# Address delivered at the opening of the Edinburgh Veterinary College, Session, 1874-75 / (by Professor Walley).

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## ADDRESS

## DELIVERED AT THE OPENING

OF THE

## EDINBURGH VETERINARY COLLEGE,

SESSION, 1874-75.

(By PROFESSOR WALLEY.)

My Lord Provost and Gentlemen of the Town Council of the City of Edinburgh,—

Allow me, before proceeding with the subject matter of my address, to acknowledge the honour you have conferred upon me by electing me to the position of Principal of the Edinburgh Veterinary College. I assure you that I do not esteem this honour lightly; and I further assure you that no effort on my part shall be wanting to restore the old Institution to its original status. I am loth to believe that an Institution like the Edinburgh Veterinary College, founded as it was by one man, reared by the indomitable will, the undaunted perseverance, and the never-dying zeal of that one man, and endowed by him at his death: I say, I am loth to believe that such an Institution, so founded, so reared, and so endowed, can become a thing of the past; and I am further sanguine enough to hope that many of my professional brethren, who claim that Institution as their Alma Mater, and who, from various causes, have become alienated from it, will be yet found returning to their old love.

To you, my Lord Provost, and to the Members of Committee who have seconded your efforts in bringing about the arrangements which at present exist, we owe a deep debt of gratitude; and I can only pay this by expressing the wish that you may live long and enjoy the fruits of your labours in seeing the College of which you are the Trustees going on pros-

perously, and to prosper.

My Lord Provost and Gentlemen of the Town Council of the City of Edinburgh—

LADIES AND GENTLEMEN,-

I have thought it the wiser course to divide the address which I am about to deliver to you into three sections. The first gives you some idea of the scope and aim of our profession, and is addressed alike to Veterinary

Students and the public; the second, I trust, will give students an insight into the work which lies before them; the last will be devoted solely to giving students such advice as I think necessary as to their conduct during

their connection with the College.

I will preface the remarks I am about to make under the first head by observing that our profession is comparatively little known in Scotland, as proved by the fact that there are more qualified Veterinary Surgeons on the Register in two counties alone (viz., Lancashire and Yorkshire) in England than in the whole of Scotland. Our profession, in the minds of the general public, is bound up on the one hand with the "horse doctor," on the other with the "cow leech;" but the term Veterinary signifies far more than this, for it pertains to the art of healing or treating the diseases of the domestic animals: and I would add of all animals, without reference to class or scale. I am quite aware, that the error of supposing that Veterinary Surgeons do not attend all animals has in a great measure arisen from the behaviour of those who study and practise the Veterinary Art despising, or pretending to despise, all other animals as beneath their notice—they devote all their attention to the horse. But of such, I have only to remark, that they lack the mighty intellect of a Landseer, the noble soul of a Scott, and the universal love of a Coleridge, or of a Burdett Coutts. More than this, they are deservedly rebuked by the dog which licks the beggars' sores, and the stag which trys to staunch the wound of its stricken companion.

All who are engaged in the relief of brute suffering must remember this

great truth—

That those who would the pains
And sufferings of a creation (lower only than themselves
In having less of Godly attributes), assuage, relieve,
And heal, must not despise one part and help the other:
For all creatures, each alike, demand man's care
And tending equal with the other.

But further still than this must motives stretch,
Expand, and grow. The polar principle of pain
Is equal in compare though present in the smallest
Form of mammal life, as in those animals of majestic mien
Which ever round us move. It is a principle not seen
But yet most keenly felt by those in whom it dwells
And finds a home;—a feeling foreign to the nature of our being,
Inducing restlessness, discontent, uneasiness:
And besides all these, it enervates the strength
And energies of each and all whose misfortune 'tis
To entertain it as a guest. A guest, unwelcome
In itself, but none the less insidious; tenacious too,
Despising, often, all the efforts and attempts of those
Who would remove it, or against its ravages
Successfully do battle.

Yes, Pain!—The mighty leveller, Regards not any brute, but visits each alike, And e'en the vicious horse, when suffering in the Pangs and agonies of death, will supplicate for help The hand which 'erst he'd bitten, with Subtle, savage, and intense malignity.

The Veterinary Art is as universal as the brute creation, and were I called upon to design a coat-of-arms for our College, I would place the horse in the centre, with the domesticated animals and birds crowding around

him; at the foot the lion, with various wild animals arranged as a wreath, encircling the whole. It is very evident that this idea occurred forcibly to the mind of the late Professor Dick, as it is embodied by the row of heads of the different animals, surmounted by the figure of the horse, which embellishes the front of the Institution which he founded.

The Veterinary Art is noble and merciful, as it seeks to relieve the

pains of creatures incapable of seeking relief for themselves.

The Veterinary Art is ancient, a treatise having been written upon the treatment of the diseases of horses by the venerable physician, Hippocrates.

The Veterinary Art is of use to the general community, as it seeks to protect and save the lives of beings upon which, to a great extent, man is

dependent for his subsistence.

The Veterinary Art is charitable, because it gives to those who can give nothing in return; and yet, this remark is only partially true, for, is it nothing, when walking along the street, to be suddenly greeted by a joyous brute with eyes all aglow, tail in violent motion, and the whole body evincing intense delight at the meeting, and mayhap a once injured, but now whole paw, held up to be examined? Is this, I ask, nothing? Let those who have experienced such greeting answer!

The Veterinary Art has been thought worthy of the pen of the poet. Shakespeare, than whom no man's knowledge is more universal, no man's pen more versatile, has alluded (King Henry VIII., act I, scene iii., Lord Sands to the Lord Chamberlain) to spring-halt and spavin in the horse in such a manner as to leave no doubt of his acquaintance with some of the

details of our profession-

Sands.—They have all new legs, and lame ones;

One would take it

That never saw them pace before,

The spavin

Or spring-halt reigned among 'em.

Cham.—Well said, Lord Sands:

Your colt's tooth is not cast yet.

Sands.—No, my lord;

Nor shall not, while I have a stump.

Again in King Richard III., act I, scene iii., Queen Margaret, speaking of Glo'ster to Buckingham, is made to say—

Beware of yonder dog; Look, when he fawns, he bites; and when he bites His venom tooth will rankle to the death.

And your own Scott, in "The Monastery" (the Sub-Prior to Henry Warden) says—"I hate the judgment that, like the flesh-fly, skims over whatever is sound, to detect and settle upon some spot which is tainted."

The Veterinary Art is intimately connected with the practise of Human Medicine; indeed, to the latter is due the credit of rescuing the former from the obloquy of the "farrier" and the "cow-leech," and raising it to a position amongst the enlightened professions of the age. Veterinary Surgeons should cultivate to the utmost an acquaintance with the Science and Art of Human Medicine; while the professors of the latter would be able to ex-

plain many phenomena with which they daily meet if they devoted a little

more time to the study of Comparative Pathology.

The Veterinary Surgeon seeks to prevent cruelty and disease. It is not alone his to soothe, to relieve, to heal disease when once it is established in the system of his patients; a nobler, a grander duty is his—viz., to prevent the spread of disease, and to prevent cruelty to the animals whose maladies he has set himself to heal; to inculcate by his own actions the spirit of kindness into others; to moderate the angry passions which so frequently work ill to the brute creation; to remove, when the opportunity occurs, causes of pain and causes of illness from the often rough and joyless path of man's best and truest servants.

The Veterinary Profession is not so lucrative as some others, and all who join its ranks must not look forward to making a fortune by the

exercise of its practice; indeed, of it may it be truly said that

Hard work and little pay, Are oft the order of the day.

Were our profession supported and fostered in Great Britain as it is in many of the Continental States, it would be far more attractive and more profitable to those who embrace it as their life's work. No Government grants strengthen and aid its schools; its students and young members are not taken by the hand and educated, and afterwards provided with berths, not very rich ones perhaps, but still better than nothing, in the army or elsewhere, until they can feel their legs, and decide upon their future course of action. No State payments assist its professors to carry on experimental inquiries—all such work has to be carried on by individual enterprise, and as the colleges are nearly all self-supporting, such enterprise is extremely limited in its extent; and bear in mind that no man can set himself heartily to work in experimental science if his thoughts are divided by the question as to-" How he is to provide for those dependent upon him for support?" Ease him of this harassing thought, and his mind is free to pursue other paths. Thus it is that Veterinary Science in this country is far behind Veterinary Science in Germany, France, Belgium, &c. a Veterinary Surgeon labours for a lifetime endeavouring to disseminate truer ideas as to the diseases of the lower animals; little is his reward; no cross of the Legion of Honour is awarded him. Whereas, in not one, but in several of the Continental States, Veterinary Surgeons reap the fruits of their hard work, and have bestowed upon them well-merited civic honours. And this is not all, for in this country the advice of Veterinary Surgeonsmen best qualified to judge of such matters—is often cast aside and other advice accepted. In the time of the Cattle Plague, when Veterinary Surgeons were demanding isolation and stamping-out, medical men were suffering from a vaccination mania; and the people shared and supported that mania until, after the loss of many valuable animals, the mistake became palpable to all. So, too, with Pleura-Pneumonia—a bane, not one whit less virulent than Cattle Plague. While Veterinary Surgeons agree that it is not safe to allow of the removal of animals from, or into, diseased byres under a period of at least three months, the Legislature fixes such period at thirty days; and what is worse, appoints as inspectors men who, in some instances, can scarcely distinguish a horse from a cow, except that the latter has horns and that the foot of the former is not cloven.

In lamenting that the State gives no support to Veterinary Science, we must not forget that private societies give a little. The Royal Agricultural Society of England, if I am not wrongly informed, supports somewhat the Pathological Department of the London College, and the Highland Society in Scotland up to the present has given its £100 annually to the Comparative Pathology Chair of our own College; and it also sets aside its £15, 15s, and its two £10, 10s for essays on particular subjects in connection with cattle. With regard to this matter of prizes, I must confess that I am sceptical of the amount of good such a course can be productive of, as little result other than theoretical can be by this means obtained; for the simple reason, that no private individual amongst us can make experimental or practical researches in a subject where the purchase of one animal for the purpose of carrying on such research would involve the outlay of considerably more than the prize is worth. I venture to ask, would not greater, more valuable, and more lasting results have been brought about had the Society appointed a Commission, supplied with the necessary pecuniary aid, to inquire practically into the subjects upon which it wished to gain further To illusurate my meaning, I will point out one fact:— Rather more than two years ago, I expressed an opinion, founded on observation and reasoning, that tubercle was propagable from one animal to another by ingestion; some twelve months after, Chauvbrau published the results of experiments, which proved that the theory I had advanced was a correct one. The difference is simply this: in the one case the means were forthcoming to carry on experimental researches; in the other they were absent.

## Second Section.

In commencing the Second Part of my address, I would remark that the subjects which the Veterinary Student has to learn have of late been somewhat added to, and a higher standard of knowledge has been demanded in them; but the present arrangement is not satisfactory even yet. It has shown us, however, the necessity for further legislation in this direction; and I hope the day will come when not only will the time for study be extended, but a higher matriculation examination, including Natural History, Physics, Elementary Botany, Physiology, and Chemistry, will be the test of entrance into the Schools. Few students, with the little time now allotted them, can avoid feeling appalled when they sit down and look at the work they have to accomplish, and as technicality after technicality greets their ears, and labyrinth after labyrinth is exposed to their view, they may well heave a deep sigh, and ask, Shall I ever accomplish this task which I have set myself? To many, it is indeed a cram; as peas are crammed into the crop of a fowl, so knowledge is crammed into the brain of the student until it is full to overflowing, and the whole becomes an incoherent mass. To most, the few months spent at College may be characterised as

\_\_\_a dream, a dream:
A feverish dream;
A whirling twirling of the brain.

Technical study is never a favourite—hard words, deep sentences, and difficult problems rather tend to repel than to attract; but it is only by a throrough knowledge of these technicalities that we can hope to obtain a thorough intimacy with the beauties which lie hidden under a comparatively repulsive crust; it is the mean-looking grub which gives birth to the beautiful and diversely-coloured butter fly; from insignificant seeds spring the various and magnificent foliages which in all countries gladden the eyes and minister to the wants of men; and it is from the simple looking, and often microscopical ova, that the teeming multitudes of animal organisms which people our earth have their primary existence. Technical study is rendered still more difficult by the shifting nosology and pathology (due to the constant advances made in scientific knowledge) of the present day.

The collateral sciences of which the Veterinary Surgeon in his studies has to gain a knowledge are Anatomy, Physiology, Chemistry, Botany,

and Helminthology—either one of which is in itself a life study.

Of these sciences, Anatomy is undoubtedly the most important, especially as bearing upon Veterinary Surgery, for to nothing does the old proverb, that "devil's enter in where angels fear to tread," more aptly apply than to this: the ignorant man performs operations of a formidable character with as little hesitation as the highly scientific man; the former, because he comprehends not the danger attending them; the latter, because he knows the points of danger and how to avoid them. It is he who has a little knowledge who makes the worst operator, as he is well aware that there are vital structures to avoid, but knows not how to avoid them; hence he hesitates and his patient dies, because he is either not sufficiently learned to avoid sources of error, or too learned to be able to shut his eyes to the existence of danger. A thorough practical knowledge of the anatomy of the body is required in order to found on a scientific basis the diagnosis and treatment of disease, and to enable the student to gain this knowledge, dissection is absolutely necessary. It were as absurd to attempt to form an opinion of the face of some person never seen but only heard of as to say what an organ is like without having handled and seen it: the semblance, the idea, is one thing—the reality, the truth, is another.

Many students look upon Practical Anatomy as dirty work, and think a lecture upon the subject a nuisance and a bore; but let me remind such that He who created us thought not so, for

Four hundred and forty-seven years
Before the birth of Christ His Son!
The Great Almighty Father—of the Universe the Architect—
In answer to His question, to the Prophet put,
Disdained not, nor thought that it demeaned
His Godly being, a lecture to deliver on Anatomy.
Son of man! He asks; Can these bones live?
And answering it Himself, He says, "Behold!
I will cause breath to enter into you, and ye shall live."
And further still than this, and looking
On the bones as the strong frame on which
The superstructure of the organism must be raised,
He said again—"And I will sinews on you lay,
And will bring upon you flesh, and cover you with skin."
And in these words to us is given, of these parts

Of the animal structures, predestinated for the Protection of organs more vital than themselves, A concise and true description.

## And further on-

The Prophet "heard a noise—
A mighty noise—and, behold! a shaking;
And the bones together came—bone unto his bone"—
Aye! Each unto his fellow, in apposition
Beautiful!—not in confusion hopelessly
Entangled; but each its purpose to subserve,
In the wise economy of the animal being,
And its fellow to support and to sustain.

Twere not alone sufficient that the groundwork Should be laid. In order to enable it to fulfil Its destined purpose, something more was yet required; And that something, too, was quickly added, For the prophet says: "And when I looked, Behold! the flesh and sinews came upon the bones." Thus, the two things of necessity absolute to locomotion, Had now been supplied;—But yet, "Twas not enough: for there was something wanted—. Comeliness to give, and to protect from the vicissitudes And ill effects of the atmosphere in which it had to live.

And, the Prophet joyously to us doth shew That, "The skin enfolded them above." Still, there yet existed a deficiency. The frame was there on which the more Delicately-formed and intricate structures Had been built—"The straps and withes, And their external covering the skin."

But what would all this be
Without the principle that to it motion gave?
'Twould be like the engine or the ship devoid of steam,
Or like balloon, without the lighter air.

"Prophesy"—said God—"unto the winds, And let breath come from out the heavens, From each of its four quarters, and breathe Upon these slain that they may live."

And as I prophesied, the Prophet says,
"The breath came into them, and they did live."
Yes! lived and moved! And thus the mighty plan
Of the Great Builder was perfected and finished:
In manner satisfactory—To Him 'twas very good.
And thus in the Creation of all things
That on the earth do live and move,
A marvellous work was marvellously planned,
And executed even as marvellously.

And as each structure of the body
Was subservient made unto the ends for which
It was created: So Zoography doth open up before us
The wonderful adaptation of each form of life;
That animate is termed, unto the purpose
For which it was intended, for the climate in which it must exist,
And for the conditions under which it had to live.

And by gradation from the worm
That meanly crawls upon the earth,
A series of organisims, with life endowed
Constructed was—each in its appearance
More nobly growing and more majestic in its form,

As its importance did increase; until, at last, Man! aye, man himself! the lord of all things Here below, did rise proud—as well he might Be proud in his superior power and upright form.

And owing to this gradatory progress
In the scale of beings what have been created,
There are those amongst us who would lead
Our minds to think, that by them had been forged
A chain 'twixt man and other creatures,
That for his use were made; and with evidence,
Inductive, and inferential; filling up hiatus,
Check, or blank, that to mar their scheme would tend.

But, in thus endeavouring a chain to forge
Which to man's high position and exalted rank
Derogatory should be, they do certainly forget
That were such proven 'twould degrading be
To Him who did us make. That in so far
As structure is concerned, a certain likeness
And similitude exists the wisest men
Have not attempted to gainsay or to deny;
And e'en the historian—of memory sacred—has thus

Much told us many, many years e'er they were born.

In the eternal counsels of the Almighty Father,
When creature after creature had been made,
When bone unto his bone had come together, and received
Its covering of flesh, of sinew, and of skin,
It was determined that there was yet required
Another and a higher form;—Something far more noble
And more Godlike than the rest, and to which their
Heads should bow. Some being that should regulate—
To some extent—their increase and decrease,
And to whose wants and varied wishes, they

And after seeing that all which had been made
Was very good, God determined man to form,
And though for this good purpose He from the Earth
Did choose the dust, as He had done for all
Other things that lived; and ordained that
Unto this dust man's body should again return;
There were two things left to superadd,
That from all else should him distinguish.

Should each administer.

In His own image, He created him
And with wisdom, understanding, knowledge,
Power, and might, did him endow;
And in order that this likeness might not be defiled,
Reason on her high empire was enthroned,
And thought established in the mind of man.

Yes! these Godly attributes to him were given
That he might carry out the predetermined counsel
Of that Being of whom (in Spirit) he was the image and reflection;
And though, as all must own, the animal creation
Is supplied with powers, both of reasoning and of instinct,
These principles to it were only given that it might
All the more contribute to the enjoyment, well-being,
And support of him who over it was made to reign.

True instinct, reason, thought, nobility— The attributes and great prerogatives of God— To man alone were given, that he should be Like unto Himself.

From what I have just now uttered, you will have gathered that I am not a convert to Darwinism; while admiring the man for his undaunted

perseverance, his great scientific zeal, and his power of generalisation, I cannot subscribe to a doctrine which teaches, that He who made a mollusc did not also as an independent act create man, and that the Power which brought into being a protozoon or a cell, did not also, as a separate creative act, bring into existence a leviathan of the ocean, or a mammoth of the land. Until it be shown that the necessity existed for the Creator to evolve man out of the lowest form of animal life, then, and not till then, can I bring myself to accept a theory which is at present only based on hypotheses.

Chemistry—a science which has done more for the advancement of the human race than any other, which has penetrated to the lowest depths of the mine, has riddled the earth, sifted the air, and analysed the ocean—is of importance to the Veterinary Surgeon, inasmuch as it teaches him some of the secrets of the phenomena accompanying health and disease with which he constantly meets; and warns him against mixing together or administering substances to his patients which are incompatible with each other, or with the solids and fluids of the body with which they may come in contact.

Histology-

To us doth show, the little things— The little things, which aggregate, do form The large: and constitute the great Harmonious all of Nature.

Physiology is intimately connected with Anatomy and Histology, and this connection may not be inaptly likened to that existing between the maker and the performer on the pianoforte: the former knows every part of the instrument and the arrangement of every key, and the latter knows and can explain from which of these keys he can obtain the sound he desires. I look upon Physiology as the consummation of all your other studies—the perfection, in fact, of all study, because you gradually pass on from the contemplation of the structures to their highest office, which is reached in Physiology.

Botany is a new study to the Veterinary Student; and I would, considering the little time at his disposal, that more attention were directed to the detection of poisonous plants than to classification. Structural and Physiological Botany is closely allied to the Anatomy and Physiology of Animals, and teaches us that the two kingdoms are intimately connected with each other, not only in being mutually dependent for their existence, but in their structural characters. For, the woody fibre of the stem and branches of the plant correspond to the bony skeleton of the animal: and without these frames their organisms could not be built. The leaves of the plant inhale and exhale like the lungs of animals; it has its circulatory system: the sap corresponding to the nutrient fluid, the blood. It has, too, its secretory system, assimilating, building up, and consolidating. Like the animal, it has its genesis in an ovum, which is impregnated and nurtured in the ovary. Each has its Alpha in a cell, and in its Omega each contributes to the life of the other. Each is dependent, too, upon the fluid, solid, and

gaseous constituents of the air, earth, and sea, for its growth and subsistence.

Helminthology-

'Tis not a pleasant theme, perhaps,
My muse is now engaged upon.
Ah, no! pleasant it cannot be to contemplate the fact,
That this, our wondrous frame, should be the home

Of parasites, unnumbered, and innumerable.

Infinitely small they are, but wonderfully
And fearfully made; with structures intricately
Built up as thine, oh, Man! who art so proud
In thy superior strength, and think'st thyself
So much above the creatures that around thee move.
But even in thy boasting—vain as void—a busy
Host of living germs are ever fattening on thy inmost vitals,
Devouring, and burrowing through thy textures
In manner subtle and insidious. Slowly and silently

In manner subtle and insidious. Slowly and silently
Their growth goes on; but even thou with all thy pride
And wisdom, cognisance cannot take, of their infinitesimal
But none the less destructive presence.

Witness, too, the Bombyx: a parasite itself, A hanger-on to other structures; yet not free from other forms,

Whose serried ranks, in one vast phalanx, Its body—delicate—invade.

Well-grounded was the hatred nursed by the Progenitor of the Hebrew race (and handed Down from sire to son, from son to sire again Through countless generations of descendants) against The flesh of swine. Abomination then, 'tis not The less so now; when, by deep patience and research The microscope reveals myriads on myriads, a countless throng Of beings, which transported to the human frame, A dire disease set up—Trichiniasis, named by men Well versed in matters scientifical. Dreadful 'tis indeed, To think, that in our tissues lay encoiled, a host—Collective, mighty,—though when singly Contemplated, insignificant.

And thus is our great food supply
The home of many creatures, which wait but for appropriate
Habitation to be developed, and results disastrous to produce
In animals and man In this great host included are
Distomata, Ascarides, and Tænideæ, with all their
Intermediate forms; each—in its life, migratory—
Sapping the essence of other lives more noble

And more useful than themselves.

Gentlemen, there is no subject which affords so wide a field for research as that of Helminthology, no subject so little understood, and no cause of disease which annually claims such a holocaust of victims. I have, since my connection with the College, endeavoured to impress the importance of this subject on the student, and shall still continue to do so; more particularly as parasitic diseases are so much on the increase in every class of animals.

## Third Section.

## RELATION OF TEACHERS WITH TAUGHT.

Trust your Teachers, gentlemen, and believe that it is their determination and their desire to aid you to the utmost in attaining a knowledge of

the several subjects you have to study. As the roots of the plant deeply penetrate the soil, and rive even the solid rock to gain a spot of earth in which food proper for its nourishment is deposited, so it is the duty of the teacher to sift the various theories which come under his ken, and to burrow through the masses of evidences which are presented to his view, in order that he may pass by or reject that which is not in accordance with fact, and place that only before the taught which he considers orthodox and true, and likely to feed his mind with a supply of necessary nourishment in the form of useful and attractive knowledge. And as the plant which is situated on the border of a stream grows rapidly and vigorously by appropriating to itself somewhat of the large quantity of nourishment, in a state fit for assimilation, by which it is surrounded, so the student must choose from that which he is taught, material necessary to fit him for the duties which he will have to perform when he turns his back upon his Alma Mater, and goes forth to fight the battle of life, by the aid of his own strong arm, by fixity of purpose, and the power of his own will.

And be assured that as it is our intention to aid you in your studies, so it is our wish to give you advice and assistance in other matters than those which strictly affect the teacher and the taught. I have always felt that it is a pleasant thing for a young man, separated by many intervening miles from those he loves, to think that in his teachers he has friends whom he can consult in emergencies, and in whom he has perfect confidence.

Moral and Social Evils abound in every city and town; not in one street alone, but in all; not only in the quarters of plebianism, but in those more favoured spots which are ever redolent of the perfumes of the aristocracy; and it is against these things that we desire at all times to warn and caution you.

Be Diligent.—Knowledge can only be gained by work, it will not come by intuition; and this work, to be effective, must be thorough, it will not do to rest satisfied with a mere superficial view of things, as in this case no lasting impression is made on the memory, and the time spent in such study is only thrown away. The majority of professions rise in proportion as the general public recognise them as an integral part of the great social system; ours, as a special profession, will advance in accordance with the acknowledgement by owners of domesticated animals of its utility and necessity; but far more surely will it advance in ratio with the earnestness, the industry, and the accomplishments of its practitioners: every act of negligence, of carelessness, or of ignorance on the part of one of its votaries, is a stab from which much time must elapse before recovery can be looked for.

The caution to be diligent is rendered all the more necessary by the fact that there are several fallacious notions entertained, more or less, by all students; these are the *idling away of time* during the early part of the session, with the idea that they will be able to "pull up" at its close. Let those who nurse such a fallacy take my word for it, that they will find when they come to pull up, that the number of ideas which they attempt to stow away in their minds will produce such a whirl therein as will render their knowledge, alike to themselves and their examiners, an *incom*.

prehensible jumble. The system of dividing the examinations has done away to some extent with this mistaken notion, but it still exists far too much. Other students under-rate the Examiners and trust to luck, consoling themselves with the absurd fallacy that "if such an one gets through they can do the same," or "if they are plucked there will be plenty more who will share the same fate." Rather study with a determination to win and trust to Providence for the rest. It has been said—

"How can the man who ease pursues
The praise of knowledge ever earn?
All those the path of toil must choose—
Of ceaseless toil—who care to learn.
Who knowledge seeks, must ease refuse;
Who ease prefers, must knowledge lose."

Be regular in attendance at College, and earnest in attention in class. Irregular attendance and lack of earnestness in listening are rocks upon which many young men split; a link is lost in a chain which, like a dropped stitch in knitting, demands the outlay of valuable time for its recovery.

Be not self-conceited, but gather up every crumb, no matter whether he who lets it fall is in your estimation great or small, knowing that even from the mouths of babes and sucklings wisdom frequently goes out; and never think that everybody else is foolish because you happen to be wise.

Lose no opportunity of gaining knowledge, for like all that is good, opportunities are golden, and their glint cannot be regained if allowed to slip from the grasp.

Assist each other in every possible way; you must be prepared to borrow as well as to lend, to instruct as well as to be instructed, to give as well as to receive.

"Two men of heavenly bliss are sure:
The lordly man who rules a land
With mild and patient self-command;
The man who freely gives, though poor.

You are all here for one common object, be banded together then as brothers, each trying to forward the others' interests, and your reward will not be small in the knowledge that you have contributed somewhat to the general advancement of the Profession which you have chosen. Companionship makes men brave! No matter whether the character of the toil be mental or physical, it is lightened and made easier by the knowledge that another shares the labour; by working together a spirit of emulation is excited, and an idea falling from one and being communicated to another, will open up a view of the subject under consideration which may render it the more facile to grasp and understand.

Observe.—Observation is the life of science. The value of observation and its meaning will, I think, be best understood by the relation of the following tale; I know not its author, but be he or she what they may, they deserve much credit for the happy way in which they have, in so few sentences, explained the meaning of an important word in our vocabulary:

-" A dervise meeting two merchants in a desert, enquired of them If they had lost a camel, if it was blind of one eye, if it was lame, if it had lost a tooth, and if it was laden with corn on one side and honey on the other?" To these several questions he received affirmative answers, and in return was asked 'What he had done with the jewels which the camel carried in its pack,' as since he knew so much about the matter, he must also have discovered the jewels and stolen them. After being searched and tried for the theft without eliciting evidence of his guilt, they were about to try him as a sorcerer, when he told them that he had obtained a knowledge of the particulars he had given them by previous and acute observation; 'Thus,' he said, 'I knew that the animal was lost, because its footsteps were not accompanied by those of an attendant; that it was blind, because it had cropped the herbage only on one side of its path; that it was minus a tooth, because small tufts of herbage remained in the centre of its bite; and that it was lame in the left foot, because the imprints of that foot in the earth were lighter that those of the opposite; as to the nature of its burden, the busy ants on one side, and the clustering flies on the other, gave me a sufficient clue.

Persevere.—Perseverance wins its own reward! Who has not observed the short pieces of sea-weed growing on the stones on the sea shore? Who has not watched one of these weeds now standing erect; anon-at the roll of a wave-yielding to the superior force of the waters, bowing its head, and becoming submerged and hidden for a short time, then rising to its natural position on the refluence of the waves into the trough of the sea; its elasticity enabling it to do this no matter how many times the waters may assert their dominion over it? Just so is the life of a brave persevering man. The canker-worm of care may knaw at his heart and cause him to bow his head; the enmity of foes and the falseness of friends may sadden and depress him; some one who has been near and dear to him may have been suddenly cut off, leaving a blank behind, which nothing earthly could fill: poverty, sickness, and adversity, may have each added a stone to the weight which oppresses his soul ;-but in spite of all he struggles on and braves each successive storm, having faith in the ultimate triumph of perseverance over difficulties, trusting in the love of an all-powerful and everseeing God, and feeling that this life is but a pilgrimage and a journey to a better land.

Just so must it be with you, gentlemen, if you strive to understand something which seems hidden and fail; make another, and yet another, effort, and all will become familiar and simple to your view; everything is made easy by degrees: look which way you will, and at any science you choose, and you will find that that all has to be attained slowly and perseveringly. If you place a vessel of water out in the cold air of winter, it does not become congealed throughout its bulk simultaneously; gradually the surface is cooled, this abstracts heat from the surface below it, until ultimately the whole mass becomes of the same temperature as the media by which it is surrounded. George Elliot has said—

"Could if he would? True greatness ever wills; It lives on wholeness, if it live at all, And all its strength is knit with constancy."

And, if beyond this you need other spurs to goad you on to work, you have them in the chances afforded you of obtaining some of the bursaries and medals so generously offered for competition by the Trustees of the College, and by the Highland and Argricultural Society of Scotland.

Rest on the Sabbath.—Recreation is highly desirable; rest is an absolute necessity; and I conjure you, for your own sakes, not to fall into the hurtful, and much to be deprecated practice, of devoting your Sabbath leisure to study. Six days out of the seven are given you for this purpose, and if you cannot accomplish all you desire in the six, I promise you that it cannot be done by misusing the seventh. Nature, to whom I refer you, proves (and amply so, too,) the truth of this assertion; for, who has not felt, and who does not feel the holy calm of the Sabbath Day? I answer, none but those whose minds are entimed alone to the things of earth, Even Nature herself seems hushed during those proscribed twenty-four hours of rest. Go into the fields and watch the lazy browsing of the cattle in the hedge sides, and the listless manner in which they rest under the shadow of the trees; see the sheep carelessly outstretched on the green slopes; wander into the woods, and on their velvety carpet repose for a short time, and whilst doing so, listen to the hum of the bees and the buzz of the flies; watch the quiet, timid, and almost silent rush of the squirrel from tree to tree; hark to the subdued lowing of cattle in the far distance, to the ripple of the brook flowing at your feet, and above all, to the encalmed but glorious trill of the feathered songsters of the forest and the field; and tell me, is not all subdued, is not all sweet repose? Yea! in bush and brake, in forest and glade, in the valley and on the hills, an universal quietude proclaims that the Sabbath is a day of rest; and yet, man alone, the greatest of all God's works, with his illimitable thoughts, with his restless mind, remains unsatisfied, and not content to be quiet.

To be more practical, let us take two sets of horses, the one set toiling each day indiscriminately, the other set enjoying its septuisimal day of rest, and tell me which set is the most profitable in the end? The proprietor of

which set, think you, has the greatest return for his outlay?

Finally, gentlemen, be "Harmless, but armed." "Harmless" in not attempting to injure wilfully your professional brother, but shielding his name from evil as jealously as you would your own. "Armed" with the sword of the spirit of truth and of knowledge, so that you may not fear the attacks of any man who may wilfully wish to damage your professional fame; and do not think when you go into practice, that your enemies will alone be found outside the Profession—remember that a man's foes are often those of his own household; and unfortunately it is frequently true of our Profession as of others, that

Like the carrion fly which scruples not To lay its eggs within the carcase Of its fallen fellow—

some of its members scruple not to seek for the skeleton which is hid in the cupboard of their brother, and expose it alike to friend and foe, hoping

thereby to raise themselves in the estimation of those around them. The only effectual way of being armed against the attacks of foes, is to work hard during the allotted time of study in order that you may gain a perfect knowledge of, and mastery over, the details of the Profession you intend to practice, and by which, at least the majority of you, intend to live. Be true to yourselves and to your clients, but above all, to your Profession and to your patients; bear in mind that every agony unrelieved in the latter through your carelessness in not making yourselves acquainted with the means of giving relief, is a witness to your inhumanity, and a moan of dissatisfaction at your inability to relieve the pangs of the creatures you assume to treat.

Love your Profession for its own sake, and in its noblest sense; not for mercenary motives alone, but because by its exercise you perform a noble part; let its highest aims be yours, and when your life's career is drawing to its close, when the golden bowl is about to be broken, and the thread of life snapped, you can look back with a feeling of satisfaction, that you have left undone nothing which you might have done, and that in your little life on earth, you have at least endeavoured to do good by

banishing, or assuaging, some of the ills to which flesh is heir.

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