On the Horse Sickness.

Graaff-Reinet, 22d July, 1830.

In the last article of the Instructions for District Surgeons, it is commanded that they shall, from time to time, report to Government touching Epizootic Diseases, and other medical business of their District; and as a large portion of the Horses of this District have died this year, of a Disease not generally known, I think it my duty to convey to you, for the information of His Excellency the Governor, and for the public good, the result of nine years' experience of the disease in question.

In the year 1819, the *Horse Sickness*, as it is usually called by way of eminence, on account of its great fatality, raged in this District to such a degree as to occasion much apprehension to those persons who turned their attention to the breeding of Horses; and on my arrival in this District, in the year 1821, I was requested by the then Landdrost, Capt. Stockenstrom, to observe the disease whenever it should appear; but no opportunity occurred till the year 1824, when the disease again appeared, but not to the same extent as on the last occasion. I then took the earliest opportunity of observing the disease while life continued, and of dissecting the body after death.

The first symptoms of the disease, as it has hitherto appeared in this District, are, general torpor in the animal; he coughs and hangs his head; shows a great disinclination to motion; and refuses his food: there is generally some swelling and perspiration about the eyes, and occasionally of the whole head; the veins of the neck are distended, and the breathing is invariably quick and oppressed. These symptoms continue to increase till death ensues, which is seldom protracted to the fourth day, unless some remedy is used. Motion invariably accelerates the termination of the disease, and persons occasionally ride the animal in its earliest stages, sometimes under the impression that a little exertion will prove useful, but generally from not suspecting that any thing is wrong; for in the beginning of the disease the mildness of the symptoms does not lead to suspicion, which is to be attributed to the insensible nature of the part affected.

If the animal is rode during the sickness, or urged by driving or otherwise, to any degree of speed, he falls at once, literally suffocated by the quantity of frothy matter which fills his trachea and issues in abundance from his nostrils; this was

the case with the very first horse I dissected which had died of the disease. The nature of the disease was then so buried in obscurity—I mean in this District—and such contradictory reports prevailed, that I thought it advisable to get the assistance of two intelligent individuals at the dissection, and Messrs. Kift and Bain were kind enough to accompany me. The horse belonged to the last-mentioned gentleman, and fell under him while riding in the neighbourhood, without the slightest suspicion that the animal was diseased, and died almost immediately; he had not been stabled.

I shall give the result of the examination as it agrees with the results of numerous subsequent examinations, with a few exceptions only, which I shall note hereafter,—and as being a document authenticated by the signatures of the gentlemen above-mentioned.

"The skin being removed, a more than natural determination of blood to the neck and shoulders, was observed, but no other external indications of disease.

"On opening the chest to examine the state of the lungs, the superficial veins were seen distended with blood; both lobes of the lungs were highly inflamed throughout more than half their bulk; the inflamed parts appeared of a dark color, approaching to purple, and on cutting into their substance it was found to be filled with a yellowish frothy matter, similar to what came from the nose of the animal immediately before death. This froth exuded abundantly from the lungs when pressed—showing very satisfactorily the nature of the disease, and the origin of the discharge from the nose.

"The trachea was entirely filled with the same frothy matter, which, by stopping respiration, appeared to be the immediate cause of death.

"The inflamed parts of the lungs were easily torn and punctured by the finger, while the more healthy parts were firm and tough.

"The other viscera were carefully examined, and found healthy in every respect. As there was no symptom of disease in the head before death, it was not opened; and we felt fully satisfied that the disease in the lungs was quite sufficient to occasion death.

(Signed,) "THOS. PERRY, District Surgeon.

(Signed,) "B. G. KIFT.

"A. G. BAIN.

"Graaff-Reinet, May, 14, 1824."

From this period to January, 1829, the disease did not occur in this District; but then it returned with a fatality equal to that of 1819; and I did not lose the opportunity of

obtaining further experience of the disease. I paid particular attention to many sick animals, and prescribed for some of them; I also dissected many when dead. The result of this year's experience did not militate in any degree against that obtained on the former occasions,—the symptoms during life were the same, and also the principal features of the post mortem examinations. In consequence of the greater number of deaths, the field of observation at this period was necessarily extended; and I observed some appearances which escaped my observation, or which did not occur on the former occasions.

The head of the animal was sometimes swelled in an extraordinary manner, but always from congestion; I have repeatedly examined the brain in such cases, but have never discovered the least indication of disease therein; and the appearance and conduct of the animal during his illness have never betrayed the slightest symptom of aberration of intellect.

Another appearance on dissection not noticed in the above account, is a yellow gelatinous matter attached to the pleura, or internal lining of the chest, which always indicates inflammation. I have observed the same substance in the human subject, arising from the same cause. I must also observe that the frothy matter which flows from the nose of the horse at the time of death, is generally considered as a symptom peculiar to this particular disease in this animal. But long experience has taught me that the same appearance, but in a lesser degree, is observed in the human subject in the same disease; that is, an inflammation of the substance of the lungs. No people of whom I ever read, or of whose diseases I have had experience, are so liable to pulmonary complaints as the Hottentots. It has been my lot to open many of them after death; and it is from the experience thus obtained that I assert their liability to the disease in question;—in them I have very often observed the same frothy matter in the substance of the inflamed lungs, and the same exudation from the nose after death. It is occasioned by the increased secretion of mucus in the inflamed lung, and rupture of the minute air cells. Accelerated motion necessarily increases the impetus of the blood through the lungs, and consequently hastens the termination of the disease.

An unfortunate belief prevails in this District, that no remedy is useful in this disease, and even by some persons it is believed that all curative measures are prejudicial; this belief must be attributed to the fatal nature of the disease. Some decry bleeding, and others purging—for both remedies have been tried, but without any regular plan of cure. It

must occur to every one on reading the account of the appearances on dissection, that the only method of cure which can be adopted, with any prospect of success, is to lower the circulation by bleeding largely from the neck immediately the disease is discovered; I also purge plentifully with a ball, composed of 4 drams of aloes, 1 dram of soap, 30 grains of calomel, and 10 drops of oil of carraway, and occasionally quicken its operation with half a pint or more of castor oil—keeping up the action of the intestines through the whole course of the disease.

It is an object of primary importance, to irritate the skin of the chest by some acrid application, as blistering flies, scalding water, or what will, perhaps, prove more efficacious than either, with the bruised leaves of that species of Ranunculus, called in this country "Brand Boschjes." It grows plentifully in moist places, and will raise a blister on the skin in ten minutes, the effect of which continues much longer than that of a blister raised by Spanish flies, while it costs nothing. I shall take the liberty of troubling you shortly with an account of the medicinal properties of some of the indigenous plants of this District, when I shall be more particular in describing the effects of the Ranunculus, which deserves to be generally known. It is also important to occasion a determination to the skin, which may be effected by antimonials or warm clothing, paying particular attention to the atmosphere of the stable. If the animal will eat, I give him a warm mash of wheat bran, with nitre in it. The great difficulty is to discover the disease in its first stages, for it is only then that these remedies can be useful, they never succeed when a large portion of the lung is inflamed, and the progress of the disease is so rapid, that I have known horses fall down before they were thought to be sick, as in the case of the animal whose dissection I have given above. It is no uncommon thing here to find a horse dead in the stable in the morning, which was supposed healthy the night before; but a careful observer will discover some of the symptoms I have enumerated: the first is generally a slight cough, and then no time is to be lost, for if left to itself, the disease will invariably terminate in death.

The disease in question is evidently an Epidemic, produced like other Epidemics, by some unknown peculiarity in the atmosphere, recurring at uncertain periods; I have no reason to believe it infectious, but the contrary. Its remote cause appears to be the sudden application of cold to the surface of the body; hence well groomed and well stabled horses are seldom attacked by it; this is an observation of such constant occurrence, that I think it can admit of no doubt; not that I mean to assert that no stabled horses will die of it;

unfortunately I know the contrary too well, but even the imperfect stables of this District, which are often without doors, and always without windows, their place being supplied by unclosed air-holes, are a great protection to horses, as common experience proves. But as by far the greater proportion of the horses of this Colony is necessarily left to run at large in the field, it becomes an object of primary importance to inquire what description of country is least liable to the disease, and there it is that my inquiries and experience may benefit the public.

It is a constant practice in this District, to send horses to the highest lands about Mid-summer, at which time the disease generally makes its appearance, and on any rumour of its approach. This practice is founded on experience and reason, for it is known that there are places on the highest mountains of the Sneeuwberg, where horses seldom or ever die of the "Sickness," which is to be accounted for by the well-known fact, that those places, although cold, are not liable to sudden changes of climate; on the other hand, the low country, or as it is here called, the "Thornland," for the Mimosa does not grow on high mountains, is notorious for its unhealthiness for horses; for although warm, it is liable to sudden changes to cold, when the mist descends from the hills, bringing death to horses. Summer is here the rainy season; the wetest summers have been the most fatal; rain is always followed by a change of temperature, and the appearance of young grass, thence the popular belief that horses die of eating it; but the change of temperature will account for that much better; the same may be said of the belief that dew is injurious to them, for it is known that horses die when turned out of a warm stable to graze before the dew is off the grass, and it is also known that when the atmosphere becomes warm the dew is evaporated.

Garlic given with food is constantly used here as a preventative, but on what grounds I do not know, neither have I ever seen any good effects from it; but popular experience is always worthy of attention; I believe the only preventatives for this fatal malady, are good grooming and stabling, or probably warm clothing of some description or other, and where these things cannot be obtained, sending the horses to the highest mountains, where the disease is known not to reach.

The only plan of cure when the disease appears, is to be vigilant, and use the remedies above-mentioned, or similar ones, in its earliest stages.

Note. We have received other Communications respecting this malady, but consider the experience detailed in this paper, and the interest it has excited, as pre-eminently requiring that it should be circulated as widely as possible.