the vessel was oval, smooth, and rounded at the edges, and easily admitted the blunt end of a probe. We perceive that the statement made by Mr. Lawrence is hereby confirmed; and, in this case, hæmorrhage occurred so late as five weeks after the accident.

The patient, after the first few days, went on very well; the wound healed favourably, the young man regained his health and spirits, and is now gone to his friends in London.

Plymouth, August, 1830.

AN INQUIRY

INTO THE CIRCUMSTANCES WHICH HAVE
BROUGHT INTO DISREPUTE THE

OPERATION OF FIRING

For Lamenesses of Horses, with an improved method, and suggestions for its admission into Human Surgery.

By Mr. JAMES TURNER, *Veterinary Surgeon.*

"MONSTROUS presumption!" I expect will be the exclamation that will head the reply to this letter. Should you, however, Mr. Editor, be disposed to give it a place in your far-famed Journal, viewing the communication merely as a veterinary subject, I think the majority of your readers will be content to smile at it as a novelty, although the more grave portion may be angry, and, perhaps, reprove me for temerity.

That I may plead some shadow of excuse for thus addressing you, permit me to state that my whole time and thoughts have been occupied in endeavouring to cure sick and lame horses from my earliest days, and having gained experience by a long practice in a hunting country (viz. Surrey, notorious from its hills and flints for incapacitating the limbs of horses), it has followed that lamenesses, arising from diseases of *joints*, have demanded of me, and received, the most sedulous attention.

The difficulty of establishing a radical cure after the interior of a joint has suffered such violent contusions as are consequent upon hunting over a rough country, is well known, and has induced or rather compelled me, to *venture* farther with that veterinary instrument called the *firing iron*, than the generality of practitioners, having pushed the actual cautery to greater extremities, in contra-distinction to that method which is commonly known by the term *superficial firing*.

Now the latter is the generally approved mode, and consists in drawing lines in the

skin at certain distances from each other with a red-hot iron, about half or three parts through the common integuments. Most of the veterinary authors of the present day reprobate the practice of passing the instrument entirely through the skin. Vide the 14th edition of Mr. White's popular work on the Diseases of Horses; in his *Compendium* for the treatment of diseases, page 310, he remarks, "The skin should never be penetrated; but the cuticle should be destroyed, and a dark-brown impression left on the skin."

Again, Mr. Percival's *Veterinary Lectures*, 1st volume, page 358, on the treatment of spavin, this scientific writer observes, should the ordinary means fail, "firing may be had recourse to, but not deep firing." Also Blaine's *Outlines of the Veterinary Art*, 3rd edition, page 672. This intelligent author is particularly cautious, and limits the operation to the cuticle. Among the old writers on this subject, I observe that the celebrated Osmer forbids penetrating the skin. Both the Professors of the Royal Veterinary College of London have cut this matter much shorter, and nearly extinguished the *fire* altogether, having repeatedly pronounced it a "useless operation."

My desire is to see the "Phoenix rise from its dying ashes," therefore will attempt at showing the causes which have led to the failure and abandonment of the *firing* operation, regarding it as one of our chief resources in effecting *cures*, and therefore indispensable to veterinary surgery.

I am well assured the eminent and highly-talented professors of our national institution are sincere when they inculcate that other remedies are preferable to the firing iron; they are themselves deceived; having taken notice of the College practice of firing ever since the year 1810, I am well aware that they have fired only *superficially*, and studiously avoided cutting *through* the common integuments, they have therefore experienced a succession of disappointments, and consequently have lost faith in the operation. This being the impression at the Royal Veterinary College itself, it is not to be wondered that a corresponding effect should have been produced on the public mind, and the result is, that a very strong prejudice exists at this moment *against* the operation of *firing* in horses, particularly in the metropolis, but it is still upheld in the country as indispensable by post and coach masters, and most sporting men who ride the top pace to hounds.

I am quite certain that the professors have given to the public a candid and honest opinion, experience having likewise shown me in too many instances, that *surperficial firing* (that is, where the skin is not com-

pletely cut through with the instrument) is not one jot more efficacious than a common strong blister.

Vewing the other method, my practice in firing of horses has convinced me, that the *success of the operation, if performed for the removal of lameness*, where the ordinary means have failed, whether situate in a joint or a sinew, depends solely on making each separate line or incision, from end to end, completely *through the skin* or common integuments, *cutis* as well as cuticle, and boldly exposing the cellular tissue, forming the immediate covering of ligaments, tendons, periosteum, &c.; with all due caution, of course, not to pass the instrument so near as to wound or sear these important structures. When the part operated on happens to be the inside of the hock, a case of spavin, for instance, all the dexterity, tact, talent, and *nerve* of the experienced practitioner will be in requisition; for while he strenuously exerts himself amid the struggles of his patient, he revolves in his mind the absolute necessity of his instrument reaching the surface of the disease itself; and yet, on the other hand, he has to consider the paramount necessity of avoiding a puncture of the capsule of the joint.

With respect to the rationale of this method of firing, the kind of instrument as to shape, size, &c., the great variety of cases for which it is applicable, together with the fore-and-after treatment of the patient, I have as much to remark as would fill a volume, and which I purpose, ere long, to submit to the public. But I deem it necessary to state, that although my brother, Mr. Thomas Turner, Veterinary Surgeon, of Croydon, and myself, have practised these deep cautery incisions successfully for a series of years, we have never allowed that success in a single instance to entice us off our guard, by venturing to perform this operation so far from home as to preclude the possibility or convenience of almost daily watching our patient, and therefore, by never having allowed that sturdy opponent, "inordinate inflammation," to have gained a day's march on us, we can defy the world to say, that a single mishap has occurred to us from the severity of the operation, such as an opened joint, or a fatal termination from excessive irritation or constitutional disturbance.

I fear, Mr. Editor, your patience is exhausted; but I have now only just arrived at the burden of my story, therefore I will come to the point by asking you, whether it is your opinion that this *deep* method of firing, as above detailed, may some day or other become admissible in the surgical treatment of human beings for many of those intractable scrofulous inflammations of the synovial membranes of joints, commonly

called white swellings of the knee, hip-joint cases, &c.?

Of course I cannot pretend to any knowledge whatever in such matters, only that I have been led to think on them from having carefully perused those splendid yet plain lectures by Mr. Lawrence. In the treatment of ulceration of the cartilages of joints, Mr. Lawrence remarks, page 485 of Vol. II. of *THE LANCET*, that your "great reliance must be on counter-irritation," and that in the days of Hippocrates, the same principle was employed by the application of the actual cautery, and that Professor Rust, of Berlin, considers the hot iron as more efficacious than other means of employing this principle.

Now, Sir, I humbly suggest, that if such desperate cases have derived benefit from the days of Hippocrates down to Professor Rut's time, by only cauterizing or searing the *surface* of the skin, how much more may be expected by making numerous crucial incisions *through* the skin with the actual cautery, occupying a surface of integuments by these lesions, somewhat more extensive than the disease is supposed to occupy within the joint, thereby creating artificially a counter disease truly formidable, but yet controllable.

If had recourse to in the *earliest* stage of the disease, I entertain an idea that the patient would experience instant relief by the *bold and free incisions releasing the capsular ligament from the pressure of the integuments*, the bare circumstance of putting the patient out of pain by removing tension during the period of the acute stage, might ward off the chronic form of the complaint, in more *suddenly* arresting its progress, than the operations of leeching, purging, fomenting, &c.

I will not presume any further on the subject, but as I am reasoning from analogy only, I must beg to add that I have also practised these *cautery lesions* upon hounds, for a disease which huntsmen call the stifle joint lameness, usually with success, and never with the supervention of any disastrous circumstances.

Horse Infirmary, 311, Regent
Street, Aug. 14th, 1830.

CASES OF LIGATURES TO LEECH-BITES.

By GEO. YEATES HUNTER, Esq.

THE subject of troublesome bleeding from leech-bites, has been often referred to in your valuable Journal; the several methods of restraining it have been mentioned, and at least one case of fatal hæmorrhage has been recorded. I confess that I smiled at these accounts, because in a tolerably extensive