



THE DEVELOPMENT OF VETERINARY MEDICINE IN SWITZERLAND DURING THE 19TH CENTURY

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The title of my talk indicates its essential content. I was asked, however, to imbed it to some extent into the history of our art in general. I shall try to do this, but with two important restrictions : first, I am not a professional historian. I just share with them the fate of talking about a period of which I have no personal experience! Second : we are limited in time.

My general remarks will therefore be rather arbitrary. You all know that man, on from the first domestication of animals — going back some 10'000 or more years — tried to prevent and cure their ailments, as he did for himself (1).

Wherever civilization concentrated, in Egypt, Mesopotamia, China, the Anatolian, Greek and Roman, the Arab world, animal medicine developed, most times together with human medicine. The convulsions of mans history— rise and fall of the empires — let the art flourish or disappear. What was left of the ancient world was taken over by the Arabs, amalgamated with Asian wisdom, developed in centres like Andalusia and from there handed over to the European Middle Age through scientists, of whom many were Jewish. Knowledge was — selectively — preserved, but usually not furthered, in many medical schools like Salerno, Bologna, Padova, Montpellier, Paris, Oxford, to mention only a few. Medicine was essentially conservative, basing on the knowledge and works of ancient authors, especially Galenus. University medicine was preceeded by the so-called monastic medicine, which should not be over-estimated. In the 9th

century, the famous library of the monastery in Saint Gall had only six medical books, in contrast to about 1000 on theological matters! (2)

Treatment of animals was essentially in the hands of farriers, herdsmen, hunters, falconers, at the best of equerries and other more or less educated people. If somebody — I only quote *Carlo Ruinis'* "Dell' anatomia, et dell' infirmità del cavallo", Bologna 1598 — marked an outstanding progress, his heritage was soon brought down to popular levels by numbers of imitators.

Critical mind and willingness to observe nature instead of compiling and exploiting so-called classical writings began to dominate in the Renaissance and the following centuries. They brought a wealth of information about animal anatomy and diseases, to a large extent by the work of physicians. Just one example : *Johann Jakob Wepfer* (1620-1695) founded a small, but famous medical school in Schaffhausen on the Rhine. *Harder* who described the lacrimal gland of deer and *Peyer* with this "Merycologia sive de ruminantibus et ruminatione commentarius" — the precursor of ruminant physiology — were two of his prominent scholars. *Wepfer* himself studied Coenurosis in cattle as a model of human vertigo, using, therefore, the comparative method (3).

Applied veterinary medicine, however, did hardly take advantage of this flow of knowledge, and went on as it had done for centuries. Crude and uncontrolled treatments were common, and the authorities ordered partly useless and stupid measures against epizootics. Maybe the best ones protected humans against rabid dogs — or tried doing so. In 1810, there was an outbreak of canine rabies in our town. the order was to kill all of the about 9000 cats. It was a tremendous problem for our mild-hearted Ladies hiding their beloved pets — nearly as important as the marriage of Napoleon with Marie Louise!

Mrs. von den Driesch is certainly correct when she says that the "cure" was often more noxious and certainly more painful than the disease itself (4).

I am old enough to know that, what I had learned and applied to the best of my knowledge, is now considered to be in part between useless and disastrous! Man's convictions are a strange thing; but can you exist without them ?

The veterinary profession — if we wish to use this term — was lacking of cohesion, of a common philosophy, being split into parts according to its objects. Even the most advanced — horse medicine — was in the hands of farriers and horsemen. But the demand of the armies, with millions of horses, finally enforced the foundation of Veterinary Schools and the formation of more solidly trained people. In addition, numerous and extremely devastating epizootics had sometimes as much influence on the outcome of wars as had the military actions themselves. Empress *Maria Theresia*, in the founding act of her Vienna school, urged not to neglect "the civilian sector". Which, by the way, did not prevent this famous institution from becoming a nearly exclusive horse establishment for over hundred years!

Human doctors, whose insight was in no way beyond doubt, were officially the supervisors of epizootic diseases. Except for quarantines, nothing reasonable was done. And quarantines were rather due to politicians — often identical with cattle traders — than to physicians. In the flourishing trade across the Alps between Italy and Switzerland, they had functioned for centuries — without the Common Market!

Human medicine — to be honest — was largely ineffective. The great plagues had disappeared from Europe, merely by slight improvements of hygiene and changes in human behaviour — and thanks to the Genius epidemicus! The helplessness of medicine in front of tuberculosis and syphilis, f.i., was typical. Academic medicine was entangled in theories. The most efficient branch, surgery, had long been left to barbers and other non-academic people. Sometimes, one of those "quacks", due to his intelligence and his psychological intuition,

became famous. So was *Michel Schüppach* of my home country, who treated distinguished patients from Antwerp to St. Petersbourg.

Finally, in the second half of the 18th century, time was ripe for a better education of veterinarians, for the foundation of veterinary schools. The first two, as you all know, were Lyons and Alfort in France. Founded in the sixties of the 18th century by *Claude Bourgelat* (5).

Bourgelat, horseman and politician, friend of influential people, is a symbol for the fact that new ideas do not necessarily originate from traditional sources. His competence was rightly questioned by *Lafosse père et fils* — his merit remains untouched!

Up to the end of that same century, about 30 schools were founded in Europe, most of them by monarchic decree and most often run by people — physicians and others — who had been sent to France.

The development during more than hundred years was not at all easy, the resistance of "popular medicine" being strong. According to van den Driesch (6), in the Free State of Bavaria, 926 certificated veterinarians still competed with 310 registered animal healers — in 1925!

When tracing now the history of my own Bernese school during its first hundred years, I hope to convey also an impression of the slow, but steady development of our profession.

Towards the end of the 18th century, Berne was still an important but somewhat sleepy State in the centre of Europe, oligarchic, patrician and patriarchal. It was prosperous, austere and parsimonious. Berne was one of the leading Republics of the loose and manifold Swiss federation. It had reached its political culmination after the Burgundian wars — you may know that its attitude in front of *Charles le Téméraire* was somehow different from that of the City of Ghent!

— but withdrew from the great European politics after the bloody defeat of Marignano in 1515. The flourishing export of mercenaries for over 200 years (16th to 19th centuries) is another matter not to be discussed here. But it was a long period of relative peace — although not for the Grisons, invaded repeatedly by French, Austrian and Spanish armies.

In the Republic of Berne — dominated by the town, but respecting rather scrupulously old rights and privileges of smaller towns and rural areas — a rustic, non-commercial, nearly anti-industrial attitude prevailed. The 17th and 18th centuries were a time of flourishing peasant civilisation.

When the French armies invaded the country in and after 1798 and brought the blessings of the Great Revolution — *liberté, égalité, fraternité* — the old order faded away. The state had to adapt to the new conditions and — seen from the distance — did extremely well. A plundered, impoverished, exhausted country mobilized its intellectual resources. Between a number of national organizations — still in existence — the Swiss Veterinary Association was founded in 1813. Its leading spirit was a physician, *Franz Karl Stadlin*, of Zug.

A few years before, on the initiative of its chancellor *von Mutach*, the old "Hohe Schule" — the precursor of the University of Berne — had been revitalized. It was founded in the time of the Reformation, and — according to the practically oriented Bernese politics — had to form mainly clergymen, the observers of the people and prolonged arms of the government. It was now called the "Academy".

Speaking of clergymen, a short digression may be permitted : in many parts of Europe, catholic and protestant, an often considerable part of the income of the minister stemmed from the church farm. Knowledge of its management was therefore vital. Educated as they were, the priests played an important rôle in the advancement of the agricultural sciences. My friend *Hörning* has found an article where the

activities of clergymen in veterinary medicine — as part of agriculture! — are vividly defended. It was published in the "Magazin der Vieharzneikunst" — probably the oldest veterinary journal in German — in its first and only issue of 1784!

The Bernese Academy of 1805 had 4 faculties : Theology, Law, Medicine and Philosophy. As an appendix to the medical Faculty, it was decided to install a Veterinary School, in order to cultivate "this vital science". The main wealth of the new Canton of Berne - part of the République helvétique une et indivisible and living under the constitution mediated by Napoleon Bonaparte — stemmed from agriculture.

The next step was to find a teacher for the newly established school. The local candidates were all found to be insufficient, and finally Prof. *Emmert* — henceforth called "the elder" — anatomist and physiologist of the medical Faculty, suggested to try it with his younger brother *Carl Friedrich*. He was a graduate of the Tübingen medical Faculty and had heard lectures on veterinary matters given by Prof. *Ploucquet*. He was elected in spring 1806 and started lecturing in November, with one student! Three years later, the first 3 students (the total number having increased to 11 within 18 months) graduated. In 1812, *Emmert younger* was made Professor of surgery and obstetrics at the medical Faculty and began to neglect — for financial reasons between others — his activities in the veterinary School. Some years before, the young institution had found its first accomodation in old buildings of the Burgerspital (Hospital for old citizens). The Burgerspital — a beautiful classicistic building — contrasts today strangely with the modern construction of the Railway Station next to it! On from the beginning, there was much dispute between the school and its surroundings, especially concerning post-mortems performed close to habitations. Finally, they had to be done in an old tower of the medieval walls, down at the riverside!

The school entered a critical period when *Emmert* was appointed by the medical Faculty. The Academy decided to have a pair

of young, local people trained and offered two grants for a 3-years period to be spent in foreign Veterinary Schools.

Matthias Anker (1788-1863), who had successfully graduated in 1811, competed and won, together with *Peter Schilt* (1787-1845). In the autumn 1812, they left Berne. *Anker* went to Vienna (*Schilt* to Berlin), from Ulm on the Danube, an 11 days boat journey (with extremely poor food, as he wrote back home!). *Anker* studied in Vienna for nearly 2 years, with one interruption for a study trip (per pedes!) in Hungary, where he visited studs, cattle- and sheep farms. In the fall 1814 he walks from Vienna to Berlin, where he stays until the end of March 1815. His intention to visit *Viborg* in Copenhagen and to end his trip in Alfort is prevented by the political situation. Astonishingly enough, the historical turmoil in Europe had otherwise rather little influence on his plans! He finally reaches Munich, visiting many places and interesting persons in between.

Back in Bern towards the end of 1815, the two candidates were thoroughly examined by a committee of the medical Faculty early in 1816, then appointed as veterinary teachers — provisionally — with a yearly salary of 800 pounds Bernese! *Emmert* remained Director of the school and teacher of anatomy and physiology. When *Schilt* returned to his native Oberland — as practitioner of human and veterinary medicine! — in 1819, *Emmert* wanted to teach surgery again, but the students preferred *Anker*. The conflict was perfect. *F.A. Gerber*, a young physician, was elected prosector and probably did most of the anatomical and physiological teaching. He was one of the earliest pioneers of photography, but his claim for priority against *Daguerre* seems unwarranted.

In 1826 finally, the school could move into new quarters, where it remained for nearly 140 years. It was a property next to the old rifles ground, 5 minutes out of the city walls, with a building originally conceived as a brewery. Years later, it is described as a lovely meadow with running fountains and with fruit-trees, high above the river, in an agricultural environment; seemingly an idyllic place. But

bad enough, the knackers yard and the cemetery of the prison were its closest neighbours! Under *Anker's* rule, stables and a smithy (which shoed about 2000 horses a year) were built.

The political shift after 1832, called the Regeneration, brought democratic forces to power. It was soon followed by the transformation of the old Academy into an University, in 1834. The Veterinary School was again incorporated in the medical Faculty, as a so-called subsidiary institution. The same year, *Emmert* died in Interlaken. *Anker* was officially made principal of the school. The teaching staff was enlarged by *H. Koller* and *J.J. Rychner*.

The first of them was a very quiet figure, mainly teaching botany, pharmacology and materia medica. He was also in charge of the library, which — as it seems — did nothing than decay in his hands. In a satyric newspaper of the forties, it was said that he was distinguished only by his capital moustache; and in fact, the late biographer has nothing to add! *Rychner*, on the other hand, was an interesting, over-active, partly brilliant but controversial person. Born in Aarau in 1803, he had studied in several veterinary schools including Berne (7). He worked first in his native town as meat inspector and then went to Neuchâtel — a Prussian principality! — as government veterinarian. Here he failed practically. This was partly due to his physical appearance : he was a tiny man, as you would expect from his youth-portrait; a late one simulates a rather sturdy fellow. The political wind blew him to Berne. In some way or another, he managed to join the teaching staff of the Veterinary School. In 1839 he was already professor; no doubt, he was carried upwards by the radical wave.

At this point, one more digression : in 1835, *Samuel Anker* (1790-1860), brother of *Matthias*, takes the position in Neuchâtel abandoned by *Rychner*. He studied in Berne after his brother, made the diploma in 1814 and practised in his native village Ins (Anet) for 20 years. Their father — his certificate still exists — and grand-father had been country-veterinarians, farming and cattle- and horse-trading as a

supplement to their scarce income. Father Anker *built* a big farm-house in Anet, which today is a site of pilgrimage. But not because it was the home of veterinarians. *Samuels* only surviving son *Albert* became a painter (instead of a vicar as his father had foreseen) : conservative, traditional, but very popular and today again en vogue. *Samuel* died — of cancer — in his brothers home in Berne. The only existing portrait is a drawing, made by his son, of the dead father. It still hangs in the Anker-house in Anet. *Rychner* — whom *Matthias Anker* profoundly disliked — was probably withheld by him from an extensive horse practice. So he directed his energies towards cattle. In 1835 already appeared his volume on the diseases of cattle, or Buiatrics. At that time, he must have had a minimum of personal experience — by far inferior of that of the two *Anker's*. But the book had 3 editions and secured him — at least in the reach of the German language — the fame of a founder of buiatrics.

Rychner wrote a lot : several books and a great number of monographs and articles in veterinary and agricultural journals. His critics said that he was writing much, but thinking much less! And they are not thoroughly wrong. He, however, did another thing to perpetuate his name : he founded an Ambulatory Clinic — on his own expense, as he stressed — which was developed further under so capable successors as *von Niederhäusern*, *Hess*, *Wyssmann* and *Hofmann*.

The 28 years within the Academy (1806-1834) may be considered as the initial period of the Veterinary School, or the period of development. It was dominated by the personalities of *Emmert* and *Anker*. The following period was one of stabilization and than decline. It is identical with the 35 years as a subsidiary institution of the new University. During its early 20 years — politically a much troubled time for the Canton — the school was quite active. *Anker* was fighting for a better position of the veterinarians, for improvements of meat inspection and control of knackery, of horse- and cattle-breeding, for better regulations concerning epizootic diseases, and he published his standard books on diseases of hoofs and claws. The activities of

Rychner were already mentioned. *Gerber* the anatomist, as well, did good work. Between other things, he published a beautiful atlas on horse anatomy in common with the painter *Volmar*. Only *Koller* persisted in silence! After the midfifties, however, the fire burnt down. *Anker*, already sick over years, died in 1863. The remaining 3 were sent to pension in 1869. A government decree of 1868 — although saying that the School was an institution "linked with the University" — marked in fact the expulsion from it. An active fraction of the medical Faculty was behind this decision and — regarding the facts calmly — one must say that it was well founded. It is now the moment to look at other parts of the country, because Berne is not Switzerland!

Amusing inset : in 1846 — just before our last Civil War — the Canton of Valais founded its own, bilingual, veterinary school. But after its first course, it disappeared again.

In 1820, the school in Zurich was founded. It had very difficult periods over years and was often close to suppression. During all the 19th century, it was never attached directly to the University. One of its outstanding teachers of the early period was *David Wirth*, physician and veterinarian. He was also for a time editor of the Swiss Veterinary Archives and in this period secured order and regular publication. (The journal has been founded in 1816 — and still exists). *Wirth* died in 1849, with 56 years, and his successor was *Rudolf Zangger*, with only 23! He was elected so-called second main-teacher. Only in 1834 had the school been consolidated by a law; its revision in 1848 provided better financial support, increased the duration of the studies from 2 to 3 years, and promoted the first main-teacher, Professor *J.J. Hirzel*, to director of the school. *Hirzel* died already in 1855, only 49 years old (and leaving behind a son who later on fought in the North American Civil War). *Zangger*, 29, was elected first main-teacher and Director of the school. He was of very modest provenience, but gifted with sharp intelligence, limitless working capacity and probably equal ambitions. He immediately had a heavy load of teaching obligations, contrasting with the paucity of his salary. After the death of *Anker*, he negotiated

with the Bernese government about the directorship of that school. When the Zurich government offered him the same salary, he found Zurich more attractive. This even more so because nobody supported his plans for *one* federal school. *Zangger* had been editor of the *Schweizer Archiv für Tierheilkunde* from 1849 to 1855, together with *Rychner*, but probably carrying most of the load. He was it again — this time alone — from 1855 to his death in 1882. He was president of the Swiss veterinary Association from 1853 to 1856 and -reelected in 1861 — held the function again until he died. Both went asleep under his hands. This is not a reproach : because *Zangger* was active and often successful, he was overloaded with problems — which the others hoped he would solve! And it seems that he could hardly say "NO"! He organized the 50-years celebration of the Swiss Veterinary Association in 1862 and the 3rd International Veterinary Congress in Zurich 1867. He was federal Commissioner for the (successful) fight against Rinderpest 1870/71 and as such precursor of the later Director of the Federal veterinary Office. Having served during the short civil war in 1847, he advanced rapidly as a veterinary officer and reached the rank of a colonel. His influence for better positions of the veterinarians in the army was remarkable. During the Franco-Prussian war, he was acting as Chief-Veterinarian of the army, but later on refused to accept this position as a full-time job.

But *Zangger* was also an active politician. Member of the democratic party, he was in the cantonal parliament with 32 years, later in the National and in the States Council (Ständerat). He was a leader in the campaign for democratic revision of the Zurich constitution. *Zangger* was a model for the manifold political activities — from community to federal levels — of veterinarians. It is a pity that this has largely disappeared; not to the advantage of the profession!

The countless activities of *Zangger's* withheld him more and more from his primary task : Director and teacher at the Veterinary School. During the seventies, there was a constant flow of young co-workers away from Zurich. The last important action of *Zangger* was probably that he attracted a gifted young man and won him for the

school : *Erwin Zschokke*, who soon became the leading figure of the school — later on : the faculty.

Now back to Berne : the last 30 years of the century may be named the period of hopes, deceptions and devotion. In 1869, as we have seen, the government had made *tabula rasa*. A new director was elected, professor *Pütz*, 40 years old, ph. D. of the University of Rostock, graduated as veterinarian in Berlin 1850. He was an energetic and active man; and on from his first days in Berne was fighting for improvements of veterinary education and for the re-integration of the veterinary School into the University. Some other teachers from Germany were elected with him. When they slowly moved back to their home country, they were predominantly replaced by Swiss people. Quite a few of them came from Zurich. In general, it was a young staff : I'm counting 8 who were between 24 and 31 in the seventies and eighties.

Despite some adersion from certain sides, co-operation with the medical Faculty was intensified : *Guillebeau*, pathologist, acquired the MD and medical diploma during his first years in Berne and the anatomist *Rubeli* made his MD-degree as well. *Marcelli Nencki*, *Balthasar Luchsinger*, *Hugo Kronecker*, all of the medical Faculty, instructed biochemistry and physiology to veterinary students. General matters like physics, chemistry, botany were offered by the philosophical Faculty. During te same decennies more and more matters shifted from cantonal to federal competence.

It's not my ambition to bore you with data : control of food-stuffs with the so important branch of meat inspection, regulations of trade of animals and materials of animal origin, control of epizootics and other economically important animal diseases, regulations of training programs and exams for the medical professions and — depending from it — the right of exerting ones profession in all Cantons, reorganization of the army including the veterinary services, may all serve as examples.

No wonder that the two Veterinary Schools did not escape to such trends of unification. An inquiry committee proposes, in 1884, the establishment of a Federal Veterinary School, and the teachers of Berne and Zurich support this proposal, considering the rather poor state of their institutions. In 1889 and 1890, the Federal Assembly declares the plan "important" (erheblich). But none of the two cantons is ready to abandon its school, and the Confederation has plenty of other problems. Once more, parochialism (the Swiss term is "Kantönlicheist") was stronger.

Historical reminiscence : seventy years before, the physicist of the town and canton of Basle had already proposed the establishment of a Swiss Veterinary School!

Anyway, the ferment worked : the Bernese Grand Council decided to build a new Veterinary and Farriery School, to the price of about half a million francs. In 1891, a fire destroyed part of the old main building, including a large number of books in the library. In 1895, the new buildings — in the same area — were ready and could be proudly demonstrated to the VIth International Veterinary Congress held in Bern. Its successful secretaries were professors *Berdez* and *Noyer*, both perfectly bilingual.

(In parenthesis : *Louis Pasteur* was made honorary member of the Congress. He thanked with a telegram saying that the veterinarians were the first to recognize the importance of his new doctrines. Ten days later, he died!)

I called the last third of the century one of devotion. Both in Berne and in Zurich, the few Professors, with a heavy load of teaching and more than modest facilities, did research work in bacteriology and pathological anatomy, were involved in animal husbandry, in the struggle against epizootic and other economically important diseases, in meat and milk control and — last but not least — in the hardships of public instruction. And some of them had not the starting conditions considered normal today. *David von Niederhäusern*, f.i. — he became

Director of the School with 30 years, after *Pütz'* departure for Halle-had only frequented country schools and then an agricultural college, where he felt at first far behind the other scholars. He died at the age of 34; tuberculosis and restless work killed him.

Ernst Hess, who was made a teacher with 24 years, a farmers son, had left the classical grammar-school after two classes — at that time still customary. He became one of the most famous buiatricians. After the re-incorporation of the school into the University, he had to work out a doctoral thesis, in order to maintain his position as a professor! At that time, he had passed the forties. He died in 1920, of coronary sclerosis.

This epoque of hardship, with a study program nowadays considered absolutely insufficient, produced valuable men. I only mention *Sir Arnold Theiler* of Onderstepoort, South Africa. He published a paper on Horse-malaria in 1901, which he submitted to the Berne Faculty as his doctoral thesis (8). His temporary co-worker *K.F. Meyer*, lifelong Director of the Hooper-Foundation in San Francisco, already belongs to the 20est century.

During the last decade of the 19st century, the Swiss Veterinary Association and the two Veterinary Schools pushed in the same direction. At the annual assembly of the Association in 1898, it was unanimously stipulated that the "maturity"-certificate, i.e. full grammar-school education, should alone give access to the Veterinary Schools. *Conrad Eggmann*, distinguished practitioner and local politician, and Prof. *Rubeli* of Berne were the rapporteurs. Both were later made honorary Doctors of their Faculties, and honorary members of the Association — highly deserved distinctions.

Early in 1899, the teaching staff of the Berne School proposed to the government the re-integration into the University. On the 11th of December, a federal decision postulated equality of conditions for all medical students, human and veterinary. With this, the way was free, and in a public vote of January 21st 1900, the Bernese people

accepted, with huge majority, the "Law concerning the integration of the Veterinary School into the University".

The Bernese Minister of Public Instruction, *Albert Gobat*, Jurassien, had been an important positive factor. By the way : in 1902, he won the Peace-Nobel-Price for his efforts concerning the reconciliation of France and Germany after the war of 1870. He had the privilege to die on march 16th, 1914.

The Canton of Zurich soon followed the Berne example. After World War II, the problems of housing — again acute — were solved for both Faculties.

Ladies and Gentleman : the title of my presentation is not just a title, but also an obligation. Whith the last sentences, I already penetrated into the 20est century — our century which will soon enter its last decade. May it end as did the 19st : in relative peace and full of hopes. And may the hopes be better realized.

To conclude : for the future of our work at least, i have good reasons to be optimistic. My successor is a former student of the University of Ghent. He has been sent to us by one of the most outstanding neurologists of our time, *Dr. Ludo van Bogaert*, who died a year ago in Antwerp.

For this heritage, and for the honour of the *Sarton* medal and lecture — and certainly also for your patience — I am very grateful.

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Many of the quoted items contain ample bibliographic information. A few additional references are given in the footnotes.

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Notes

- (1) Mammerickx M.: Génèse de la pratique, de la recherche et de l'enseignement vétérinaires dans le pays flamand. Sartoniana 1, p. 115-134 (1988).
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- (3) Fankhauser R. : Coenurosis cerebri beim Rind. Schweiz. Arch. Tierheilk. 97, 16-30 (1955)
- (4) Driesch A. von den : Geschichte der Tiermedizin. 5000 Jahre Tierheilkunde. München (D.W. Callwey) 1989.

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- (6) see footnote 4.
- (7) The Swiss, despite the existence of two veterinary schools since 1820, had to pass examinations in their individual cantons. Some French speaking people studied in Lyons or Alfort, Alemanics in Karlsruhe and Stuttgart, and a few from the Italian speaking valleys sometimes went to Milan. This was still possible up to the end of the century, although there were federal regulations on from 1880. See also footnote 1.
- (8) Theiler A. : Die Pferde-Malaria. Schweiz. Arch. Tierheilk. 43, 253-280 (1901) and Inaug. Diss. vet. med. Univers. Bern 1901.



Fig. 1 : Chancellor Abraham Friedrich *von Mutach* (1765-1831), founder of the Bernese Academy.



Fig. 2 : Prof. Carl Friedrich *Emmert*, 1780-1834, first teacher and Principal of the Berne Veterinary School.



Fig. 3 : Matthias *Anker*, 1788-1863, Professor and 2nd Principal of the Berne Veterinary School.



Fig. 4 : Prof. H.J. Theodor *Pütz*, 1829-1898, Director of the Berne Veterinary School from 1869 to 1877.



Fig. 5 : Prof. David von *Niederhäusern*, 1847-1882, Director of the Berne Veterinary School from 1877 to 1882.

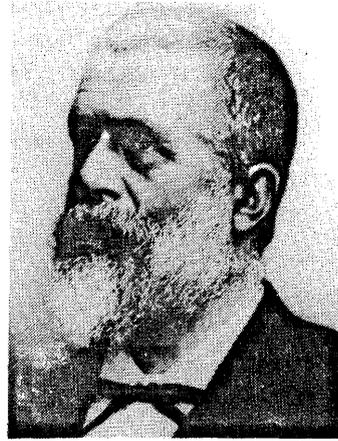


Fig. 6 : Prof. Henri *Berdez*, 1841-1901, Director of the Berne Veterinary School from 1882 to 1900.



Fig. 7 : Albert *Gobat*, 1843-1914, Director of the Department of Public Instruction, Canton of Berne, from 1882 to 1906.

