ART. XI.—*The History of a very extraordinary and unusually violent Case, (supposed to have been engendered by Glanders,) which terminated fatally in the Hospital of the 2nd Dragoon Guards, at Cahir Barracks, Ireland, 30th April, 1829.* By ANDREW BROWN, Surgeon 2nd Dragoon Guards.

GLANDERS, until lately, was generally considered, I believe, a disease exclusively belonging to the horse, the ass, and the mule. But within the last few years, there are several cases on record, which unequivocally shew the facility with which it may be communicated to the human subject by the contact of morbid matter (from any of those animals) with the surface of incised or lacerated wounds; evinced not only by the subsequent inflamed state of the lymphatics, distinctly traced from the part originally inoculated, terminating rapidly in ulceration, similar to farcy; but that the matter again taken therefrom possesses a most active power of reproducing this disease in its most acute and genuine form, invariably ending in death; thus proving its existence in our own practice, as well as its extreme virulence, beyond the possibility of a doubt.

I am not, however, yet acquainted with any authenticated case having heretofore occurred, where this truly formidable disease has been communicated to man by other means, either by cutaneous absorption, by effluvium, or by the incautious application of glandered matter to the nasal linings, in picking, scratching, or blowing that organ. And should it be admitted, that there is even a possibility of introducing this direful malady into the human system by any one of these means, or by a combination of the whole, then the following singularly untoward case may be, at least, elucidated, if not clearly and fully established.

CASE.—Corporal John Wells, aged thirty-eight, a tall, well-formed, florid-complexioned, healthy-looking man, originally a labourer, and had been upwards of nineteen years in the corps; during the whole of which lengthened period, he “was never

once in the doctor's list," always enjoying the best possible health, until the 16th of April last, when he was suddenly awakened from an unrefreshing sleep by rigors, headach, and irritability of stomach, all of which continued unabated when admitted into hospital next morning ; complaining, in addition, of severe continued pains, and stiffness in all his large joints, which became excessively aggravated on the slightest motion. I am just informed, " these are the constant precursors when a combination of severe acute glanders and farcy first appears in the horse ; and in all cases thus ushered in, death speedily and inevitably follows." He laboured, likewise, under great depression of spirits, restlessness, and a general disturbance of all his functions, which he could not possibly refer to any particular cause. But on subsequent inquiry, it appeared, that he had sole charge of a glandered horse for some time previous, which had been destroyed on the very evening of his attack ; and that he had skinned him, and exerted himself a good deal in cutting up and burying the carcass. But these circumstances did not then create the least suspicion ; and his complaint was considered a very severe case of acute rheumatism, and treated as such. However, on the morning of the 19th, two days after admission, finding that the severity of his pains increased under the most active means, and that his constitution was no longer able to bear a continuance of them, Dr. Home and myself became truly alarmed, even at this early stage of the disease, in observing its unconquerable violence, and novelty of appearance, forming thereon, in consequence, a very unfavourable prognostic.

From this period, the constant and general pain, night and day, became excessive, and violent to a degree ; but particularly over the left shoulder, which, on examination, shewed the scapula slightly tumefied, although not inflamed ; but being above the temperature of health, leeches were consequently applied over its entire surface ; and it bled profusely for some hours after, without affording the least relief : but it shortly after became hard, ecchymosed, and insensible to the touch.

The severity of his sufferings continued unabated ; and on the morning of the 24th, seven days after admission, the tumour over the scapula had assumed a dark livid colour, and attained a considerable size, resembling, in a strong degree, the shoulder of a man recently and severely punished.

Similar tumefactions, but more circumscribed, were now observed on the legs, arms, and sacrum, and one of considerable magnitude over the left temple, which had already distorted the entire face. The eye being apparently diminished and humoury, the lids tumefied, the inferior one with a prominent doubling in it, the conjunctiva pale and infiltrated, as well as the membrana nictitans and caruncula lachrymalis. The skin and cellular membrane of *this* tumour, together with *those* on the extremities, became like *that* on the scapula, hard, insensible to the touch, and of a dark chocolate colour ; convincing us that the application of leeches to the original one, was not instrumental in the production of those appearances, as we had then supposed. The right nostril was likewise contracted, and gummed with an inspissated discharge ; and he complained of constriction of the throat, with difficulty in swallowing cold liquors, but not those previously warmed ; and on examination, the posterior fauces were found much inflamed, and nearly of the same purple hue as the *tumours* on the surface ; the whole of which observed regular gradations from their commencement : first showing themselves, not simultaneously, but in succession, by a slight discoloured puffiness of the skin and cellular membrane ; generally nearest the bone ; they were next observed after a lapse of twelve or fifteen hours, diffused over their entire surface with a deep vermilion blush, which then changed rapidly into a dark brown ; the integuments becoming thick and callous, with fissures or superficial cracks, from which exuded a thin, acrid, corrosive sanies. These formed their characteristic appearances without any very material deviation, or producing the slightest mitigation of suffering throughout, which had now become so excruciating as to baffle every effort of art to procure

either sleep or rest ; not even whilst in the warm bath has he had a moment's respite from pain.

His thirst from the beginning had been great, with a foul parched tongue ; his pulse varying from 88 to 96, and full, but easily compressed ; and the blood abstracted at the commencement of this disease, appeared much attenuated, buffed, and deprived of the coagulating principle. His bowels (constantly attended to) were easily kept free, and his excretions, both urinary and alvine, were always natural in every respect, showing the alimentary canal perfectly healthy.

In this state he advanced into the morning of the 28th, his eleventh day under treatment ; when several distinct, warty pustules, considerably raised above the surface of the skin, were first observed on different parts of the body, very much resembling yaws, but particularly numerous and large over the right side of the neck and shoulders, and on the inside of the arms and thighs.

Several of the tumours already described, but particularly the one over the shoulders, appeared now to be running rapidly into gangrene ; which had not been in the slightest degree impeded by the copious exhibition of tonics and antiseptics ; and the powers of nature being at length quite exhausted, his pulse scarcely perceptible, his countenance frightfully haggard and livid, his entire surface bathed in a cold clammy sweat, and of a pale leaden hue, we expected every moment to be his last. He, however, held out in a partial state of somnolency and a low muttering delirium until the morning of the 30th, when death happily released him from his misery : having been twelve clear days under treatment in hospital.

Post-Mortem Examination.—Eighteen hours after death the body was examined by Assistant-Surgeon Dr. Home and myself, and presented the following appearances :—

The entire surface exhibited a most unsightly deformity, with extreme emaciation, being nearly covered by black gangrenous tumours of various sizes, each surrounded by numerous

small vesications about the size of peas, which, with those over the neck, shoulder, arms, and thighs, at first sight resembled the yaw pustule, but on cutting into them they were found to be merely elevations of the cuticle filled with a dark, violet-coloured, inspissated lymph; and a strong suspicion having been recently entertained, that the causes and effects of this disease had their origin in glanders, it was considered essential, in the first instance, to have the absorbents of each arm minutely examined to their termination in the axillary glands, in order fully to ascertain whether it might have been communicated through their medium to the system generally. These vessels, however, as well as the glands, were found in their natural state; nor was there the slightest appearance of either absorbent, glandular, or cutaneous inflammation, nor of any recent cicatrices, chopped or scratched fingers; or in short, the slightest breach of integument, or abrasion of skin, by which absorption of morbid matter could have been facilitated into the system, any where discoverable.

The head was next examined, and on removing the scalp in the usual manner from the cranium, and thereby dividing the tumour already specified, we observed, immediately over the left superciliary ridge, a cluster of tuberculated bodies of various sizes, imbedded in a lamina of the cellular tissue exterior to the pericranium.

At this stage of the dissection, the presence of our highly talented and much esteemed veterinary surgeon, Mr. Woodman, was solicited, and on his arrival he unhesitatingly recognized a strong resemblance between *these* and *those* usually found in the nasal linings of glandered horses after death.

The skull-cap was now removed, and discovered the brain much more pale and soft than ordinary, with rather a larger proportion of fluid in the ventricles; but on removing with the saw that portion of the cranium situated between the orbits, the Schneiderian membrane lining the frontal sinuses and passages into the interior æthmoid cells, appeared throughout not

only pale, thickened, and infiltrated; but in the right frontal sinus was found another cluster of what Mr. Woodman considered to be "well-defined, ulcerated tubercles, and exactly similar in appearance to what we have in the membrane lining the frontal sinuses and other cavities of the head in *acute* glanders in the horse."

The posterior fauces were next examined and found highly inflamed, of a dark purple colour, and on the surface of the right tonsil there were four or five ulcerated patches of a similar character with preceding, but neither the thoracic or abdominal viscera presented any vestige of this formidable disease, all of which appeared perfectly healthy, except that the tissues of the heart might be considered rather more pale and flabby than usual.

We now resumed the examination of the trunk, first inspecting a large, hard, cancer-like tumour, spreading backward over the scapular region, and downwards by the serratus and latissimus dorsi muscles, the most prominent part having cracked or separated previous to death, from which exuded a thin, highly fetid ichorous sanies; and on cutting through this disorganized mass down to the bone, the muscles appeared perfectly decomposed, and of a dark liver colour, (exhaling a peculiarly fetid odour, similar to cariosity,) with points of purulent matter, as it were, infiltrated everywhere through its entire substance, resembling much a hepatized or tuberculated lung; and on removing the whole of this diseased mass from the bone, the scapula was observed nearly covered by a cluster of grey, circular tubercles, the whole composed of fine cellular tissue, enveloped in small cysts, and firmly attached to the periosteum, differing only in this respect from those found in the pericardium.

The other tumours on the sacrum and extremities were all separately examined, and exhibited precisely the same character and appearance with those already described, each covering a crop of tubercles adhering to the periosteum under-

neath, and proportionate in size and consistency to the extent and duration of the tumour.

The muscles generally, even those the most remote from the tumours, appeared blanched and flabby, the fibres softened, and the cellular membrane infiltrated with a yellow serosity ; in short, the entire frame was here more or less contaminated in a very uncommon degree.

Having now faithfully, and I trust clearly, concisely, and accurately detailed the most prominent features in the primary appearance, the progress, and the termination of this violent and extraordinary malady, I shall purposely refrain from offering any opinion of my own on either its cause or character, but leave it entirely to the erudite reader to form his own conclusions thereon from the foregoing details.

ART. XII.—*On the Use of the Nitro-Muriatic Acid Bath.* By CHARLES LENDRICK, M.D., T.C.D., King's Professor of the Practice of Medicine, Clinical Lecturer at Sir Patrick Dun's and Mercer's Hospitals, Honorary Fellow of the College of Physicians, &c.

[Read at the re-union of the College, 18th March, 1837.]

I HAVE often inculcated on my pupils, the importance of accurately scrutinizing the merits of obsolete modes of treatment, rather than speculating on new and untried remedies ; under the conviction, that there is little recommended on respectable authority, which is not of efficacy in *some* cases. The great difficulty is, that the discoverers or partisans exaggerate the effects of their favourite specifics ; and thus, what is really valuable in some instances, by the universality of its application and consequent failure, soon falls into discredit, and is employed in none ; a negative error on the part of the profession at large, nearly as great as the positive one committed by the panegyrist.