VESALIUS THE ANATOMIST.*

I CANNOT begin a sketch of the life of this great man better than by trying to describe a scene so picturesque, so tragic in the eyes of those who are wont to mourn over human follies, so comic in the eyes of those who prefer to laugh over them, that the reader will not be likely to forget either it or the actors in it.

It is a darkened chamber in the College of Alcala, in the year 1562, where lies, probably in a huge four-post bed, shrouded in stifling hangings, the heir-apparent of the greatest empire in the then world, Don Carlos, only son of Philip II. and heir-apparent of Spain, the Netherlands, and all the Indies. A short sickly boy of sixteen, with a bull head, a crooked shoulder, a short leg, and a brutal temper, he will not be missed by the world if he should die. His profligate career seems to have brought its own punishment. To the scandal of his father, who tolerated no one's vices save his own, as well as to the scandal of the university authorities of Alcala, he has been scouring the streets at the head of the most profligate students, insulting women, even ladies of rank, and amenable only to his

* This lecture was given at Cambridge in 1869.

lovely young stepmother, Elizabeth of Valois, Isabel de la Paz, as the Spaniards call her, the daughter of Catherine de Medicis, and sister of the King of France. Don Carlos should have married her, had not his worthy father found it more advantageous for the crown of Spain, as well as more pleasant for him, Philip, to marry her himself. Whence came heart-burnings, rage, jealousies, romances, calumnies, of which two last—in as far at least as they concern poor Elizabeth—no wise man now believes a word.

Going on some errand on which he had no business—there are two stories, neither of them creditable nor necessary to repeat—Don Carlos has fallen downstairs and broken his head. He comes, by his Portuguese mother's side, of a house deeply tainted with insanity; and such an injury may have serious consequences. However, for nine days the wound goes on well, and Don Carlos, having had a wholesome fright, is, according to Doctor Olivarez, the *medico de camara*, a very good lad, and lives on chicken broth and dried plums. But on the tenth day comes on numbness of the left side, acute pains in the head, and then gradually shivering, high fever, erysipelas. His head and neck swell to an enormous size; then comes raging delirium, then stupefaction, and Don Carlos lies as one dead.

A modern surgeon would, probably, thanks to that training of which Vesalius may be almost called the father, have had little difficulty in finding out what was the matter with the luckless lad, and little difficulty in removing the evil, if it had not gone too far. But the Spanish physicians were then, as many of them are said to be still, as far behind the world in surgery as in other things; and indeed surgery itself was then in its infancy, because men, ever since the early Greek

schools of Alexandria had died out, had been for centuries feeding their minds with anything rather than with facts. Therefore the learned morosophs who were gathered round Don Carlos's sick bed had become, according to their own confession, utterly confused, terrified, and at their wits' end.

It is the 7th of May, the eighteenth day after the accident, according to Olivarez's story: he and Dr Vega have been bleeding the unhappy prince, enlarging the wound twice, and torturing him seemingly on mere guesses. "I believe," says Olivarez, "that all was done well: but as I have said, in wounds in the head there are strange labyrinths." So on the 7th they stand round the bed in despair. Don Garcia de Toledo, the prince's faithful governor, is sitting by him, worn out with sleepless nights, and trying to supply to the poor boy that mother's tenderness which he has never known. Alva, too, is there, stern, self-compressed, most terrible, and yet most beautiful. He has a God on earth, and that is Philip his master; and though he has borne much from Don Carlos already, and will have to bear more, yet the wretched lad is to him as a son of God, a second deity, who will by right divine succeed to the inheritance of the first; and he watches this lesser deity struggling between life and death with an intensity of which we, in these less loyal days, can form no notion. One would be glad to have a glimpse of what passed through that mind, so subtle and so ruthless, so disciplined and so loyal withal: but Alva was a man who was not given to speak his mind, but to act it.

One would wish, too, for a glimpse of what was passing through the mind of another man, who has been daily in that sick chamber, according to Olivarez's

statement, since the first of the month: but he is one who has had, for some years past, even more reason than Alva for not speaking his mind. What he looked like we know well, for Titian has painted him from the life—a tall, bold, well-dressed man, with a noble brain, square and yet lofty, short curling locks and beard, an eye which looks as though it feared neither man nor fiend—and it has had good reason to fear both—and features which would be exceeding handsome, but for the defiant snub-nose. That is Andreas Vesalius, of Brussels, dreaded and hated by the doctors of the old school—suspect, moreover, it would seem to inquisitors and theologians, possibly to Alva himself; for he has dared to dissect human bodies; he has insulted the mediævalists at Paris, Padua, Bologna, Pisa, Venice, in open theatre; he has turned the heads of all the young surgeons in Italy and France; he has written a great book, with prints in it, designed, some say, by Titian —they were actually done by another Netherlander, John of Calcar, near Cleves—in which he has dared to prove that Galen's anatomy was at fault throughout, and that he had been describing a monkey's inside when he had pretended to be describing a man's; and thus, by impudence and quackery, he has wormed himself—this Netherlander, a heretic at heart, as all Netherlanders are, to God as well as to Galen—into the confidence of the late Emperor Charles V., and gone campaigning with him as one of his physicians, anatomising human bodies even on the battle-field, and defacing the likeness of Deity; and worse than that, the most religious King Philip is deceived by him likewise, and keeps him in Madrid in wealth and honour; and now, in the prince's extreme danger, the king has actually sent for him, and bidden him try

his skill—a man who knows nothing save about bones and muscles and the outside of the body, and is unworthy the name of a true physician.

One can conceive the rage of the old Spanish pedants at the Netherlander's appearance, and still more at what followed, if we are to believe Hugo Bloet of Delft, his countryman and contemporary.* Vesalius, he says, saw that the surgeons had bound up the wound so tight that an abscess had formed outside the skull, which could not break: he asserted that the only hope lay in opening it; and did so, Philip having given leave, "by two cross-cuts. Then the lad returned to himself, as if awakened from a profound sleep, affirming that he owed his restoration to life to the German doctor."

Dionysius Daza, who was there with the other physicians and surgeons, tells a different story: "The most learned, famous, and rare Baron Vesalius," he says, advised that the skull should be trepanned; but his advice was not followed.

Olivarez's account agrees with that of Daza. They had opened the wounds, he says, down to the skull before Vesalius came. Vesalius insisted that the injury lay inside the skull, and wished to pierce it. Olivarez spends much labour in proving that Vesalius had "no

* I owe this account of Bloet's—which appears to me the only one trustworthy—to the courtesy and erudition of Professor Henry Morley, who finds it quoted from Bloet's "Acroama," in the "Observationum Medicarum Rariorum," lib. vii., of John Theodore Schenk. Those who wish to know several curious passages of Vesalius's life, which I have not inserted in this article, would do well to consult one by Professor Morley, "Anatomy in Long Clothes," in "Fraser's Magazine" for November, 1853. May I express a hope, which I am sure will be shared by all who have read Professor Morley's biographies of Jerome Carden and of Cornelius Agrippa, that he will find leisure to return to the study of Vesalius's life; and will do for him what he has done for the two just-mentioned writers?

great foundation for his opinion:" but confesses that he never changed that opinion to the last, though all the Spanish doctors were against him. Then on the 6th, he says, the Bachelor Torres came from Madrid, and advised that the skull should be laid bare once more; and on the 7th, there being still doubt whether the skull was not injured, the operation was performed —by whom it is not said—but without any good result, or, according to Olivarez, any discovery, save that Vesalius was wrong, and the skull uninjured.

Whether this second operation of the 7th of May was performed by Vesalius, and whether it was that of which Bloet speaks, is an open question. Olivarez's whole relation is apologetic, written to justify himself and his seven Spanish colleagues, and to prove Vesalius in the wrong. Public opinion, he confesses, had been very fierce against him. The credit of Spanish medicine was at stake: and we are not bound to believe implicitly a paper drawn up under such circumstances for Philip's eye. This, at least, we gather: that Don Carlos was never trepanned, as is commonly said; and this, also, that whichever of the two stories is true, equally puts Vesalius into direct, and most unpleasant, antagonism to the Spanish doctors.*

But Don Carlos still lay senseless; and yielding to popular clamour, the doctors called in the aid of a certain Moorish doctor, from Valencia, named Priotarete, whose unguents, it was reported, had achieved many miraculous cures. The unguent, however, to the

* Olivarez's "Relacion" is to be found in the Granvelle State Papers. For the general account of Don Carlos's illness, and of the miraculous agencies by which his cure was said to have been effected, the general reader should consult Miss Frere's "Biography of Elizabeth of Valois," vol. i. pp. 307–19.

horror of the doctors, burned the skull till the bone was as black as the colour of ink; and Olivarez declares he believes it to have been a preparation of pure caustic. On the morning of the 9th of May, the Moor and his unguents were sent away, "and went to Madrid, to send to heaven Hernando de Vega, while the prince went back to our method of cure."

Considering what happened on the morning of the 10th of May, we should now presume that the second opening of the abscess, whether by Vesalius or someone else, relieved the pressure on the brain; that a critical period of exhaustion followed, probably prolonged by the Moor's premature caustic, which stopped the suppuration: but that God's good handiwork, called nature, triumphed at last; and that therefore it came to pass that the prince was out of danger within three days of the operation. But he was taught, it seems, to attribute his recovery to a very different source from that of a German knife. For on the morning of the 9th, when the Moor was gone, and Don Carlos lay seemingly lifeless, there descended into his chamber a *Deus e machinâ*, or rather a whole pantheon of greater or lesser deities, who were to effect that which medical skill seemed not to have effected. Philip sent into the prince's chamber several of the precious relics which he usually carried about with him. The miraculous image of the Virgin of Atocha, in embroidering garments for whom, Spanish royalty, male and female, has spent so many an hour ere now, was brought in solemn procession and placed on an altar at the foot of the prince's bed; and in the afternoon there entered, with a procession likewise, a shrine containing the bones of a holy anchorite, one Fray Diego, "whose life and miracles," says Olivarez,

"are so notorious:" and the bones of St. Justus and St. Pastor, the tutelar saints of the university of Alcala. Amid solemn litanies the relics of Fray Diego were laid upon the prince's pillow, and the sudarium, or mortuary cloth, which had covered his face, was placed upon the prince's forehead.

Modern science might object that the presence of so many personages, however pious or well intentioned, in a sick chamber on a hot Spanish May day, especially as the bath had been, for some generations past, held in religious horror throughout Spain, as a sign of Moorish and Mussulman tendencies, might have somewhat interfered with the chances of the poor boy's recovery. Nevertheless the event seems to have satisfied Philip's highest hopes; for that same night (so Don Carlos afterwards related) the holy monk Diego appeared to him in a vision, wearing the habit of St. Francis, and bearing in his hand a cross of reeds tied with a green band. The prince stated that he first took the apparition to be that of the blessed St. Francis; but not seeing the stigmata, he exclaimed, "How? Dost thou not bear the marks of the wounds?" What he replied Don Carlos did not recollect; save that he consoled him, and told him that he should not die of that malady.

Philip had returned to Madrid, and shut himself up in grief in the great Jeronymite monastery. Elizabeth was praying for her step-son before the miraculous images of the same city. During the night of the 9th of May prayers went up for Don Carlos in all the churches of Toledo, Alcala, and Madrid. Alva stood all that night at the bed's foot. Don Garcia de Toledo sat in the arm-chair, where he had now sat night and day for more than a fortnight. The good

preceptor, Honorato Juan, afterwards Bishop of Osma, wrestled in prayer for the lad the whole night through. His prayer was answered: probably it had been answered already, without his being aware of it. Be that as it may, about dawn Don Carlos's heavy breathing ceased; he fell into a quiet sleep; and when he awoke all perceived at once that he was saved.

He did not recover his sight, seemingly on account of the erysipelas, for a week more. He then opened his eyes upon the miraculous image of Atocha, and vowed that, if he recovered, he would give to the Virgin, at four different shrines in Spain, gold plate of four times his weight; and silver plate of seven times his weight, when he should rise from his couch. So on the 6th of June he rose, and was weighed in a fur coat and a robe of damask, and his weight was three arrobas and one pound—seventy-six pounds in all. On the 14th of June he went to visit his father at the episcopal palace; then to all the churches and shrines in Alcala, and of course to that of Fray Diego, whose body it is said he contemplated for some time with edifying devotion. The next year saw Fray Diego canonised as a saint, at the intercession of Philip and his son; and thus Don Carlos re-entered the world, to be a terror and a torment to all around him, and to die—not by Philip's cruelty, as his enemies reported too hastily indeed, yet excusably, for they knew him to be capable of any wickedness—but simply of constitutional insanity.

And now let us go back to the history of "that most learned, famous, and rare Baron Vesalius," who had stood by and seen all these things done; and try if we cannot, after we have learned the history of his early life, guess at some of his probable meditations on

this celebrated clinical case; and guess also how those meditations may have affected seriously the events of his after life.

Vesalius (as I said) was a Netherlander, born at Brussels in 1513 or 1514. His father and grandfather had been medical men of the highest standing in a profession which then, as now, was commonly hereditary. His real name was Wittag, an ancient family of Wesel, on the Rhine, from which town either he or his father adopted the name of Vesalius, according to the classicising fashion of those days. Young Vesalius was sent to college at Louvain, where he learned rapidly. At sixteen or seventeen he knew not only Latin, but Greek enough to correct the proofs of Galen, and Arabic enough to become acquainted with the works of the Mussulman physicians. He was a physicist too, and a mathematician, according to the knowledge of those times; but his passion—the study to which he was destined to devote his life—was anatomy.

Little or nothing (it must be understood) had been done in anatomy since the days of Galen of Pergamos, in the second century after Christ, and very little even by him. Dissection was all but forbidden among the ancients. The Egyptians, Herodotus tells us, used to pursue with stones and curses the embalmers as soon as they had performed their unpleasant office; and though Herophilus and Erasistratus are said to have dissected many subjects under the protection of Ptolemy Soter in Alexandria itself: yet the public feeling of the Greeks as well as of the Romans continued the same as that of the ancient Egyptians; and Galen was fain—as Vesalius proved—to supplement his ignorance of the human frame by describing that

of an ape. Dissection was equally forbidden among the Mussulmans; and the great Arabic physicians could do no more than comment on Galen. The same prejudice extended through the Middle Age. Medical men were all clerks, *clerici*, and as such forbidden to shed blood. The only dissection, as far as I am aware, made during the Middle Age was one by Mundinus in 1306; and his subsequent commentaries on Galen—for he dare allow his own eyes to see no more than Galen had seen before him—constituted the best anatomical manual in Europe till the middle of the fifteenth century.

Then, in Italy at least, the classic Renaissance gave fresh life to anatomy as to all other sciences. Especially did the improvements in painting and sculpture stir men up to a closer study of the human frame. Leonardo da Vinci wrote a treatise on muscular anatomy. The artist and the sculptor often worked together, and realised that sketch of Michael Angelo's in which he himself is assisting Fallopius, Vesalius's famous pupil, to dissect. Vesalius soon found that his thirst for facts could not be slaked by the theories of the Middle Age; so in 1530 he went off to Montpellier, where Francis I. had just founded a medical school, and where the ancient laws of the city allowed the faculty each year the body of a criminal. From thence, after becoming the fellow-pupil and the friend of Rondelet, and probably also of Rabelais and those other luminaries of Montpellier, of whom I spoke in my essay on Rondelet, he returned to Paris to study under old Sylvius, whose real name was Jacques Dubois, *alias* Jock o' the Wood; and to learn less—as he complains himself—in an anatomical theatre than a butcher might learn in his shop.

Were it not that the whole question of dissection is one over which it is right to draw a reverent veil, as a thing painful, however necessary and however innocent, it would be easy to raise ghastly laughter in many a reader by the stories which Vesalius himself tells of his struggles to learn anatomy. How old Sylvius tried to demonstrate the human frame from a bit of a dog, fumbling in vain for muscles which he could not find, or which ought to have been there, according to Galen, and were not; while young Vesalius, as soon as the old pedant's back was turned, took his place, and, to the delight of the students, found for him—provided it were there—what he could not find himself;—how he went body-snatching and gibbet-robbing, often at the danger of his life, as when he and his friend were nearly torn to pieces by the cannibal dogs who haunted the Butte de Montfaucon, or place of public execution;—how he acquired, by a long and dangerous process, the only perfect skeleton then in the world, and the hideous story of the robber to whom it had belonged—all these horrors those who list may read for themselves elsewhere. I hasten past them with this remark—that to have gone through the toils, dangers, and disgusts which Vesalius faced, argued in a superstitious and cruel age like his, no common physical and moral courage, and a deep conscience that he was doing right, and must do it at all risks in the face of a generation which, peculiarly reckless of human life and human agony, allowed that frame which it called the image of God to be tortured, maimed, desecrated in every way while alive; and yet—straining at the gnat after having swallowed the camel—forbade it to be examined when dead, though for the purpose of alleviating the miseries of mankind.

The breaking out of war between Francis I. and Charles V. drove Vesalius back to his native country and Louvain; and in 1535 we hear of him as a surgeon in Charles V.'s army. He saw, most probably, the Emperor's invasion of Provence, and the disastrous retreat from before Montmorency's fortified camp at Avignon, through a country in which that crafty general had destroyed every article of human food, except the half-ripe grapes. He saw, perhaps, the Spanish soldiers, poisoned alike by the sour fruit and by the blazing sun, falling in hundreds along the white roads which led back into Savoy, murdered by the peasantry whose homesteads had been destroyed, stifled by the weight of their own armour, or desperately putting themselves, with their own hands, out of a world which had become intolerable. Half the army perished. Two thousand corpses lay festering between Aix and Fréjus alone. If young Vesalius needed "subjects," the ambition and the crime of man found enough for him in those blazing September days.

He went to Italy, probably with the remnants of the army. Where could he have rather wished to find himself? He was at last in the country where the human mind seemed to be growing young once more; the country of revived arts, revived sciences, learning, languages; and—though, alas! only for awhile—of revived free thought, such as Europe had not seen since the palmy days of Greece. Here at least he would be appreciated; here at least he would be allowed to think and speak: and he was appreciated. The Italian cities, who were then, like the Athenians of old, "spending their time in nothing else save to hear or to tell something new," welcomed the brave

young Fleming and his novelties. Within two years he was professor of anatomy at Padua, then the first school in the world; then at Bologna and at Pisa at the same time; last of all at Venice, where Titian painted that portrait of him which remains unto this day.

These years were for him a continual triumph; everywhere, as he demonstrated on the human body, students crowded his theatre, or hung round him as he walked the streets; professors left their own chairs —their scholars having deserted them already—to go and listen humbly or enviously to the man who could give them what all brave souls throughout half Europe were craving for, and craving in vain—facts. And so, year after year, was realised that scene which stands engraved in the frontispiece of his great book—where, in the little quaint Cinquecento theatre, saucy scholars, reverend doctors, gay gentlemen, and even cowled monks, are crowding the floor, peeping over each other's shoulders, hanging on the balustrades; while in the centre, over his "subject"—which one of those same cowled monks knew but too well—stands young Vesalius, upright, proud, almost defiant, as one who knows himself safe in the impregnable citadel of fact; and in his hand the little blade of steel, destined—because wielded in obedience to the laws of nature, which are the laws of God—to work more benefit for the human race than all the swords which were drawn in those days, or perhaps in any other, at the bidding of most Catholic Emperors and most Christian Kings.

Those were indeed days of triumph for Vesalius; of triumph deserved, because earned by patient and accurate toil in a good cause: but Vesalius, being but

a mortal man, may have contracted in those same days a temper of imperiousness and self-conceit, such as he showed afterwards when his pupil Fallopius dared to add fresh discoveries to those of his master. And yet, in spite of all Vesalius knew, how little he knew! How humbling to his pride it would have been had he known then—perhaps he does know now—that he had actually again and again walked, as it were, round and round the true theory of the circulation of the blood, and yet never seen it; that that discovery which, once made, is intelligible, as far as any phenomenon is intelligible, to the merest peasant, was reserved for another century, and for one of those Englishmen on whom Vesalius would have looked as semi-barbarians.

To make a long story short: three years after the publication of his famous book, "De Corporis Humani Fabrica," he left Venice to cure Charles V., at Regensburg, and became one of the great Emperor's physicians.

This was the crisis of Vesalius's life. The medicine with which he had worked the cure was China—Sarsaparilla, as we call it now—brought home from the then newly-discovered banks of the Paraguay and Uruguay, where its beds of tangled vine, they say, tinge the clear waters a dark-brown like that of peat, and convert whole streams into a healthful and pleasant tonic. On the virtues of this China (then supposed to be a root) Vesalius wrote a famous little book, into which he contrived to interweave his opinions on things in general, as good Bishop Berkeley did afterwards into his essay on the virtues of tar-water. Into this book, however, Vesalius introduced—as Bishop Berkeley did not—much, and

perhaps too much, about himself; and much, though perhaps not too much, about poor old Galen, and his substitution of an ape's inside for that of a human being. The storm which had been long gathering burst upon him. The old school, trembling for their time-honoured reign, bespattered, with all that pedantry, ignorance, and envy could suggest, the man who dared not only to revolutionise surgery, but to interfere with the privileged mysteries of medicine; and, over and above, to become a greater favourite at the court of the greatest of monarchs. While such as Eustachius, himself an able discoverer, could join in the cry, it is no wonder if a lower soul, like that of Sylvius, led it open-mouthed. He was a mean, covetous, bad man, as George Buchanan well knew; and, according to his nature, he wrote a furious book —"Ad Vesani calumnias depulsandas." The punning change of Vesalius into Vesanus (madman) was but a fair and gentle stroke for a polemic, in days in which those who could not kill their enemies with steel or powder, held themselves justified in doing so, if possible, by vituperation, calumny, and every engine of moral torture. But a far more terrible weapon, and one which made Vesalius rage, and it may be for once in his life tremble, was the charge of impiety and heresy. The Inquisition was a very ugly place. It was very easy to get into it, especially for a Netherlander: but not so easy to get out. Indeed Vesalius must have trembled, when he saw his master, Charles V., himself take fright, and actually call on the theologians of Salamanca to decide whether it was lawful to dissect a human body. The monks, to their honour, used their common sense, and answered Yes. The deed was so plainly useful

that it must be lawful likewise. But Vesalius did not feel that he had triumphed. He dreaded, possibly, lest the storm should only have blown over for a time. He fell, possibly, into hasty disgust at the folly of mankind, and despair of arousing them to use their common sense, and acknowledge their true interest and their true benefactors. At all events, he threw into the fire—so it is said—all his unpublished manuscripts, the records of long years of observation, and renounced science thenceforth.

We hear of him after this at Brussels, and at Basle likewise—in which latter city, in the company of physicians, naturalists, and Grecians, he must have breathed awhile a freer air. But he seems to have returned thence to his old master Charles V., and to have finally settled at Madrid as a court surgeon to Philip II., who sent him, but too late, to extract the lance splinters from the eye of the dying Henry II.

He was now married to a lady of rank from Brussels, Anne van Hamme by name; and their daughter married in time Philip II.'s grand falconer, who was doubtless a personage of no small social rank. Vesalius was well off in worldly things; somewhat fond, it is said, of good living and of luxury; inclined, it may be, to say, "Let us eat and drink, for to-morrow we die," and to sink more and more into the mere worldling, unless some shock should awake him from his lethargy.

And the awakening shock did come. After eight years of court life, he resolved, early in the year 1564, to go on a pilgrimage to Jerusalem.

The reasons for so strange a determination are wrapped in mystery and contradiction. The common story was that he had opened a corpse to ascertain

the cause of death, and that, to the horror of the bystanders, the heart was still seen to beat; that his enemies accused him to the Inquisition, and that he was condemned to death, a sentence which was commuted to that of going on pilgrimage. But here, at the very outset, accounts differ. One says that the victim was a nobleman, name not given; another that it was a lady's maid, name not given. It is most improbable, if not impossible, that Vesalius, of all men, should have mistaken a living body for a dead one; while it is most probable, on the other hand, that his medical enemies would gladly raise such a calumny against him, when he was no longer in Spain to contradict it. Meanwhile Llorente, the historian of the Inquisition, makes no mention of Vesalius having been brought before its tribunal, while he does mention Vesalius's residence at Madrid. Another story is, that he went abroad to escape the bad temper of his wife; another that he wanted to enrich himself. Another story—and that not an unlikely one—is, that he was jealous of the rising reputation of his pupil Fallopius, then professor of anatomy at Venice. This distinguished surgeon, as I said before, had written a book, in which he added to Vesalius's discoveries, and corrected certain of his errors. Vesalius had answered him hastily and angrily, quoting his anatomy from memory; for, as he himself complained, he could not in Spain obtain a subject for dissection; not even, he said, a single skull. He had sent his book to Venice to be published, and had heard, seemingly, nothing of it. He may have felt that he was falling behind in the race of science, and that it was impossible for him to carry on his studies in Madrid; and so, angry with his own laziness and luxury, he

may have felt the old sacred fire flash up in him, and have determined to go to Italy and become a student and a worker once more.

The very day that he set out, Clusius of Arras, then probably the best botanist in the world, arrived at Madrid; and, asking the reason of Vesalius's departure, was told by their fellow-countryman, Charles de Tisnacq, procurator for the affairs of the Netherlands, that Vesalius had gone of his own free will, and with all facilities which Philip could grant him, in performance of a vow which he had made during a dangerous illness. Here, at least, we have a drop of information, which seems taken from the stream sufficiently near to the fountain-head: but it must be recollected that De Tisnacq lived in dangerous times, and may have found it necessary to walk warily in them; that through him had been sent, only the year before, that famous letter from William of Orange, Horn, and Egmont, the fate whereof may be read in Mr. Motley's fourth chapter; that the crisis of the Netherlands which sprung out of that letter was coming fast; and that, as De Tisnacq was on friendly terms with Egmont, he may have felt his head at times somewhat loose on his shoulders; especially if he had heard Alva say, as he wrote, "that every time he saw the despatches of those three señors, they moved his choler so, that if he did not take much care to temper it, he would seem a frenzied man." In such times, De Tisnacq may have thought good to return a diplomatic answer to a fellow-countryman concerning a third fellow-countryman, especially when that countryman, as a former pupil of Melancthon at Wittemberg, might himself be under suspicion of heresy, and therefore of possible treason.

Be this as it may, one cannot but suspect some strain of truth in the story about the Inquisition; for, whether or not Vesalius operated on Don Carlos, he had seen with his own eyes that miraculous Virgin of Atocha at the bed's foot of the prince. He had heard his recovery attributed, not to the operation, but to the intercession of Fray, now Saint Diego;* and he must have had his thoughts thereon, and may, in an unguarded moment, have spoken them.

For he was, be it always remembered, a Netherlander. The crisis of his country was just at hand. Rebellion was inevitable, and, with rebellion, horrors unutterable; and, meanwhile, Don Carlos had set his mad brain on having the command of the Netherlands. In his rage at not having it, as all the world knows, he nearly killed Alva with his own hands, some two years after. If it be true that Don Carlos felt a debt of gratitude to Vesalius, he may (after his wont) have poured out to him some wild confidence about the Netherlands, to have even heard which would be a crime in Philip's eyes. And if this be but a fancy, still Vesalius was, as I just said, a Netherlander, and one of a brain and a spirit to which Philip's doings, and the air of the Spanish court, must have been growing ever more and more intolerable. Hundreds of his country folk, perhaps men and women whom he had known, were being racked, burnt alive, buried alive, at the bidding of a jocular ruffian, Peter Titelmann, the chief inquisitor. The "day of the *mau-*

* In justice to poor Doctor Olivarez, it must be said that, while he allows all force to the intercession of the Virgin and of Fray Diego, and of "many just persons," he cannot allow that there was any "miracle properly so called," because the prince was cured according to "natural order," and by "experimental remedies" of the physicians.

brulez," and the wholesale massacre which followed it, had happened but two years before; and, by all the signs of the times, these murders and miseries were certain to increase. And why were all these poor wretches suffering the extremity of horror, but because they would not believe in miraculous images, and bones of dead friars, and the rest of that science of unreason and unfact, against which Vesalius had been fighting all his life, consciously or not, by using reason and observing fact? What wonder if, in some burst of noble indignation and just contempt, he forgot a moment that he had sold his soul, and his love of science likewise, to be a luxurious, yet uneasy, hanger-on at the tyrant's court; and spoke unadvisedly some word worthy of a German man?

As to the story of his unhappy quarrels with his wife, there may be a grain of truth in it likewise. Vesalius's religion must have sat very lightly on him. The man who had robbed churchyards and gibbets from his youth was not likely to be much afraid of apparitions and demons. He had handled too many human bones to care much for those of saints. He was probably, like his friends of Basle, Montpellier, and Paris, somewhat of a heretic at heart, probably somewhat of a pagan, while his lady, Anne van Hamme, was probably a strict Catholic, as her father, being a councillor and master of the exchequer at Brussels, was bound to be; and freethinking in the husband, crossed by superstition in the wife, may have caused in them that wretched *vie à part,* that want of any true communion of soul, too common to this day in Catholic countries.

Be these things as they may—and the exact truth of them will now be never known—Vesalius set out

to Jerusalem in the spring of 1564. On his way he visited his old friends at Venice to see about his book against Fallopius. The Venetian republic received the great philosopher with open arms. Fallopius was just dead; and the senate offered their guest the vacant chair of anatomy. He accepted it: but went on to the East.

He never occupied that chair; wrecked upon the Isle of Zante, as he was sailing back from Palestine, he died miserably of fever and want, as thousands of pilgrims returning from the Holy Land had died before him. A goldsmith recognised him; buried him in a chapel of the Virgin; and put up over him a simple stone, which remained till late years; and may remain, for aught I know, even now.

So perished, in the prime of life, "a martyr to his love of science," to quote the words of M. Burggraeve of Ghent, his able biographer and commentator, "the prodigious man, who created a science at an epoch when everything was still an obstacle to his progress; a man whose whole life was a long struggle of knowledge against ignorance, of truth against lies."

Plaudite: Exeat: with Rondelet and Buchanan. And whensoever this poor foolish world needs three such men, may God of His great mercy send them.