by word of mouth to Your Highness in Your said Chancery, and we are prepared to declare the same more fully to Your Highness by scientific process (per processum scientificum), if, and wherever, it shall be necessary.

"In testimony whereof, we, the said William Hatticlyff, Roger Marshall, and Dominus de Serego, have signed our name with our proper hands, and alternately affixed our seals."

To the preceding document, which is one of the earliest, if not the very earliest, English medical certificate which either historical or medical records have preserved, it is added in the form of a note, "Et memorandum quod praedicti Willielmus Hatteclyff, Rogerus Marchall, et Dominus de Serego venerunt in Cancellarium apud Westmonasterium, septimo die Novembris, anno praesenti (1468), et recognoverunt scriptum praedictum, et omnia contenta in eodem, forma praedicta."²¹⁷

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PART III.

THE ETIOLOGICAL HISTORY OF THE DISEASE.

To conclude the present hurried sketch of the British leprosy of the middle ages, it now only remains for me to consider, in relation to the etiology or causation of the disease, the rank, age, sex, etc., of those that were attacked by it; the effects of its hereditary transmission; and the question of its propagation by contagion. In connection with this last subject, I shall attempt to bring together under one view the stringent regulations and usages that were adopted by our ancestors, with a view of preventing the diffusion of the disease by means of communication between the infected and the healthy; and at the same time consider the light in which the despised lepers were regarded both by the civil and ecclesiastical law.

RANK OF THE PERSONS ATTACKED BY LEPROSY.

In this country the leprosy of the middle ages seems to have had its largest share of victims in the lower classes of society—amongst the "villeyns" or bondsmen of these times, and the poorer peasantry and burgesses, who, when shut up in the hospitals, were obliged either to depend upon

the funds of these institutions, or to beg for their support. The exact trade and calling of the individuals admitted into the Scottish and English hospitals can only be very imperfectly gathered from one or two casual notices. 218

Among the patients of Kingcase leper hospital, in Ayrshire, I have only found one whose rank I can trace. In the burgh of Prestwick²¹⁹ records for 1478-9, Anne Kerd is formally accused before the magistrates of the burgh of visiting Kingcase, and further "hir seik soun, att is lepper, repairis daili in her house [in Prestwick]." This Anne Kerd, having "a sick son that is leprous" seems from the old *Liber Communitatis*, etc., *de Prestwick* of 1470 to have had assigned her a very small fragment of the burgh lands only, viz. "a porciunkle of commoun lande quilk acht after hir lyve to John Haveris airis (which belonged after her life [death] to John Haveris' heirs)."²²⁰

Amongst the citizens of Glasgow who were at different times in the latter part of the sixteenth century ordered by the magistrates to be visited, under the suspicion of labouring under leprosy, most are recorded by their mere Christian name and surname; but two or three are entered in the burgh records in such terms as to show their occupation and probable rank, as "Robert ——, fleschor," in 1573; "Mr. James ——, fleschor," "Patrick Bogle, maltman," and "Andro Lawson, merchand," in 1581. One of these individuals is reported by the Water Bailies as confined in the Glasgow leper hospital at the Brigend 1589, along with five other lepers. The whole list is interesting for our present purpose, as showing the trade and calling of the infected inmates, viz. "Andro Lawson, merchand; Stevin Gilmor, cordener; Robert Bogill, sone to Patrick Bogle; Patrick Birstall, tailzeour; Johne Thomsoun, sone to Johne Thomsoune, tailzeour; Daniel Cunninghame, tinclar.""

I am not aware of the existence of any similar complete list of the inmates of other British leper hospitals, to which I could refer with the view of ascertaining the occupation and rank of those that occupied them. We have scattered records, however, to show that men of riches occasionally became the victims of the disease, and passed their subsequent term of life in the leper hospitals. Thus, Jenkins, in speaking of the St. Mary Magdalene lazar-house at Exeter, states, "Richard Orange, Esq., a gentleman of noble parentage, and mayor of this city (Exeter) in 1454, being infected with the leprosy, notwithstanding his great wealth, submitted himself to a residence in this hospital, where he lived many years, and finished his days, and was buried in the chancel of the chapel. His grave, with a mutilated inscription, is still extant."

Some of the leper hospitals were specially endowed for persons above the lower ranks, who happened to become affected with the disease. In 1491, Robert Pigot gave by will to the leper hospital of Walsingham, in the archdeaconry of Norwich, a house in or near that town for the use of two leprous persons "of good families." 224

The malady was found among the clergy as well as among the laity, and some of the English leper hospitals were specially founded for the reception of leprous monks alone—as the hospital of St. Lawrence, near Canterbury, and, according to Tanner, ²²⁵ that of St. Bartholomew, at Chatham. From one of the edicts issued by Henry II. during the height of his quarrel with Archbishop Becket, it would appear that the dignitaries of the church occasionally did, or at least might, employ lepers in the high character of nuncios, for, in order to prevent Becket from putting the kingdom of England under an ecclesiastical interdict, Henry took all precautions that no official letters to that effect should be conveyed into Britain; and to secure this object the more surely, he enacted, that, if any individual did carry thither letters of interdict from the Pope or Archbishop, he should be punished "by the amputation of his feet if a regular; by the loss of his eyes and by castration, if a secular clergyman; he should be hanged if he were a layman; and burned if he were a leper" (si Leprosus, comburatur). ²²⁶

In the extant account of the British leper hospitals, there are still preserved some instances in which these institutions were founded by the wealthy and noble after they had themselves become the victims of the malady. The leper hospital of Mayden Bradley, in Wiltshire, was founded by a female member of the rich family of the Bysets²²⁷—Camden alleges by a daughter of Manasser Byset, sewer to King Henry II., after she had herself become a leper. "This hospital," says Leland, "was builded by one of the three heirs general of the Bisets, who, being a lazar, gave her part of the town of Kidderminster *in pios usus*."

If the earlier biographical notices that we possess regarding the nobility of Great Britain were as minute on their private as on their martial and political lives, we might probably have to record many more notices in regard to their bodily maladies of an import similar to the following:—The youngest son of Robert Blanchmains, Earl of Leicester, was himself a leper, and in the reign of Richard II. founded a leper hospital, dedicated to St. Leonard, on the north part of the town of Leicester.²²⁹

The royal families of England and Scotland did not always remain exempt from the suspicion, at least, and accusation of leprosy, if not from the actual attack of the disease.

Henry III. courted Margaret, Princess of Scotland, and the sister of Malcolm IV. The royal lady preferred the brave Hubert de Burgh, the minister of the English king. Hubert's enemies afterwards alleged to King Henry, that he (Hubert) had dissuaded the Scottish princess from accepting the hand of the English monarch, by telling her "that Henry was a squint-eyed fool, a lewd man, a *leper*, deceitful, perjured, more faint-hearted than a woman, and utterly unfit for the company of any fair and noble lady."—(Articles of Impeachment, as given by Speed.)²³⁰

In reference to this unfounded accusation, I may state that Ryland mentions it as a local tradition

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that the leper-house of Waterford in Ireland was founded by King John (the father of Henry III.) in consequence of his son's being affected at Lismore with an eruption that was supposed to be leprosy.²³¹ But even supposing the tradition correct, it could scarcely have been Henry the eldest legitimate son of John, since, at the date of his father's expedition into Ireland, 1209 and 1210, Henry was a child of only five or six years of age, and in all probability did not accompany his royal sire.

Different historians have alleged that Henry IV. was affected with leprosy in the latter part of his life. The immediate cause of his death seems to have been epilepsy, terminating, after a time, in an apoplectic attack; and some authors aver strongly that this was his only disease. Thus, in his Chronicles of England, ²³² the celebrated old printer, Grafton, upholds that Henry was carried off by "a sore and sudaine disease called an apoplexie." Hall, an author somewhat anterior in date, stoutly maintains this same view, for the king's disease, as he observes, "was no lepry striken by the hand of God, as folish friers before declared, for then he neither would for shame nor for debility enterprize (as he did), so greate a journey as into Jewrie (Jerusalem), in his own persone, but he was taken with a sore apoplexye."²³³

Hollinshed,²³⁴ quoting implicitly this account from "Maister Hall," gravely adds, and he "had none other greefe nor maladie." The dogmatic authority of Hall on this, as on other points, is not to be over much relied upon.

We have little doubt that Dr. Lingard²³⁵ had some sufficient evidence from the records of the times, for stating that Henry had at least "the most loathsome eruptions on his face." Rapin²³⁶ and Turner,²³⁷ in their histories of England, both refer to Mezeray as their authority for averring that these eruptions consisted of leprosy. I find that Duchesne²³⁸ also describes Henry as weighed down with a severe and grievous affection of leprosy; and Maydestone²³⁹ alleges that it was this last disease, and solemnly considers it as a punishment inflicted on the king for his cruel treatment of Archbishop Scrope. Iohn Hardynge, whose authority is the more valuable from his being himself a contemporary of Henry IV., and a follower of his son, Henry V., describes in his rhyming Chronicles of English History the face of the king as disfigured by leprosy. As a portion of the last personal confessions of the monarch, Hardynge puts into his mouth the following penitent lamentations regarding the changes which the ravages of the disease had wrought upon his frame and face:—

"This wormes mete, this carryon full vnquert, That some tyme thought in worlde it had ne pere; This face so foule that *Leprous* doth apere, That here afore I have had such a pride To purtraye oft in many place full wyde," etc.²⁴⁰

These observations are certainly by no means sufficient either decidedly to confirm or controvert the opinion that Henry IV. was affected with leprosy; but they serve at least to show that, at the time at which he lived, rank of the highest kind was not considered as any adequate barrier against an attack of the disease.

In none of these alleged cases of leprosy in the royal family of England is the proof of the actual existence of the disease at all indubitable and complete. The evidence is more certain and satisfactory in regard to the occurrence of the malady, in its genuine form, in other scions of the House of Anjou than those who ascended the throne of England. I allude especially to the case of Baldwin IV., King of Jerusalem, a direct descendant, like the royal Plantagenets of England, from Fulk, Count of Anjou and Touraine. All historians seem to agree in stating Baldwin IV. to have laboured for some years under elephantiasis, and to have ultimately resigned his sceptre in consequence of disability from that disease. He was, says Fuller, when speaking of him under the year 1174, "enclined to the leprosic called elephantiasis." 241 By the year 1183, "the leprosic had arrested him prisoner and kept him at home. Long" (adds the same historian) "had the king's spirit endured this infirmity, swallowing many a bitter pang with a smiling face, and going upright with patient shoulders under the weight of his disease. It made him put all his might to it, because when he yielded to his sicknesse, he must leave off the managing of the State; and he was loth to put off his royal robes before he went to bed, a crown being too good a companion for one to part with willinglie. But at last he was made to stoop, and retired himself to a private life."242

The disease, as has been above observed, did not spare the royal family of Scotland. At least two cases of leprosy are alleged to have occurred among the members of it. The first and earliest of these, however, is much more a matter of fable than of fact, and the story, as told us by Hector Boece and Dempster, is, in all probability, due rather to their love of historical romance than their knowledge of historical records. Fiacre, the subject of it, still holds a place as a saint in the Catholic calendars of France and Germany. Among the long list of oaths²⁴³ which Rabelais, in his Pantagruel, long ago put into the mouth of the garrulous Panurge, one is an imprecation "par l'espine de Saint Fiacre." This Saint Fiacre or St. Fithulk (as he was sometimes termed) was the reputed son of Eugenius IV. King of Scotland. Preferring a cloister to a court, he is said to have retired into France, and to have led the life of a religious solitary in a cell granted to him by Pharo, Bishop of Meaux. After his father was dead and his brother deposed, the Scottish nobles sent a deputation to Fiacre with an offer of the throne of his ancestors. But "quhen (to state the result in Boece's words) thir ambassatouris was brocht to his presence, he apperit to thair sicht sa ful of *lipper*, that he was repute be thaim the maist horribill creature in erd" (on earth).²⁴⁴ Spottiswood fixes the era of his death in the year 665.²⁴⁵

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The case of King Robert the Bruce is a more recent and a more authenticated instance of leprosy in the royal family of Scotland. All authorities agree in stating that the Bruce suffered under a "lang seknes," as Wyntoun²⁴⁶ expresses it. Froissart, who visited the Scottish Court in the reign of his grandson Robert II., describes, in more than one passage, the Bruce as having been afflicted with and died of "la grosse maladie," "sore greved with ye great sickenes" 247 as Lord Berners has translated it.²⁴⁸ In their editions of Froissart's works, Sauvage,²⁴⁹ Buchon,²⁵⁰ and Johnes,²⁵¹ severally comment upon "la grosse maladie" of Froissart, as signifying the leprosy. I have already adverted to this expression as being quite synonymous in words and meaning with the Saxon term for the disease. Further, that Bruce was really affected with and died of leprosy, seems to be borne out by the evidence of the older historians. Hemingford, a contemporary of Bruce's, describes him as "lepra percussus;" 252 and Walsingham uses the same language both in his Chronica²⁵³ and in his Ypodigma Neustriæ;²⁵⁴ Boece speaks of Bruce as dying of leprosy (ex lepra fato concessit); 255 and Buchanan gives to his disease the more unequivocal name of elephantiasis ("nam in elephantiam incederat"). 256 Leland, in the translation which he has given in the first volume of his Collectanea from the famous Scalacronica, speaks of ambassadors being sent from England to "Murrefe (Moray), the guardiane of Scotlande in the nonage of King Davy, whos fader dyed of the Lepre;"257 "qui mort estoit de lepre," in the words of the original works.2 In the old and valuable Chronicle of Lanercost, which has only been for the first time printed within the last two years, the disease and death of the Bruce are mentioned in terms equally precise. In speaking (p. 254) of Randolph and Douglas entering England in 1326, the Chronicle states that the Scottish army was not led by Bruce in person, because "factus erat Leprosus." 259 His death is thus announced in a subsequent page (264) of these old and probably contemporary records, under the year 1329, "mortuus est Dominus Robertus Brus, Rex Scotiæ, leprosus."

I shall close these remarks by alluding to one other reputed case of leprosy in a descendant of the royal families of Scotland. The celebrated Constance, Duchess of Britanny, who was allied to the royal families both of England and Scotland (being a granddaughter of Malcolm III. of Scotland, and the English Princess Margaret Atheling, and at the same time a descendant of a natural daughter of Henry I.), is generally alleged by historians to have suffered and died from leprosy. William of Nangris (as Lobineau observes) "has shown that she died of leprosy (*de la lepre*), a disease with which females were occasionally attacked in these times." Lobineau places the date of the decease of Constance in the year 1201.

SEX OF THE LEPERS.

The modern history of tubercular leprosy would seem to show that the disease attacks the male in a larger proportion than the female sex. From the table which Dr. Adams collected and published of patients admitted into the leper-house of Funchal, Madeira, 261 from 1702 to 1803, it appears that during that period 526 infected males were admitted into the hospital, while the corresponding list of infected females amounts only to 373. The enumeration of the lepers in the Glasgow leper hospital in 1589,²⁶² and those entered into the Greenside hospital of Edinburgh in 1591 (the only two old lists of patients of such institutions in Britain that I am acquainted with), show the diseased inmates of these two establishments to have been all males. A large proportion of the English lazar-houses seem, from the language of their charters, to have been endowed entirely for males (fratres leprosi), but, at the same time, we have abundant evidence in the same documents that females often suffered from the disease.²⁶³ Some of the lazar-houses were founded and endowed for admitting infected inmates of both sexes (fratres et sorores leprosæ). Thus Tanner states that the old lazar-house of St. Nicolas, York, contained both male and female lepers.²⁶⁴ Mackarell and Bridges both mention the same fact with regard to the hospitals of St. Nicolas at Lynne Regis, 265 and of St. Leonard at Northampton; 266 and the inmates of the leperhouse of St. Giles, Shrewsbury, bore, according to Owen and Blakeway, 267 the style of the prior, brethren and sisters of St. Giles. A few of the English hospitals were indeed entirely devoted to the reception of leprous females. Thus the hospital of Mayden Bradley was founded in the time of Henry II. for those of the female sex only (pro mulieribus leprosis); and the hospital of St. James, Westminster (which, says Bishop Tanner, stood on or near the place now occupied by the palace of the same name), was destined, as the renewed charter of Henry III. bears, for fourteen leprous girls (quatuordecim Leprosis puellis). 268

Age of those attacked—Duration of the Disease.

There are no documents (as far as I am aware) which directly throw any light on the age of the inmates of the leper hospitals. The expression, however, of *puellæ*, which I have just quoted as applied to the inmates of St. James' Hospital, shows the youth not less than the sex of the inmates of that institution, and so far demonstrates that the disease then, as it does now, sometimes attacked its victims very early in life. Baldwin IV. of Jerusalem, (whose case I have already referred to) was affected with the disease while still a minor, and surrendered his crown at the age of 23, in consequence of the ravages which the disease had by that time made upon his constitution. "He died young," says Fuller, "at five-and-twenty years of age—a king happie in this, that he died before the death of his kingdome." 269

King Robert the Bruce, another, as we have already seen, of the royal victims of the malady, died at the age of 55.²⁷⁰ But it is difficult to fix the precise date of the first attack of the disease in the case of the Scottish king, and hence difficult to deduce the exact duration of the malady in this particular instance. His faithful biographer, Barbour, describes him as "tuk with sic a sicknes" before the battle of Inverury in 1307, "that he mycht nothyr rid na ga"²⁷¹—(that he might neither

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ride nor walk). Kerr, in his *History of the Life and Reign of the Bruce*, seems to hint that this was the commencement of the disease which ultimately carried him off;²⁷² and indeed Barbour, in a subsequent part of his poem, describes his fatal malady as "beguth"—(begun)

through his cald lying Quhen in his gret myscheiff wes he.—P. 407.

But if the affection commenced in so acute a form at that date, it must have lasted for the long period of twenty-two years, as his death did not take place till 1329. If the disease under which the king suffered so severely in 1307 had been leprosy, it would not in all probability have left his activity and individual prowess for so long a date unimpaired. The battle-axe which, on the evening before the battle of Bannockburn, cleft at a single blow the helmet and skull of Henry de Bohun, could scarcely have been wielded by the arm of one whose body had for some years previously been the seat of a mortal disease. Some facts, however, would seem to show that the malady had assumed a marked and severe form a considerable time before the Bruce's death. I have already shown, from the Chronicle of Lanercost, that three years before his demise the Bruce was already so incapacitated by the inroads of the leprosy that he was unable to undertake the command of the army in their descent upon the northern counties of England.²⁷³ The same reason rendered him, as we are informed by Barbour, unable to attend the peaceful nuptial feast of his son at Berwick in 1328. It may not be considered uninteresting to add, as a part both of the history of the man and of the disease under which he was labouring, that during these three last years of his life, and whilst "the sicknes" affected his body "so fellely" (to use Barbour's words), and him trawaillat sa that he considered death certen," his naturally energetic mind was still active and vigorous. The accounts of his chamberlain, preserved in the Register House of Edinburgh, 274 show that, during the very last year of his life, he was busied in making experiments on ship-building and navigation in his retirement at Cardross Castle, near the banks of the Clyde, in Dumbartonshire. Within a month before his death, he indited from this place a letter (the original of which still exists among the old archives of Melrose Abbey, preserved in the General Register House, Edinburgh²⁷⁵), desiring his heart to be buried within the precincts of that monastery,—a wish which he changed, a short time before he expired, into the well-known commission to his favourite follower and friend, "ye gentle knighte of Douglas," viz. "I woll yat, as soone as I am trespassed oute of this worlde, ye take my harte oute of my body, and embaume it, and present it to the Holy Sepulchre at Jeruslem, saying my bodie can nat come."276

HEREDITARY TRANSMISSION OF THE LEPROSY.

Few facts in the history of tubercular leprosy seem to be more universally admitted by all writers on the disease, both ancient and modern, than the transmission of the predisposition to it from parents to offspring. The Greek and Arabian physicians considered it as a malady in which all the fluids of the body were equally diseased (corrumpens pariter omnes humores corporis). "Fit itaque (adds Haly Abbas, the well-known Arabian author of the tenth century, in his chapter "De Elephantia"), "cum humoribus spermatis corruptio, cum et humores et sperma ex sanguine fiant, in tantum, ut in generatione passio haec transeat in filios." (Theoric, lib. viii. cap. 15.) Avicenna and the later Arabian authors, with Theodoric, Lanfranc, and other European writers of the middle ages, express a similar belief in the hereditary transmission of the disease; and in the same spirit, our countryman Gilbert, writing, as we have already seen, in the thirteenth century, observes, "Lepra est interdum morbus primus, sicut ex spermatibus primis matris et patris Leprosis. Sanguis enim corruptus interius, qui est nutrimentum foetus, corrumpit foetum." 277

Amid the scattered fragments relative to the former history of leprosy in this country, it can scarcely be expected that we should have preserved for us any individual data bearing directly upon the transmission of the disease from father to son. I have met, however, with one notice, which, though imperfect, it may not be considered uninteresting to quote in regard to the present question. In the Burgh Records of Glasgow for 1581, Patrick Bogle is ordered to be inspected for leprosy;²⁷⁸ and eight years afterwards (1589) "Robert Bogill, *sone* to Patrick Bogle," is reported as an inmate of the leper-house belonging to the city.²⁷⁹

It is unnecessary to adduce the opinions of modern authors in support of the occasional hereditary transmission of leprosy, as all observers who have described the disease from their own observations, and that in the most different and distant parts of the world, seem uniformly agreed upon this point. Dr. Heineken, in his account of the inmates of the leper hospital at Funchal, Madeira, in 1825, 280 states that in three of the cases no hereditary taint was known; the aunt of a fourth (p. 21) was a lazar; the uncle and two brothers of a fifth (p. 18) laboured under the same disease; the mother, brother, and son of a sixth (p. 19), were lepers, and all of them affected before himself; and in a seventh case (a female aged 35) her father, mother, three sisters, and two brothers, had already all died of elephantiasis.

Among the seven cases of elephantiasis seen by Dr. Kinnis in the Mauritius,²⁸¹ three were Mozambique slaves, and could give no satisfactory account of their parentage. Of the remaining four—the first could give no history of her father and mother, but had brothers and sisters in perfect health: the ancestors of the second patient had not been affected with leprosy, but her husband had laboured under it for two years before death: the third case was a daughter of these parents, and one of her brothers had died of elephantiasis: the fourth patient appeared to have inherited the predisposition from the family of his maternal grandmother, who was never attacked herself, but who lost two sisters and three nieces by the disease.

These and other similar data show that the predisposition to leprosy, like the predisposition to

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other hereditary diseases, may occasionally show itself only in one or two individual members of a family; and may sometimes lie dormant for one or two generations, to reappear in a subsequent one. "God and Nature," says the reverend author of a description of the Faroe Isles, formerly quoted, "deals wonderfully with such people (lepers) in their marriages, for amongst the children, they beget some clean and some unclean. It has also been taken notice of that two living together in marriage, though the one be found infected, they live together as before, as long as one doth but murmur of it, till the magistrate doth separate them, and yet the sound remaineth uninfected; whereas another is often taken with the disease by a very little conversation.... What is this? but that God confirms the truth of his word, taking pleasure in them that live in a just wedlock, and wander in lawful ways, putting their hopes in him, that neither fire nor water, contagious disease, nor dangerous pestilence shall hurt them." 282

In some of the few districts of Europe in which cases of the disease have continued to linger down to a late period, the malady seems to be transmitted through an old hereditary taint in particular families, rather than generated by existing external circumstances acting on the bodies of those who now become its victims. The tubercular leprosy exists still, or at least existed lately, in the districts of Martigues and Vitrolles²⁸³ in the south of France. The cases, though very few, have still been well marked. M. Vidal, who, towards the end of last century, described several instances of the disease which he saw at Martigues, states that, with one problematical exception, the malady was in every case hereditary.²⁸⁴ "May we not," he adds, "conclude from this, that if the local causes which are generally assigned for leprosy be true, they have not, at least in our country, sufficient power to originate the disease (la faire naître), but generally only to develope and perpetuate it in the descendants of ancient lepers?"²⁸⁵ The same family predisposition probably perpetuated the malady for some generations in the few cases that occurred in Shetland, in the latter part of the last century. The case of the Shetlander Berns, as mentioned in a preceding Part, was an instance in which the disease was apparently the result of hereditary transmission from his ancestry.

The predisposition from hereditary constitution to leprosy, and some other diseases, was well known to our forefathers; and, if we place credit in the account of the "auld manneris" of the Scotch antecedently to the reign of Malcolm Canmore, as "compilit be the nobil clerke, Maister Hector Boëce, Channon of Aberdene," they were accustomed to practise hygienic measures that were assuredly more summary than humane, in order to arrest the diffusion of disease by such channels. For, to quote the words of Boëce:—"He that was trublit with the falling evil (epilepsy), or fallin daft or wod (insane), or having sic infirmitie as succedis be *heritage* fra the fader to the son, was geldit (*castratus*), that his infekit blude suld spreid na forthir. The women that was fallin *Lipper*, or had any other infection of blude, was banist fra the cumpany of men, and gif scho consavit barne under sic infirmitie, baith scho and hir barne war buryit quik (if she conceived a child under such infirmity, both she and her child were buried alive").²⁸⁶

EXTERNAL EXCITING CAUSES OF LEPROSY IN THE MIDDLE AGES.

The investigation of the causes of diseases has, probably more than any other department of medicine, been marked by belief without evidence, and assertion without facts. The history of the opinions which have at different times been so freely offered and adopted with regard to the production of leprosy, and the numerous explanations which have been proposed with respect to the causes of its almost epidemic prevalence in Europe in the middle ages, and its nearly complete suspension in the same region of the world at the present day, might easily, if time and space permitted, be made to form a chapter highly illustrative of the above general remark. The frequency of the disease in former times has been confidently ascribed by different authors²⁸⁷ to peculiarities in the diet, dress, personal and domestic habits, etc., of our forefathers. And certainly their mode of life was in many respects specially calculated to generate derangements and eruptions of the skin. The good old Saxon practice of bathing²⁸⁸ appears to have become forgotten after the date of the Norman conquest; and in the subsequent history of these early times we might trace various indirect and direct causes of cutaneous disease, in the close hovels and unventilated dwellings of the period;²⁸⁹ in the habits of personal uncleanness;²⁹⁰ in the rough straw bedding then generally²⁹¹ in use, and which "hard lodging" Hollinshed describes as still used by the servants in his day, "with seldome (he adds) anie sheete vnder their bodies to keepe them from the pricking straws that run oft through the canvas, and rase their hardened hides;"292 and probably also in the articles of diet²⁹³ on which the general community were obliged to subsist in times before the improvement of agriculture, and the introduction of that "schamefull intemperance" (as old Boece²⁹⁴ fanatically terms it), "when na fische in the see, nor foule in the aire, nor beast in the wod may have rest, but are socht heir and thair to satisfy the hungry appetit." For the investigation of this and other allied questions in the history of the production of our older epidemic and endemic diseases, the works of Hollinshed, Strutt, Henry, Chalmers, Macpherson, and others, contain a great and available mass of materials. But, in consequence of the unforeseen extent to which our present remarks have already lengthened out, we are forced to abstain from entering into this topic, and discussing the notes which we have collected in regard to it. At the same time, however, we may pause to observe that we believe it would be no easy matter to point out the exact differences in those physical conditions of the inhabitants of this country in former and in modern times, which may have led to the prevalence of the disease amongst our ancestors, and to its disappearance amongst us. If poverty in diet, or personal wants, and filth, and wretchedness in their deepest degrees, could generate the malady, there are certainly still numerous spots in continental Europe, and even in our own land, where, unfortunately, all these elements of disease are in our own day in full and active operation,

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without any such specific result following; the alleged causes are present without the alleged effects.

In order to attain anything like satisfactory results of the supposed physical causes of leprosy in Great Britain in former times, the whole question would require to be thoroughly investigated in connection with two others, viz., the allied physical circumstances,—firstly, of the inhabitants of those countries in which the disease in the same way formerly raged; and, secondly, of those districts of the world in which it is still prevalent. It is only by following such a line of inquiry that we could hope, if at all, to separate mere matters of opinion from matters of fact, and at last to obtain, by a kind of reasoning by exclusion, the exact physical condition or conditions of a people that are capable of originating or of spreading this particular species of disease. The difficulty of the problem may be easily appreciated by glancing for a moment at the diversified geographical localities and circumstances under which the tubercular leprosy is known at the present day to appear. In modern times it has been found existing, to a more or less limited extent, in places the most distant and the most dissimilar in regard to temperature, climate, situation, soil, etc., as in Sumatra,²⁹⁵ under the equator, and in parts of Iceland almost within the verge of the Arctic Circle;²⁹⁶ in the temperate regions of both hemispheres, as (in the southern) at Hamel en Aarde²⁹⁷ in the Cape district, and (in the northern) at Madeira²⁹⁸ and Morocco;²⁹⁹ in the dry and arid plains of Arabia, 300 and in the wet and malarious districts of Batavia 301 and Surinam; 302 along the shores of Guiana, 303 and Sierra Leone, 304 and in the interior of Africa, 305 Hindostan, 306 Asia Minor, 307 and Asiatic Russia; 308 on the sea-coast, as at Carthagena, 309 and thousands of feet above the level of the ocean, as on the table-land of Mexico;³¹⁰ on some of the islands in the Indian,³¹¹ Chinese,³¹² Caribbean,³¹³ and Mediterranean³¹⁴ seas, and on the continents of Asia, Africa, and America.

CONTAGION AS A CAUSE OF LEPROSY.

Most modern pathologists seem inclined to call in question the contagious nature of tubercular leprosy, as it at present exists in different parts of the globe.

Cullen, Darwin, and Good are almost the only English physicians of later times that have admitted the contagious character of the disease, and that not from personal observation. The evidence bearing against the doctrine of this mode of its diffusion is principally of a simply negative kind. In some of the districts in which the malady is endemic, the sick are seen to maintain a free intercourse with the healthy, without the disease being frequently or at all communicated to the latter; the nurses of the lazar hospitals are alleged to remain uninfected; lepers often continue long in the midst of their families without spreading the scourge to any of the other members; and occasionally a husband and wife are seen living in wedlock for years, one of them deeply affected by the disease, and the other remaining perfectly sound. Instances, exceptional to these general remarks, are certainly occasionally observed, as in a case quoted in a previous page from Dr. Kinnis, of a wife becoming infected subsequently to both her husband and daughter suffering from an attack of the malady. In such cases as this, however, we must recollect that the repetition of the disease in two or more members of the same family may merely depend upon the same external or general morbific agencies, acting upon the constitution of all the sufferers.

At least, whenever, from circumstances, this source of fallacy is avoided, the evidence of the contagion of leprosy seems to become more and more defective. Thus, when the disease happens to be imported in the person of an infected individual from a district in which it is endemic, to one in which it is unknown, the malady seems to have no tendency whatever at the present day to spread to any of the inhabitants of the new and healthy locality. Persons labouring under tubercular leprosy are occasionally, for example, sent from southern stations to England and France. In such not unfrequent cases the malady has never, I believe, been known to be communicated, in one single instance, from the infected person to those resident inhabitants of the new district, among whom he was living in free and daily intercourse. 315

Did the leprosy extend and prevail over Europe in the middle ages as independently of propagation by contagion as the perpetuation of the disease seems to be in most localities at the present day?

If we deferred to the mere opinion of the older medical and historical authors, the contagious character of the disease at that era would appear to be undoubted. These authors express an unanimous opinion on its contagious propagation; and it is not till we come down to the professional writers of the seventeenth century, as Fernelius³¹⁶ and Forestus,³¹⁷ that we find this doctrine ventured to be called in question.

The evidence, however, left us by the older authorities and physicians on this point, is an evidence of opinion rather than of facts. They have bequeathed to us merely their own dogmatic inferences, without vouchsafing to state any of the individual data upon which their general deductions were founded. As far, however, as we may judge by a few loose fragments which we may still gather up from amid the imperfect and scattered records of the disease, the European leprosy, if it were contagious, when epidemic in the middle ages, was at least less so than the combined medical and popular belief of those times would seem to represent it. In the Edinburgh hospital in 1590, two of the lepers' wives lived uninfected with their husbands; and a few of the English leper hospitals, as those of Ripon, St. Magdalene, Exeter, and St. Bartholomew, near Oxford, were endowed for the purpose of serving as retreats at one and the same time both for the merely poor and the truly leprous.

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Individuals stricken with leprosy were sometimes looked upon by the superstitious spirit of the age as persons directly smitten by the hand of God; and we find in history traces of rich and noble, and even of royal devotees, endeavouring to expiate their sins and propitiate the good will of Heaven, by occasionally devoting themselves, and that with perfect impunity, to such duties to the sick as offered the most certain means of calling down the disease upon their own bodies, provided it had been at all so contagious as was generally supposed. Saint Louis (Louis IX.) of France visited the leper hospitals every third month, personally rendered the most abject services to their inmates, fed them, and bathed their sores with his own hands.³¹⁸ Henry III. of England is reported to have annually, on Shrove Tuesday, engaged in the same duties.³¹⁹ Robert II., the son of Hugh Capet, enacted the devotee in the same manner, imprinting kisses with his lips on the hands of the lepers (ore proprio figens leprosorum manibus oscula, in omnibus Deum collaudabat).320 The old English historian, Matthew Paris, relates, in his usual quaint and gossiping style, an anecdote illustrative of a similar degree of charitable penance and defiance of contagion being practised by the Scottish Princess Matilda, the queen of Henry I. of England. Speaking of some transactions in the year 1105, he observes—

"At the same time David (King of Scotland), the brother of Matilda, Queen of the English, came to England to visit his sister, and when, on a certain evening, he came by her invitation to her chamber, he found the house filled with lepers (domum invenit Leprosis plenam), and the Queen standing in the midst, having laid aside her cloak, she with both hands girded herself with a towel, and water being placed in readiness, she began to wash their feet, and wipe them with the towel, and embracing them with both hands, kissed them with the utmost devotion. Upon which her brother addressed her thus; 'What is this which you are doing, my Lady? in truth if the King knew this, he would never deign to kiss with his lips your mouth, contaminated by the pollution of the lepers' feet!' and she, smiling, replied, 'Who knows not that the feet of an Eternal King are to be preferred to the lips of an earthly king? Behold it was for this that I invited you, dearest brother—that you might learn by my example to perform similar actions. Do, I beseech you, that which you see me doing.' And when her brother had made answer that he would by no means do such things, as she persevered in her employment David with a smile withdrew."321

In quoting, against the alleged strong contagion of the olden leprosy, the preceding instances of complete exposure to the infection of the disease, and yet, at the same time, of complete escape from it in some well-known historical personages, let it not be inferred that the victims of the malady were usually looked upon by the general community with feelings of devotion and pious commiseration. On the contrary, the subjects of this "foedissimus omnium morborum" were, as a body, regarded alike by the church and by the people as objects of disgust. The Council of Ancyrus decreed that lepers were only to be allowed to worship amongst the Hyemantes, or those public penitents who, on account of the enormity and turpitude of some of their sins, were obliged to stand in the open air, and not even allowed to come under the porch of the church.³²² The Council of Worms granted to lepers a liberty of receiving the sacrament of the body and blood of Christ, but not with those in perfect health. 323 Guido de Monte Rocher, in his Manual for Curates, states, that to some lepers the sacrament cannot be given, because "non possunt corpus Dominicum sic recipere et tractare in ore suo, quin rejicerent ipsum, sic multi, quibus reciderunt 136 labia et dentes et sunt totaliter corrosi usque ad guttur."324

The preamble to the laws of the hospital of St. Julian's, drawn up by Abbot Michael, asserts, that "amongst all infirmities the disease of leprosy may be considered the most loathsome, and those who are smitten with it ought at all times, and in all places, and as well in their conduct as in their dress, to bear themselves as more to be despised and as more humble than all other men." The canons of the Church of Scotland, as drawn up in the thirteenth century, deal with the unfortunate lepers more humanely than most other ecclesiastical judicatories; for after recommending them to be admonished to respect the churches of their districts, it is added that, if they cannot be induced to do so, let no coercion be employed, seeing that affliction should not be accumulated upon the afflicted, but rather their miseries commiserated (cum afflictis addi non debeat afflictio, sed ipsorum, miseriis sit potius miserandum.)³²⁵ But the contempt displayed towards them seems to have been almost proverbial as late as the age of Elizabeth. Thus Shakespeare makes Margaret of Anjou exclaim to the afflicted and suspicious Henry VI., after the murder of his uncle, the Duke of Gloucester,

> Why dost thou turn away and hide thy face? I am no loathsome leper, look on me. 326

Maundrell, one of our early English travellers in Palestine, alludes to some cases of leprosy in terms portraying simply but strongly the fearful effects and character of the disease. After speaking of some cases of leprosy that he met with in his journey, he states (to quote his own words), "At Sichem, near Naplous, there were not less than ten lepers,—the same number that was cleansed by our Saviour not far from the same place, that came a-begging to us at one time. Their manner is to come with small buckets in their hands to receive the alms of the charitable, their touch being still held infectious, or at least unclean. Their whole distemper was so noisome that it might (he adds) well pass for the utmost corruption of the human body on this side the grave."327

Various authors have alleged that the institution of leper hospitals, and laws for the separation and seclusion of the infected, were formed more from imitation of the Levitical institutions regarding the leprosy than from direct observation and proofs of the contagious character of the disease. The avoidance, however, and separation of the sick, have been recommended and followed by authors and by communities over whom the Levitical laws could have exercised no

influence, direct or indirect, and to whom, indeed, these laws were in all probability totally unknown.

After describing the horrors and course of elephantiasis or tubercular leprosy, the old Roman physician, Aretæus, adds, "seeing the infected with this disease are such, who would not fly them? (aufugiat), or who would not turn aside from a leper, even although he were a son, or a father, or a brother, since there is fear lest the disease should be communicated? (quum metus est ne morbus communicaretur). Hence, many have banished those that were dearest to them into solitudes and mountains."328

A knowledge of the laws and customs of the Jews in all probability never reached, or at least certainly never influenced, the opinions of the inhabitants of Tonquin-a kingdom which was formerly a part, and long a tributary, of China, and where the general religion is the idolatry of Fo and of Lanzo, with sects of the literati or followers of Confucius; 329 yet in that country those infected with leprosy are treated on the same principles of separation from the general community as we find applied to them in other and distant districts. "In Tonquin, leprosy is so common," says Richard in his history of that country, "that there are pieces of land assigned where those attacked by it must reside. They are shut out from society; and it is even lawful to kill them if they enter cities or towns."330 In a country like Tonquin, it is difficult to conceive how laws and usages of this kind could have originated in anything except a belief in the contagious nature of the disease, as derived from the observation of its mode of diffusion. At all events, the old institutions and customs of the different kingdoms of Europe, in regard to lepers, seem all to have been originally founded on such a belief in the possibility of the contagious communication of this dreadful and dreaded disease from the sick to the healthy. These institutions and customs I propose now to sketch very briefly, and that principally as they bear upon the usages formerly observed towards lepers in England and Scotland. I shall consider them as they refer to—1. The separation of the infected from the general intercourse of society; 2. The laws prohibiting their entrance into towns; and 3. The restrictions under which they were placed as inmates of the hospitals.

SEPARATION OF LEPERS FROM THE GENERAL AND HEALTHY COMMUNITY.

After all that I have already had occasion to state relative to the objects of the leper hospitals, and the selection of the infected, it is almost unnecessary to add that in Great Britain, as upon the Continent, 331 lepers were obliged, either by law or usage, to seclude themselves from society when once the disease was discovered upon their persons.

The chancery warrant of Edward IV., quoted in the Second Part of these papers, speaks of the retirement of a leper from society as a matter of custom and duty, and empowers the sheriff of the county to remove the suspected person to a secluded place, as is the usage (prout moris est), provided the actual existence of the disease was made out. 332

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There exist in the old records of Scotland both local and general enactments enforcing the retirement and seclusion of lepers. The Scottish "Burrow Lawes" (Leges Burgorum) are generally allowed to have been drawn up as early as the twelfth century.333 They are a code intended apparently for the government of the four first royal burghs of Scotland, viz. Berwick, Roxburgh, Edinburgh, and Stirling. Their sixty-fourth chapter contains some regulations regarding "lippermen." The first of these regulations provides in the following terms for the lodgment in hospital and sustenance of the "lippermen" of the burghs:334—

"Gif ony man dwelland or borne in the King's Burgh is striken with leprosie, and hes substance and geir of his awin to sustaine and cleath himselfe, he sall be put in the hospitall of that burgh quhere he dwells. And gif he hes na thing to liue upon, the burgesses of that burgh sall make ane collection amongst them, for meat and claith to him; and that collection sall be the summe of twentie shillinges."335

The canons of the Church of Scotland, as drawn up or authorised by the provincial ecclesiastical 141 councils held at Perth in the years 1242 and 1269, speak of those attacked by leprosy in this country, as being "separated from society in accordance with general custom (de consuetudine generali a communione hominum separantur) and retired to secluded situations."336

I have already, in Part II., quoted a clause from the acts of the Perth Parliament of 1427, empowering and enforcing the dignitaries and officers of the church to search diligently in their parish visitations for any persons affected with leprosy, and to commit them to the keeping of either the civil or ecclesiastical authorities, according as they happened to be "Clerkes" or "Seculars."

PROHIBITIONS AGAINST THE INFECTED ENTERING TOWNS.

Lepers were compelled, by other reasons than mere custom or common law, to retire from society. They were of necessity driven to seek the asylum of the lazar hospitals, in consequence of the statutes, both of the general country and of local communities, prohibiting any citizen from retaining a person labouring under leprosy in his house, and preventing the infected from entering within the gates of the towns and villages.³³⁷

The old Scottish Burrow Lawes have stringent clauses upon this head, for they hold that "na man should presume, or be so bauld as to harberie or ludge ane lipperman within the burgh, under

ane full amerciament." And further, "lippermen sall not enter within the towne, bot in passing throw it, and sall not gang fra dure to dure, but sall sit at the ports of the burgh, and sall seek almes fra them that passes in and comes furth." 338

By the later general act of the Perth Parliament, the unfortunate beings affected with the disease were again prohibited from entering towns except for the purpose of purchasing victuals, and this they were only allowed to do on three days of the week, the act strictly providing that—

"Item, Na lipper folke, nouther man nor woman, enter nor cum in ane Burgh of the Realme but thrise in the oulk (week) that is to saie, Mondaie, Wednesdaie, and Fridaie, fra ten hours to twa after noone; and quhair faires and mercattis fallis on thay dayis, that they leave their entrie in the Burrowes, and gang on the morne to get their living." 339

Various towns and local judicatories in the country seem to have at different times passed laws enforcing more strictly the observance of exclusion of the infected from their own limits and districts. Some of these local enactments have been preserved; and I shall quote such as I have been able to discover, with a view to show the general fear formerly entertained of the contagion of the disease, and the measures that were adopted to prevent its communication.

Thus, in the statutes of the Society of Merchants or Guildry of Berwick-upon-Tweed, said to have been drawn up by the mayor and others in "the Zeare of God 1283-84," it is strictly provided that "Na lipper man sall enter within the portes of our burgh; and gif any by chance enters within them, he sall be incontinent put forth be the sergant of the burgh. And gif any lipper man uses commonlie contrair this our discharge, to come within our burgh, his claithes wherewith he is cled sall be taken from him and sall be brunt, and he being naked sall be ejected furth of the burgh. Because it is provyded be the common councill, that some gude man sall gather almes to them, that they may be sustained in ane place competent for them without the burgh. And this is to be understand of lipper folk, indwellers within the burgh, and not of them quha dwells without the burgh."

Some of the smaller burghs and villages of these early times had their individual rules and statutes upon the same point. The burgh of Prestwick, Ayrshire, which contains at present, and probably never contained more than about 1000 inhabitants, is situated about half-a-mile north of the leper hospital of Kingcase. The old official records and statutes of this small burgh, to which reference has repeatedly been made in the preceding pages, have lately been printed from the original MS. by Mr. Smith of Swinridgemuir. The earliest burgh record that has thus been preserved is a collection of the laws of the burgh, "Statuta Burgi de Prestwick maide by the haile consent of the community of the same at the Cross of the same burgh, and to be keepit and rafit unremittable and unrevocable." The date of this collection, or probably re-collection of the burgh laws, is 1470. The fourth of the statutes fixed upon "for the common profit of the said burgh in time coming for everlasting memorans" is to the following effect:—

"It is statut yat na man inhabitant ye said burghe or weman commoun or intromet with ye sic folk (commune or intromit with the sick people) of Kingcase, vnder ye pain of exiling ye said burghe when thai ar ourtane (overtaken) be ane enquest yairupon, mair plainli yan ony oyder persounis or persoun duelland in all ye land about."—P. 15.

In the minuted records of the burgh, different cases occur of persons accused in accordance with this statute. Thus, on December 1, 1477, Anne Kerd and Andro Sauer are accused of repairing to Kingcase.³⁴¹ On the 26th April of the second following year, 1479, it was alleged with regard to the said Andro Sauer, that he "repairis till Kingcase daily and nigtly and his wif and his bairnis."³⁴² This Anne Kerd seems to have had the property of a burgess. At last, in November 1481, the same rebellious Prestwickian, "Andro Sauer, is fund in daili reparand to Kingcase, and yis the xxti court yerein, and is abill till infect ye hale toune; and weris ye seik folkis clathis and bonnettis."³⁴³ After this date no more mention is made in the records of Andro, who repeatedly figures in them previously, for other more serious deeds than that of repairing to Kingcase. I find, however, that others of his name, and probably of his kindred, fall into the same error for which he himself appears to have been banished. Thus, in 1496, Anne Sauer, Marion Myllar, Ellane Browne, and Anne Duncane, "are ilkane severale in amerciamentis for the selling of ale and intromettin of the folkis of Kingcase again the statutis of the towne."

Few or none of the very early records and laws of the magistrates of Edinburgh have been preserved, but amidst some lately recovered, of a date as 1530, we find the following statute anent the "Leper Folke,"—"It is statut and ordanit be the Provost, Baillies, and Counsell of this burghe that na manner of Lipper persone, man nor woman, fra this tyme furth, cum amangis uther cleine personis, nor be nocht fund in the kirk, fische merket, nor flesche merket, nor na other merket within this burghe, under the pane of burnyng of their cheik and bannasing off the toune." 344

Some of the old edicts and regulations made in regard to the diseased in London have been preserved for us by Stow. According to the record of Edward III., that king sent, in 1346, "a commandment under his Great Seal, to the mayor and sheriffs of London, willing them to make proclamation in every ward of the city and suburbs, that all leprous persons within the said city and suburbs should avoid within fifteen days, and that no man suffer any such leprous person to abide within his house, upon pain to forfeit his said house, and to incur the king's further displeasure. And that they should cause the said lepers to be removed into some out places of the Fields, from the haunt and company of all sound people."³⁴⁵ From some of the city records it further appears that the magistrates ordered "That the lepers walk not about the streets, nor

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tarry there; that the keepers of the gates swear that they will not permit lepers to enter into the city." "There was at one time," adds Stow, "a brief for removing them from the city and suburbs. At another time there was an edict for levying a hundred shillings out of a tenement of the lepers, and delivering it to their officers for sustaining them."³⁴⁶

RESTRICTIONS PLACED UPON THE INMATES OF THE LEPER HOSPITALS.

The chance of contagion was provided against by other means besides the mere separation of the infected from the community, and their banishment to the lazar hospitals. In many instances the regulations and statutes to which the lepers were subjected, as inmates of these hospitals, were strongly restrictive, and framed with a view of preventing them from spreading the disease to others by any dangerous degree of personal communication with the healthy. The occasional severity of the restrictions to which, with this view, the leper inhabitants of the hospitals were subjected, affords us a curious example both of the great dread in which the disease was held, and of the extent and stringency of the measures of medical police which the local judicatories of this country had in these times both the power and the will to exercise.

The rules of the Greenside Hospital, Edinburgh, present in themselves a striking proof of this, and the occupants of the hospital were bound to observe these rules under the penalty of death. "That this," observes Arnott, "might not be deemed an empty threatening, a gallows was erected at the gavel of the hospital for the immediate execution of offenders." 347

The persons placed in the Greenside Hospital in 1591 were five male lepers with two of their wives—viz. (to quote the record) "Robert Mardow, James Garvie, Johnn MacRere, James Wricht, and Johnn Wilderspune, lepperis, togidder with Isobel Barcar, spous to the said Robert Mardow, and Janet Galt, spous to the said James Garvie." Among other regulations enacted in regard to them, it was specially ordained, "That nane of the said personis Lepperis, or their wyffes, depart or resort fra the said hospitall to na oyder pairt, or place, bot sit still thairat, and remayne thairin nicht and day, halyday and wark-day; and that they resave na oyder maner of personis, oyder man or woman, within the said place, bot sic as sall be placit with thame thairin, at command of the said Counsall and Session; and that they keip the dure of the said hospitall fast and clois, fra the dounpassing of the sone to the rysing thairoff, under the payne of hanging."

"That the said Jonet Galt only cum to the markatts for buying sic viveris as is necessary to the saids personis, and presume to gang to na oyder pairt nor place in her cuming and returning to and frae the said markatts, under the payne aforesaid. Quhilk and other injunctions being red to the personis foresaids, they agreit thairto, and promisit to obey and underly the samyn, under the paynes therabove written. And thairfore, for the better obedience thairof, and for terrefying the said lepperis to transgress the samyn, the said commissioners has thocht meitt and expedient that there be ane *gibbet* sett up at the gavell of the said hospital; and that the forme and order thairof be insert baith in the buiks of Counsall and Sessioun of this burgh, *ad perpetuam rei memoriam.*" 348

The tenor of the regulations of the British leper hospitals was probably in few or no other cases so extremely stringent as in the establishment at Greenside. At least, if we may judge by the records of most of those hospitals, the rules of which have been accidentally preserved, the restrictions placed upon the inmates were confessedly great, but certainly by no means so severe either in their degree or in the punishment applied to them, as in those which we have just cited. Besides, in most institutions, the prior, master, or warden of the hospital, exercised a discretionary power in relation to the degree of seclusion of the lepers of their establishment.

Thus, among the rules of the leper hospital of St. Magdalene, Exeter, it was provided that "no brother or sister shall go or pass out of the house beyond the bridge, without the gate of the said hospital, without the license of the Warden or his deputy, upon pain to be put into the stocks, and to have but bread and water for one day."³⁴⁹

Again, among the many rules enacted by the Abbot Michaele for the regulation of the hospital of St. Julian, in the neighbourhood of St. Albans, I may select the following as characteristic illustrations of the point which we are now considering:—

"Let no one presume to transgress the bounds fixed of old, (*metas ab antiquo statutas*), of which one is placed in the south, another in the north, as they still remain in view, except the custor of granges and granaries, to whom the charge is committed to the master.

"Let no brother venture to enter the bake-house or brew-house in any manner, with the exception of the brother to whom the charge is assigned, who, when he enters, may not approach the bread and beer, in touching or handling them in any way; since it is not meet that men of such infirmity should handle those things which are appointed for the common use of men.

"Let no one of the brothers attempt to go beyond the bounds of the hospital, namely, in the direction of the king's road, without his close cape, in going to church or returning, nor stand or walk about in the said street before or after service (nor, indeed, at any hour of the day before or after dinner); but when divine service is finished, let them enter their hospitals with all haste, unless any one wishes to remain in the church, that he may have leisure for prayer and meditation. In like manner, we command that there be no standing in the corridor, which extends in length before the houses of the brothers in the direction of the king's road; and that no brother hold conversation there (teneat ibi parliamentum) with another; but if any brother wish to hold colloquy with another, let one go to the other in order, as he may wish, through the said corridor,

without standing by the way, unless some stranger chance to meet him, with whom he may briefly speak and pass on. But if an honest man and true come there, for the purpose of visiting an infirm brother, let him have access to him, that they may mutually discourse on that which is meet."350

In considering under a previous head the extent of endowment of the British leper hospitals, we have seen that the inmates of many of the poorer institutions depended more or less entirely for their means of subsistence upon the casual alms which they were able to beg from the charitable. In a few favoured cases the lepers were specially authorised to pursue this occupation beyond the district of the hospital. A charter was given by King John to the lepers of St. Lawrence's Hospital, Bristol, granting them great privileges of this kind. Some of the passages in this charter are curious, as illustrative of the present point. I append a translation of a part of it from the copy of the original document as published by Dugdale:-

"Iohn, by the grace of God, King of England, etc., to the Archbishops, etc., greeting, know ye that we, for the love of God, have granted, and by this charter have confirmed to the lepers near Bristol, a croft beyond the gate of Lacford, on the road to Bath, to dwell there, as the charter which we gave them while we were Count Moreton reasonably proves; know ye also that we have received these lepers into our protection, and therefore desire and command that ye befriend and protect them (quod eos manu teneatis et protegatis), and cause no impediment to them, wherever they shall be asking alms in our lands, as our letters-patent which we granted unto them when Count Moreton rationally testifies," etc. 351

Grants and liberties, such as the above, were certainly, however, rare. In general the lepers were restricted as to the districts and places in which they presented themselves to seek for alms. We have already seen the Burrow Lawes ordering that they "sall not gang fra dure to dure, but sall sit at the ports of the burgh, and seek alms fra them that passes in and furth;" and the Scottish Parliament of 1427 enacted that they should not be allowed to sit and beg "neither in kirk nor in kirk-yairdis, 352 nor other places within the burrowes, but at their owne hospital, and at the part of the town and other places outwith the burrowes." But even in exercising this vocation in these stated places, the unfortunate petitioners seem to have been everywhere obliged to use certain precautions, with the view of prohibiting them from diffusing the disease.

In Scotland, and in various other parts of Europe, they were obliged, for this purpose, to use a "clapper" or rattle, in order that the noise created by it might warn the healthy of the presence of an infected fellow-mortal, whilst, at the same time, they carried a "cop" or receiving dish, into which the charitable might drop their alms.³⁵³ Muratori tells us that in Italy the lepers made their presence known at a great distance (longe positos) by the noise of a certain piece of wood. Marmotrecti describes more minutely the instrument as composed of wood, and formed of two or three tablets of it, which the leper struck together when seeking bread (quas concutit leprosus quaerendo panem).354

In the celebrated old Scoto-Saxon poem of Sir Tristrem, composed probably about the middle of the thirteenth century, 355 and valuable (to use the words of an acute critic) 56 "for its pictures of ancient manners" and the customs "of Scotland in the days of Alexander III.," the hero of the romance is, at one stage of his adventures in Cornwall, represented as assuming for disguise and concealment the appearance of a leper or mesel.³⁵⁷ In this character the poet provides him with the usual cop and clapper (stanza 80, p. 181).

> Ganhardin gan fare, Into Bretaine away: And Tristrem duelled thare, To wite what men wald say: Coppe and Claper he bare, Til the fiften day, As he a mesel ware: Under walles he lay, To lithe.

We have already, in the Second Part of the present paper, seen Henryson, in the sixteenth 153 century, describing his leper heroine as arrayed

With cop and clapper like ane Lazarous.

And from the advice proffered by the other lepers to the weeping Cresseid after she is actually removed to the lazar-house, the importance and frequent use of the clapper is sufficiently shown

> I counsall thee mak vertew of ane neid, To leir to clap thy clapper to and fro, And leir efter the law of lipper leid. 358

Into some towns the lepers seem to have been allowed the liberty of entry, provided they used their clappers, to advertise the passing inhabitants of their presence, and thus allowed them to shun the supposed danger of their contact. The magistrates of Glasgow made the carrying of clappers one of the conditions on which they admitted the occasional entrance of the inmates of the Brigend hospital into their city, one of their edicts for October 1610 running thus:-"It is statut and ordanit that the Lipper of the hospital sall gang (walk) only on the calsie (street) syde near the gutter, and sall haif clapperis and ane claith upoun their mouth and face, and sall stand afar of quhill they resaif almous, or answer under the payne of banischeing them from the toun

and hospital."

One of the statutes of the Greenside hospital, Edinburgh, was to the effect—

"That nane of the lepperis cry or ask for alms, utherways then be thair clapper; and that every ane of thame, his day about, sitt at the dore of the said hospitall to that effect, the rest allwayes remaining within the samyn, and that thay distribute equallie amongs thame quhatsoever money they purches be thair said begging, and gif the just declaration thairof to the visitour appoynted everie Setterday, under sic payne as the counsill shall injoyne unto thame."

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LEPERS REGARDED AS DEAD PERSONS BY THE CIVIL LAW.

According to the tenor of various old civil codes and local enactments, when a person became affected with leprosy he was looked upon as legally and politically dead, and lost the privileges belonging to his right of citizenship.

By the law of England lepers were classed with idiots, madmen, outlaws, etc., as incapable of being heirs; and a leper removed by a writ de leproso amovendo could not be a guardian in socage. 359

Rotharis, king of Lombardy, as early as the eleventh century, decreed that when any one became affected with leprosy, and the fact was known to the judge or people, so that the leper was expelled from society and dwelt in seclusion, he had no power to alienate his effects or dispose of them to any one (non sit illi licentia res suas alienare aut thingare cuilibet personæ). For, it is added, from the very day on which he is expelled from his home, he is to be regarded as dead (tanquam mortuus habetur).³⁶⁰ The same was the law of Normandy, according to Dufresne³⁶¹ and Delamarré;³⁶² and Lobineau, in his history of Brittany,³⁶³ speaks of it being formerly in accordance with the rituals of various churches.

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The leper was not looked upon in the eye of the law alone as defunct, for the Church also took the same view, and performed the solemn ceremonials of the burial of the dead over him on the day on which he was separated from his fellow-creatures and consigned to a lazar-house. He was from that moment regarded as a man dead amongst the living, and legally buried, though still breathing and alive. The ritual of the French church retained till a late period the various forms and ceremonies to which the leper was subjected on this day of his living funeral. Ogée 364 and Pluquet 365 have both described them.

A priest robed with surplice and stole went with the cross to the house of the doomed leper. The minister of the church began the necessary ceremonies by exhorting him to suffer, with a patient and penitent spirit, the incurable plaque with which God had stricken him. He then sprinkled the unfortunate leper with holy water, and afterwards conducted him to the church, the usual burial verses being sung during their march thither. In the church the ordinary habiliments of the leper were removed; he was clothed in a funeral pall; and while placed before the altar between two trestles, the Libera was sung, and the mass for the dead celebrated over him. After this service he was again sprinkled with holy water, and led from the church to the house or hospital destined for his future abode. A pair of clappers, a barell, a stick, cowl, and dress, etc. etc., were given to him. Before leaving the leper, the priest solemnly interdicted him from appearing in public without his leper's garb—from entering inns, churches, mills, and bake-houses—from touching children, or giving them ought he had touched—from washing his hands or anything pertaining to him in the common fountains and streams—from touching in the markets the goods he wished to buy with anything except his stick-from eating or drinking with any others than lepers;-and he specially forbade him from walking in narrow paths, or from answering those who spoke to him in the roads and streets, unless in a whisper, that they might not be annoyed with his pestilent breath and with the infectious odour which exhaled from his body;—and last of all, before taking his departure, and leaving the leper for ever to the seclusion of the lazar-house, the official of the church terminated the ceremony of his separation from his living fellow-creatures by throwing upon the body of the poor outcast a shovelful of earth, in imitation of the closure of the grave.

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LIST OF LEPER HOSPITALS IN GREAT BRITAIN.

In Part I. I enumerated specially the different Scottish leper hospitals with which I was acquainted, and referred in general terms to the number of similar institutions that had existed in England. Under the idea that a connected view of all the British leper hospitals might prove interesting, I have drawn out the following alphabetical list of such of them as have come to my knowledge in the course of the preceding inquiries. To the locality of each hospital and its special designation, or rather dedication, I have added the dates, as nearly as they could be ascertained, either of its original foundation, or of the first notice of it to be found in historical records. Among the unarranged mass of materials contained in the *Notitia Monastica*, and in the *Monasticon Anglicanum*, (to which works I am principally indebted for the notes of the English leper houses), references exist to many old hospitals, the individual objects of which are now utterly forgotten and unknown. If sufficient records of them had been preserved we would probably have been enabled to increase to a much greater extent the subjoined list of institutions for lepers, as many of them, there is little doubt, were set aside (like those we now enumerate) for the reception of the victims of that disease, whose olden history, in as far as relates to this country, we have so hastily and imperfectly attempted to trace.

Town and County.	Designation of Hospital or Locality	Date of Foundation or Earliest Notice	
Aberdeen	St. Anna		
Aldcambus, Berwickshire	•••	Before A.D. 1214.	
Aldnestun, Berwickshire	•••	Before 1177.	
Appleby, Westmoreland	St. Nicolas.		
Athelington, Dorsetshire	St. Mary Magdalene.		
Aylesbury, Buckinghamshire	St. John and St. Leonard.	Time of Henry I. or before	
		1135.	
Banbury, Oxfordshire	St. John	Time of King John, or before	
		1216.	
Beccles, Suffolk	St. Mary Magdalene.	About 1327.	
Berkhamstede, Hertfordshire	St. John the Evangelist.	D C 1000	
Berwick-upon-Tweed	Ch. Talan dha Faran wallah	Before 1283.	
Blythe, Nottinghamshire Bolton, Northumberland	St. John the Evangelist.	In time of Pope Honorius. Before 1225.	
Bristol, Somersetshire	Holy Trinity. St. Mary Magdalene.	before 1225.	
Bristol, Somersetshire Bristol, Somersetshire	St. Lawrence	Before 1135.	
Brookstreet, near Brentwood in the	St. Lawrence St. John	Before 1292.	
parish of Southweald, Essex	ot. joini	B01010 1232.	
Burton, Leicestershire	Blessed Virgin and St. Lazarus;	Time of King Stephen.	
	Burton Lazars.	Time of rang otophon.	
Burton, Leicestershire	Blessed Virgin and St. Lazarus;	Time of King Stephen.	
- ,	Burton Lazars.		
Bury St. Edmund's, Suffolk	St. Peter.	About 1327.	
Colchester, Essex	St. Mary Magdalene.		
Cambridge	"Hospital of Lazars".	Before 1397.	
Canterbury, Kent	St. Nicholas.		
Chatham, Kent	St. Bartholomew.	In time of William II. or before	
		1100.	
Chichester, Sussex	St. James and St. Mary Magdalene.	Before 1199.	
Chesterfield, Derbyshire	St. Leonard.	Before 1208.	
Crowmersh, Oxfordshire	•••	About 1248.	
Dartfort, Kent	Trinity.		
Dartford, Kent	St. Mary Magdalene.	About 1330.	
Devizes, Wiltshire	•••	Before 1207.	
Doncaster, Yorkshire	St. James.	Time of Henry III. or before	
Dunwich, Suffolk	St. James	1272. Before 1199.	
Edinburgh	Greenside.	In 1591, but probably a	
Lamburgii	oreenside.	previous hospital.	
Exeter, Devonshire	St. Mary Magdalene.	Before 1163.	
Eye, Suffolk	St. Mary Magdalene.	About 1330.	
Glasgow, Lanarkshire	St. Ninian.	In 1350.	
Gloucester	St. Margaret.	Before 1320.	
Hardwick, Norfolk		Mentioned in 1372.	
Goreleston, Suffolk	St. Lawrence	Time of Edward II. or before	
		1327.	
Hedon, Yorkshire	St. Sepulchre	Before 1216.	
Hereford	St. Giles.		
Herting, Sussex	St. John the Baptist	Before 1199.	
Hexham, Northumberland	•••	About 1210.	
Hithe, Kent	St. Andrew	Before 1336.	
Huntingdon	St. Margaret	Time of Malcolm IV. of	
Inquiah Cuffoll-	St. Mary Magdalana	Scotland, who died 1165.	
Ipswich, Suffolk Ipswich, Suffolk	St. Mary Magdalene		
rpswich, Suffolk Kingcase, Ayrshire	St. James. St. Ninian	Before time of Robert Bruce?	
Kingcase, Ayrsnire Kirkby, Westmoreland	St. Ninian St. Leonard.	perore time or gonert prace;	
Kirkby, Westmoreland Lancaster, Lancashire	St. Leonard. St. Leonard	About 1190.	
Langwade, Norfolk.	Jt. Leonard	ADOUG 1130.	
Langport, Somersetshire	St. Mary Magdalene	About 1310.	
Langport, Somersetsine Lerwick, Shetland	Jos. Plary Plagatione	125000 1510.	
Leicester	St. Leonard.		
Linlithgow	St. Magdalene	Before time of Alexander II.	
Little Maldon, Essex	St. Giles.		
Lincoln	Holy Innocents.		
London and vicinity	St. Giles	In 1101.	
n n	Highgate	In 1472.	
n n	Between Milesend and Stratford		
	Bow.		
n n	At Kingsland.		
n n	At Shoreditch.		
" "	Lock, Kent Street, without		
	Southwark.		
" "	St. James, Westminster	Very early.	
Long Blandford, Dorsetshire			
Lowcrosse, Yorkshire	St. Leonard.		
Lynne, Dorsetshire	St. Mary Magdalene	Before 1336.	

Lynne, Norfolk	St. Mary Magdalene	In 1145.	
n n	St. John.		
" "	West Lynne.		
" "	Cowgate.		
יו יי	Setch Hithe.		
Mayden Bradley, Wiltshire	Virgin Mary	Before 1135.	
Norwich, Norfolk	St. Mary Magdalene	Before 1119.	
" "	St. Mary.		
n n	Without St. Magdalene's Gate.		
n n	Without St. Bennet's Gate.		
" "	Without St. Giles' Gate.		
" "	Without St. Stephen's Gate.		
Northampton	St. Leonard	In 11th century.	
Otteford, Kent	•••	Time of Henry III. or before	
		1272.	
Otley, Yorkshire	•••	Time of Edward II. or before 1327.	
Oxford	St. Bartholomew.		
Papastour, Shetland.			
Peterborough, Northamptonshire	St. Leonard	Before 1154.	
Pilton, Devonshire	St. Margaret	Before 1197.	
Plymouth, Devonshire	St. Mary Magdalene.		
Plympton, Devonshire.			
Pontefract, Yorkshire	St. Mary Magdalene.		
Racheness in Southacre, Norfolk	St. Bartholomew	Before 1216.	
Ripon, Yorkshire	St. Mary Magdalene	Beginning of 12th century.	
Rochester, Kent	St. Katherine	About 1316.	161
Romendale or Rumney in Kent	St. Stephen and St. Thomas	Time of Baldwin, Archbishop of Canterbury.	
Rothfan, Banffshire	•••	Before 1249.	
Selwood, Somersetshire	•••	About 1212.	
Sherburn, Durham	The Virgin, Lazarus	Before 1181.	
Shrewsbury, Kent	St. Giles	Before 1189.	
Southampton, Hampshire	St. Mary Magdalene.		
St. Alban's, Hertfordshire	St. Julian	Between 1100 and 1135.	
Stamford, Lincolnshire.			
Sturbridge, Cambridgeshire	St. Mary Magdalene	Very early.	
Tannington, Kent	St. James	Before 1189.	
Taunton, Somersetshire.			
Tavistock, Devonshire	St. Mary Magdalene.		
Tenby, Pembrokeshire	St. Mary Magdalene.		
Tewkesbury, Gloucestershire			
Thetford, Norfolk	St. John	Time of Edward I.	
n n	St. Margaret	About 1390.	
Towcester, Northhamptonshire.	St. Leonard	About 1200.	
Walsingham, Norfolk.			
Warwick	St. Michael or Stephen.	Time of Henry I. or Stephen.	
Wycomb, Buckinghamshire	St. Margaret and St. Giles.		
Yarmouth, Norfolk	Outside North Gate	Before 1314.	
York, Yorkshire	St. Nicholas	About 1110.	

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APPENDIX.

ADDITIONAL NOTES BY JOSEPH ROBERTSON, LL.D.

LEPER HOSPITAL OF GLASGOW.

SIR James Simpson's Paper, Part I. p. 10.—"In 1350, in the reign of David II., the Lady of Lochow, daughter of Robert, Duke of Albany, erected a leper hospital at the Gorbals of Glasgow, near the old bridge.—(Gibson's *Hist. of Glasg.* p. 52; Cleland's *Glasg.* vol. i. p. 68.)"

There is some mistake here. If the leper hospital was founded by the Lady of Lochow, daughter of the Duke of Albany, it must have been a hundred years after 1350. The dukedom of Albany was not created until 1378, and the first daughter of that house who married a Knight of Lochow was Marjory, the wife of Sir Duncan Campbell, who died in 1453.

The earliest record notice of the hospital which I have observed is in 1494, when William Steward, prebendary of Killern and rector of Glassfurd, endowed a chaplain to serve in the chapel of St. Ninian, which he had lately built, "ad Hospitale Leprosorum degentium prope Pontem Glasguensem." He provided that yearly, on the anniversary of his death, twenty-four poor scholars should assemble in the chapel of the hospital to perform certain services, for which one penny was to be paid to each of them, along with one shilling to the lepers—"et leprosis non sociatis degentibus in dicto Hospitali xijd." The lepers were to ring the chapel bell for the Salve Regina every night, and to pray in the chapel for their benefactors.—(Regist. Episcopal. Glasg., vol. ii. pp. 488-490. Edinb. 1843, Mait. Club.) In 1505 we have "pauperibus leprosis in Leprosario Sancti Niniani trans pontem Glasguensem degentibus."—(Liber Collegii Nostre Domine Glasguensis, p. 259. Glasg. 1846, Maitland Club.) In 1528, James Houston, sub-dean of Glasgow, founder of the Lady College (now the Tron Kirk) of Glasgow, ordered twelve pennies to be

distributed yearly, on the anniversary of his death, to the lepers beside the Bridge of Glasgow, and others, who should appear in the churchyard of the Lady College to say orisons for his soul —"leprosis extraneis et commorantibus juxta Pontem Glasguensem comparentibus in cimiterio prefecto Ecclesie Collegiate oraturis Deum."—(Lib. Coll. Nostre Domine Glasguensis, p. 51.) The Tron Kirk or Ladye College was on the north side of the Clyde, and within the burgh of Glasgow, so that we have here proof that lepers in 1528 were not forbidden to enter the burgh. Contrast this feeling towards them with the feeling shown in the Leges Burgorum and Statuta Gilde of the twelfth and thirteenth centuries, printed in the Acta Parliamentorum Scotiæ, vol. i., and with the banishment of all lepers from Glasgow in 1593 and 1594, as instructed by the Kirk-Session Records, abridged in Wodrow's Biograph. Collect., vol. ii. part ii. p. 41.

Did this difference of toleration arise from some corresponding difference in the intensity or general diffusion of the disease?

LEPER HOSPITAL AT STIRLING.

The existence of a leper-house at Stirling is proved by entries in the Rotuli Scaccarii Regum Scotorum, MS. in the General Register House.

1463-4. "Et leprosis prope burgum de Striuelin ex elimosina Domini Regis percepientibus annuatim octo bollas farine—viij bolle farine."

Rot. Scacc., No. 251.

1466-7. "Et leprosis prope burgum de Striuelin ex elemosina Regis de anno compoti—viij bolle farine."

Rot. Scacc., No. 257.

1473-4. "Et leprosis prope burgum de Striuelyne ex elemosina Regis—iiij celdre farine."

Rot. Scacc., No. 266.

1497-9. "Et leprosis ad finem orientalem burgi de Striuelin percepientibus annuatim octo bollas ex elemosina Regis de dictis annis [7 Jul. 1497-10 Jul. 1499]—iiij celdre farrine auenatice."

Rot. Scacc., No. 314.

1499-1501. "Et leprosis ad finem orientalem burgi de Striuelin—j celdra farrine auenatice."

Rot. Scacc., No. 319.

1504-5. "Et leprosis de Striuelin in elimosina viij bolle ordei--viij bolle farrine."

Rot. Scacc., No. 329.

1505-6. "Allocatur compotanti in elimosina leprosis ad finem burgi de Striuelin de termino compoti—viij bolle farrine [auenatice]."

Rot. Scacc., No. 331.

1506-7. "In elimosina leprosis ad finem burgi de Striueling—viij bolle farrine."

Rot. Scacc., No. 333.

1511-12. "Et leprosis prope finem ville de Striueling in elemosina de anno compoti—viij bolle ordei."

Rot. Scacc., No. 347.

Observe how literally the situation of the leper-house, as described in the language of record "ad finem burgi," answers to Henryson's phrase—"yone hospitall at the tounis end."

LEPER HOSPITAL OF ABERDEEN.

The leper hospital of Aberdeen was in existence before 1363. A charter of that year describes certain lands as bounded by the king's highway leading from the burgh of Aberdeen *versus domos Leprosorum*; and again *a domibus dictorum Leprosorum*.—(*Registrum Episcopatus Aberdonensis*, vol. ii. p. 283.)

The use of the plural *domos* and *domibus* may possibly denote that there were two hospitals, as at Canterbury and elsewhere—one for men and one for women.

The Regent and the Privy Council interposed for the repair or restoration of the leper hospital of Aberdeen in 1574; in 1578 it was placed under the charge of a master; and in 1591 there were patients in it.—(Selections from Ecclesiastical Records of Aberdeen, pp. 20, 23. Aberd. 1846, Spald. Club.—Extracts from the Burgh Records of Aberdeen, 1570-1625, pp. 70, 71. Aberd. 1848, Spald. Club. Book of Bon Accord, p. 342.) There would seem to have been an outbreak of leprosy in Scotland about this time. It was in 1584 that the Magistrates of Edinburgh issued orders for finding a commodious place for a leper-house; in 1589 a leper-house was ordered to be built; and in 1591 there were five patients in it. (Sir James Simpson's Paper, Part I. p. 11.) So also in Glasgow, in 1586 the Kirk-Session of Glasgow gave orders that "the Lepper Folk's House or Spittal beyond the Bridge" should be visited, "to see how the same should be reformed." These orders were renewed in 1587; in 1588 "the yard of the Lepper House" was built; and in 1589 six lepers are found in the Hospital. (Wodrow's Biographical Collections, vol. ii. part ii. pp. 40, 41. Sir James Simpson's Paper, Part I. p. 10.) In 1593, "the Lepper House [of Glasgow] was charged to receive none but townsfolks, and all Leppers were banished the town;" and in 1594 the Kirk-Session "beseeches the magistrates to put all Leppers out of toun, for fear of infection."—

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If there were really a new access of leprosy in Scotland about 1580-1590, the disease seems speedily to have abated, at least in Aberdeen. In 1604, when a female leper applied for admission, "the Keys of the Hospital" were given to her, showing that the place was then empty and locked up.—(Selections from the Ecclesiastical Records of Aberdeen, p. 34.) In May 1610 it was ordered that two merks should be given by the Kirk-Session "to the Lepper woman laitlie put in the Lepper Hous, becaus she will not gett any of the rent of the said Hous till Martenes next;" denoting, apparently, that there was but one leper in the hospital at this time.—(Selections from the Ecclesiastical Records of Aberdeen, pp. 73, 74.) In 1612, a female leper, "being expellit furth of this toun, as ane not meit to dwell within the same," is allowed to take up her abode in the leper-house, although "sche be not borne and bred within this burght."—(Extracts from the Burgh Records of Aberdeen, vol. ii. (1570-1625), p. 308.) I do not observe record of any later patient. Fifty years afterwards, in 1661, both the leper hospital and its chapel (erected in 1519) were ruined if not razed to the ground, "and scarcelie is the name knowne to many."—(Gordon's Description of Bothe Touns of Aberdeene, pp. 18, 19. Aberd. 1842, Spald. Club.)

Mr. Albert Way, in the *Promptorium Parvulorum*, p. 298, says—"Heutzner, who visited England during the reign of Elizabeth, speaks of the English as very subject to the disease of leprosy." I have not Heutzner's book at hand, but it might be looked at to see if he speaks of leprosy being prevalent in England so late as the reign of Queen Elizabeth.

LEPER HOUSE OF RATHVEN.

The date of the first charter now extant of the leper-house at Rothfan (now Rathven) in the Enzie, was between the years 1224 and 1226, as can be shown from the list of witnesses who attest it. It may be remarked that the founder, John Bisset, is believed to have been a kinsman of that Manaser Bisset, sewer to King Henry II. of England, who founded the leper hospital of Mayden Bradley in Wilts, and whose wife Alice, an heiress, is said to have been herself a leper.— (*Monasticon Anglicanum*, vol. vi. part ii. p. 643, edit. ult.)

The hospital of Rathven still exists, but has long ceased to be occupied by lepers. Its tenants, in 1563, were simply "beidmen," and their number had been reduced from seven to six. They had 42 marks for their ordinary charges, and £7: 4s. for their habits. At the end of the last century every bedeman had half-an-acre of land for life, one boll of oatmeal yearly, and 9s. 6d. also yearly. At that time none of the bedemen lived in the hospital. But it was repaired not many years ago, and when the *New Statistical Account of Scotland* was published, two of the six bedemen resided in the hospital. It stands in the village of Rathven, in the district of the Enzie, and the shire of Banff.—(*Antiquities of the Shires of Aberdeen and Banff*, vol. ii. pp. 142-145. Aberd. 1847, Spald. Club.)

THE KNIGHTS OF ST. LAZARUS IN SCOTLAND.

In 1296, Friar William Corbet, master of the house of St. Lazarus of Harop (Frater Willelmus Corbet, magister domus Sancti Lazari de Harop), had letters for the restitution of his lands, directed to the Sheriff of Edinburgh (a sheriffdom which then included both Haddingtonshire and Linlithgowshire), from King Edward I. of England, as overlord of Scotland.—(*Rotuli Scotiæ*, vol. i. p. 25. London, 1814.)

In 1376, King Robert II. granted a charter to his eldest son, John, Earl of Carrick, Steward of Scotland, of the lands of Prestisfelde, St. Giles' Grange, and Spetelton, in the sheriffdom of Edinburgh, then in the King's possession by reason of the forfeiture of the Friars of Harehope, abiding at the faith and peace of the King and kingdom of England, contrary to the faith and peace of the King and kingdom of the Scots, (racione forisfacture Fratrum de Harehope ad fidem et pacem Regis et regni Anglie, ac contra fidem et pacem nostras existencium). The grant was to lapse when the Friars of Harehope became reconciled to the faith and peace of the King and kingdom of the Scots.—(Registrum Magni Sigilli Regum Scotorum, p. 132. Edin. 1814.)

These notices do not enable us to fix the position of Harop or Harehope, showing only that it had lands near Edinburgh. The only other notice of the house which I have observed rather perplexes the question than otherwise. It occurs in the history of the deprivation of English priests of their Scotch benefices, given by Fordun (Scotichronicon, lib. xi. cap. xxi.), and, with some variations, in a memorial of a Scotch monk claiming the Priory of Coldingham, about 1422, printed in the Priory of Coldingham, pp. 246-258. Lond. 1841, Surtees Soc. It is here said that Harehope, or Holme, was founded by King David, the son of St. Margaret; that certain lands in Lothian were annexed to it, in the neighbourhood of Edinburgh, namely Spitalton and St. Giles' Grange; that the monks (monachi) and laymen of the house, being Englishmen, conspired against the realm of Scotland; that King David therefore declared their lands forfeited, and bestowed them on Walter of Wardlaw, Bishop of Glasgow, for his life; that after Bishop Wardlaw's death the lands were given to his kinsman the Laird of Ricarton, by whose heirs they were possessed at the time this record was written. The memorial printed in the Priory of Coldingham expressly quotes the Ricarton charters—"Ut patet in cartis dicti domini de Ricarton exinde confectis." If these be still extant, they may remove the doubts which meanwhile may attach to the question whether the "Harehope or Holme" of Fordun and the Scotch Prior of Coldingham be certainly the same with the "Harehop" of the Rotuli Scotiæ in 1296, and the charter of King Robert II. in 1376. The possessors of the latter are described as Friars (fratres), of the former as monks (monachi)—an all-important distinction in that age, and not at all likely to be overlooked. Then, again, Fordun

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and the Scotch Prior of Coldingham say nothing of the grant of the possessions of Harehope to the Earl of Carrick,—if, indeed, they do not relate grants of these possessions incompatible with the charter of King Robert II. in 1376. On the other hand, we have, both in that charter and the notices of Fordun and the Scotch Prior of Coldingham, mention of the same lands of Spitaltoun and St. Giles' Grange as the possessions of Harehope.

The Spitaltoun here referred to may perhaps be identified with the "Spittle toun" of Upper Liberton, near Edinburgh. At the same time there is a Spitaltoun in the lands of Warristoun, near Ricarton.

In Spottiswood's Account of the Religious Houses in Scotland, it is said that the hospital of 169 St. Mary Magdalene, near Linlithgow, "was formerly governed by the Lazarites."—(Bp. Keith's Catal. of Scotch Bishops, p. 477, edit. 1824.) It is added that the hospital at Lanark "belonged likewise to this sect." It does not necessarily follow from the words of the charter in the Registrum de Neubotle (p. 149) that the Friars of St. Lazarus, there spoken of, had their Hospital in Linlithgow. The words are,—"Unam particam terre cum crofto de quarta parte illius tofti quod tenui de Fratribus de Sancto Lazaro in villa de Lynlitgu in burgagis scilicet illum particum terre que iacet ex orientali parte illius tofti." The object here seems to be rather to indicate the position of the piece of land as being in Linlithgow than to describe the Friars of St. Lazarus as being located there.

ENDOWMENTS OF SCOTCH LEPER HOSPITALS, Part I. p. 31.

Glasgow.—In 1593 the rental of the leper-house of Glasgow was £7: 15s. in money, and 18 bolls of meal.—Wodrow's Biographical Collections, vol. ii. part ii. p. 40; Glasg. 1848, Mait. Club.

Rothfan or Rathven.—In 1563 the money rent of the hospital of Rathven seems to have been £35: 4s. In 1798 the hospital had 3 acres of land, 6 bolls of oatmeal, and £3: 15s. of money rent. -Antiquities of the Shires of Aberdeen and Banff, vol. ii. pp. 143-145; Aberd. 1847, Spald. Club.

Number of Inmates in Leper Hospitals.

A passage in the will of "old John of Gaunt, time-honour'd Lancaster," in 1398, seems to support the opinion expressed at p. 18, that the leper hospitals in general did not contain many patients. - "Item, jeo devise a chescun maison de lepres deinz v. lieues entour Londres charges de v. malades, v. nobles en l'onur des v. plaies principalx de Nostre Seigneur, et a ceux qi sont meyns charges, trois nobles en l'onur de la Benoit Trinite."—(Testamenta Eboracensia, vol. i. p. 227; Lond. 1836. Surtees Soc.)

Dates of the Appearance of Leprosy in Great Britain.

Ireland.—Ireland is excluded from consideration, else proof of the existence of leprosy in that island in the end of the seventh century might be adduced. St. Finan, a native of Munster, who died between 675 and 695, "was surnamed Lobhar, or the Leper, from his having been afflicted for thirty years of his life with some cutaneous disorder."—(Dr. Lanigan's Ecclesiastical History of Ireland, vol. iii. pp. 83-88; Dublin, 1822.)

England.—As to England, says Mr. Albert Way, "it has been affirmed that leprosy was brought into Europe by the Crusaders; in the Anglo-Saxon vocabulary, however, which has been attributed to Aelfric, occurs the word 'Leprosus = hreofliz, oððe, licðrowera,' Jul. A, II. f. 123."— (Promptorium Parvulorum, vol. i. p. 297; Lond. 1843. Camden Soc.)

To the instances given by Sir James Simpson, Part I., p. 39, of the occurrence of leprosy in England before the first Crusade, may be added the case of a noble Englishman of the south of England-nobili viro sed leproso-miraculously cured at the tomb of St. Cuthbert at Durham, as related by Reginald of Durham from the recital of a fellow-monk, Turold-"qui se hæc audisse a veteranis canonicis asseruit, in quorum presentia et aspectu hoc gestum fuit." The canons here spoken of were ejected from Durham in 1083—thirteen years before the first Crusade. Reginald of Durham wrote before 1195. He speaks of the disease thus:—"Accidit ut lepræ morbum passim eam enutriendo incurreret, ita ut, modico interposito tempore, tota vultus illius superficies horribilis videntibus appareret. Suis etiam quandoque, sanie ulcerum difluente, factus est evitabilis; et in consortii communione nonnullis effectus intolerabilis." Yet, when he journeyed from the south of England to the tomb of St. Cuthbert he was "nobilibus juvenum ministrantium, amicorum et parentum, constipatus agminibus."—(Reginaldi Dunelmensis Libbellus de Beati 171 Cuthberti Virtutibus, cap. xix. pp. 37-41; Lond. 1835. Surtees Soc.)

The disease was probably not unknown among the Anglo-Saxons, yet the silence of their laws (the word Leper is not to be found in the index to Thorpe's Collection) with regard to it, contrasts strongly with the frequent enactments for its prevention in the twelfth and thirteenth centuries both in England and Scotland, and (if we allow the Welsh laws the antiquity which is claimed for them) in the tenth and eleventh centuries in Wales. May not the anomaly be explained by supposing that the disease broke out with new severity about the beginning of the twelfth century?

Scotland.—No trace of leprosy is to be found in Adamnan's Life of St. Columba, written in the seventh century. But of one of St. Columba's contemporaries—St. Kentigern of Glasgow, who died about 600—it is related that in that city he cleansed lepers—"mundabat leprosos." These are

the words of his biographer, Joceline of Furnes, who wrote towards the end of the twelfth century.—(*Vit. S. Kentigerni*, cap. xxxiv.; Pinkert. *Vit. Antiq. Sanct. Scotiæ*, p. 270.) The same biographer relates that at St. Kentigern's tomb in Glasgow lepers were cured—"leprosis cutis munditia restituitur."—(*Vit. S. Kentigerni*, cap. xliv.; Pinkert. *Vit. Antiq. SS. Scot.*, p. 295.)

So also it is related of St. Boniface of Rosemarky, who appears to have flourished in the beginning of the eighth century, that he cleansed lepers—"leprosos mundabat." These are the words of the Breviary of Aberdeen (Proprium Sanctorum pro tempore hyemali, fol. lxx.), printed in 1510, but quoting and using older materials.

St. Aelred of Rievaux, who died in 1166, relates that lepers were cleansed at the tomb of St. Ninian at Whithern in Galloway—"ad ejus namque sacratissimum tumulum curantur infirmi, mundantur leprosi."—(*Vit. S. Ninian*, cap. xi.) He mentions specially two cases:—

"Visi sunt præterea venire in civitatem viri duo leprosi. Qui præ sumptuosum æstimantes cum lepræ contagio scabiem tangere, quasi delonge poscunt auxilium. Accedentes autem ad fontem, et sanctum arbitrantes quidquid sanctus contigerat Ninianus, lavacio illo se abluendos putarunt.... Mundantur leprosi tactu lavacio, sed meritis Niniani."—(Vit. S. Niniani, cap. xi. § 4; Pinkert. Vit. Antiq. SS. Scot., pp. 22, 23.)

All these writers—St. Aelred of Rievaux, Joceline of Furnes, and the compiler of the Aberdeen Breviary—wrote so long after the Saints whose miracles they commemorate, that their testimony cannot avail as proof in itself of the existence of leprosy in Scotland in the seventh and eighth centuries. Besides, they speak only in general terms—"leprosos mundabat,"—which may be little or nothing more than a rhetorical flourish. But the passages which have been quoted are at least sufficient to demonstrate that in the twelfth century the existence of leprosy in Scotland from a remote age was a matter of unquestioned belief. Of the general prevalence of the disease on this side of the Tweed in that and the subsequent age, there is abundant evidence elsewhere in the Leges Burgorum and other ancient capitularies of Scotch law.

The canon of the Scotch Church, "De monitionem faciendo leprosis," printed in the Registrum Episcopatus Aberdonensis, vol. ii. p. 32, and elsewhere, belongs to the thirteenth century, probably to the latter part of that century. If, as seems to be the case, it be merely a diocesan statute, and not a statute for the whole of Scotland, it will only show more forcibly the general prevalence of the disease. The diocese for which it was enacted was apparently Aberdeen, containing at that time about eighty parishes, and the number of lepers must have been great before it could be found necessary to guard against the injury done to the parochial clergy by the withdrawal of the dues and oblations of the inmates of the leper hospitals.

LEPROSY IN WALES.

The Venedotian Code (the Laws of the Women)—

"Should her husband be leprous, or have fetid breath, or be incapable of marital duties; if on account of one of these three things she leave her husband, she is to have the whole of her property."—(Ancient Laws and Institutes of Wales, p. 39. Lond. 1841.)

The Dimetian Code (of Women)—

"For three causes, if a woman desert her husband, she is not to lose her agweddi [dowry]; for leprosy, want of connection, and bad breath."—(Ancient Laws and Institutes of Wales, p. 255.)

The Laws of Howel Dda, according to the Gwentian Code (of Women)—

"For three causes a woman loses not her agweddi, although she may leave her husband; to wit, on account of leprosy, bad breath, and default of connection."—(Ancient Laws and Institutes of Wales, p. 365.)

These citations are from Aneurin Owen's translation of the Welsh text of the Welsh laws, published in parallel columns with the Welsh text by the Record Commissioners. These laws are of uncertain date; they are commonly attributed to Howel Dda, but bear interpolations or alterations of much later date. The oldest MSS. of them are of the twelfth century.

I add the passages regarding lepers which occur in the Latin versions of the Welsh Laws, the oldest MSS. of which are of the thirteenth century:—

"Tribus de causis potest femina habere suum egwedy [suam dotem], licet ipsa uirum relinquat; scilicet, si sit leprosus uir; et si habeat fetidum anhelatum; et si cum ea concumbere non possit."—(*Liber Legum Howel Da*, lib. ii. cap. xx., sec. xxxi. *Ancient Laws* 174 and *Institutes of Wales*, p. 796; Lond. 1841.)

"Tribus de causis habebat femina suum aguedi [suam dotem], licet ipsa virum suum relinquat; id est, si leprosus sit vir; et si fetidum hanelitum habueret; et si cum ea coire non possit."—(Liber Legum Howel Da, lib. ii. cap. xxiii. sec. xiii. Ancient Laws and Institutes of Wales, p. 827.)

"Leprosi cum seculum dimittunt ebedyw [i.e. heriot seu caulp] dare debent dominis suis."—
(Liber Legum Howel Da, lib. ii. cap. xxii. sec. ix. Ancient Laws and Institutes of Wales, p.797.)

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The Dimetian Code (of Murder)—

"If there be a relative of the murderer, or of the murdered, who is an ecclesiastic in holy orders, or in an ecclesiastical community, or leprous, or dumb, or an idiot, such neither pays nor receives any part of galanas" [assythment, or fines for murder].—(*Ancient Laws and Institutes of Wales*, p. 200.)

The Dimetian Code (Triads)—

"There are three persons, no one of whom, by law, can be a qualified judge; one of them is, a person having a defect, as one who is deaf, or blind, or leprous, or an insane person," etc. etc.—(*Ancient Laws and Institutes of Wales*, p. 200.)

The next class of passages is taken from what are called the "Anomalous Welsh Laws," which, in the state they are now found in, are supposed to be of the sixteenth century:—

"If a person become a surety, and before the termination of the suit he should become leprous, or a monk, or blind, he must fulfil his promise while he lives."—(Ancient Laws and Institutes of Wales, p. 403.)

"There is to be no objection to a pleader, but for having violated his religious profession, and quitting the world, or his becoming a separated leper."—(Ancient Laws and Institutes of Wales, p. 516.)

"Three sons who are not to have patrimony—The son of a priest, the son of a leper, and the son of a man who had paid his patrimony as blood land. The son of a leper is not to have it, because God has separated him from worldly kin—that is, such son as a leper may have after being adjudged to a lazar-house; and a son a priest shall have after taking priestly orders; and the third has no patrimony, as his father, prior to him, had determined it by law."—(Ancient Laws and Institutes of Wales, p. 556. See also p. 603.)

"Three persons to whom saraad [fine for insult] is not due—A leper, a natural fool, and an alltud [an alien serf] who is not married to an innate Cymraes: And, nevertheless, there is worth in law attached to each of them, and whoever shall ill-use them and injure them in person and property is subject to a dirwy [fine or punishment].—(Ancient Laws and Institutes of Wales, p. 656.)

"Three persons who are not to be invested with the judicial function—An inefficient person, as one that is deaf, or blind, or maimed, or leprous, or insane, or mute," etc. etc.—(*Ancient Laws and Institutes of Wales*, p. 671.)

"A leper cannot be a pleader."—(Ancient Laws and Institutes of Wales, p. 764.)

The Welsh term for leper is *Clafwr*, obviously an adaptation of the Latin word.

It should be kept in view that the license which the Welsh laws give to the wife to leave a leprous husband is in direct contradiction to the canon law as declared by Pope Alexander III. to the Archbishop of Canterbury in 1180:—"Mandamus quatenus si qui sunt in provincia tua viri vel mulieres qui lepræ morbum incurrunt, ut uxores viros et viri uxores sequantur, et eis conjugali affectione ministrent, sollicitis exhortationibus inducere non postponas. Si vero ad hoc induci non poterunt, eis arctius injungas ut uterque altero vivente continentiam servet. Quodsi mandatum tuum servare contempserint, vinculo excommunicationis adstringas."—(Corpus Juris Canonici, vol. ii. col. 656. Edit. 1747.)

The same Pope, in the same year, decreed that lepers might marry:— "Leprosi autem si continere nolunt, et aliquam quæ sibi nubere velit invenerint, liberum est eis ad matrimonium convolare." He settled another and more delicate point:—"Quodsi virum sive uxorem divino judicio leprosum fieri contigerit, et infirmus a sano carnale debitum exigat, generali præcepto Apostoli, quod exigitur est solvendum: cui præcepto nulla in hoc casu exceptio invenitur."—(Corpus Juris Canonici, vol. ii. col. 656. Edit. 1747.)

Pope Urban III. found, in 1186, that subsequent leprosy was a sufficient reason why betrothed persons should not be compelled to marry.—(*Corpus Juris Canonici*, vol. ii. col. 657. Edit. 1747. See also col. 344.)

NOMENCLATURE OF THE DISEASE.—The terms "Leprosi" and "Elephantuosi."

The "MS. History of the Durham Cathedral and Diocese," referred to in Sir James Simpson's Paper, Part II. p. 77, was printed in Wharton's *Anglia Sacra* in 1691, and more perfectly in the *Historiæ Dunelmensis Scriptores Tres*, by the Surtees Society in 1839. The passage quoted stands thus (pp. 11, 12):—

"Præterea Hospitale de Schyreburne construxit, et elefantiosos in episcopatu suo circumquaque collectos, ibidem instituit, aptisque eorum usibus habitaculis ampliant; et ne 177 quid sollicitudini caritatis deesset, ad eorum perpetuam sustentationem et nonnullorum susceptionem terras et ecclesias concessit et confirmavit. In geminum creditur esse bonum, quod et pauperum necessitatibus liberrime prospexit, et societatem immundorum a cohabitacione mundorum segregavit."

"Elephantuosi" is here put as equivalent to "Leprosi." In the Chronicle of Battle Abbey, written about 1180-1200, some slight distinction seems to be implied between the words. The writer is

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speaking of the Abbot Walter, who died in 1171:-

"Leprosorum maxime et elephantiosorum ab hominibus ejectioni compatiens, eos non solum non abhorrebat, verumetiam in persona propria eis frequenter ministrans, eorum manus pedesque abluendo fovebat, et intimo caritatis pietatisque affectu blanda oscula imprimebat."—(Chronicon Monasterii de Bello, p. 135; Lond. 1846. Anglia Christiana.)

But, after all, the two terms may here be used merely rhetorically. There are other instances of such a tautology. Ducange (t. iii. coll. 49, 50), quotes *Elephantiæ lepra* and "Leprosi enim vere atque Elephantia debent habere." At the same time he cites from an old Latin-French Glossary, "Elephancia = une maniere de mesclerie." In the same way some writers distinguish between *mesellerie* and *cordrerie*. On the other hand, the *Catholicon Anglicum*, an Anglo-Latin Dictionary of the year 1483, has "A Lepyr = lepra, elefancia, missella."—(*Promptorium Parvulorum*, vol. i. pp. 297, 298. Lond. 1843. Camden Soc.)

DESCRIPTION OF A LEPER.

Reginald of Durham (sometimes also called Reginald of Coldingham), a Benedictine monk, who wrote before 1195, gives the following description of a leper girl who had been for three years in the hospital at Budele, near Darlington, in the bishopric of Durham:—

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"Nempe omnem facierum illius superficiem laceræ putredinis cicatrix nunquam sana totam obduxerat, et falliculis [*I.* folliculis] crudæ carnis sparsim patentibus et hiulco meatu saniem venenoso meatu rimantibus, horridam cunctis visu reddiderat. Labiorumque ipsius extrema circumquaque marcentia diriguerant, quia particulares quasdam ejus regiones usque ad profunda quædam dimensionum dispendia vis sæva diutini languoris consumendo exederat. His itaque aliisque illius aegritudinus modis corpus ejus dilaceratum periit," etc. —(*Libellus de Vita et Miraculis S. Godrici*, p. 456. Lond. 1847. Surtees Soc.)

The leprosy is cured by a miracle at the tomb of S. Godric at Finchale, when the appearance of the face is thus described:—

"tota sana comparuit, omnisque lepræ prioris fœda scabies jam recesserat, labiaque illius sana ac tenua, facies vero tota incontacta ac clara, velut parvuli cujusdam triennis apparebat. Quæ una cum matre sospes domum rediit, quæ illo prius tota lepræ pustulis et sanie contracta pervenit."

Among other witnesses to the miraculous cure, Ralph Haget, sheriff of Durham,

"dicebat quod facies ejus cutis licet sana, tenera sit et clara, tamen ubi cicatrices ulcerum quondam fuerant illa superficies videtur aliquantulum comparere subrufa; labiorum vero extrema quæ frustris carneis pinis fuerant valliculata, tota sunt plena atque rotunda, sed aliquanto altius prominentia."

This was confirmed also by Norman the priest of Hailtune, who got the girl into the lepers' hospital at Badele, near Darlington, and who subsequently showed her to his parishioners in his church.—(*Libellus de Vita et Miraculis S. Godrici*, pp. 457, 458.)

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The same writer, in the same work, gives other descriptions of leprosy. A young shepherd of the north of England "lepra percussus cunctis horrori fuit." He is miraculously cured—"tumorque omnis cum deformi rubore fugatus abscesserat, novaque coloris insoliti superficies in facie et toto corpore ipsius relucebat; et nulla omnino pustula vel cicatricis macula in ipso residendo comparuit."—(Lib. de Vit. et Mirac. S. Godrici, p. 431.)

A woman—"diutino tempore toto corpore lepræ fuerat contagio maculisque cum pustulis horrende perfusa ... cunctis horrida et detestenda, nulli pene ad videndum tolerabilis fuerat."— (*Lib. de Vit. et Mirac. S. Godrici*, p. 431.)

RANK OF THE PERSONS ATTACKED BY LEPROSY.

In 1203, a piece of land in Sudton in Kent was in dispute in the King's court between two kinswomen—Mabel, the daughter of William Fitz Fulke, and Avicia, the widow of Warine Fitz Fulke. Among other pleas, it was urged by Avicia, that Mabel had a brother, and that his right to the land must exclude her claim. Mabel answered that her brother was a leper—"E contra dicit Mabilla quod leprosus est." The judgment is not recorded; but the notice shows two things—(1) The doctrine of the civil death which followed leprosy; (2) The comparatively good condition of the person who in this instance was smitten with leprosy.

The case is recorded in the *Placitorum in Domo Capitulari Westmonesteriensi asservatorum Abbreviatio*, p. 39. Lond. 1811. Record Commission.

In 1280 it was certified to King Edward I. that Adam of Gangy, brother and heir of Ralph of Gangy, deceased, of the county of Northumberland, holding land of the king in chief, was struck with leprosy (*leperia percussus*), so that he could not conveniently repair to the king's presence to pay his homage to the king (quod ad presenciam Regis ad homagium suum Regi faciendum commode accedere non potest). It was therefore ordered that Thomas of Normanville, the elder, should in lieu and turn of the king take the leper's fealty for his lands.—(*Rotulorum Originalium in Curia Scaccarii Abbreviatio*, vol. i. p. 33. Lond. 1805.)

Here, again, we see leprosy attacking a person of comparatively high position. But here the disease neither inferred civil death nor excluded the leper from all intercourse with his fellows.

In 1313, Nicholas the Leper (Nicholaus le Lepere) and William the Leper (Willielmus le Lepere) are manucaptors or pledges that John de la Poile, knight of the shire returned for Surrey, will do his duty in Parliament.—(*Palgrave's Parliamentary Writs*, vol. ii. pp. 89, 113.)

Here we have a family of note bearing the name of Leper, derived no doubt from the leprosy of an ancestor.

Before 1083 a miraculous cure of leprosy is said to have been effected at the shrine of St. Cuthbert at Durham, on the person of a noble of the south of England—"vir quidam in longinqua Australium Anglorum regione qui multæ nobilitatis gratia inter comprovintiales preditus erat. Hic tam corporis sani virtute gaudebat, quam omni prosperitatis affluentia; et divitiarum gloria cæteros excedebat," etc. etc.—(Reginaldi Dunelmensis Libellus de Beati Cuthberti Virtutibus, pp. 37-41. Lond. 1835. Surtees Soc.)

The same writer, in another work, relates the cure of three lepers at the tomb of St. Godric of Finchale. One, a male, was a shepherd; the other two were women, apparently of the middle or lower ranks.—(*Reginaldi Dunelmensis Libellus de Vita et Miraculis S. Godrici*, pp. 430, 431, 455-458. Lond. 1845. Surtees Soc.) The shepherd was a youth (*juvenis*); one of the women was a girl (*puella*).

LEPERS AMONG THE CLERGY.

Another illustration of the prevalence of leprosy among the English clergy, alluded to at p. 106, Part III., is supplied by the will of Richard Basy, of Bylburgh, in Yorkshire, in 1393:—"Item lego presbiteris cæcis vel leprosis seu aliter languentibus, qui non valent celebrare circa divinum officium celebrandum, et aliis pauperibus eodem modo languentibus et jacentibus, xl. solidos."— (*Testamenta Eboracensia*, vol. i. p. 192. Lond. 1836. Surtees Soc.)

Pope Lucius III. decreed in 1181 that rectors of churches who were struck with leprosy should serve their cures by coadjutors; and Pope Clement III., in 1190, ordained that leprous priests should be removed from their priestly office, but should be supported from the fruits of their benefices.—(*Corpus Juris Canonici*, vol. ii. coll. 447-448. Edit. 1747.)

CASE OF KING ROBERT BRUCE.

The silence of Wyntoun, Fordun, and our other early Scotch chroniclers, as to the disease of which King Robert Bruce died, may not improbably be explained by their reluctance to associate the heroic monarch with an odious and degrading malady. But the King's metrical biographer names his disease, or at least its origin; and it would be interesting to know if that disease can be identified with leprosy.

"For a malice him tuk sa sar,
That he on na wiss mycht be thar.
This malice off enfundeying
Begouth; for, through his cald lying,
Quhen in his gret myscheiff wes he,
Him fell that hard perplexite."

-(Barbour's Bruce, pp. 406-407. Dr. Jamieson's edit. 1820.)

In Mr. Cosmo Innes' later edition the passage stands thus—

"For ane male es tuk him sa sar That he on na wis mycht be thar. His male es of ane fundying Begouth, for throu his cald lying, Quhen in his gret mischef was he, Him fell that hard perplexite."

—(Barbour's Bruce, p. 469. Aberd. 1856. Spalding Club.)

What is "enfundeying," as Dr. Jamieson calls it, or "ane fundying," as Mr. Innes makes it? Dr. Jamieson glosses it as "perhaps asthma," but on what ground I do not see. At the same time I am unable to suggest any interpretation of the term. Can medical nomenclature supply none?

Contagiousness of Leprosy.

To the list of persons (Part III. pp. 133, 134) who tended or even kissed lepers without being smitten with the disease, may be added Walter de Luci, Abbot of Battle, in Sussex, from 1139 to 1171, who often washed and kissed the feet and hands of lepers—eorum manus pedesque abluendo fovebat, et intimo caritatis pietatisque affectu blanda oscula imprimebat.—(Chronicon Monasterii de Bello, p. 135. Lond. 1846. Anglia Christiana.)

The story (Sir James Simpson's Paper, Part III. p. 134) quoted from Matthew Paris, about the good Queen Maud, is to be found in an earlier writer, St. Aelred of Rievaux, from whose *Genealogia Regum Anglorum* Matthew Paris, or rather Roger of Wendover, borrowed it. It may be remarked, generally, that late editors have shown that all that part of Matthew Paris' history which is previous to the year 1235 is really the work of Roger of Wendover. As such it has been

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LIST OF LEPER HOSPITALS.

Oxford, St. Bartholomew.—The date of foundation of this hospital is left blank in the list of British Leper Hospitals, p. 160. It certainly existed before the 24th November 1200, when the lepers of St. Bartholomew of Oxford had letters of protection from King John.—(Rot. Chart. in Turr. Lund. vol. i. p. 99.)

Berington.—On the 20th July 1199 King John confirms to the canons regular of Lantony, among their other possessions, the half of Berington, which had been given to them by the Earl Roger for the procuration of thirteen lepers—"Ex dono Rogeri Comitis aliam dimidietatem de Berington ad procurationem tredecim leprosorum."—(Rot. Chart. in Turr. Lund. vol. i. p. 7.) "Procuratio" seems to be used here in the sense of necessaria ad victum et vestitum.—(See Ducange, t. v. col. 885.)

Carlisle.—The lepers of Carlisle had letters of protection from King John on 25th February 1201. —(Rot. Chart. in Turr. Lund. vol. i. p. 101.)

Badele, near Darlington, in the county of Durham.—The reception of a leprous girl into the hospital of Badele, about three miles from Darlington, is related by Reginald of Durham in his Libellus de Vita et Miraculis S. Godrici, p. 456. Lond. 1845. (Surtees Soc.) The work was written before 1195.

Canterbury.—The date of foundation of this hospital is left blank in the list of British Leper Hospitals, p. <u>158</u>. It certainly existed before the death of Archbishop Lanfranc in 1089, for the contemporary historian of Canterbury expressly says it was built by him:—"Ligneas domos in devexo montis latere fabricans, eas ad opus Leprosorum delegavit, viris in istis a fœminarum societate sejunctis."—(*Eadmeri Hist. Novorum*, p. 9. Lond. 1623.)

York.—One leper hospital at York is noted in the list of British Leper Hospitals, at p. 161. There were four. The will of Henry of Blythe, painter of York, in 1365, has this bequest:—"Item lego quatuor domibus Leprosorum civitatis Eboracencis equaliter ij solidos dividendos."—(Testamenta Eboracensia, vol. i. p. 75. Lond. 1836. Surtees Soc.) The will of Master Adam Wigan, rector of St. Saviour's, York, in 1433, has—"Item lego cuilibet domui quatuor domorum leprosorum iij s. iiij d."—(Test. Ebor. vol. ii. p. 26. Lond. 1855. Surtees Soc.) The will of Richard Russell, citizen and merchant of York, in 1435, shows that at York, as elsewhere, the leper hospitals were beyond the city walls:—"Et cuilibet leproso in quatuor domibus Leprosorum in suburbiis Ebor., v solidos."—(Test. Ebor. vol. ii. p. 55.) Again, in the will of William Gyrlyngton, draper of York, in 1444:—"Item lego quatuor domibus Leprosorum in suburbiis Ebor., xx solidos per equales portiones."—(Test. Ebor. vol. ii. p. 93.) The lepers of York have similar bequests in 1446, in 1454, and 1441.—(Test. Ebor. vol. ii. pp. 115, 182, 187.) I do not observe any legacies to them after 1454.

Beverley.—The leper hospital here, as at York, Canterbury, Glasgow, Stirling, Aberdeen, etc., stood in the suburbs. The will of John Brompton, merchant of Beverley, in 1444, has this legacy—"Item leprosis extra barras boriales Beverlaci ij s. et dimidiam celdram carbonum."—(Test. Ebor. vol. ii. p. 97.)

Newcastle-upon-Tyne.—The will of Roger Thornton, merchant of Newcastle, in 1429, has this legacy—"Item to the Lepre men of Newcastell, xl s."—(Northern Wills and Inventories, part i. p. 78. Lond. 1835. Surtees Soc.)

Winchester.—The existence of a leper hospital at Winchester is shown by the will of Martin of Holy Rood, master of the hospital of Sherborn, in 1259 [referred to in Sir James Simpson's Paper, Part I., p. 36]—"Fratribus Leprosis Wyntonie, ij solidos."—(Northern Wills and Inventories, part i. p. 10.)

Lynne, Norfolk.—Five leper hospitals at Lynne, in Norfolk, are enumerated in the list of British Leper Hospitals, p. 160. There seem to have been six. Mr. Albert Way, in a note to the Promptorium Parvulorum, vol. i. p. 297, Lond. 1843 (Camden Soc.), cites, from Parkins' Account of Lynne, in Blomf. Norf. iv. 608, the bequest of Stephen Guybor, in 1432, to every house of lepers about Lynn, "namely, at West Lynn, Cowgate, Herdwyk, Setchehithe, Mawdelyn, and Geywode." Four of these may be identified with those in the list, p. 160. "West Lynn" and "Cowgate" are the same in both lists; "Mawdelyn" is "St. Mary Magdalene's;" and "Setchehithe" is "Setch Hithe."

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ANCIENT GREEK MEDICINE VASES.

NOTES ON SOME ANCIENT GREEK MEDICAL VASES FOR CONTAINING LYKION; AND ON THE MODERN USE OF THE

SAME DRUG IN INDIA.

The physicians and surgeons who, in ancient times, pursued their medical profession at Rome, and in different parts of the Roman empire, have left us various palpable relics of their craft. Thus, in the ruins of Pompeii and Herculaneum, numerous surgical instruments, pharmacy and drug-bottles, etc., have been found; and elaborate drawings and accounts of these have lately been published by Savenko, Vulpes, Renzi, and others. On the sites of the old Roman cities and colonies throughout Western Europe, various surgical and medical relics of the same kind have been at different times discovered; as lancets, probes, cupping-glasses, scalpels, oculist-stamps, phials, etc. But of medicine, as it was still earlier exercised in Greece and in the Grecian colonies, few such tangible vestiges remain. We have, it is true, had carefully transmitted down to us the imperishable professional writings of Hippocrates and others of the purely Greek school; but time has spared few, or indeed almost no, material remnants of the professional instruments or vessels used by the ancient Greek surgeons and physicians.

Perhaps the great rarity of such archæological remains may serve as some apology for the present notice of some specimens of ancient Greek medical vessels or vases. Besides, the vases which I wish to describe are interesting in other points of view. They are all of them intended to contain one and the same drug, as shown by the inscriptions on their exterior; this drug was derived by the ancient Greeks chiefly from Hindostan,—one of the many points of evidence of the former freedom and frequency of the traffic between the south of Europe and India; and at the present day the same drug is still employed extensively and successfully, by the native practitioners of the East, for the very purposes for which it was, in former times, used by the

medical practitioners of Greece.

The drug to which I allude is the *Indian Lycium* or *Lykion*, the Λ YKION IN Δ IKON of Dioscorides. In modern collections and writings, I know of four ancient vases or drug-bottles intended to contain this valued eye-medicine. If our museums, however, were properly searched, perhaps various other Greek vases, for the same or for similar medicines, would be detected. The four specimens of bottles or vases for *Lycium*, to which I have adverted, are the following:—

1. In the collection of Greek antiquities contained in the British Museum is a small vase, made of lead, and of the exact form and size represented in Plate, Fig. 1. The vase is of a sub-ovoid form, and is somewhat above an inch in height, and about three quarters of an inch in breadth. An inscription, preceded by the ornament of a small tripod, encircles the middle of the vase. The inscription is in Greek letters, of which the following is a correct copy:—

AYKIONA APAMOYSAIOY

This inscription may be read as $\Lambda YKION$ $\Pi APAMOY\Sigma AIOY$ —the Lycium of Paramusaeus—as suggested to me by Mr. Birch, who first had the kindness to direct my attention to this vase, or, and perhaps more correctly, it may be rendered $\Lambda YKION$ ΠAPA $MOY\Sigma AIOY$ —the Lycium sold by Musaeus. Mr. Birch informs me that he thinks he met with the name of Paramusaeus as a medical practitioner in Fabricius' Bibliotheca Græca. I have not been fortunate enough to detect the name in question, notwithstanding some considerable search through that learned work. On the other hand, the name of Museus, or Musaeus, is well known in Athenian biography. (See Fabricius' Bibliotheca, vol. i. pp. 120-133.) I should, perhaps, have already stated, that the vase in question was sent to the British Museum, among a collection of antiquities from Athens.

2. Through the kindness of M. Sichel of Paris, I am enabled to give, in Plate, Fig. 2, an engraving of a second *Lycium* jar, not hitherto published, of nearly the same dimensions as the specimen contained in the British Museum. This second specimen is not made of lead, but of pottery-ware. It bears upon its side the inscription:—

HPAKΛΕΙ°Y ΛΥΚ°N

This inscription—"the *Lycium of Heracleus*"—has the word AYKON spelt without the I; errors of this kind being, as is well known, very common in old Greek and Roman letterings.

3. M. Millin of Paris published, nearly forty years ago, an account of a similar vase, found at Tarentum, a well-known Greek colony and settlement (*Description d'un Vase trouvé à Tarente*. Paris, 1814). This vase is slightly larger than either of the above, but somewhat mutilated. It is made of clay, and has on its front, in Greek letters, the inscription *Lycium of Jason*.

IAC°N°C ΛΥΚΙ°N

The form and size of this jar are represented in Plate, Fig. 3. M. Millin fancied that probably this small vase or jar was intended as a child's toy; but two years after he wrote, M. Tochon d'Anneci gave an account of a similar jar, and first suggested that it must have been destined to contain a collyrium or an ointment—destine à contenir un collyre ou un onguent. (See his Dissertation sur l'Inscription Grecque, et sur les Pierres Antiques, etc., Paris, 1816.)

4. The vase described by M. Tochon is delineated in Plate, Figs. 4, 5, and 6. It is of the same material, and nearly of the same size, but less mutilated than that previously delineated by M. Millin. It presents also in front the same inscription (see Fig. 5), namely—

IAC°N°C ΛVKI°N

M. Tochon believes, further, that this vase was found, like that of Millin, at Tarentum. At least, it was originally given to M. Tochon by a person who had resided for a long time in that city, and who had himself acquired the specimen there. M. Sichel has reason to think it not improbable that his specimen (Fig. 2) also came from Tarentum. And it is perhaps not uninteresting to remark, that Galen, Celsus, and various other old medical authors, repeatedly mention a Greek physician of the name of Heracleus or Heraclides, who practised at Tarentum, and was the author of various treatises on the Materia Medica, etc. (See an enumeration of his writings, etc. in Kühn's *Opuscula*, vol. ii., p. 156, etc.) Among his large collection of collyria and medicines for diseases of the eye, Galen gives formulæ for making different eye medicines bearing the name of Heracleus, as, for example, two "agglutinatoria pilorum Heraclidæ Tarentini" (Ἡρακλεῖδου Ταραντίνοῦ). See Kuhn's edition of *Galen*, vol. xii. p. 741.

The medicine mentioned in the preceding inscriptions, the LYCIUM or AYKION, was a drug which enjoyed much favour among the ancients; and it was supposed to be possessed of great medical value and virtues. It was used principally as an astringent remedy to restrain inflammatory and other discharges. Dioscorides, Galen, Oribasius, and Paulus Ægineta, dilate upon the medicinal properties of the Lycium. Dioscorides recommends it as an astringent for the cure of various complaints, as obscurities of the cornea, psoriasis, and pruritus of the eyelids, purulent ears and

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tonsils, ulcers of the gums, chapped lips, fissure of the anus; in cæliac and dysenteric affections, both in draughts and clysters; in hæmoptysis and coughs; in female fluxes, hydrophobia, and so forth. The Indian variety, he states, cures inflammation of the spleen and jaundice, prevents menstruation, purges water, and is a counter-agent to deadly poisons. (Dr. Adam's Trans. of *Paulus Ægineta*, vol. iii. p. 234.) Two varieties of Lycium were in use—one obtained from Lycia and Cappadocia, etc., and the other from India. The latter was regarded as by far the most valuable. Thus, when treating of the two varieties of Lycium, Galen mentions the Indian as the most powerful for all purposes—τὸ Ἰνδικὸν ἰσχῦρότερόν ἐστιν εἰς ἄπαν. (*De Simp. Medicam.* lib. vii. 64.) Such late writers as Paulus Ægineta, Ætius, etc., allude also to the superior value of the Indian variety. For instance, in Roxarius' edition of *Oribasius* it is stated that the Indian Lykion "præstat ceteris et est efficacius." (*Medicin. Collect.* lib. xi.) Avicenna, the celebrated Arabian physician, who gives a long account of the medical uses, etc., of Lykion, remarks, "Magis vincens, secundum existimationem, est quod Indicum est," etc.; and he compares its properties with that from Mecca. (*Canon Medicinæ, Lib.* ii. cap. 398.)

Of all the uses to which the Lycium was applied in medicine, by far the most important was the employment of this drug, and particularly of the Indian variety, as a collyrium or local application to the eye, in the treatment of different varieties and forms of ophthalmic inflammation. Thus Scribonius Largus, the reputed body physician to the Emperor Claudius, and one of the most original among the ancient medical writers, declares that "he attributes to no collyrium whatever such great efficacy as to the genuine *Indian Lycium* used by itself. For if," says he, "near the commencement of ophthalmia, any one anoints himself with this collyrium, he will immediately—that is, on the same day—be freed from present pain and future swelling. It is unnecessary (he adds) to dilate on its virtues, for a person experienced only in other collyria would scarcely credit the effects of this simple drug." (*De Composit. Medicamentorum*, cap. 3.) Marcellus lauds its power in nearly the same words. (*De Medicam. Lib.* cap. 8.)

The Lykion, or Lycium, is still used extensively by the native medical practitioners of India, under the Hindoo name of Rusot or Ruswut. In a learned article on the nature of the λύκιον of Dioscorides, contained in the Transactions of the Linnæan Society, vol. xvii. p. 82, Professor Royle has shown that the Indian Lycium or Rusot is an inspissated extract, prepared from the wood or roots of several species of Berberis, as the Berberis lycium, aristata, etc., growing on the mountains and plains of Upper India, and principally procured from Nuggur-kote, near Lahore. 366 "On inquiring," says Dr. Royle, "in the shops of the druggists in the bazaars of India, I everywhere learned that both the wood (dar-huld) and the extract Rusot were imported from the hills into the plains, and that large quantities continued to be brought from Nuggur-kote as well as other places." And he adds,—"The Rusot is at the present day procurable in every bazaar in India, and used by the native practitioners, who are fond of applying it both in incipient and chronic inflammation of the eye; and in the latter state both simply and in combination with opium and alum. It is sometimes prescribed by European practitioners; and I have heard that it was found very efficacious by Mr. M^cDowell in the ophthalmia of soldiers who had returned from the expedition to Egypt. I have myself occasionally prescribed it; and the native mode of application makes it particularly eligible in cases succeeding acute inflammation, where the eye remains much swollen. The extract is, by native practitioners, in such cases, rubbed to a proper consistence with a little water, sometimes with the addition of opium and alum, and applied in a thick layer over the swollen eyelids; the addition of a little oil I have found preferable, as preventing the too rapid desiccation. Patients generally express themselves as experiencing considerable relief from the application."

My friend, Dr. Wise, the author of that learned work *Commentaries on the Hindoo System of Medicine*, some time ago brought to Scotland with him a small quantity of the Indian Lykion. I have seen one or two cases of recent conjunctival ophthalmia treated by the application of this Lykion, with speedy relief and cure. Dr. Wise has been so good as furnish me with the following interesting letter regarding his own extended experience with it.

"The use (says Dr. Wise) of the mixture of Lykion or Ruswut is very generally known over Hindostan, where diseases of the eye are common, and probably over Asia and Africa, if we are to believe that this was the black application employed with such success to the diseased eyes of our soldiers in Egypt. It is likewise probable that Dioscorides obtained it nearly two thousand years ago from the East, where the plant is indigenous, and introduced it into Europe. Having found great personal benefit from the application of the mixture of Lykion to my eyes when inflamed, I employed it extensively when superintendent of the Eye Infirmary, Calcutta; and so convinced was I of its efficacy, that I brought a supply with me to Europe, with the intention of bringing it to the notice of the profession. I found you investigating the subject; and at your suggestion, Dr. Walker was so kind as to try the medicine, and I am sure will inform you of the results he saw derived from its use. The Indian mixture consists of equal weights of Lykion and burnt alum, with half the weight of opium. These ingredients are mixed with lemon-juice, and reduced to the consistence of cream, and applied round the eyelids and over the eyebrow of the inflamed eyes. This mixture is washed off, and again applied twice in twenty-four hours; and it was only when accompanied with fever, that aperients and other parts of the antiphlogistic regimen were required. In less urgent cases the mixture was only applied at night, and produced no inconvenience, unless when it dried, and the lids felt stiff, when it was softened by applying a little moisture. I found the Lykion mixture most useful in all cases of inflammation of the external tunics of the eye. When both eyes were inflamed, it was interesting to mark the advantage this simple remedy had when applied to one eye, while the usual remedies of leeches, blisters, etc., were applied to the other eye. Another most important application of the Lykion is when the

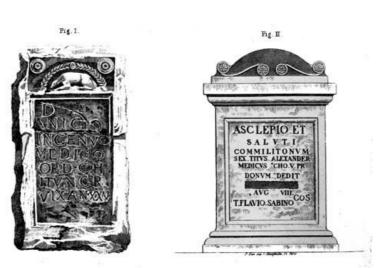
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ophthalmia is accompanied with severe pain. On such occasions, after applying the mixture, a piece of live charcoal (*gool*) produced the most soothing effect when approached near the eye. With this intention, the charcoal was placed upon an earthen cup, and held on a wooden stand by the patient, and he approached or withdrew it from the eye according to his own feeling. The great relief in this case was in part from the anodyne effect of the opium."

Mr. Walker has kindly given me the following note of his experience with the Lykion at the Edinburgh Eye Dispensary:—

"I have used (he writes me) the Indian Lykion in a considerable number of cases of eye-disease. The affections in which I found it most useful were those of the conjunctiva, such as the simple, catarrhal, and pustular forms of inflammation. In them its action was well marked and beneficial, the disease generally subsiding in a day or two; sooner perhaps than it would have done under the ordinary treatment. I have had no opportunity of trying it in purulent ophthalmia; but I believe that in it also it would prove of service. Cases of slight rheumatic and catarrho-rheumatic inflammations have been benefited, but not cured, by it alone. In some affections of the eyelids, as ophthalmia tarsi and chronic ophthalmia, it did good; but such cases often get well with very little treatment. I applied it to the eyelids in the form of a paste, with opium and burnt alum, as recommended by Dr. Wise. This was repeated two or three times a day. The patients generally complained of a burning and smarting of the lids after its application, similar to what is produced by a mustard blister."

The four ancient Greek vases, mentioned in the preceding notice as inscribed with the name of the drug Lykion or Lycium, are each of very small dimensions, the Plate representing all of them of their original sizes and forms. They are small, in consequence, in all probability, of the foreign drug which they contained being difficult to procure in large quantities, and being hence an article of high price in the markets of Greece and Italy. The value set upon the contained drug would seem to be indicated by another circumstance—namely, by the shape of the interior of the vases. In the specimens described by Millin and Tochon, the cavity of the jars is narrow and conical from above downwards, the mouth being wide, and the interior becoming more and more tapering and contracted as it descends downwards. The section of the interior of the vase of Tochon, given in Plate, Fig. 6, represents this peculiar and deceitful form of the cavity. In consequence of this peculiarity in their form, these jars contained, in fact, much less of the Lykion than their mere external appearance indicated. This remark, at least, holds true of the two vases from Tarentum bearing the name of Jason. The vase of Museus from Athens, belonging to the British Museum, appears more honest at least in its construction. The high price of the pure Lykion probably led also to the fact mentioned specially by Dioscorides (lib. i. cap. 133), Pliny (lib. xxiv. cap. 14), and Serapion (lib. ii. cap. 398), of the frequent adulteration of the drug. And, perhaps, as in similar inscriptions on some modern medicine-nostrums and packets, the names of the preparer or vendor, Jason, Heracleus, and Museus, stamped on the vases, were added in attestation of the purity and unadulterated character of the drug which these vases contained.



ROMAN INSCRIPTIONS TO MEDICAL OFFICERS.

WAS THE ROMAN ARMY PROVIDED WITH MEDICAL OFFICERS?

LITTLE or nothing has hitherto been written by archæologists regarding the medical staff of the Roman army. Indeed, in none of our common works on Roman antiquities, as in those of Rosini, Kennet, Adam, Smith, Ramsay, etc., is there any allusion whatever made to the question, whether or not the Roman troops were furnished with medical officers. In one anonymous work on Roman

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antiquities, translated from the French, and published in London in 1750, the subject is referred to, the author stating that during the commonwealth there were no physicians in the Roman armies; and he adds that, even under the Emperors, "it does not appear there were any physicians in the armies, as there are surgeons in ours." Nor does there exist, as far as I am aware, in the Roman classics, any very distinct allusion to the matter. I have also, in vain, searched among Roman medical authors, and among the writings of the Greek physicians who practised at Rome, for any direct notices, relative to the medical or surgical care of the numerous and scattered armies employed by Rome in the different quarters of the world. In fact, the only passages, with which I am acquainted, relating at all to the subject, consist of a casual remark in one of the military epistles of Aurelian; two incidental legal observations contained in the law writings of Modestinus, and in the Codex of Justinian; an allusion by Vegetius to the medical care and expense of the sick in camp; and an expression by Galen as to the opportunities for anatomical observation presented to the physicians during the German wars.

The reference to the medical superintendence of the army by Aurelian occurs in Vopiscus' Life of that Emperor (chap. vi.) In issuing some peremptory orders regarding the discipline of the army, after enumerating various rigid rules which the soldiers were to observe, Aurelian concludes with the following admonition and announcement:—"Let each soldier aid and serve his fellow; let them be cured gratuitously by the physicians (*a medicis gratis curentur*); let them give nothing to soothsayers; let them conduct themselves quietly in their hospitia; and he who would raise strife, let him be lashed."³⁶⁸ The date of this order is not earlier than A.D. 270, the year when Aurelian became Emperor.

When treating of those who, by absence from Rome, etc., were exempted from some burthens and taxes, the jurist Modestinus, who wrote in the earlier half of the third century, mentions, among others, the military physicians (*Medici Militum*), "because," he adds, "the office which they fill is beneficial to the public, and ought not to be productive of any injury to themselves (quoniam officium, quod gerunt, et publice prodest, et fraudem eis adferre non debet)".³⁶⁹

In Justinian's *Corpus Juris Civilis*, lib. x. tit. 52, drawn up in the sixth century, there is a series of laws, "De Professoribus et Medicis." The first of these laws exempts the physician of a legion ($Medicum\ Legionis$) from civil duties when he is absent in the public service.³⁷⁰

In his work *De Re Militari*, Vegetius, who wrote towards the end of the fourth century, devotes a chapter (lib. iii. 2) to the regulation of the health of an army; and incidentally rather than directly alludes to the cure of sick soldiers by the skill of the physicians (*arte medicorum*).³⁷¹ Enumerating also elsewhere the duties of the Præfect of the Camp, he states that his authority extended over his sick fellow-soldiers, and the physicians who had the care of them, and he regulated the expenses relative thereto. (Lib. ii. cap. 10.)

The passage I have alluded to as in the works of Galen is of an earlier date than any of the preceding, and is to be found in liber iii. cap. 2, of his work, *De Compositione Medicamentorum per Genera*. In discoursing regarding the treatment of wounds, he talks of the necessity of a knowledge of human anatomy for their proper management. In order to know the anatomy of man, he recommends here, as elsewhere, the anatomy of the monkey to be studied, maintaining that without such knowledge you cannot take due advantage of the opportunities that you may accidentally have presented to you of becoming acquainted with the anatomical structure of human bodies. And he adds, that in consequence of a want of this knowledge the physicians (oi $i\alpha\tau\rho\sigma$) employed in the German wars, and having the power of dissecting the bodies of the barbarians, did not learn more than the cooks understand.³⁷²

This paragraph, though indistinct as regards the status and office of these $^{\prime}$ I α T ρ 01, is still sufficiently explicit as to the fact that there were physicians in the Roman army during the German wars that Galen alludes to; and these wars were no doubt those that occurred from the year A.D. 167 to 175, immediately previous to the time when Galen wrote the work from which we have quoted.

The history of other more ancient governments than that of Rome is not without allusion to the office of army physicians. Homer, 373 Herodotus, 374 and Pliny, 375 each comment on the number and fame of the medical men with which the kingdom of Egypt abounded. Diogenes Laertius, in his life of Plato, tells us of Plato's sickness when travelling in Egypt; and adds that he remarked, like Homer, that the Egyptians were all physicians ($\varphi\alpha\nu\alpha$ 1 $\pi\alpha\nu\tau\alpha$ 2 $\dot{\alpha}\nu\theta\rho\dot{\omega}\pi\sigma\nu$ 2 $\dot{\alpha}^{17}$ 3 They had, moreover, paid medical officers attendant upon their troops in war. For, in describing the status and character of the Egyptian physicians, Diodorus Siculus specially mentions that, when engaged in military expeditions, the soldiers were cured without fees, for the physicians of the army received a salary from the state.

One instance is referred to in history, in which an Egyptian king, when thrown from his horse in battle, wounded and speechless from injury of the head, had his skull trepanned by his surgeons. I allude to Ptolemy Philometor, who defeated Alexander Balas, the pretender to the throne of Syria, in the year B.C. 146. According to Livy, the victor himself died after the battle during the attempts of his surgeons to relieve him. "Ptolemaeus, in caput graviter vulneratus, inter curationem, dum ossa medici *terebrare* contendunt, exspiravit."—(*Epit.* lib. lii.)

Nor is the old classical literature of Greece without reference to surgical services tendered to the soldier in war. Homer describes the double character of army surgeons and warriors as

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combined in the persons of Podalirius and Machaon.³⁷⁸ And when the latter is wounded, he puts into the mouth of Idomeneus the well-known expression (Iliad, lib. xi. v. 514), that the medical man is to the army more valuable than many warriors; knowing as he does how to excise arrows, and to apply soothing medications:—

Ιητρος γαρ ανηρ πολλῶν ἀνταξιος ἀλλων, Ιους τ' ἐκταμνειν, επι τ' ηπια φαρμακα πασσειν.

In the course of the Iliad, the surgical treatment followed in individual cases among the disabled Greek warriors is sometimes minutely entered upon; and thus the different modes of operation by which the transfixing arrow, dart, and lance, were, in those early days of surgical science, removed from the bodies of the wounded, may be sometimes gathered from Homer's lucid and minute descriptions. He mentions three different methods, at least, by which war-weapons were extracted—viz., first, by evulsion, or traction of the weapon backwards, as in the case of Menelaus (Iliad, lib. iv. 214); secondly, by protrusion, or pushing of the instrument forward, as in the case of Diomede (v. 112); and, thirdly, by enlarging the wound, and cutting out the weapon, as was the practice of Patroclus in the case of Eurypylus (xi. 843). I am not aware that Homer ever individualises any internal medical treatment except once (xi. 638), when he mentions a mixture of Pramnian wine, cheese, and flour, as having been administered by the nursing hand of Hecamede to the wounded Machaon, ³⁷⁹ ere she prepared the warm bath for him and washed away the clotted blood (xiv. 7).

The author of the ancient Greek treatise $\Pi\epsilon\rho$, an essay usually included in the works of Hippocrates, explicitly advises the young physician to attach himself for a time to some army, in order to learn the best methods of extracting war-weapons, and to acquire practical skill in the treatment of accidents.³⁸⁰

Xenophon alludes in various parts of his works to physicians or surgeons connected with the Greek armies. In describing the laws of the Lacedemonians, as instituted in the earliest ages of Greek history by Lycurgus, he incidentally mentions that physicians were attached to the Spartan army. For in the arrangements previously laid down for the troops before a battle, it was ordered that there should be placed behind the station occupied by the King several officials, and among others, the soothsayers or priests, the physicians, the minstrels, the leaders of the army, and any persons who were voluntarily present in the expedition (καὶ μάντεις, καὶ ἰατροὶ, καὶ αὐληταὶ, οἱ τοῦ στρατοῦ ἄρχοντες, καὶ ἐθελούσιοι ἡν τινες πατρῶσιν).

Again, in his celebrated account of the retreat of the ten thousand Greeks, Xenophon states that at the conclusion of the fifth day of their march, and after considerable skirmishing with the troops of Tissaphernes, "they appointed eight physicians, for there were many persons wounded." 381 —(Anabasis, lib. iii. c. 4, § 30.)

Lastly, in his semi-historical or political romance—the *Cyropædia* (lib. i. 6, § 15), Xenophon makes his young royal hero, Cyrus, the founder of the Persian monarchy, speak, among other matters, of the importance of medical officers being attached to armies. "With respect to health" (says Cyrus), "having heard and observed that cities that wish health choose physicians, and that commanders, for the sake of their soldiers, take physicians; so, when I was placed in this command, I immediately attended to this point; and I believe that I have men with me that are very skilful in the art of physic." In the same work Xenophon subsequently describes Cyrus as commending to the professional services and care of his medical officers the Chaldeans who had been wounded and captured in fight with him.—(*Instit. Cyri*, lib. iii. c. 2, § 12.)

Few individual instances are recorded in Greek history of surgical aid being afforded on the field of battle. One of the most interesting examples is that mentioned by Quintus Curtius in reference to Alexander the Great at the taking of the capital of the Oxydraceæ, or Mallians. The Macedonian King, who had leaped down, almost alone, within the walls of the fortress, was struck with a long arrow (duorum cubitorum sagitta), which entered the right side of the thorax (per thoracem paulum super latus dextrum infigeretur). The wound produced great hæmorrhage and faintness. Alexander was carried on his shield to his tent: and the shaft of the arrow being cut off and his cuirass removed, it was discovered that the head of the arrow was barbed, and could not, consequently, be removed without the artificial dilatation of the wound and imminent danger from increased bleeding; for the large weapon was fixed in its situation, and seemed to have penetrated into the internal viscera (quippe ingens telum adactum erat, et penetrasse in viscera videbatur). At Alexander's request, the surgeon Critobulus undertook the extraction, enlarged the wound, and removed the arrow-head, which, according to Plutarch, was "three fingers broad and four long." Great hæmorrhage (ingens vis sanguinis) attended the operation; death-like insensibility supervened; and, when the flow of blood continued in despite of the medicaments (medicamenta) applied, a cry and wail was set up by those around, that the king was dead. At last, however, the hæmorrhage stopped, under the state of syncope. That very syncope, observes Arrian, saved his life; and Alexander gradually recovered. But every modern surgeon must admire the boldness, not less than the expertness, of Critobulus, when he reflects for a moment on the fearful peril attendant on such an operation, performed on so august a patient —and at a time, too, when surgical science as yet possessed no certain means of restraining surgical hæmorrhage.382

In the earlier periods of Roman history and Roman warfare, the treatment of the military sick and wounded was, in all probability, trusted to the casual care of some fellow-soldiers whose tastes and inclinations had led them to pay more than usual care to the rude surgery which existed at

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the time. 383 As early, however, as the commencement of the Christian era, we find Celsus laying down distinct, and in many instances very excellent and practical precepts for the extraction of war-weapons from the bodies of the wounded 384 —as of arrows, spears, leaden bullets (*glandes plumbeæ*), etc.

Occasionally the weapons used in ancient war seem to have been forged for the special purpose of rendering their extraction by the surgeon a matter of difficulty and danger. At least we find Paulus Ægineta complaining that some of them have "their barbs diverging in opposite directions, like the forked lightning, in order that, whether pulled or pushed, they may fasten in the parts."

Still, let me repeat, neither in Celsus nor in Paulus Ægineta, nor, indeed, in any other ancient medical work, have we, as far as I know, any allusion to the circumstance of surgeons or physicians being regularly appointed as army medical officers in the Roman army, for the purpose of superintending the treatment of the wounded, or—what is of still greater importance—in order to take professional care of the soldiers disabled by sickness and disease, and whose number in warfare is generally very much greater than the number of those that are disabled in fight.

Modern military experience has, in many instances, proved the high importance of the services and superintendence of a medical military staff; and not so much in reference to the care of individual cases, and the cure of the wounded, as in reference to the general health and consequent general strength and success of whole armies. In fact, in war the devastations produced by sickness and disease have often been found greatly more formidable and fatal than any devastations produced by the sword; fevers, dysenteries, and other distempers of the camp, have carried off far more soldiers than the ball or bayonet; malarious and morbific agency has sometimes terminated a campaign as effectually as the highest military strategy; and armies have occasionally, in later times, been as completely destroyed by the indirect ravages of disease as by the direct effects of battle.

Nor was the experience of the Roman armies in this respect different from our own. When the Emperor Septimius Severus determined to subdue the whole of Scotland, he about the year 208 led, according to Herodian and Dion Cassius, ³⁸⁶ an army of not less than 80,000 men across the Forth, marched them north, apparently as far as the Moray Firth, and thence returned to York. But though in this course the Roman Emperor nowhere met the enemy in open fight, he is stated to have lost, in this single campaign, not less than 50,000 of his troops. The marshes, fens, woods, etc., of Caledonia were far more destructive to the Roman invaders, than were the spears, long swords (ingentes gladii) and scythed chariots (corvini) of its painted, and almost naked, warriors. ³⁸⁷

We know, from the oft-repeated anecdote regarding Arcagathus, as told by Pliny, that in the early days of republican Rome the practice of medicine was not encouraged among the inhabitants of the Eternal City. But, in the later periods of the empire, Rome abounded with native and foreign physicians; and, when we find the Roman people exalted in so many branches of art and knowledge, we could not but expect that common experience, and results like that of Severus, would have suggested to them the propriety of increasing the strength and success of their armies, by having medical men to watch over the health of the soldiers that were fighting in so many different regions around the Roman standards.

Some modern discoveries in Great Britain and elsewhere show that such a conjecture is not at variance with truth, and that the Roman armies were provided, at all events in the time of the Empire, with a medical staff.

Housesteads, in Northumberland (the ancient Borcovicus), formed one of the principal stations on the great defensive wall which the Emperor Hadrian reared, in the second century, from the Tyne to the Solway. Many Roman remains have been found at Housesteads. Thirty years ago the embellished monumental tablet, represented in the accompanying plate, Fig. 1, was discovered among these remains. This tablet was, according to the inscription upon it, raised by the first Tungrian cohort to the memory of their MEDICUS ORDINARIUS. The plate represents this interesting relic, which is preserved in the Newcastle Museum. The inscription upon the tablet reads as follows, in its contracted and in its extended forms:—

D M D[IIS] M[ANIBUS]
ANICIO ANICIO
INGENUO INGENUO
MEDICO MEDICO
ORD COH ORD[INARIO] COH[ORTIS]
I TUNGR [PRIMÆ] TUNGR[ORUM]
VIX AN XXV VIX[IT] AN[NIS] XXV

And I append Mr. Brace's translation of it:—"Sacred to the gods of the shades below. To anicius ingenuus, Physician in Ordinary of Cohort the first of the Tungrians. He lived twenty-five years." 390

The first Tungrian Cohort, which erected this monument over the grave of their young physician, distinguished itself under Agricola at the battle of the Mons Grampius.³⁹¹ It was afterwards, as we learn from some legionary inscriptions, engaged at Castlecary in erecting there a portion of the more northern Roman wall of Antoninus, which ran from the Forth to the Clyde. 392 Subsequently it was stationed at Cramond, near Edinburgh, and there raised an altar to the Matres Alatervæ et Campestres. 393 Still later, this Cohort was stationed in Cumberland; and latterly at Housesteads, in Northumberland, where the monument we allude to, and several 214 others, were erected by them.³⁹⁴

The youth of this military physician is remarkable. He died at twenty-five.

The elaborate nature of the carving of this monumental tablet affords the strongest evidence of the esteem and respect in which this young physician was held by his Cohort. In fact, it is more ornamented than many of the altars raised by this and other Cohorts to the worship of their gods.

It has been suggested by Mr. O'Callaghan³⁹⁵ that the animal represented on the monument is a hare, and that it was selected as an emblem characteristic of the watchfulness of the profession to which anicius ingenuus belonged. In his admirable work on the Roman Wall, the Rev. Mr. Bruce describes, more correctly, the figure to be that of a rabbit; and he further conjectures that it had some reference to the worship of Priapus. The whole device is, in all probability, far more simple in its signification. The cuniculus, or rabbit, when found on ancient Roman monuments and coins, is generally held by archæologists and numismatists as the recognised emblem of Spain,³⁹⁶ as, for example, on the coins of Sextus Pompey and Galba; and the circular bucklers or cetræ which are placed on this tablet, on either side of the animal, are equally strong characteristics of the same country. Indeed, there can be little or no doubt that these devices indicate merely that this young military physician was of Spanish birth and origin.

Several monumental and votive tablets have been discovered in other parts of the old Roman world, affording further evidence of the Roman troops being provided with a medical staff. In Gruter's great work on Roman inscriptions there are copies of at least three inscriptions, in which physicians of Cohorts (medici cohortum) are mentioned.397 One of these inscriptions (p. 219, 3) bears the name of a physician who had the same nomen gentilicium as the medical officer of the Tungrian Cohort who died at Housesteads-viz., "M. JULIUS INGENUUS MEDIC. COH. II. VIG." The tablet, which was found at Rome, contains a votive imperial inscription from twelve or thirteen persons, and among others, from the physician to the second "Cohors Vigilum." Another of the inscriptions of Gruter is specially interesting in relation to its date, for it was cut at the commencement of the reign of Domitian,³⁹⁸ and in the year of the consulship of F. Flavius Sabinus, which year chronologists know to have been the eighty-third of the Christian era. We are, consequently, afforded evidence by this inscription that before the end of the first century, at least—however much earlier—medical officers were appointed to the Cohorts of the Roman army. The inscription itself is upon an altar or votive tablet, dedicated by SEXTUS TITUS ALEXANDER, physician of the fifth Prætorian Cohort, to Æsculapius, and the safety of his fellow-soldiers. A copy of this altar and its inscription is given in the accompanying plate, Fig. 2. The stone seems to have been found at Rome.

Another altar, discovered also at Rome, and inscribed in the same terms to Æsculapius, is given by Gruter (p. 68, 2). In this instance, the dedicator is SEXTUS TITIUS, medical officer to the sixth Prætorian Cohort; and he erects it for the health of the fellow-soldiers of his Cohort, in conformity with a vow which he had undertaken. The whole inscription is as follows:—

> ASCLEPIO ET. SALUTI COMMILITIONUM COH. VI. PR. VOTO. SUSCEPTO SEX. TITIUS. MEDIC. COH. VI. PR. D. D.

Long ago Reines published in his Syntagma Inscriptionum, 399 a tablet found at Rome and erected by TITUS CLAUDIUS JULIANUS, Clinical Physician to the fourth Prætorian Cohort, to himself, to his wife Tullia Epigone, to their freedmen, freedwomen, and descendants.

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D. TI. CLAUDIUS. IULIANUS MEDICUS. CLINICUS. COH. IIII. PR. FECIT. VIVOS. SIBI. ET TULLIÆ EPIGONE. CONIUGI LIBERTIS. LIBERTATIBUS (Q) CLAUDIIS. POSTERISQUE

H. M. H. N. S.

Muratori, in his Thesaurus,⁴⁰⁰ cites a Roman sepulchral tablet discovered at Veterbi, and containing an inscription by a father to his deceased son, M. VLPIUS SPORUS, Physician to the Indian and Asturian Auxiliaries (Medico Alarum Indianae et tertiae Asturum).⁴⁰¹

The tablets to which I have hitherto alluded all refer, with the doubtful exception of the first and last, to one rank of medical military men, namely the surgeons of cohorts (*Medici Cohortum*). It is generally believed that each cohort consisted of about 500 or 600 men; though this appears to have varied at different times. From the preceding tablets, each cohort seems to have been provided with at least one medical officer, if not more. For the distinctive terms "Ordinarius" and "Clinicus," which occur in the first and last of the preceding inscriptions, when added to the usual term "Medicus Cohortis," apparently tend to indicate a different grade or rank of medical officer from the latter.

Whether, however, or not there were different grades among the Roman *Medici Cohortum*, we have sufficient evidence for proving that there existed in the Roman army a higher rank of medical officer than these,—namely, *Medici Legionum*. The Roman legion consisted of ten cohorts. We have seen that the individual cohorts of which the legion was composed were each provided with a medical officer or officers. I have already cited a law from Justinian's Codex, showing further that there were military physicians to the Roman legions. The evidence of monumental tablets affords additional proof, that over the whole legion, another, and in all probability a superior medical officer, was placed. More than one monumental tablet has been discovered, dedicated not to the *Medicus Cohortis*, but to the *Medicus Legioni*. Thus Maffei, in his *Museum Veronense*, gives the inscription of a tablet raised by Scribonia Faustina to the manes of her very dear husband, L CÆLIUS ARRIANUS, physician to the Second Italian Legion, who died at the age of forty-nine years and seven months. The inscription in the original runs as follows:—

D. M.
L. CAELI ARRIANI
MEDICO LEGIONIS

II. ITALIC. QUI. VIX. ANN
XXXXVIIII. MENSIS VII
SCRIBONIA FAUSTINA
COIUGI KARISSIMO.403

In the *Collectio Inscriptionum* (vol. i. No. 448) of Hugenbach and Orelli, there is published another Roman tablet found in Switzerland (at Gebistorf, near Windisch), bearing the name of a Legionary physician. The inscription states that Atticus Patronus erected this tablet to TITUS CLAUDIUS HYMNUS, physician to the twenty-first Legion, and to Claudia Quieta, his wife. 404

TI CLAVDIO HYMNO
MEDICO. LEG. XXI.
CLAVDIÆ QUIETÆ EIUS
ATTICUS. PATRONUS.

Orelli gives in the same work (vol. ii. No. 4996), another tablet found at Salon, in which a third physician to a legion is named; the tablet being erected by M. BESIUS TERTULLUS, physician of the eleventh Legion, to the memory of his "hospes," Papiria Pyrallis.

I have already alluded to a passage in Vegetius, showing in relation to the government of the Roman medical staff, that the medical officers as well as their patients were both placed under the control of the Præfect of the Camp, to whose multifarious duties, these, among other matters, pertained. "Praeterea aegri contubernales, et medici a quibus curantur, expensae etiam ad ejus industriam pertinebant." Vegetius does not allude to the existence of any special sick quarters; but a writer of the second century, who lived under Trajan and Hadrian, Hyginus Gromaticus, in his essay "De Castrametatione," In laying down the proportions and measurements of the different parts of a Roman camp, describes the proper situation in it for the Hospital or "Valetudinarium." This observation of Hyginus is interesting as far as regards the probable date of the first institution of camp hospitals; for we have no allusion to them in Polybius' earlier account of the different points and parts of a Roman camp of his day; and even in the first century of our era, when Tacitus describes Germanicus as visiting and encouraging the wounded soldiers under his command, he uses such an expression, "circumire saucios" as to lead to the supposition, that the invalids in the Roman camp were still, like the old Homeric heroes, laid up in their own tents. Indeed, Lampridius speaks of the Emperor Alexander Severus in the third

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century, still visiting his sick soldiers in their tents (aegrotantes ipse visitavit per tentoria milites). ⁴⁰⁸ Let me add, that medical stores appear, as we might expect, to have been carried with the imperial armies. At least in the war conducted by Germanicus against Arminius, we are told by Tacitus, that in one of their contests with the German army, the Roman troops lost their intrenching tools, tents, and remedies or dressings for the wounded (fomenta sauciis); ⁴⁰⁹ and subsequently we find Agrippina the wife of the Roman general, distributing gratuitously among the soldiers, clothes to the needy, and dressings to the wounded (militibusque, ut quis inops aut saucius, vestem et fomenta dilargita est). ⁴¹⁰ We have the transport of the wounded sick sometimes spoken of; as, for example, when Tempanius leads back his victorious troops from the Volscian war; ⁴¹¹ but the only instance in which, as far as I remember, any special description of ambulance is mentioned, occurs in Hirtius' *Commentaries*, where he tells us that, after the battle fought near Ruspina, Labienus ordered his wounded to be carried to Adrumentum, bound in waggons (saucios suos jubet in plostris deligatos Adrumentum deportari). ⁴¹² The passage should more probably read "plostris decubitos."

The remarks which I have hitherto made refer only to the medical staff and organisation of the Roman army. If, however, as the preceding facts tend to show, the Roman troops were furnished with a medical staff, there is, a priori, every probability that the Roman fleet was similarly provided. The contingencies, however, of a naval, as compared with a military life, render the preservation of such monumental proofs as we have already adduced in relation to the existence of army medical officers much less likely in relation to the existence of medical officers in the fleet. Indeed I am only aware of the discovery of one ancient tablet referring to the naval medical service. In his late splendid work on the Latin inscriptions found in the kingdom of Naples, Mommsen has given a careful copy of the tablet in question. The inscription upon it was first, I believe, published by Marini. The tablet itself, which is now placed in the antiquarian collection at Dresden, was originally discovered in the Elysian fields, near Baiæ; and consequently in the vicinity of the famous *Pontus Julius*, and the station of the imperial Misenian fleet. The inscription on the stone bears that M.

SATRIUS LONGINUS, physician to the three-banked ship or trirem, the CUPID, 415 and those or the heirs of those freed by Julia Venerias, his wife, erected the tablet to the manes of this deserving lady.

D. M.
IVLIÆ VENERIÆ.
M. SATRIUS LONGIN
MEDIC. DVPL. III. CVPID
ET. IVLIA VENERIA LIBER
HER. BEN. MER
FECER

In the preceding inscription LONGINUS is designated *Medicus Duplicarius*; the term duplicarius in this as other inscriptions signifying that, by the length or superiority of his service, he was entitled to double pay and rewards. The "duplex stupendium" and "duplex frumentum" is repeatedly alluded to by Varro, Livy, Virgil, and other classical authors, as a military reward accorded to the more deserving soldiers and officers of the army; and the corresponding adjective "duplicarius" not unfrequently occurs in old Roman inscriptions.

In a previous page it has been stated that nowhere in the Roman classics does there exist any distinct allusion to physicians or surgeons as forming a regular part of the staff of the Roman army. There are several references, however, in ancient medical and classical authors to the fact of medical men being placed in professional attendance upon Roman Senators, 416 Consuls, 417 and Emperors during the course of their military campaigns. Thus Galen tells us that he himself was summoned in this last capacity to attend upon the Emperors M. Aurelius and L. Verus at Apuleia during their proposed campaign against some of the German tribes. 418

Various fragmentary notices exist regarding the physicians who attended upon those Roman Emperors who visited Britain. A medical author (whom Galen often quotes), Scribonius Largus, has left a valued therapeutical work, *De Compositione Medicamentorum*. This work was written, as we are informed in the preface to it, when the author was absent from Rome, and deprived of the greater part of his library. In his *History of Medicine*, Sprengel states, but I know not on what precise authority, that the work in question was composed by Largus when he was absent with the Emperor Claudius during his short campaign into England. Our countryman, Sir Thomas Browne, makes a similar statement. In his *Hydriotaphia*, when discoursing on the want of Roman notices regarding the state, habits, etc., of the ancient Britons, he observes, "We much deplore the loss of that letter which Cicero expected or received from his brother Quintus, as a resolution of British customs; or the accounts which might have been made by Scribonius Largus, the physician accompanying the Emperor Claudius, who might have discovered that frugal bit of the old Britons (mentioned by Dion) which, in the bigness of a bean, could satisfy their hunger."⁴²⁰

We have already had occasion to allude to the disasters which attended the Scottish campaign of Severus, and to the imperfect health of the emperor himself during his invasion of Scotland. The

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evidence of Herodian further shows us that during it he was attended by his own physicians, and that their conduct after the emperor's return from Scotland to York, whilst in the highest degree commendable as regards their faith and duty to the emperor, proved the cause of their own downfall and destruction. The anxiety of Caracalla for the death of his father Severus is well known. We have the testimony of Herodian to the fact, that while the father and son were living at York, Caracalla at one time attempted to destroy his father with his own hand. The same historian further informs us, that the unhappy son attempted to induce the medical attendants of Severus to adopt means to hasten the emperor's death.⁴²¹ He adds further, that in consequence of the court physicians not complying with his unrighteous request, Caracalla, immediately after the demise of Severus, commenced his reign of bloodshed and terror by putting to death these recusant physicians of the late emperor.⁴²²

In the retrospect, it affords a strange subject of meditation for us in the nineteenth century, to consider that, some fifteen hundred years ago, it thus happened in England, that a number of physicians were themselves doomed to death for refusing to pervert their professional trust so far as to become the murderers of the royal invalid who had confided his health to their care. And the modern physician may look back with some degree of pride upon the fact, that in an age and at a court where cruelty and corruption held unrestrained sway, some members of the medical profession at least remained so uncorruptible as to endanger and sacrifice their own lives rather than tamper with the life of their patient.⁴²³

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Fig. II CODESAD DIATHESIS

NOIL

NOIL

NOIL

NOIL

NOIL

NOIL

NOIL



ROMAN MEDICINE STAMPS.

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ANCIENT ROMAN MEDICINE-STAMPS.

SECTION I.

INTRODUCTORY REMARKS ON THE DISCOVERY, CHARACTERS, ETC., OF ROMAN MEDICINE STAMPS.

About two hundred years ago there were found at Nymegen, in Holland, two small, greenish, flat, square-shaped stones or tablets, each engraved on its four lateral surfaces or edges with

inscriptions, the letters of which were cut incuse and retrograde. In his work on the Roman and other antiquities of Nymegen, ⁴²⁴ Schmidt, one of the greatest archæologists of his day, described these two stones; but he confessedly altogether failed in interpreting their nature and uses, or in reading the legends inscribed upon them.

A few years later, another distinguished Dutch antiquary, Spon of Leyden, published an account of a third tablet, similar in character to the two described by Schmidt;⁴²⁵ and he suggested that they were engraved stones, which the ancient pharmacopolists used as lids for covering the jars or boxes in which their ointments, oils, or collyria were kept.⁴²⁶

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Subsequently, during the currency of the last century, Chishull, ⁴²⁷ Caylus, ⁴²⁸ Walch, ⁴²⁹ Saxe, ⁴³⁰ and Gough, ⁴³¹ published accounts of various other stones, analogous in their character to the two first discovered at Nymegen. And, through the labours and interpretations of these and other authors, it came at last to be generally admitted among antiquaries, that the nature of the legends upon the stones in question,—the incuse and retrograde form of their inscriptions,—and the localities in which they were found, all proved them to be medicine-stamps, employed for the purpose of marking their drugs, by the Roman doctors, who (some sixteen or seventeen centuries ago) practised at the various stations throughout Europe, that were in those olden times occupied by the colonists and soldiers of Rome. Latterly, since the beginning of the present century, various additional examples of similar Roman medicine-stamps have been discovered at different old Roman towns and stations in France, Germany, etc., and described by Tochon, ⁴³² Sichel, ⁴³³ Duchalais, ⁴³⁴ Dufour, ⁴³⁵ and others.

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These Roman medicine-stamps all agree in their general characters. They usually consist of small quadrilateral or oblong pieces, of a greenish schist and steatite, engraved on one or more of their edges or borders. The inscriptions are in small capital Roman letters, cut retrograde and intagliate (like the letters on modern seals and stamps), and consequently reading on the stone itself from right to left, but making an impression, when stamped upon wax or any other similar plastic material, which reads from left to right. The inscriptions themselves generally first contain (and that repeated on each side) the name of the medical practitioner to whom the stamp pertained; then the name of some special medicine, or medical formula; and, lastly, the disease or diseases for which that medicine was prescribed. In a few instances, the modes and frequency of using the medicine are added. In some instances, the designation of the medicine, and of the disease for which it is intended, are alone given. Perhaps still more frequently, when the number of items is limited, the name of the medical practitioner only appears, along with the name of some special medicinal preparation or remedy prepared or sold by him. And sometimes the stamps present merely the appellation of the medicine alone, without either the name of the practitioner who vended it, or the name of the disease against which it was supposed to be efficacious.

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To this brief description one more curious fact remains to be added,—namely, that in almost all, if not in all, the Roman medicine-stamps hitherto discovered, the medicines inscribed upon them are drugs for affections of the eye and its appendages; and the diseases, when specified upon them, are always ophthalmic diseases. Hence it may, with great probability, be concluded, that either these stamps were used by oculists alone, or they were used by the general medical practitioner in marking his eye-medicines only. On this account some authors have not inaptly described them under the special designation of Roman Ophthalmic or Oculist stamps.

The number of the stamps that have already been discovered amply proves that ophthalmic diseases must have been extremely frequent in the sites of the old Roman colonies spread throughout western Europe; and although only three such oculist-stamps are as yet described as having been found within the confines of Italy itself, 436 yet the frequent references to individual oculists at Rome by Celsus, Galen, and others, and the elaborate descriptions of eye-diseases left us by the various Greek and Roman medical authors, who practised in the Eternal City during the time of the empire, alike testify to the fact, that these diseases were also sufficiently common in the Roman capital, and that many of the fellow-citizens of Horace could probably personally apply the well-known description which the poet gives of himself:—

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Hic oculis ego nigra meis Collyria lippus Illinere.

Galen, Celsus, Ætius, Paulus Ægineta, etc., all describe the different diseases of the eye with care and minuteness; and the Roman practitioners had evidently studied these affections, and their specific distinctions, with no small degree of attention. In modern times medical literature has been enriched with more complete and elaborate monographs upon the diseases of the eye, than upon the diseases of any other single organ of the body. But, perhaps, few of these monographs describe a larger number of ophthalmic diseases than was professed to be known and discriminated in those distant times when Galen wrote and practised. This author, in the 16th chapter of his book, entitled *Introductio seu Medicus* enumerates and defines nosologically not less than one hundred and twenty-four diseases to which the eye and its appendages are liable.⁴³⁷

In the management of these diseases of the eye, the Roman practitioners used, as we shall afterwards see, bleeding, antiphlogistics, scarification, and other appropriate constitutional and local treatment. But the practical part of their treatises, referring to ophthalmic affections, is specially loaded with collyria—professedly of use in almost every stage of every disease of the eye. 438 Galen speaks of Asclepiades describing in his works a plentiful forest of collyria (collyriorum silva). 439 In his book, De Compositione Medicamentorum secundum Locos, Galen has himself left us formulæ for upwards of two hundred of the ancient collyria. Ætius gives as great,

if not a greater number. The "Opus de Compositione Medicamentorum" of Myrepsus contains recipes for eighty-seven ophthalmic collyria; and the works of Scribonius Largus, Celsus, Actuarius, Oribasius, Alexander Trallianus, Marcellus, Paulus Ægineta, etc., present us with abundance of formulæ for the same class of preparations.

These collyria were composed of very various, 440 and in some instances of very numerous, ingredients. But most of them which had attained any great degree of reputation, seem (like the compound formulæ, or prescriptions in our modern pharmacopæias), to have each passed under a short specific name, by which they were no doubt readily and generally recognised by the profession, and perhaps also by the public, in those ancient times. The specific appellations of the individual collyria were derived from different sources.

Some of them were known under the names of the oculists who invented or employed them. Thus Galen gives recipes for the collyria of Asclepiades, of Philoxenis, of Capiton, of Zoilus, of Cassius, of Sosandrus, of Phaedrus, of Syneros, of Hermeius, of Erasistratus, of Marcus, of Antonius Musa; the collyrium of Sergius, the Babylonian oculist; the collyrium of Philip of Cæsarea; and many others. 441 Occasionally the appellation under which the collyria were known was derived from some of their more marked physical properties, as the "collyrium *Chloron* appellatum," from the green colour of the preparation; the Cirrhon, from its yellowish tint; Euchron, from its agreeable hue (a colore bono dictum); the collyrium *Cygnus*, from its white or swan-like hue;⁴⁴² the Aromaticum, from its pleasant odour; and so forth. One or other of the principal ingredients entering into its composition seems to have given the name under which other collyria were known, as the Nardinum, from its containing spikenard; the collyrium Diasmyrnes (δια, with, and σμυρνα, myrrh), from its containing myrrh; the Diarrhodon, from its containing roses, etc. Occasionally the collyrium seems to have derived its name and fame from some great person whom it had been fortunate enough to benefit or to cure. Thus, for example, Galen gives a recipe for the collyrium which Phlorus used in the case of Antonia, the mother of Drusus; for the "collyrium Harmatium," which King Ptolemy used, etc. One was termed Achariston, from its cheapness; and this collyrium repeatedly occurs on the oculist-seals. Another was termed Atimeton, from its supposed great value. But perhaps the most common mode of appellation was the use of some recommendatory name, advertising the supposed high qualities of the drug. Thus the old Greek and Roman authors give various species of the collyrium Monohemeron,—so named from its being alleged to effect a cure in a single day; others are designated the Miraculum, the Mysterium, the Nectar collyrium (Nectarium); the Royal (Collyrium Basilicon); the Royal Indian (Collyrium Indicum Regale); the gold-like (Isochryson); the divine (Isotheon), etc. etc. And lastly, a collyrium was often known under some high-sounding but unmeaning name, such as the collyrium Olympus, Proteus, Phænix, Phyon, Sphærion, Philadelphium, etc. etc.

Under such designations the principal collyria of the Roman oculists were known and used (like the one invented and boasted of by Galen) "per omnes gentes quibus imperant Romani;" and it is under such special appellations that we find these different collyria mentioned in the inscriptions engraved upon the old oculist-stamps, which have been turned up among the ruins of their ancient colonial stations.

Above sixty Roman oculist-stamps have now been discovered in different parts of Western Europe, but particularly in Germany, France, and Holland. Some time ago one was found about ten miles east of Edinburgh; and it is principally with the view of describing this, and along with it the other specimens that have been detected in the British Islands, that I have ventured to draw up the present imperfect essay. I have been the more induced to do so because this Scottish stamp is remarkable, both as being found on almost the very frontier of the ancient Roman empire, and as being one of the most perfect yet discovered. Besides, I entertain a strong hope that such a publication as the present may perhaps be fortunate enough to lead, through the zeal of some members of the profession, to the detection in this country of additional examples of these curious remains of our Roman medical predecessors.

In treating, in the following sections, of the individual Roman medicine-stamps that have been found in Great Britain, I shall begin with some account, first, of the specimen found at Tranent, and of two other undescribed specimens contained in the British Museum. Afterwards I shall notice the other similar stones or tablets that have been hitherto brought to light in these islands, in an order chronologically in reference to the dates at which they severally happened to be rediscovered in those localities in which they had lain concealed and buried for many a long century. And lastly, I shall attempt to offer some general remarks upon the probable uses of the medicine-stamps; the nature of the drugs and the character of the diseases mentioned upon them; the names, status, and residences of their proprietors; and various other correlative points.

SECTION II.

STAMP NO. I.—FOUND AT TRANENT.

The Scottish specimen of Roman medicine-stamp, to which I have adverted in the preceding page, was discovered some years ago at Tranent in East Lothian, not far distant from the old, and doubtlessly in former times extensive, Roman settlement or *Municipium* at Inveresk. The stamp now belongs to the Museum of the Society of Scottish Antiquaries.

It was presented to the Museum by the late Mr. Drummond Hay, formerly one of the Secretaries of the Society. From Mr. Hay's notes it appears that it was found amid a quantity of broken tiles,

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brick, and other debris of an old (and probably Roman) house, near the church of Tranent. For many years after being deposited in the Antiquarian Museum its character remained undiscovered, till the present excellent Secretary of the Society, my esteemed friend Mr. Daniel Wilson, was led, in reading the descriptions of other similar stamps, to ascertain its true

The stamp itself is, as usual, formed out of a greenish-coloured steatite. The stone is of the figure of a parallelogram, nearly two and a half inches in length, and with inscriptions cut upon two of its sides. There is a roundish projection at either extremity of the stone, as seen in the accompanying lithograph (Plate I., No. I., Figs. 1, 2, 3), where the stone and letters of the two inscriptions are, in every respect, faithfully copied from the original as to form and size. The letters are, as in all other similar medicine-stamps, cut incuse and reversed, so as to read from left to right when the inscription was stamped upon any impressible material. Fig. 2 shows one of the inscriptions as it appears cut intagliate upon the stone. Fig. 3 presents an accurate copy of this inscription as it is seen when stamped upon wax. Fig. 1 is an equally faithful copy of the second inscription placed on the opposite side of the stone. It will be observed that, as in the original, the size of the lettering varies on the two sides.

The lettering on the two sides (1 and 2) runs thus, as it stands inscribed upon the stone:—

- 1. LVALLATINIEVODESADCI CATRICESETASPRITUDIN
- 2. LVALLATINIAPALOCRO **CODESADDIATHESIS**

The two inscriptions read as follows, when we separate the individual words composing them from each other:-

- 1. L VALLATINI EVODES AD CI-CATRICESETASPRITUDIN
- 2. L VALLATINI APALOCRO-CODES AD DIATHESIS.

Let us endeavour to interpret each of these inscriptions in detail, supplying the elisions and contractions which exist in almost all Roman inscriptions; but which are less in this seal than in most others.

1. L(ucii?) vallatini evodes ad cicatrices et asperitudines.—Lucius Vallatinus' Evodes for cicatrices and granulations.

Several of the collyria derived, as I have already observed, their designation from some special physical character. The present instance is an example in point, the appellation *Evodes* (εὐώδες) being derived from the pleasant odour (εὐ, well, and ὄζω, I smell) of the composition. Marcellus, in his work De Medicamentis, specially praises the collyrium known under the name of Evodes; and that too in the class of eye-diseases mentioned on the Tranent seal. For, in his collection of remedies for removing ulcers, cicatrices, etc., of the eyes and eyelids, he recommends (to use his own words) "præcipue hoc quod quidam Diasmyrnon, nonnulli Evodes, quia boni odoris est, nominant." And he directs the Evodes to be dissolved and diluted in water, and introduced into the eyes with a probe, or after inverting the eyelid, when it was used with the view of extenuating recent cicatrices of the eyes, and removing granulations of the eyelids, - "ex aqua autem ad cicatrices recentes extenuendas, et palpebrarum asperitudinem tollendam teri debet, et subjecto specillo aut inversa palpebra, oculis inseri."444

Scribonius Largus had previously described, in nearly the same words, the collyrium,—"quod quidam εὐώδες vocant," and its uses in recent cicatrices and granulations, etc. Both these authors give the same recipe for the composition of the Evodes,-viz. pompholyx, burnt copper, saffron, myrrh, hematites, opium, and other ingredients, rubbed down in Chian wine. Its agreeable odour was probably owing to a considerable quantity of spikenard being used in its composition.⁴⁴⁵ Galen gives two other collyria, of a different composition, and for other affections, as known at his time under the same name of Evodes,—the one termed the "Evodes of Zosimus," the other the "diasmyrnon Evodes of Syneros." 446

2. L. VALLATINI APALOCROCODES AD DIATHESIS.—L. Vallatinus' mild Crocodes for affections of the eyes.

The term diathesis in this inscription is used in a different sense from that in which we now employ the same word in modern medicine. At the present day we apply the term diathesis to designate the tendency or predisposition to some special disease, or class of diseases. In the times of the Roman physicians, it was often used as synonymous with disease itself; and in the Latin translations of the Greek texts of Galen, Aetius, etc., it is hence rendered usually by the general word "affectus," "affectio," etc. The first sentence in Paulus Ægineta's chapter on Ophthalmic Diseases, affords an instance in point: "Quum dolores vehementiores in oculis fiunt, considera ex quanam affectione ($\delta \iota \alpha \theta \epsilon \sigma \epsilon \iota$) oculum dolere contingit."⁴⁴⁷ Thus, also, the *Evodes* of Zosimus (to which I have before alluded) is entered by Galen as a remedy simply against "dolores et recentes affectus," according to the Latin translation of Κühn,—"προς περιωδυνιας και προσφατους διαθεσεις," according to the original Greek text. He uses diathesis, in fact, as a general term for eye-diseases. Thus, when speaking of diseases of the eye in general, he observes,—"Scripsi omnia quæ necesse est Medicum de oculorum affectibus (διαθεσεων) 242

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nosse."⁴⁴⁸ In its last syllable in the inscription on the seal, diathesis stands instead of the Roman accusative diatheses, or the Greek accusative diatheses. This usage, however, is not without classical authority.

The collyrium mentioned in the prescription (the *Crocodes*) derives its designation from its containing the crocus, or saffron, as one of its principal ingredients.

In describing the therapeutic effects of the crocus, Dioscorides mentions, as its first special use, its efficacy in "fluxions of the eyes"—(oculorum fluxiones cohibet). 449

Pliny, in enumerating the qualities of the crocus, begins by observing that it has a discutient effect upon all inflammations, but chiefly on those of the eyes (discutit inflammationes omnes quidem, sed oculorum maxime); and in speaking of its combinations he tells us that it has given a name to one collyrium (collyrio uno etiam nomen dedit). But it entered into the composition of very many of the ancient eye-medicines, and more than one of these passed under the name of *Crocodes*, as in the inscription on the seal. Galen, in his list of eye-remedies, gives the recipe for the composition of a *Crocodes* collyrium for epiphoræ, pains, and affections ($\delta \alpha \theta \epsilon \sigma \epsilon c c c$) from wounds of the eye. He discusses the composition also of the aromatic *Crocodes* of Heraclides, and the oxydercic *Crocodes* of Asclepius, etc. He describing, in another part, the remedies for ulcers of the eyes, he mentions a collyrium containing crocus, and adds, "habet autem hoc plurimum in se crocum, unde etiam *Croceum* ($\kappa \rho \sigma \kappa \omega \delta \epsilon c$) appellatur."

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Celsus, 454 Alexander Trallianus, 455 and Paulus Ægineta 456 give recipes for eye collyria, under the name of diacrocus (δια κροκος).

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When treating of carbuncles and carcinoma of the eye, Paulus Ægineta observes that the affection may be alleviated "by the injection of soothing (tenera, $\alpha\pi\alpha\lambda\alpha$) collyria, such as the *Spodiacum*, *Severianum*, and the like."⁴⁵⁸ And again, when giving his formulæ for different collyria in another part of his works, he applies the term $\alpha\pi\alpha\lambda\nu$ to the collyrium *Diathalium*, or collyrium made from olive leaves ($\Delta\iota\alpha\theta\alpha\lambda\iota\nu\nu$ $\alpha\pi\alpha\lambda\nu\nu$), upon the same principle, and evidently with the same signification, as the word is used in the Tranent stamp, as applied to the collyrium *Crocodes*. ⁴⁵⁹

I am indebted to the kindness of Mr. Birch for the impressions of two unpublished oculist-stamps, contained in the British Museum. Their forms and inscriptions are represented in Plate I., Nos. II. and III.; and I shall describe them under these numbers. They are supposed to have formed part of the collection of Sir Hans Sloane; but no note exists as to the precise locality in which they were discovered.

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SECTION III.

STAMP NO. II.—CONTAINED IN THE BRITISH MUSEUM.

This large stamp consists (Plate I., No. II.⁴⁶⁰) of a flat quadrilateral stone, about an inch and a half broad, and engraved upon three of its sides. A portion of one corner of the stone is broken off. The probable deficiency which is thus produced in one of the inscriptions is supplied in this, and in some other similar instances in the sequel, by Italic letters. The three inscriptions read as follow:—

- 1. SEX: JUL: SEDATI CROCOD PACCIAN
- 2. SEX: JUL: SEDATI CRO-CODES DIALEPIDOS
- 3. (Sex): JUL: SEDATI CRO-(cod)ES AD DIATHES

The name of the oculist—Sextus Julius Sedatus—is imperfect on the third or broken side, the prænomen "sex" being wanting on that side in the first line, and the middle syllable "cod" of the word Crocodes being also wanting, from the same cause, in the second line.

The restored reading of this third side—viz., SEXTI JULII SEDATI CROCODES AD DIATHES*es*—need not be dwelt upon, as it is so very similar to that on one side of the Tranent stone. The other two sides contain the names of two new varieties of crocodes.

One of these varieties—the CROCODES PACCIANUM—received its name from Paccius, a celebrated Roman medical practitioner, who either invented this special collyrium, or brought it into repute. Paccius, who lived about the commencement of the Christian era, is said to have amassed a fortune by the sale of a secret nostrum. At his death he bequeathed the prescription for it to the Emperor Tiberius, who placed a copy of it in the various public libraries. In the list of his ophthalmic medicines, Galen gives formulæ for various collyria invented by Paccius, such as the "Sphragis Paccii," Asclepiadeum Paccii," Collyrium ex terra Samia Paccii Ophthalmici ad affectus intensos (Emtetamevag diabeseg)." Galen does not give any recipe for the Crocodes of Paccius; but it was evidently a collyrium duly esteemed at the time in which he wrote; for, in his chapter on ulcers of the eyes, he specially names the "CROCODES PACCIANUM," and recommends its use in cases in which the accompanying inflammation has already ceased, and at the stage when a stimulating application becomes necessary.

The other variety of crocodes used by Sedatus is the crocodes dialepidos. A formula for Dialepidos is given by Marcellus, 466 with the crocus as the first ingredient mentioned in its composition. The Dialepidos derived its name from its containing the scales— $(\lambda \epsilon \pi \iota \delta \epsilon \epsilon)$ of burnt copper, or the black peroxide of that metal,—a preparation which Dioscorides (lib. v. cap. 89) describes as useful in eye-diseases; and which Galen declares to be a "medicamentum multo utilissimum," vol. xii. p. 223.

SECTION IV.

STAMP NO. III.—CONTAINED IN THE BRITISH MUSEUM.

A second Roman medicine-stamp is (as I have already stated, p. 244) contained in the British Museum. The stone is small and broken, and only engraved on one side (see Plate I., No. III.) The inscription does not include, as usual, the name of the oculist who possessed and employed it.

The lettering on this stamp is very distinct, except in one particular. It is doubtful whether the third last letter is intended for an "L," or stands, as suggested by Mr. Way, for an "I," with a period-point after it, thus—"I." An inspection of the stamp itself has impressed me with the belief, that the doubtful letter is truly an "L;" and if so, the inscription would run:—

COLLYR. P. CLOC.

Or, to read it in an extended form, COLLYRium Post Caliginem Oculorum—Collyrium for blindness of the eyes. And I may observe that several of the prescriptions found on these medicine-stamps are collyria professing to be useful against and after (ad and post) caliginem.

But if the doubtful letter is an "I," and not an L, then the inscription, when extended, may be read as follows:—COLLYRium Post CIcatrices Oculorum, or, "Collyrium after cicatrices of the eyes."

The P may stand for Pro, and not for Post; but I am not aware of any instance of the former preposition (Pro) occurring in these inscriptions, while several examples of this use of the latter preposition (Post) are known. An instance of this use of the preposition Post will be found in the sequel, in Stamp No. VI.

SECTION V.

STAMP NO. IV.—FOUND AT COLCHESTER.

The first Roman medicine-stamp discovered in Great Britain was described about a hundred and thirty years ago by Mr. Chishull in the learned "Dissertatio De Nummo $CK\omega\Pi I$," which he addressed to Haym, and which this last-mentioned author has published in the preface to his second volume of the *Tesoro Brittanico*.

The stamp had been found some years previously at Colchester, a well-known and extensive Roman colonial station. Mr. Chishull believed it to have belonged to some old Roman Iatraliptes, or curer by ointments.⁴⁶⁷ The following is a copy of the inscription on this Colchester stamp, as given by Chishull:—

1. QIULMURRANIMELI NUMADCLARITATEM.

2. QIULMURRANISTAGIU MOPOBALSAMATADCAP.

And Mr. Chishull interpreted these inscriptions thus:—"Quinti Julii Murranii Melinum, sive ex malis cotoneis oleum, ad claritatem oculorum faciens. Iterumque, Quinti Julii Murranii stagium opobalsamatum, sive myrrhæ oleum opobalsamo permixtum, ad cap. *i.e.*, ad caput medicandum utile."

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In this interpretation, Mr. Chishull seems to have fallen into more than one important error, as we shall endeavour to show by considering the two inscriptions in detail.

1. Q. JULII MURRANI MELINUM AD CLARITATEM.—The Melinum of Q. (Quintus?) Julius Murranus, for clearness of vision.

Two or three varieties of the collyrium *Melinum* are given by Galen.⁴⁶⁸ Thus, in his list of collyria he gives formulæ for the *Melinum* of Lucius; for the *Melinum atarachum* (*i.e.* against the taraxis); and for a *Melinum delicatum*, fitted for those who could not bear the irritation of any powerful medicament.

Different opinions have been expressed in relation to the origin and signification of the term Melinum. Walch, 469 like Chishull, derives the term from "malum" ($\mu\eta\lambda\sigma\nu$), an apple, supposing it to be the principal ingredient in the collyrium. And certainly Pliny and Paulus Ægineta speak of an oil termed melinum, 470 being made from the quince (Malum Cydoneum); and the flower of the plant is described by Pliny as useful in inflammation of the eyes. But no "malum" enters into the composition of any of the three Melina collyria, which I have referred to in Galen.

The best variety of alum seems, in ancient times, to have come from the island of Melos; and, according to Pliny, this drug was consequently termed *Melinum*. It was believed to be useful in discussing granulations of the eyes (oculorum scabritias extenuat).⁴⁷¹ Hence Saxe (p. 29) and Tochon (p. 18) have conjectured that the alum or *Melinum* of Pliny was the *Melinum* which has been found inscribed on several oculist-stamps. But again, the same objection holds,—namely, that in none of the collyria *Melina* of Galen was alum a component ingredient.

In his observations, however, upon the different forms of emplastra (and many of which were named *Melina*), Galen gives a sufficient explanation of the origin of this term as it was applied to plasters; and the same holds, no doubt, also in reference to its application to collyria. According to his own explanation, it was a term significant merely of the colour of the resulting medicament, like the green, brown, etc., plasters and collyria, named *chloron*, *cirrhon*, etc. etc. Gesner, Cooper, and other philologists, lay down *Melinum* as an adjective, meaning yellow. And perhaps the term was originally derived from the yellow colour of the quince or μῆλον, in the same way as the *citrine* (*Unguentum Citrinum*), which is still common in modern pharmaceutical language, was a term originally derived from the yellow colour of the *citron* (κιτριον) or lemon, and was applied to designate ointments, etc., of that special tint. In further proof of this origin and signification of the term *Melinum*, I may add, that, in mixing together the ingredients contained in the *collyrium melinum delicatum* of Galen (vol. xii. p. 769), I find that a yellow or orange-coloured fluid is the result. The yellowish tint of the *emplastra melina* was, as Galen tells us, generally, but not always, derived from their containing verdigris, altered by a moderate boiling with the other component ingredients.⁴⁷² The collyria *Melina* of Galen contain ceruse and calamine in their composition.

The *Melinum* is professed, in Murranus' stamp, to be efficacious for the clearing of the eyesight (ad claritatem). The *Melina* collyria of Galen are all alleged by him to have effects conducive to this object—viz. the removing of cicatrices and calli, and every weakness of vision (omnem hebetudinem visus).

2. Q. JULII MURRANI STAGIUM (STACTUM) OPOBALSAMATum AD CAP (CALigines).—Q. Julius Murranus's Opobalsamic Stactum, or Opobalsamic Eye-drops, for dimness or blindness.

Mr. Chishull read *Stagium* instead of *Stactum*, the CT of the latter word having been mistaken by him for GI. Mr. Forster showed to the London Antiquarian Society, 473 in 1767, a plaster-cast of what was doubtlessly this same Colchester stamp, and gave the reading correctly in the second inscription as Stactum.

The Latin designation $\mathit{Stactum}$, analogous to the Greek terms $\mathit{Stacton}$, $\mathit{Enstacton}$, and derived from the verb $\sigma\tau\alpha\zeta\omega$ (I drop), denoted any liquid collyrium, applied by drops into the eye—"collyria enstacta, hoc est, instillatitia, appellata."⁴⁷⁴

A collyrium, with the appellation *Stactum* or *Staticon*, is described by Marcellus,⁴⁷⁵ Myrepsus,⁴⁷⁶ Paulus Ægineta,⁴⁷⁷ etc.; and Aetius⁴⁷⁸ gives a chapter of collyria under this designation. In this chapter Aetius describes five collyria *Stactica*; and, of these, four contain the Opobalsam⁴⁷⁹ as an ingredient, showing the origin and propriety of the term *Opobalsamatum* in the inscription on the seal.

Chishull read the last three letters of the inscription CAP, and thought that the oil was serviceable for head diseases. But if the inscription is not really CAL, the P has in all probability been substituted by an error of the engraver for L (CAL), an abbreviation for Caligines. In confirmation of this opinion, I may remark that the same inscription occurs at greater length on an oculist-stamp found at Daspich in France; and in it the *Stactum Opobalsamatum* is professed to remove *Caligines*. There is, indeed, little doubt but that Murranus of Colchester vended, of old, his Opobalsamic Eye-drops for the same alleged purpose. This quality of "visum acuens" is attributed to two out of the four forms of Opobalsamic Eye-drops mentioned by Aetius. And the *Stactum* is (according at least to the testimony of Myrepsus) "ad acumen visus mirabile admodum."—P. 660.

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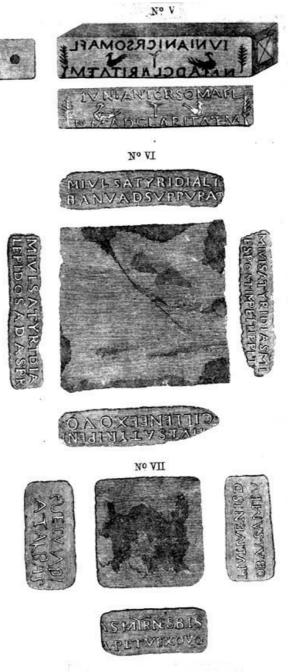
STAMP NO. V.—FOUND AT BATH.

This stamp was found, in the year 1731, at Bath, a well-known Roman station. It was discovered in a cellar in the Abbey-yard. Shortly afterwards the stamp was exhibited to the Antiquarian Society of London by Mr. Cutler. Mr. Mitchell of Bristol, who possessed the stone about the middle of the last century, submitted it also for examination to the Royal Society of London. I have, through Mr. Norman of Bath, and other friends in England, attempted to trace out the present proprietor of the stamp, with a view of ascertaining more correctly the exact nature of the inscriptions upon it; but these efforts have been quite unsuccessful.

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Mr. Lethieullier presented to the London Antiquarian Society plaster casts of the inscriptions on the stamp; and three of these plaster impressions of it are still preserved in the London Antiquarian Museum. These plaster casts, however, are very imperfect; and the lettering upon them is now unfortunately defective at some of those very points that are otherwise the most difficult to decypher.

Manuscript notices of this Bath medicine-stamp exist in the Minute-books of the Antiquarian Society for 1744 (vol. iv. p. 210), and for 1757 (vol. viii. p. 29); the last is with an impression taken with ink from the inscriptions. For copies of these I am deeply indebted to the polite kindness of Mr. Akerman, the distinguished secretary to the Society. The outline in Pl. II., No. V., presents a copy of a rude drawing of the Bath stamp given in the Minute-book of the Antiquarian Society for April 27, 1732. Hr. Akerman has also obligingly furnished me with this sketch, which is interesting as giving us the form of the stone. On the exposed sides of this sketch there is given retrograde, as on the original stone, one of the inscriptions. This inscription the engraver has entered in the plate, as corrected from the pertaining plaster-cast in the museum; and below it, in the plate, is a reversed impression of this inscription.



ROMAN MEDICINE STAMPS.

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In 1788 Mr. Gough published, in the *Archæologia*, "Observations on certain Stamps or Seals used anciently by the Oculists." ⁴⁸² In this communication he has given, amongst others, copies of the inscriptions on the medicine-stamp found at Bath; but without making any attempt whatever to read and decypher these inscriptions. He appears to have seen the stone itself, as he describes it as "square, of a greenish cast, and perforated." He presents the following as the legends or inscriptions on the four sides of the stamp: ⁴⁸³—

- 1. T. IVNIANI THALASER AD CLARITATEM
- 2. T. IVNIANI CRSOMAEL IN M AD CLARITATEM
- 3. T. IVNIANI DPTAL VM AD VETERES CICATRICES
- 4. T. IVNIANI HOFSVMAhoDV EC VMODELICTA AMEDICIS

The two first of these inscriptions are given with sufficient distinctness and accuracy; and they do not offer any great difficulties in the way of explanation. But the two last have been copied so imperfectly,—and, perhaps, so inaccurately,—by Mr. Gough, as to surround their meaning with no small degree of uncertainty and doubt.

In all of the four inscriptions, the name of the proprietor or oculist, T(*itus*?) JUNIANUS, is perfectly distinct. The first side reads as follows:—

1. T. Juniani Thalasser ad Claritatem. T. Junianus' Thalasser (or Marine Collyrium) for clearness of 256 vision.

The collyrium *Thalasseros* ($\theta\alpha\lambda\alpha\sigma\sigma\epsilon\rho\sigma\varsigma$) is mentioned by several of the old Greek and Roman authors, who have discussed the subject of diseases of the eye and collyria, as by Galen, ⁴⁸⁴ Myrepsus, ⁴⁸⁵ Aetius, ⁴⁸⁶ Alexander Trallianus, ⁴⁸⁷ and Paulus Ægineta. ⁴⁸⁸

The name itself—Thalasseros—is evidently derived from $\theta\alpha\lambda\alpha\sigma\sigma\eta$, the sea. Fuchs, the translator of Myrepsus, avows that he can form no conjecture as to why the collyrium was termed Thalasseros (quam autem ob causam nescio). In Cornarius' translation of Aetius, it is entered as "Thalasserum, hoc est marinum." And in all probability it originally received its high-sounding and attractive appellation from the marine colour of the preparation, the hue of the collyrium being, as we have already seen, sometimes the cause and source of its distinctive appellation, as in the collyria termed Melinum, Cygnus, Cirrhon, etc. It has been conjectured that the name was imposed upon it in consequence of one or other of its ingredients being of marine origin. But in none of the formulæ given for it by the authors already named, does any sea ingredient enter into its composition. 489

The object of the *Thalasseros* in our inscription was to produce clearness of vision (*ad claritatem*). It was used in vision impaired from cataract (*suffusio*) and other causes. Galen describes the *Thalasseros* of Hermophilus as "accomodatum ad suffusiones et ad omnem hebetudinem visus; facit et ad incipientem suffusionem" (vol. xii. p. 781). Myrepsus assigns to it the powers of "lachrymas retinens, ad inchoantes suffusiones et nyctalopas, et ad recentem pupillæ dilatationem" (sect. xxiv. cap. 51). It is adapted, according to Trallianus, "ad hebetudinem, et incipientes suffusiones; et callos exterit" (lib. ii. cap. v. p. 175).

2. T. JUNIANI Cerus Somaelinum ad Claritatem.—T. Junianus' Leaden (?) Melinum (or Golden Yellow Collyrium) for clearness of vision.

I have already had occasion to speak of the signification and qualities of the collyrium named Melinum. In the Colchester stamp the Melinum is invested with the same supposed properties as the Crsomelinum in the above legend on the Bath seal,—namely, "ad claritatem."

The prefix CRSO, in *Crsomelinum*, admits of more than one interpretation. Galen gives four different formulæ for "collyria *Melina*." Three of these contain, as one of their ingredients, the *Cerussa*, or carbonate of lead; and the prefix CRSO may possibly stand as a contraction for *Cerussa*, implying the presence of this medicine in the collyrium. And, in relation to this view, it is to be recollected that this preparation of lead was, in these ancient times, held in some esteem as a local application in eye-diseases. Galen recommends it as an anodyne in pains of the eyes, and as a general astringent and sedative application.⁴⁹¹

Another, and perhaps more probable meaning, has been suggested to me by my friend M. Sichel. He supposes the CRSO to be a contraction for CHRSO, *golden* (from χρυσος, gold), the prefix marking the golden colour of this *melinum*, or yellow collyrium. In this way we would have Junianus retailing his "Golden Yellow Collyrium" to the colonists and natives of Bath some sixteen centuries ago. And we all know that "Golden Ointment" for the eyes is an application not by any means unknown to the medical practitioners and pharmacopolists of England in the nineteenth century.

3. T. JUNIANI DIEXUM AD VETeRES CICATRICES.

In the above line I give the reading of the third side of the Bath medicine-seal, such as it stands

copied into the manuscript minute-books of the Antiquarian Society for 17th November 1757. By turning back to the inscription, as cited in a previous page from Gough, it will be seen that the three medial letters IEX are in a rude Brittano-Roman character, which allows us only to guess at their true signification. Unfortunately, the plaster cast of this side of the stamp does not happen to be preserved with the others, so as to enable us to ascertain the probability of either reading; and it is more than doubtful whether the inscription thus given by these opposed authorities is correctly copied, either by Gough, or in the Society's minute-book. And I believe I state the general experience of all who have worked at the deciphering of Roman and other inscriptions, in observing that the perplexities connected with the reading of them have often been produced, much more by grave errors in the published copies of the inscriptions, than by actual difficulties in the interpretation of the original, after a true copy has been once obtained.

In the present instance, by reversing the usual mode of procedure in such investigations, we may perhaps arrive at the probable truth. In other words, if we consider the disease prescribed for, we may possibly arrive at a knowledge of the drug prescribed. Now the affection on this side of the Bath stamp is *old cicatrices* (VETERES CICATRICES). This disease, or rather result of disease, is mentioned on various Roman medicine-stamps discovered on the continent of Europe, as on examples found at Verona, Lillebonne, Ingweiler, and Saint Cheron, 492 and in one which I shall notice in the sequel, lately detected in Ireland. In all the instances which I have just named, the collyrium indicated on the inscriptions as the remedy (VETERES CICATRICES), is the collyrium termed DIAMYSOS or DIAMYSUM, which contained, as its principal ingredient, the metallic preparation known under the name of Miou, or Mysy, among the ancient medical authors; and Marcellus Empiricus gives a formula for the formation of a collyrium DIAMYSOS from it. Looking to these facts, in relation to other analogous Roman medicine-seals, it seems not an improbable conjecture that the word on this third side of the Bath stamp is the same, perhaps more or less mis-spelt or contracted; and consequently, that the whole inscription is T. JUNIANI DIAMYSUM AD VETERES CICATRICES. The re-discovery of the stamp itself can alone settle this and other difficulties connected with it.

If we judged of the nature of the inscription by the characters of the letters, as given by Gough, the disputed word might perhaps be more correctly read DRYCUM or DRYXUM. And possibly, in this way, it may signify an astringent and detergent collyrium, made from the bark, acorn, or galls of the DRYS ($\delta \rho \nu c$) or oak—a tree that held a place in the materia medica of Hippocrates, Galen, and the other ancients, and which still maintains its place in our own modern Pharmacopæias. Dioscorides, and the other old pharmaceutical authorities, describe the *Drys* or Quercus as possessing desiccant, astringent, and other properties; and they attribute especially these powers to the gall excrescences that so often grow upon it, and which they incorrectly deemed the fruit of this tree. According to Oribasius, the gall of the oak—"siccat, repercutit, contrahit, constringit, et particulas infirmas roborat."

Further, in favour of the present supposition, that the collyrium of the inscription may possibly be named from the DRYS, I may take the present opportunity of mentioning that the ancient Roman oculists seem to have pursued, in regard to old cicatrices of the eye, a treatment which is not followed by their successors in modern times. "All cicatrices on the transparent part of the eye," says Aetius, "appear white (omnes cicatrices in nigro oculi *albæ* apparent");⁴⁹⁴ and consequently give, by their presence, a disagreeable and disfiguring effect to the eye.⁴⁹⁵ Some of the Roman oculists seem to have used various collyria, for the purpose of dyeing or changing the colour of these white specks or pearly cicatrices, and of thus imparting to them some kind of tint that rendered the appearance of the eye, and the distinction between the transparent cornea and its white opacities, less marked and striking. For this purpose the gall-nuts of the oak or DRYS appear to have been greatly used. Actius does not approve of the practice of tinting cicatrices; but, in a chapter bearing the heading of "Albuginum Tincturæ," he describes half-a-dozen applications and collyria that might be employed for the purpose of staining and correcting the colour of old cicatrices of the eyes, lest, he adds, his readers should be ignorant of the means which might effect this (ut ne ignorentur ea quæ hoc facere possunt). In three or four of these collyria the gall-nut forms a leading ingredient, 496 and it seems to have been generally used previously to, or in combination with, blue vitriol (atramentum sutorium). Myrepsus gives a "collyrium tingens crassas albugines et cicatrices," containing galls with chalcanthus (or copperas), roasted lead, etc.; and a second formed of burnt and washed lead, etc., combined with unripe galls. 497 Paulus Ægineta mentions two dyes for cicatrices, both of them containing galls along with chalcanthus. 498 Alexander Trallianus gives a collyrium for staining cicatrices, which he pronounces "valde generosum." It consists principally of chalcanthus and galls. 499

Lastly, let me offer one more conjecture. If the debateable word in this legend be correctly copied as DIEXUM into the Antiquarian Society minute-book, it may probably signify the collyrium DIOXUS OF DIOXUM given by Marcellus, and which he recommends for the removal of granulations of the eyelids. This collyrium was composed of cadmia, burnt copper, hæmatites, myrrh, and gum. 500

4. T. JUNIANI HOBSUM ADhoUECUMO DELICTA A MEDICIS.

This fourth legend on the Bath stone offers the most puzzling of all the inscriptions hitherto found upon the Roman medicine-stamps discovered in Great Britain. As Mr. Gough gives it, the last

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words of the inscription delicta, or more probably delecta⁵⁰¹ A medicis (esteemed by physicians), are alone intelligible. The plaster cast of this side of the seal, contained in the Museum of the Antiquarian Society of London, contains an extremely imperfect copy of the second line, and not an over perfect one of the first; but we see enough in it to be quite aware of the great carelessness with which Mr. Gough had originally copied the whole inscription. The second last letter in the line is not the Greek ρ , as Gough prints it, but the Latin ρ ; and the name of the collyrium is not hobsum, as he gives it, but apparently phoebum. At all events there is a ρ , which he has omitted, before the ρ ; and the two medial letters, which he read ρ s, are seemingly ρ b. Such is the conclusion to which a careful examination of the lettering of the cast itself forces me; and what is much more important,—because affording far stronger evidence than mine,—Mr. Akerman reads this inscription in the same way. I may add, that (as I am informed by the same gentleman) the word is always copied and written as phoebum, in the several notices of the stamp contained in the minute-books of the Antiquarian Society, and to which I have already referred; and Gough's Greek ρ is always given as the Roman ρ .

Still, with all these emendations, I confess myself quite at a loss to decipher, satisfactorily, the inscription. The spelling of all the inscriptions on this stamp is executed very carelessly,—as in *crsomaelinum* for *crysomelinum*; *thalaser* for *thalasser*; and possibly the term QUECVMO may be a mis-spelling by the engraver for LEUCOMA. If so, the inscription would stand as

T JUNIANI PHOEBUM AD LU ECOMA DELECTA A MEDICIS.

Or, as we may then translate it, "The Phoebum of T. Junianus for Leucoma, esteemed by physicians."

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I am not aware that any of the old authors have described a collyrium under the name of PHOEBUM. But it looks like one of those specious titles which the oculists were so fond of selecting and assuming; and we find described in their works collyria with analogous semi-astronomical and mythological appellations, such as *Sol, Aster, Lumen, Phos, Uranium,* etc.⁵⁰²

I shall venture only one more remark, viz. the possibility of the term being phorbium and not phoebum. "The phorbium," observes Galen, "possesses attenuating, attractive, and discutient powers. They apply its seeds, mixed with honey, to Leucoma; and it is believed to have the power of extracting spicula of wood." 503

SECTION VII.

STAMP NO. VI.—FIRST DESCRIBED BY MR. DOUCE.

Mr. Douce published in 1778^{504} a notice of a square flattened Roman medicine-stamp, a quarter of an inch thick, and each side or edge measuring about two inches.

Mr. Gough published in the *Archæologia* a sketch of this stamp, which is copied into Pl. II., No. VI. Some wax impressions were taken of the stone, but the stone itself was (it is stated in the same volume of the *Gentleman's Magazine*, 1778, p. 510) "lost out of a pocket that had a hole in it, and probably, instead of gracing a museum, has contributed its mite towards mending the roads."

The four sides of the stone contained the following series of inscriptions, the terminal and initial letters of three of the lines being wanting, and supplied in our copy below by italic letters:—

- 1. MJULSATYRIDIA LEPIDOSADASPR
- 2. MJULSATYRIDIASMI(*r*) (*n*)ESPOSTMPETLIPPIT
- 3. MJULSATYRIDIALI BANUADSUPPURAT
- 4. (m)JULSATYRIPENI CILLENEEXOVO

The name of the oculist, M. JUL. SATYRUS—M(arcus?) Jul(ius) Satyrus—is sufficiently distinct, and occurs with each of the four legends of the stamp. When we analyse further the inscriptions on the four sides of the seal, they severally read as follows:—

1. M(arci) Julii satyri dialepidos ad asperitudines.—Marcus Julius Satyrus' Dialepidos or Copper collyrium for granulations of the eyelids.

The three first sides of this stamp have the special collyria inscribed upon them, beginning each with the letters DIA, from the Greek preposition $\delta\iota\alpha$, "with," and here signifying "made with." The three principal ingredients in the three first inscriptions are all given, combined with this initial preposition $\delta\iota\alpha$, and under their Greek appellatives,— $\lambda\epsilon\pi\iota\delta\circ\varsigma$, $\sigma\mu\nu\rho\nu\alpha$ and $\lambda\iota\beta\alpha\nu\circ\varsigma$ —forming instances, among many others, of the anxiety of the ancient Roman oculists to invest

their drugs with all the mysterious attraction and formality of a Greek name; just as some modern English physicians foolishly enough consider it still proper to write always the names of the medicines which they now prescribe in the language of the ancient Romans, thus, like their predecessors, attempting, in the exercise of their profession, to act upon that principle in the weakness of human nature which holds "omne ignotum pro mirifico."

I have already described (see Stamp No. II., p. 245) the composition of the collyrium termed *Dialepidos*, and the origin of the name of the inscription from the λ επιδες, or scales of the oxide of copper.

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2. M. Jul. Satyri diasmi*rn*es post impetum lippit*udinis.—The Diasmyrnes or Myrrh collyrium of M. Jul. Satyrus, after the commencement of ophthalmy.*

The principal ingredients in the collyrium *Diasmyrnes*, namely, myrrh (μρρνα or σμυρνα), was a drug to which important therapeutical virtues were formerly ascribed. It was applied in the treatment of various diseases. In reference to affections of the eye, it had the power, according to Dioscorides, of filling up ulcers of the organ, removing cicatrices and scales obstructing the pupil; and besides, it cured eruptions and granulations of the eyelids (oculorum ulcera complet, exteritque albugines, et ea quae pupillis tenebras offundunt; quin et scabritias seu asperitudines expolit). 506

Various collyria were used by the ancients, bearing the name of *Diasmyrnes* or *Diasmyrnon*, from myrrh constituting their leading ingredient. Aetius has one of his long chapters on collyria headed "Collyria Diasmyrna et Chiaca appellata." Actuarius, in his section "De affectionibus Oculorum," speaks of the collyria *Diasmyrna* (quæ ex myrrha constant) in the plural number, and as well known in his time. Paulus Ægineta, in discussing the treatment of hypopion or suppuration in the cornea, speaks of sometimes making the abscess burst; and, if so, then, he adds, "cleanse the ulcer by means of the more potent remedies, such as those called *Diasmyrna*," etc. Among his formulæ for individual collyria in his several books, he gives a receipt for the collyria *Diasmyrnes*. (Aldine edition, p. 118.)

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Galen gives several collyria Diasmyrna, as the Diasmyrnum Odorum Synerotis, 510 the Diasmyrnum Glaucidanum, and the Diasmyrnum ex hæmatite. 511 And in his work De Simplicium Medicamentorum Temperamentis ac Facultatibus, he states, "Sed et collyria sunt plurima quæ medeantur suffusionibus, et maxime quod plurimam recipit myrrham, quale est quod a Democrate compositum est, quod vocant Diasmyrnon."

The term Lippitudo in this legend, and which we will find recurring in the sequel, was, according to Galen, anciently applied to that form of ophthalmy which consists of inflammation of the conjunctival covering of the cornea (lippitudo inflammatio est membranæ, quæ corneæ adnata est.)⁵¹³ But the term was also used to designate other forms or varieties of ophthalmic inflammation. The disease described by Celsus under the name of Lippitudo appears (says a high modern authority on eye-diseases) to have been "catarrhal conjunctivitis."⁵¹⁴ The same oculist speaks of Lippitudo as "an excoriation of the edges of the lids, or bleared eyes;" and he describes obliteration of the Meibomian follicles as the cause of incurable Lippitudo.

3. M. JULII. SATYRI DIALIBANU*m* AD SUPPURAT*ionem.—M. Jul. Satyrus' Dialibanum, or Incense collyrium, for Suppurative discharge from the eyes.*

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Frankincense (thus, λιβανος, λιβανος) λιβανωτος) was frequently used by the ancient oculists in their collyria. According to Galen and Paulus Ægineta, in consequence of its detergent powers, it apparently cleanses and fills up ulcers in the eyes (expurgare et implere quæ in oculis consistunt ulcera videtur). It has the power, according to Oribasius, "astringendi, calefaciendi, caliginem oculorum discutiendi, cava ulcera implendi, ad cicatricem perducendi," etc.

Alexander Trallianus gives a formula for the collyrium *Dialibanum ad chemosim efficax*; and he describes the *Dialibanum* as, like the Libanum, of much use in eye-diseases, and particularly for inflammations which are accompanied with ulceration (multi est usus, maxime ad inflammationes quae cum ulcere infestant). Celsus recommends it in ulcers of the eye following pustules (fit quoque proprie ad hæc quod διὰ λιβάνου vocatur). Paulus Ægineta gives a formula for the *Dialibanum*, in his chapter on collyria. Marcellus Empiricus, who offers two recipes for its composition, ascribes to it the power of being efficacious in the disease noted on our inscription, namely, "ad suppurationes oculorum." described in the disease noted on our inscription, namely, "ad suppurationes oculorum."

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When speaking of the treatment of suppuration of the eye, Galen lays down the following indications for the use of the *Diasmyrnes*, and *Dialibanum*:—"At quando pus, quod in oculis est, digerere placet, collyriis quæ myrrham habent, maxime utemur; quæ utique et *Diasmyrna* Græci proprie vocant; his certe minus, sed reliquis melius faciunt quæ *Dialibanum* vocant." ⁵²³

4. (M): JUL: SATYRI PENIC*illum* LENE EX OVO.—M. Jul. Satyrus' mild Penicillum; to be used with an egg.

The term *Penicillum* has been found inscribed on several different Roman medical stamps, as upon specimens discovered at Vieux and Paris, each marked with *lene penicillum*; upon one discovered at Nais (*penicillum ad omnem lippitudinem*); and upon another at Famars. Its signification has given rise to several opinions somewhat differing from each other.

M. Grivaud considers the *Penicillum* indicated on the Roman medicine-stamps, to be merely a small brush or hair-pencil, such as is still used at the present day to wipe away the more viscid

discharges that may be found adhering to the palpebræ and eyelashes. ⁵²⁴ According to M. Sichel, the *Penicillum* consisted of a pledget or folds of charpie, which the ancient oculists used both for the purpose of cleansing the eyes, and of introducing into them soothing washes and collyria. ⁵²⁵ M. Eloi Johanneau, ⁵²⁶ and M. Duchalais, ⁵²⁷ describe the *Penicillum* as a soft and fine sponge, employed in applying collyria to the diseased eye. Blancardi, in his *Lexicon Medicum*, defines the word *Penicillum* as "lint reduced to charpie, and besmeared with ointment to be applied to ulcers"

The word Penicillum occurs in the writings of Pliny and Celsus, and is used by these ancient authorities in such a manner as to give countenance to each of the preceding opinions. Thus Pliny, in his chapter on sponges (De Spongiarum Natura), speaks of a variety of very fine sponge under the name of *Penicillum*; and this, when soaked in a preparation of honeyed wine (mulso), was, he says, applied to tumours of the eyes.⁵²⁸ These *Penicilli* were also (he adds) useful, when very soft and fine, in cleansing the eye in ophthalmy. 529 Celsus, in his observations on the diseases of the eye, three or four times, and in different senses, uses the term. In inflammation of the eye, he recommends the eyes to be fomented with a Penicillum or pledget, squeezed out of a warm watery decoction of myrtle or rose leaves, before local medicines and collyria are applied to them.⁵³⁰ Elsewhere, he recommends a pledget or *Penicillum* to be laid, or, if necessary, bound over the eyes, squeezed out of water; or, if the attack is more severe, out of vinegar and water (Penicillo uti expresso ex aqua; si major, ex posca).531 In another passage, he states that in intense ophthalmia the white of an egg or the milk of woman, dropped into the eye with a Penicillum, relieves the inflammation, and that this may be used by the patient when neither a physician nor other medicines are at hand.⁵³² And again, he recommends the patient to take a bath, and foment his head and eyes freely with the warm water, then to wipe both with a Penicillum, and anoint his head with iris ointment. 533 Here we have the Penicillum used by the same author as a mechanical means both of cleansing the eye and of making local applications to it. Further, in his chapter on the surgery of the eyes, Celsus uses the word Penicillum in the signification of tents. Thus, in describing the operation for ancyloblepharon, or agglutination of the eyelids, he directs the eyelids, after being separated by a probe, to be kept asunder by small penicilla laid between them, till the ulceration of the part is cured. 534

The preceding quotations show that, besides other significations, there is no doubt that the term *Penicillum* was used to designate a soft sponge, and perhaps also a brush or pledget of charpie that was occasionally employed in ophthalmic practice, for the double purpose of fomenting or cleansing the eye, and of dropping local applications into it. But it seems very unlikely that a stamp should be used by the oculist to mark the material of these *Penicilli* with. It would be both difficult and unnecessary to stamp in any way either a piece of sponge or of charpie with such an inscription as that found upon this and the other Roman seals. And I would venture to suggest, that it appears much more probable that the collyrium, ointment, or lotion, that was to be used with the sponge or charpie, was sometimes designated *Penicillum*, from the special mode in which it was to be applied; in the same way as we have found various eye-drops passing under the general designation of *Stactum*, from the special mode in which they were applied to the diseased organ. In this way the LENE PENICILLUM in the legend of our present oculist-stamp would not signify the material which was used in the application of the medicine, but the name of the medicine or collyrium as indicative of the mode in which it was to be used.

The employment of the collyrium PENICILLUM mixed with an egg (EX OVO) is often indicated upon the oculist-stamps; and in the ancient Roman authors it is a mode in which many of the collyria were directed to be prepared before they were applied to the diseased eye.

SECTION VIII.

STAMP NO. VII.—CONTAINED IN THE BRITISH MUSEUM.

In his paper in the *Archæologia* (vol. ix.), Mr. Gough published a sketch and account of a medicine-stamp, inscribed on three of its sides, and remarkable in one or two respects. The sketch which he has given of it is copied into Plate II., No. VII. The stamp itself is preserved in the British Museum. It is thicker, and more rounded at the edges, than the generality of these flat medicine-stones.

After quoting the three inscriptions on its sides, Mr. Gough gives the following very brief and unsatisfactory account of the reading of this stamp. "From the inscriptions," he observes, "we learn that the owner's name was FL., or Flavius Secundus, and that his composition was made of Opobalsamum and Myrrh, and the white of eggs." ⁵³⁵

Mr. Gough pointed out that the third side of the stamp was engraved in letters of a rude and negligent form, and different in character from the inscriptions on the two other sides. But he failed in seeing that the remaining sides are both imperfect; and that the latter half of one of the inscriptions, and the first half of the other, are deficient, in consequence of the stone, which was at first much larger, having been broken or reduced in size, and subsequently again rubbed down and smoothed on two of its sides before one of these sides was cut with the rude lettering above alluded to. When these circumstances are attended to, the inscriptions on the three sides appear to stand as follows:—

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1. LJULIVENISD
OPOBALSAMTU
2..... ASMVRNESBIS MPETUEXOVO
3. FSEKUNDI

ATALBAS

The name of the proprietor is evidently L. JUL. IVENIS [L(ucius?) Jul(ius) Ivenis]; and I may remark in passing, that the cognomen of IVENIS is one which has been found recurring among the Roman pottery-stamps found in England.

It is impossible to fill in, with anything like precision and certainty, the defective words in the two first inscriptions. But judging from the analogy of other similar and more perfect stamps, these two inscriptions probably read somewhat as follows when the seal was entire.

1. L. Jul. IVENIS Diapsoricum OPOBALSAMatum ad Claritatem.—L. Jul. Ivenis' Opobalsamic Diapsoricum for clearing of the sight.

The adjective, OPOBALSAMATUM, has hitherto been generally found united upon medicine-stamps with one of two collyria—viz. with *Stacticum* (as in seal No. IV.); or with *Diapsoricum*, as in seals found at Jena and Lyons. The D preserved in the first line is, in all probability, the initial letter of the latter collyrium.

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The Psoricum was a mixture of cadmia and chalcitis, according to Dioscorides, Pliny, and Celsus;⁵³⁶ or of litharge and chalcitis, according to Galen, Aetius, and Paulus Ægineta.⁵³⁷ This metallic compound derived its name of *Psoricum* from its supposed utility in the treatment of parts affected with the eruption of scabies or psora. The eyelids, according to the ancient oculists, were the occasional seat of eruptive or pruriginous inflammation (psorophthalmia, scabrities, prurigo, etc.) In enumerating the diseases of the lining membrane of the palpebræ, Galen mentions, among others, sycosis, chalazosis, and psoriasis. 538 Various collyria employed for the removal of these affections were termed Psorica, and most of them, though not all, contained the metallic compound alluded to. "Quae scabros in palpebris affectus persanant, atque ob id Psorica appellantur."539 When speaking of the specific affections of the eyes and their appropriate local applications, Actuarius, in the same way, remarks, "Quae scabiosis palpebrarum affectionibus medentur, id circo *Psorica* appellantur." ⁵⁴⁰ He gives (p. 307) formulæ for various forms of the Collyrium Psoricum; as the Psoricum aridum, the Psoricum Aelii, etc. Aetius recommends the collyrium Psoricum against "scabros ac corrosos angulos, et intensos pruritus, milphoses et prurigines."541 Scribonius Largus describes the composition of a collyrium *Psoricum* made from the metallic compound of the same name (facit hoc collyrium bene quod psoricum dicitur), and fitted to remove blindness, granulations, and xero-ophthalmia.⁵⁴² Marcellus Empiricus credulously invests the collyrium Psoricum with signal powers for various eyediseases, but particularly for old-standing blindness (antiquam coecitatem). For if (says he) we may credit the experience of the author of the remedy, it has, at the end of twenty days, restored sight to a person who had been blind for twelve years (nam ut auctori hujus remedii de experimento credamus, duodecim annorum coeco intra dies viginti visum restituisse se dicit).⁵⁴³

On the Jena medicine-stamp the *Diapsoricum Opobalsamatum* is entered as efficacious for the clearing of the sight (ad claritatem);⁵⁴⁴ and in the proposed restoration of the reading of the present English stamp, I have added to it the same therapeutic indication, as one not unlikely to have originally filled up the part that is now deficient in this line of the stamp.

2. L. Jul. Ivenis Diasmyrnes bis Lippitudinis impetu ex ovo.—The myrrh collyrium of L. J. Ivenis, to be used twice a day, mixed with an egg, at the commencement of Ophthalmy.

Already we have considered the composition, etc., of the Collyrium *Diasmyrnes* (see pp. 267, 268.) It is entered, as efficacious in attacks of Lippitudo, on the medicine-stamps of Jena, Nais, etc. In the Jena stamp it is, as in the present instance, ordered to be used mixed with an egg.⁵⁴⁵

2/8

The word BIS denotes, in all probability, the frequency with which it was to be used daily. Occasionally the ancient authors state in the same way in their works the frequency with which a special collyrium was to be used. Thus, for example, Paulus Ægineta, after describing the composition of the brown collyrium (collyrium fuscum), adds that it is to be applied thrice a day (illinitur ter in die ... ex ovo aut lacte, etc.)⁵⁴⁶ Indeed when speaking of the variety of collyrium mentioned in the legend on this stamp,—namely, of the "collyria quæ quod ex myrrha constant διασμυρνα vocantur," Actuarius expressly states that the affected eye is to be annointed with the Diasmyrnes "twice a day (bis in die)."

3. The third side of this medicine-stamp is engraved, as already observed, by a different and far more inexperienced hand than the other two sides. The letters are very roughly and rudely formed. The inscription indicates the name of another oculist,—of one who probably became the possessor of the stamp after IVENIS. The new proprietor's name is F., or probably FL., SECUNDUS, and the inscription reads, F. SEKUNDI AT ALBAS, the collyrium or preparation of F. Secundus against Albuaines.

2/9

In reading it, I suppose the AT to be a mis-spelling for AD,—a mistake of which there are not

SECTION IX.

STAMP NO. VIII.—FOUND AT SOUTHWELL.

An anonymous correspondent, C. D., sent to the *Gentleman's Magazine*, in 1772, a sketch and notice of what, no doubt, is a Roman medicine-stamp, but both the sketch given of it and the description are excessively meagre. The correspondent dates his letter from Southwell, in Nottinghamshire. He says, "The inscribed stone was found lately by casting up the ground, in the neighbourhood of Littleborough in this county. The stone is oblong, about two inches long, and one broad. It contains inscriptions on the edges or rim of the two ends, and on one of its oblong sides, but not on the other."

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"It is," says the correspondent, "supposed to be a Tessera or kind of tally, such being, as we are told, a little flat square piece of stone, and having a particular inscription, and was used in the Roman armies, by being on certain occasions delivered to each of the soldiers, to distinguish them from the enemy, and also in setting their nightly guard, by being given from one centurion to another, quite through the army, till it returned to the tribune who first delivered it. Upon the receipt of this, the guard was set immediately. But," he continues, "as the inscription on the above drawing cannot be made out to satisfaction, many of you will be glad to know whether it has been such a Tessera as is above supposed; or what else it may have been, or also an explanation of its legend, by some of your antiquarian correspondents."

The inscription on one of the long sides of the stone appears to be the name of the proprietor of the stamp; but the published copy of it presents such irregular lettering, as to defy any certain deciphering of what the name is. (See Plate III., No. VIII.) On the other two sides the inscriptions are as follow:—

B. DIASORICV.
 STATVS.

These two words evidently are mis-spellings, either on the original stamp, or (what is equally probable) in its published copy, for the Collyria termed *Diapsoricum* and *Stactum*. But I have already, in reference to previous inscriptions, discussed the signification of these two terms at such length as not to require to revert to them. (See under Stamps No. IV. and No. VIII.)

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The initial B, as it stands in the first line, seems to defy all kinds of conjecture in regard to its signification. In this, as in one or two other instances, the only hope of obtaining a true reading of the legend is in the re-discovery of the stamp itself.

SECTION X.

STAMP NO. IX.—FOUND AT WROXETER.

This seal is remarkable both from its inscription, and from its round form. In this last respect it is, I believe, as yet unique,—no other specimen of a medicine-stamp of the same circular figure having, as far as I know, been hitherto described. The stone is about seven-eighths of an inch in diameter, and a quarter of an inch thick. Its form and inscription are seen in Plate III. No. IX., where the upper figure shows the stamp presenting the usual incuse and reversed inscription; and the second or lower figure shows the impression left by the stamp upon wax. 549



ROMAN MEDICINE STAMPS.

DOM NE MDOLO REM

This curious medicine-stamp was found, in 1808, by a person ploughing in a field near the Roman wall at Wroxeter (the ancient Uriconium), Shropshire. It was first figured and very briefly noticed by Mr. Parkes in the *Gentleman's Magazine* for 1810, p. 617. "Several (observes Mr. Parkes) have attempted to decipher the legend, but no one has as yet been able to give a satisfactory reading." Mr. Nightingale (1813), in his account of Shropshire in the *Beauties of England and Wales*⁵⁵⁰ mentions the stamp; and Mr. Hartshorne in his *Salopia Antiqua*⁵⁵¹ (1841), has given an embellished and consequently less accurate copy of the inscription than that originally published by Mr. Parkes. Mr. Hartshorne describes it as "an amuletal seal," and adds, "it has hitherto baffled the endeavours of those who have attempted to explain it." Lastly, Mr. Albert Way has lately correctly published it as a specimen of a Roman medicine-stamp, and has interpreted the second and fifth lines, leaving the others still undetermined. But the whole appears capable of being deciphered. The inscription runs thus:—

IBCLM
DIA LBA
AD OM
NE Δ VN
O EX O

J (ulii?) B (assi?) CLementis DIALiBAnum AD OMNEM $\Delta \iota \alpha \theta \epsilon \sigma \iota \nu$ (Diathesin) VNO EX Ovo.-The Dialibanum or Incense collyrium of Julius Bassus Clemens, for every eye-disease; to be used mixed with an egg.

The name of the practitioner or proprietor, given in the first line of the seal, offers the principal difficulty in reading the inscription. But the CLM is in all probability a contraction, as I have ventured to interpret it, for CLEMENS,—a common cognomen or family name among the Romans. The B as an initial could stand for any of the various gens names which begin with this letter, as Balbus, Betutius, etc. I have conjecturally given it as *Bassus*, principally because on an old monumental tablet, discovered at Leyden, ⁵⁵² the cognomen of CLEMENS is preceded by the nomen gentilicium of BASSUS,—showing the combination in question not to have been unknown among the Roman colonists formerly scattered over Western Europe. Besides, *Bassus* was a name by no means unknown in ancient Roman medical literature and practice. When mentioning, in the preface to his first Book, the more distinguished disciples and followers of Asclepiades,

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Dioscorides places, as the foremost in his enumeration, *Julius Bassus*. Galen (*De Simpl. Medicam. Facult.* lib. i. cap. 7) and Cælius Aurelianus (*Contra Hereses*—Preface to lib. i.) both cite the practice and authority of *Bassus*; and Pliny, in his *Index Auctorum*, mentions that this physician wrote in Greek, although he was by birth a Roman. ⁵⁵³

The nature and composition of the Collyrium *Dialibanum* we have already had occasion to consider under a former head. (See Stamp No. VI., p. <u>253.</u>)

I have also formerly shown that the Greek term $\Delta\iota\alpha\theta\epsilon\sigma\iota\varsigma$ was used as a general term for eyedisease (see p. 241); and no doubt its initial letter Δ stands in the present inscription under this signification.

Many of the ancient collyria were, like the *Dialibanum*, preserved and sold in a firm or solid form, and were directed to be dissolved or mixed with the white of one or more eggs at the time when they were required for application to the eye.⁵⁵⁴ Hence the expression, UNO "EX OVO," in this and other stamp legends.

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This stamp, like some others, has a rude figure of a plant engraved along with the inscription. The trunk of the plant is given at the commencement of the third line by Mr. Hartshorne as an I—thus unnecessarily confusing the reading of the legend.

SECTION XI.

STAMP NO. X.—FOUND AT KENCHESTER.

In the Journal of the British Archæological Association for 1849, Mr. Roach Smith has described a medicine-stamp found at Kenchester, in Herefordshire, and communicated to him by Mr. Johnson. I myself am indebted to the kindness of Mr. Johnson for both a model and drawings of this medicine-stamp, which is quadrilateral, and engraved on its four sides. It has, besides, the word SENIOR inscribed on one of its flat surfaces; and the four first letters of the same word are repeated on the opposite surface. I shall afterwards have occasion to re-advert to this curious point.

Mr. Smith has published a sketch of the stamp; but the more correct drawings of it in Plate III., No. X., have been kindly furnished to me by Mr. Johnson. The six lowest figures in this plate represent, first, the two flat surfaces of the stone, with the retrograde inscriptions upon its four sides; and, secondly, these four inscriptions as they appear when impressed upon wax.

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The inscriptions on the four sides of this stamp read as follows:—

- 1. F.VINDAC.ARIO VISTIANICET
- 2. T.VINDACIAR (i)OVISTINARD
- 3. (T) VINDAC. ARI OVISTI CHLORON
- 4. T. VINDAC . ARIO VISTI ... RINM

The name of the oculist or proprietor, T. VINDAC ARIOVISTUS, *Titus (?) Vindacius* or *Vindex Ariovistus*, is singular; the name ARIOVISTUS being the same as that of the celebrated German king and general that plays so interesting and important a part in the Commentaries of Cæsar, and the reputed valour and prowess of whose troops daunted for a time, and almost created a mutiny in, Cæsar's army.

On this stamp there are no names of any specific eye-diseases given; but the four sides contain the designation of four collyria that we have not met with on any of the previous medicine-stamps which we have had occasion to describe. These are the collyria *Anicetum, Nardinum, Chloron*, and *Thurinum*.

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1. T. VINDACİİ ARIOVISTI ANICETUM.—The Anicetum or infallible Collyrium of T. Vindacius Ariovistus.

The collyrium Anicetum, or Aνικητον, is, as far as I know, described by Oribasius alone. It was composed of red copper, combined with henbane, hemlock, spikenard, frankincense, etc. Oribasius enters it as a collyrium "ad carbunculos aptum." 555

Mr. Roach Smith supposes that the collyrium Anicetum of this stamp derives its name from being a preparation containing aniseed. But the formula given by Oribasius does not present this ingredient; and the origin of the term is, we believe, very different. Galen presents us with a clue to its true meaning, when discussing the subject of plasters, in the sixth book of his work, De Compositione Medicamentorum. One, bearing the name of ANICETUM, is (he observes) called so in consequence of its many and wonderful effects (vocatum est insuperabilis (ANIKHTON) propter miranda et multa ipsius opera). The term itself is, no doubt, derived from the Greek participle PIKNTOS "conquered," with the prefix of the privative α . Among his own list of collyria, Galen enters the one known in his time under the name of Collyrium Aster, 557 as unsurpassed (AoTEP)

Ανικητον⁵⁵⁸).

2. T. VINDAC.—ARIOVISTI NARDINUM.—T. Vindacius Ariovistus' Nardinum or Spikenard Collyrium.

The ancient authorities on the Materia Medica describe several kinds of spikenard, according to the localities in which it is procured, as the Indian, Syrian, Celtic, etc. It was used by the Romans in many of their ointments and perfumes, 559 and sometimes added to their wines. 560

The nard, or spikenard, was used principally to perfume various medicines, etc. But high medicinal properties were also attributed to it in various diseases, and, amongst others, in diseases of the eye. (See Dioscorides, lib. i. cap. vi.) It entered into the composition of many of the ancient collyria, and several were named from it in consequence of its forming their leading ingredient. Aetius has a long chapter on formulæ for "Collyria Nardina et Theodotia,"⁵⁶¹ and bestows the most extravagant praises upon some varieties of the spikenard eye-applications. Speaking of one of them, he observes, "It is not easy to relate the powers and efficiency of this medicine; indeed my readers would scarcely credit it, for under the most desperate affections it recalls the eye to its natural state."⁵⁶²

3. T. VINDAC. ARIOVISTI CHLORON.—The Chloron or green Collyrium of T. Vindax Ariovistus.

Already I have had occasion to allude to the collyrium *Chloron*, as one of those which derive their particular appellation from the tint or colour of the preparation. The green collyrium, or *Chloron*, is mentioned in many of the old treatises upon affections of the eye. For example, Galen gives several such collyria in succession, as, vol. xii. pp. 763 and 768, the "*Chloron* ad diatheses;" and again, two forms of *Chloron* used by Zoilus the oculist.

4. T. VINDAC. ARIOVISTI TURINUM. The Frankincense Collyrium of T. Vindacius Ariovistus.

The designation of the collyrium on this fourth side of the Kenchester stone is so very much destroyed as to render the deciphering of it extremely difficult and problematical.

Mr. Roach Smith has not attempted to read it; but has contented himself by giving N as the last letter of the collyrium, and the only one capable of being deciphered, printing the whole legend on this side thus:—

T VINDAC. ARIO VISTI N. ⁵⁶³

But certainly the terminal letter is not N. Mr. Johnson has kindly supplied me with two wax impressions of the legend on this side. One of these is faithfully copied in Plate III., No. X., lowest figure. The examination of it will show that the terminal letter is not an N; for the supposed middle or oblique line of the letter descends downwards from left to right, and not, as it should do, provided the letter were N, from right to left. The two first letters of the name of the collyrium are entirely obliterated. In the position of the third letter there is the head of a letter which may stand for R, B, or P. The following letter is apparently an I; and the next an N. In reading it, I have supposed these three consecutive letters to be RIN, and the terminal letter to be an M, or rather a V and M braced together. An instance of a similar bracing or conjunction of two letters is seen in the legend of the second side of this stone, where the terminal two letters TI of "Ariovisti" are conjoined into one. Further, I have ventured to suggest the two initial letters as TU, and the whole name as consequently TURINUM.

The collyrium *Thurinum*, or *Turinum*, is inscribed on three Roman medicine-stamps that have been discovered in France,—the first in Paris, the second at Cessi-sur-Tille, and the third at Solangei. The two last are both described by M. Fevret de Saint-Mesmin. 564 The collyrium evidently derived its specific name from its principal ingredient frankincense, or *thus*, this latter Roman noun being sometimes spelt with, and sometimes without, the h. In the Solangei stamp the collyrium is written thurinum; but in the stamps of Paris and Cessi-sur-Tille it appears without the h, or as turinum.

The collyrium Turinum is, it is scarcely necessary to add, merely a latinised form for the Greek collyrium Dialibanum, the composition and virtues of which we have considered in the previous pages (see pp. 269 and 283). The Latin translators of Oribasius and Paulus Egineta render the collyrium Dialibanum as written by these Greek authors by the term " $Collyrium\ ex\ thure$." In the same way the κολλουριον το δια λιβανου γινομένον of Galen is rendered by Kühn, and his other translators, as "Collyrium quod fit ex thure." E66

SECTION XII.

STAMP NO. XI.—FOUND AT CIRENCESTER.

In the beautiful work on the Roman remains of Cirencester, published last year by Professor Buckman and Mr. Newmarch, a Roman medicine-stamp is described.⁵⁶⁷ It was found, in 1818, in the Leauses garden at Cirencester, deposited in a fictile urn.

This stamp is of the form of a parallelogram, and is inscribed on two of its sides. Plate III., No. XI., shows the lettering of these two inscriptions, as well as the size of the sides, and the rude

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cross-markings that appear on the two ends of the stone. The inscriptions are as follow:—

- 1. MINERVALIS DIALEB ANUM AD IMPT LIPP EX OVO
- 2. MINERVALIS MELINU AD OMNEM DOLOREM

Messrs. Buckman and Newmarch read minervalis as signifying "pertaining to Minerva;" but it is no doubt the name, as in other specimens, of the oculist who was the proprietor of the stamp. And from the inscriptions left us upon Roman tombs, we know that $\it Minervalis$ was a Roman cognomen. 568

The two inscriptions are easily read; they are as follow:—

1. MINERVALIS DIALEBANUM AD IMPET*um* LIPP*itudinis* EX OVO.—*Minervalis' frankincense Collyrium for attacks of Ophthalmy; to be used with an egg.*

We have already had occasion to discuss the nature of the Collyrium Dialibanum (p. 269), and it is unnecessary to recur to it. On a previous occasion, also (p. 284), the signification of the common expression, *ex ovo*, was adverted to.

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2. MINERVALIS MELINUm AD OMNEM DOLOREM.—Minervalis' yellow Collyrium for every pain or disease of the eye.

More than once we have had occasion to allude to the Collyrium *Melinum* (pp. 250, 257). The only singularity in the present instance is, that we have here the *Melinum* offered as a panacea for every painful affection to which the eyes of the colonists and natives of Cirencester might be subject, at the time that Minervalis practised amongst them. One of the forms of the Collyrium *Melinum* given by Galen is professed by him to be efficacious "ad omnem oculorum hebetudinem."—(Kühn's edit. vol. xii. p. 786.)

SECTION XIII.

STAMP NO. XII.—FOUND IN IRELAND.

A Roman medicine-stamp has lately turned up in these islands, in a locality in which its presence could be little expected—viz., in the county of Tipperary, in Ireland. It has been described by Mr. Albert Way in an interesting paper, published after the first part of the present essay appeared in the *Monthly Journal of Medical Science*. Dr. Dowsley, of Clonmel, who now possesses this stone, has kindly furnished me with a wax impression of its inscription, and with the following note relative to the locality in which it was discovered:—"It was found (he says) near the village of Golden, parish of Relig-Murry, in the county of Tipperary, in a field near the ruins of an old hospital, or at least what was supposed to be such; but it was built at so remote a period, that there is now no record of what the building was for, nor of the founder of it, and so little of the walls are at present standing, that even the style of architecture cannot be known. The seal was discovered by a labourer when digging. There was no pottery nor coin found; but near it was a human skeleton much decayed, the position of which in the ground was not noticed. The soil in this field is peculiarly rich and very deep; it is frequently carted away for manure; most likely it was an ancient burial-ground. The village of Golden is about a mile from the old Abbey of Athassel."

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It is unnecessary to discuss here how such a Roman relic reached this part of Ireland,⁵⁷⁰ and whether it was conveyed there or not when the Romans were colonising Britain; or, what is probable, at a later period. But I may merely remark, there can be no doubt that Roman civilisation and Roman practices spread in the earlier centuries of the Christian era to parts beyond the precise line of Roman conquest. Other Roman relics have been found in Ireland,⁵⁷¹ though Ireland was never subject to the Roman arms; and Roman vases, ornaments, and coins, have been discovered even in those more distant and northern Scandinavian settlements, to which the Roman power never penetrated.⁵⁷²

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Plate III., No. XII., shows the figure of this Irish medicine-stamp. It is engraved only on one side, and the inscription runs as follows:—

M IUVEN TUTIANI DIAMYSUS AD VET CIC

M(arci?) JUVENtii TUTIANI DIAMYSUS AD VETeres CICatrices.—The Diamysus of Marcus Juventius Tutianus, for old cicatrices.

At the end of the first line there is a small cut in the inscription (see Plate), which, in all probability, is not a letter, but a mark or ornament intended to fill up that space. If a letter, it is most likely C, standing perhaps for collyrium.

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In speaking of the Bath stone, I have already taken occasion to state that this same inscription of *Diamysus ad veteres cicatrices* has now been found on various Roman medicine-stamps discovered in different parts of France.

The collyrium diamissos or diamysos derived its designation from containing as its principal

ingredient the *Misy*, a metallic vitriolic preparation, used to a considerable extent as a stimulant and escharotic among the ancients; and it was retained even to a comparatively late period in the London Pharmacopœia.⁵⁷³ It appears to be still used medicinally in the East.⁵⁷⁴

The chemical nature, however, of *Misy* has given rise to some considerable doubt and discussion. It was usually found, and generally described, along with two other cognate fossils, *Sori* and *Chalcitis*. And Galen, who enters into an elaborate description of them, visited the copper mines of Cyprus, with a view of determining the precise nature of these three mineral substances.⁵⁷⁵

Dr. Adams,⁵⁷⁶ who has examined this question with all his well-known great learning and care, believes that these three minerals were merely varieties of *chalcanthum* or copperas. In his opinion the *Chalcitis* was probably a kind of pure sulphate of copper which had contracted an efflorescence from age; the *Sori* was sulphate of copper combined with zinc or other impurities; and the *Misy* was a combination of sulphate of copper with sulphate of iron, the predominance of the chalybeate salt giving to the fossil its peculiar colour. For the Misy, says Dioscorides, is "of a golden appearance, hard, shining like gold when broken, and glancing like stars."

In his remarks on the *Misy*, Dioscorides speaks of the analogy of its caustic power with those of Chalcitis; but the only diseases that he referred to as having the *Misy* used in their treatment, are the diseases of the eye. And he does so in telling us that the Egyptian kind of *Misy* is quite inferior to the Cyprian in forming eye-medicines (ocularia medicamenta).⁵⁷⁷

In speaking of its medical powers, Galen,⁵⁷⁸ Oribasius,⁵⁷⁹ and Paulus Ægineta,⁵⁸⁰ describe the *Misy* as escharotic, and astringent. In giving his list of eye-medicines, Galen places the *Misy*, *Sori*, etc., amongst those local applications which have a detergent effect.⁵⁸¹ Paulus Ægineta enters the *Misy* in his list of "detergents of foul ulcers" of the eye (vol. iii. p. 548). Pliny, in describing the properties of Misy, states that "extenuat scabrities oculorum." Celsus in his work repeatedly alludes to the *Misy* and its effects.⁵⁸³ One of the collyria which he describes when treating of granular ophthalmia, contains the *Misy* (see page 294). And he adds, that with the exception of those affections which require mild applications, this special collyrium is adapted to every kind of disorder of the eye (adversus omne genus oculorum valetudinis idoneum est). Galen (vol. xii. p. 736), Oribasius (lib. iv. p. 51), and Paulus Ægineta (vol. iii. 556), all give formulæ for the collyrium Panchrestos of Erasistratus, which contained *Misy* as its leading ingredient. "It has," says Paulus, "wonderful efficacy in diseases of the eyes." Oribasius enters it as a "compositio admirabilis." The *Misy*, as a reputed "valedissimum medicamentum," enters as an ingredient into several of the collyria described by Actuarius.⁵⁸⁴

In a previous page I have already taken occasion to state that Marcellus Empiricus gives a formula for a collyrium under the name inscribed upon the stone of the collyrium DIAMISYOS; and he describes it as calculated "ad aspritudines oculorum tollendas et ad lachrymas substringendas."

The collyrium *Diamisyos* of Marcellus Empiricus consists of *Misy* burnt till it becomes red, and then combined with spikenard, saffron, cadmia, calcined copper, opium, myrrh, Cyprian scales, and gum, with all which it was to be rubbed down in the best wine, shaken and filtered. But he gives also the alternative of adding to the *Diamysos* another ingredient, which was long an article in the materia medica—viz. vipers. For some (he observes) add to the collyrium *Diamisyos* "a viper, dried and baked well in the sun, as if it were salted" (quidam adjiciunt huic collyrio viperam siccam et arefactam bene in sole tanquam si sit salita). He goes on, however, still further to explain that prayers and incantations must be used in making this addition to the *Diamisyos*. For (he observes) if you thus wish to add the dried viper, you must first extract its bones, roll it up in linen, and then pour over it the wine of the collyrium, previously charming the viper (sed prius eam praecantabis) as follows, lest it cause tears and produce harm, saying, "As thou dost not see, even so may thy juice, when tasted, hurt no one, but I pray that with the purpose for which thou hast been added, thou mayest⁵⁸⁵ further the cure (quomodo tu non vides, sic et tuus succus gustatus nulli noceat, sed ob rem propter quam adjecta es proficias bene curationi, precor)."⁵⁸⁶

ANTIQUARIAN NOTICES OF SYPHILIS IN SCOTLAND.

PART I.

Medical men are, for the most part, agreed upon two points in relation to the history of syphilis—viz. that it is a species of disease which was unknown to the Greek, Roman, and Arabian physicians; and that it first began to prevail in Europe in the later years of the fifteenth century.

The non-existence of syphilis in ancient times, and the circumstance of its original appearance in Europe about the date alluded to, are opinions strongly borne out by two sets of facts. For, first, no definite account of this marked and extraordinary species of disease is to be found in the writings of any one of the ancient Greek or Roman physicians, historians, or poets; and, secondly, of the numerous authors whose works exist in the learned collections of Luisinus, ⁵⁸⁷ Astruc, ⁵⁸⁸ and Girtanner, ⁵⁸⁹ and who saw and described the malady in the later years of the fifteenth or

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commencement of the sixteenth century, almost all comment upon it as (to use their own general expressions) *morbus novus, morbus ignotus, ægritudo inaudita, ægritudo nova, malum novum, novus et nostro orbe incognitus morbus,* etc. etc. ⁵⁹⁰

It would not, however, affect our present object were we to consider the disease, as it appeared about the period in question, not to have been a new malady previously totally unknown, but merely, as some have thought, an aggravated form of a disease formerly existing in so mild a form as not to have attracted general observation.

Nor need I stop here to inquire into the much more difficult questions of the probable source of syphilis, and the exact date at which syphilis first burst forth in Europe. In relation to the object which I have at present in view, it matters not whether the malady sprang up spontaneously and endemically in Spain, Italy, or France, at the era in question; or was imported from Africa, as Grüner, ⁵⁹¹ Infessura, ⁵⁹² and others allege; or from Hispaniola, as Astruc, ⁵⁹³ Girtanner, ⁵⁹⁴ Weatherhead, ⁵⁹⁵ and various other authorities, have stoutly and not unsuccessfully maintained. Nor is it necessary for me to discuss whether it first showed itself in 1493, as Sanchez ⁵⁹⁶ and Hensler ⁵⁹⁷ consider that they have proved; or in 1492, as Fulgosi ⁵⁹⁸ asserts; or as early even as the month of October 1483, as Peter Pinctor, ⁵⁹⁹ in 1500, demonstrated astrologically, to his own complete satisfaction at least, that it ought to have done, inasmuch as that was—as he sagaciously convinced himself—the precise and exact date of the conjunction of Venus with Jupiter, Mars, and Mercury; and the conjunction of these or other stars in the heavens above, was—so he and many of the astrological physicians of his day believed—the undoubted origin of this new scourge on the earth below.

In such a notice as the present, we may most safely, I believe, and that too without entertaining the question of the exact source or geographical origin of syphilis, start from the general proposition that the disease was in 1494 and 1495 first distinctly recognised in Italy, during the invasion of that country by the victorious army of Charles VIII. of France. The malady is usually allowed to have first broken out in a very marked degree at Naples, about the time that Charles took possession of that city, in the spring of 1495; or nearly two years after Columbus' return from his first voyage to Hispaniola. Charles set out again for France in May 1495; and the malady seems to have been both diffused by his infected troops along the line of their northward march, and afterwards carried to their respective homes by his own French soldiers, as well as by his various Swiss, German, and Flemish auxiliaries.

But it is as little my intention at present to trace the progress as to ascertain the first origin of syphilis in Europe. The chief object of the present communication is to adduce some data which show that the new malady was not long in reaching the shores of Scotland, and in spreading to different towns in that kingdom. In proof of this, I have principally to appeal to one or two old edicts and ordinances relative to the disease, and to other collateral but slighter evidence bearing upon the subject. The edicts or statutes in question were issued by the Town-Council of Aberdeen, in relation to the existence of the malady in Aberdeen; and by the Privy Council of Scotland, in relation to the prevalence of the disease in Edinburgh. The two first edicts in both places were issued in 1497. That of Aberdeen is the earlier. It is dated the 21st of April 1497. Its words, as they stand in the old and carefully preserved Council Records of that city, 600 are the following:—

"The said day, it was statut and ordanit be the Alderman and Consale for the eschevin of the infirmitey cumm out of Franche and strang partis, that all licht weman be chargit and ordanit to decist fra thar vices and syne of venerie, and all thair buthis and houssis skalit, and thai to pas and wirk for thar sustentacioun vndir the payne of ane key of het yrne one thair chekis, and banysene of the toune." (Vol. i. p. 425.)

A few years later—or on the 8th October 1507—a long list of statutes was passed by the "Prouest, bailyes, and counsale" of Aberdeen, for the "common proffitt, weil, and gud reull of the burgh." Two of these statutes refer again to the introduction and spread of syphilis. By the first of these statutes it was enacted "That diligent inquisitioun be takin of ale infect personis with this strange seiknes of Nappillis, for the sauetie of the town; and the personis beand infectit therwith be chargit to keip thaime in their howsis and vther places fra the haill folkis." (Vol. i. p. 437.)

Two or three enactments follow in the "statut buk" on minor subjects, one ordering the hygienic measure "that thar salbe certane personis to cleng the toun and dicht the causaies;" and then succeeds another sanitary ordinance relative to the avoidance of syphilis—viz. "That nayne infeccht folkis with the *seiknes of Napillis* be haldin at the common fleschouss, or with the fleschouris, baxteris, brousteris, ladinaris, for sauete of the toun, and the personis infectit sale keip thame quyat in thar houssis, zhardis, or vther comat placis, quhill that be haill, for the infectioun of their nichtbouris." (P. 437.)

The Edinburgh edict regarding syphilis was six months later in date than the first of those issued by the magistrates of Aberdeen, and is more lengthy in its details and provisions. It was drawn up, as I have already said, by the King's Privy Council, and apparently sent to the magistrates for due execution. It is preserved in the first volume of the *Town Records of Edinburgh*, fol. 33, 34, and is entitled in the rubric "Ane Grangore Act;"—Grandgore being an early term often applied to syphilis in Scotland. This edict has been repeatedly printed, but usually in a very incorrect form. The exact date and words of it are as follows:—

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"xxii Septembris anno i^{ai} iiii^c lxxxxvii zeiris. It is our Souerane Lordis will and the command of the Lordis of his Counsale send to the Provest and baillies within this burch, that this proclamation follow and be put till execution for the eschewing of the greit appearand danger of the infectioune of his liegis fra this contagius seiknes callit the Grandgor, and the greit vther skayth that may occure to his legeis and inhabitouris within this burch—that is to say—We charge straitlie and commandis be the authoritie abone written, that all maner of personis being within the fredome of this burch quhilkis ar infectit or hes bene infectit vncurit with this said contagious plage callit the Grandgor, devoyd red and pas furth of this toun and compeir vpoun the sandis of Leith at x houris befoir none, and thair sall thai haue and fynd botis reddie in the havin ordanit to thame be the officiaris of this burch reddely furneist with victuallis to have thame to the Inche, and thair to remane quhill God prouyde for thair health, and that all vther personis the quhilkis takis vpoune thame to hale the said contagious infirmitie and takis⁶⁰¹ the cure thairof, that they devoyd and pas with thame, sua that nane of thir personis quhilkis takis sic cure vpoune thame vse the samyn cure within this burch in presens nor peirt ony maner of way—and guha sa beis fundin infectit and nocht passand to the Inche as said is be Monounday at the sone ganging to, and in lykwayis the saidis personis that takis the said cure of sanitie vpoun thame gif thai will vse the samyn thai and ilk of thame sal be brynt on the cheik with the marking irne that thai may be kennit in tyme to cum-and thairefter gif ony thame remanis that thai sall be banisht but fauouris."

It is almost unnecessary to add that the measures adopted by the public authorities in Aberdeen and Edinburgh were utterly inadequate to arrest the further dissemination of syphilis after it was inoculated upon the country. It seems indeed to have been spread to the more populous towns of Scotland within a year or two after its first introduction into the kingdom. There are some references in official documents of the period which incidentally but amply prove this rapidity in its diffusion.

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The notices to which I here specially refer exist in the Accounts of the Lord High Treasurer of Scotland. The Register House, Edinburgh, contains a curious and valuable series of these Accounts, detailing the daily expenses of the kings of Scotland from the reign of James III. down to the ascension of the English throne by James VI. At the time of the first appearance of syphilis in our northern realm, the throne of Scotland was occupied by James IV., a prince who was a great patron of the arts and sciences of his time. He was a practitioner in them also, as well as a patron of them. At different times we find him busily experimenting in chemistry, in physiology, and in medicine. His daily expense-books contain many entries of purchases for instruments and materials to make the unmakeable "quinta essentia," or philosopher's stone; and he had laboratories for these investigations both at Edinburgh and Stirling. His alchemical assistant— John the Leeche-whom he had imported from the Continent and made Abbot of Tungland, experimented for the king in physiology as well as in chemistry. John, Dædalus-like, undertook to prove the improvability of human progression by flying to France with wings. "To that effect he causet (states Bishop Lesley⁶⁰²) mak ane pair of wingis of fedderis, quhilkis beand fessinit apoun him, he flew off the castell wall of Striveling, but shortly he fell to the ground and brak his thee bane." But the doctrine of sympathies was in voque in these days, and by that doctrine the afflicted Abbot easily, of course, and clearly explained all. For the cause of his fall, or "the wyt thair of he asscryvit to that thair was sum hen fedderis in the wingis, guhilk varnit and covet the mydding and not the skyis." Like the Egyptian king mentioned by Herodotus, King James made also a physiological or rather philological experiment to ascertain the primeval language of mankind; and for this purpose his Majesty sent a deaf and dumb woman to live with and bring up two young children upon the island of Inchkeith in the Firth of Forth—the same island to which we have found the first victims of syphilis previously banished, and itself the old "Urbs Guidi" of the venerable Bede. When the two children, the companions of the "dumb voman cam to the aige of perfyte speach, some sayes" (to quote the account of Lindsay of Pitscottie) "they spak guid Hebrew;"603 but the cautious old Scottish chronicler sagely doubts the truth of this tradition. King James personally practised the art of leechcraft, as well as experimented in alchemy and physiology. "He was," says Pitscottie, "weill learned in the airt of medicine, and was ane singular guid chirurgiane; and thair was none of that professioune, if they had any dangerous cure in hand, bot would have craved his adwyse" (p. 249). So states the ancient Scottish historian. The High Treasurer's Account shows that the king had in one important respect a right royal way of gaining patients,—a way by the adoption of which he probably might have secured a considerable consultation and private practice even in these modern days of high-pressure rivalry, and keen competition. For he paid his patients, instead of being paid by them. Thus, for example, in his daily expense-book, under the date of April 14th and 15th, 1491, are the two following entries:-

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"Item to Domenico to gif the king leve to lat him blud, xviii shillings." "Item til a man yat come to Lythgow to lat the king blud and did it nocht, xviii shillings."

Some time afterwards he buys from a travelling pedlar "thre compases, ane hammer, and a turcase to tak out teeth;" and forthwith, we find the Scottish king becoming—like the more modern Peter the Great of Russia—not a dentist to royalty, but himself a royal dentist, as the two following entries may suffice to show (the first of them—provided there be any truth whatever in dental orthography—surely indicating a tooth of rather a tough and tusky character):—

"Item, to ane fallow, because the king pullit furtht his twtht, xviii shillings."

"Item, to Kynnard, ye barbour, for tua teith drawin furtht of his hed be the king, xviii shillings."

He seems to have tried his royal hand also at ocular surgery. But the terms of the following entry would seem rather ominously to hint that he was not a very successful operator for cataract:—

"Item, giffin to ve blind wif vat hed her eyne schorne, xiii shillings."

A prince imbued with such medical and surgical propensities would naturally feel deeply interested in the first appearance within his realm of such a malady as syphilis; and in his Treasurer's accounts there are several entries indicating that the king had bestowed monies upon various persons affected with this disease. Perhaps these monies were given less in the way of alms than in the way of a reward for the king's medication of the patients; less for the behoof of royal charity than of royal chirurgery. The entries I advert to all occur during the currency of the years 1497 and 1498. They are as follows:—the first sum given away being to a person at Dalry, when the king was on one of his many pilgrimages to the ancient and holy shrine of St. Ninian at Whitehorn, in Wigtownshire.

September 1497.

"Item, to ane woman with the grantgore thair [Dalrye, in Ayrshire], be the kingis command

iijs. vjd."

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2 October 1497.

"Item to thaim that hed the grantgor at Linlithquho

viijd."

21 February 1497-8.

"Item, that samyn day at the tounne end of Strivelin to the seke folk in the grantgore

ijs."

22 February 1497-8.

"Item, the xxij day of Februar giffin to the seke folk in the grangore at the tounn end of Glasgo.

ijs."

April 1498.

"... seke folk in grangor in Lithgw as the King com in the tounne

ijs. viijd."

In the course of the preceding remarks I have had occasion to adduce seven or eight different notices with regard to the appearance of syphilis in various cities and districts of Scotland during the years 1497-8, as at Aberdeen, Edinburgh, Glasgow, Stirling, Linlithgow, etc. A diversity of allusions to the same disease, of a less direct and official character, and somewhat later in date, may be traced in various olden Scottish works and writings. The malady is occasionally alluded to, for example, in the reports left us of some of the old criminal and other trials of Scotland. Thus a minute in the Records of the Privy Seal of Scotland records the punishment of a medical man in whose hands a dignitary of the church had died while under treatment for syphilis. The entry is as follows:—

January 18th, 1509.—"Respitt made to Thomas Lyn, burges of Edinburgh, for ye slauchtir of umquihile Schir Lancelote Patonsoun, chapellain, quhilk happinit be negligent cure and medicine yat ye said Thomas tuk one him to cure and hele ye said umquhile Schir Lancelote of ye infirmitie of ye Grantgor yat he was infekkit with. To endure for xix yeeris. (Subscripsit per dominum Regem apud Edinburghe.)"605

Some, perhaps, of my professional brethren may think that this nineteen years' banishment from the town was a proper punishment for an unprofessional charlatan undertaking the cure of syphilis in the sixteenth century; and some, possibly, may even hold, that it would not be an improper proceeding in this—the nineteenth century.

The disease is alluded to in some of the old Scotch witch trials of the sixteenth century.

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One of the most remarkable of these trials was that of a lady of station and wealth—Euphame Macalzane, daughter of Lord Cliftonhall, a judge of the Court of Session. Among other matters, she was "indyted and accusit" of using, during the birth of her two sons, anæsthetics in the form of charms, and a fairy stone "layit under the bowster," whereby, in the words of the dittay, "your seiknes was cassin of you unnaturallie, in the birth of your fyrst sone upon ane dog, quhilk ranne away and wes newir sene agane. And in the birth of your last sone, the same prakteis foirsaid wes usit, and your naturall and kindlie payne, unnaturallie cassin of you uponn the wantonne cat in the house, quhilk lyke wyis wes newer sene thair efter." In the fourteenth item of her indictment she is accused of trying to break off a marriage by "certane witchcraft," and by alleging that the intended bridegroom had the "glengore." For these and other analogous crimes this unfortunate lady was "takin to the Castel-Hill of Edinburghe, and thair bund to ane staik, and brunt in assis, quick to the death."

There are also various sarcastic allusions to syphilis by the Scottish poets of these early days, amply testifying to the fact of its rapid diffusion both among the followers of the court—who were then the most common objects of poetical satire—and among the community at large.

William Dunbar, the flower of the old Scottish poets, was, at the period of the first introduction of

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syphilis in 1497, in the prime of manhood; and in two or three years afterwards, viz. in 1500, he was attached to James IV. and his court by an annual state pension. In a number of verses addressed to his patroness, Margaret, the Queen of James IV. and the sister of Henry VIII.— verses which appear to us at the present day, and with our existing standards of taste, as utterly degraded and indecent—Dunbar commemorates the communication of the new disease under the name of the "pockis" and the "Spanyie pokis," to the Queen's men (as he terms them) during the jollities of Fastern's e'en, and the reign of the Abbot of Unreason; and he closes his stanzas with an earnest advice to all youths, to

"Be ware with that perrelous play That men callis libbing of the Pockis." 607

The after effects and consequences of the disease he describes as follows:—

"Sum that war ryatouss as rammis, Ar now maid tame lyk ony lammis, And settin doun lyk scarye crockis, And hes forsaikin all sic gammis That men call libbing of the Pockis."

"Sum thocht thame selffis stark lyk gyandis, Ar now maid weak lyk willow wandis, With schinnis scharp, and small lyk rockis, And gottin thair bak in bayth thair handis, For ower oft libbing of the Pockis."

Another and later poet of that age, Sir David Lyndsay of the Mount, alludes to the occurrence of syphilis at the Christmas feasts in an inferior officer of the court—viz. in John Mackrery, the king's "fule," or royal jester, who, according to the poet—like many a poor fool since John's time—did

"In his maist triumphand gloir For his reward get the Grandgoir." 608

The same author includes this disease elsewhere (p. 147) among the maladies

"Quhilk humane nature dois abhor, As in the Gut, Gravel, and Gor."

A metrical translation of Hector Boece's *History of Scotland* was made in the earlier half of the sixteenth century, apparently by command of James V. It has been published for the first time, within the last two years, under the authority and direction of the Master of the Rolls. The author of this rhyming *Buik of the Chronicles of Scotland*, William Stewart, when translating Boece's account of the fatal disease produced in the old mythical Scotch king, Ferquhard, by the bite of a wolf, tells us (vol. ii. p. 313) that the resulting gangrenous wound defied the skill of the leiches, and the fœtor of it, and its discharges were

"Moir horribill als that time for till abhor, No canker, fester, gut, or yit Grandgor."

In the celebrated old poem of the *General Satire of Scotland*, attributed by most authorities to Dunbar, and which, from some circumstances adverted to in the course of it, is supposed by Sibbald and Chalmers to have been written in 1504 (seven years after the first introduction of syphilis), the author deplores the extent to which the disease had by that time already spread in Scotland, observing—

"Sic losing sarkis, so mony Glengoir markis, Within this land was nevir hard nor sene." ⁶⁰⁹

In several of the notices which I have just quoted, the new disease, syphilis, is alluded to under the names of "Gor," "Gore," "Grandgore," etc. Few maladies have been loaded with a more varied and more extensive nomenclature. The terms in question, "Gore" and "Grandgore," are of French origin, and are old names corresponding to pox and great pox—"verole" and "grand verole." In the earlier periods of the history of syphilis they were terms commonly employed by the French themselves to designate the affection. To quote one confirmatory sentence from Astruc (p. 1166), the disease "Gore et Grandgore a Gallis initio vocata erat." John le Maire, in his celebrated poem on syphilis, published in 1520, gives this as one of the designations of the disease used at that time by the commonalty:—

"La nommoit Gorre ou la verole grosse, Qui n'espargnoit ne couronne ne crosse." 610

Old Rabelais, whose *Gargantua* and *Pantagruel* are perfect repositories of the low and licentious French words of the era at which syphilis first appeared, uses the term Grandgore as a synonym for syphilis; and in his wild allegorical style he makes the poor and widowed poet, Rammagrobis, take this grandgore to bed for his second wife. The term Grandgore seems to have been applied to the disease in Scotland for a long time after its introduction. For example, the author of the *Historie of the Kennedys* quotes a letter written in the latter part of the sixteenth century by the Laird of Colzean to the Laird of Bargany, whose "neise was laich," maliciously suggesting to him that yet he might lose "sum uther joynt of the Glengoir, as ye did the brig of your neise." Still later, or in 1600, the Kirk-Session of Glasgow requested the magistrates "to consult the chirurgeons how the infectious distemper of Glengore could be removed from the city."

In Scotland, as elsewhere, the disease also passed under other designations. When syphilis first broke out it was frequently, as is well known, designated from the country or people from whom it was supposed to have been transmitted. Thus, the Italians and Germans at first generally spoke of it as the French disease; while the French talked of it as the disease of Naples; and the Dutch, Flemings, Portuguese, and Moors, applied to it the name of the Spanish pocks or Castilian malady. Dunbar, in the Scottish poem already alluded to as addressed to Queen Margaret, speaks of it, in most of the stanzas, under the simple title of "pockis," but in one he gives it, as I have already hinted, the distinctive and significant appellation of the Spanish pocks:—

"I saw cow-clinkis me besyd; The young men to thair howssis gyd, Had better liggit in the stockis; Sum fra the bordell wald nocht byd, Quhill that thai gatt the Spanyie Pockis."

In two of the Aberdeen Town-Council entries we have already seen the malady spoken of as "the sickness of Naples." This name was at first often applied to the malady. The disease was, however, much more generally known in Scotland and in the other kingdoms of Europe under the name of the French pox. The first Aberdeen edict speaks of it in 1497 as the "infirmity come out of France." In the manuscript Session Records of the parish of Ormiston for 1662, there is an entry regarding the malady under the appellation of the French pox, one of the minutes being—

"The minister, Mr. Sinclair, hath given out to James Ogilvy, apothecary-chirurgeon, for curing William Whitly, his wife and daughter, of the French pockis, 35 lbs. Scots."

Grunbeck and Brandt, who wrote on syphilis in 1496, when speaking of the diffusion of the disease at that early date over Europe, both allude in very vague and general terms to its having invaded France, Germany, etc., and reached as far as Britain. But the earliest specific notice of syphilis in England which I remember to have met with is in 1502; and in this notice the malady is spoken of under the same name that I have been adverting to, of "French pox." The notice in question is contained in the interesting Privy Purse Expense Book of Elizabeth of York, the queen of Henry VII., edited by Sir Harris Nicolas. This charitable lady seems from these records to have had several protégés under her immediate care and keeping. Among these protégés is entered John Pertriche, one "of the sonnes of mad Beale." There are various articles of expenditure noted in the Queen's private expense book as lavished upon this John Pertriche during the currency of 1503; as monies for his "dyetts," for buying "shirtes," "shoyn," and "hosyn," "cloth for a gown," and "fustyan for a cote" to him. There are twenty pence expended "for his lernyng;" and the last two items in the account record attempts of two different and rather opposite kinds to amend the mental and moral deficiencies of this hopeful youth. These two ultimate items are—

"For a prymer and saulter (book to John), 20 pence."
"And payed to a Surgeon whiche heled him of the Frenche pox, 20 shillings."

To finish this very rough and meagre sketch, let me here add that by the end of the sixteenth century—and perhaps long before that date—the malady was abundant enough in England. Writing in 1596, or in the time of Queen Elizabeth, William Clowes, "one of her Majesties chirurgians," observes to his "friendly reader," "If I be not deceived in mine opinion, I suppose the disease itselfe was never more rife in Naples, Italie, France, or Spain, than it is in this day in the Realme of England." 614

PART II.

The preceding notices, however brief and imperfect, relative to the first introduction and dissemination of syphilis in Scotland, are not simply matters calculated to gratify mere antiquarian curiosity. They appear to me to be capable of a much higher application, for they offer so many elements tending to illustrate the general history of the first appearance of syphilis in Europe. Besides, we may, I believe, be justified in drawing from the data they afford several not uninteresting nor unimportant corollaries, both in regard to the first origin and mode of propagation of the disease, and the distinction of it from other affections with which it has sometimes been confounded.

1st Corollary.—These notices tend to corroborate the pathological opinion, that syphilis was a species of disease new to Europe when it first excited the attention of physicians and historians in the last years of the fifteenth century.

Like the numerous list of contemporary authors and physicians quoted by Astruc, Grüner, and Weatherhead, the Aberdeen edict speaks of syphilis in the last years of the fifteenth century as a disease hitherto unknown, "the infirmity come out of France and foreign parts." The Edinburgh edict mentions it as "a contagious disease callit the grandgore." If it had been previously known, the definite, and not the indefinite, article would have, in all probability, been employed. And if such a disease had previously existed on the continent of Europe, there is every reason to believe that it would have also existed and been known in Britain. Besides, this reasoning certainly admits of being inverted and changed, in so far that we may probably lay it down with equal

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2d Corollary.—But if syphilis was thus new in Britain in the end of the fifteenth century, this shows that it is a species of disease distinct and different alike-1st, from gonorrhæa, and, 2d, from Greek leprosy, with both of which maladies it has, as is now well known, been occasionally confounded; for both these maladies existed, and were abundantly recognised, in this, as in other countries, long before the era of the introduction of syphilis. Gonorrhœa was early distinguished by English authors under the name of "burning," or "brenning" (ardor urinæ, arsura, etc.) Thus, Andrew Borde, in his "Breviary of Health," 1546, speaks of it as the "burning of an harlotte." "Burning of harlottes" is also mentioned in Bulleyn's Bulwark of Defence, 1562. But it is under this same name that reference is made to the same disease in one of the ordinances enacted about 1430, for the better regulation of the eighteen brothels that stood for centuries on the Bankside in Southwark, under the jurisdiction of the Bishop of Winchester. At the above date it was decreed that "no stewholder keep noo woman wythin his hous that hath any sickness of brenning."615 This statute was enacted half-a-century before the introduction of syphilis in England; and nearly a century previously, gonorrhoea had been accurately described, among others, by John Arden, surgeon to Richard II., who, writing about 1380, gave a correct summary of the symptoms, pathology, and treatment of this malady. In an old English medical poem, evidently written not later than the last part of the fourteenth century, and published lately by Mr. Stephens of Copenhagen, there is a receipt for "all maner brenninge" (line 294); and then follows a series of cures (line 510, etc.)—

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"if ye verge be brente As man of woman may so be schente, Thorow cas y^t womā may be his bote Off qwom his sekenesse be gan ye rote." 616

There is no doubt, further, that gonorrhœa was well known to the Greek, Roman, and Arabic authors, and is described unmistakably in their writings.

I might also, if it were here necessary, adduce abundant evidence to show that the two diseases, Greek leprosy and syphilis, though sometimes confounded together, were always in general regarded as two entirely different affections; and that, as such, the hospitals severally appointed for the reception of those unfortunates labouring under the diseases in question were kept distinct and separate. Thus, in 1527, the Carmelite monk, Paul Elia, proposed to the burgomaster of Copenhagen a plan for an hospital outside the town for "syphilis, cancer, and other great sores," similar to the Leper Hospital already existing;⁶¹⁷ for syphilis had, at an early period of its existence, spread itself into Denmark.

When syphilis broke out in Edinburgh, in 1497, those affected by it were not sent to the leper hospital then existing near the town, but they were ordered off to Inchkeith. In the course of the next century, we find in the Kirk Session books of Glasgow the two maladies recognised as distinct, and two separate hospitals devoted to those affected by these two separate diseases. For on the 20th October 1586, the Kirk Session "ordains some to visit the leper folks' house or spittal beyond the brig, to see how the same, and the dykes of the yards may be reformed, and that nane be received but town's folks." But again, in 1592, the same Session directed "that the house beyond the stable-green-port for women afflicted with the Glengore be looked after."

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In a late census of Norway, above two thousand lepers were found in that small kingdom; but the Scandinavian physicians do not confound together syphilis and Greek elephantiasis, and have no difficulty in distinguishing them. Nor have our own colonial professional men in the East and in the West Indies, where both diseases exist, any dubiety, at the present day, in recognising them as two totally different and specific maladies.

3d Corollary.—As regards the mode or modes in which syphilis was supposed to be so speedily propagated at its first appearance in Europe, the Aberdeen and Edinburgh records are both interesting, though in some respects they offer very opposite testimony on this point.

For some time after syphilis broke out, it was believed, both by medical men and by the non-medical public, that the disease was communicable, and constantly communicated from the infected to the healthy by the employment of the clothes, vessels, baths, etc., used by those already suffering from it, and by the slightest corporeal contact, or even by inhaling the same air with them. I might appeal on this head, if it were necessary, to the individual and general testimony of Schilling, Torella, Brandt, Massa, and almost every other early continental author, historical or medical, who mentions the first outbreak of syphilis. Some even thought that neither the presence of infected persons, nor of fomites, was always absolutely requisite. In his work, *De Morbo Gallico*, published in 1551 (above half-a-century after the disease commenced), Benedict Victorius, of Fienga, like most of his contemporaries, still maintained that "the state of the air" (to use his own words), "together with that of the putrid humours, are sufficient to beget the affection;" and in strong confirmation, he adds, "I myself happened once to know some honest and religious nuns, who were confined in the strictest manner, and yet contracted the venereal disease from the peculiar state of the air, together with that of the putrid humours, and the weakness of their habit of body."

The same belief in the easy contagion of syphilis without contact or intercourse extended to our own country. It was, in particular, strongly believed that the malady could be propagated from

the sick to the healthy by the medium of the breath. One of the gravest articles of guilt brought against the celebrated Cardinal Wolsey, when he was arraigned before the English House of Lords in 1529, was the allegation that (to quote the *ipsissima verba* of the indictment, as laid before Henry VIII.), "whereas your Grace is our Sovereign Lord and Head, in whom standeth all the surety and wealth of this realm, the same Lord Cardinal, knowing himself to have the foul and contagious disease of the great pox, broken out upon him in divers places of his body, came daily to your Grace, rowning in your ear, and blowing upon your most noble Grace with his perilous and infective breath, to the marvellous danger of your Highness, if God of his infinite goodness had not better provided for your Highness. And when he was once healed of them, he made your Grace believe that his disease was an impostume in his head, and of none other thing." 619

The notion that the breath of persons having the venereal disease was infectious seems to have prevailed as late as the reign of William and Mary. Dr. Oates, in his *Picture of the late King James* (1696), says,—"Tom Jones, your quondam chaplain, was afraid to go to old Sheldon, for fear he should give him the pox by breathing on him." (Part II. p. 106.)

The Edinburgh regulations of September 1497 are evidently framed upon the idea that "the contagious plage callit the grandgore," as they term it, was propagated by simple contact, and personal intercourse, or probably even by the air. Hence their strict injunctions for the removal and detention of the "infectit, or that hes bene infectit and incurit," to their secluded position upon the island of Inchkeith, for "the eschewing" (to cite again the words of the edict) "of the greit appearand danger of the infectioune of the lieges." Indeed, it seems to have been believed that the disease might be communicated through medical attendants, or intermediate individuals who were themselves unaffected. This is at least the natural, or, indeed, the only interpretation of that part of the edict which enjoined that all persons who take upon them "to hale the said contagious infirmitie," go with their infected patients to Inchkeith; and if they attended and treated such cases within the city, they did so at the peril of being themselves cauterised on the cheek with the "marking iron," and banished without favour (banisht but favouris) out of the town.

The anxiety of the authors of the Edinburgh regulations to prevent this supposed medium of communication through a third person is further displayed in the severity of the punishment— (the application, namely, of the actual cautery to the face)—denounced against the medical attendants who should infringe the above edict by not passing to, and remaining on, Inchkeith. "Lykwayis the saidis personis that takis the said cure of sanitie vpoun thame, sal be byrnt on the cheike with the marking irne that thai may be kennit in tyme to cum."

For some time after the first outburst of the disease, sexual intercourse with the infected does not seem to have been suspected as the source and means by which the syphilitic contagion was propagated. Nor was the local primary affection of the sexual organs generally noticed by the authors of these times as either a constant or marked symptom. They were acquainted with, and described, only the secondary symptoms of the malady—the hideous eruptions on the skin—the ulcers of the throat—the nocturnal pains in, and lesions of, the bones—while they mostly all pass over the genital organs, as if they remained unaffected. So much so was this the case, that we find Montagnana, in 1498, advising not as a means of infection, but rather as a means of cure, moderate coition; for, in laying down various rules of treatment to a sick bishop under his care for syphilis, he inculcates, among other items "coitus vero sit temperatus." 620

When treating of this subject, and when speaking of both the usual mode of the infection of syphilis and its primary local symptoms generally escaping notice at the era of the first appearance of the disease, Swediaur observes,—"It is worthy of remark, that although many authors, since the year 1500, make mention of the genital organs, and say that syphilis may more generally (ut plurimum) be communicated by coition; not one before that time (1500) points out the (primary) affection as essential or characteristic of the disease. All (Swediaur adds) look upon it as a disease pestilential and contagious without coition, and even without any direct contact" (vol. i. p. 36). The observations of Astruc and Girtanner, and other authors on this point, are nearly to the same effect.

In relation to this question, that of the actual mode and means of propagation of syphilis, the edict of Aberdeen, in 1497, is particularly remarkable and interesting, and most fully maintains the character of the capital of the north for that native shrewdness and sagacity which the poet Dunbar long ago solemnly assigned to it. We have just now referred to Swediaur, etc., stating that up to 1500 all European writers looked upon syphilis as spreading, pestilentially and contagiously, without coition. Three years earlier, the aldermen and town-council of Aberdeen seem to have arrived at more just ideas of its laws of propagation, and to have distinctly suspected impure sexual intercourse as the mode of communication of the malady. This seems to be fully borne out by their ordering, "for the eschewing of the infirmitey," that (to use the words of the edict) "all licht weman be chargit and ordanit to desist fra thar syne of venerie;" and we have the usual glowing and earnest threat of the application of the actual cautery, or "ane key of het yrne (hot iron) to thair chekis," in case of disobedience. The later Aberdeen edicts of 1507, which we have already quoted at length, show, however, that the rulers of the burgh had been subsequently led to adopt the erroneous idea of the leading authorities of the day, that the disease might be transmitted also in the way of common contagions, and even, perhaps, by the medium of a third person.

4th Corollary.—The early notices that I have adduced of the appearance of syphilis in Scotland are curious as proofs of the rapidity with which the disease travelled, at its first outbreak, over

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the kingdoms of Europe. The new malady was, as I have already stated, first distinctly recognised during the period that Charles VIII. of France occupied the city of Naples, or rather immediately after he left that place. The cases of the disease that had appeared previously were not, at least, anywhere in such numbers, or in such severity, as to excite any marked and decided degree of attention from physicians or from the public. That Naples was the locality in which the contagion first burst forth so extensively and overtly as to be considered almost the source and cradle of the new epidemic; and further, that this happened at the precise date of the visit of the French army, seems, as has been suggested by various authors, to be shown by the very designations respectively conferred at the time upon the new affection by the Neapolitans and French. For whilst, as already alluded to, the French, as is well known, designated it at its first commencement among them the Neapolitan disease, alleging it to have been communicated to them by the inhabitants of Naples, the Neapolitans, on the other hand, termed it the French disease, believing that it had been brought to them by the victorious army of France. Now the date of Charles's sojourn in Naples is well known. His army, in their march through Italy, arrived at Rome on the 4th December 1494, and entered Naples on the 21st or 22d February 1495; and after remaining three months, they vacated the city on the 20th May. On the 24th of the same month the renowned Spanish general Cordova landed in Sicily; on the 6th July the battle of Fuornovo was fought, and next day King Ferdinand returned to Naples; but the last remains of the French army did not reach France till the end of the following year. The Aberdeen edict, however, was issued within less than two years after Charles commenced his march homeward. Or, we may state the matter otherwise. Columbus arrived at Palos, in Andalusia, after his first voyage to the New World, on the 15th March 1493, having previously landed at Lisbon on the 6th, and visited the Portuguese King at Valparaiso: while Pinzen, the commander of the other remaining caravel of Columbus' tiny fleet, was, about the same date, driven northward into the French port of Bayonne. Possibly one focus or centre for the future spread and dissemination of syphilis was left in this French port by Pinzen's crew, if they brought the infection with them; but I have nowhere found any allusion to this question. Columbus reached Spain, from his second voyage, in April 1496. The edict of the Aberdeen aldermen and council was passed on the 23d April 1497, or exactly four years and thirty-eight days from the date of Columbus' first return to Spain; while the famous ordinance of the Parisian authorities regarding syphilis was issued on the 6th March 1497, only forty-eight days before that of Aberdeen.⁶²¹

In reference to the rapidity with which syphilis spread from the south and middle of Europe to this small and isolated kingdom of Scotland, it is necessary to remember that in the last years of the fifteenth century, and during the reign of James IV., the intercourse of this country with "France, Spain, Portugal, Denmark, and Flanders was (to quote the words of the Scottish historian, Mr. Tytler) as regular and uninterrupted, not only in the more solemn way of embassies, but by heralds, envoys, and merchants, as that carried on with England."622 There was in actual operation, also, at that very date, another medium by which such a disease was very likely to be carried from the Continent to our shores, and diffused among the population of the larger towns. In November 1495, Perkin Warbeck, under the title of Prince Richard, Duke of York, arrived in Scotland, and was received with regal honours by King James, who bestowed upon him in marriage his cousin, the Lady Catherine Gordon. This pretended claimant to the English throne remained in Scotland till July 1497. He was preceded, accompanied, and followed to this country by gay and reckless "soldiers of fortune" from the Continent, Ireland, England, etc. —the men of all others most likely to transmit and diffuse such a disease as syphilis. These adventurers appear to have been quartered by the Scottish King upon various towns. Thus, the town-records of Aberdeen show that, as early as the 5th July 1495,-some months before Warbeck himself arrived in Scotland,—a burgh tax was imposed "to the sustentacioun of aught Inglismen of the Duk of Yorkis, direkit to the toune by our souerane lordis hiennes, and his letteris therapone."—(Spalding Club Extracts, vol. i. p. 57.)

The speed, however, with which the disease thus travelled from the south of Europe to its western confines has been often employed as an argument to show that the contagion of syphilis was propagated at its first introduction by laws different from those which now regulate its communication. In other words, it has been often alleged that the disease was then spread from kingdom to kingdom, and from city to city, by epidemic influences and by general contagion, and not merely by the slower medium of impure sexual connection. We have just seen such a doctrine so far belied by the sagacious regulations of the magistrates of Aberdeen; and when we look to the then existing state of Society, both on the Continent and in our own country, to the loose manners and licentious lives of these times, we shall probably find a sufficient solution of the, at first sight, difficult problem of the rapid dissemination of the new malady. The morals of the general mass of the people are ever found to be principally regulated by the example set before them by the aristocracy and clergy. At the date of the introduction of syphilis into Europe, the notorious habits of the two latter ruling bodies were assuredly such as to expedite greatly the diffusion of the new scourge that had sprung up among them; and hence, at its first outbreak, we find the disease fixing itself upon several of the highest members of the continental courts, and of the church. The Emperor Charles V., and Pope Alexander VI., kings and cardinals, princes and bishops, peers and priests, are openly and publicly recorded among its victims by those who personally watched and described the first ravages of syphilis. In fact the disease was then scarcely, or indeed not at all, looked upon as conferring any degree of infamy.

In his tract on the malady,⁶²³ published at Rome in the year 1500, Peter Pinctor mentions by name, and without any reticence, three of the more illustrious patients whom he had treated for this new disease—namely, the Prebendary Centez, the Cardinal of Segovia, and his Holiness the reigning Pope. Writers thought it no imputation on their own characters to publish an account of

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the disease as it occurred in their own persons. The physician Joseph Grunbeck of Burkchausen, in his essay "De Pestilentiali Scorra sive Mala de Frantzos" (1496), tells his readers how he himself caught the disease from the atmosphere, when walking in some fields near Augsburg. One of the earliest adherents and fiercest champions of the Reformation in Germany was Ulric Hütten, "the poet and valiant knight of the sixteenth century," as Merle D'Aubigné designates him. In 1519, Hütten, though bred to arms, and not to physic, published a treatise—De Guiaci Medicina, etc., Morbo Gallico. In this treatise he details his own case and sufferings from the disease, how he had been "utterly vexed with the sycknes,"—had been eleven times salivated for it, and was at last cured by guiacum. This treatise, written, as the preface bears, by "that great clerke of Almayne, Ulrich Hütten, Knycht," was translated by Thomas Paynell, Chanon of Marten Abbey, and published in England in 1539. The disease was, in Hütten's opinion, produced "throughe some unholsome blastes of the ayre." His polemical antagonist, Erasmus, in his Colloquy of Gamos and Agamos, denounced fiercely the character of this reforming and literary knight:—"Qualis eques (he exclaims) cui per Scabiem vix in sella sedere liceat!"

In order to show how swiftly a disease, propagated in the way syphilis is, might overrun the society of continental Europe towards the conclusion of the fifteenth century, it is only necessary to allude to the dire and deplorable state of morals among those that ought to have set an example to the community—namely, the clergy of these days, as painted by the tongue and pens of their own writers. In an official sermon published by Martene (tom. ii. p. 1758), and preached in St. Peter's at Rome by the Apostolic Auditor prior to the election of the Pope in the year 1484, the corrupt morals and dishonesty of the whole church are denounced; and it is added that many do not merely commit, but triumph even in, such sins as the subversion of chastity and other virtues (de pudicitia, cæterisque virtutibus subversis, triumphantes). The frightful licentiousness and obscene orgies of the reigning pontiff, and of his family and court, which speedily followed, formed a hideous practical commentary upon this text. A high Romanist who had the honour of refusing a cardinal's hat, Claud D'Espence, Rector of the University of Paris, after exposing the infamy of the taxes of the apostolic chancery, with its list of "filthy and horrid iniquities" (fœdorum tamque horrendorum scelerum)—a license for any and all of which could be purchased -adds, "You shall say we ingenuously confess that God permits this (Lutheran) prosecution to come upon his church on account of the sins of men, chiefly of priests and prelates, from whose sins the Scriptures cry out that the sins of the people are derived.... Is it wonderful if the malady descend from the head to the members, from the supreme Pontiff to others?⁶²⁴ Where under heaven is there a greater license of all evils (infamia, impudecentia, etc.)?... Truly (adds D'Espence, and he had personally visited Rome), evils such and so great that no one can believe but he who has seen, and no one can deny but he who has not seen....

> Vivere qui cupitis sancte, discedite Roma; Omnia cum liceant, non licet esse bonum."⁶²⁵

Previously another orthodox Roman ecclesiastic, Nicolas de Clemangis, Archdeacon of Bayeaux, had, in indignant, and, let us hope, in too sweeping terms, denounced the continental nunneries of these dark days as little better than brothels, and the taking of the veil as almost synonymous with a profession of public prostitution:—"Nam quod aliud sunt puellarum monasteria nisi quædam non dicam Dei sanctuaria, sed Veneris execranda postibula. Sed lascivorum et impudicorum juvenum ad libidines explendas receptacula ut idem hodie sit puellam velare, quod et publice ad scortandum exponere."⁶²⁶ Truly in these pre-Reformation days there was, as Cardinal Bellarmine confesses and laments, "almost no religion left."⁶²⁷

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As far as regarded the predisposing habits and influence of the clergy, matters were not better in Britain than on the Continent, when the disease first reached this country. We have already seen Cardinal Wolsey, the primate of England, publicly accused in Parliament of labouring under the disease. We can, however, wonder the less at the disease attacking such a high dignitary, when we recollect that, according to some writers, 628 there was openly inscribed over the doors of a palace belonging to this prelate—"Domus Meretricium Domini Cardinalis." Polydore Vergil, the sub-collector of the Pope's revenues in England, speaks, perhaps in exaggerated terms, of the orgies in the residence of Wolsey, by which he allured at first the young King Henry VIII. "Domi suae voluptatum omnium sacrarium fecit quo regem frequenter ducebat. Sermones leporis plenos habebat, etc."629 The manners of the inferior dignitaries of the church offered only too close an imitation of those of its primate. The commissioners appointed by Henry VIII. to visit the monasteries of England have recorded a sad, and (even setting aside the influence of prejudice) probably only too true a picture of the moral degeneracy of the great mass of the regular clergy of the time. With some few cheering and honourable exceptions, they found the occupants of most of the monasteries following lives of degraded vice and licentiousness, instead of religious purity and exemplary rectitude. When the visitors received their commissions and instructions, they were despatched into different parts of the kingdom, at the same time, that the monks might have as little warning of their approach as possible. They executed, says the historian Henry, 630 their commissions with zeal and diligence, and made some curious discoveries almost in every house, not much to the honour of its inhabitants. Accounts, he adds, of their proceedings were transmitted by the visitor to the vicar-general, and they contained sufficient materials to render the monasteries completely infamous,—for their gross, absurd superstition, their shameful impositions, their abandoned unnatural incontinency, etc. etc. Some of the old abbots and friars did not attempt to conceal their amours, because they knew it was impossible. The holy father, the prior of Maiden Bradley, assured the visitors that he had only married six of his sons and one of his daughters out of the goods of the priory as yet; but that several more of his children were

now growing or grown up, and would soon be marriageable. He produced a dispensation from

the Pope, permitting him to keep a mistress; and he asseverated that he took none but young maidens to be his mistresses, the handsomest that he could procure; and when he was disposed to change, he got them individually provided with very good lay husbands. "These be the men" (exclaimed Simon Fish, in one of his celebrated public sermons which he delivered at the period we speak of), "these be the men that corrupt the whole generation in your realm, that catch the pox of one woman, and bear it to another; that be burnt with one woman, and bear it to another."

Clerical morals and manners were not in a much healthier state on the Scottish side of the Border. Towards the end of the fifteenth century, we have not on record any such obscene scandal as was detailed in a previous century in the *Chronicle of Lanercost* regarding Priest John, who is alleged to have publicly celebrated phallic orgies among the young inhabitants of his parish of Inverkeithing, 633 a town which was certainly a place of no small note and importance in these early days. But clerical morals were still confessedly in a sad state about the time that syphilis first appeared in this part of the island. The *General Satyre* of Scotland, written, as I have already stated, at the commencement of the sixteenth century, stigmatises amongst other things—

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"Sic pryd with prellatis, so few till preiche and pray, Sic haunt of harlettis with thame, baythe nicht and day."634

Queen Mary would seem to have regarded the health of the high Roman church dignitary who baptized her son James VI. with considerable suspicion, perhaps, however, only in as much as he was one of a class with a very bad character in that respect. King James, in "A Premonition to all most mightie Monarchs, Kings, Free Princes, and States of Christendome," thus refers to it:

—"For first, I am no apostate, as the Cardinal (Bellarmine) would make me, not onely having ever been brought up in that religion which I presently professe, but even my father and grandfather on that side professing the same: and so cannot be properly an Heratike, by there own doctrine, since I never was of their church; and as for the Queene my mother of worthy memorie, although she continued in that religion wherein she was nourished, yet she was so farre from being superstitious or Jesuited therein, that at my Baptisme (although I was baptized by a Popish Archbishop) she sent him word to forbeare to use the spettle in my baptisme; which was obeyed, being indeed a filthy, and an apish trick, rather in scorne than in imitation of Christ; and her owne very words were, that 'She would not have a pokie priest to spet in her child's mouth.'"

Of the dissolute lives of the Scotch, like the other clergy of these times, we may find ample proof in some of the contemporaneous medical works. We know, for example, from an old medical author, something of the inner life of the identical "pockie priest" who baptized James VI. In 1552, Dr. Jerome Cardan, the famous Italian physician, came from Milan to Edinburgh to visit professionally the high ecclesiastic in question—namely, John Hamilton, Archbishop of St. Andrews—who was suffering under severe and recurrent attacks of asthma. He travelled with all possible expedition, and in these "good olden times" the part of his journey from London to Edinburgh only took twenty-three days. Cardan has left us in his works a copy of the lengthy and very minute medical and hygienic directions which he drew up for the behoof of the archbishop. Besides giving him innumerable medical prescriptions, he lays down for him excellent rules regarding his food, drink, exercise, sleep, etc., down to the materials of which his bed and his pillows should be composed. He adds for the Archbishop's guidance the following rule—"De Venere. Certe non est bona, neque utilis: ubi tamen contingat necessitas, debet uti ea inter duos somnos, secilicet post mediam noctem, et melius est exercere eam ter in sex diebus pro exemplo, ita ut singulis duobus diebus semel, quam bis in una die, etiam quod staret per decem dies." 636

The quiet and matter-of-course style in which these rules are laid down and published proves only too strongly the dissolute life of some of the highest clergy in our land; and in order to appreciate the full force of this observation, it is necessary to remember that Cardan's patient was the living head of the Scottish Roman Catholic church of that day—the Primate and Metropolitan of Scotland. Perhaps still more unequivocal evidence of the scandalous profligacy of the Scottish clergy of these times is to be found in their own statutes, and in the legal documents of the country.

In a provincial council of the Scottish clergy, held at Edinburgh in 1549, the circumstance that there had come very grave scandals to the church from the incontinence of ecclesiastics (ex clericorum incontinentia, gravissima ecclesiæ scandala esse exorta) was taken into consideration, and the edict of the Council of Basle "De Concubinariis" put in force. Another edict was passed by this Edinburgh synod "exhorting" both the prelates and inferior clergy not to keep their own illegitimate children in their company, prohibiting their promotion of them in their churches, and forbidding the endowment of them with baronies out of the church's goods.⁶³⁸ But perhaps the dissolute and depraved state of the Romish church in Scotland is more clearly photographed in a subsequent edict, which they passed in a large synod held at Edinburgh in 1558-9. This edict does not "exhort" against incontinence on the part of the priests, but it simply and shamelessly restricts, and lays down a legal limit to, the amount of property which they might unsacrilegiously abstract and purloin from the pious endowments belonging to the Church (de patrimonio Christi) for the marriage portions of the bastard daughters of their concubines; the synod enacting that neither prelates nor any other ecclesiastics should directly or indirectly give with their illegitimate daughters, in marriage to barons or other landowners, any greater sum than one hundred pounds yearly of the Church's patrimony. 639

The legitimation of bastard children was necessary before they could inherit or dispose of

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property, and exercise other legal rights. The Privy Seal Records of Scotland for the earlier years of the sixteenth century have been preserved, and are full of entries of legitimation of the bastard children of Scottish prelates and priests. Lord Hailes gives us some sad information regarding the numbers of the illegitimate children of the Scottish bishops, abbots, and monks of these times. Among others, he states that David Bethune, the immediate predecessor of Hamilton in the archbishopric of St. Andrews and primacy of Scotland, had three bastards legitimised in one day; and afterwards, Patrick Hepburn, Bishop of Moray, had seven—five sons and two daughters—all acknowledged in one day. John Leslie, Bishop of Ross, himself the illegitimate son of an official in the diocese of Moray—viz. of Gavin Leslie, parson of Kingusie, was the father of several illegitimate children; and it is, says the learned author of the *Book of Bon Accord*, sufficiently amusing to find his name among those of the other members of the chapter of Aberdeen who solemnly counselled their ordinary to "caus the lay kirkmen within their diocie to reforme thameselfes in all thair slanderous maner of lyving, and to remove thair *oppin* concubins."

Concubinage among the lower clergy, provided it was not slanderously open and avowed, would almost seem to have been overlooked and connived at by the church dignitaries of those degenerate times. 642

The remains of the old chapel of St. Ninian, at Leith, still exist in the vicinity of Edinburgh. The spire of the church is, even at the present day, a conspicuous object above the second harbour bridge, though the chapel itself and its prebendary are degraded to common dwellings. This chapel was founded by Robert Bellenden, Abbot of Holyrood, and endowed for two chaplains. In the charter of foundation, which is dated 1493 (four years before syphilis broke out in Edinburgh), it is—in accordance with a common formula in these deeds—ordained that if "either of the aforesaid chaplains keep a lass or concubine, in an open and notorious manner, he shall be degraded; which seems," as the historian Maitland pertly observes, "to imply this, that they or either of them might keep a miss or misses provided it were not publickly known."

Nor was poverty on the part of a portion of the priesthood apparently any great obstacle to such, as well as to less sinful indulgences. For, according to the testimony of honest George Marjoribanks (see his *Annals of Scotland*, p. 5), "In the yeir of God 1533 Sir Walter Cowpur, Chaiplaine in Edinburgh, gate a pynte of vyne, a laiffe of 36 unce vaight, a pock of aite-meill, a pynte of aill, a schiepe-hede, ane penny candell, and a faire woman for ane xviii^d grote."

Very shortly before the commencement of syphilis, the dissolute manners of the English clergy, especially of the regulars, created such noise and commotion among the laity, that Pope Innocent VIII. sent in 1490 (a few years before the actual appearance of the disease) to Archbishop Merton, authorising him to admonish his abbots and priors that "by their lewd and dissolute lives they brought ruin upon their own souls, and set a bad example to others." In obedience to this bull, the Primate sent monitory letters to the superiors of all convents and religious houses in his province, admonishing and commanding them, by the authority he had received from the Pope, to reform themselves and their subjects from certain vices, of which they were said to be guilty. The monitory letter that was sent on this occasion to the Abbot of St. Alban's is published in Wilkins's Concilia, vol. iii. p. 632. If that Abbot and his monks were stained with all the odious vices of which the Primate openly accuses them in this letter, they stood much in need of reformation. Some of these vices, says Dr. Henry, were so detestable that they cannot so much as be named in history. "You are infamous," writes the Archbishop to the Abbot, for "simony, usury, and squandering away the possessions of your monastery, besides other enormous crimes." One of these crimes was, that the Abbot had turned all the modest women out of the two nunneries of Pray and Sapwell (over which he pretended to have a jurisdiction), and filled them with prostitutes; that these nunneries were esteemed no better than brothels, and that he and his monks publicly frequented them as such. His Grace seems to have been well and accurately informed, for he even names some of these infamous women and their gallants. The monks, too, were at least as profligate as their Abbot, for they also kept their concubines both within and without the monastery.

When such was the scandalous life led by some of the clergy, we cannot wonder that, before the introduction of syphilis, Rabelais (himself at one time a monk) should apply to the gonorrhœal disease the very significant term of "rhume ecclesiastique;" or that, after the appearance of syphilis, this latter and greater malady should have spread speedily among all ranks, down from the clergy to the laity, and from the king to the churl, and should have become diffused by such stealthy but rapid steps over the countries of Europe, as to have at first been mistaken for a malady spreading itself, not by impure intercourse, but by general epidemic influences. And when we advert to the existing state of society in that age, and couple it with such notices as we have found in the Aberdeen records, we may surely (in despite of all that has been written to the contrary, both in ancient and modern times) reasonably doubt whether the laws regulating the propagation of syphilis in the fifteenth and sixteenth centuries were in any degree different from what we know them to be in the nineteenth century. The Aberdeen edict shows that three hundred and sixty odd years ago, or in 1497, the common mode of infection of the disease was precisely the same as all acknowledge it to be at the present day.

- 1 From the Edinburgh Med. and Surg. Journal, No. 149.
- 2 Study of Medicine, vol. i. pref. p. xxiii.
- See some learned notices regarding this strange species of mania (the wolf-madness or wehrwolf of the Germans) in Burton's *Anatomy of Melancholy* (edit. of 1804), vol. i. p. 13, and Heinrich Hase's late work on the *Public and Private Life of the Ancient Greeks*, p. 17. Ploucquet, in his *Literatura Medica*, gives references to a number of articles and monographs on the subject under the word "Lycanthropia," vol. i. p. 510.
- 4 See particularly the Canon De Leprosis of Pope Alexander III. in the *Monasticon Anglicanum*, tom. ii. p. 365; and Semler's *Historiæ Ecclesiasticæ Selecta Capita*, tom. iii. p. 170.
- The terms employed by Matthew Paris are quite precise. "Habent insuper *Templarii* in Christianitate novem millia Maneriorum; *Hospitalarii* vero novemdecim." *Anglor. Historia Major* (ed. of 1644), p. 417. In referring to the subject under the word "Leprosaria," Ducange states, "Dominus Matthæus Paris, *Hist. Angl.* p. 63, affirmat suo tempore fuisse Leprosarias 1900 (19,000?) in toto orbe Christiano." See his *Glossarium, Med. et Inf. Latinitatis*, tom. iv. p. 126. At p. 63 of the Appendix to Paris, the institution of one hospital at St. Alban's is referred to; but neither here nor elsewhere in his work can I find any allusion whatever to the existing number of leper hospitals in England, or in Christendom in general.
- 6 Velley, Villaret et Garnier, *Histoire de France*, tom. ii. (ed. of 1770), p. 291.
- 7 Velley, etc., *Histoire*, ii. p. 292.
- 8 Mezeray, *Histoire de France*, tom. ii. 1645, p. 168. "Il n'y avoit n'y ville, n'y bourgade, qui ne fust obligée de bâtir un hospital pour les (Lepres) retirer."
- 9 Antiquitates Italicæ Medii Aevi, tom. iii. p. 53. "In Italia vix ulla erat civitas quæ non aliquem locum, Leprosis destinatum, haberet."
- 10 Acta Sanctorum a Patribus Soc. Jesu Antuerpiæ Collecta. Holst in his Work on Radesyge (Morbus quem Radesyge vocant: Christianae, 1817), refers to the works of Smid and Petersen, as showing that Denmark formerly suffered much from leprous diseases (morbis Leprosis olim graviter vexatam fuisse), p. 90.
- For reference to the prevalence of leprosy and leper hospitals in Ireland, see Ledwich's *Antiquities of Ireland* (Dublin, 1804), p. 370.
- 12 Terms manifestly (according to Junius, Johnson, Richardson, etc.) mere corruptions of the word hospital.
- 13 Manuscript Chartulary of the Priory of Coldingham, p. 25. Advocates Library, Edinburgh. In the above Latin extract the original orthography is preserved.
- 14 Liber de Sanctæ Mariæ de Melros. Presented by the Duke of Buccleuch to the Bannatyne Club, Edin. 1839, tom. i. p. 70. See also Morton's Monastic Annals of Teviotdale, 1832, p. 265.
- 15 Stat. Ac. of Scotland, No. xvi. p. 75.
- 16 Registrum Monasterii de Passelet, 1163-1529. Presented by the Earl of Glasgow to the Maitland Club, tom. i. p. 21. I am indebted to Mr. E. Thomson of Edinburgh, and formerly of Ayr, for pointing out to me the fact and inference in the text.
- 17 See Chalmers' Caledonia, vol. iii. p. 496; and Records of the Burgh of Prestwick, from the fifteenth to the eighteenth century. Glasgow, 1834, p. 127.
- 18 The Lord of the Isles. Canto v. Note vii.
- 19 Session Papers, Advocates' Library, vol. xxix. Petition of Colonel Fullarton to the Lords of Council and Session, Jan. 18, 1798, for the patronage, etc., of Kingcase.
- Geographiæ Bleauvianæ, vol. vi. p. 60.
- 21 Gibson's History of Glasgow (1778), p. 52. Cleland's Glasgow, 1816, vol. i. 68.
- Burgh Records of Glasgow, from 1573 to 1581 (printed 1832), p. 1.
- 23 *Ibid.* p. 52.
- 24 *Ibid.* p. 127.
- Memorabilia of Glasgow, selected from the Minute Books of the Burgh, 1588 to 1750 (printed 1835), p. 55.
- Manuscript Records of the Town-Council of Edinburgh, vol. vii. p. 168. There would seem to have been a Leper-hospital belonging to Edinburgh antecedent to that built at Greenside. At least in the City Council Records for 30th September 1584, I find a missive for Michael Chisholm and others, to inquire into "the estait and ordour of the awld (old) fundatioun of the Lipperhous besyde Dyngwall." The Castle of Dyngwall, the residence of the Provost of the adjoining Trinity College, formerly stood on the site of the Orphan Hospital, behind Shakespeare Square.
- 27 Manuscript Records of the Town-Council, vol. ix. pp. 9 and 12.
- 28 Ibid. vol. ix. p. 123.
- Pennecuik's *Historical Account of the Blue Blanket or Craftsmen's Banner*. Edinburgh, 1722, p. 135.

- 30 Manuscript Records, vol. xvii. p. 298.
- 31 *Ibid.* vol. xix. p. 210.
- 32 Book of Bon Accord, 1839, p. 341.
- 33 Book of Bon Accord, 1839, p. 312.
- Kennedy's *Annals of Aberdeen*, vol. ii. p. 82, and vol. i. p. 168.
- 35 Registrum Episcopatus Moraviensis, Edinb. 1837, pp. 77-78. Sir John G. Dalyell's Brief Analysis of the Records of the Bishopric of Moray, Edinb. 1826, p. 34.
- 36 Rhind's *Sketches of Moray* (1840), p. 114.
- 37 A Brief Description of Orkney, Zetland, Pightland Frith, etc. Edinb. 1701, p. 72.
- 38 View of the Ancient and Present State of the Zetland Islands, vol. ii. p. 103. Edinb. 1809.
- 39 Vol. ii. pp. 7, 88.
- 40 See Transactions of the Society of the Antiquaries of Scotland, vol. i. p. 295.
- Boece gives with great gravity the following extravagant account of the holy origin of the oily well of Liberton:—"Nocht two milis fra Edinburgh (says he) is ane fontane dedicat to Sanct Katrine, quhair sternis of oulie springis ithandlie (where drops of oil rise constantly) with sic abondance, that howbeit the samin be gaderit away, it springis incontinent with gret aboundance. This fontane rais throw ane drop of Sanct Katrinis oulie, quhilk was brocht out of Mount Sinai, fra hir sepulture, to Sanct Margaret, the blessit Queene of Scotland; and als sone (as soon) as Sanct Margaret saw the oil spring ithandlie, be divine miracle, in the said place, she gart big ane chappell (made be built a chapel) there in the honour of Sanct Katherine."—Bellenden's Translation of Boece's Hystory and Chroniklis of Scotland, p. xxxviii.
- 42 Memorial of the Rare and Wonderful Things in Scotland, at the end of his Abridgement of the Scotch Chronicles. London, 1612.
- 43 Dyet of the Diseased, book iii. cap. 19.
- 44 Trans. of the Society of Antiquaries, vol. i. p. 324.
- 45 The Oily Well; or a Topographico-Spagyrical Description of the Oily Well at St. Catherine's Chappel, in the Paroch of Liberton. Edinburgh, 1664.
- 46 Sir Thomas Murray's edition of *The Acts of Parliament made by James the First*, etc. (Edinburgh 1681), p. 18; or T. Thomson's edition of *The Acts of the Parliaments of Scotland* (1814), vol. ii. p. 16.
- Surtees' Antiquities of the County Palatine of Durham, vol. i. p. 127.
- 48 Nicolson and Burns' *History of Westmoreland and Cumberland*, vol. ii. p. 250.
- 49 Dugdale's Monasticon Anglicanum, tom. ii. p. 458. Tanner's Notitia Monastica (fol. edit.), p. 395.
- It may be proper to state that the references made to the *Monasticon Anglicanum* throughout the present paper, apply always to the first edition of that great work, unless when it is otherwise specified.
- 51 In the index to Tanner's Notitia Monastica (Nasmith's folio edition), 509 hospitals, leperhouses, and Maisons dieu are referred to as having existed in England previously to the Act for their suppression by Henry VIII. (See a table in Taylor's Index Monasticus, p. xxv.) We have no collection of data on which to form any similar general calculation for Scotland. In Chalmers Caledonia (vol. ii. p. 347) nine hospitals are stated to have existed in the county of Berwick alone. In the Scottish Parliament of 1424, an Act was passed regarding the hospitals "uphaldane to pure folks and seik" (poor people and sick) throughout the kingdom, and empowering the chancellor and bishops to "reduce and reforme tham to the effec of thair first fundacione" (see Thomson's edition of the Scotch Acts of Parliament, vol. ii. p. 7). Some of the hospitals in these early times were founded for the reception of the sick and infirm, others for lepers, many for the poor and aged, and a considerable number for the gratuitous entertainment of pilgrims and travellers. Among the whole long English list I have only found four endowed as lunatic asylums. A few were instituted for purposes which sound strangely in the ears of the present generation. Thus the hospital of Flixton, or Carman's Spittle, in the parish of Folketon, Yorkshire, was founded in the time of King Athelstane, to preserve travellers from being devoured by the wolves and other voracious and forest beasts of the districts ("pro conservatione populi inde transeuntis, ne populus ille per lupos et alias bestias voraces et sylvestres, inibi existentes, devoretur"). See the renewed charter of Henry VI. in the Monasticon Anglicanum, tom. ii. p. 372.
- 52 Bloomefield's *History of Norfolk*, continued by Parkin.
- Taylor's *Index Monasticus to the Diocese of Norwich*, p. 52, seq.
- 54 Pitcairn's Criminal Trials in Scotland, vol. ii. p. 29.
- 55 De Secretis Naturæ (Amsterdam ed. of 1790), p. 241.
- British Monachism, or Manners, etc., of the Monks of England, p. xv.
- 57 Historiae Ecclesiasticae Selecta Capita, tom. iii. p. 170.
- On the north-west side of the ruins of the Kingcase Hospital Chapel, Ayr, the burial-place of the leper bedesmen is still pointed out, but the numerous and marked "undulations of

- the green sward" are their only tombstone.
- 59 MS. Records of the Town-Council of Edinburgh, vol. ix. p. 123.
- 60 Ancient Records of the Burgh of Prestwick. Glasgow, 1834, p. 40.
- 61 Surtees' Durham, vol. i. 128.
- 62 Index Monast. p. 55.
- 63 Monasticon Anglicanum, tom. ii. p. 390.
- Paris, *Historia Anglor.* edit. of 1644, Additam. p. 169.
- As in the hospital of St. Laurence, Canterbury, which contained lepers of both sexes. See Strype's *Life of Archbishop Parker*, 1791, vol. i. p. 224.
- 66 Surtees' Durham, vol. i. p. 286.
- In a passage breathing the very spirit and prejudices of the middle ages, Mezeray states that during all the twelfth century, two very cruel evils (deux maux tres cruels) reigned in France, viz. *leprosy* and *usury*; one of which (he adds) infected the body, while the other ruined families.—*Histoire de France*, tom. ii. p. 169.
- 68 Historia Anglor. etc., Appendix, p. 164.
- 69 De l'Origine de Chevalrie, chap. ix. p. 126.
- 70 Le Histoire du Clerge Seculier, etc. See Table from it in Taylor's Index Monasticus, p. xxvii.
- 71 Helyot's *Histoire des Ordres Religieux* (edit. of 1792), vol. i. p. 257.
- 72 Rivius' Historia Monast. Occident. (1737), p. 223.
- 73 History and Antiquities of Leicester, vol. ii. p. 72.
- 74 There was in England at least one alien cell of Lazarites, at Lokhay, Derbyshire, subject to a French house. Tanner's *Notitia Monastica*, p. 83.
- 75 Monasticon Anglicanum, 2d ed. vi. p. 632. Notitia Monastica, p. 239.
- 76 MS. Chartulary of Newbottle Abbey, p. 205, Advocates' Library, Edinburgh. Since writing the above I find that Maitland, in his History of Scotland, includes, but without any references or details, the institution of Lazarites at Linlithgow, among his meagre list of Scottish Hospitals, vol. i. p. 269.
- 77 Histoire des Ordres Religieux, tom. i. p. 264.
- 78 Historical Account of the Blue Blanket, etc., containing the fundamental principles of the Good Town (Edin. 1722), p. 6. Probably the Lazarites are here confounded with the Hospitallers or Knights of St. John.
- 79 Geddes' *Tracts*. View of all the Orders of Monks and Fryars in the Roman Church. London (1794), p. 46.
- Helyot, tom. i. p. 262, and Moehsen's *Commentatio Prima de Medicis Equestri dignitate Ornatis* (1750), p. 56.
- 81 Bul. Rom. tom. ii. Const. 95, Pii iv. § 4.
- *Abrégé Hist. de l'Ordre de Notre-Dame*, etc., or Helyot, tom. i. p. 397.
- 83 Testament of Cresseid (Bannatyne Club edition, 1824), p. 20.
- 84 Edinburgh Town-Council Records, vol. ix. p. 123.
- See a copy of the charter in Kennedy's *Annals*, vol. i. p. 167.
- Taylor's *Index Monasticus*, p. 12.
- 87 *Ibid.* See instances at pages 57 and 60.
- 88 Monast. Anglic. tom. ii. p. 365, and Hist. Angl. Scripta edit. Lond. 1652. Coll. 1450, l. 4.
- 89 Life and Acts of Matthew Parker, by J. Strype, 1791, vol. i. p. 224-26.
- Taylor, ut supra, p. 127, Table of Revenues.
- 91 Dugdale's *Mon. Anglic.* 2d ed. vol. vi. p. 652.
- 92 *Ibid.* p. 637.
- 93 Val. Ecclesiast. Temp. Henr. VIII., tom. v. 1825, p. 308.
- 94 *Ibid.* p. 645.
- 95 Itinerary through England, etc. (by order of Henry VIII.), Hearne's edit vol. v. p. 105.
- Monast. Anglic. vi. p. 632; or Thoresby's History and Antiquities of Leicester, vol. iii. (1790), p. 175.
- 97 Paris' *Historia Anglor.* etc. Additamenta, p. 163.
- 98 Sed bene cavendum quod nec putridum, nec corruptum, vel morticinum illis rogetur.
- 99 Surtees' *History of the County of Durham*, vol. i. pp. 129 and 286.
- 100 Chronicon de Lanercost (Edinburgh 1841), p. 241. Chronica Th. Walsingham in

- Camden's Anglica, etc. (1603), p. 113. Hume's History of England (ed. of 1792), vol. ii. p. 370.
- Histoire de France, Mezeray, tom. ii. p. 72. Velley, etc., tom. ii. p. 292.
- 102 Ordonnances des Roys de France de la Troisieme Race (1723), tom. i. p. 814.
- 103 Ib. loc. cit. This Ordonnance is dated Crecy, 16th August 1321.
- Velley, Villaret, etc. *Histoire de France*, vol. vi. p. 239.
- 105 De Morbis Veneriis, ed. of 1740, p. 7.
- Letter to Von Troil, in his work on Iceland, p. 323.
- 107 History of the Holy Warre (1647), p. 254.
- General History of Scotland (1794), vol. ii. p. 266.
- Ingram's Edit. of the Saxon Chronicle, 1823, p. 302. See also Wharton's Anglia Sacra, tom. i. p. 264—and Gervase, in Leland's Collectanea de Rebus Britannicis (Hearne's Edit.), tom. i. p. 263. Dr. Lingard, in his History of England, vol. ii. p. 44 of 2d edit., states on the authority of Ordericus Vitalis, etc., the date of Lanfranc's death as 1079, which, if correct, and not a mere misprint, would only add to the force of the argument in the text.
- Antiquities of Canterbury, vol. i. p. 42, and vol. ii. p. 169.
- 111 Eadmeri Historia Novorum sive Sui Seculi, p. 9.
- 112 History of Northampton, vol. i. p. 363.
- Bishop Tanner's *Notitia Monastica*, edit. of 1744, p. 211.
- Ruel and Hartmann's *Collectio Conciliorum Illustratorum*, 1675, tom. iv. p. 100. The Lombards had a similar law, see Lindenbrog's *Codex Legum Antiquarum*, 1613, p. 609.
- 115 Histoire de Bretagne, Paris, 1707, tom. i. p. 204.
- Wharton's Anglia Sacra, tom. ii. pref. p. 32.
- 117 Cambro-Briton and Celtic General Repository, vol. iii. p. 199.
- 118 Chalmers' Caledonia, vol. ii. 789.
- 119 Liber Cartarum Sancté Crucis de Edwinesburg (Bannatyne Club edit. 1840), p. 6.
- 120 Transactions of the Society of Scottish Antiquaries, vol. i. p. 299.
- Chronica de Mailros, a cod. unico in Bibl. Cott. servato. Bannatyne Club edition, Edinburgh, 1835, p. 88. Crawford's Genealogical History of the Family of the Stewarts, 1710, p. 5. Lord Hailes' Annals of Scotland, ed. of 1797, vol. i. p. 327. Fordun gives the year as 1178, probably from a difference in the style of reckoning; see his Scotichronicon, Goodall's edit. 1759, tom. i. p. 475.
- 122 Registrum Episcopatus Moraviensis, p. 77.
- Tanner's Notitia Monastica Huntingdonshire, ii. 3. Monast. Anglicanum, tom. ii. p. 417.
- Paxton's Account of the Hospital and Parish of St. Giles in the Fields. Stowe in his Survey of London (Strype's edit. 1720, vol. ii. book iv. p. 74), says it was founded about 1117 (the year preceding Matilda's death).
- 125 Anglor. Historia Major, Append. p. 161.
- 126 Monasticon Anglicanum, 2d ed. vol. vi. p. 620.
- 127 *Ibid.* vol. vi. p. 630.
- Book of Bon-Accord, p. 342.
- 129 Records of Prestwick, p. 91.
- Was it used as a preventative or disinfecting agent? In some districts in Scotland at the present day all the attendants upon a funeral are regularly provided with tobacco and pipes at the expense of the relatives of the dead person.
- 131 Sinclair's Statistical Account of Scotland, vol. xii. p. 346.
- Ancient and Present State of the Zetland Isles, vol. ii. p. 102.
- 133 Bartholini De Morbis Biblicis Miscellanea Medica (1672), p. 41.
- 134 Faeroae et Faeroa Reserata, etc. (London, 1659), pp. 101 and 311, and Acta Medica, etc. Hafn. Tom. i. p. 98.
- 135 *Memoires de Medecine for 1782-3*, p. 200.
- 136 Voyage to Iceland (1770), p. 172.
- 137 *Letters on Iceland* (1780), p. 121.
- 138 Dissert. Inauguralis de Morbis Islandiae (Edinb. 1811), pp. 12-17.
- 139 Iceland, or the Journal of a Residence in that Island (Edinb. 1818), vol. i. p. 295.
- 140 Voyage en Islande et au Groënland, etc., livr. 11, 12, 14, 15, etc.

- 141 Edinburgh Med. and Surg. Journal, vol. xviii. p. 102, or Amoenitates Academicae, tom. vii. p. 97.
- 142 Ibid. No. 132, p. 119. See also Dr. Charlton's "Observations on the Norway Hospitals," Ib. p. 105.
- Die Radesyge oder das Scandinavische Syphiloid (Leipzig, 1828), p. 57.
- 144 Abrégé Pratique des Maladies de la Peau (1828), par MM. Cazenave et Schedel.
- 145 Practical Synopsis of Cutaneous Diseases (edit. of 1829), 411, 412.
- Library of Medicine, edited by Dr. Tweedie, vol. i. (London, 1840), p. 418. Among his list of Synonyms, Dr. Schedel gives "The Tsarath of Moses; Lepra Hebræorum; Lepra Egyptica; Lepra; Lardrerie," etc.
- "Morbus contagiosus, cutis crassa, rugosa, aspera, unctuosa, pilis destituta; extremis artubus anæsthesia; facies tuberibus deformis; vox rauca et nasalis." *Synopsis Nosologiæ Methodicæ* (1772), p. 369.
- Class III., Order IV., Genus VIII. *Elephantiasis*; (1) Skin thick, livid, rugose, tuberculate; (2) Insensible to feeling; (3) Eyes fierce and staring; (4) Perspiration highly offensive. Species I. (Tubercular or Arabian Leprosy of authors.) "(1) Tubercles chiefly on the face and joints; (2) Fall of the hair except from the scalp; (3) Voice hoarse and nasal; contagious and hereditary." Good's *Physiological System of Medicine* (1817), pp. 257, 258.
- De Causis et Signis Morborum, p. 69. (Leipsic, edit. of 1735).
- The disease is still designated in different parts of Asia and Africa by the same terms, more or less slightly changed. In his Travels in Africa, Egypt, and Syria (p. 332), Browne speaks of elephantiasis under the local designation of *dzudham*; Niebuhr says it is still named in Arabia and Persia *dsjuddam* and *Madsjuddam*. (Pinkerton's *Collection of Voyages and Travels*, vol. x. p. 170.) In Morocco it is called at the present day *Jeddem* and *Murd Jeddem*. (Jackson's *Account of the Empire of Morocco*.)
- The remark in the text applies to nearly all the numerous Latin versions made from the Arabic. It is proper, however, to add, that the translator of the works of Haly Abbas has so far avoided the error alluded to, by translating the Juzam of his author by elephanta. With this single exception, the error might otherwise, I believe, be called universal.
- The Arabians (*i.e.* the Latin translators from the Arabians), and their expositors, as was long ago remarked by Eustachius Rudius, and as has been often repeated since, "per Lepram nil aliud intelligunt præter Elephantiasim."—De Affectibus Externarum Corporis Humani Partium, Venet. 1606, p. 24.
- See Bostock's *History of Medicine* (New York edition of 1836), pp. 43 and 47, or chapters vi. and vii.
- This appropriation of the single term "lepra" for the designation of Greek elephantiasis is still adhered to by some modern authors. Thus Plenck, in his celebrated *Nosology of Cutaneous Diseases*, denominates (after the example of the translators from the Arabic) the Barbadoes leg "Elephantiasis," and applies to the Greek elephantiasis the simple term "Lepra." Hence he defines lepra to be "that disease in which the skin, particularly of the face, becomes rugose and irregular (aspera), and is deformed with large reddishlivid and chinked tubercles (rimosis tuberibus), along with insensibility of the extremities, and the voice raucous and nasal."—Doctrina de Morbis Cutaneis, quâ hi morbi in suas Classes, Genera, et Species rediguntur (1783), p. 67. See also Schilling in his Commentatio de Lepra (1778), p. 2. etc.
- As in the works on Cutaneous Diseases by Turner (*Treatise of Diseases incident to the Skin*, 1736), p. 2; and Lorry (*Tractatus de Morbis Cutaneis*), p. 376, etc. etc.
- Memoires de la Societé Royale de Medecine for 1782-3, p. 170. Alibert employs this term in his Monographie des Dermatoses (1835), tome ii. p. 270.
- "Elephantiasis a vulgo Medicorum Lepra vocata et quibusdam Sancti Lazari morbus."

 "Elephantiasis quam vulgus male Lepram appellitat." See pp. 680 and 716 of the "Libri quinque Institutionum Chirurgicorum Joannis Tagaultii," in Uffenbach's Thesaurus Chirurgiae (Francof. 1610).
- "Chirurgia secundum Medicationem Hugonis de Luco" (in Arte Chirurg. Scriptorum Collect.; Venice, 1546), p. 175.
- "Chirurgia Magna et Parva." In the same collection of Surgical works, p. 207, 208.
- 160 Breviarium practicae a Capite ad plantam Pedis. Brev. ii. cap. 46.
- 161 Philoneum Pharmaceuticum et Chirurgicum de medendis corporis affectibus; Frankfort, 1599, p. 659.
- "Lilium Medicinæ inscriptum de Morborum prope omnium curatione," vide Opera Medica (Lugd. 1574), p. 49, sqq.
- 163 Chirurgiae Tractatus vii. (Lugd. 1572), p. 307, sqq.
- 164 Pro conservandâ Sanitate, etc., Liber utilissimus (Mogunt. 1531), c. 202.
- 165 Chirurgiae Libri Sex. (Venet. 1533), lib. v. 23.
- Selectiorum operum, in quibus Consilia, etc. continentur (Lugd. 1525), Consil. 299.
- 167 Consilia secundum viam Avicennae ordinata (Lugd. 1535), Consil. 299.

- 168 Les Oeuvres d'Ambrose Paré (Lyons, 1652), p. 476, etc.; or Uffenbach's Thesaurus Chirurgiæ (Frankfort, 1610), p. 428, etc.
- Joannis Fernelii Ambiani Universa Medicina (Geneva, 1680), pp. 579 and 517.
- 170 Julii Palmarii Constantini, Medici Parisienis, de Morbis Contagiosis Libri Septem (Frankfort, 1601), pp. 257-326.
- 171 Opera Observationum et Curationum quæ extant Omnia (Frankfort, 1646), p. 973.
- See in Gesner's Collection *De Chirurgiâ Scriptores*, etc. (Tiguri 1555), a tract entitled "Examen Leprosorum." Gregory Horst, *Operum Medicorum*, tom. ii. (Norimberg, 1660), p. 127. Franciscus de Porta, *Medicæ Decad*. cap. xxx. lib. 4. Von Forrest's *Observationes Medicæ et Chirurgicæ*, lib. iv. p. 103. Schenckius, *Observationum Medicarum Rariorum Libri Septem* (Frankfort, 1665), p. 803.
- Several of the authors quoted above, divide the *species* Lepra into four modifications or varieties: the Lepra Leonina, Lepra Elephantia, Lepra Alopecia, and Lepra Tyria. This division, which some of them freely allow to be founded more in theory than in nature, seems to have been first proposed by Constantinus Africanus. (*De Morborum Cognitione*, chap. 17.) Like the fanciful fourfold subdivision of other diseases, it was made in correspondence with the Hippocratic and Galenic doctrine of the four humours. Theodoric, Arnald, Gilbert, and the other authors who, in accordance with the pathological creeds of the time, were led to adopt it, attribute each particular variety to the operation and predominance of a particular humour. John of Gaddesden has attempted, in his *Rosa Anglica*, to dress up different medical doctrines in rude Latin hexameters, and amongst others, he announces the doctrine in question in the five following lines:—

Sub specie tetrà deturpat corpora Lepra; Tiria prima datur, de *flegmate* quae generatur; Turpe pilos pascens Alopicus, *sanguine* nascens; Fitque Leonina, *colera*, fervente canina; De *Mel* (*Melancholia*) fit tristis Elefantia, tristior istis.

- The *History of Physick*,5th edit. 1758, vol. ii. p. 263.
- 175 Freind, p. 262.
- 176 Sprengel, vol. ii. p. 448.
- 177 Bernhardi Gordonii Opera Medica, Lugd. 1542, pp. 48 and 49.
- 178 *Ib.* p. 54.
- 179 See Freind, Sprengel, Eloy, etc.
- In the *Biographie Universelle, ancienne et moderne,* Paris, 1813, tom. viii. p. 293, a third Pope, Innocent VI., is added to this list.
- 181 Chirurgiae Libri Septem, Lugd. 1572, p. 307, sqq.
- 182 Gilberti Anglici Compendium Medicinae, tam morborum universalium quam particularium, non solum medicis sed et chyrurgicis utilissimum. Vienna, 1510.
- Eloy's *Dictionnaire Historique de Medecine, Ancienne et Moderne,* 1778, tome ii. p. 349. Aitkin's *Biographical Memoirs of Medicine in Great Britain,* 1780, p. ix.
- Freind's *History of Medicine*, 5th edition, vol. ii. p. 268.
- 185 Compendium Medicinæ (ut supra), p. 340.
- Nosologia Methodica, tome v. p. 229. Before citing Gilbert's description, Sauvages observes, "Plures hujus morbi (Elephantiasis) varietates sunt quarum nomina et signa ex Gilberto Anglo mutuabimur, loco Leprae Elephantiasin nominando."
- Memoires de Medecine et de Physique Medicale tirés des Registres de la Societé Royale de Medecine, Années 1782-83, p. 200. Speaking of the Greek elephantiasis, or elephantiasis legitima of Sauvages, they observe "on ne trouvoit nulle part, pas même dans Arétée de Cappadoce, une exposition plus claire que celle qui a été donnée par Gilbert, Medecin Anglois du seizieme (?) siecle."
- Sprengel's *Histoire de la Medecine* (Jourdain's translation). Tome ii. p. 404.
- 189 Anthony Wood's *Athenae Oxonienses*, p. 87.
- Wood gives his name as entered in an old College Catalogue in 1320. He compiled his book between 1305 and 1317: Freind, vol. ii. p. 277; and Eloy, vol. ii. p. 287. See also Hutchison's *Biographia Medica*, vol. i. p. 323; and Aitkin's *Biographical Memoirs*, p. ix, etc.
- Guy de Chauliac entitles Gaddesden's book (probably with more truth) "una fatua Rosa Anglica."
- 192 Rosa Anglica quatuor Libris distincta (Papiae, 1492), lib. ii. cap. vii. p. 55; or Joannis Anglici Praxis Medica, Rosa Anglica dicta (Schopf's edit. 1595), p. 1076, sqq.
- 193 Rosa Anglica, p. 1079. The editor, Schopf, appends to this passage a rubric, stating the above sound counsel as "Decretum Joannis Angli de Leprosis."
- Pitt places him about 1360: Eloy, vol. ii. p. 354; Freind, vol. ii. p. 293.
- From the old translation of Glanville's work, *De Proprietatibus Rerum,* by John Trevisa, Vicar of Barkley. See *Phil. Trans.* vol. xxxi. p. 59.

- 196 Eccles. Dunelm. Hist. l. liii. f. 56, a; vide Monasticon Anglicanum, tom, ii. p. 437, a.
- Bernhard Gordon of Montpellier, whose description of the disease I have already quoted, has been sometimes alleged to be a native of Scotland, see Sprengel's *Histoire*, ii. p. 447; but without any other evidence whatever than that derivable from his Scottish surname.
- The Testament of Cresseid, compylit be M. Robert Henrysone, Sculemaister in Dunfermeling. Imprentit at Edinburgh, 1593. Reprinted by the Bannatyne Club, Edinburgh, 1824. The poem has been published, without the name of the author, in Godfray's and most other later editions of Chaucer's Works.
- 199 This complication was not so common as to be regarded as a constant and pathognomonic sign of Greek elephantiasis, but it is noted as an important and frequent one, by various authors, both ancient and modern. Hally-Abbas tells us, in our diagnosis of a case of the disease, to be particular in examining "album oculorum ne forte turbatum est" (Lib. i. cap. xxiv.); Rhazes attributes great value as a diagnostic mark of his Juddam or elephantiasis to the "conturbatio albedinis oculorum" (Lib. v. cap. cxx.); Avicenna, among his incipient signs, states "et apparet in oculis obfuscatio ad rubedinem declivis" (Lib. iv. Fen. iii. Fr. 3, cap. ii.) Not to multiply examples, I may merely mention that Theodoric, in the thirteenth century, places early among his list of signs "oculorum in albedine lividitas" (Lib. iii. cap. lv.); see also Lanfranc (Doct. i. Tr. iii. c. 7, albedo oculorum obfuscator); Arnald of Villeneuve (Brev. ii. c. 46, multum rubeae); Gilbert (Lib. viii. oculi circulos habent rubros), etc. Dr. Heberden, in his account of the tubercular leprosy in Madeira, states, in regard to a case, "that the confirmed elephantiasis was attended with livid and scirrhous tubercles, which had overspread the face and limbs; the whole body was emaciated; the eyebrows inflated; the hair of the eyebrows fallen off entirely; the bones of the nose depressed; the alae nasi tumefied, as likewise the lobes of the ears; with a suffusion in both eyes, which had almost deprived the patient of sight," etc.—Medical Transactions of the College of Physicians, vol. i. p. 35.
- I give the term "livid" as synonymous with the old Scotch term "haw," under the idea that it expresses in all probability, as nearly as possible, the meaning of the author. The Scottish writer Gawin Douglas renders the Latin adjectives "caeruleus" and "glaucus," by the adjective "haw," in his celebrated translation of "The xiii. bukes of Eneados of the famose poet, Virgill, out of Latyne verses, into Scottish meter." For the occasional livid colour of the lumps or tubercles in the face, see the extract in the preceding note from Dr. Heberden, and the modern descriptions quoted in a previous page from Bateman and Schedel.
- Since writing the above, I have met with the following interesting notice in the still earlier voyage of Martin to St. Kilda, the most westerly island of the Hebrides. Describing his visit to St. Kilda, in 1697, he states, "Some thirteen years ago, the Leprosy broke amongst the inhabitants, and some of their numbers died of it. There are two families at present labouring under the disease. The symptoms of it are, their feet begin to fail; their appetite declining; their faces becoming too red, and breaking out in pimples; a hoarseness, and their hair falling off from their heads; the crown (?) of it exulcerates and blisters; and, lastly, their beards grow thinner than ordinary."—Voyage to St. Kilda (first published in 1698), p. 40 of edition of 1749.
- 202 MS. Medical Annotations, vol. iii. p. 226.
- "The Moderator proposed to the session, that, considering that a Gracious Providence had not only delivered the Island and country from the burden and necessity of maintaining and otherwise providing for the poor Lepers, formerly in this Island, but had also put a stop to the spreading of that unclean and infectious disease, so that there is no appearance of the symptoms thereof in any person now in this place, the Session should therefore ordain a day to be set apart for solemn thanksgiving for so great a deliverance throughout this ministry excepting Fowla, which we can have no access to probably to inform. The Session having heard the Moderator's proposal, were cordially satisfied therewith, and did agree unanimously that a day be set apart for solemn thanksgiving on the above account throughout the bounds of the ministry, excepting Fowla, as above said." (Extracts from the MS. Session Register of Walls, under date of 17th March 1742.) The 19th May 1742 was held as the day of thanksgiving, as appears from a subsequent entry.
- Færoæ et Færoa Reserata (London, 1659), pp. 310, 311.
- Mackenzie's Travels in Iceland during the summer of the year 1810; or Edinburgh Medical and Surgical Journal, vol. viii. pp. 202, 203.
- Von Troil's Letters on Iceland, p. 123; Barrow's Visit to Iceland in the summer of 1834, pp. 289 and 294.
- 207 Pontoppidan's *Natural History of Norway*, containing an account of its Climate, etc. etc. (London translation, 1755), pp. 261, 262.
- See Wellhaven's account, extracted from the *Transactions of the Stockholm Society*, vol. iii. pp. 188-200, into Hunefeld's "Essay on Radesyge," pp. 38-56.
- See pp. 110-117 of the excerpta in Hensler's learned work, *Vom Abenländischen Aufsatze im Mittelalter*. (Hamburg, 1790.)
- The disease seems to be noticed under the name of Skyrbjugr in some of the oldest Iceland records. (See Olassen's *Islansk Urtagaard Bok*, p. 172; and Back, in Von Troil's *Letters on Iceland*, p. 324.) Munch and Hunefeld suggest, with no great probability, that it might have been carried to the north by the expeditions which, during the ninth and tenth centuries, were made upon the Norman coast by Rolf and others. (See Hunefeld's *Radesyge oder das Scandinavische Syphiloid*, p. 57.)

- I have already referred to Bartholin in relation to its former prevalence in the Faroe Isles and Iceland. Writing in 1672, he states that in these parts leprosy "fuisse olim familiarem" (de morbis Biblicis in Mis. Med. p. 41). Jonas, Pastor of Hitterdale in Iceland, wrote in 1662 to the celebrated Sir Thomas Browne, "Nullus elephantiasi vel abominabilior vel pestilentior hic existimatur, et tamen postremo hoc seculo pavendus se diffundit." (Wilkin's edition of Sir Thomas Browne's Works, including his Life and Correspondence, vol. iv. p. 261.)
- The date of admission to the church of one of the priors of the hospital.
- 213 Synopsis of Cutaneous Diseases, p. 419.
- Murray's Edition of the Acts of the Parliament of Scotland, vol. ii. p. 18. In Shetland the 214 kirk-sessions seem to have latterly taken upon them the legal powers conferred by the above Act upon the bishops and other ecclesiastical authorities, as shown by the following extract from the Session Records of the parish of Walls. "Kirk of Walls, December 6th, 1772.—This day the Session being informed that Margaret Abernethy, relick spouse of James Henry, had been, to all appearance, for a considerable time past, deeply tinted with the inveterate scurvy, commonly called the Leprosy in this place, and was now removed to Brabaster in the midst of a number of children, whose parents were in the greatest fear of their being infected with that disease by the said Margaret Abernethy, and that they and others had again and again called upon the Session to convene the said woman before them, in order to be sighted, and also to be set apart, if she should be found unclean, conform to former use and wont, in this and other parishes of the country: Therefore the Session did, and hereby do, appoint the officer to require said Margaret Abernethy to compear before them at this place, next Wednesday, in order to be examined and inspected, as above said."—Extracted from the MS. Session Records of Walls.
- In describing the duties of the examiner, De Chauliac observes, "In primis invocando Dei auxilium debet eos comfortare, quòd ista passio est salvatio animae et quod non dubitent dicere veritatem, quia si reperientur Leprosi, purgatorium animae esset; et si mundus habet eos odio, non tamen Deus, cum Lazarum Leprosum plus dilexit quam alios. Si autem non reperientur tales stabunt in pace."—P. 310.
- From the "Statuta Milonis Episcopi Aurelianensis, anno MCCCXIV. in Synodo autumnali edita," contained in Martene and Durand's *Amplissima Collectio veterum Scriptorum et Monumentorum* (Paris, 1733), tom. vii. p. 1286.
- 217 Foedera, Conventiones, Literae et cujuscunque generis Acta Publica inter Reges Angliae et aliosquosvis Imperatores, Reges, Pontifices vel Communitates. Vol. xi. (London, 1710), p. 635.
- Ropemakers were long treated and shunned as lepers, because their trade was one which at an early part of the middle ages was principally followed by pilgrims and crusaders who had returned in a leprous condition from the East.—Ogée's *Histoire de Bretagne*. Hensler's *Abendländischen Aufsatze*, 1790, p. 212.
- 219 Records of the Burgh of Prestwick, p. 28.
- In the list (p. 10) of fifty-eight "burges inhabitant ye burghe of Prestwik" in 1507, occur the two significant surnames of "Allane Leppar" and "Adame Leppar."
- 221 Burgh Records of Glasgow, presented to the Maitland Club by Mr. Smith, pp. 1 and 127.
- 222 Memorabilia of Glasgow, p. 55.
- Alexander Jenkins' History and Description of the City of Exeter, and its Environs, Ancient and Modern, etc. (1806), p. 384.
- Index Monasticus, p. 61. Monasticon Anglicanum (2d edit.), vol. vi. p. 769.
- Notitia Monastica, p. 211.
- Lord Lyttelton's *History of the Life of Henry II. and of the Age in which he lived.* (Lond. 1767.) Appendix of Documents, vol. iv. p. 220.
- See Monasticon Anglicanum, vol. vi. p. 643, 2d edit.
- Leland's Itinerary through England and Wales (Hearne's edit.), vol. iv. p. 105.
- 229 Chron. MS. Henrici Knyghton, in Bibl. Bodl. lib. ii. cap. 2; Monasticon Anglicanum (2d edit.), vol. vi. p. 687.
- Agnes Strickland's *Lives of the Queens of England*, vol. ii. p. 78.
- Ryland's *History of Waterford*, p. 200. Mrs. Gore has founded one of her latest tales ("The Leper House of Janval"), on the idea of William, the third son of the Empress Matilda, becoming a leper. See her *Tales of a Courtier*, vol. ii. p. 55. I am not aware whether the tale is so far historically accurate, or merely assumed, as I do not recollect to have met with any notice of the individual history or death of the prince (the youngest of the three grandsons of Henry I.) who is the subject of the story.
- Chronicle at large and meere Historie of the Affayres of England and Kings of the same (1569); see p. 506 of edit. of 1809.
- Chronicles; or Union of the two Noble and Illustre Families of York and Lancastre (1548); see Hearne's edit. of 1809, p. 45.
- Hollinshed's *Chronicles of England, Scotland, and Ireland,* 1577. London, edit. of 1808, vol. v. p. 360.

- 235 History of England (1st edit.), vol. iii. p. 315.
- Rapin's *History of England* (ed. by Tindal), vol. ii. p. 185.
- 237 Sharon Turner's *History of England*, vol. ii. p. 272.
- Duchesne's Histoire d'Angleterre, d'Ecosse et d'Irelande (Paris, 1614), p. 1010.
- 239 Strickland's *Lives of the Queens of England*, vol. iii. p. 114.
- 240 The Chronicle of England unto the reigne of King Edward IV., by Iohn Hardynge (Ellis' edit. 1813) p. 370.
- Fuller's Historie of the Holy Warre (3d edit. 1647), p. 94.
- Fuller's *Historie of the Holy Warre* (3d edit. 1647), p. 101.
- 243 *Oeuvres de Rabelais* (Paris, 1835), p. 666.
- Bellenden's Transl. of Boece's *Chroniklis of Scotland*, vol. ii. p. 102 (edit. of 1821). Dempster's *Historia Ecclesiastica Gentis Scotorum* (1627), p. 278.
- Spottiswood's *History of the Church of Scotland* (edit. of 1665), p. 21. See also Fiacre's story in Lesslie *de Origine, Moribus*, etc., *Scotorum* (1578), p. 156.
- The *Orygynale Cronykil of Scotland* (Macpherson's edit.), vol. ii. p. 136.
- I have already shown in Part I. that the name here given to the leprosy by the old French historian exactly corresponds with the Anglo-Saxon designation of the disease "seo mycle adhl." It perhaps deserves to be added that (as appears from a paper of Dr. Ainslie —Asiatic Researches, vol. i. p. 287) the term "Peri Vishadi," applied to tubercular leprosy by the Brahmins of Hindustan, also literally signifies "the great disease."
- Sir John Froissart's *Chronycles of England, France*, etc., translated at the command of Henry VIII. by Lord Berners (London, edit. of 1812), vol. i. p. 19. In p. 28, he again states, "it fortuned that King Robert was right sore aged and feble, for he was greatly changed with the great sicknes, so that there was no way with him but death."
- Froissart, *Histoire et Cronique* (edit. of 1559), vol. i. p. 13.
- 250 Collection des Memoires Nationelles, etc., tom. x. p. 61.
- Johnes' English edit. of *Froissart's Chronicles*(1839), pp. 18 and 26.
- 252 Hemingfordii Chronicon (Hearne's edit. 1731), tom. ii. p. 270.
- 253 Camden's Anglica, Normannica, etc., a veteribus Scripta (Frankf. 1603), p. 129.
- 254 Ibid. p. 610.
- 255 Scotorum Historia (Paris edit. 1574), p. 308. Bellenden's Translation vol. ii. p. 40: "He deceissit in lepre."
- 256 Rerum Scoticarum Historia (1762), p. 224.
- 257 Collectanea de Rebus Britannicis, vol. i. p. 552.
- 258 Scalacronica; a Chronicle of England and Wales, from 1066 to 1362, by Sir Thomas Gray of Heton. Maitland Club edition (1836), p. 19.
- 259 Chronicon de Lanercost, 1201-1346, presented in 1839 to the Maitland Club by Mr. Macdowall.
- 260 Histoire de Bretagne; par Guy Alexis Lobineau (Paris, 1707), tom. i. p. 135.
- Adams on *Morbid Poisons*, p. 287.
- Cleland's Former and Present State of Glasgow (1840), p. 20.
- The five lepers in Papa, in Shetland, about 1736, were all females; see Part II., page 82, supra.
- Monasticon Anglicanum, vol. vi. (2d edit.), p. 710; and also Madox's Formulare Anglicanum (1702), pp. 22, 255, 314, etc.
- 265 Mackarell's History and Antiquities of King's Lynn (1738), p. 223.
- Bridges' History of Northamptonshire (1791), vol. i. p. 363.
- 267 History of Shrewsbury (1825), vol. ii. p. 173 (engraved seal of the House).
- 268 Monasticon Anglicanum, vol. vi. pp. 637 and 643.
- 269 Historie of the Holy Warre, p. 102.
- 270 Hailes' Annals of Scotland (1797), vol. ii. p. 146.
- Jameson's edition of Barbour's Bruce, Book vi. p. 167.
- 272 Kerr's *History of Robert the Bruce* (1811), vol. i. pp. 332-3, and vol. ii. p. 474.
- Froissart gives the same cause for the Bruce not leading the expedition in question (see Lord Berners' Translation of his *Chronicles*, vol. i. p. 19).
- 274 Chamberlain's Accounts (printed copies), vol. i. p. 37. Compotum Constabularii de Cardross.
- See a beautiful lithograph copy of this interesting document in the second volume of the

Bannatyne Club copy of the Liber Sanctae Mariae de Melros.

- 276 Froissart (Berners' translation), vol. i. p. 29. Shortly afterwards Froissart states, "And thus, soone after thys noble Robert de Brouse, Kyng of Scotland, trespassed out of thys incertayne worlde, and his hart was taken owte of his body and embawmed, and honourably he was entred in the Abbey of Donfremlyne." When the grave of the Bruce was opened at Dunfermline in 1818, the anatomical appearances of the skeleton showed that the king's will had been so far obeyed, the bones of the chest being found divided in such a way as to have allowed the removal of the heart. This piece of dissection seems, at the time at which it was made, to have drawn down the dreaded vengeance of the Vatican upon Randolph, Earl of Moray, the king's nephew, and apparently the operator in this case, in such a way as forms a strange and startling contrast with the medical usages observed towards the dead at the present day. I quote the account, as a curious point in the march of necroscopic anatomy, from the Appendix to the Chronicon de Lanercost (p. 428)—"It appears that, by a constitution of Pope Boniface, the mutilation of a dead body subjected those by whom it was mutilated to heavy ecclesiastical censures. To free himself from these censures, Randolph, two years after the death of King Robert, presented a petition to the Pope, setting forth that the deceased king had intended to undertake a crusade against the Saracens, but was prevented by death, and that in his last will he expressly ordered his heart to be taken out of his body and carried in such an expedition, which was done by James de Douglas, who conveyed it into Spain. The Bishop of Moray was employed to obtain from the Pope a remission for the crime, dated 8th before the Ides of August, in the fifteenth year of Pope John's pontificate." Raynald, in his Annal. Ecclest., gives the extract A.D. 1329. § 81.
- 277 Compendium Medicinae (Lugd. 1510), p. 336.
- See the Maitland Club Burgh Records of Glasgow, p. 127.
- See Memorabilia of Glasgow, p. 55.
- 280 Edinburgh Medical and Surgical Journal, xxvi. p. 15, seqq.
- 281 Edinburgh Medical and Surgical Journal, xxiv. p. 286.
- Debes' Færoæ et Færoa Reserata, p. 311.
- Dictionnaire des Sc. Medicales, tom. xi. p. 419; Rayer's Treatise on the Diseases of the Skin (London, 1831), pp. 740 and 747.
- Memoires de la Soc. Roy. de Medecine (1776), p. 167.
- 285 *Ibid.* (1782-83), p. 188.
- 286 Bellenden's Translation of Boece's History, p. lviii.
- See, for example, among non-medical authors, various of these causes alleged for the disease in Heron's *History of Scotland*, vol. ii. p. 266 (unwholesome diet, uncomfortable lodgings, dirty clothing). Hooker's *Iceland*, vol. i. p. 189 (ascribes it to former use of woollen garments). Taylor's *Index Monasticus*, p. xii. (owing to personal filth, close and bad lodging, etc.) White's *Natural History of Selborne*, Letter 37 (formerly produced by poverty, want of fresh meats, and vegetables, etc.) etc. etc. Similar opinions are offered in various medical works.
- The Canons of the Anglo-Saxon Church urged it as a duty upon the charitable to give to the poor, meat, mund, fire, fodder, bedding, *bathing*, and clothes. Wilkin's *Leges Anglo-Saxonicae Ecclesiasticae et Civiles*, p. 94. Turner's *History of the Anglo-Saxons*, vol. ii. p.
- Hollinshed mentions the "multitude of *chimnies* latelie erected" as one of the "three things marvellouslie altered in England" about the beginning of the sixteenth century. (*Chronicles of England*, etc. edit. of 1807, vol. i. p. 317; and Strutt's *Horda Angel-Cynnan*, 1774, vol. i. p. 104.) When we consider this we shall scarcely wonder that the smoke of coals was formerly looked upon as a noted cause of disease, and was at one time actually prohibited in London and Southwark. (Stow's *Survey of London*, p. 925. Evelyn's *Fumifugium*, 1661. Macpherson's *Annals of Commerce*, vol. i. p. 474.) In 1307 fires were ordered not to be lighted near the Tower because the Queen was going to reside there. (Macpherson, *ut supra*, see the edict in Rymer's *Foedera*, vol. ii. p. 1057.)
- The last Archbishop of Glasgow (says Arnott) put on a clean shirt once a week.—*History of Edinburgh*, p. 259.
- Straw was first used for the king's bed in 1242, in the reign of Henry III., whose court was considered the most polite in Europe. (Dr. Henry's *History of Great Britain*, vol. iii. p. 507.) Some estates in England were held by the tenure of the proprietors finding clean straw for the king's bed, and litter for his chamber. (Henry, *ut supra*; Camden's *Britannia*, vol. i. p. 311; *Index Monasticus*, p. 12.) In the charter granted by Robert the Bruce to the Burgh of Ayr, the providing of this latter item for him and his successors, for three days and nights, whenever they visited the town, is specially entered in the reddenda—"Et inveniendo nobis et heredibus nostris per vices in adventibus nostris et heredum nostrorum apud Are per tres dies et noctes *literium* pro aulâ nostrâ." (*Records of Prestwick*, p. 128.) The office of rush-strewer was continued till a late period on the list of the royal household (Craik and Macfarlane's *History of England*, vol. i. p. 644.)
- 292 Chronicles, vol. i. p. 317.
- Many of the older medical authors lay down various and most contradictory lists of articles of food as capable of producing leprosy—some accusing too great quantities of animal diet—others blaming too much vegetable diet as the cause, while a third class, as Theodoric, impugn too free a use of either or both (nimium usum carnis vaccinae,

buballinae, lentium et omnium leguminum. Theodoric, c. 55). Some authors state the most strange doctrines on this point. Thus Bernhard Gordon gravely states, that to partake of fish and milk in the same meal does induce leprosy (comedere lac et pisces in eadam mensa inducit Lepram. *Lilium Medicinae*, p. 48). The same idea is repeated from Avicenna down to our countryman Gilbert, and it is probably not unworthy of being remarked that the same prejudice in regard to the influence of a mixed fish and milk diet prevails, or prevailed till of late, in such opposite points as Madeira and Hindostan.— (Heberden's paper on "Elephantiasis in Madeira," p. 29; Walker, in *Calcutta Medical and Physical Transactions*, vol. i. p. 4 of his "Account of the Medical Opinions of the Hindus on Leprosy." See also Sir William Jones' Works, vol. i. p. 556.)

- 294 History and Chronicles, vol. i. p. lx.
- Marsden's *History of Sumatra*, containing an account of the Government, Laws, etc., pp. 151 and 201.
- See references formerly given to the works of Mackenzie, Olafsen, Troil, Barrow, Henderson, Hooker, etc.
- Some scattered records of the leper hospital at Hamel en Aarde by Messrs. Halbeck and Leitner, are to be found in the *Periodical Accounts relating to the Missions of the Church*, vol. ix. p. 345, 482, etc., as kindly pointed out to me by Dr. William Brown. In 1824 the hospital contained 110 lepers.
- See Heberden, Adams, and Heineken's papers, already referred to.
- Hoest's *Reise nach Marokos*, p. 248, calls the disease Sghidam (Juddam). Lempriere's Tour from Gibraltar to Tangier, Morocco, etc., in 1789, in Pinkerton's *Collection*, vol. xv. p. 689, describes the disease as true leprosy. Jackson's *Account of the Empire of Morocco* (1801), gives an account of the leper hospital or village near Morocco.
- Niebuhr states that three different varieties of leprosy are known in Arabia in modern times—viz. the Bohak, Barras, and Juddam. "There is (he states) a quarter in Bagdad surrounded with walls, and full of barracks, to which lepers are carried by force, if they retire not thither voluntarily. They come out every Friday to ask for alms."—(Pinkerton's Collection of Voyages, vol. xviii. p. 170.)
- 301 Dejean in Hensler's *Abendländischen Aufsatze*, p. 240.
- Schilling, De Lepra, p. 20. Stedman's Narrative of Five Years' Expedition in Surinam (1796), vol. ii. p. 285.
- 303 Bajon's *Memoires pour servir à l'Histoire de Cayenne*, etc., vol. i. p. 237. Bancroft's *Natural History of Guiana*, p. 385.
- Winterbottom's Account of the Native Africans in Sierra Leone, vol. ii. p. 113.
- F. Moore's *Travels into the Inland parts of Africa* (1738), p. 130. Mungo Park found the disease among the Mandingoes.—(See Pinkerton's *Collection*, vol. xvi. p. 877.)
- Whitelaw Ainslie, in the *Transactions of the Royal Asiatic Society*, vol. i. (1824), p. 282. Robinson, in the *London Medico-Chirurgical Transactions*, vol. x. (1819), p. 27.
- 307 Pococke's Description of the East, vol. ii. p. 122; or Pinkerton's Collection, vol. x. p. 502.
- 308 Voyages de Pallas en differentes Provinces de Russie (Paris, edit. of 1769), vol. i. pp. 651 and 659.
- Ulloa's *Voyage to South America* (London, edit. of 1762), vol. i. p. 45, etc. Ulloa states that, at the time of his visit to Carthagena, all the lepers of the place were confined in the hospital of San Lazaro, and if any refused to go, they were forcibly carried thither. The hospital consisted of a number of cottages, and the ground on which it stood was "surrounded by a high wall, and had only one gate, and that always carefully guarded."
- My friend, Dr. Cheyne, lately of San Luis, informs me that the hospital of San Lazaro, in the city of Mexico, is set aside for the reception of cases of tubercular leprosy.
- As in Ceylon (Marshall's *Medical Topography of Ceylon*, p. 43); Mauritius (Kinnis in *Edin. Med. and Surg. Journal*, vol. xxii. p. 286); Madagascar (*Narrative of Madagascar Mission*, pp. 208 and 191). I am informed by Dr. Shortt that one of the group of the Sechelle Islands is used as a leper station. See further Crawford's *History of the Indian Archipelago* (Edinburgh, 1820), vol. i. p. 34.
- As in Java (Cloyer in *Miscell. Naturae Curiosorum*, Dec. i. Ann. 2 (1683), p. 7); Amboyna (Valentyne's *Beschreibung von Amboyna*), vol. ii. p. 249. Clarke's *Observations on the Diseases of Long Voyages*, vol. i. p. 128.
- Casan, in the *Memoires de la Soc. Medicale d'Emulation*, vol. v. p. 102. Hillary on *Diseases of Barbadoes*, p. 322. Alibert's *Monographie des Dermatoses*, tom. ii. p. 289; Case from Guadaloupe. Peyssonnel's Report on the Lepers in Guadaloupe, in *Philosoph. Trans.* vol. i. p. 38, etc. etc.
- As in Scio, according to information given me by Dr. Clarke. Howard, in his *Account of the principal European Lazarettoes*, mentions, p. 40, the leper hospital in Scio. Hennen, in his *Medical Topography of the Mediterranean*, states that elephantiasis is endemic in one small village in Cephalonia, p. 275. Savary seems to have met with several cases in the islands of the Archipelago (*Letters on Greece*, 1788, p. 110).
- It is but proper to add that the tubercular leprosy is looked upon by some pathologists as a disease not originally endemic in any part of the New World, and that it was first imported into and spread through the West Indies, etc., by subjects brought from Africa.

Hillary professes himself certain upon this point. See his *Observations on the Diseases of Barbadoes* (1766), p. 322; and also, for the same opinion, Schilling's *Commentationes de Lepra* (1778), p. 20.

- 316 De Morbis Occultis, lib. i. c. 12.
- 317 Observationes Chirurgicæ, lib. iv. obs. 7.
- Du Chesne's *Historiæ Francorum Scriptores Coaetanei*, tom. v. p. 402. Joinville's *Histoire de St. Louys* (1668), p. 121. Sprengel's *Histoire de Medecine*, tom. ii. p. 373.
- Joinville, *ut supra*, p. 121. "A celui jour du Jeudi Saint, il lave les predz aux meseaux, et puis les baise."
- 320 Du Chesne, *ut supra*, tom. iv. p. 76.
- 321 Historia Angliæ Major, p. 42.
- Ruel's Collectio Conciliorum (1675), tom. i. p. 1108.
- Dupin's History of Ecclesiastical Writers (London, edit. 1695), vol. vii. p. 131.
- 324 Manipulus Curatorum (Bremen, 1577), p. iv. c. 9.
- 325 Concilia Magnæ Britanniæ, tom, i. p. 616. Canon lxxii.
- 326 Second Part of Henry VI., act iii. sc. 3.
- Maundrell's "Journey from Aleppo to Jerusalem, at Easter, A. D. 1697," in Pinkerton's *Collection*, vol. x. pp. 380-81.
- 328 De Causis et Signis Morborum (Leip. edit. 1735), p. 71.
- Baron's *Description of the Kingdom of Tonquin*, p. 104; or Churchill's *Voyages*, vol. vi. p. 158.
- Richard's "History of Tonquin," contained in Pinkerton's Collection, vol. ix. p. 728.
- 331 See various enactments of the French provinces on this head, given at length in Delamarré's *Traité de la Police* (Paris, 1722), vol. i. p. 636.
- 332 See the document previously cited from Rymer's Fædera, vol. xi. p. 635. I quote the following notice from Poulson's Antiquities of Beverley (London, 1829), vol. ii. p. 773, as an instance of what in all probability not unfrequently took place in these times-viz. the voluntary entrance of lepers into the lazar-houses: "Item, in the year of our Lord 1394, one Margaret Taillor, a leper, came before the twelve governors of the town of Beverley in the Guildhall, and prayed license to have one bed (et petiit licenceam here [habere] unum lectum) in the leper-house without Keldgate bar, which said twelve governors, viz. Ryse, William Pollesta, etc., by their common consent have granted."—Lansdowne MS., No. 896, fol. 116.
- Skene alleges that these laws were made by David I., who died in 1152-53. George Chalmers states, that, from allusion to them in a charter to Glasgow, bearing date 1176, they were at least by that time in existence. (*Caledonia*, vol. i. p. 726.) See further remarks in the Essays of Anderson, Lord Hailes, etc.
- 334 Skene's *Regiam Majestatem*. The Auld Lawes and Constitutions of Scotland (edit. of 1774), p. 241.
- The economical measures generally adopted for the sustenance of the poor lepers are only too significantly shown in the following public statute passed in the Scoon Parliament of 1386. "Gif ony man brings to the markit corrupt swine or salmond to be sauld, they sall be taken by the Bailies, and incontinent, without ony question, sall be sent to the lepperfolke, and gif there be na lepperfolke, they sall be destroyed alluterlie (entirely)."—Acts of Robert III. in the *Regiam Majestatem*, p. 414.
- Transcribed from the "Chartulary of Aberdeen" in Wilkin's *Concilia Magnæ Britanniæ*, tom. i. p. 616. Canon lxxii.
- See the edicts to this effect of the state and city of Modena, in Muratori's *Antiquitates Mædii Ævi*, vol. iii. p. 54; the Synodal Statutes in 1247 of the Church of Le Mans, in Martene and Durand's *Collectio Veterum Scriptorum*, vol. vii. p. 1397; *ibid.* p. 1363, etc.; and also the various laws enacted by the Magistrates of Paris, in Delamarré's *Traité de la Police*, vol. ii. pp. 636-7, etc. etc.
- 338 Regiam Majestatem, Burrow Lawes, chap. 64, p. 241.
- 339 Murray's Acts of the Scottish Parliament, vol. ii. p. 18.
- 340 Regiam Majestatem, p. 273.
- 341 Records of Prestwick, p. 27.
- 342 *Ibid.* p. 28.
- 343 Ibid. p. 29.
- "Liber Statutorum Burqi de Edynburqh"—in the Maitland Club *Miscellany*, vol. ii.
- Strype's edit. of John Stow's *Survey of the Cities of London and Westminster* (1720), vol. ii. book ii. p. 74.
- 346 Stow's Survey, vol. ii. p. 21.
- 347 Arnott's *History of Edinburgh*, p. 258.

- 348 MS. Records of the Town-Council of Edinburgh, vol. ix. p. 123.
- This and the other laws of St. Magdalene's, Exeter, are to be found at p. 30, etc., of an interesting essay of Dr. Shapter's of that city, entitled, "A few observations on the Leprosy of the Middle Ages." The essay, which was printed for private circulation, was kindly forwarded to me by the author, after the publication of the First Part of the present papers.
- 350 Matthew Paris' *Historia Angliæ*. Additamenta, pp. 162 and 168.
- 351 Monasticon Anglicanum, tom. ii. p. 438.
- In former times the churchyards seem to have been the general resort of beggars. Æneas Sylvius, who visited Scotland as the Pope's Legate in the reign of James I., speaks of there seeing the almost naked paupers (pauperes, pæne nudos; ad templa mendicantes) supplied with coals as alms.—*Historia de Europa*, c. 46. Sibbald's *Chronicle of Scottish Poetry*, vol. i. p. 176.
- We have seen, in a previous page (p. 137, *supra*), that the lepers met with by Maundrell, in Palestine, in 1697, carried a kind of "cop," or, as he expresses it, they came "with small buckets in their hands to receive the alms of the charitable." Evelyn, in his interesting *Memoirs*, alludes to a curious mode of sending alms to the leper that he saw practised one hundred years ago in Holland. In his Diary, under the date of 26th July 1641, he states, "I passed through Deft to the Hague, in which journey I observed divers leprous poor creatures dwelling in solitary huts on the brink of the water, and permitted to aske the charity of the passengers, which is conveyed to them in a floating box that they cast out."—Bray's edition of *Evelyn's Memoirs*, etc., vol. i. p. 12.
- 354 Antiquitates Italicæ Medii Ævi, tom. iii. p. 54.
- 355 Sir Tristrem, a metrical Romance of the thirteenth century, edited by Sir Walter Scott (Edinb. 1804), Introduction, p. 12.
- 356 Tytler's "Historical Inquiry into the ancient state of Scotland," *History* (2d edit.), pp. 305 and 337.
- In Robert de Brunne's translation (made in the reign of Edward the Third) of Peter Langtoft's Chronicles, the same term "mesel" is used as synonymous with leper, and applied to one designated in the rubrics "Baldeiano Leproso."

Baldewyn the Meselle, his name so hight, ... For foul meselrie he comond with no man.

John Trevisa has rendered the lepra of Glanville by "meselry," in translating, in 1398, the treatise *De Proprietatibus Rerum.*—See the London edition of 1535, pp. 109-110.

- 358 Testament of Cresseid, as previously quoted.
- Lord Coke's First Institutes of the Laws of England (Thomas' edit.) vol. ii. p. 193, and vol. i. p. 162.
- Lindenborg's Codex Legum Antiquarum (1613), p. 609.
- 361 Observations sur l'Histoire de S. Louys (in edit. of Joinville's Life of St. Louis, 1668. Appendix, p. 34.)
- 362 Delamarré's *Traité de la Police* (Paris, 1722), vol. ii. p. 636.
- Lobineau's *Histoire de Bretagne*, vol. i. p. 204; Mezeray's *Histoire de France*, tom. ii. pp. 168-69.
- 364 Dictionnaire Historique et Geographique de la Bretagne (1778), p. 176.
- 365 Essai Historique sur la ville de Bayeux (1829), p. 254, seqq.
- The other variety of Lycium, described by Dioscorides as procured in Asia-Minor (Lycia, Cappadocia, etc.), is now generally supposed to be an extract from the *Rhamnus infectorius*, or other species of *Rhamnus*. (See Professor Royle, in *Linnæan Transactions*, vol. xvii. p. 87; Dr. Adams, in his admirable edition of *Paulus Ægineta*, vol. iii. p. 234.)
- 367 The Manners and Customs of the Romans, p. 287.
- 368 Scriptores Historiæ Romanæ, tom. ii. p. 402. (Heidelberg edition of 1743.)
- 369 Corpus Juris Civilis Digestorum, lib. iv. tit. vi. leg. 33, sec. 2, p. 142. (Leyden Edit. 1652.)
- "Cum te Medicum Legionis secundæ adjutricis esse dicas, munera civilia quandiu reipublicæ causa abfueris, suspicere non cogeris. Cum autem abesse desieris, post finitam eo jure vacationem, si in eorum numero es, qui ad beneficia medicis concessa pertinent, ea immunitate uteris."—(*Ibid.* lib. x. tit. 52, p. 855.)
- The whole chapter of Vegetius "Quemadmodum sanitas gubernetur exercitus," etc., is so interesting that I will take the liberty of here quoting it in full:—"Now (what is to be most specially attended to), I will give directions how the health of an army is to be preserved, in as far as regards places for encampment, waters, temperature, medicine, and exercise. With respect to places, the soldiers should not remain long near unhealthy marshes, nor in arid situations that are destitute of the shades of trees; nor on hills without tents in summer. They ought not to be late in the day in commencing their march, lest they contract disease from the heat of the sun and the fatigue of their journey; and, indeed, in summer, they had better arrive at their destination before the morning is advanced. In severe weather they should not pursue their journey through snow and ice at night; nor be allowed to suffer from scarcity of fuel, or a deficient supply of clothing. For the soldier who is obliged to endure cold is neither in a fit state for

enjoying health, nor for marching. Nor should he make use of unwholesome nor of marsh waters. For a draught of bad water induces, like a poison, disease in those who drink it. And, moreover, in this case, the unremitting diligence of the generals, tribunes, and their assistants, as wielding the highest authority, will be required, so that their sick comrades may be restored by seasonable articles of food, and be cured by the skill of the physicians (arte medicorum). For it is difficult to manage with those who are at one and the same time oppressed with the evils of disease and of war. But those who are skilled in military affairs have held that daily exercise contributes more to the health of the soldiers than the physicians do. Wherefore, they have advised that the foot soldiers should be regularly exercised during seasons of rain and snow under cover, and at other seasons openly. In like manner, they have ordered that the horsemen should assiduously exercise themselves and their horses, not only on level ground, but also in steep places, and in parts rendered difficult by wide ditches, so that nothing new or strange may occur to them in this respect during the casualties of battle. From all this may be inferred how much the more diligently an army ought to be trained in the exercise of arms, seeing, as we do, that the habit of labour procures alike health in the camp and victory in the battle-field. If (Vegetius adds) a multitude of soldiers be permitted during the summer or autumn seasons to remain long in the same locality, from the corruption of the water, and the stench of their filth, the atmosphere is rendered insalubrious, their respiration becomes vitiated, and most dangerous disease is engendered; and this cannot be remedied by any other means than by a change of encampment."—(De Re Militari, III. 2.)

- 372 Galeni Omnia Opera, Ed. Kühn, vol. xiii. p. 604. Celsus speaks of the possibility of studying human internal anatomy by looking at the wounds of soldiers, etc. "Interdum enim gladiatorem in arena, vel militem in acie, vel viatorem a latronibus exceptum sic vulnerari, ut ejus interior aliqua pars aperiatur."—De Medicina, lib. i. p. 8.
- 373 See *Odyssey*, lib. iv. v. 229, etc.
- 374 Euterpe, II. § 84; Thalia, III. §§ 1 and 132.
- 375 Historia Naturalis, lib. xxvi. c. 1. Pliny states that the Egyptians even prosecuted the study of morbid anatomy by dissection:—"In Ægypto, regibus corpora mortuorum ad scrutandos morbos insecantibus."—(Lib. xix. c. 5.) Galen advised those who desired, in his day, to become acquainted with human osteology, to repair for that purpose to Alexandria, for this potent reason, that there were two actual human skeletons preserved in that city.—See Kühn's edit. of Galen, vol. ii. p. 220.
- 376 De Vitis, etc., Clarorum Philosophorum, lib. iii. v. 8.
- "In expeditione bellica absque mercede curantur; medici enim annonam ex publico accipiunt."—*Bibliothecæ Historicæ* (Amsterdam edition of 1746), vol. i. p. 92. Lib. i. § 82.
- 378 It has been suggested by some authorities, but without sufficient grounds, that in practice Machaon exercised only the art of surgery, while Podalirius followed the art of medicine. Hence, it is argued, Agamemnon, when Menelaus was wounded, did not send for Podalirius, but Machaon. Arctinus, one of the early cyclic poets, takes this view.—See Welcker's *Cyclus Epicus*: "Ilii Excidium Arctini," xiii. 2.
- See Eustathius' *Commentarii in Homeri Iliadem, loc. cit.*; and Dr. Adams' *Paulus Ægineta*, vol. ii. p. 426. Plato, in his *Republic*, discourses as to whether the potion of Pramnian wine, etc., given to Machaon (whom by mistake he names Eurypylus), was not too inflammatory in its character.—(Lib. iii. c. 14.)
- The treatise in question, though usually printed amongst the Hippocratic works, is not admitted to be genuine by any of the translators or commentators upon Hippocrates, with the exception of Foes.—See Dr. Adams' *Works of Hippocrates*, vol. i. p. 121.
- 381 Xenophon's expression (ιατροὺς κατέστησαν ὀκτω) has been supposed by some commentators to indicate that eight soldiers, perhaps previously experienced to some extent in tending the wounded, were selected and improvised into medical officers, rather than that eight were chosen out of a greater number of medical attendants present with the army. But, in all probability, there were present among the ten thousand Greeks more than eight men who professed the imperfect medical knowledge pertaining to the surgeons of that day. In a later part of the Anabasis (v. 8), Xenophon, in defending himself against accusations of alleged severity on his part, in the course of the retreat, to some of the soldiers under his command, argues for its necessity on the principle that "physicians also use incisions and caustics for the good of their patients." He owns to having urged some, when themselves unwilling, to continue their march towards the shores of the Black Sea, through the cold and snows of Armenia, "because," says he, "sitting down and rest made the blood to congeal, and the toes to rot off, which was the case of a great many,"—a result that lately happened only too frequently to the soldiers of our own armies on the opposite or Crimean shores of the Euxine.
- De Rebus Gestis Alexandri Magni, lib. ix. cap. 18. In lib. iv. cap. 25, an account is given of the extraction of an arrow from the king's shoulder, by the surgeon Philip of Acarnania, who had previously cured Alexander of the attack of fever which followed on his bathing, when overheated, in the cold waters of the Cydnus. Curtius speaks (iii. 13) of Philip as one "inter nobiles medicos," who were present with the army. When describing the well-known incident of the fever draught given by this physician Philip to Alexander, Arrian speaks of him, not as a medical attendant upon the king, but as one "in whose extraordinary skill in physic Alexander had great confidence, because of his success in the camp," or in attending upon other members of the army.—(Lib. ii. cap. 4.) Alexander himself affected some knowledge of medicine. At least, when Craterus was invalided, and Pausanias, the physician in attendance upon him, proposed to give him a dose of hellebore, Alexander (as we are informed by Plutarch) wrote a letter to Pausanias, expressing his great anxiety about the case, and desiring him to be cautious in the use of

this medicine. In Alexander's own chest-wound, as detailed in the text above, the head of the arrow possibly did not enter the cavity of the thorax, as its point was, according to Plutarch's account, fixed in the bone (the scapula or a rib?). When Julius Cæsar fell under the daggers of his assassins, out of the twenty-three wounds which he received, there was none that was mortal, in the opinion of the surgeon Antistisius, except the second, a penetrating wound of the breast. (See Suetonius' *Julius*, c. 82.) After Epaminondas was fatally wounded at the battle of Mantinea, he refused to allow the iron of the spear with which he was struck to be extracted till the victory was decided—aware that, from its site, death from bleeding would immediately follow—an event which the result confirmed.—(*Cornel. Nepos*, lib. xv. c. 9.)

- 383 At the famous battle at the Lake Regillus, fought 497 years before the commencement of the Christian era, Livy tells us that after Titus Herminius slew Mamilius, he was himself struck with a javelin while stripping the body of his enemy; and on being brought back to the camp victorious, he died on the first dressing of his wound (inter primam curationem expiraverit).-Livii Historiarum Libri, lib. ii. cap. xx. It is not, however, stated whether this cure of the wound was attempted by the hand of a military comrade, or by that of a surgeon. The same historian mentions that a few years later (B.C. 483), after the battle in which the Romans defeated the Hetrurians, the surviving consul, M. Fabius, distributed his wounded soldiers, for the purpose of cure, among the senators residing in Rome (saucios milites $\it curandos$ dividit patribus).—See $\it Livy$, lib. ii. cap. xlvii. And Tacitus, when describing the catastrophe resulting from the fall of the amphitheatre at Fidena, in the reign of Tiberius, states that those injured and wounded by the accident were received into the houses of the citizens, and there carefully attended to, as (he adds) was the custom in former times after great battles (veterum institutis similis, qui magna post proelia saucios largitione et cura sustentabant).—Annal., lib. iv. c. 63.
- 384 See lib. vii. cap. v. "Telorum ejectio."
- 385 Dr. Adams' Translation, book vi. § lxxxviii. vol. ii. p. 418.
- Xiphilin gives the following account from Dion Cassius of the various difficulties and 386 disasters encountered by Severus, from the rivers, marshes, woods, stratagems, etc., of the Caledonians:- "Severus, wishing to reduce the whole island under his power, entered into Caledonia, and, in marching through it, encountered the greatest difficulties; for he had to cut down woods, make roads over mountains, mounds across the marshes, and bridges over the rivers. He fought no battle, nor did he ever meet with the forces of the enemy in array; but they advisedly placed sheep and oxen in the way of our troops, so that when our soldiers attempted to seize the booty, and were thus drawn far from the line of march, they were easily cut off. The waters and lakes, likewise, were destructive to our men, as by dividing them they fell into the ambuscades prepared for them; and when they could not be brought off, they were slain by their comrades, that they might not fall into the hands of the enemy. Owing to these causes there died not less than fifty thousand of our troops."-Xiphilin's Excerpta, p. 305. Severus himself seems to have suffered in his health during this Scottish campaign; for during the most of it, he required, says Dion, to be carried, on account of his weakness, in a closed litter (nam plurimum propter imbecilitatem operta lectica vehebatur-p. 305). Both Dion (p. 307) and Herodian (p. 153) mention that he was disabled by gout.
- 387 Herodian's account of the labours and difficulties of Severus in this campaign sufficiently indicates the sources of malaria and disease to which his army was subjected, and, at the same time, affords a curious statement regarding the condition and habits of the ancient Caledonians:—"Severus' first care (says Herodian) was to throw bridges across the morasses, that his soldiers might be able to pursue the enemy over the dangerous places, and have the opportunity of fighting on firm ground; for as the greater part of the island is frequently overflowed by the tides, these constant inundations make the country full of lakes and marshes. In these the barbarians swim, or wade through them up to their middle, regardless of mud or dirt, as they always go almost naked; for they are ignorant of the use of clothes, and only cover their necks and bellies with fine plates of iron, which they esteem as an ornament and sign of wealth, and are as proud of it as other barbarians are of gold. They likewise dye their skins with the pictures of various kinds of animals, which is one principal reason for their wearing no clothes, because they are loath to hide the fine paintings on their bodies. But they are a very warlike and fierce people, and arm only with a narrow shield and spear, and a sword hanging by their naked bodies; unacquainted with the use of habergeons and helmets, which they think would be an obstruction to their wading through the ponds and marshes of their country, which, perpetually sending up thick gross vapours, condense the air and make it always foggy."—Hart's Herodian, pp. 153, 154. Dion Cassius, who lived at the date of Severus' expedition, gives, when describing the expedition, an account of our Caledonian ancestors that is in no degree more flattering. "The Caledonians," says he, "both possess rugged and dry mountains, and desert plains full of marshes. They have neither castles nor towns; nor do they cultivate the ground; but live on their flocks and hunting, and the fruits of some trees; not eating fish, though extremely plenteous. They live in tents, naked, and without buskins. Wives they have in common, and breed up their children in common. The general form of government is democratic. They are addicted to robbery; fight in cars; have small and swift horses. Their infantry are remarkable for speed in running, and for firmness in standing. Their armour consists of a shield, and a short spear, in the lower end of which is a brazen apple, whose sound when struck may terrify the enemy. They have also daggers. Famine, cold, and all sorts of labour they can bear, for they will even stand in their marshes, for many days, up to the neck in water, and, in the woods, will live on the bark and roots of trees. They prepare a certain kind of food on all occasions, of which taking only a bit the size of a bean, they feel neither hunger nor thirst."-Xiphilin's Excerpta, p. 304; and Pinkerton's Inquiry into the Early History of Scotland, vol. i. p. 438.

- See Gordon's *Journey through Scotland*, p. 75. Bruce, in his work on *The Roman Wall*, p. 214, speaks of the ancient city of Borcovicus as likely, when excavated, to prove "the Pompeii of Britain." Stukeley, in a similar spirit, declared it the "Tadmor of Britain."
- 389 It is possible the word may be a contraction for *ordinatus* (appointed), and not for *ordinarius*.
- 390 The Roman Wall: a Historical, etc., Account of the Barrier of the Lower Isthmus, extending from the Tyne to the Solway, p. 228.
- 391 Vita Agricolæ, cap. 36 (Orelli's edit. vol. ii. p. 441).
- Stuart, in his *Caledonia Romana*, p. 340, gives a copy of a legionary tablet found at Castlecary, which states that the first Tungrian Cohort had erected 1000 paces (mille passus) of the wall.
- 393 Horsley's Britannia Romana, p. 205. Stuart's Caledonia Romana, p. 164.
- According to Horsley, it was probably under the reign of Marcus Aurelius that the Tungrian Cohort became stationed at Castle-steeds, in Cumberland, where they erected an altar to Jupiter. Lastly (he adds), this Cohort settled at Housesteads, where we have six or seven of their inscriptions under four or five different commanders. Here they seem to have continued till the lowest time of the empire. The *Notitia* places this Cohort at Borcovicus (Housesteads).—*Britannia Romana*, p. 89.
- 395 United Service Journal for 1841, vol. iii. p. 124.
- 396 See Eckhel's *Doctrina Nummorum Veterum*, vol. i. p. 8, and vol. vi. p. 495.
- Inscriptiones Romanæ, p. 68, Fig. 1 and Fig. 2; and p. 269, Fig. 3.
- The name of Domitian (see the plate) is erased from the inscription—a practice which has been followed sometimes in relation to the names of other Roman tyrants besides him; but the name of the consul on the stone fixes the date and reign.
- 399 Syntagma Inscriptionum Antiquarum (1682), p. 611, 7. See also Spon's Miscellanea Eruditæ Antiquitatis, 145, 16; and Dr. Middleton's Dissertation "De Medicorum apud veteres Romanos conditione," in his Works, vol. iv. p. 103.
- Novus Thesaurus Vet. Inscriptionum, 1046, 5.
- In the text I have given the reading of this puzzling inscription suggested by Hultmann, in his *Miscellanea Epigraphi*, p. 415, the letters referring to the corps to which Sporus was attached being very indistinct—namely, "Medico alar indianae etheriae astorum." The inscription, if Hultmann's suggestion be correct, indicates the third wing or cohort of the Asturian or Spanish auxiliaries. The first and second wings of the Astures (*Astorum*), and the first cohort of them, are mentioned in the celebrated "Notitia imperii" as located at the time at which that army-list was made out, at three different military stations along the line of Hadrian's wall from the Tyne to the Solway; and various inscriptions raised by these troops have been dug up in Northumberland and Cumberland. See Dr. Bruce's work, p. 47, 110 and 154. These English slabs all read *Asturum*, instead of the *Astorum* of the Notitia, and of the Italian inscription referred to in the text. Let me add that inscriptions referring to soldiers of the Ala Indiana or Indian wing of auxiliary horsemen, have also been found in England.—See an example in Mr. Akerman's Archæological Index, p. 67, and Messrs Buckmann and Newmarch's Corinium, p. 115.
- "In Legione sunt Cohortes decem."—Cincius in Aulus Gellius, xvi. 4.
- Museum Veronense, p. 120, 4. See also Gruter's Inscriptiones Romanæ, tom. i. p. 633, fig. 5. The exact age of the dead, not as to years only, but as to months, as in the above tablet, and sometimes even as to days, is a feature peculiar to Roman monumental inscriptions. And nothing appears to us more strange and interesting in relation to Roman monumental tablets, than their total or almost total silence as to a future state, and the possibility of meeting beyond the grave. Out of the almost innumerable Roman monumental inscriptions that have now been copied and published, not one, as far as I am aware, ventures to refer to the hope of a future life. They seem to have looked upon the idea of a future state of existence as poetical imagery only, and not reality; all doubting, like Tacitus, "si quis piorum manibus locus; si, ut sapientibus placet, non cum corpore extinguuntur magnæ animæ."—Vita Agricolæ, cap. 46.
- There is, at the end of the third line, an evident ellipsis of the word *Uxoris*. It is scarcely necessary to add that, as is well known, these old Roman inscriptions abound in errors of orthography and grammar.
- 405 De Re Militari, lib. ii. cap. 10.
- 406 Grævius' Thesaurus, vol. x. p. 1021.
- 407 Annal. lib. i. cap. 71.
- 408 Scriptores Historiæ Romanæ, tom. ii. p. 355.
- 409 Annal. lib. i. cap. 65.
- 410 *Ibid.* cap. 69.
- 411 Livy, lib. iv. cap. 39.
- De Bello Africano, cap. xxi. The exigencies of war sometimes converted the stronger soldiers into the only available transport corps for the sick and wounded. Xenophon speaks in the Anabasis (lib. iii. cap. iv.), of the number of Greeks capable of fighting being diminished, because some soldiers were employed in carrying the wounded, and

others in carrying the arms of the latter. One anecdote subsequently told by Xenophon seems to show that, occasionally at least, if not as the common rule, one soldier was deemed capable of carrying a sick or wounded companion. For he informs us, that towards the end of the expedition, when publicly accused of being sometimes too severe to the soldiers during the long retreat of the Greeks, the only person who came forward to substantiate the charge, was a soldier whom he had compelled to carry a sick comrade, and who, it turned out, had subsequently dug a pit to bury the invalid before he was completely dead. The army held that Xenophon had not beaten the complainant so much as he actually deserved for this conduct.—*Anabasis*, lib. v. cap. 8.

- 413 Inscriptiones Regni Neapolitani Latinæ, No. 2701.
- 414 Atti e Monumenti de fratelli Arvali, vol. ii. p. 826.
- In the fragmentary list of the two old Roman fleets stationed at Misenum and Ravenna, collected from various inscriptions by Mommsen (p. 477), it is not uninteresting to find the ships—sixteen or eighteen centuries ago—bearing names exactly the same as those borne by our modern royal and commercial navies; as The Cupid, The Diana, Mars, Neptune, Ceres, The Fortune (*Fortuna*), The Victory (*Victoria*), The Hope (*Spes*), The Faith (*Fides*), The Triumph (*Triumphus*), Providence (*Providentia*), The Peace (*Pax*), The Tiber (*Tiberis*), The Nile (*Nilus*), etc.
- 416 Thus when Cato the younger, after the battle of Thapsus, committed suicide at Utica, by stabbing himself in the abdomen, his friends rushed into his room, on hearing him fall, and among them his attendant physician, Cleanthes, who replaced the uninjured bowels, and began to staunch and sew up the gash. But on recovering from his state of syncope, Cato thrust aside the surgeon, tore asunder the wound, pulled out the entrails, and speedily expired.—(See Plutarch's Life of him, and Hirtius' Commentar. De Bell. Africano, cap. 88.) Cicero and Seneca have written applaudingly of Cato's suicide. Lucan invests him with all godlike virtues; and various modern writers have spoken in enthusiastic terms of his unbending moral dignity and magnanimity of character. But one anecdote, mentioned by Plutarch, seems calculated to detract not a little from our modern estimate of the mental character of this "the last and greatest of the Romans." In stabbing himself, Cato could not, according to Plutarch, strike sufficiently hard to produce an immediately fatal wound, in consequence of inflammation in his hand, which had required to be dressed by Cleanthes; for a few hours before death, Cato,-that alleged "paragon of Roman virtue," - had severely injured his fist by striking one of his slaves in the mouth with it.
- The death of Pansa, the consul, at the battle of Mutina, in the year B.C. 48, is detailed by Suetonius and Tacitus in such a way as proves that Glycon attended the army as surgeon to Pansa, and took professional care of the consul when he was wounded. In fact, Glycon was thrown into prison, after Pansa's death, upon a suspicion of having poisoned his wounds.—(See Tacitus' *Annal.* lib. i. cap. 10; Suetonius' *Octavius*, cap. 11.) M. Brutus, in a letter to Cicero, begs the interference of Cicero in favour of Glycon, and pleads his innocence of the deed imputed to him.—(Cicer. ad Brut. 6.)
- 418 Kühn's Edit. of Galen, vol. xiv. pp. 649, 650.
- 419 Histoire de la Médicine, vol. ii. p. 54 (Jourdan's Translation). "Scribonius Largus vivait sous le règne de l'Empereur Claude, qu'il suivit dans ses campagnes d'Angleterre."
- Wilkins' Edition of Browne's Works, vol. iii. p. 467.
- "Medicis ministrisque conaretur persuadere, senem ut e medio quam primum quoquo modo tollerent."—Lib. iii. p. 412. The Emperor Marcus Aurelius died in Pannonia, when prosecuting a war against the German tribes. Dion Cassius alludes to the physicians who were in attendance upon Aurelius during this long campaign, when adverting to the report that the emperor's death was caused by them, in order to promote his son and successor Commodus ("peremptus a Medicis qui Commodo gratificabantur."—Excerpta, p. 252). But Capitolinus, the principal authority regarding the biography of Aurelius, does not even advert to the report. On the other hand, he describes Aurelius' fatal illness as one of seven days' duration, and states that the emperor only dismissed Commodus from his presence on the last day, lest he should communicate the disease to him. ("Septimo die gravatus est; et solum filium admisit; quem statim dimisit, ne in eum morbus transiret."—Scriptores Historiæ Romanæ, vol. ii. p. 298.)
- Lib. iii. p. 413. "Nam et *Medicos* supplicio affecit, quod sibi parum obtemperaverant, jubenti senis maturare necem." This, as stated in the text, was one of the first, if not the first, act of cruelty which Caracalla committed after Severus' death. Dion affirms that, after murdering his brother Geta, he ordered about 20,000 of Geta's supposed friends to be put to death; and amongst others he condemned to death, according to Spartian, a class which is medically not uninteresting—namely, all those who wore amulets or charms about their necks for the cure of agues, a custom which would appear to have been much in use both among the Greeks and Romans.—See Hart's Herodian, p. 177.
- As a further not uninteresting record of the habits of these times, as contrasted with our own, let me add (though the topic is not altogether medical), that after Severus died at York, worn out, according to Herodian, more by grief than by disease (moerore magis quam morbo consumptus), his body was burned, and the ashes left by the corpse inclosed in an urn of alabaster with perfumes (odoribus).—Herodian, p. 413. His sons, with their own hands, lighted the funeral pile. Dion states that, shortly before his death, Severus sent for the urn that was destined to contain his ashes, and addressed it in terms too truly significant of the vanity and emptiness of the highest earthly ambition and the greatest earthly success: "Tu virum capies quem totus orbis terrarum non cepit."—Dion, p. 307.
- 424 Antiquitates Neomagenses, sive Notitia rarissimarum rerum Antiquariarum, etc. (1678),

pp. 97, 99. When describing these two medicine-stamps (which are interesting as having been the first rediscovered in modern times), Schmidt ingenuously states:—"De illis quid sentiam, non facile dixerim, sæpe mecum cogito, quid sibi illa velint. Ego tamen *nihil* adhuc affirmare audeo."—P. 98. Hugo Grotius, in his *Respublica Hollandiæ* (1630), speaks of Schmidt as "antiquitatum omnium cultor summus, cujus commentarium de Noviomagi oppidi (*Nymegen*) antiquitate avidissime expectamus."—P. 123.

- 425 Miscellanea Eruditæ Antiquitatis (1685), pp. 236-238.
- "Smetius vir eruditus nobis exhibet lapides duos virides quadratos, in margine scriptos, quarum usum se ignorare fatetur. Ego vero puto fuisse opercula pyxidum in quibus unguenta, olea, atque collyria reservabant Pharmacopolae."—Spon, in his *Miscellanea Eruditæ Antiquitatis*, p. 236.
- 427 Haym's *Tesoro-Brittanico* (1720), vol. ii. Letter in Preface.
- Caylus' *Recueil Antiquites* (1761), vol. i. p. 225. Count Caylus states (p. 226) that the Abbé Le Bœuf, in 1729, expressed the following opinion in relation to one of these Roman stones that was shown him:—"La regarda comme un moule qui servoit à marquer sur la cire les drogues d'un Médecin Romain, on comme une formule de recette pour la confection d'un médicament." See also vol. vii. (1767), p. 261.
- 429 Antiquitatis Medicæ Selectæ. Jena, 1772.
- 430 Christophori Saxii Epistola de Veteris Medici Ocularii Gemma Sphragide, prope Trajectum ad Mosam eruta. 1774.
- 431 Archæologia; or Miscellaneous Tracts relating to Antiquity, vol. ix. (1789), p. 227.
- 432 Dissertation sur l'Inscription Grecque IACONOC ΛΥΚΙΟΝ. Paris, 1826.
- 433 Cinq Cachets Inedits de Médecins-Oculistes Romains. Paris, 1845. To M. Sichel, one of the most learned of living physicians, I am indebted for various valuable suggestions in collecting the materials for the present essay.
- 434 Observations sur les Cachets des Médecins-Oculistes Anciens, à-propos de Cinq Pierres Sigillaires inedites. Paris, 1846.
- 435 *Mémoires de la Société des Antiquaires de Picardie,* tom. viii. p. 575. (1846). Notice sur un Cachet d'Oculiste Romain trouvé à Amiens.
- The three found in Italy have all been discovered in the more northern parts of that kingdom,—viz. the first at Genoa, the second at Sienna, and the third at Verona. See notices of them in Spon's *Miscellanea Eruditæ Antiquitatis*, p. 237; Muratori's *Thesaurus Inscriptionum*, D. viii. 4; and Maffei's *Museum Veronense*, p. 135.
- 437 Kühn's Edit. of Galen, vol. xiv. pp. 766-777.
- Some of the ancient collyria were gravely averred to possess properties that were optical, rather than medical. Thus Alexander Trallianus gives a receipt for a very complex collyrium, which, when anointed upon the eyes, enabled those who used it to gaze upon the sun even without harm (Possis etiam solem citra noxam intueri).—De Arte Medica, lib. ii. p. 174.
- "Etiam Asclepiades plurimam et optimam tum aridorum tum liquidorum collyriorum conscripsit silvam." See Kühn's edit. of *Galen*, vol. xii. p. 226. Asclepiades, who enjoyed during his life high professional popularity at Rome, seems to have flourished in the century preceding the commencement of the Christian era; and the expression of Galen (*sylva collyriorum*) consequently shows us the great number and extent of the collyria known and used even at that early period. For notices of the time and character of Asclepiades, see Pliny's *Historia Naturalis*, lib. xxv. cap. 7; Grumpert's *Asclepiades Bithyni Fragmenta*, Vinar. 1794; Burdach's *Scriptorum de Asclepiade Index*, Leipzig, 1800.
- In the following passage Galen tersely enumerates the very varied general ingredients, and general therapeutic effects, of the numerous collyria used by the Roman practitioners of his day:—"Nam et liquores, et succi, et semina, et fructus, et plantarum particulæ, ocularibus compositionibus induntur, veluti etiam non pauca ex iis, quæ metallica appellantur; aliqua quidem extreme austera, et acerba, atque aeria; aliqua vero his moderatiora et tamen fortia; quemadmodum item aliqua omnia mordacitatis expertia, ac lenissima per lotionem reddita."—De Compositione Medicam. secundum Locos, cap. i.; Kühn's edition, vol. xii. p. 699.
- Celsus, in the same way, enumerates and describes the collyria of Philon, of Dionysius, of Cleon, of Theodotius, of Euelpides (*qui ætate nostra maximus fuit ocularius medicus*), of Nileus, of Hermon, etc. See his *Medicinæ Libri*, lib. vi.
- 442 Appellantur talia a medicis collyria *libiana* et *cygni*, ob colorem quidem album.—Galen, *de Compos. Med. secundum Locos*, cap. i. Kühn's edition, vol. xii. p. 708.
- See Stuart's *Caledonia Romana*, p. 154; *New Statistical Account of Edinburghshire*, p. 254, etc., for descriptions of the Roman remains at Inveresk.
- 444 Medicæ Artis Principes: De Medicamentis Liber, p. 273.
- 445 Medicæ Artis Principes: De Compositione Medicamentorum Liber Comp. xxvi. p. 198.
- Kühn's Edit. of Galen, vol. xii. pp. 753 and 774.
- 447 Cornarius' Latin Translation in *Medicæ Artis Principes*, p. 432.
- Kühn's Edit. of Galen, vol. xii. p. 699.

- 449 P. Dioscoridis Opera quæ extant Omnia. (Edit. Saraceni, 1698) p. 21, lib. i. cap. xxv.
- Naturalis Historia. Leyden edit. of 1635, vol. ii. p. 474.
- Kühn's Edit. of *Galen*, vol. xii. p. 770.
- 452 *Ibid.* pp. 785 and 773.
- Kühn's edit. of Galen, vol. xii. p. 715.
- 454 See Milligan's *Celsus*, p. 296.
- 455 *Medicæ Artis Principes*, lib. ii. p. 170.
- 456 *Ibid.* lib. iii. p. 432. Our own Pharmacopœias long retained similar terms. The London Pharmacopœia, for example, for 1662, contains an electuary termed *Diacrocuma*, an *Emplastrum Oxycrocum*, etc.
- 457 Cornarius' Latin edition of Aetius, 1549, p. 371; and Venice Greek edit. p. 126.
- Dr. Adams' Sydenham Society edition, vol. i. p. 419; and the Basle Greek edition of 1538, p. 76.
- 459 See Dr. Adams' edition, vol. iii. p. 551, as compared with the Basle edition, p. 78.
- The central figure shows the size of the stone, and the intagliate inscription on one side. The other figures show its three inscriptions as they read from left to right when stamped on wax.
- See Scribonius Largus in *Medicæ Artis Principes*, p. 209; Marcellus Empiricus, in *ibid.* p. 326.
- Kühn's edit. of Galen, vol. xii. p. 751.
- 463 *Ibid.* p. 772.
- 464 *Ibid.* p. 760.
- 465 *Ibid.* vol. xi. p. 715.
- 466 Medicæ Artis Principes: De Medicamentis Lib., p. 280.
- Spon also (see his *Miscellanea Eruditæ Antiquitatis*, p. 236) supposed the Nymegen and Genoa medicine-stamps (the only specimens known to exist at the time at which he wrote) to have belonged to some of those practitioners (*Myropolæ* or *Unguentarii*) who professed to cure diseases principally by the external application of oils, ointment, and friction,—a form of charlatanry not altogether unknown in this, the nineteenth century. According to Pliny, Prodicus, a disciple of Hippocrates, founded the mode of cure termed "Iatraleptice." By this means (adds Pliny) he opened a road to riches to the slaves and rubbers themselves employed by the physicians (reunctoribus quoque medicorum ac mediastinis vectigal invenit). See his *Historia Naturalis*, lib. xxiv. cap. i. in Leyden edition of 1695, vol. iii. p. 187.
- Kühn's *Galen*, vol. xii. p. 787, 786, and 769. Actuarius gives a formula for a collyrium *melinum*, but it is a copy of the last of Galen. See *Medicæ Artis Principes*, p. 309.
- 469 Antiquitates Medicæ Selectæ, p. 55.
- 470 Historia Naturalis, lib. xiii. tom. ii. p. 37. Dr. Adams' edition of Paulus Ægineta, vol. iii. p. 592.
- 471 *Historia Naturalis*, vol. iii. lib. xxxv. p. 423. Scribonius Largus gives (cap. 90, p. 231) a formula, with the *alumen melinum* as one of its ingredients. See the same *Oleum Melinum* described by Dioscorides, lib. i. cap. 55, p. 31.
- Quemadmodum viridium emplastrorum plurima propter æruginem præpollentem talia fiunt, præsertim quæ sunt ex ipsis coloratiora; ita quoque Melina. Sed viridia æruginem incoctam habent, Melina vero coctam quidem sed mediocriter; nam si amplius coquas, bicolora emplastra quibusdam appellata, quibusdam gilva, efficies. Solent Medici viridia, simpliciter, Melina, et rufa, nominare, etc.—Galen de Compositione Medicamentorum per Genera, cap. vi.—Kühn's edit. vol. xiii. p. 503.
- 473 See *Archæologia*, vol. ix. p. 228.
- 474 Aetius' *Tetrabiblos*, Cornarius' edit. p. 359.
- De Medicam. Liber.: *Med. Artis Principes*, p. 281.
- 476 De Compos. Med.: *Ibid.* p. 660.
- Paulus Ægineta's Works. Dr. Adams' Translation, vol. iii. p. 551.
- 478 Cornarius' Translation, p. 435.
- Opobalsam, the "succus a plaga" of the Syrian balsam tree. See *Pliny.* lib. xii. c. 25.— Dioscorides, in describing its origin, effects, etc., specially recommends it as a detergent application in dimness of sight (quæ pupillis tenebras offundunt, exterget).—Lib. i. cap. xviii. p. 18.
- The inscription on the Daspich stone is "Q. Valleri Sexti Stactum ad Caligines Opobalsamatum." Paulus Ægineta gives a special collyrium under the designation of "Collyrium from opobalsam"—*Collyrium ex opobalsamo*. See Dr. Adams' Translation in the Sydenham Society Edition, vol. iii. p. 554. The opobalsam is a frequent ingredient in the various collyria described by Galen, Aetius, etc.

- 481 Catalogue of Antiquities, Coins, etc., in the possession of the Society of Antiquaries of London, by Albert Way, Esq. 1847, p. 12.
- 482 Archæologia, vol. ix. p. 227.
- For the purpose of explanation, I have changed the order of the sides, bringing forward as the second what Mr. Gough gives as the fourth side.
- 484 Kühn's *Galen*, vol. xii. p. 781.
- 485 Sectio xxiv. De Collyriis, p. 662.
- 486 Tetrabiblos, Sermo iii. cap. 110, p. 434.
- 487 *De Arte Medica*, lib. ii. cap. v. p. 175.
- Dr. Adams' Translation, vol. iii. p. 554; and vol. i. p. 421.
- Thus, for example, the ingredients in the collyrium Thalasseros, as given by Paulus Ægineta, are "calamine, 8 ounces; verdigris, 2 ounces; Indian ink, 8 ounces; white pepper, 4 ounces; median juice, 1 ounce; opobalsam, 2 ounces; and gum, 6 ounces."—Ibid. vol. iii. p. 554.
- 490 Kühn's edit. of *Galen*, vol. xii. pp. 786 and 787.
- 491 Commentar. in App. vi. 31. De Simplic. Med. ix. 39. Dr. Adams' Paulus Ægineta, vol. iii. p. 420. Plautus, in his Mostellaria (Act i. scene iii. v. 106), enumerates in the same line the Cerussa and Melinum as among the number of the cosmetic paints used at the toilets of the Roman ladies:—

Non isthanc aetatem oportet pigmentum ullum attingere Neque *cerussam,* neque *melinum,* neque ullam aliam offuciam.

- 492 See Duchelais' *Observations*, p. 75; Tochon's *Dissertation*, pp. 26 and 64; Maffer's *Museum Veronense*, p. 135; Johanneau in *Melanges d'Archeologie*, p. 177; for accounts of stamps inscribed with the legend *Diamysus ad Veteres Cicatrices*.
- 493 *Medicinalium Collectorum*, lib. xiii. p. 499.
- 494 Tetrabiblos, Sermo iii. cap. 37, p. 382.
- Galen defines Cicatrices and Albugo of the eye as follows:—"Cicatrix appellatur ubi nigro oculi ex alto ulcere membranae crassities supervenit, ut color albior apparet. Albugo nihil a cicatrice differt, nisi quod ex ulcere major cicatrix simul et crassior in iride nascitur."—Kühn's Edit. vol. xiii. p. 775.
- 496 See *Tetrabiblos*, Sermo iii. cap. 40, 37.
- 497 Medicæ Artis Principes. De Collyriis, cap. 72 and 73, p. 665.
- 498 Dr. Adams' Translation, vol. i. p. 418.
- De Arta Medica, lib. ii. cap. vi. p. 175. Perhaps the medical idea of staining the cicatrices of the eyes was suggested by the circumstance, that the Romans, like the ancient Egyptians, occasionally had recourse to dyeing or staining their eyebrows in the decorations of the toilet. On the substances (calliblephara) used for this purpose, see Pliny, lib. xxiii. cap. 4, and lib. xxxv. cap. 16. Juvenal alludes to the practice in his Second Satire, v. 93:—

Ille supercilium madida fuligine tactum Obliqua producit acu, pingitque trementes Attollens oculos.

- 500 See *Medicæ Artis Principes*. De Medicam. p. 280.
- In the Minutes of the Society of Antiquaries for 17th November 1757, the word is copied as DELICATA.
- Thus Nicolaus Myrepsus describes the "Collyrium nominatum Sol;" the "Collyrium Aster, hoc est stella;" the "Collyrium dictum Lumen." See his Opus de Compositione Medicamentorum, sect. xxiv. cap. 2, 22, 3, etc. Trallianus describes the collyrium Phos, etc., p. 174. Aetius gives, p. 352, a formula for the collyrium Uranium. See also Oribasius, p. 50. Perhaps I ought to have stated earlier, that in quoting the works of Oribasius, Aetius, Myrepsus, Trallianus, Scribonius Largus, and Marcellus, I always refer, except when it is otherwise specified, to the writings of these authors as contained in Stephen's collated edition of the "Medicæ Artis Principes post Hippocratem et Galenum" (Paris, 1567).
- 503 De Simplic. Medicam. Kühn's Edit. vol. xii. p. 152.
- See *Gentleman's Magazine* for 1778, p. 472.
- This form of Greek designation, consisting of the name of the principal ingredients in a formula, preceded by the initial DIA, was long retained in pharmaceutical nomenclature. The London Pharmacopœia of 1677, for instance, has upwards of twenty medicines or formulæ commencing with DIA, as the *Pulvis Diasennæ*, the *Electuarium Diacinnamomum*, the syrup named *Diacodium*, etc. Almost the only remnant of this type of nomenclature that is retained in modern medical language, is to be found in the well-known term *Diachylon* plaster. The inventor of the *Diachylon* plaster—Menecrates—lived about the time of Tiberius, and, according to the inscription still preserved at Rome upon his marble tombstone (See Gruter's *Inscriptiones*, p. 581), he was the author of not less than 155 medical works, few or no fragments of which remain. His plaster has greatly outlived the productions of his pen. The medical poet, Damocrates, who wrote several

- pharmaceutical works, put Menecrates' directions for preparing the *Diachylon* into Greek Iambic verse.—See Galen *de Compos. Medicam. sec. Genera*, vol. xiii. p. 996.
- Opera, lib. i. cap. 77, p. 43. See, also, on its properties, Galen's Works, by Kühn, vol. xii. p. 127; Adams' Paulus Ægineta, vol. iii. p. 349.
- 507 Tetrabiblos, Sermo iii. cap. cix. p. 429.
- 508 De Methodo Medendi, lib. vi. cap. v. p. 310.
- Dr. Adams' Paulus Ægineta, vol. i. p. 417.
- Kühn's Edition, vol. xii. p. 774.
- 511 *Ibid.* p. 746.
- 512 *Ibid.* p. 257.
- 513 *Ibid.* vol. vi. p. 876.
- Mackenzie. Treatise on Diseases of the Eye (1830), pp. 140 and 141.
- Frankincense, saffron, and myrrh, form, as we have seen, prominent ingredients in the ancient collyria. Actuarius lays down the differences among the therapeutical effects of these three eye-medicines, with the following rare subtlety:—"Crocus et Myrrha hoc inter se dissident, quod ille moderate adstringat, hæc vero citra adstrictionem non instrenue discutiat, humiditatesque exsiccet: suntque generosiora facultatibus quam Thus, quapropter etiam discutiunt magis, verum quod detergendi vi careant: in ulcerum curatione thuri ceu inferiora cedunt."—De Methodo Medendi, lib. vi. cap. v. p. 305.
- 516 Kühn's Edit. vol. xii. p. 60.
- 517 Dr. Adams' Edit. vol. iii. p. 217.
- 518 Medicinalium Collect. lib. xi. p. 425.
- 519 De Arte Medica, lib. ii. p. 173.
- 520 Milligan's Edit. of *Celsus*, p. 290, lib. vi. 13.
- 521 See the Aldine Greek edition of his works, p. 118.
- 522 De Medicamentis Liber, cap. viii. p. 280.
- 523 De Methodo Medendi, lib. vi. p. 93. Tochon, p. 32.
- 524 Recueil de Monuments Antiques, tom. i. p. 281.
- 525 Cinq Cachets Inedits des Oculistes, p. 13.
- *Bottin: Melanges d'Archæologie*, p. 114.
- *Observations sur les Cachets*, p. 41.
- On the properties and uses of *Mulsum* in ocular medicine, see a full account in the Second Book of Alexander Trallianus, p. 176.
- "Mollissimum genus earum *Penicilli*, oculorum tumores levant ex mulso impositi: iidem abstergendæ lippitudini utilissimi: eosque tenuissimos et mollissimos esse oportet."—*Naturalis Historiæ*, liber xxxii. cap. xi. p. 289. In regard to the locality from which these sponges were procured, Pliny afterwards adds,—"Trogus autor est, circa Lyciam *Penicillos* mollissimos nasci in alto, unde ablatæ sint spongiæ."—*Ibid.* p. 290.
- "Penicillo fovere oculos oportet, ex aqua calida expresso, in qua ante vel myrti vel rosæ folia decocta sint."—Milligan's Celsus, liber vi. cap. vi. sec. 9, p. 288. When describing venesection at the bend of the arm, Celsus uses the word Penicillum to imply the pledget or compress applied after the operation with the view of arresting the bleeding—"Deligandum brachium super-imposito expresso ex aqua frigida Penicillo."—Lib. vi. cap. xi. p. 65.
- 531 Milligan's Celsus, lib. vi. cap. vi. p. 284.
- "Quo gravior vero quæque inflammatio est, eo magis leniri medicamentum, debet, adjecto vel albo ovi, vel muliebri lacte. At si neque medicus, neque medicamentum præsto est, sæpius utrumlibet horum in oculis *Penicillo* ad id ipsum facto infusum, id malum lenit."—*Ibid.* lib. vi. cap. vi. sec. 8, p. 286.
- Deinde in balneo aqua calida quamplurima caput atque oculos fovere; tum utrumque Penicillo detergere et ungere caput iridis unguento.—Lib. vi. cap. vi. p. 287. Scribonius Largus uses the analogous expression—"Penicillo abstergeretur," p. 232.
- Igitur aversum specillum, inserendum, deducendæque eo palpebrae sunt: deinde exigua *Penicilla* interponenda, donec exulceratio ejus loci leniatur.—*Ibid.* lib. vii. cap. vi. p. 342. After removing nasal polypi, he recommends a styptic tent, or, "aliquid ex *Penicillo*," to be introduced into the nostrils (lib. vii. cap. x. p. 355). See also lib. vii. cap. iv. p. 324; and lib. viii. cap. ix. p. 425.
- 535 Archæologia, vol. ix. p. 240.
- In his chapter on diseases of the eyes, after giving the formula for the *Basilicon* collyrium of Euelpides—which was composed of poppy tears, cerussa, Asian stone, gum, white pepper, saffron, and *psoricum*—Celsus adds:—"Now there is no simple which by itself is called *Psoricum*; but a certain quantity of chalcitis, and a little more than half its quantity of cadmia, are rubbed together with vinegar, and this being put into an earthen vessel, covered over with fig leaves, is deposited under ground for twenty days, and being taken

- up again it is powdered, and is thus called Psoricum."—See Greive's Celsus, p. 343.
- "Psoricum is formed by mixing two parts of chalcitis with one of litharge, triturating them in vinegar, and, having put them into a new pot, by burying them in dung for forty days."—See Adams' *Paulus Ægineta*, vol. iii. p. 421.
- 538 Kühn's Edit. vol. xiv. p. 767.
- 539 Galen in Kühn's Edit. vol. xii. p. 717.
- 540 Princ. Art. Medicæ, De Methodo Medendi, lib. vi. p. 305.
- 541 *Tetrabiblos*, pp. 434, 435.
- 542 De Compositione Medicamentorum, p. 199.
- 543 De Medicamentis Liber, pp. 274 and 275.
- The inscription on the Jena stamp is as follows (see Tochon's *Dissertation*, p. 66): PHRONIMI DIAPSORICUM OPOBAL. AD CLAR.
- The inscription alluded to runs thus:—PHRONIMI DIASMYRN. POST IMPE. LIP. EX OV. Or, when extended,—"*Phronimi Diasmyrnes post impetum lippitudinis ex ovo.*"—*Tochon*, p. 66. *Phronimus* is the name, of course, of the occulist or proprietor.
- 546 Cornarius' Edit.; or Dr. Adams' Edit. vol. iii. p. 550.
- 547 Med. Art. Princ. De Methodo Mendendi, lib. vi. p. 310.
- For example, in the stamp found at Maestricht, and described by Saxe, there occurs the inscription *C. Lucci Alexandri Crocodes* AT *aspritudines*, instead of AD *aspritudines*. See Tochon's *Dissertation*, p. 68.
- These figures of the Wroxeter stamp are copies of those originally published of it by Mr. Parkes in the *Gentleman's Magazine* for 1810, vol. lxxx. p. 617.
- Beauties of England and Wales (1813), vol. xiii. p. 191.
- 551 Salopia Antiqua, p. 126.
- 552 See a copy of it in Gruter's *Inscriptiones Antiquæ Orbis Romanæ*, tom. ii. p. 896, No. iii.
- See Le Clerc's *Histoire de la Médecine*, pp. 421 and 568.
- See, for example, Adams' Paulus Ægineta, vol. iii. pp. 551 and 555, where the collyria Diasmyrnum and Isotheon are directed "to be used with an egg"—("Usus cum ovo est," according to the Latin translation of Cornarius, p. 671, etc.) Celsus directs the Collyrium Philetis to be used "vel ex ovo, vel ex lacte." Galen repeatedly employs the same expression in giving his directions about collyria, as in vol. xii. pp. 746, 747, 749, 754, etc.
- 555 Med. Art. Princ. Synopsis, liber iii. p. 51.
- Kühn's Edit. of Galen, vol. xiii. pp. 877 and 879.
- 557 *Ibid.* vol. xii. p. 761.
- The same title or designation of ANIKHTOΣ (the unconquered) was assumed by some of the Indo-Greek kings of Bactria. Philosenus (who reigned in the east of Bactria), and Antialcides, Lysias, and Archebias (who reigned in the west), according to Grotefend's classification, all appropriated this title to themselves. See Werlhof's *Handbuch der Griechischen Numismatik*, pp. 72 and 73.
- The Unguentum *Nardinum* was one of the favourite ointments used by the Romans for anointing the hair previous to crowning it with the garland at their festive symposiums.—See Horace's *Carmina*, lib. ii. carm. xi. "Assyriaque *Nardo* Potamus uncti."
- Thus Plautus, in his *Miles Gloriosus*, act iii. sec. ii. v. 11, speaks of wine mixed and flavoured with the perfume of Nard—

Demisit Nardini unam amphoram cellarius.

Horace, in one of his odes addressed to Virgil (*Carmina*, lib. iv. c. 12), invites his brother poet to a drinking-party, provided Virgil will earn his wine by bringing some spikenard; and he declares that a small box of the perfume shall draw a whole cask of wine from the storehouses of Sulpicius.

Nardo vina merebere.
Nardi parvus onyx eliciet cadum
Que nunc Sulpiciis accubat horreis.

The *onyx*, or alabaster box, mentioned in these lines of Horace, was made of a kind of gypsum, and was used for containing the more precious ointments, under the belief, as we are told by Pliny (lib. xxxv. cap. 12), that this material prevented the fragrance of the ointments from being dissipated (quoniam optime servare incorrupta dicitur). In explanation of the great use of ointments among the Romans, it is to be remembered that they then formed their only vehicle for the enjoyment of perfumes, the art of distillation being altogether unknown to them.

- 561 Tetrabiblos, Sermo III. cap. cxiii. pp. 436-8.
- Hujus auxilii actiones ac efficaciam dicere non est facile. Audientes enim vix crediderint. Nam desperatas affectiones ad naturalem statum revocat.—*Ibid.* p. 438.

- Journal of the British Archæological Association, vol. iv. p. 280.
- Sichel's Cachets Inedits, p. 15; and Duchalais' Observations sur les Cachets, p. 35. See also Mémoire de la Commission des Antiquaires de Department de la Côte-d'Or, vol. x. p. 338; or Rapport sur deux Cachets Inedits d'Oculistes Romains; Dijon, 1841.
- See Medicæ Artis Principes,—Oribasius, p. 50; Paulus Ægineta, p. 672.
- See, for example, Kühn's *Galen*, vol. xiv. p. 409.
- 567 Illustrations of the Remains of Roman Art in Circnester, the site of the Antient Corinium, p. 117.
- See, for example, Gruter's *Inscriptiones Romanæ*, vol. ii. p. DCCLXXXIII. 2; CML. 3; MXXVII. 4.
- Notice of a stamp used by a Roman oculist or empiric, discovered in Ireland. *Archæological Journal*, p. 354.
- Much stranger relics than Roman coins or medicine-stamps have been found in Ireland. Above fifty Chinese porcelain seals, with legends, etc., inscribed upon them in ancient Chinese characters, have now been discovered in different parts of Ireland, and generally in localities indicating that they had lain entombed for many long ages. See Smith in London and Edinburgh Philosophical Journal for March 1840; and Getty's Notices of Chinese Seals found in Ireland, Belfast, 1850.
- See Ledwich's *Antiquities of Ireland*, p. 45—Roman coins found at New Grange. A celebrated passage in Tacitus proves that, even as early as the first century of the Christian era, the Irish seaports were better known to the merchants of these times than those of Britain were—("Melius aditus, portusque per commercia, et negotiatores cogniti"). See *Agricolæ Vita*.
- 572 Hildebrand states, that in the northern or Scandinavian districts of Europe there have been found "Roman silver coins from about the middle of the first to the commencement of the third century (Vespasianus to Severus Alexander); but especially those of Hadrianus, Antoninus Pius, Aurelius, and Commodus. Along with them," he continues, "are sometimes found various bronze articles, as statuettes, vases, and ornaments of various kinds of Roman workmanship, and apparently of the same age. These coins, etc., are usually found about the islands of Gothland and Oland, and in Scanïa. The coins are worn and clipped, so that often the legends and reverses are defaced, and the portrait alone tells by whom they were struck. The reason of this is (he suggests), that the coins came to the north after long voyages. As the Roman eagles were never planted on Swedish soil, these coins, etc., must either have been brought by the northern pirates from Roman possessions, or by merchants trading with Roman subjects. Only one gold coin (of Titus), and one ? (of Faustina the elder), are as yet known to have been found in the North." See Hildebrand's Monnaies Anglo-Saxonnes du Cabinet Royal de Stockholm. Introduction, pp. vi. vii. note.
- 573 See the *Pharmacopæia Londonensis* for 1662, p. 48.
- 574 See Ainslie's *Materia Indica*, vol. i. p. 513; and Royle's *Antiquities of Hindoo Medicine*, p. 102.
- I shall quote Galen's own graphic account of his personal visit and observations:—"At the mine in Cyprus, in the mountains of the Soli, there was a great cave dug in the mountain, at the right side of which, that is to say, on our left hand as we entered, there was a passage into the mine, in which I saw certain specimens of the three substances stretched upon one another like zones, the lowest being that of *sori*, upon it *chalcitis*, and then that of *misy*. In process of time the chalcitis changes into misy by degrees, and the sori can change into chalcitis, but requires a much longer space of time. So that it is no wonder that these three substances should be possessed of homogeneous (similar) powers, as differing from one another in tenuity and density of their parts—the grossest being the sori, and the finest the misy, whereas chalcitis possesses an intermediate power. When burnt, they become more attenuant, but less styptic."—Adams' *Paulus Ægineta*, vol. iii. note, p. 400. (Kühn's *Galen*, vol. xii. p. 226.)
- See his Edition of *Paulus Ægineta*, vol. iii. notes in pp. 253, 400, and 402.
- 577 Opera, lib. v. cap. 117, p. 370.
- 578 Kühn's Edit. of *Galen*, vol. xii. p. 228.
- 579 *Opera*, lib. xv. p. 515, and lib. xiv. p. 483.
- Dr. Adams' Sydenham Society Edition, vol. iii. p. 253.
- 581 Kühn's Edit. vol. xii. p. 701.
- 582 *Hist. Nat.* lib. xxxiv. c. xii. v. iii. p. 399.
- See Milligan's Edit. p. 194, Misy sanguinem suppremit; p. 197, rodit; p. 199, crustas inducit, etc.
- See *De Methodo Medendi*, lib. vi. pp. 305-308.
- Viper wine (Vinum Viperinum) and viper broth (Jus Viperinum) had long a place in the London Pharmacopœia; and still longer the vipers were retained in it as an ingredient in the celebrated but multifarious Theriaca Andromache, which, with its discordant farrago of seventy and odd ingredients, was only expelled about a hundred years ago from the British Pharmacopœias. (See Alston's Materia Medica, vol. ii. p. 517; Hill's Materia Medica, p. 829; Quincy's Dispensatory, p. 400; Mead's Essay on the Viper, 1745, etc.)

- Perhaps this incantation was but a remnant of that ophite worship which appears to have in former times prevailed so generally throughout the world. On the ancient extent of serpent-worship in the old world, see Stukeley's *Abury*, p. 32; Colonel Tod's *History of Rajasthan*; the Rev. J. B. Deane's learned Treatise on the Worship of the Serpent, and his observations on various ancient Dracontia, or ophite temples in England, France, etc., in the *Archæologia*, vol. xxv. p. 180, etc. Latterly, the observations of Mr. Squier would seem to show that the same type of worship was, in long past times, diffused as extensively over the new world. (See his late work, entitled *Serpent Symbol*, and the Worship of the Reciprocal Principles of Nature in America.) The supposed connection of the serpent and serpent-worship with the healing art has been handed down to us emblematically in the serpent symbol with which the caduceus of Æsculapius is always represented as surrounded. The Romans regarded the serpent as a symbol of health, and we find it figured as such on some of the coins of Augustus and Claudian.
- 587 Aphrodisiacus, sive, Collectio Auctorum de Lue Venerea. Venet. 1566-67; and Lugd. Batav. 1728.
- 588 De Morbis Venereis. Paris, 1740.
- Abhandlung über die Venerischen Krankheiten. Göttingen, 1788.
- See also a collection by Grüner of the opinions of many authors, who wrote in the end of the fifteenth or beginning of the sixteenth century, as to the disease being new and unknown,—in his *Morborum Antiquitates*, p. 69, *seq.*
- 591 Aphrodisiacus, sive de Lue Venerea. Jena, 1789.
- 592 Vide Grüner's Aphrodisiacus, p. 38.
- 593 De Morbis Venereis, 1740.
- 594 Ueber die Venerischen Krankheiten, 1788.
- 595 The History, etc., of the Venereal Disease. London, 1841.
- 596 Sur l'Origine de la Maladie Venerienne. Paris, 1752.
- 597 Geschichte der Lustseuche. Altona, 1783.
- 598 Grüner's *Aphrodisiacus*, p. 115.
- 599 Grüner's Aphrodisiacus, p. 86.
- See Extracts from the Council Register of the Burgh of Aberdeen, edited by my friend Mr. John Stuart, and published by the Spalding Club.
- By an evident clerical error this word is mis-spelled "vakis" in the copy of the edict contained in the Town-Council records.
- 602 History of Scotland, by John Lesley, Bishop of Ross, p. 76.
- The Chronicles of Scotland, by Robert Lindsay of Pitscottie, vol. i. p. 249.
- Two of these entries were published by Mr. Pitcairn, in the *Criminal Trials of Scotland*, vol. i. p. 117. My friend Mr. Joseph Robertson, Superintendent of Searches in the Literary and Antiquarian Department of the General Register House, most kindly collated for me the other entries, while looking over the Treasurer's accounts for another purpose.
- 605 Pitcairn's *Criminal Trials*, vol. i. p. 110.
- 606 Pitcairn's *Criminal Trials*, vol. i. p. 232.
- See Mr. Laing's admirable edition of Dunbar's *Poems*, vol. i. p. 115.
- 608 Lyndsay's Warkis (1592), p. 262.
- 609 See Dunbar's *Poems*, vol. ii. p. 24.
- 610 Astruc, p. 634.
- Historical, etc., Account of the Principal Families of the name of Kennedy, p. 17.
- 612 Cleland, in 1st Part of the *Transactions of the Glasgow and Clydesdale Statistical Society*, p. 13.
- 613 See Grunbeck, in *Tractatus de Pestilentia Scorra*, c. 8; and Brant, in his poetical Eulogium *De Scorra Pestilentiali*—

"Nec satis extremo tutantur in orbe Britanni."

- 614 A Brieffe and Necessary Treatise touching the Cure of the Disease now usually called Lues Venerea.
- See Mr. Beckett's papers in the *Philosophical Transactions* for 1718.
- 616 Archæologia, vol. xxx. pp. 358 and 359.
- 617 Holdtfeldt's *Chronik*, p. 6. Astruc (p. 116) points to the same fact in regard to Paris, where two leper hospitals existed when syphilis began; but the syphilitic patients were not sent to them, but to other houses specially hired for the purpose.
- 618 See Dr. Cleland's "Extracts," in *Transactions of Glasgow Statistical Society*, Part i. p. 13, etc.
- 619 Parliamentary History, vol. iii. p. 44; Henry's History of Great Britain, vol. xii. p. 219; the

- Life and Reign of King Henry VIII., by the Right Hon. Edward Lord Herbert of Cherbury, 1572, p. 295.
- 620 See his *Consilium pro reverendissimo Episcopo et Hungariæ Vicerege*; in Luisinus' Collection, vol. ii. p. 6.
- 621 Astruc, p. 113 (English Edition).
- Tytler's History of Scotland, vol. iv. p. 319.
- 623 De Morbo fœdo et occulto, his temporibus affligente.
- The simple and newly elected Pontiff, Adrian VI., when writing to his Legate at the Diet of Nuremberg, a.d. 1522, in the same spirit observes, "We are well aware that for many years past the holy city has been a scene of many corruptions and abominations. The infection has spread from the head through the members, and has descended from the popes to the rest of the clergy."—*Pallav. Op.*, vol. i. p. 160; *Sarpi*, p. 25.
- 625 See Claud. Espencæi Opera Omnia, p. 479. The morals of those assembled at the "sacred" Councils of the Church showed, perhaps, in these days, little or no amendment upon the morals of Rome itself. At the great Council of Constance, for example, held in the fifteenth century, there were, according to the long list of those present, as given by Lenfant, "seven hundred common women" whose habitations were known to Ducher; whilst the Vienna list of the same Council sets down the list of "meretrices vagabundæ" as fifteen hundred in number (Lenfant's History of the Council of Constance, vol. iv. pp. 414, 416). This Council was summoned together by that misnamed "Vicegerent of God on earth," Pope John XXIII., a man who, according to his own secretary, Thierry de Niem, was guilty of "all the mortal sins, and of a multitude of abominable acts not fit to be named" (Niem de Vita Joh. XXIII., ap. Von'der Hardt, tom. ii. p. 391.) Among other matters, the Procurators of the Council publicly accused him before it of "cum uxore fratris sui, et cum sanctis monialibus incestum, cum virginibus stuprum, et cum conjugatis adulterium, et alia incontinentiae crimina" (Concil. Constan. Sess. xi., Binius, tom. iii. p. 874). Yet this same "infallible" Council of Constance, as it termed itself, called together, as it was, professedly for the cure of the evils and doctrines of the Church and Papacy, principally distinguished itself in history by burning John Huss and Jerome of Prague for preaching from the Scriptures the pure and simple gospel of Jesus Christ.
- Nicol. de Clemangiis, Opera (edit. Lydii), p. 22.
- Opera, tom. vi. col. 296 (ed. of 1617). The history of these and other dark times shows us, however, occasional bright and isolated glimpses of the existence of true Christianity in general society and in the cloisters. In the personal history of Luther, for example, few circumstances are more interesting than the fact of Staupitz, the Vicar-General of the Order of Augustine Monks of Germany, earnestly and tenderly assisting the young and distressed monk of Erfurth to arrive at a knowledge of salvation by faith alone (as laid down in the Scriptures—a copy of which he presented to him), and not by works.
- 628 See Sir John Dalyell's Fragments of Scottish History, p. 11.
- 629 Polydor. Vergilii Angl. Histor. (Bull 1570), p. 633.
- 630 See his *History of Great Britain*, vol. vi. p. 434.
- See the whole details given more fully and broadly in the *Letters relating to the Suppression of Monasteries*, published by the Camden Society, p. 58, etc.
- 632 See his Supplication of Beggars, presented to Henry VIII. in 1530.
- "Insuper hoc tempore (A.D. 1282) apud Invirchethin in hebdomada paschæ, sacerdos parochialis Johannes, Priapi prophana parans, congregatis ex villa puellulis, cogebat eas, choreis factis, Libero patri circuire; ut ille feminas in exercitu habuit, sic iste, procacitatis causa membra humana virtuti seminariæ servantia super asserem artificiata ante talem choream præferebat, et ipse tripudians cum cantantibus motu mimico omnes inspectantes et verbo impudico ad luxuriam incitabat," etc. See the *Chronicon de Lanercost*, p. 109.
- 634 George Bannatyne's Ancient Scottish Poems (1770), p. 42.
- 635 King James's Works, p. 301.
- 636 Cardani, Philosophi ac Medici, Opera, tome ix. p. 135.
- Yet we find the Archbishop, who left some bastard offspring, when writing as an author, violently and virtuously declaiming against "all kind of lichorie." See fol. li., etc., of "The Catechisme set furthe by the Most Reverend Father in God, John Hamilton, Archbishop of St. Andrews," printed at St. Andrews, 1552. Perhaps the Archbishop held some of the other commandments in little more respect than the seventh, if we may judge by one of his sayings regarding Queen Mary, when a girl of nine or ten years of age, as reported by Sir James Melville in his *Memoirs*, p. 73. There is no wonder that Sir James found it difficult or impossible to translate the coarse saying of the Scotch Primate for the polite ears of Montmorency the Constable of France. See *Memoirs of his own Life*, p. 21.
- 638 See the edicts in Wilkins's *Concilia Magnæ Britanniæ*, tom. iv. pp. 47-8.
- See the forthcoming *Statuta Ecclesiæ Scoticanæ*, p. 155, edited for the Bannatyne Club by Mr. Joseph Robertson; also Wilkins's *Concilia*, iv. 20.
- See his note to Bannatyne's *Scottish Poems*, p. 210.
- 641 Book of Bon Accord, p. 377; Keith's Historical Preface, p. xv.; Aberdeen Magazine, 1796, p. 270.

- See Prescott's *Ferdinand and Isabella*, vol. ii. p. 354. In Spain, indeed, it was recognised and sanctioned by law, till the scandal was uprooted by strong hand of Ximenes.
- 643 History of Edinburgh, p. 497.

THE END.	

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