ADDITIONAL FACTS
RESPECTING
GLANDERS
IN THE HUMAN SUBJECT.

BY JOHN ELLIOTSON, M.D. F.R.S.,
PRESIDENT OF THE SOCIETY.

READ 12TH MARCH, 1833.

It is now nearly three years since the Society did me the honour of publishing, in the sixteenth volume of its Transactions, a paper in which I proved that the glanders of the horse is communicable to the human race, and described three cases, two of which occurred in men whom I saw and one in a person well known to me, together with three which I found in recent English works, and three in Rust's Magazin für die gesammte Heilkunde.

The proofs adduced were the perfect similarity and uniformity of the symptoms and course of all the acute cases of the affection, and their complete distinctness from those of any other disease, as well as the perfect correspondence of the appearances on dis-
section, in the only case which was properly examined, with those in the horse:—the fact of each of the nine patients having been in communication with a glandered horse, though the occupations of some of them had rendered this extremely improbable;—and the fact of glanders having been produced in asses by the inoculation of matter taken from two of them. At that time it was not generally known, indeed by many it was disbelieved, that the disease could affect the human subject. In no writer upon contagious or cutaneous diseases was it mentioned. The Dictionnaire de Médecine et Chirurgie Vétérinaires declares glanders to be peculiar to monodactylous animals. Sir Gilbert Blane in his Select Dissertations, published in 1822, asserts that "the only examples hitherto ascertained" of contagions communicable from one species to another "are the hydrophobia and cow pox". Mr. Travers, in whose work on Constitutional Irritation, published in 1828, I found two cases of the disease caught by men from the glandered horse, and whose morbid secretions, when inoculated into asses, again produced the disease in them, considers that the disease of the intermediate beings—the men,—was not glanders. Mr. Colman, who inoculated one of the asses, declares, that, "as far as his experience goes, the nostrils of the human subject are not susceptible of glandered ulceration or inflammation:" and indeed, when I related my cases to Mr. Colman at one of the meetings in the College of Physicians, he appeared to doubt their nature, as he said the symptoms were not those observed in the horse;
but I replied, that, in the asses, inoculated from the human being, the symptoms were precisely the same,—discharge from the nose, swellings, pustules, sloughing. Mr. Youatt, although now, in the last number of the Veterinarian, after seeing the present case, he says "the possibility of the communication of glanders from the quadruped to the human being has long been suspected, or rather painfully known by the veterinarian," stated in a lecture, delivered in the University of London some time after the appearance of my paper, and published by him only last year in the Lancet, that, "notwithstanding a loathsome and fatal disease results (in the human being) from inoculation with the matter of glanders," he doubted "that it bears the true character of glanders," and he did not think it worth while to mention a single fact detailed in my paper, or even allude to it at all.

Under these circumstances, I presume it will be acceptable to the Society if I relate another case of the disease, in which not only the symptoms and course agreed with those of all the rest, but the connection with a glandered horse was proved, and, a complete examination having been allowed after death, the appearances disclosed were the same as those observed in the horse.

CASE.

William Johnson, aged 23, was admitted on the 31st of January, into St. Thomas's Hospital, under Dr. Williams. He complained of tightness across
the chest, pain in the right side and loins, and great lassitude. The tongue was somewhat coated with yellowish mucus. There were sweating and thirst, and the pulse was 90.

On the 2d of February, there was pain of the head and loins, and frequent watery and offensive stools. He became a little incoherent in his answers, rigors began, and the tongue was tremulous. He continued to be occasionally delirious, and on the 4th, in addition to the other symptoms, there was pain in the forehead and vertex, in the right hypochondrium, and in the extremities. On the 10th, he had been furiously delirious, and required strapping down; he complained of gnawing pains in all his limbs, of great difficulty in moving the left arm, for the joints were very painful, and the knuckle of the fore finger was tumesfied and red; the discharge from the skin was profuse, sour and offensive; leeches were applied to the temples. On the 11th, the swelling on the hand had increased, there was also a red swelling on the right outer ankle; the tongue was covered with a brown dry fur, and there were much thirst and heat of throat. On the 13th, a portion of his chest which had been blistered before his admission, and had now been sloughing several days, was affected with burning pain; the right temple on which the leeches were applied, was much swollen, and dark coloured; the right eye closed, and the leech-bites sloughed and discharged an unhealthy pus. On the 14th, in the evening, an offensive and yellowish discharge began
from the right nostril, and a large swelling arose in
the middle of the forehead of a purplish appearance;
the left eye was nearly closed and numerous tumefac-
tions took place on the arms and legs; several
phlyzacious pustules were seen on the left side of the
neck; the pulse was 112.

Mr. Stone, the assistant apothecary, who had seen
the former cases of glanders in the hospital, ima-
gined, from the present appearances, that this must
be one of the same kind, and on questioning the
man, actually learnt that his occupation was amongst
horses, that he had been grooming a glandered horse,
kept in a stable by itself, and that he remembered
that the discharge from the nostril had frequently
fallen upon his hand, upon which the scar of a
wound was still visible.

On the 15th, being in the hospital, I was re-
quested by Mr. Stone to see the patient, and I did
not hesitate for a moment to coincide with him in
opinion. I did not know the man's occupation, but
asked him the same questions that Mr. Stone had
put to him, and of course received the same an-
swers. The whole scalp was now become tumefied, the
forehead purplish, the eyelids red and shining, the
burning sensation in the throat and nostrils, and the
thirst, were intense, more tumefactions appeared on
the extremities and abdomen, and several phlyzacious
pustules appeared on the left side of the body.
The discharges from the skin and bowels continued copious. The pulse was 124.

On the 16th the discharge from the nostrils, chiefly from the right, was very considerable, and of a glutinous and brownish character, and ran in a continued stream down the face and neck; the thirst was unquenchable. Another purple tumefaction appeared on the right side of the nose near the inner canthus, and soon increased so as to occupy nearly the whole of that side of the nose.

On the 17th he sunk, and died early in the morning.

**Autopsy.**

On cutting into the various tumefactions on the head, trunk, and extremities, they were found to be full of pus, underneath which, in many, a number of small white granules were seen; and these, in several instances were closely attached to the periosteum or perichondrium. The frontal sinuses contained a jelly-like secretion, and a number of similar granules, and on the septum narium was an ulcer exactly like those which I have seen in the nostrils of glandered horses, and upon it lay a cluster of granules.

Two or three very large white circular elevations were found immediately below the sacculi laryngis.
Mr. Youatt, who was present, called them "true glanderos chancers."

About an inch below the valve of the colon, for three inches in extent, on the whole of the surface, were white granules exactly like those in other parts.*

In my former paper I stated that "as two cases, and I might say three, of this disease have occurred within my own observation in so short a space of time, and a fourth has been recorded within the same period, all in different places, I cannot but imagine that the disease, though rare, is not of extreme rarity, more especially when I reflect that it is not likely to be recognized, and was not in the two instances at St. Thomas's Hospital, and that it may be communicated by an abrasion of the cuticle so slight as to escape notice."

Since the publication of the paper, upwards of a dozen cases have been related to me by medical men, which they are now satisfied were instances of glanders.

* See Plate I.