# JOHN HUNTER AND VETERINARY MEDICINE\*

BY

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THE ROYAL VETERINARY COLLEGE was founded in London in 1791, and was the first institution of its kind in the English-speaking countries. At the time of its establishment it was known simply as the London Veterinary College. The Royal College of Veterinary Surgeons did not receive a Charter until 1844. On the Continent, recognized centres for veterinary education had been in existence for many years past. The first was established at Lyons in 1763 and was followed by one at Alfort in 1766. Other colleges quickly followed in Italy (Turin, 1769), Germany (Göttingen, 1771), and Denmark (Copenhagen, 1773). In the year that the London College was founded, a student intending to take up veterinary medicine had a choice of no less than twenty-one centres, all of which, however, were on the Continent.

One of the best known, as certainly the most easily reached from England, was at Alfort, so near Paris that it was alternatively known as the Paris College. In the late 1780's a sum of money was collected by the Odiham Agricultural Society of Hampshire to send English students over there to qualify. In June 1788 a former junior Professor at Alfort, Monsieur Charles Vial de St. Bel,<sup>†</sup> visited England, and during a six months' residence endeavoured to gain support for a course of veterinary instruction he proposed to give in this country. All his efforts proved unsuccessful, so he returned to France with an English lady he had met and married during his visit. However, he found conditions so unsettled in France, that at the end of only two months he returned to England. In August of that year (1789) the storm broke, and Sainbel lost his patron, M. de Flesseilles, who had been paying him an annuity, in the chaos of the French Revolution.

At that time Sainbel was fairly well known in England through his dissection of the famous racehorse Eclipse. His proposals to give courses of lectures in veterinary medicine, particularly as regards the horse, again

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<sup>†</sup>Although commonly known as Charles Vial de St. Bel or Saint Bel, it appears that his real surname was Benoit Vial. The cognomen 'de St. Bel' was derived from an estate at Sain-Bel, near Lyons, which had long been in the possession of his family. In the title of the first of his works to be published in England his name appears as de Saint Bel, but in subsequent writings it is de Sainbel and this is the spelling generally accepted.

met with no response. However, with the assistance of his wife-for his own command of English was imperfect—he drew up a 28-page pamphlet entitled 'Plans for establishing an Institution to cultivate and teach Veterinary Medicine' (May, 1790). He also received the whole-hearted support and encouragement of Granville Penn, the grandson of the founder of Pennsylvania and owner of considerable estates. It was probably at Penn's suggestion that Sainbel visited such famous centres as Newmarket. He secured the goodwill of Earl Grosvenor, the greatest breeder of racing stock in England at that time, and he also sent copies of his "Proposal" to various agricultural societies. The Odiham Society, whose plans had been thwarted by the outbreak of the Revolution, generously offered to divert the funds collected to send students abroad to the foundation of an English Veterinary College. Finally, a Committee was formed, which held its first meeting on February 13, 1791, at the Blenheim Café in Bond Street. A second meeting followed on April 8, when the Duke of Northumberland was appointed the First President of the Veterinary College of London. Earl Grosvenor was appointed Vice-President and there were to be eight Directors.

A piece of land was bought in the fields near St. Pancras Church, and buildings were erected. Sainbel was appointed Principal and Professor, with Delabere Pritchell Blaine as his assistant and Demonstrator in Anatomy. Blaine was born in the City of London, son of the Rev. Henry Blaine, a Dissenting Minister of the parish of St. Giles, Cripplegate. He was a surgeon who had worked at the Borough Hospitals under Dr. John Haighton, distinguished for his work on the physiology of the nervous system. Blaine had assisted in these researches for six months and thereby acquired some knowledge of the anatomy of the dog. He was a fine draughtsman, a gift Haighton employed in getting the illustrations drawn for his paper on nerve regeneration. Blaine tells us that in addition to translating Sainbel's lectures into English, he taught physiology and general pathology as well as anatomy.

There were at first fourteen students and they resided in the College. They were required to have reached a certain standard of general education —including some knowledge of classics and mathematics—and their course of instruction covered three years and led to the award of a diploma.

Considering that the importance of recognized veterinary instruction had been grasped on the Continent thirty years earlier, it cannot be said the English centre was founded too soon. The absence of a recognized centre for veterinary instruction is the more surprising from the fact that in 1779 George III—nicknamed 'Farmer George' from his interest in agriculture—had ordered the foundation of a Veterinary College at Hanover, but not in this country. This was two years after Edward Snape, master of a School of Equitation in London, had offered unsuccessfully (in 1777)

to found an establishment himself in the metropolis, if he received 3,000 subscriptions of one guinea each, the subscribers to receive free treatment for their animals. A far finer character than Snape, James Clark of Edinburgh, had also proposed a centre for veterinary education. This was not to be a private venture but supported by the State. Clark, of whom nothing is known except that he was the King's Farrier for Scotland, was an educated man who wrote three outstanding veterinary treatises. His fervent advocacy of a State College seemed on the point of succeeding in Edinburgh about the year 1794, when, to his bitter disappointment, the outbreak of war with France removed any possibility of Government support. Many others had written on the crying need for a centre of organized instruction. Granville Penn, who helped Sainbel in getting his 'Proposals' into print, contributed several letters on the subject to the Gentleman's Magazine, under such pen-names as 'Philippos', 'Zoophilus of Birmingham', and 'John Elderton of Bath'. All this agitation undoubtedly reflected the trend of public opinion, and no doubt helped materially towards securing goodwill for the establishment of the College.

It is significant that the preliminary notice of the new College states that it is for the reformation of Farriery. The wider implications in the title 'Veterinary' are ignored. Sainbel, the Professor, was an admitted specialist in all that related to the horse, and he subsequently published his lectures under the title of *Lectures on the Elements of Farriery*, or the Art of Horse Shoeing.\* His assistant, Blaine, was a medical man with a nodding acquaintance with the anatomy of the dog. No provision was made for instruction in the diseases of the farm animals, the cow, the sheep, and the pig, although Sainbel had had some sketchy experience of them earlier in his career.

The inference to be drawn from the notice would appear to be that in that age of patronage the support of the nobility—and possibly of the Government—could only be secured if it was emphasized that the practical science of horse-shoeing and the care of horses' feet was to be the first consideration of the new institute. There were, certainly, a number of country gentlemen, livestock owners, and farmers who wished to see their flocks and herds properly treated when they became ill, but they had little public voice. The Odiham Society had to raise funds for its admirable project privately among its members. In spite of the universal reliance upon the horse as the only means of transport, the care of horses' feet was undertaken by farriers whose abysmal ignorance was only surpassed by the heavy fees they charged. If at long last Farriery was to be properly studied and taught, then support would certainly be forthcoming.

When we recall the fate of Snape's proposals, and those earliest ones of Sainbel himself, and the long, apparently fruitless, crusade of James Clark,

\* The frontispiece to the Lectures is illustrated opposite page 69.

it is quite clear that the London College might possibly not have been founded until an even later date. The decisive impetus was given by one whose name appears among the list of Vice-Presidents—John Hunter. There was no doubt at all what Hunter felt about the new institute. He had declared roundly: 'Whatever may have been done to increase the public stock of knowledge in other departments, the veterinary science hath been hitherto little cultivated in this country; nevertheless, if its claims to public favour were fully stated there could be no doubt but that our national spirit and benevolence would patronize it equally with any other branch of national knowledge. To define this science will be sufficient to recommend it in the most effectual manner.'

The time was ripe for the foundation of a Veterinary College because of the great strides forward that British agriculture had taken since the beginning of the eighteenth century. The great landowners were the leaders of agriculture, while practical improvements, especially in the breeding of livestock, were made by tenant farmers. Viscount Townshend greatly increased the productivity of his estates by adopting the 4-course rotation known as the Norfolk method, which had been introduced a little before his time, and thereby earned the nickname of 'Turnip' Townshend. His neighbour, the first Earl of Leicester, followed his example by turning what was virtually a rabbit warren into a productive estate that became a famous centre for sheep-shearing and livestock judging. Sir John Sinclair, who owned considerable estates in Caithness, became First President of the Board of Agriculture, founded in 1800. The old open-field system was being broken up by the Enclosure Acts at the cost of some misery, particularly to 'squatters'-one recalls Goldsmith's 'Deserted Village'-yet in the enclosed fields whose pastures could be improved, livestock breeding became a science. Robert Bakewell was the most notable pioneer in cattle and sheep breeding, but Charles Colling, who produced the Shorthorn cattle, and John Ellmann, who bred the South Down sheep, progenitor of all the other Down breeds, are also famous.

John Hunter was a farmer's son who had worked on the land for nearly twenty years before coming to London. The late Professor G. Grey Turner has truthfully observed that those early years on the land were the most important in John's whole life. Throughout his life John Hunter possessed that simplicity of heart which is the charm of the countryman. He had, as his essays show, many friends among farmers and livestock owners, and he was well aware of the improvements that had transformed agriculture during the forty years that had elapsed since he left his father's farm in September 1748. For example, in his Observations upon the Animal Economy, one paper, that upon the 'Freemartin', mentions Messrs. Charles Palmer of Berkshire, Benjamin Way of Denham near Uxbridge, and John Arbuthnot

of Mitcham, Surrey, who had given him useful information or provided heifer calves for examination. Plainly, these gentlemen were livestock farmers or cattle breeders. But at the time Hunter wrote his paper sick animals were at the mercy of ignorant cow-leeches. The Georgian age was a brutal one, and livestock was treated with callous and sickening cruelty. The knife and the cautery were used with dreadful liberality for practically every complaint. Even to a layman the extraordinary ignorance of the cow-leech was glaringly obvious. In its mildest form, his practice is summed up for us by John Swaine, a country gentleman who lived in Lincolnshire and who published in 1789 a book entitled Every Farmer his own Cattle Doctor. Among the first diseases dealt with is one called 'The falling down of the palate', to remedy which the animal is cast and the palate thrust up by hand! 'Headache', we are told, is a common disorder of cattle and should be treated by squirting garlic into the ears and nostrils. Stale human urine figures prominently in his pharmacopoeia. Two pints of blood were withdrawn as routine treatment for all 'fevers' and for 'indigestion'. And if all treatment failed, there was always the village witch to fall back on, some wretched old woman who had put a 'spell' on the beast. The cow-leech confined his attentions to cattle and sheep; pigs were attended by the hoggelder. The farrier considered himself superior to either, because his education was by means of an apprenticeship, at the conclusion of which his master presented him with his own infallible nostrums and other trade secrets, and also because he attended the horse. For, as mentioned, the horse was the only means of transport on land, and therefore of very great value. In point of fact, there was little to choose between these practitioners, all were notorious for their ignorance. The radical operations of the farrier were even more hideous than that of the cow-leech. A wrenched shoulder, for example, was first blown up by introducing a clay pipe into the subcutaneous connective tissue, next an instrument like a sword-blade was run up for eight or ten inches between the shoulder blade and ribs, an operation known as 'boring', then, the shoulder was 'fired', that is, a hot iron was applied in a pattern like that of the leads in a church window. A blister was later applied to the shoulder, and a patent shoe applied to the sound limb in order that the lame leg was not rested. The wretched patient was then turned out to grass. This terrible operation, in vogue in the 1750's, was still practised as late as 1793; as an alternative, the equally atrocious method of tying up the sound limb and flogging the horse till it sweats, then bleeding and 'pegging' the injured shoulder, are described in sickening detail by the anonymous author of a large sporting dictionary first published in 1793 and which ran into four editions. As Sir Frederick Smith justly observes 'The horse was never more important and never so ill understood or so much neglected'.

Furthermore, as increasing numbers of valuable animals were folded on the farms, the risk of epidemic disease rose proportionately. Cattle Plague had appeared early in the century, but it had been handled by medical men who in general showed a curious apprehension lest they should lose caste by studying a disease of animals. Thomas Bates, F.R.s., surgeon to the Royal Household, was called upon in 1714, in association with four Justices of the Peace, to deal with an outbreak among cattle at Islington. From there it spread all over the country, and it was not until the authorities reluctantly put into force his very sensible recommendations that its progress was halted. However, when it broke out again in 1745, Dr. Cromwell Mortimer, Secretary to the Royal Society, and Dr. Theophilus Lobb, who had made a particular study of the epidemic, open their reports with an apology for degrading their profession by taking an active interest in animal diseases. Mortimer follows Lobb in offering as excuse the erroneous statement that the great Hippocrates studied the diseases of animals as well as man. Many physicians, of course, particularly in the first half of the eighteenth century, felt the continued existence of the Cattle Plague to be a reproach to their profession. Even laymen wrote tracts airing their views and experiences. Richard Bradley, F.R.S., Professor of Botany at Cambridge, published, among other works, a dictionary in two large volumes, which includes discussions on animal epizootics, but contributes nothing useful. But the medical profession as a whole failed to grasp the nettle, fearing lest they made themselves ridiculous, and the Plague continued to flourish for another twelve years.

The attitude of the Church was not conducive to the control of animal epizootics (or, for that matter, to veterinary education), since it taught that sickness was a Divine visitation. The clergy were entrusted by the Government with delivery from the pulpit of the various Orders relating to the control of disease, and these were frequently not read out owing to conscientious objection! There were honourable exceptions. The Rev. James Granger published in 1772 An Apology for the Brute Creation, or Abuse of Animals censured. He was followed by the Rev. Dr. Humphrey Primatt who published a work On the Rights of Brute Creation to Tenderness from Man in 1775. Doughtiest of all was Thomas Young, a fellow of Trinity College, Cambridge, who sought to awaken the public conscience in the matter by his famous Essay on Humanity to Animals, first published in London in 1798.

John Hunter, we can be certain, clearly saw all the dangers. A hardheaded, forthright Scot, he could have had little patience with the squeamishness of medical practitioners approaching a dumb patient. When William Moorcroft, the surgeon and explorer, who was at that time a medical student at the Liverpool Infirmary, dealt very effectively with a local outbreak of Cattle Plague, it was suggested he should qualify not only in human but in Veterinary Medicine. Bitter opposition by his family and

friends was overcome, when, in reply to an inquiry, John Hunter wrote back that if he were younger, he would himself take up veterinary studies forthwith. As there was no College in England, Moorcroft who was then twenty-three years old, entered the Lyons Veterinary School in 1790.

If, to get an English school started, emphasis had to be laid on Farriery, Hunter would have been the last to demur. He had been an army surgeon and therefore understood the importance of correct shoeing for the artillery and commissariat teams. In his daily rounds, he was at the mercy of the farriers who shod his coach horses and whose gross cruelty caused foreigners to describe this country as 'The Hell of Horses'.

Once the school was established, the wider and more philosophical aspects of the veterinary art could be gradually introduced. Hunter, during the course of his tireless researches, had amassed a great store of information bearing directly upon veterinary problems. He had dissected the horse, the ass, and the draught ox. In his studies of the dog he must surely have been assisted by the excellent little treatise A Comparative Description of all the muscles in a Man and a Quadruped, published by James Douglas, M.D., in 1707, since his brother, William Hunter, had been assistant to Dr. Douglas when he first came to London in 1741. At that time Dr. Douglas resided at Red Lion Square, where today the Royal College of Veterinary Surgeons is established. In 1777 John Hunter removed an ovary from a young sow and found that the operation did not affect her breeding. By 1782 she had had six litters averaging from six to ten piglets in a litter. An unoperated sister, used as control, averaged a rather higher number of piglets per litter. He made experiments upon the effect of ovariotomy in the cow on milk vield and has some most interesting observations on the release of milk from the cow's udder, comparing the relative influence upon the sphincter of a sucking calf and the hand of a dairymaid. These and many other studies are described in his Animal Oeconomy. Turning to his 'Lectures on Surgery', Chapter VIII has an absorbing discussion on vital heat, where he records his observations and conclusions on the heat of man's body as compared with that of hibernating mammals, insects and the developing chick in the egg of the hen. Breeding is thoroughly dealt with; witness his paper on 'The Freemartin', earlier mentioned, and place it beside that essay he communicated to the Royal Society in 1789 on the identity of species of the wolf, the jackal, and the dog, an absorbing discussion not only on the crossbreeding of dogs, but on their habits and characters. In this study of breeds and monstrosities and sterile twins, we read of the curious tail-less cats procured by Mr. Hudson, an apothecary of Panton Street, from a farm in the country. What exactly, one wonders, were those forgotten breeds that Hunter mentions, the Chinese hogs, the Welsh sheep, and the Holderness cows? His studies were not confined to the post-mortem room, for he saw

veterinary cases in consultation. The grounds of his country estate at Earls Court contained cages that housed jackals, zebras, buffaloes, leopards, and other mammals, while a variety of game and other birds strolled about over the lawns. Among his livestock was a beautiful small bull sent him by the Queen, with which he used to wrestle in play. On one occasion the bull got him down, and he might have lost his life had not a servant luckily turned up and hurried to his assistance.

When young Edward Jenner in 1770 became a resident pupil in Hunter's house, and proved to be a kindred spirit, Hunter urged him to gather as many facts as possible on what he termed 'Natural Philosophy' and was delighted at the further extension of his own vast labours that resulted. Hunter and Mr. Curtis, the editor of the Botanical Magazine that is still published today, had founded a Natural History Society. After Jenner returned to Berkeley, Hunter wrote to him about a project he had in mind of founding a school of Natural History in London; Jenner was the obvious choice for its Director, but as he could not be coaxed away from his country practice, Hunter did not go further with the scheme. It may be understood, however, how eagerly he accepted the proposal to found a veterinary institute. Here one aspect of Natural Philosophy, and a most important one, that of the domestic animal in health and disease, could be thoroughly explored at material benefit to the country. By canvassing among his personal friends; by writing, it is believed, an anonymous 'puff' in its support, he was a real power behind the scenes and the instigator chiefly responsible for the successful establishment of the college. Youatt, who had sources of information denied to us, has described him as 'the life and soul of the undertaking'.

Apart from his great achievement in getting the new college fairly launched, Hunter's influence as a teacher must not be forgotten. He was so famous that he attracted students not only from this country but also from abroad. Two of Hunter's pupils in particular later exerted an immense influence upon the progress of veterinary medicine, in the one case most beneficial, in the other, alas, stultifying and retrogressive. Johann Gottlieb Wolstein came over from Austria to study, not only under John Hunter but also under his brother William and the surgeon Percival Pott. Subsequently, Wolstein was Director of the Vienna Veterinary Institute for twenty years. His treatise on the Internal Diseases of Foals, Army and Civilian Horses (1787), and Annotations regarding Venesection of Man and Beast (1791) are milestones in the history of veterinary medicine. Professor Robinson is of the opinion that Wolstein should be regarded as the founder of Veterinary Science in German-speaking countries. His work on venesection reflects the teaching of his great master, John Hunter, by insisting that the blood is a vital fluid which should not be needlessly spilled.

Astley Cooper, one of the most famous of all Hunter's pupils, was an intimate friend of Coleman, the surgeon who succeeded Sainbel as Principal of the Veterinary College. As will be seen later, his influence upon the infant profession through his friendship with Coleman, who was also a pupil of Hunter, can only be described as disastrous.

No doubt Hunter inspired other pupils, whose names are now forgotten, to work in veterinary fields. Volume V of the London Medical Journal (1791) has an article by Professor Soemmerring of Cassel, a former pupil of Hunter's, on the 'Decussation of the Optic Nerve in Quadrupeds'.

Jenner, Hunter's favourite pupil, of course worked with cow-lymph in his researches upon human smallpox. But the notebook that he kept at Berkeley, after he had completed his training under Hunter, reveals that he was deeply interested in veterinary problems in general. Surely the strength of this interest sprang from Hunter's encouragement? While a pupil of Hunter's, Jenner had recorded some observations upon 'tubercles'probably hydatid cysts—in the omentum of pigs, and at Berkeley he studied the formation of these hydatids in the cow, ox, hare, sheep and pig, comparing them with the disease in man. His attempts to draw a parallel between them and phthisical tubercles are unfortunate, although not surprising in view of the opinions of his day. Studies on canine distemper also occupied his leisure, but naturally he was not wholly successful in his analysis of the distemper complex. In 1821 he invited James White, the leading veterinary practitioner in the West of England, to Berkeley. White had graduated from the London College in 1797, and subsequently published some works on the horse. In 1815, at the request of a client, he issued a Treatise on Veterinary Medicine, the fourth volume of which deals with the diseases of cows, sheep, swine and dogs. Jenner, it appears, was anxious to discuss this encyclopaedia. White tells us that they had a long conversation, particularly on 'stringhalt' of horses, and 'redwater' of cattle which was endemic on local farms. Jenner begged White to preach the gospel of pure water supply for dairy stock. It is most fitting that William Clift, whose devotion saved Hunter's collection for posterity, also made a contribution, if anonymously, to the progress of veterinary medicine. Strickland Freeman, a gentleman of independent means, met with an accident and was attended jointly by Everard Home and John Hunter. Now Freeman had spent many vears at the Riding School of Sir Sidney Medows. He had given much thought to the physiology of the horse's foot, and doubtless as a result of conversations with Home and Hunter, was urged to study the anatomy of the foot and its functions. This he did, and as he was quite untrained, Everard Home (Hunter had died in the interval) found him 'a person' to make the necessary dissections. Freeman later published a work on the subject, but did not apparently think it necessary to acknowledge the

"person" whose brilliant preparations are preserved for us by Kirtland, one of the best anatomical artists of the day. We know now that they were the work of William Clift, F.R.s., Hunter's personal assistant and amanuensis, later (and most justly) first Conservator of the Hunterian Museum of the Royal College of Surgeons. Everard Home, yet another of Hunter's pupils, read the proofs of the book, but as Freeman wrote for laymen, and Home knew little or nothing of the subject, the text is weak, and only redeemed by Kirtland's fifteen coloured plates.

Sainbel began to lecture in January 1791, but he was a highly strung, irascible individual, and very sensitive of speaking in broken English. In April he presented a memorandum to the Directors, stating that he had been libelled, professionally and in his private life, and demanding immediate action. He was examined as to his professional abilities by a committee which included John Hunter, Cline, and Everard Home, and it reported that 'Mr. Sainbel was perfectly qualified for his office as Professor'. The committee, headed by the Earl of Morton, expressed itself equally well satisfied with his character and conduct. In the same month his salary was raised from  $\pounds$ 100 to  $\pounds$ 200 a year, and Blaine was appointed Assistant Professor.

In 1792 a committee was formed at the College, consisting of the foremost medical men of the day, including John Hunter and Cline, and designed to plan and foster original research. Hunter was often within its walls, and he certainly took an active part in its affairs. One of the earliest patients seen at the College was a horse with supplemental digits on each foreleg, which were removed by amputation. John Hunter was present at the operation and, noting that Sainbel left rather too little skin for a flap, corrected the error in the other leg, so that this wound healed much more rapidly than the first.

Hunter did not live to see in print the account of its creation and activities which the College published in 1793. But Youatt attributes to him the plan which there appears for the creation of a veterinary profession and the estimate of the position it should occupy in the scientific world. These may be briefly summarised as follows: 'The incompetence of persons to whom veterinary practice has been abandoned has drawn contempt on the art, which is second only to that of human medicine; the state of human medicine today is evidence of what awaits the cultivation of the veterinary art in this country. It requires the sacrifice of as many years to make a skilful veterinarian as to become a skilful physician; each is a task sufficient to occupy one man's life. The idea must be abandoned that while medicine is the province of the learned few, any man of ordinary capacity can acquire the veterinary art. The nation requires a veterinary school in which the structure and diseases of animals can be scientifically taught, and when this

is duly accomplished men of liberal education will cease to look on veterinary medicine as a mean and degraded profession.' Holding such convictions, Hunter would highly approve of the course of training instituted by Sainbel; indeed, he may well have assisted in drawing it up. The students first presented the certificate of good education and their subsequent studies at the College were to cover a minimum of three years. In the first year, Anatomy, Physiology, Conformation and External Diseases, in the second, Surgery, Materia Medica and Medical Botany, and in the third year Pathology, Epizootic Diseases, Hospital Practice and Shoeing.

Blaine, Sainbel's assistant, left the College after about a year. He was rash enough, being only twenty-two, to point out some mistakes in Sainbel's anatomy lectures, whereupon that excitable foreigner 'concluded it would not be prudent to retain one about him who was able to detect his errors'.

It is tragic to relate that this auspicious start of the College proved a false dawn. On 21 August 1793, Sainbel died of glanders contracted from a horse upon which he had conducted a post-mortem. He did not believe that glanders could be transmitted from horse to horse, so he would take no precautions against the possibility of self-infection. John Hunter at once threw open his classes to the students and made them free of his museum, in order that their studies might not be interrupted. He also persuaded other London lecturers to do the same. But there followed a period of some confusion while a new Principal was sought. Delabere Blaine had gone into private practice; James Clark of Edinburgh was eagerly awaiting the State College of which he was promised the Directorship. Finally, Edward Coleman was appointed joint Professor with William Moorcroft, who possessed not only a medical qualification but one received from the Lyons Veterinary College. Moorcroft, then busily engaged in a lucrative private practice, was an obvious choice after James Clark had declined the post. It is not so clear why Coleman was brought forward. Edward Coleman had commenced practice as a surgeon in London in 1791. He had been awarded a prize by the Humane Society for an essay on resuscitation of the drowned, but beyond some comparative studies of the eye of the horse and other animals was entirely ignorant of veterinary matters. While a student, he had lived in the house of Henry Cline with his other pupils, one of whom was Astley Cooper. Coleman and Cooper became life-long friends; they both attended John Hunter's lectures. In the Veterinarian for February, 1830, Sir Astley Cooper stated that Coleman was selected as joint Principal by Mr. Cline and Drs. Fordyce and Crawford; there is no mention of Hunter. Nevertheless, only the names of Hunter and Cline appear in the memoir of Coleman which is embodied in the biography of Astley Cooper by Bransby Cooper. Hunter must have been aware that Coleman was quite unfitted for the post; there is no doubt that it was he who selected Moorcroft.

However, Hunter died, suddenly, only two months after Sainbel, on 16 October 1793. Perhaps his death made it easier for Cline to bring in his old pupil Coleman. So far as is known, Coleman and Moorcroft had never met before they took up their joint work at the College on 17 February 1794. Moorcroft, who was studious and conscientious by nature, and thoroughly trained, must have received a severe shock to find that Coleman, a hasty, plausible individual, was absolutely ignorant of his future duties. The partnership lasted only a few weeks. Moorcroft resigned, and on April 4 left Coleman in undisputed possession.

This was a great disaster for the veterinary profession. Coleman soon realised that his meagre knowledge was insufficient for a long course, so he cut down the original course of three years to one of three to six months. At the same time he dispensed with the certificate of education required of students and allowed grooms, sons of coachmen, and country louts, to enter. This at once got rid of the educated student who might be inclined to ask awkward questions and filled Coleman's pockets; for by shortening the course of training he increased the number of entrants, whose fees for tuition he himself received. At the time of his appointment Coleman was twentyeight years old. He taught himself the diseases of the horse, picking up his experience among the horses of the Artillery after he had been appointed their Medical Superintendent. As regards the farm animals, he cheerfully explained to his students that 'he taught them the laws of health and disease, how to observe symptoms, and thus armed his hearers could pretty well guess what should be done; and if they should err in the first case they would know better next time!' From 1802 to 1826 the Veterinary College was virtually cut off from the outside world. The profession at last found its voice by the creation in 1828 of the Veterinarian and the Hippiatrist. The more thoughtful and public-spirited of the graduates were so dissatisfied not only with the low status of their profession, but also by the meagre and restricted course of training, in which the health of farm animals was almost entirely neglected. Coleman could not be dislodged during his lifetime (Astley Cooper declared that if he resigned he deserved to be flogged!) but there was throughout the nineteenth century a ceaseless struggle to lift Veterinary Medicine to the level claimed for it by John Hunter.

The influence of John Hunter upon veterinary medicine is profound and far-reaching. Moreover, it is still active today. He is rightly claimed as the founder of an organized veterinary profession in the English-speaking countries, because he was the prime instigator in the foundation of the first veterinary college in Britain. Despite the destruction after his death of a large mass of his papers by Everard Home we know from what is left of his writings, and from many other sources, of his deep interest in veterinary medicine and his extensive researches in veterinary fields. His example and

encouragement fostered recognition of the vital services a veterinary profession can render and must provide in national life, and spread his knowledge far beyond this country. If two of his students unhappily crippled the early growth of the British veterinary profession, they were solitary exceptions among others who applied his ideals abroad. Nor did Coleman stifle the infant; from the original centre in London sprang other Institutes at Edinburgh, Glasgow, Dublin and Liverpool. Veterinary graduates passed out in ever-increasing numbers all over the Empire, and to their labours may be attributed the foundation of veterinary institutes in India, the Dominions, and America. John Haslam of Baltimore graduated at the London College on 4 March 1799 (or 1801?) while James Carver, who qualified at the College in 1815, settled in Philadelphia and in 1818 tried to organize an American Veterinary College. Granville Penn, who so loyally supported Sainbel, and as a Vice-President laid the foundation stone of the new institute, has been claimed as an American since he was a member of the Penn family of Pennsylvania. The leaven of Hunter's spirit is still working. To colleges whose students receive a diploma have now succeeded Universities which grant a degree in veterinary medicine comparable to that in human medicine. At home and abroad, we look out and see that all the solid improvements in the stamina and health of British livestock which have made it famous the world over, and our firm control of animal epizootics, are in sober fact the gift of John Hunter. No less is the perhaps more humble, yet equally satisfying, relief of pain in the spinster's pet or the coster's donkey. They are the achievements of a profession, the sister of human medicine to quote the late Professor G. Grey Turner, which has grown like a great oak from a seed planted by John Hunter one hundred and sixty years ago at the London Veterinary College in Camden Town.

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