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The Man Galen and His Times

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The times into which Galen was born and the position he occupied in social life and an allusion to the importance he has for his medical posterity must in this account of him take precedence of the incidents, which, though it is impossible to be sure of their actual sequence in chronology, unmistakably mark his personality, as revealed to us in his works. One does not progress very far in the study of Hippocratic medicine before the need is felt of taking a jump of about six hundred years and knowing about the works of Galen. I do not propose here to go into an earnest discussion of these but rather to make a study of the man Galen in his training for his life work. This cannot be done for Hippocrates, because he was a different man. He was not so eaten up with vanity as to foresee that the world would ever care about his personality. He was purely objective and impersonal and we are the losers thereby in an historical sense. The works of Hippocrates are full of the accounts of his failures in treatment and diagnosis. One finds no fatal cases in Galen's reports of his practice. Puzzled by some passage in Hippocrates, Galen exclaims: "Why bother with the text, the patient died." So absorbed was Hippocrates with his work rather than with himself we need the light which the volubility of Galen throws on the works and are grateful for the little he throws on the person of Hippocrates. The justification of the charge of garrulity brought against Galen is appreciated by any student who undertakes to become acquainted with his work in an exhaustive way. Its enormous mass was turned into Latin from the Greek by Dr. Carolus Gottlob Kühn, to whom we may ascribe an iron determination and an industry scarcely less remarkable than that of Galen himself. This Herculean task he began after he was sixty-two years old and brought to a triumphant conclusion (1) in less than ten years.

There is no other source from which to draw information about the man Galen except from the works of Galen, all the works, for notices of his personality are scattered here and there and one must pick and patch and put it all together if one is to know how this one man did so much to perpetuate the ancient medical lore in the world of his

time and hand it down to posterity, for what we know of more ancient medicine from other sources, while not negligible of course, altogether is comparatively small. If we should add to the works themselves of the Hippocratic Corpus all we learn of other medical writers before the time of Galen and all we can glean from Plato and Aristotle and Theophrastus, even from Oribasius and Aëtius, of medicine before Galen, the whole would not equal what Galen alone tells us of medicine before his time, not to mention what he contributed himself, which is huge. We could almost construct Hippocratic medicine out of what Galen alone says of it. This mighty mass, scarcely less perhaps than four or five million words, is the chief source also of the medicine from which after the renaissance our medicine sprang. He was no less distinguished for the volubility of his discourse than for the fertility of his pen. In the former he showed the characteristics the younger Pliny (2) ascribed to the inhabitants of his native land over which Pliny was a proconsul of Trajan. The Bithynians, he says, like most Greeks, are prolific in words and chary of deeds—*plurimis verbis, paucissimis rebus*. Galen wrote such a large number of philosophical and medical works, according to Athenæus (3), that he surpassed all his predecessors and we cannot demur at the further eulogy that he could take rank with any of the ancients as an expositor, since he so far excelled them in copiousness at least.

Any one who attempts to write the history of medicine, past or present, can no more pass over this huge bulk than he can circle the earth and miss the ocean. He must go through it. With the exception of small islands here and there, like the translations of Daremberg (4) into French and the recent translation of Brock (5) of one book into the English of the Loeb Classics, the sole refuge for the reader from the Greek text is the limping Latin of Kühn, twenty-one bulky volumes each averaging almost a thousand pages of the original and the translation, badly proof read, and, I fear, not free from blemishes of other kinds.

Out of this great mass of discourse, not absolutely confined to medicine but having a sprinkling of philosophy and its history, what can we learn of

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the man Galen? It is said that genius is the power to work intensely. If we are to agree to this the possession of genius cannot be denied to Galen, for nothing but an enormous assiduity¹ would have left such an output behind him, loaded on the demands of an active practice in a large city even when supplemented by the leisure of an occasional withdrawal from it. With one small exception none of his contemporaries, either lay or professional, so much as mention him. We must accept his estimate of his own powers when brought into competition with his fellows. If pertinacity and industry, which we must attribute to him, raised him above mediocrity, as it so often does in our more energetic age, we know it only from himself. It is quite evident, and he appreciated the fact himself, that the circumstances of his early life were eminently favorable to success in that which has made him a great figure for us. It is plain, as to this, that these in combination with an innate energy of character and even a mediocre mental endowment quite suffice to explain what he left in writing, if we have little proof as to its efficiency in marking him among his contemporaries as a commanding figure.

If this is the conclusion we are driven to, I do not know where one is to turn for another example so striking of the triumph of circumstances of character and training over the circumstances of the times and above all over the circumstance of time. Indeed, Galen was almost if not quite the last medical man who has any claim to originality at all in the ancient world, and he ruled the medieval world for more than a thousand years. Despite his prolixity and his commonplaces, perhaps partly because of this garrulity, he dragged his hero, Hippocrates, at his chariot wheels through a world sunk in ruin, to the renaissance. For all that time to the world he was a mightier man than the mightiest mind of all medical history. That is what fate, luck, not genius, does for a man's fame. As Boswell for us is more interesting, as that astonishing literary personage alone makes Johnson, the leviathan of his day, bearable to us, so Galen sung the praises of Ypocras to the Dark Ages, and the indiscriminating taste of those rude centuries thought the servant the equal if not the superior of the master. Boswell was nothing to his contemporaries. To posterity he was the greatest fool and the greatest biographer who ever put pen to paper. Galen is neither of these things to us, whatever he may have been for his contemporaries, but when we attempt to seek out from others the personality of Galen we find him, it is true after the lapse of a vastly greater stretch of time, more obscure than even Boswell. Even Asclepiades, the Bithynian, was a friend of Cicero though Galen thought him a charlatan, but he seems to have had a better claim to originality than his critic, while his heresies seem no more wrong to us than the fallacies of his more orthodox fellow countryman.

Galen was the physician of probably the best and wisest ruler who ever reigned and of his son Commodus who was perhaps the worst. He seems so

well acquainted with their cooks (6) he might be accused of having arrived at the sick chamber by way of the scullery stairs, except he specifically gives other accounts of it. As the exsurgeon to the gladiators at Pergamus we even might be pardoned for suspecting that thus he kept the favor of Commodus, who dragged the purple of the Cæsars in the dust of the arena, but he tells a different story. He relates in glee the anecdote of his triumph over the cooks in his quarrel about the heart of an elephant, slain in the circus, which he kept long after at home to show the bone in it. He swells with pride as he says many of the gladiators died before he took charge of their health and their wounds at Pergamus but none afterwards (7). But on the whole the little we can gather from his account of his daily life in Rome can scarcely be taken for any more than a hint of the degradation of the middle class. There can be no doubt that Galen belonged to people of wealth and culture but history tells us that this does not at all mean that they stood high in the social scale in the time of the Antonines, despite the example of Marcus Aurelius. Doctors a hundred years ago in England entered the servant quarters on their way to high placed patients. These considerations are not entirely out of place in a discussion of the question, why little or no record has come down to us, in the general literature of the times, of such a man as Galen, but that is trivial. Nothing will ever be heard of the names which loom so large in our professional eyes today with the lapse of an equal time.

What is vastly more curious is that there is no mention of Galen in such contemporary professional literature as we have. I do not know of any until the time of Julian, the Apostate, by whose shining mark in history we date his chronicler Oribasius. This was probably two hundred years after Galen's death, but there is said to be a contemporary notice of him by Alexander Aphrodisiensis, mentioning him as a philosopher and a doughty disputant, the Mule's Head, he called him. Cælius Aurelianus does not mention him and neither does Aretæus. This we might explain by placing them earlier than Galen, but to suppose that Galen would not have mentioned them if they had preceded him is improbable. They may have all three been contemporaries it is true, but it does not entirely explain the lack of mutual acquaintance. It is difficult then to see on what ground Sprengel bases his opinion that in the time of Oribasius Galen was regarded as infallible. Paulus Ægineta, probably much later, refers (8) to him as standing on the same footing as Oribasius, indeed he mentions him after Oribasius in his preface.

It seems probable that the social standing of physicians fell after the Augustan age. According to Suetonius, Julius Cæsar (9) conferred Roman citizenship on professors of the liberal arts, especially physicians, that he might induce others to seek the city. Augustus (10) expelled slave dealers, slaves and prize fighters, who were foreigners, but made exceptions of schoolmasters and doctors, the implication for the reader being the latter in the estimation of the public in the time of Suetonius belonged in the same category. Suetonius is supposed to have

¹ To what extent this could be carried in a previous generation may be seen in the striking account by Pliny the younger—*Epistularum* III. 5—of the industry of his, for us, more famous uncle.

been born shortly after the birth of Nero, perhaps in 70 A. D. His contemporary and friend Pliny, the younger, bears the same testimony (11). He begs from Trajan citizenship for Harpocras, an Alexandrian, manumitted from slavery in Egypt, who had cured him of a very severe illness. However, it is necessary for us, familiar practically with a very degrading form of slavery only two or three generations ago, to guard against prepossessions in adjudicating the social status of slaves among the ancients.

Cato had written a so-called book on medicine and the book of Celsus is the sequel to one on agriculture. After the advent of the Greek culture in Rome, medicine became a trade apart from "what every gentleman should know," if only to keep his slaves serviceable, and under the Emperors around the court many of them were little better than poisoners or men kept there to detect poisoners.

Eudemus, the paramour of Livia, the wife of Drusus, was one in the reign of Tiberius (12). This Eudemus was of course not the one Galen knew so well, but Galen himself succeeded an antidote mixer for Marcus Aurelius (13). At least, except in this way, they ceased to interest political circles and literary men, the satirists as well as the historian chiefly referring to them thus. Whatever his contemporary standing in the profession and whatever the social status of physicians after the period in which Greek genius had placed the school of Alexandria on a height, it seems safe to say that an appreciation of Galen's talent first rose to the point of mistaking it for genius several hundred years after his death.

In seeking to know the man Galen, then, we are thrown back on his works, on what he says of himself. No county atlas, no compendium of "distinguished" physicians ever allowed its contributors to go so far in selflaudation. Athenæus speaks (14) in this vein: "Except the doctors nothing could be sillier than the pedantic grammarians," he says, quoting some of his guests and speaking of a play (*Mendax*) by an ancient Athenian. "Great is the sophist and the cook in Sosipater is in no way inferior to the boastings of the doctors." Things apparently were not different in the day of Galen. His actual portrait is lacking because of the lacking of the engraver's art. We do not know what the "Mule's Head" looked like, but otherwise his character stands forth in many an anecdote he relates of his prowess in debate, his infallibility in diagnosis, his oracles in prognosis, his marvels of therapy.

But like Æneas he was a pious man on his own showing, far better he honored his father, and far worse he spoke evil of his mother. He was a cad, a prig and a grind. He was studying Hippocrates when he had better have been reading Horace, though he was learned in Homer, probably from student days in Alexandria. Though not born with a very healthy body (15), having in childhood and adolescence suffered from some more or less severe illnesses, he had never had any "fevered huboes," and when he was twenty-eight years old he became convinced, though since his early years he had devoted himself night and day to strenuous study, that he could by careful regimen preserve his health. But

for an occasional attack of fever this he succeeded in doing. It was when he was seventeen that his father had a dream which decided him to make a physician, instead of a philosopher and a rhetorician, of his son, whom he had already indoctrinated with the stoic opinions of Chrysippus (16). Despite his priggishness there is no denying the enormous service he rendered, not alone to the history of medicine, but to the science of anatomy in his research work by experimental methods, especially in neurology. Of all things, however, the world is most grateful to him, and out of this arose chiefly his posthumous fame, because he handed down to subsequent generations of benighted men the words and meaning of Hippocrates, Plato, and Aristotle. He honored himself in humbly bowing before Homer and the mighty shades of these men, but he too plainly placed himself next their thrones in his own estimation, and yet so great are his services to us we need not begrudge him this vanity, for in truth the station he really occupies is that of the second greatest name in the annals of medical history.

It is thought the year of his birth was about 130 or 131 A. D., in the beneficent reign of Hadrian—in a reign when almost the whole known world, as Gibbon remarks, was enjoying the blessings of peace among men, and for a longer time than it has ever enjoyed it since, it may be added. He was born in Syria, the son of Nicon, a gentleman and a scholar, if we are to believe filial tenderness, an engineer and a mathematician, a philosopher, a friend of learning, and apparently a man of wealth. His grandfather and great grandfather were also men of learning (17). "Fate dealt kindly with me in giving me the best and most benevolent of fathers. What I am by nature I hardly know, since my father devoted himself to making me by training the best and most attractive kind of man he could" (18). Galen seems to have been very well satisfied with his father's labors and fully recognizes what circumstances did for him at any rate. His father taught him all he knew and instructed him in the doctrine of Chrysippus and the other noted stoics, on which in his youth he wrote many exercises, but in which he seems to have found much to criticize in later life. "I had surely a father," he declared, "who achieved the highest distinction in geometry, architecture, logic, arithmetic and astronomy. He was praised by those who knew him for justice, honesty, and moderation above all philosophers" (19). He was something of a dietitian, we also learn, experimenting on the various soups and ptisans and the ways of preparing them, his son assisting. Galen was born probably and lived, in his boyhood, in Bithynia near Prusa (20) and this seems to have been his home until he was twenty-one when his father died, though he was away at Alexandria, Smyrna and elsewhere in his student years subsequently and practised in Pergamum nearly before he went to Rome the first time. He boasts of the purity of his Greek tongue (21), though he is at no pains to conceal his prejudice against the Attic dialect and the philosophy of Athens of his day in many passages. He declares he has always dwelt in an atmosphere of books and asserts he has never been accustomed to conversa-

tion with hucksters, cooks or publicans—differing in this way as in others from Socrates, on the whole, for the worse.

We get some idea of the kind of a country house they lived in. So unchanging is the East it reminds us of the house of Odysseus (22), in which the wooers of Penelope met their fate, though Galen's home apparently had no upper chamber. Some of its features are biblical and occasionally described as still existent. As you enter the door you see in the middle of the room a fireplace and connected with it the ovens for baking. Beyond these and also facing the door, for there was no chimney, on the interior wall, is a raised chamber for guests with seats. On the side walls are stalls for cattle. On each side of this "drawing room" are bed chambers and along the upper part of the walls of these are arranged, all around, cupboards for all sorts of things. After the wine had fermented in casks and had been tightly corked in bottles, his father used to place it in these recesses to age it. The hay mows and the granaries were evidently on the sidewalls above the stalls, exposed also to the warmth of the fire in the cool weather. The roof did not extend over the centre of the room apparently which thus made the dwelling essentially one around a small court with colonnades, at least in places, to support the roof. An opening to the sky is the natural and pleasantest thing in the balmy southern air of the Mediterranean. His father's farm was situated facing the sea between Pergamum and Elea. "There is a hill, covered with thyme from which the bees make the most delicious honey. This hill is at the left as you go from Pergamum to Elea, not however near the road" (23). Beyond the hill lies Mysia. We quite catch the spirit of the beautiful verse Murray has made out of a strophe in the *Iphigenia at Tauris* of Euripides, so often quoted:

"Give me the little hill above the sea,
The palm of Delos fringed delicately,
The sweet young laurel and the olive tree,
Grey leaved and glimmering."

No wonder that for Galen yearning for the hillsides of his youth no other field, even in nearby Mysia, produced such honey, even though they said the Mysian was like the Attic honey. They had no such sweet flowers to feed their bees upon as grew in the sod his boyish feet had pressed. Looking back in his old age after having known, as he said (24), all manner of men, even the emperors, and the wickedness of the world, he may well have realized that all is vanity but that.

Asia Minor in the time of Galen was indeed a land of milk and honey—a promised land, which it might have been thought of old worth forty years' wandering in the desert to enter, where grapes grew to monstrous proportions, granaries groaned with the harvest, and treasure of all kinds for long periods lay open to the horrid rapacity of brutal Roman proconsuls. Cæsar, according to his own account, carpeted Gaul with the dead. We say he made a desert and called it peace, but out of the welter of nations a great civilization arose. The slaughter of human beings, so attractive to human beings, cannot destroy civilizations. Out of the soil springs life ever anew. Apparently that was

not the result in Asia Minor after the Roman dominion. Cosmic changes seem responsible for most of it but man did what he could. Cicero, Sallust, Tacitus tell us of the sordid and brutal rule of Rome and that the provinces of Western Asia were the ones its two legged wolves most quarrelled about, but the thorough scrapings of further Gaul and even combing the forests of Germany could heap the platters of but a few. They took what they could and there was more to go round in hither Asia for Sulla and Lucullus and Pompey and Crassus and Piso and their countless imitators, but before the Byzantine power was at its height a mightier devastator, the hand of Nature herself, apparently began her work.

From this point of view Galen had every reason, as an Asiatic Greek, to look with contempt on the rocky and barren shores of Attica, but he even decried the supremacy of her dialect and at times seemed blind to the traditions of her ancient glory, so bitter was the rivalry between the sophists of Athens and those of Pergamum in his day. The influence of purely Athenian culture was then in decadence. Philosophy, poetry, even the material arts had their chief seats in the maritime cities of Africa and Asia, whence the sages and sophists of the Academy and the Lyceum at Athens had derived them. In Galen's day they had already returned to the fruitful soil from which Athens and the rock-ribbed isles of the Ægean had transported them. Attic supremacy for all its still unapproached glory was short lived. A few generations and the high tide of the human intellect washed back to the sands along the eastern littoral of the middle sea. In the best era of that backwash and in the cradle of pre-Attic civilization Galen was born and trained. Circumstances, not only of personal affluence but the vastly more important ones of cosmic pulsation, both terrestrial and intellectual favored him. Man had done his worst and still the land bloomed as before. Under the Antonines, as earlier under Trajan, it had wiser and better rulers, perhaps the very best it has ever had. Under them Galen and his father lived in peace and plenty. He was born not in the stews of Rome nor beneath the crumbling façades of Athens but in the centre of the land of the Asian renaissance, close to Pergamum, whose library had been despoiled by Anthony, it is said, but he could not, even for the smiles of the Egyptian sorceress, remove learning and culture from Smyrna and Antioch with cases of parchment and papyrus rolls to the shelves of Alexandria. We must keep this atmosphere in mind.

Had the feeble murmurs of the new religion reached the hillsides where the sweet thyme grew in the fourth decade of the second century? There can be no doubt of it. Thither, to rule over Bithynia and Pontus, a generation earlier Trajan had sent Pliny, the younger, who found the problems raised by the new doctrine rising and confronting him. Had Nazareth and Bethlehem any significance in the education of our apt and omnivorous scholar, as he learned the precepts of the stoics from the lips of his father? They were provincial towns, far away to the south, and if the father and son had heard of them, as doubtless they had, they, too, may have

thought no good could come out of them, but Galen, the son, bore a brand of piety throughout his life which was nearer Christianity than the stoic writers of an earlier age could have taught him. The saints, Ignatius, Polycarp, Irenæus, Justin Martyr, were already bearing their testimony by the middle of the second century after Christ. We hear of St. Polycarp and St. Irenæus at Smyrna (25) during Galen's boyhood. It was there, where Galen studied, that Polycarp was burned at about this time. In a comparatively small city, though larger, he says, than any Hippocrates ever saw, burning even one human being would have been a thing a young man would hear of, and Galen, perhaps with such scenes in mind, remarks on the obstinacy of the Christians. It is quite evident from his maturer works that he had, at least in his own later life, diverged markedly from the orthodox traditions of the Athenian epoch. Pliny told (26) Trajan he did not know what to think or do with the Christians or what to ask them, though he had tortured two women to find out the truth. In Bithynia the old temples were deserted and the cattle dealers, who supplied victims for the sacrifices, were loud in complaint. Better leave them alone, Trajan said; don't investigate, unless some one complains and then, if the case is manifest, they had better be punished—with death probably, "but these charges after all are not the worst samples of our age."

Twice in the books on the differences in the pulse Galen refers to the obstinacy and mysticism of the Christians. You cannot take for granted what is laid down in medical theory, "without explanation as though it had to do with the sect of Moses and Christ" . . . "they will more easily depart from their principles than the doctors and philosophers from their chosen tenets" (27). Most of the fathers of the church were born later than Galen, but if Galen wrote this book, he knew of Christ.

At any rate a new ethical feeling which was a part of the deep underlying thought even before Christ, was veering toward modern standards. Even in the classical præmium of Celsus, in the discussion of human vivisection we get some note in it, but if we go back of Galen five hundred years to the time of Hippocrates we get more exclusively the earlier signs of intellectual progress rather than those of Christian ethics. It was one of discrimination and differentiation in accord with the law of the evolution of thought. When the later Hippocratic author in the *Sacred Disease* attacks the charlatans, he comes out plainly and says there are different processes to use in discussing things divine and things terrestrial, but for the author of *Airs, Waters and Places* there is no celestial body as separated from the terrestrial body. All diseases for the more ancient writer are divine, one not more nor less than the other. Of course we bold successors to the martyred iconoclasts see in this declaration there is nothing supernatural about the origin of disease or anything else. That may have been the thought of Hippocrates but that is not the way he put it, for obvious reasons.

The old pantheistic methods of thought of primitive man still prevailed and the best he himself dared to do was to declare epilepsy a disease like any other

—all of them divine, if you will. This recurs in a more uncompromising form in some of the books supposed to have been transliterations of Hippocratic thought by his successors before Galen's time. The words had been heard before and doubtless heeded, "Render unto Cæsar the things which are Cæsar's and unto God the things which are God's." We can take note of the same sentiment in the Christians who bothered Pliny. Galen remarks the assertions of Moses and Christ may need no proof, but it is different with the pulse. If you have a theory you must have a valid demonstration of it, but this clarity of discrimination between things divine and mundane things does not appear in the thought attributed to Hippocrates II at all, full of irony as much of his writing is. Now this is one of the significant things about Galen's early training, about the training, evidently, of so many of the medical writers after Hippocrates. In Galen it may have lain at the root of the endless, tireless, tiresome, garrulous, futile effort to reason things out, hurling anathema at the empirics but not admitting that he himself was a dogmatist. This is a characteristic we perceive in much which Galen quotes from this literature often in derision, often in support of his own assertions, no less prolix and puerile.

While it is not difficult for a fuller analysis to trace out divergence of thought between the essentially Greek and the later oriental Græco-Roman tendencies of thought, it is scarcely possible in the time of Galen to find any influence of the ethical tendencies which were inaugurated or at least greatly advanced by the advent of the new light of Christianity from the east. Modern humanitarianism was born at Bethlehem and though the ultimate change was to be so much greater it was not noticeable in the time of Galen. The shifting of ways of thought toward transcendentalism, begun before the Christian era by the Neoplatonists, brought in its wake the shifting of ethical ideals beyond the path traced by the stoics, but this was in the lap of the future, the practical application of them, very far in the future. The old dispensation was the one under which Galen was born and lived. The torture of the slave to make him reveal the crimes or even the ideas of his master was alike a character of ancient Greek and of later Roman law—the torture of innocent human beings in order to expose his guile or save the master from the clutches of the law. Galen exhibits in his writings the stoic instruction of his early life. He emphasizes the necessity of restraint of the passions in the prevention and treatment of disorders of the mind (28) and diverges into much ethical application of the regimen.

It is, however, not the altruistic but the individual application, not a word of compassion for human suffering, not as much as we can find in the Præmium of Celsus, not a sign of a revolt from the exhibition he makes of inhuman cruelty in contemporary manners. He comments in a detached tone on the degrading effect angry passions, vented on the slave, have on the master, the loss of dignity and the weakening of his character, when he beats him with his fists, with clubs, with sticks, lacerating the unhappy creature with the sword and chance instruments of torture. He tells of masters seizing a pen

and jabbing it into the slaves eye—one of these monsters was one of the better kind of Roman emperors—Adrian, in whose reign Galen first saw the light. He was filled with shame and mortification, not because of the torture of a human being—not at all; it was because he had lost his selfcontrol and given way to passion. So to humiliate himself, to palliate his own feelings of lost respect, he told the slave he could ask him what he liked in the way of recompense. The slave was silent. Galen says he was afraid for his other eye. It was not the emperor only who could safely, as safely as a mob with newspapers behind it, venture to indulge in fits of unbridled fury. He speaks of journeying with a comrade, perhaps as physician to one of the four hundred, whose acquaintance he had made at Rome. The man gave way to such a fit of passion for a trivial fault of a slave, laden with his attire, who followed on foot, that he beat him with a sword. The slave was so maimed and bled so the journey was interrupted at the Isthmus of Corinth. Again Galen describes the remorse of the stoic, not on the slaves's account but on account of the stoic's precious feelings of selfrespect.

Cæsar knew by running up the figure of the dead in his commentaries on the Gallic wars he was appealing in the most moving way for popularity to the ferocity of the Roman mob. Galen himself was physician to the gladiators in Pergamum. As in secular literature so in professional works in medicine we seek in vain for any evidences of pity and compassion. They must have had them in some degree for we have them and they were as human if not as humane as we. It is not an integral part of the germ plasm of human nature to pity the weak and succor the needy. It is a somatic graft from an intellectual evolution. We easily brush it aside and can be as beastly as they, more beastly than the beasts. The beasts only kill for food not for sport and the excitement of adventure. It was not the fashion for the human beast to be kind in the time of Galen. It is the fashion now despite the decline in religious feeling, but it had its beginnings in the intellectual changes of the early phases of social organization as well as in the happening on Calvary a hundred years before Galen's birth. It was influenced, too, in the Roman empire, by the gradual increase in the number of slaves of education and ability in the ancient world. The enfranchised slave and the freedman had memories deep in their souls which told for social revolution and the success of a new religion. If cruelty lingered in the world of Galen undiminished and still unmodified by the rise of a new religion on a ground prepared for it, partly by changes in the methods of thought and partly by the political and social changes of the west, we find superstition and the mysticism of primitive life more firmly rooted in the East, for some reason not well understood, another factor in the preparation of the ground for the new faith and this still more plainly we take note of in the works of Galen (29), the Asiatic Greek. On one of its manifestations hung the fate of Galen's profession in life. Though trained for pure philosophy by a father, who was not only a philosopher but a learned man, the latter's dream told him that his son must study medicine.

This Galen alludes to many times (30). It was hardly due to this so much as to his own mysticism and to the mysticism of the East generally that Galen was more devoted to dreams than Hippocrates. There is a spurious book in the Hippocratic Corpus tacked on to another treatise, *The Regimen*, which is as foolish as anything in Galen. Indeed there is no reason why Cos, so near to the mainland, should not have been as open to orientalisms as the mainland of Asia Minor, except for differences in the extension of the hegemony of oriental despotisms which visited Cnidos at the formative period more heavily than the Isle of Cos, where tradition has it Hippocrates passed his early life under the tutelage of the priesthoods of Æsculapius, hereditary in his family.

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9. *SUETONIUS: De vita Cæsarum*, ed. Teubner. Divus Julius, 42, 2.
10. *Ibid: Divus Augustus*, 42, 3.
11. *Epistularum Plinii et Trajani*, V (iv).
12. *Cornelii Taciti—Ab excessu Augusti* IV, 3, ed. Teubner. C. Plinii, Secundi Naturalis Historiæ Lib. xxix, cap. I, sec. 8, ed. Sillig.
13. *GALEN: On Antidotes*, Lib. I, xiv, p. 4.
14. *Idem: Vol. v*, p. 423, and vol. iii, p. 395 (sec 3).
15. *GALEN: Concerning the Way of Preserving Health*, Liber V, cap. I (vi, 309).
16. *On the Order of His Own Books to Eugenius* xix, p. 59).
17. *On His Own Books* (xix, 40).
18. *Commentary on the Humors of Hippocrates* (xvi, p. 324).
19. *On the Good and Bad Humors of the Food* (vi, p. 755).
20. *Concerning the Way of Preserving Health*. Libri VI (vi, 424).
21. *Differences in the Pulse*, Liber II (vii, 587).
22. *The Palace of Odysseus*, *American Journal of Archaeology*, vol. xxiii, 3, 4, 1919.
23. *GALEN: Concerning Antidotes*, Liber I (xiv, p. 22).
24. *GALEN: Places Affected*, Liber III, 3 (viii, 144).
25. *FARRAR, F. W.: Lives of the Fathers*, two vols, Black, 1907.
26. *C. Plinii Cæcili Secundi Epistularum*, Libri Epist., Plini et Traiani, 96-97, ed. Teubner, p. 231.
27. *GALEN: On the Differences in the Pulse*, Lib. II, cap. IV, and Lib. III, cap. III (viii, 579 and 637).
28. *GALEN: On the Recognition and Treatment of Diseases of the Mind* (v, p. 58).
29. *Diagnosis from Dreams* (vi, p. 832).
30. *On Methods of Treatment*, Liber IX, cap. IV (x, 609). *Commentary on the Humors of Hippocrates*, II, ii (xvi, 222). *On the Order of His Own Books to Eugenianus* (xix, 59).

[NOTE.—The references to the works of Galen indicate the Kühn edition, the Roman notation for the volume, the Arabic for the page.]

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The Man Galen and His Times

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In the first section (1) of this account of the times of Galen, some allusion was made to the possible effect of Christianity upon him. At least the environment in which our faith took root has, I think, left its impress on his works.

It was at Smyrna in the time of the early Christian martyrdoms that he received a part of his education, both philosophical and medical. There he studied with Pelops and with Albinos the Platonist and with the Stoic Philopator (2) having also studied at Pergamus under Gaius (3) or some pupil of his until, as the result of his father's dream, he deserted metaphysics and turned his attention to medicine. Beside these instructors of his youth he fell under the influence there of Stratoniceus, a disciple of the Hippocratic Sabinus (4) and of some follower of Aspasius, the peripatetic (5). Among his early instructors it is Pelops to whom he most frequently refers, who was a disciple of Numesianus (6), and to Quintus (7). In the house of Pelops he resided for a time, but Metwald (8) seems to think his medical education was almost entirely due to Quintus, the pupil of Marinus, but Galen also speaks of being much taken with the instruction of Heracianus at Alexandria (9). However, his acquaintance with previous medical literature as well as with that of his own time was too wide for him to be influenced exclusively by any one authority, living or dead, excepting Hippocrates whom he rarely contradicts. Wellmann (10) declares it is not so much Quintus as Rufus, the dogmatic of Alexandria, whom Galen follows. In reading Galen I have not got that impression, though if any one ever deserved the name of dogmatist it is Galen. He himself studied with Numesianus at Corinth (11). All these are names only for us but they serve to show the width of his preparation and the earnestness with which he entered upon his career. Of his student life at Corinth or at Smyrna or at Alexandria we have no details. From his account of his régime at home and at Rome we may well imagine it was that of an earnest and ardent student. It was in 151, just after his father's death, that he studied at Smyrna, but even before this he had written something on the anatomy of the uterus and the diseases of the eye and an exercise on the empirics, a sum-

mary apparently of a dispute between his teachers, Pelops and Phillipos. His assiduity never flagged and his health suffered from his labors until later he learned to regulate his regimen. It was his boast in later years that even in his youth he learned to correct his conduct and regulate his passions also (12), which, for a boy not out of his teens and handicapped in having for his father a man of wealth, even though a man of wisdom, was something to boast of. Marcus Aurelius was not so successful in the education of Commodus. It is interesting to observe the efficiency and the failures of the ancient stoicism in this training of youth. As usual the good and the evil the gods alone bestow peep through it all. We take note of his unctuousness in congratulating himself that he is not as other men in after life. This superiority he attributes to his nurture rather than to his nature, but his characteristics are quite in contrast to the nobility and the humility of the meditations of Marcus Aurelius. He seems quite as vain of his mental equipment as of his moral.

How much time he spent in Alexandria in contact with what was once all the world had to teach in anatomy and physiology is not at all known, though his seeking knowledge elsewhere also is in itself significant of the fact that the preeminent scientific activities at Alexandria had long since passed with the best of the Ptolemies. Ptolemy Physkon (171-167 B. C.), because of family quarrels, had once driven scholars and physicians out of Alexandria and through this, as has happened before and since in the course of history, as much as through the gradual invasion of knowledge, the arts and sciences were scattered throughout all Hellas, according to Athenæus, and in the time of Strabo (66 B. C.) there arose a second school of Herophilean anatomy in Asia Minor (13). We infer he was at home when his father died. Despite the latter being something of a dietitian we learn that his death followed the injudicious eating of some fruit, and Galen himself at the time twenty-one years old was sick in the same way (14). He had evidently long since begun the study of his profession and was perhaps even then engaged in its practice. He was subsequently a student in Alexandria (15) and when he returned

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home he had to learn the properties of medicaments peculiar to his own territory (16). It seems that his period of preparatory study was a long one away from home, but it is not certain where he was for the longest part of the ten years he seems to have devoted to it, though as a matter of fact he never ceased from being a student engaged in research in his art. Although the reference to Alexandria and the Alexandrian anatomy and its authors are frequent and there seems no doubt of his residence and perhaps of more than one visit there, it does not appear how long his stay was or how much, if any, his experience with human dissection was. It is doubtful if he ever did more with the human subject than study its bony structure (17), but evidently his other researches there were extensive. When he returned to his own country he was twenty-eight years old and we infer he had been long absent. Intending to devote himself to surgery he was intrusted a year later by the pontifex of the gladiators at Pergamus with the supervision of their health, their illnesses and their wounds (18). It was the duty of the pontifices to procure and organize them into a company. Rich men like Atticus, the friend of Cicero (19), sometimes bought gladiators, slaves for the most part at that time, and hired them out for the games. By the time of Galen it was quite a business in the world. Gladiators were transferred from place to place, from company to company, like baseball players or actors under contract. In Pergamum the shows were given in the summer and Galen had to treat their wounds, so his experience was largely surgical when he went to Rome.

We get a pretty good idea (20) of the subsequent course of his life until he was over sixty, but there is some confusion and some gaps in it which seem impossible to overcome. He speaks (21) as though he were a practitioner of Pergamum and Rome but a stranger neither to Alexandria or Athens. In his thirty-fourth year he first went to Rome, where he remained three or four years, apparently, and if he returned from Alexandria when he was twenty-eight, he must have practised five or six years in Pergamum. We do not learn why he left the provinces for the capital. All roads then led to Rome. There he acquired much reputation and made many enemies. He longed, because of the latter misfortune, he gives us to understand, to return to his old home. He does not definitely say how long his first stay in Rome extended. A certain coyness falls over his pages (22) when he speaks of leaving it the first time. His first stay at Rome was about four years and Ilberg (23) reckons that from 164 to 168 A. D. On account of the plague and for other reasons he went back to Pergamum, but returned to Rome in 169, eluding Marcus Aurelius's invitation to serve in the army. As to this first rather precipitous retreat from the city, disgust, he says, with the life at Rome, with the envy of himself by his fellowmen and a disinclination for the honors he tells us he won, are the ostensible reasons, but a suspicion of something else shines through what he says. He seems to have been dodging conscription into the army, or perhaps only dodging the plague as Kühn says in his preface.

He writes a description of how much he was

sought after by the mighty. Knowing they had it in mind to draft him, he begged them to delay his appointment to official duties in the army thinking it would interfere with his plans for returning home. As soon as the war was over in Bithynia he left the city by stealth and went to Brundisium, whence he could take ship for Dyrrachium and thus escape from the soldiers they might send after him. It does not appear whether the soldiers caught him or not, though presumably he got away safely for the time, but the arm of Rome reached everywhere. The only escape from it was death. Lucius the brother and colleague in the empire with Marcus Aurelius, called upon him to accompany the army in its campaigns against the Germans on the Danube, but in 169, Galen being close on forty, Lucius died. Nevertheless, following that or subsequently or perhaps on more than one campaign he served in the field with Marcus Aurelius. At one time Galen fled from the armies in the train of his master to escape the plague in Aquileia (24). The first time he served with him at any rate, the emperor's antidote mixer dying (25), for from these accounts it seems Marcus Aurelius contemned death chiefly in his *Meditations*, Galen was appointed to the office in immediate attendance on his majesty. We infer that before this he was only one of the army doctors, unwillingly dragged into the service, but was known by reputation to men in high command. He evidently acquired much credit with the emperor and he prevailed on him to free him from army duties, so distasteful to him, and even to provide a place for him of honor and emolument, where he would be less annoyed by jealous competitors in the profession.

Since he found Rome so hostile to his genius he was appointed to medical attendance upon the boy Commodus and permitted to dwell near him in the country outside of Rome, perhaps until Marcus Aurelius died in 180 B. C., where he found ample time and leisure for literary work (26). This admission to imperial favor he apparently owed to an official by the name of Boethus, who introduced him to Septimius Severus, not the one afterwards emperor, but said to have been a son in law of Marcus Aurelius. It is impossible definitely to establish the chronology of the different periods of his activity in Rome. There were three of them at least. Reckoning from various figures, some of them already alluded to, and comparing them both with the incidents he tells us of his own life and with known dates in history, he could hardly have been in Rome more than four or five years the first time, probably less. It is astonishing he should in that time have formed such important connections in high life at court, though he may have had time to make enemies in his profession. When he returned from the army and acted as physician to the young Commodus, after being in medical attendance on the emperor, doubtless all doors were open to him at Rome and by that time he was as much hated for his worldly success as before for his disagreeable personality. The second time he says he stayed three years, perhaps going into the city under the protection of the court when the emperor returned. He forsook Rome the second time and this time in order again to escape from

the plague (?). This he relates with no sign that such conduct for a doctor in his day was considered disgraceful. It does not appear how long he remained away, probably not long, and when he returned Marcus Aurelius was still reigning. The latter dying in 180 he was in favor still with Commodus and was alive and probably, as we have seen, physician to Septimius Severus (27), who reigned from 193 to 211. The extent of his writings in themselves indicate he lived a very long life. Even if he died in the last year of Severus's reign he must have been eighty and there is no reason to suppose he died at an earlier period, but there is no proof positive beyond the book to Piso, that he lived even in the reign of Severus, beginning in 193 A. D.

Kühn, however, is disposed to think that he lived at least until thirty years after the death of Lucius Verus in 169 A. D., because it was at that time apparently he mixed the antidote for Marcus Aurelius. In the treatise on antidotes (28) he seems to say that Severus, nearly thirty years after he had prepared the medicine for the great emperor, requested that he should mix a similar one for him. If he did this for Marcus Aurelius at a later date than that of his first attendance upon him, though the inference does not support this, his age at the time of writing the book is correspondingly lengthened. Many legends, having their origin apparently in the Middle Ages, prolong his life beyond that for which there is any indication in his writings. If he referred (*l. c.* p. 5) to the making of the ointment at the end of Marcus's reign and not to the antidote, that would lengthen his life at least until 210. He may indeed have lived that long but in all probability he is referring to the incident when he especially mentions making an antidote at his first attendance, shortly after the death of Lucius Verus. On this evidence we may say he lived at least until he was seventy or thereabouts and of course he may have lived long after he wrote *On the Antidotes*.

During his student days and perhaps at other times we find him in the cranky vessels of the period ploughing the waters which wash the shores and flow around the islands of the eastern Mediterranean in search of vegetable and metallic drugs, thus to be sure he had the best that enterprise and energy could procure, without trusting the representations of the dishonest dealers who thronged the drug markets. Among other things he carried home with him was copper powder from the furnaces of Cyprus. Even before he went to Rome at all it would seem that his experience with the world had by that time been sufficient to have made him careful to enter more diplomatically upon the new field. The pet of wealth and fashion at Pergamum evidently found an unexpectedly hostile reception at Rome. His acquaintance with the high society of Bithynia, his familiarity with the stage door of the gladiatorial arena, one would have thought, might have tempted him before he went thither to ways of riotous living. We find him referring to these diversions which have so often wrecked the most promising career when entering upon a more cosmopolitan field of activity, in a way that shows at least worldly wisdom of another kind.

"Some of those who seemed to me to love me personally often complain that since I have become more addicted to earnest study of the truth I have become of no use to them or to myself. Leaving off my great ardor in its pursuit, I should go around mornings greeting people and in the evening dine with the mighty. To be respected for studious accomplishments, to become skilful in them, even to acquire gratitude by them is of no help in the profession, for it is not from these that those judge who spend all the day in different pursuits. Those succeed who are occupied indeed in the morning with greetings but who afterwards divert themselves in the forum, at the trials in crowds, with the mountebanks, and with the still larger crowds at the chariot races, with dicing, whoring, bathing, drinking, eating, or wallowing in other pleasures innumerable. In the evenings they are collected together at the clubs, where after they have filled themselves with wine, the harp or zither or other musical instrument goes the rounds. It used to be the good custom to be acquainted with these; indeed not to know how to play them was disgraceful, but there is no talk of a worthy kind such as the ancients used to practise and enjoy in the olden time at the clubs nor any other decent thing, but they are earnest in excelling in the size of their potations, so that among them not he is thought best, who is skilful on several musical instruments or is practised in philosophical discourse, but he who has emptied the most and the largest cups. Next morning they seem still drunk and some smell so of wine one would think they did nothing else. Ruined in health they call in, not the best physicians at all, but those who have been the companions of their revels" (29). This highly moral young man, on the contrary, so moved the gratitude of patients when he first came to Rome they thought his voice that of the golden Apollo, speaking from his tripod (30), he said.

He expresses a surprise we do not feel, that even his more properly behaved new acquaintances in the profession soon came to lie in wait for him to trip him up. They were an ignorant lot, he said. "Rumors filled the city that just as I had surpassed older men in much else, so I had now written much on anatomy, which was in no way proved. I laughed at them and held them in contempt" (31). He declares some report cases they have never seen, even in their dreams (32), and one might as well prophesy to an ass as talk to some of these men. It was doubtless difficult to hide such sentiments as these, which we can gather still more abundantly if we seek their exposition in the various books, written at different times, but entertained constantly as part of the nature of the man. They could hardly have made him popular, to say the least, when they came to listen to him at the Temple of Peace, "the most distinguished physicians taking the first seats and beginning to question me without loss of time" (33). That he overcame such serious handicaps and carried all before him, which we have, however, from him only, is a testimony to his talent. He devoted himself to practise and followed the city customs of his profession. He says (34) in speaking of an ointment, recommended by the surgeon, Meges Sidonius, that if he were in Asia he would try to get some

experience with it, but in Rome the treatment of ulcers was left to the surgeons. The oculists he also found jealous, so he preferred for prudential reasons to write privately about diseases affecting the eyes or anything which is properly surgical. It was only, therefore, in the uncontrollable impulses of his nature that his worldly prudence forsook him.

Not only because we get a glimpse of him in the streets of Rome but because he tells us something we are likely to forget about the history of surgery, it is worth while to note what he says about the ligature of arteries, too often thought of as a much later acquisition in the art (35). This was done when bleeding was practised from the arteries of the temples. We see him on his way down the Via Sacra in search of the proper kind of material for it.

"There are some ligatures for this purpose, not readily becoming putrescent, such as at Rome are called Gajetanian (Cadiz?), brought from Gaul, and especially in the Via Sacra, which leads from the temple to the square. But if you are practising in any other city, those which are called silken should be bought, though large quantities of the others can be bought at Rome very cheaply. Those that decay easily, such as are found in country places, quickly fall away from the vessels. In Rome and also in other places under the rule of Rome, rich women make use of these silken cords" (36).

His provincial rawness and perhaps the crassness of his behaviour and the imprudence of his tongue to some extent wore off in his new environment. At any rate he did win friends and his talents attracted attention in high places. His triumph in prognosis in the case of Eudemus, not the poisoner of course in the time of Tiberius who was the lover of Livia, but evidently much later a professional brother high in the esteem of his fellow practitioners, marked him as a man of talent and learning. Eudemus, like Asclepiades before him, was evidently a fellow countryman of Galen and probably had known his father. We get here a hint how the wily and voluble Greeks from the Asiatic provinces flocked to Rome under the empire and made their way there. Perhaps he had some reason for thinking that the dislike of the chief physicians, when he first came to Rome and thus triumphed, was due to envy and he swore as soon as his native land was no longer the seat of war he would go back to it. The things he says Eudemus told him about his new colleagues were the worst possible. He got into trouble with the stoics and with the peripatetics too, beside the troubles he says the brilliancy of his professional attainments made for him. Eudemus became his warm friend and admirer and so did Glaucon, the philosopher (37), who Ilberg thinks afterward became his assistant being much impressed by a wonderful diagnosis Galen had made, due to his slyness and his quick apprehension more than to his medical knowledge. To the latter, on his own statement (38), were due the cures which his astonished fellow practitioners came to know of, especially perhaps that of a noble Roman lady. We appreciate how helpful to the young practitioner such a lucky case is. He was a veritable sleuth hound at smelling out evidence. Per-

haps it was Boethus's wife who was the noble lady he cured. It was Boethus's boy at any rate, Cyrellum, who deceived his mother so artfully but whose surreptitious enjoyment of jam (?) was revealed to the matchless inquisitory powers of Galen. The passage (39) is a very amusing one, full of humor in itself and abounding in Galen's vaunts, who apparently does not appreciate the humor at all. There is another story in the same vein, which copies the pulse story, so often attributed to Hippocrates but to several other physicians as well besides being found in Herodotus and Lucan attributed to still others. A lady was in love with Pylades, the dancer, and Galen found out her secret from her pulse (40). Again elsewhere he tells another tale, one of malin-gering, in which he outwitted a slave (41) faking a sore knee in the face of a long journey afoot.

I have alluded to his medical charge of Commodus when that young hopeful was being educated by Pitholaos. Galen tells a story of his care of the boy while he was suffering from a sore throat (42). The empress, Faustina, a lady blindly and fondly loved by the great Cæsar, the best and wisest of men, taking Galen by the hand in the presence of rival doctors, green with envy doubtless, told them he had overcome them not in words only but in practise. "Here are more enemies for me," said the poor man to himself after he had accompanied her to her chariot. He also tells of a night call he had to the emperor himself, probably at a later period and he recounts with glee his victory over his professional enemies, "than which nothing more admirable ever happened to me" (43). He assured this mighty monarch and revered philosopher that he was not in for a fit of sickness, but had eaten something which disagreed with him, a thing sedentary philosophers, Celsus thinks, were very likely to do, and perhaps emperors too. The other medical attendants had gravely shaken their heads, but the emperor said he was the only one physician for him. If this is not the acme of professional glory I do not know what is.

If there were any he especially singled out for enmity among the sects of medical practitioners at Rome it was the Erasistrateans, albeit he seems to have been an Ishmaelite, with his hand against every one and every one's against him. He attacked them most bitterly on the score of venesection, but even that a man long ago dead should enjoy such honor as Galen found for Erasistratus at Rome seemed to excite the gall of the aspirant to new laurels. Galen has him much on his mind. We find Celsus entertaining much respect for his memory. Even Galen has occasionally to pay tribute to his anatomical observations and the power of his intellect, but he wrote books against him and his followers on phlebotomy (44), which Erasistratus had earnestly condemned on theoretical grounds and Galen as vivaciously commends. In his opinion he smote them root and branch. It must be confessed blood flowed in torrents from the veins of the patients of the Sangrados for more than one thousand five hundred years until statistics or the slowly penetrating satire of the author of *Gil Blas* brought Erasistratus to his own again in practice.

It is difficult to quote from Galen's works pas-

sages relating to his personality without exhibiting his overweening and aggressive vanity. It is all pervading and irritating even to the reader today. In Cicero the grace of his style and the respectability if not the originality of his philosophical ideas, his broad humanity and his wide sympathy with the opinions of others, his catholicity of thought, things utterly foreign to Galen, make us forget he too was permeated by a self-esteem which makes him at times ludicrous to posterity as it made him disliked by those few of his contemporaries not enamored with his intellectual gifts; but it is otherwise with Galen. It is the keen perception of the problems of his profession and the indefatigable labor with which he attacks them, resulting apparently in some original contribution to the then existing knowledge of the anatomy and physiology of man, form for us the redeeming traits in the personal character of Galen, but it is very uncertain how much he received from his instructors and how much was due to his own research. We can scarcely doubt the latter was considerable, we can hardly believe it is as much as he would like us to infer. We know he pursued research with an adumbration of modern experimental methods of no mean order, especially in investigating the functions of the motor nerves. The animation of the same spirit carried him, we have seen, on distant and dangerous voyages. He sought not only the drugs and herbs well known to the medical science of the day but he investigated the myths of the poets and the scarcely more reliable tales of contemporary merchants and travelers. *Moly*, with which the fair Helen stimulated the young Telemachus in the *Odyssey*, he does not make out, if the name is a guide, to be of the character Homer gives it at all. It is a certain black root in the woods of Syria and Cappadocia with a milky flower "weakly warming, dissolving the humors and increasing the urine" (45).

In attempting to run down the story of some Lemnian earth having been mixed with goat's blood and thereby possessing magic or at least medicinal properties, he incidentally refers to a visit, among other places, to Cyprus to examine its metal (46) to Syria, "a part of Palestine" to inspect the bitumen and other things, to a pedestrian tour to Thrace and Macedonia and a futile attempt to find Lemnia in the Alexandrian Troad and finally to another more successful voyage, when he found at its origin the peculiar red Lemnian clay suitable also for making seals. There was always mystery and magic interest in seals and the kings and priests employed them in that part of their business habitually of old; now but a trace of it remains. Near the "phæstiada," whereby we are reminded of Phæstum in Crete and of its famous clay seals, but in the distant island of Lemnos, he located this much lauded earth "to the east and the west of Myrina," which had found its way to the drug markets at the seaports which were the gateways of Rome. His opinion of the Lemnian clay differed on the side of the rational from that of his brethren, but it was made up also of fables of his own as to its medicinal qualities, scarcely less wonderful to us than the tales which had excited his curiosity; for Galen too dabbled, moderately it is true, but much more extensively

than Hippocrates, in magic; only that he did not accept it unquestioningly is to his credit. Some one told Galen that by muttering an incantation one could kill a scorpion by spitting on it, but he knew this was wrong because he had killed a scorpion by spitting on it without an incantation. "I traveled in Lemnos, Cyprus and Syrian Palestine to increase my knowledge of drugs." He could not trust the dealers. Only the aloes one saw taken from the packs of the camels could one be sure were not adulterated (46a). He treasured in his house an excipient for salves and plasters his father had prepared in Bithynia when he was a boy.

Queer stories he heard on some of his travels, some matching, perhaps originating, the like tales in our day. One was of a man having eaten heartily of pork at an inn and finding a human finger among the bones. Fearing lest he also should be made up into pork, if the hosts became aware of his discovery, he fled, after vomiting, but he subsequently heard the inn keepers were arrested for slaughtering the human animal—the "long pig" Stevenson reports it is called in the South Seas. He repeats much that he had heard in various places and something of what he said he had himself verified as to matters which impugn either his understanding or his veracity or both, as in the scorpion story for instance and others (47).

Much has been said as to Galen never having dissected the human body. As I have intimated I doubt very much if this is strictly so. He says those physicians, who had opportunities in the German wars of dissecting the bodies of barbarians, contributed nothing to the knowledge of anatomy more than the cooks know (48). As he was for a time with the emperors on one or more of their campaigns against the Germans, he doubtless was at least familiar with the fact and may have practised it, but evidently his methods of anatomical investigations were for the most part limited to animals. Although his opportunities may have been limited and it was for this reason he depreciated dissection of the human body, elsewhere he speaks of the opportunity occasionally arising to dissect the abandoned dead bodies of robbers, so that he must have seen it done and perhaps practised it himself, though rarely.

It may have been because of his wide extended travels and numerous acquaintance throughout the Roman world, but at Rome too he had prospered greatly and there as elsewhere he had become a famous man. We wonder from this account he gives of himself that no more than a single secular mention is made of him in contemporary literature, for he would have us know his fame reached to the uttermost corners of the known world. "I received letters from Iberia and Celtica, from Asia and from Thrace, in which I was begged to send medicine to the writers," and he asserts he cured many people by this "distant treatment." This he related in a book he wrote on eye troubles (49), which he wrote for private circulation perhaps or possibly after he became so firmly established in favor that he dared to face the displeasure of the specialists at Rome.

There are so many passages bearing on the character of Galen that one wonders all the more that the rich mine of hints of the medical atmosphere at

Rome in his time has not been more assiduously worked out in the study of what he has left us, formidable as it is. There is scarcely another individual in antiquity who has left us such a coloring of life, all but two thousand years ago, unless it is Cicero in his correspondence. The latter writes with a matchless grace, which of course we poor grubbers in the fields of science have no reason to look for in the musty works of one of our brethren. He disarms criticism, but Galen no more disarms the criticism of the modern reader, when he writes of his own performances, than that of his contemporaries in his converse with them. One wonders, not so much that no one mentions him, except as a "muleshead," as that no one murdered him. In the exposition of the art of ancient medicine, however, he has written with astounding industry and, on the whole, with clarity if not elegance of style. At any rate no history of medicine is complete which does not deal thoroughly with what lies between the covers of his innumerable books and it will always be so.

In regard to his books (50) he says that Greek boys, in their education, were taught from the beginning to know the authorship of the books from the context and they did not have to depend on the title. Think in our day of a halfback or a short-stop with that sort of an education. He saw a bookseller throw aside a book as spurious in Sandalarium, a little place near Rome, labelled with his own name. So indifferent was he in this matter of titles that he had given to friends books he had written without title or name and they dying the books had passed into the hands of strangers at home and abroad who were delighted with them—others had themselves written his name on them. Some were written hastily. He tells us he dictated some of the books on phlebotomy hurriedly to a boy amanuensis as he was on the eve of departure for Ionia. Many were uncorrected. Some to which his name had been added were not his books at all and to some of the genuine books wrong titles had been given by others. When he went back home he found the three books he had written for Pelops. When he returned to Rome he found much confusion from this sort of thing. At this time he collected and put in permanent shape what he had taken from his teachers and what he had done for himself. With all this source of error it is remarkable that there are so few of the books collected under his name and remaining to us about which the reader has any doubt. Once acquainted with Galen and his style, whether one is a Greek boy or not, there is no mistaking him. Many of his books were stored in the Temple of Peace and when this was destroyed by fire some, of which there were no other copies, were burned (51). The emperor was indulgent to him and he wrote a second time his *Utility of the Parts* and his *Commentaries on Hippocrates and Plato*, two of his most important books. Taking him as he was personally and with what he has left behind him he is a unique figure. There is not his like in professional or lay literature and though there is almost no contemporary account of him, he has conferred on posterity a priceless legacy and he has won for himself a deathless fame.

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