Profession ever had,—whatever the mistaken partiality of friendship and good opinion, or the flatteries of weak-headed or time-serving sycophants may say to the contrary. Mr. Coleman is very prone to talk about the art he professes being still in its infancy; in this at least he is candid, for as far as the Veterinary College, its Governors and Professors, are concerned, it certainly is so, and can never be otherwise.—Nurtured in mis-rule, delusion, and sordid avarice, human nature must undergo a change before it can be reasonably expected that these Governors and Professors should libel their past conduct by making their future conduct entirely its reverse,—and it is only by a course thus widely different, that any satisfactory improvement can be obtained.

If more facts and further illustrations on this subject are requisite, I am prepared to give them, but I think it is needless to do so.

July 1830.

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DISCOVERY OF PART OF THE POROUSSYSTEM OF THE EPIDERMIS.

By THOMAS GORDON HAKE, *Esq.,*
of Edinburgh.

A SURVEY of the works of Bonn, Albinus, Winslow, Haller, and others, who, in their writings, have noticed the structure of the epidermis, renders it at once obvious that nothing hitherto has been known concerning that membrane. Bichat I think stands alone in asserting that he observed pores in it, but his conjecture on the obliquity of their course shows how little he really saw.

Even with the naked eye, a scrupulous examination of the cuticle enveloping the palms and corresponding surfaces of the fingers, will bring into view a vast number of *ridges* and *furrows*; the latter being between the former, and with them taking various courses, both circular and serpentine, and the former having a dotted appearance.

On using a moderate lens (and let me here observe that no microscopical appearances can be relied on, unless the outline of the object can be seen without a magnifier), the following results are obtained:—

1. The *base* of the *ridge* is found to be $\frac{1}{30}$ of an inch in width.

2. The *furrows* are concave from side to side, and $\frac{1}{300}$ of an inch in width.

3. From the edges of the furrows arise the *sides* of the ridges which meet above, imitating the form of a prism, each side being $\frac{1}{36}$ of an inch in width.

4. Of these *sides*, one is occupied nearly

in its whole width by papillæ, arranged in a regular series and in the direction of its length; their distance being one-fiftieth of an inch from each other, and each being terminated above by an open mouth, which is often seen filled with a glistening globule of fluid. By dissecting away the ridge, layer by layer, down to the level of the furrow, each new surface presents an opening perpendicular to the spot occupied by the mouth above, proving the non-obliquity of the canals.

5. Proceeding from the mouth of each papilla, a superficial groove traverses the *opposite side* of the ridge, terminating in the furrow below, by which arrangement the perspiration reaches the latter after rising through the canal, and leaving the mouth of the papilla.

On first observing these phenomena, there are three circumstances which are apt to cause deception:—1. The papillæ may appear to be in the furrow, owing to the inclination of the sides of the ridges. 2. If viewed from one side, the papillæ will appear to occupy the summit of the ridges. 3. If viewed from the other side, the whole appears reticulated from the meeting of the grooves and furrows.

July 1830.

PROPOSITION FOR THE CURE OF SANGUINEOUS OR SEROUS APOPLEXY.

By E. B. SHERRIFFS, *Brown-square School*
of Anatomy, Edinburgh.

THE fatal result of apoplexy in most cases, more particularly in such as are of the above class, shows how prompt our treatment of it ought to be. Sanguineous apoplexy generally depends on an increased quantity of blood being sent to the brain, although it may also happen from obstruction to the free return of the usual supply. Serous apoplexy, when it occurs, is the result of sanguineous, unless where it is produced by relaxation of the exhalents; hence the same treatment will, in general, answer both the varieties of the disease.

Bloodletting, which is so great a resource in apoplexy, so far as I have been able to judge, seems to afford but a very temporary relief, often encouraging the plethoric diathesis, and thus ultimately hastening the fate of the patient. Other remedies, although undoubtedly not without their good effects, are also in the greater number of cases finally unavailing. It would appear to me that a far more sure, speedy, and safe remedy than any other has been quite overlooked by practitioners, viz. securing one or both internal carotid arteries. As to the safety of securing both, no doubt can be

entertained. That it will greatly diminish the supply of blood sent to the brain, we are equally certain, and this step must prove at once efficacious and continue so, for the vertebral arteries can never increase in size, so as to transmit as much blood as was formerly done by them and the internal carotids.

I have this day been examining a dog, in which I secured the abdominal aorta about six months ago, and after injecting this animal from the right common carotid, I was astonished not to find the arteries which had carried on the collateral circulation, larger. Still I was enabled to make a beautiful injection of the sacral extremities. That securing the internal carotid arteries is preferable to the common carotids, I am quite of opinion, as were we to secure the latter, the circulation might soon be nearly as perfect as ever, from the anastomosis which exists among the vessels of the head and neck.

Securing the internal carotid may easily be effected immediately sacred to the digastric muscle, for here we find it very superficial, the only important organs betwixt the operator and it being the lingual nerve and its descending branch, with several veins from the submaxillary and sublingual glands going to join the internal jugular, which also lies superficially and inial to the artery. These veins forming a plexus over the vessel, will be with difficulty excluded from the ligature in securing it. We must not forget that the artery, after passing off the rectus capitis anticus major, gets upon the pneumo-gastric nerve and superior cervical ganglion of the sympathetic, so that these or their primary branches (the superior laryngeal and superior cardiac) may be included in the ligature. The best line of incision is, perhaps, from the mastoid process of the temporal bone to the os hyoides, deepening until we bring the posterior belly of the digastric into view, when, cutting cautiously down, we may expose both external and internal carotids, the latter being most inial.

Not having as yet had an opportunity of putting the former proposition into practice, and as I should be unwilling ever to do so were there any just argument against it, I thus submit the suggestion to the consideration of the profession.

EXPANSION OF THE HORSE'S FOOT.

To the Editor of THE LANCET.

SIR,—Observing a very glaring error, which has been made by your reviewer, in THE LANCET, No. 360, July 24th, in the notice of Mr. Bracy Clark's book on the Foot of the Horse; I therefore appeal to your impartiality and candour for the correc-

tion of the misstatement, by particularly requesting an early insertion of this letter.

It is expressly stated in the review, that "Mr. Bracy Clark was the first to point out the principle of elasticity in the horse's foot." Now, Sir, I positively deny that he was so, and presume the following extracts, which have been selected from a variety of others, will prove my assertion, whatever may be advanced to the contrary.

1st. "In the middle of the frog is a longitudinal cleft, or opening, by which the heels have a small degree of *contraction* and *EXPANSION* at every tread which the animal makes upon the ground."*

2d. "I was led to these researches on the anatomical construction of the foot, from having, by constant attention for some years past, carefully observed the various exertions of which the limbs of a horse are capable; and from having noticed, in consequence of frequent conversations with my late much-regretted master in horsemanship,† the necessity there is for preserving the elasticity of the heels for those purposes."—Preface, pages 7 and 8.

3rd. "I shall begin these observations by giving some general idea of the construction of the hoof, and of the motion which its elasticity admits."—Page 1.

4th. "In the interior part of the hoof the fibres become a laminated substance, following the same direction, and placed, as I shall hereafter describe, in such a manner as to be peculiarly subservient to the elasticity of the hoof."—Pages 2 and 3.

5th. "For when his feet strike the ground, the elasticity of the bars aids the pressure of the bones in the expansion of the heels; which are again immediately contracted by the quarters, the moment his heels are again in the air."—Page 13.

6th. "It is enabled to yield (i. e. the frog) to the expansion of the foot by having a longitudinal cleft or opening in the middle, which expands and contracts itself upon violent exertions, when it is permitted to touch the ground. It also yields to the binders in the expansion of the heels, and to the 'bones in their play upon one another.'" —Page 15.—*Observations on the Mechanism of the Horse's Foot, its Natural Spring explained, &c.* By Strickland Freeman, Esq. 1796.

It appears that Mr. B. Clark's first edition bears the date of 1809; consequently we have two, at least, of the best writers, by

* Observations upon Shoeing of Horses, with an Anatomical Description of the Bones of the Foot of the Horse. By J. Clark, Farrier. Published at Edinburgh, 1770.—Page 7.

† That excellent horseman, the late Sir Sidney Meadows.