#### CHAPTER 2

# Witchcraft Vs. Animal Medicine

In these days of "miracle" drugs it has become commonplace to expect a little magic in most medicines. Recognizing that an antibiotic armamentarium sometimes may be used indiscriminately as a substitute for the powers of nature and good nursing care, it may be possible to take a more dispassionate view of colonial charms and witchcraft than all too frequently has been done.

# SUPERSTITION AND SORCERY

The idea that certain persons are endowed with supernatural powers is deeply rooted in the philosophies of most civilizations, perhaps as a logical projection of the observation that some individuals seem to have unusual qualities. In like manner, certain herbs, minerals, and animal products - some undoubtedly useful as medications - came to have magical powers imputed to them. It is, therefore, a not too illogical development to find these same powers transferred to inert objects, and charms and incantations substituted for medical services. That it should have been women who were attributed with these powers - once they had been determined to be evil – comes as no surprise, for colonial society, perhaps to a greater extent than in the mother country, was a man's world. Moreover, witchcraft frequently had medical connotations, and it was the women who, in the absence of a *bona fide* medical service, performed most of the domestic medicine.

#### **Enchanted Oxen**

With disease still looked upon as punishment for sin as a legacy from the past, and preached by the omnipresent pastor, those who had no doubts concerning their own righteousness found it convenient to look to their neighbors as the source of their ills. Thus in 1692 at the height of the witch fever, as related by Marion Starkey in *The Devil in Massachusetts*:

There was the tale of the Enchanted Oxen of Salisbury Beach. Fourteen head that John Allen had put out to fatten on the salt grass had one day been goaded by the devil into swimming to Plum Island. When Allen traced them there and tried to round them up, the oxen ran from him "with a violence . . . wholly diabolic" and plunging into the water swam straight out to sea. . . . Faced with so ruinous a disaster a good Puritan searches his conscience to see "what sin unrepented of" God is punishing him for. Allen may have started such a search, but he was interrupted by a memory ringing in his ears like a spiteful echo of the shrill voice of Susanna Martin, "Your oxen will never do you much service!"

It came back to him now. Just before he turned his oxen out to grass he had refused to hitch his oxcart to haul her some staves, and in those words had Susanna mocked him. . . . Who but Susanna had sent the devil into his cattle?

On the basis of this and other similar stories, including one of some phantom puppies, Susanna Martin and four other women were convicted of witchcraft and hanged. As to what really had happenend to the cattle, we of course will never know. It has been suggested they may have been poisoned from eating Jimson weed, which had been introduced from the West Indies early in the century, and now thought to be a possible explanation for some actual hysteria and other symptoms of persons suspected of being "possessed." Other explanations of the crazed cattle may have been simply a craving for salt, or there may have been some actual disease of the nervous system.

It was something in the nature of poetic justice that the pastor-prosecutor of the five women died of hemorrhage some years later, perhaps with the dying words of one ringing in his ears: "God will give you blood to drink." In evaluating the Salem witch trials, Miss Starkey asks:

Heaven forgive us, "demoniac possession" is with us still, even if the label is different, and mass mania, and bloodshed on a scale that the judges of old Salem would find incredible.

Whatever stand one may wish to take today regarding witchcraft in colonial times, there is no denying the fact that this phenomenon had the stamp of high legal recognition. Some who might take issue with the philosophies of Cotton Mather on various grounds might be surprised that no less a personage than the benevolent William Penn presided over the trial of an alleged witch in 1684.

# **Bewitched Bovines**

Being slow to think evil of their neighbors, this one instance of a witch trial in the Quaker colony is something of a curiosity, and one of some interest in that it involved a Margaret Mattson, who was accused of having bewitched her neighbor's cows. She was declared not guilty "in manner and forme" as indicted (an unusual verdict in such cases), but was reprimanded for "haveing the Comon fame of a witch."

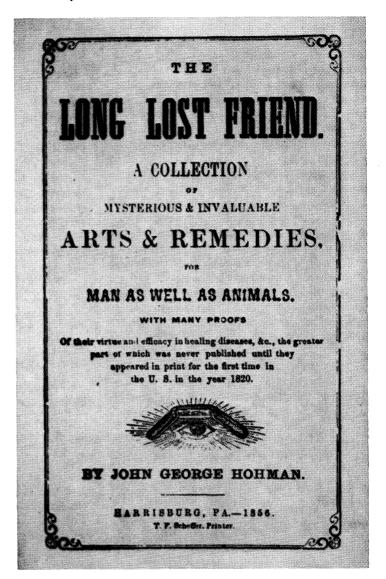
A much stronger case, however, was made against Grace Sherwood of Princess Anne County in Virginia. In 1689 she and her husband brought suit for slander against one neighbor who had openly declared she had bewitched his hogs and crops, and against another for declaring she had, in the form of a black cat, slipped through his keyhole. The jury found her guilty on both counts on the basis of the traditional trial by water and an examination for "witch marks."

Although the witch-hunting mania had cooled down considerably by the end of the seventeenth century, it should not be supposed that all prospective witches immediately flit from the scene. A New York correspondent to the Albany *Cultivator* in 1839 states:

The last time I sat on a grand jury, a woman of Duanesburgh applied for protection from her neighbors, who called her a witch. They sought opportunities to attack her when passing in the street, and attempted to draw blood from her head by striking her, believing that if they were successful, it would protect them from her witchcraft. . . She was Scotch, and . . . some of her neighbors believed she had lately made a pass to Scotland, over the ocean in a wash-tub. . . .

About three or four years ago . . . a descendent of German parents, in Rotterdam, adjoining our city, stopped at our store, and said he was on his way to the adjoining town of Glenville, to expel the witches from the cattle of a Dutch farmer there, who had sent for him for that purpose. Shortly after, that farmer stopped at the store, and we attempted to admonish him for such folly. He answered with great pathos, that when his cows all slunk their calves, it was time to do something for them. . . . If grand juries would indict, and the courts would condemn to be hanged those convicted of witchcraft, as they formerly did, witches would be as numerous now as then, notwithstanding the boasted light and knowledge of the age.

Judgement upon witchcraft cases involving ecclesiastical matters are perhaps best left to those qualified to evaluate the evidence. In medical matters, however, qualified physicians and quacks alike added fuel to the fire. Even by seventeenth-century



The so-called "Hex Book," numerous editions of which were published from 1820, was a compilation of ancient and mystic remedies for man and beast.

standards, the quality of the medicine practiced in the colonies left much to be desired. It is reasonable to suppose that relatively few competent physicians, who enjoyed a comfortable income and good social standing in England, would have left the mother country for the uncertainties of colonial life. The skill of those who possessed some qualification in medicine was such that it was complained: "Shoemakers, Weavers and Almanack makers . . . have laid aside the proper business of their lives

to turn Quacks." While laws regulating the practice of medicine were passed in Massachusetts in 1649, and in Virginia as early as 1639, these appear to have had little effect.

While it might be supposed that the medical profession would have been first in discounting or combatting a belief in witchcraft, all too often medical men promoted it as a convenient means for concealing their own deficiencies. It was an easy thing to say that a person who failed

to respond to medical treatment - all too often little more than bleeding, blistering, or purging - obviously was bewitched. Insanity or epilepsy quite obviously was "demoniacal possession." The ancient physicians had a better appreciation of the nature of nervous afflictions than any doctor of the seventeenth century. It was not until nearly 1800 that the eminent colonial physician and signer of the Declaration of Independence, Benjamin Rush, made substantial contributions to the understanding of nervous diseases in America, and so helped spell the doom of the devil in disguise. That the medical practices of any time must be viewed in perspective, however, may be appreciated by considering the probable reaction of the town fathers of colonial Boston or Salem to the sudden appearance of a white-coated physician with syringe of penicillin in hand. If he had been given the opportunity, the magical results would most certainly have convicted him of sorcery or worse.

Among intelligent and educated peoples, belief in witchcraft can perhaps at best be dismissed as a misdirected means to an end. But among settlers on the fringe of civilization, without books, doctors, or educated neighbors (the etymology of "neighbor" is nigh boor), that they might turn to for answers to puzzling questions, reliance upon superstition is a universal practice. In a recent work on Folk-lore from Adams County Illinois, some 10,000 superstitious practices are detailed, many relating to animals and medicine. As practiced by individuals, many of these "charming" bits of lore can be dismissed as traditional nonsense; but if anyone were to engage in even a few of these practices professionally, he would be lucky even today to escape with much less than the brand of "witch" or "wizard." When a belief in witches actually was in vogue, it was much simpler to attribute the loss of milk or sudden death of a cow to witches than to find - or even search for – the real cause. And to doubt that there were persons who could "bewitch" cattle amounted to rank heresy.

#### A Hex on Your House

Hex signs may still be seen on the houses and barns in eastern Pennsylvania; some of these may have been primarily decorative, but others had more mystic meaning. Less well known is the body of medicomagical folklore which thrived in this region. Much of this is detailed in a curious little book entitled *The Long Lost Friend*, by John George Hohman, first published in 1819, and printed at Harrisburg, Pennsylvania, as late as 1856. More magical than medical, this work is known as "The Hex Book" in the antiquarian book trade, and is something of a rarity. The author avers:

Whoever carries this book with him, is safe from all his enemies, visible or invisible; and . . . cannot drown in any water, nor burn up in any fire, nor can any unjust sentence be passed upon him. So help me.

As a charm "to gain advantage of a man of superior strength," one has but to repeat:

I, (your name), breathe upon thee. Three drops of blood I take from thee: the first out of thy heart, the other out of thy liver, and the third out of thy vital powers; and in this I deprive thee of thy strength and manliness.

Obviously, if this were to be translated into action, it undoubtedly would achieve its purpose. It should be kept in mind that charms such as this were not used idly, but with conviction of their efficacy—and often with malice aforethought. If said by a person reputed to have some success in these matters, this might indeed cast gloom upon the gullible.

In like vein, words could be substituted for deeds in dealing with animals. Thus as a remedy for the bots in horses:

You must stroke the horse down with the hand three times, and lead it about three times holding its head toward the sun, saying: "The Holy One saith: Joseph passed over a field and there he found three small worms; the one being black, another being brown, and the third being red; thus shalt thou die and be dead."

This particular charm utilizes the magic

of the number three (three times), the sun, and the deity, but perhaps credits the "worms" with an ability to realize their number was up.

That this particular remedy is an ancient one is evident from the fact that a similar charm appears in the writings of Albertus Magnus, the cleric-philosopher of the thirteenth century. As a charm against "the Worms in the Body," one should repeat:

God went upon an acre field. . . . He made three furrows, and found three worms. The first was black, the other was white, the third was red; forthwith (name) all thy worms are dead.

To augment the power of the spoken word: "Move three times with the finger around the navel, while pronouncing the three holiest names." This charm was used for both man and beast; if the latter, the animal's name was spoken.

Other remedies for worms given by Albertus include: rubbing the parts with fresh hot ox gall; rubbing the mouth and tongue of cattle with salt and serpentine-tree bark; a mixture of vinegar, egg shells, chimney soot and pepper for horses; or simply cut a piece of elderwood "on a Good Friday, before sunrise . . . without making a noise."

Hohman prescribes a mixture of white hellebore and linseed powder – the only medical treatment included – but offers several other charms, one being:

Worm, I conjure thee by the living God, that thou shalt flee this blood and this flesh, like as God the Lord will shun that judge who judges unjustly, although he might have judged aright.

Hohman states that his book is partly derived "from a work published by a Gipsey, and partly from secret writings, and collected with much pain and trouble, from all parts of the world." He mentions Albertus Magnus as a source in several instances. He also states that his reason for publishing the book is:

my compassion for my suffering fellow-men. . . . Besides that I am a poor man in needy cir-

cumstances, and it is a help to me if I can make a little money with the sale of my books.

#### Potent for Poll Evil

Hohman makes it clear that he is a deeply religious man, but appears to have reservations about what his clerical friends might have to say about certain of his cures:

I am willing to follow the preacher in all reasonable things, yet when I am in danger and he advises me not to use any prescriptions found in this book, in such a case I shall not obey him. . . . I am willing that my books should be seen by every body, and I shall not secrete or hide myself from any preacher.

His cure for poll evil perhaps falls into this category:

Break off 3 twigs from a cherry tree; one towards morning, one towards evening, and one towards midnight. Cut three small pieces off the hind part of your shirt, and wrap each of those twigs in one of these pieces; then clean the pollevil with the twigs and lay them under the eaves. The ends of the twigs which had been in the wound must be turned toward the north; after which you must do your business on them, that is to say, you must [defecate] on them; then cover it leaving the rags around the twigs. After this the wound must be again stirred with the three twigs, in one or two days, and the twigs placed as before.

This, presumably, is what is known as the businessman's cure. The remedy following this is "to stop pains or smarting in a wound," and the provident businessman might well have provided himself with the essentials at the same time he was preparing to combat the poll evil:

Cut three small twigs from a tree — each to be cut off in one cut — rub one end of each twig in the wound, and wrap them separately in a piece of white paper, and put them in a warm and dry place.

It might be surmised that if the condition were not particularly painful, the paper for the latter cure might be put to a better use.

#### Verhext

The emphasis placed upon livestock by the early settlers of Pennsylvania, particularly those of German ancestry, resulted in the logical development that most of those accused of witchcraft were suspected of harming livestock. Any antisocial old woman was a likely suspect, and in most cases such individuals were ill-equipped to defend themselves. The Germans in particular had a penchant for reviving and embroidering stories which had survived from the days when Germany had been the world's capital for witch hunters. Cattle were verhext by witches who milked them by squeezing on a towel, or "shot" them with hairballs, or afflicted them with "the murrain." The ever-provident Germans, of course, had their own ways of counteracting these evil influences. Some of the "hex" signs on Pennsylvania barns were made with the avowed intent of circumventing witches. If the identity of the witch were known, a silver bullet fired at a crude picture of her would transfer the spell to the witch. (Television fans are aware of the power of a silver bullet in restoring law and order.) The signs of the zodiac were faithfully consulted before crops were planted or calves castrated, and thus the almanac became second in importance only to the Holy Bible. The appropriate charm, handed down as a family secret, would suffice for any emergency, however

In an attempt to cut down the monster his predecessors had propagated, the editor of the Farmers' Almanac in 1830 wrote:

Signs and omens and prognostics continually fill the minds of some. . . . Farmer Bluejoint has nailed an Ass's shoe to his hogsty to keep the evil spirit from his herd of swine; for, it is said, that old Splitfoot has always hated Asses since the affair of Balaam. The rats by thousands destroyed his grain. So, he got his daughter, Dolly, to write them a threatening letter, which he placed in his corn crib. The consequence was that every varment of them immediately evacuated the place.

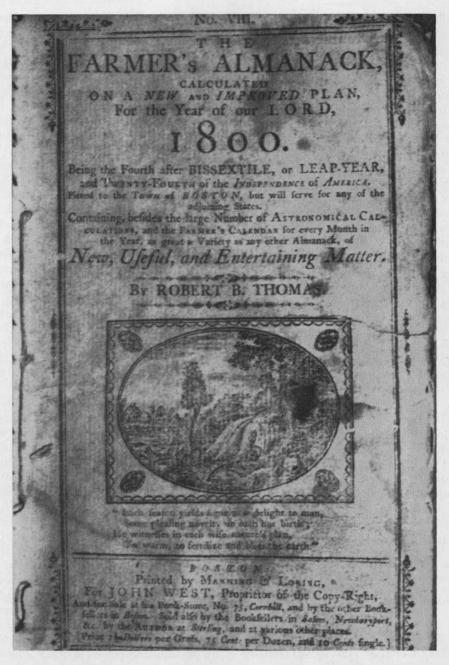
The latter superstition was very common. A note often was placed in a rat hole; if the rats took it away it constituted their acceptance of the "terms," and reputedly they were frequently observed leaving in droves

- often to a neighbor's place suggested in the note.

Once an animal had been verhext, strenuous measures were often required. Witch-doctors were consulted, who for a fee would employ the appropriate countercharm. In the 1670's this consisted of burning affected cattle or dogs on the forehead with a branding iron - precisely as had been done in the Middle Ages. Or if the animal had died, it was carefully cremated to insure its complete immolation - perhaps a more potent charm against plague than was appreciated. Later the Braucher, or "pow-pow" doctor, relied upon incantations; to be effective these had to be learned from one of the opposite sex, and administered by the healer only to individuals man or beast - of the opposite sex. The formula for "schwinde," or tetter, was:

Go out of the marrow into the bones, Out of the bones into the flesh. Out of the flesh into the blood, Out of the blood into the skin, Out of the skin into the sky, Out of the sky seven yards deep in the ground.

From the folklore of various corners of the country come measures to prevent sickness in livestock: make three crosses in the doorsill of the stable, keep a goat running with horses or cattle, or be sure the stable has many cobwebs. Pennyroyal in the stable will keep flies from molesting stock. If a calf or colt is castrated in the sign of the "private parts" it will die. Cow manure rubbed on a caked udder will cure it. Feeding a cow a stolen dishrag will cure indigestion. Feeding a hornet's nest to a horse will cure distemper. Tie a live hoptoad to the withers of a horse to cure sweeny. Rub bacon fat on the instrument that causes a wound, and the wound will heal in a few days. For a nail prick, carry the nail in your pocket, and the wound will not become infected; or cast the nail into a fire to prevent blood poisoning. A dog that licks the blood of a dead man will go mad . . . etc., ad infinitum. But let him who has no skeletons in his closet cast the first stone.



Beginning in 1793, the Farmer's Almanack gave directions for castrating animals according to "the signs," as it did for planting seeds, and the like.

# THE MARK OF MARKHAM

Some of the quaint practices of superstitious folk undoubtedly did harm - if only by depriving the affected animal of proper attention. More often, perhaps, these simple practices saved the hapless animal from real harm at the hands of countless self-denominated experts, professional or amateur, who killed and maimed more often than they cured. Countless works animal disease, professing on humanity to the horse, remain as morbid examples of the barbaric butchery that was performed under the guise of farriery for a century or more. Worse, the veterinary profession, once it became a reality, labored long under the disadvantage it inherited from the likes of these. One particular work, if taken in chronological sequence would be discussed much later; in actuality, however, it belongs to the Middle Ages, and did more harm than all the witchcraft ever practiced in America.

The Citizen and Countryman's Experienced Farrier (1764), by J. Markham, G. Jeffries, and Discreet Indians, was one of the first veterinary works published in America (Wilmington, Delaware) to achieve a wide circulation. In this, and the second edition (Baltimore, 1797) the Indians were identified as "Discreet"; in the third edition (Baltimore, 1803) they had become "Experienced," but their contributions, if any, are not specifically identified. In true Markhamian manner, we are assured on the title page that the book contains:

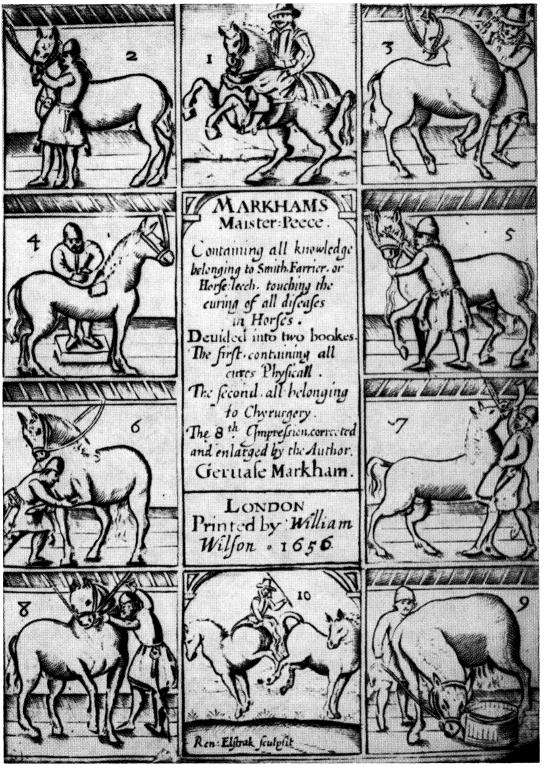
a valuable collection of the best receipts in the known world for the cure of all maladies and distempers incident to horses of what kind soever, with directions to know the ailment, or disease.

The "J. Markham" is none other than the redoubtable Gervase (Jarvis) Markham, whose *Maister-peece* (London, 1610, and innumerable later editions) was the *bête noire* of reputable veterinary writers in Britain for nearly two centuries.

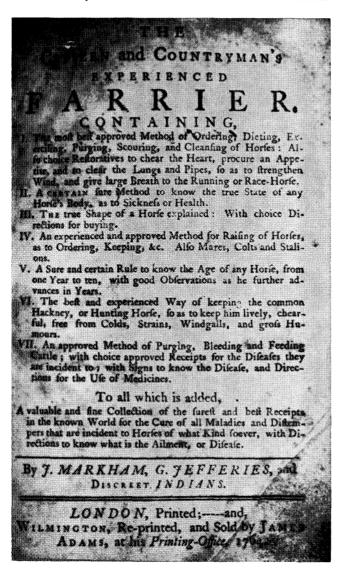
Jeffries appears to have been a farmer of Chester County, Pennsylvania; other acknowledged contributors are Matthew Hodgson, a British farrier long since dead, and a Nathaniel Shaw, whose identity is not clear. Also, a committee of four "revised and examined the copy and manuscripts" of the first edition, and were "of opinion that it [the second edition] will be of great service to the public in general." The third and fourth (Chambersburg, Pennsylvania, 1839) "editions" are only reprintings of the second.

The word "proved" appears after many of the receipts given, suggesting they had been tried - as undoubtedly they had but about all that the entire work proves is that those responsible for it lacked astuteness in choosing a source from which to copy. Markham himself had "proved" these same remedies nearly two centuries earlier; William Gibson's New Treatise on the Diseases of Horses, London, 1751, would have been a much more fortunate choice – particularly for the horse. In 1610, Markham's Maister-peece was at least excusable as a product of the times; not so, however, is the case of his copyists two centuries later. At least five editions of the Farrier as such – and inumerable imitations – appeared to 1850.

The Farrier begins with "choice secrets" for preparing the horse for racing; the sport of kings being a serious business in colonial and post-Revolutionary America, the book undoubtedly was in great demand for this advice alone. In fact, the scarcity of this work today, and the poor condition of most copies extant, suggests that many of them were literally worn out by long use. At the time, a strict regimen of six months duration was usually considered necessary to bring a horse "fat and foul" to his peak condition. These trainers, says the Farrier, "rob their noble masters of half a year's pleasure," and in so doing, "devour up an hundred pound wager." The shorter regimen of two months of purging, bleeding, sweating, and exercise recommended undoubtedly was more than adequate. For example, if the horse showed signs of sickness, "let blood instantly, and for the three following mornings, the horse being fasting." The latter is a concession to the



Markhams Maister-peece (London, 1610), although never reprinted in America, was the prototype of many worthless American works when better books were available for source material.



A wretched compilation, in part from Markham, The Citizen and Countryman's Experienced Farrier (Wilmington, 1764) went through at least five editions. Most copies extant show evidence of hard usage, and many subsequent works show evidence of wholesale pilferage from these poor productions.

superstitious practices of the ancient Romans, who would render treatment only if the animal were fasting, but the *Farrier* was not the last in this country to observe this and many other practices in the same category.

In treating of this work in some detail, it must be remembered that most of it is copied from the worst possible British source. While the American editors presumably selected those sections which were more applicable to conditions here, their choice of Markham itself demonstrates

their inability to make any contribution of value. The wide distribution and evidence of actual use of this work, however, makes it apparent that the practices advocated were characteristic of actual practice at the time, and indeed for long decades before and afterward. The brutality and incredible ignorance of later generations of fearless farriers may be traced to this one polluted wellspring. It is painfully evident that the section containing "the experienced receipts of George Jeffries," which he says, "may, in some measure, be ac-

counted more natural, as the productions are of this climet," does not differ from Markham's muddled discourse first offered in 1610.

#### The Black Drink for Glanders

While glanders probably was not the serious problem in colonial America that it was in Britain, it is likely that some horses were affected, for the disease had become a major problem by Civil War times. For glanders, the first disease considered by the Farrier, nothing is said of the cause or of diagnosis — as is the case with most other complaints — only cures, most of them "infallible," are given. Thus it is likely with the "cure" for glanders being convenient, many horses were treated for it willy-nilly. Of the medicine — composed of vinegar, honey, alum, and salad oil:

give your horse six spoonfuls in each nostril, with a little horn . . . at 9 different times, being 3 days between every drink, every second time . . . give him chickens-guts warm, rolled in beaten bay-salt, and put them down his throat.

On the other hand: "To stop the glanders until you sell your Horse," it was necessary only to give bruised elder bark in a quart of ale on three successive mornings.

Another "infallible cure in three or four times giving," was "the black drink for the glanders." This required preparation of the horse by purging and fastening a goose feather annointed with sulfur and butter up each nostril: "to purge his head and lungs, and cause him to send forth much filthy matter." The "black drink" was composed of "new-made urine, and strongest white wine vinegar, of each half a pint," with three spoonfuls of mustard, given, "at the mouth, except two small hornfuls which must be poured into his nostrils." Any comment would be superfluous, except, perhaps, that whether the condition being treated was glanders or not, one "cure" would have been as effective as the other.

For farcy, the cutaneous form of glanders:

Take rue . . . garlic . . . aqua vitae . . . and a little black wool, and put it in the ears

equally, then sew up the ears together: afterwards cut the horse's forehead, and put into the cut the inner rind of an elder, about an inch long.

Elsewhere one sensible statement concerning this disease complex appears:

If an horse hath the farcion, and his breath smells strong, and stinks, do not meddle with him, for his lights are rotten, and there is no cure for him, for he is as full of them within as without . . [also] separate the sound from the sick, for this disease is infectious; they will take it of one another.

But "if his breath be sweet, there is no doubt of the cure," which consists of drenches containing various herbs, and an ointment of alum made with "fasting spittle."

For "an approved cure for the botts, and all kind of worms whatever," give a quart of new milk sweetened with honey, followed by black soap dissolved in white wine; "let him fast two hours after it, and the worms will void in great abundance." Or:

Take the soft downy hairs which grow in the ears of an horse . . . mix them well with half a gallon of sweet oats, and give them to the horse. There is nothing that will kill worms more certainly.

There is no question that bots were a major problem in colonial America; nor is it likely that the measures above abated the problem much. Perhaps the effectiveness of these cures was recognized, for in "extream cases," a liquor made from:

about four or five lumps of the white dung of a hen, and three pints of good ashes, as much chimney soot . . . will perfectly cleanse his stomach, kill the worms, and cause him to rope at the mouth abundantly.

Jeffries advises bleeding from the palate, allowing the horse to swallow the blood, which will be ingested by the bots—causing them to loosen—following which a pint of linseed oil "will kill them instantly." Inasmuch as he does not specify boiled linseed oil, it is perhaps not clear whether "them" refers to the bots or the horses.

# **Mastiff Medicine**

For a "back-sinew" (plantar ligament) strain, or "numbness of joints," we are directed: "Take a fat mastiff whelp, slay it and gut it, then fill the body with grey and black snails, and roast it." The drippings are to be made into an ointment with oil of spike and oil of wax, and applied hot. Or:

Take a live cat, cut off her head and tail, then split her down the chine, and clap her hot, bowels and all, upon the strain, and let it stay there for forty-eight hours.

Other more moderate remedies, such as hog's grease, are prescribed, but these dog and cat atrocities appear to have fascinated the plebeian public since ancient times: the mastiff medicament was prescribed for rheumatism in man by a Doctor Carter of Kentucky in 1825. These vulgarities were at least harmless to the horse, and may have served to reduce the depredations of packs of dogs that wrought havoc upon flocks of sheep and spread rabies throughout the colonies beginning about 1770. But for sheer brutality, a "proved" cure for "shoulder strain" is as unconscionable as the devil himself could devise:

First tie up his sound-leg very sure with a list or garget, then walk or drive him on three legs that he may lay the weight of his body upon the lame leg till he begins to sweat at the ears and cods with the pain. . . Let him bleed. . . . Tie his forelegs together as close as possible . . . drive a wedge about the breadth of a six-pence, between the toes of his shoes, and the toes of his feet . . . annoint the strain once with oil of turpentine and beer, and once with blood and salt. . . . It is a speedy cure.

And if this is not enough, consider the plight of the hapless horse that might also be treated for a splint at the same (or any other) time:

You must cast the horse, then beat the place with a stick until it is soft, and fleam it in three or four places upon the splent, and squeeze out the blood. . . . Melt some black pitch in an iron pan . . . and dab it on close all over the splent . . . and the splent will come out. . . . It makes a great blemish, and

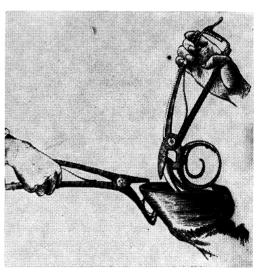
takes away the hair and flesh, and sometimes the hair comes no more.

And "for a foundered Horse" we are directed:

Take out the soles of his feet. . . . Cut the middle of the sole just at the frush's [frog] end, in the shape of an hen's tongue, and raise it a little with the point of your knife . . . prick the vein until it bleeds. . . . Let him stand in the stable . . . the bottom of the hoof, being thus festered, the sole will come out easier by a great deal, and with less danger of pulling away the veins with the sole of the foot. . . . Take your drawing knife, and draw the hoof to the quick . . . then raise the sole at the toe, and take hold of it with a pair of pincers and pull it upward to the heel, and so pull it quite out, then apply hare's-wool to stop the blood . . . then wash the sole of the foot with urine, and set on the shoe, and put in pitch, turpentine, and hog's-grease. . . . You must never take out the soles of both fore-feet at one time, for then he will not be able to stand.

# For Staggers and Stumbling

Diseases of the nervous system appear to have been common if the number of conditions mentioned is a criterion, and the drastic remedies used would suggest they



The practice of unsoling the foot for founder was commonly advocated from the dawn of printing to the late nineteenth century, despite the protestations of more humane horsemen and veterinary practitioners. Manger: Facts for Horse Owners. 1894

were little understood. For the mad staggers:

Let him blood in both veins of the neck, and in the third furrow of the palate . . . run an awl into the gristles of his nose, above his nostril, the bleeding at his nose and mouth will ease the pain in his head . . . [or]: Take a long straight stick . . . run it up to the top of his head [via the nostril!], jab a little hard, turn the stick and draw it out, and he will bleed freely. . . . To cure, take an handful of rue . . . garlic . . . salt, vinegar . . . aqua vitae, . . . put it equally into each ear . . . then tie or stitch the ears shut. . . . Give wild poppy-seed in half a pint of beer, up his nostrils . . . he will appear as if dead for a time, and this sleeping will much refresh him.

The treatment for a "stumbling" horse antedates the machinations of Markham, and may be attributed to Leonard Mascall (late sixteenth century), whom Markham barely managed to deprive of the distinction of being the greatest rogue in veterinary history. The operation, performed as a preventive as well as a cure, consisted of cutting the conjoined tendon of the levator muscles of the upper lip, and was known as "cutting the cords." The *Countryman's Farrier* directs:

Tie him close to a post . . . cut a hole lengthway down to his lips, endwards, in the midst of his nose, between his nostrils, the length of your thumb. . . . You will see a white flat sinew; put the point of your cornethorn under it, and raise it above the skin, then pull it hard out with your cornet-horn and turn your cornet-horn about [three times]: in thus doing you will see him bring his hinder legs to his fore-legs. . . . Cut the sinew . . . and put a little butter and salt into the wound . . . and the horse will go well, and never stumble afterwards.

Lest it be thought that all the "choice receipts" should be like those above, the remedies for mange, however unpleasant the preparation and administration of some may have been, undoubtedly had some beneficial effect. Thus, "for any mange, scab, or leprosy whatever," we are directed:

First let blood, then take a quart of old urine or vinegar, and break into it a quarter

of a pound of best tobacco . . . let it stew all night; then strain it, and with the water wash the infected place.

Another remedy consists of ale, tobacco, alum, salt, and mercury. Nothing is said in this particular treatment of the infectious nature of the disease, but directions are given for washing the manger with scalding water and fumigating the saddle with burning sulfur. The precautionary note Jeffries adds is probably the most sensible writing in the entire book:

Let not your saddle or collar that was upon a mangy horse go on any other, for it will quickly give it a sound horse, being an infectious disease.

# **Generation of Vipers**

What, then, is to be our evaluation of this work? Despite an occasional sensible remedy, and others which at least did no harm beyond depriving the animal of better treatment, the Countryman's Farrier is an utterly wretched and abominable anachronism. In addition to subjecting innumerable animals to unnecessary tortures for the century or more the several editions were in vogue, it created an additional generation of vipers that plied their trade in like manner for another half century. Truly Markhamian throughout, the evaluation of Markham by an English country gentleman, John Lawrence, in his Treatise on Horses (London, 1810) will bear repeating:

The redoubtable Gervase Markham was for more than a century the oracle of sapient grooms, the fiddle of old wives, and the glory of booksellers. . . . The mischiefs which have been occasioned by the extensive circulation of this man's books are incalculable. They brought almost as many evils and cruel inflictions upon poor helpless animals as the opening of Pandora's box did upon the human race.

Lawrence advises the owners of horses to purchase any of Markham's works their grooms or farriers may have, and "put them to more harmless and necessary purposes than to those which ignorant people would most probably apply them."

The evil influence of Markham was accentuated by the dearth of good veterinary works, there being only about two dozen titles, including British reprints, published in America to 1800. Even George Washington succumbed to the wiles of Markham, for in 1759 he mentions setting a horse's leg "according to Markham." This undoubtedly was the Maister-peece itself, imported from England. Probably many settlers brought their favorite work on farriery with them — all too often, perhaps, their choice was no better than that of Washington. Copies of the Maister-peece in the original are far more common today than its hybrid offspring.

#### **Antidotes for Markham**

It should not be supposed that no respectable veterinary works had been published in America to this time, however, for Bartlet, Burdon, Taplin, and James Clark had all been reprinted here before 1800. Clark's Treatise on the Prevention of Disease (London, 1778, Philadelphia, 1791) in particular still contains much that is worthwhile, but it seems to have had a relatively small circulation and less influence upon American veterinary practice. An even more obscure little Modern Practice of Farriery, or Complete Horse Doctor, published in Philadelphia in 1793, is as sensible an epitome of practice as might have been expected at the time. The author, J. Thompson, a Britisher, states that his book is "the result of 37 years practice and experience." Actually, as he states himself, it is primarily a distillation of the best offered by the leading British writers whose works were also available in this country. This little work deserved greater acceptance than it received; indeed it is practically unknown to bibliographers - in America or Britain.

Bleeding is recommended in most conditions; it would be too much to expect anyone at the time to question the practice, but Thompson at least is moderate, and specifies that the blood be measured to avoid excessive bleeding. Likewise, purg-

ing is frequently resorted to, but with moderation; like Clark, the author notes that horses are too easily killed by strong purgation. Considerable space is devoted to the causes of disease, diagnosis, and prevention. His treatment stands in strong contrast, for the most part, with the absurdities of Markham, as may be seen by comparing the remedies offered for the same conditions reviewed above from the Countryman's Farrier.

On glanders, Thompson gives an account of the practice of the eminent Frenchman, LaFosse, who recommended trephining the nasal cavity and using irrigations and fumigants. Thompson, however, says:

Trepanning . . . is not only a most painful operation, but also attended with such trouble and expence, it must be an extraordinary horse to compensate the account . . . the first loss will be ultimately best in a resignation of the hide to the collar-maker, and the remains to the hounds.

The relation of farcy to glanders is not recognized, but the condition is well described, together with an acknowledgement that it frequently is not amenable to treatment. Various astringents are used for the local eruptions, but if these do not suffice, the owners are advised to: "save themselves unnecessary expence and trouble in their endeavours to obtain a cure." When the symptoms "denote the distemper to have penetrated internally . . . it is most probable . . . irremediable by art."

For bots, calomel and savin or wormwood are recommended. Various liniments and poultices are used for strains, and with the addition of blisters, for splints or spavins. He disapproves of firing, and says purging may be adopted by those "whose credulity can conceive that a course of purgatives and diuretics will contribute to the removal of corns and warts from the feet and hands of the human species." For staggers, rapid bleeding to the extent of three or four quarts is the first recourse: "if he survives the fit," purgatives and alteratives are given. It is of some interest that he recognizes the similarity of various nervous disorders, and gives precise directions for

differential diagnosis: on the wholly imaginary matter of "stumbling" as an entity, he is discreetly silent. Mange is recognized as infectious, and sulfur or mercurial ointments are recommended. There would be little point in enlarging upon the merits of this little gem, for it would appear that it fell into few hands, and still fewer appreciated its merits.

# **Buchan's Bungling**

By contrast with Thompson's work, a book which found its way into many homes was Buchan's Domestic Medicine, issued in America as a dual purpose Every Man his own Doctor, with an appendix "Containing a Complete Treatise on the Art of Farriery" (not attributable to Buchan). Buchan was an English physician whose treatise achieved a wide circulation, many editions being published in both Britain and America beginning in the late eighteenth century. The section on farriery, some 100 pages, was first added to the American edition published in New Haven in 1816. Medical historians quite understandably have been hypercritical of Buchan's medical writing for the layman, but while any "do-it-yourself" manual is potentially dangerous, this does contain much that would appear to have been useful. Less can be said, however, for the section on farriery, for much of it is straight out of Markham and others of his stripe, including: "original discoveries adapted to our own country," furnished by friends of the publisher.

The cures for mad staggers and for stumbling, for example, are taken directly from Markham, as given above. To cause a mare to clean after foaling:

Take a quart of old strong beer, and boil in it an handful of fennel, with a fourth part of the best oil of olive, and mix well together. Give this to the mare milk warm, by pouring it into her nostrils . . . and it will presently give her ease.

And to provoke lust in mares: "with a bush of nettles pat her hinder parts." For "Cramps, or Convulsions of the Sinews or Muscles" (tetanus), which is stated to be of frequent occurrence:

First sweat him, by burying him all, save the head, in a dunghill... But if the convulsion comes accidently, as by the prick, or half cut of a sinew, then search for the wounded sinew, and with a pair of scissars clip it asunder, and the convulsion will cease.

The practice of using a dunghill to sweat a horse dates to the Byzantine veterinarians (fourth century); a medium less suitable for treating tetanus would be difficult to imagine.

The usual remedy: salt, soot, and garlic, is prescribed for "the distemper called the Tail," and we are informed:

The distemper called the Gargyse is a swelling on one side of the eye in manner of a boil, botch, or buboe. This is as dangerous a distemper as any that can attend cattle.

It is necessary to lance the swelling "to prevent its falling into the muzzle of the beast, which will certainly happen, if not timely prevented by this method, and prove mortal." The wound must be dressed with fresh human urine and salt. For scab, a remedy taken directly from an English work of 1729 is given:

Of old human urine a quart, in which mix a handful of hen's dung, or half a handful of pigeon's dung, and give it to the beast to drink.

And for a cow with blood in her urine: "Put a frog down her throat, and drive her next day into water, and she will directly [urinate] clear."

The diseases of swine are handled in like manner. One item of some interest is the mention of "the Choler in Hogs," which is taken from a British work of a century before. The lethargy and loss of appetite described resemble the symptoms of hog cholera; thus this description may have furnished a precedent for the inept naming of the disease when it was first reported in America in the 1830's.

# Retrospect and Prospect

In any historical account it probably is desirable that some sort of chronology be

ac

# FARRIERY.

WHEREIN ARE FULLY EXPLAINED

THE NATURE AND STRUCTURE OF THAT USEFUL CREATURE, A HORSE:
WITH THE DISFASES AND ACCIDENTS HE IS LIABLE TO:
AND THE METHODS OF CURE.

# LIKEWISE.

FULFS FOR BREEDING AND TRAINING OF COURS: PRACTICAL FECEIPTS FOR THE CURE OF COMMON DISTEMPERS INCIDENT TO OXEN, COWS, CALVES, SHEEP, LAMBS, HOGS, &C.

TO WHICH IS PREFIXED

TEN MINUTES ADVICE TO THE PURCHASERS OF HORSES.

NEW-HATEN:

PUBLISHED BY NATHAN WHITING.

1816.

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A section on Farriery was added by the American publisher of Buchan's Every Man His Own Doctor (New Haven, 1816), a version of Buchan's Domestic Medicine, numerous editions of which were published in England and America.



Settling on the age of a horse by examination of the (sometimes "doctored") teeth has been an ageless contest between seller and buyer, and some of the earliest writings of veterinary interest in colonial times included this subject. Mayhew: Illustrated Horse Doctor, 1865

adhered to. With military or political history this is not overly difficult. Veterinary medicine practiced a la Markham in 1850, however, quite properly belongs to another century - except that the anachronism must be acknowledged at this later date. Certainly, those who used American versions of Markham and others of his stripe were doing little more than extending this baleful influence beyond what might have been expected from the British versions of a century or two earlier. Another obvious problem relates to the fact that veterinary medicine as such had no standing - nor any advocates - in America prior to 1800. But problems which would be recognized today as being of a veterinary nature, of course, existed from early colonial times as they have at any time in history when men and animals have co-existed.

The attention paid by our colonial forefathers to what we would chose to call matters of veterinary public health interest is perhaps the brightest chapter in the story thus far. Inadequate as some of the measures taken may have been, these at least form the earliest record of continuing overt thought and action being applied to matters with veterinary overtones. That little attention should have been given to veterinary problems per se prior to 1800 is not surprising; little enough thought had been applied in Britain – where the problem of animal disease had been very real for long enough. The real nature of the animal disease problem in America had not yet manifested itself, and there were all too few persons by 1800 - and for some time afterward - capable of synthesizing anything approaching an adequate appraisal of the situation from the fragmentary data available.

In the discussion which follows on veterinary medicine during the eighteenth century, it is evident that parts of the story already have been told. Much of the story is best told in retrospect and prospect in terms of the influence of one period upon another. Certainly, many of the veterinary problems of the nineteenth century had



Berausgegeben von Comund D. Goellu.

1840

Winters' Pferde-Arzt ("Horse Doctor"), Philadelphia, 1840, was a faithful copy of the original German work of 1678.

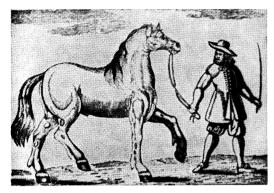
roots extending back a century or more; moreover, few of our problems of today have been created *de novo* by events of the immediate past.

Thus the stage was set for countless later "Domestic Medicines" which dealt indiscriminately with man and beast. On any appreciable scale at least, these were an American innovation. While very few such

works had been published in Britain, the cost of books in America apparently made these dual purpose works attractive.

# **Veterinary Publishing Ventures**

Philadelphia early took the initiative in the publishing field, and more veterinary works were issued with a Philadelphia imprint before 1800 than from any other



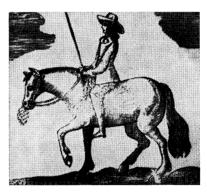
Blemishes of the limbs of the horse, from Winters' *Pferde-Arzt* (1840). The earlier German ancestry (1678) of the book is clearly evident from the man's costume.

place. In 1735, William Burdon's Gentleman's Pocket Farrier (London, 1730) was published by Benjamin Franklin. The choice of Burdon's little work as his first—and unfortunately last—veterinary venture, undoubtedly reflects the sagacity of Franklin, for Burdon was a cavalry captain who deplored the brutal treatment of horses common in England at the time. Had the American horse-owning public been willing to accept him as a guide, there would have been little call for the muddled writings of Markham and his tribe.

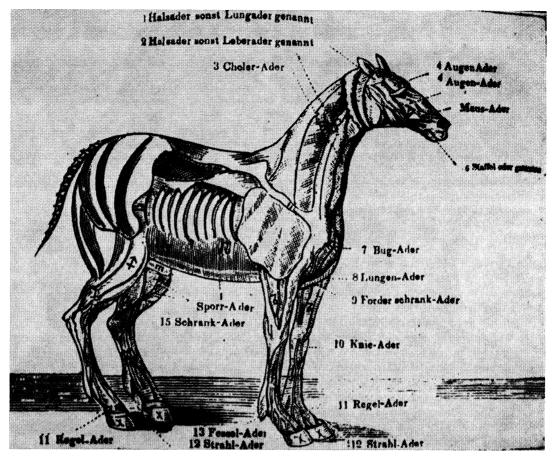
Franklin began publication of the Pennsylvania Gazette in 1728; while this was primarily a newspaper and literary journal, occasional articles on animals and animal disease were reprinted, from British sources, the first being in 1729 on determination of the age of the horse. Others followed; one in 1735 gives the best account of bots published in America for many years to come, but these articles were too few and far between to be of significance. Poor Richard's Almanac, which Franklin started in 1732, created a precedent for many such publications in presenting information on the proper time for castrating animals, and on the treatment of various ills. Because of the scarcity of information on animal disease in Franklin's time, his publication undoubtedly served some purpose in this area. Dependence upon this type of information, however, kept better and more ample writings from reaching hands that needed them; in fact, the simplicity of the almanac led many to distrust anything more complex.

Little more appears to have been published until Markham's retrograde work appeared in new guise in 1764. Nor is it likely that the series of works in German, published for Pennsylvania German consumption beginning in the 1770's, added much that was new to the veterinary art. These were mostly reprints of earlier German works - how much earlier may be appreciated from the fact that a pferde-Arzt ("Horse-doctor") by George Simon Winter, published in Philadelphia in 1840, is an exact copy of a work by this author in 1678. Two of the early works were Nachrichters, Germantown (Pennsylvania), 1770, 1771, by Johann Deigendesch, and a Vieh-Arzney-(Cow-Doctor-Book), Philadelphia, 1771. As German colonists migrated westward, stock books in German with midwestern imprints made their appearance in the early 1800's. And at least one American work. The American Farmer's Horse Book. (Cincinnati, 1867), was translated into German - Das Pferdebuch des amerikanischen Farmers – and published in Milwaukee.

Late in the century a series of reprints of works by English veterinary writers ap-



Horse with nasal discharge suggesting glanders, from Winters' Pferde-Arzt (1840). Although early works, including British reprints, warned against the danger of glanders to man and its incurable nature in animals, numerous "cures" were propagated, and the disease was allowed to become wide-spread following the Civil Warthrough the sale of surplus infected Army horses.



Bloodletting diagram with signs of the zodiac, from Winters' *Pferde-Arzt* (1840). For the three centuries or more that bleeding of animals and man "according to the signs" was popular, veterinary and medical works carried such diagrams showing when and where phlebotomy should be performed.

peared in American editions. These included:

Gentlemen's Farrier Repository (London, 1753), Philadelphia, 1775, 1787, 1790, 1791, by J. Bartlet, a surgeon who had turned to veterinary writing, but who did not practice. His eloquent plea for greater humanity toward the horse, and for simplification of remedies, probably fell upon deaf ears in America as it had in Britain.

Gentleman's Pocket Farrier (London, 1735), Baltimore, 1796, 1797, by Henry Bracken, M.D. This is a version of Captain Burdon's work, issued by him in 1730, and edited by Bracken, who was a physician as well as a surgeon—

an unusual combination for the times in Britain, where surgeons were looked upon as inferior to physicians. Like Bartlet, Burdon — via Bracken — advocates more rational practice, in particular he deprecates the universal practice of excessive bleeding of horses. But again, contemporary and later practice in America would suggest that this plea was largely unheeded.

Farriery Improved (London, 1737), Philadelphia, 1794, 1796, 1798, by Bracken was one of the better works of the time, but is infected with much medical philosophy not particularly applicable to the horse. None of these works is as valuable as the New Treatise on

the Diseases of Horses (London, 1788), Philadelphia, 1794; and A Compendium of Practical and Experimental Farriery (London, 1796), Philadelphia, 1797, by William Taplin. Taplin, also a surgeon, was a bombastic writer who was the prototype of that fraternity each of whom claimed to have "the largest practice in the world," and to have "never lost a case." Two years after establishing an "equestrian receptacle," Taplin boasted that not a

single horse had ever left his premises dead.

An anonymous work, attributable to Taplin, was published in Charleston in 1799, and is of particular interest inasmuch as it is the first American work devoted entirely to the dog. This is the Method of Raising and Training pointers: "An account of the several disorders to which they are subject, and the proper treatment and medicines in such cases." Earlier, however, The Modern System of

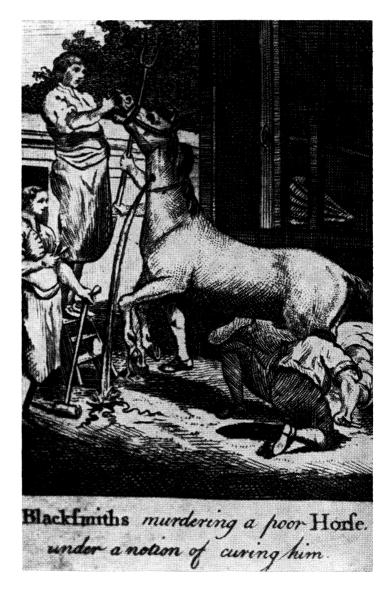


Illustration from Bracken's Farriery Improved, Philadelphia, 1794 (London, 1737), an early protest against barbarous treatment of the horse. Although the methods of graduate veterinarians of the time were not overly gentle, those of blacksmiths and farriers were notoriously harsh. Michigan State University Library

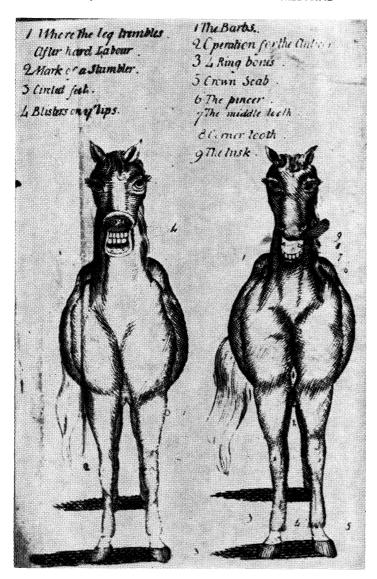


Illustration from Bracken's Farriery Improved, 1794, one of a series of plates which attempted to depict points of anatomy and sites for operative procedures. This device was used and enlarged upon by innumerable later "Stock Doctors." Michigan State University Library

Farriery, Boston, 1796, by John Mills, included "a successful method of treating the canine species in that destructive disease called the distemper."

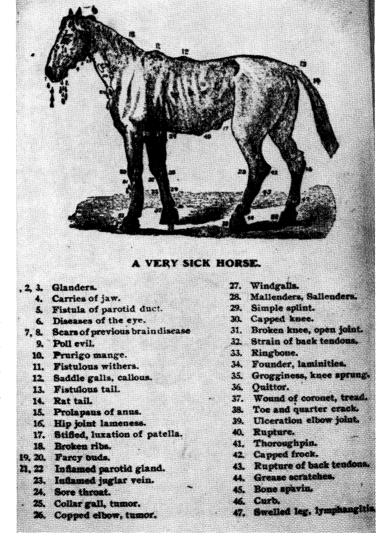
### **Auf Deutsche**

The impact of German culture upon American customs and manners has been greater, perhaps, than is generally realized — outside of Milwaukee or eastern Pennsylvania. In the veterinary field the number of German publications, beginning about 1770 and extending over a century

or more, might seem surprising to one unacquainted with the numbers of Germans and their nature. In 1740 there were about 40,000 Germans in Pennsylvania, and perhaps 120,000 by 1790; by the time of the Revolution they comprised about one-third of the state's population, and there was agitation to make German the official language of the state. In the entire United States there were perhaps 400,000 Germans, about a tenth of the total population. Mere numbers, however, do not tell the story; as agriculturalists the Germans

undoubtedly were superior to the English, and many were skilled artisans. The latter probably included a higher proportion of printers during the eighteenth and early nineteenth centuries than among any other group. The press at Ephrata, Pennsylvania, was the third colonial press in America.

The veterinary press had flourished in Germany since early sixteenth century, and undoubtedly many German immigrants brought their favorite stock remedy books with them. By comparison with those of other European countries, these usually included more on the diseases of other domestic animals, rather than dealing only with the horse. When the concept of veterinary education became a reality in 1761, the Germans espoused this development with characteristic vigor, and by 1800 had established no less than ten veterinary schools — nearly as many as in the rest of Europe. Thus it is not surprising that the Germans in America should give thought to the production of veterinary books. Some of these, like those in English,



The more elaborate "Stock Doctors" of the nineteenth century used a drawing depicting individual ailments as an aid in diagnosis. The poorer productions, as this one from an advertising pamphlet (ca. 1880), tried to encompass all problems in one diagram.

# THE AMERICAN FARMER'S

# HORSE BOOK;

Embracing, in Addition to the subjects usually treated of in similar works; A Full Description of the Causes and Nature of Several Diseases Peculiar to the American Horse; together with Original, Simple and Effective Modes of Treatment, Including those of some Diseases heretofore considered incurable; and also, An Extended Treatise on Stock Raising and Stock Management. The whole Especially Adapted to the Use of the Farmer.



By ROBERT STEWART, M. D., V. S. EMBODYING

The Results of Twenty Years Original investigation and Veterinary Practice.

# CINCINNATI:

C. F. VENT & CO.

CHICAGO: J. S. GOODMAN & CO.

PHILADELPHIA & ST. LOUIS: ZEIGLER, N'CURDY & CO.

RICHMOND & ATLANTA NATIONAL PUBLISHING COMPANY.

1868.

were reprints of works which were popular in the homeland; a relatively greater number of the German-American books, however, appear to have been of local origin. Conversely, with the demand for veterinary texts in the late nineteenth century, a substantial number of the more widely used works were translations of German veterinary texts. This, of course, is a reflection of the pre-eminence of German veterinary Horse Book, Cincinnati, 1867, was one of few (and perhaps the first) native works to be published in a German language edition (Milwaukee). Reprints of earlier German works and the original writings of immigrant German veterinarians were more popular in the Pennsylvania German community.

Stewart's American Farmer's

science at the time; the fact that many individuals on our recent and present teaching staffs—or their preceptors—learned veterinary medicine from these texts suggests that the German influence may still be stronger than might be suspected.

Most of the early German veterinary works published in America were homely little books of stock remedies which presupposed some ability to diagnose the condi-

tion being treated, and while it may be supposed that the German-American had more ability in this area than his English cousins, it is obvious that these had more informational than instructional value. While most advocated gentler methods than those of the Markhamian stripe, a number were infected with superstition, in some cases to a minor degree, but others perpetuated the penchant of the German mind for seeking out witches and goblins. And while more of these works than those in English dealt with animals other than the horse, it is evident that the information on these other animals came from elementary sources rather than from the hochschule of veterinary medicine.

#### Der Doktor Vom Friederick-Stadt

Some of these works combined the medicine of man and his animals. One such was a New Expert, American Home and Stable Doctor (title translated), published in 1794 in Friederich-Stadt, Maryland (now Frederick, settled by Germans in 1733). This work devotes 35 pages to the "stable doctor," of which 6 are devoted to a rambling preface; 20 to the horse, detailing remedies for some 50 diseases; 5 to the cow (12 diseases); 2 to sheep (8 diseases); 1 to swine (2 diseases plus spaying); and 1 on the dog (3 diseases).

The first disease taken up, and at some length, is yellow water (jaundice) of horses, which was at least timely, for the disease is considered to have been seen first in America about 1793. This anononymous work was decidedly ahead of its time, in America at least, in stating that a confirmatory diagnosis of this condition could be made by taking some blood and noting the "especially yellow" color of the "watery" part of the blood. A mixture of pulverized cherry, oak and dogwood bark was prescribed; if unavailing, a mixture of equal parts of copperas (iron sulfate), antimony, saltpetre, and rosin, or a decoction of senna leaves (a purgative cholegogue), in addition to the inevitable bleeding.

For founder: open a neck vein, mix a

pint of the blood with a quart of salt water, and give it to the horse. Also: "lead him in flowing water for 15 minutes morning and evening," and give laxatives.

Contrast this with Markham's directions: "draw the hoof to the quick . . . then raise the sole at the toe, and take hold of it with a pair of pincers . . . and pull it quite off"; or with the *Horseman's Friend* (!) of 1871, who advocated bleeding until the horse falls and pouring boiling lard over the hoof. On the other hand, the German "stable doctor" advises for a wrenched shoulder, tying the affected horse to another and forcing him to exercise until he sweats: "then take much blood from him."

If a horse will not eat: "smear his teeth with onion, or cook a half-ounce of asafetida ["devils-dung" in German] in a pint of wine and give it to him." And "when one does not know what is the matter with a horse: It is much easier, said a very wise man, to give a horse-doctor-remedy than to know what ails him." A general medicine composed of hartshorn, goat's blood, saffron, olive oil, and hops is advised in this case. And an easy remedy for a horse that cannot urinate: "Take a seemly number of childlice, and put them in the horse's genitals. He will soon urinate." Or to stop bleeding: "Take grass which grows on a grave, pulverize it, and put it on the wound." The prescribing of arsenic for poll evil or fistula, however, has a familiar ring; but for lampas: "Let him be burned by a smith."

# Superstition vs. Science

As suggested above, the remedies for animals other than the horse are more steeped in superstition, or at best, folklore. Thus for difficult calving, give the cow lamp-black and salt "and after calving, a piece of the afterbirth." When a cow gives bloody milk: "Give her blood to drink." For all "inner sicknesses," and for worms: a good handful of wormwood cooked in beer. When a cow does not ruminate: "Lance her under the tongue, smear it with honey and salt; or give her the cud



Das Pferdebuch des amerikanischen Farmers was a full translation of Stewart's Horse Book. Around the mid-century several midwest farm journals published editions in German.

of another cow; then put her to fresh grass." And when a cow has the worm in the tail: "Then must one cut it off."

It is evident, however, that some attempt was being made to free the mind from murky practices; for wildfire (probably erysipelas) of sheep:

It is of no use, from fear, that the whole flock might be affected, to bury the first sheep that dies under the sheepfold gate. Take caroway, beat in old beer, make a salve and smear it on the sheep. But to get female lambs: "Tie the ram on the right side, or cut out the right testicle." From the time of the ancient Romans, femaleness has been associated with the *sin*ister parts.

For spaying swine, directions are given "how a farmer can cut his own sows"; the details of the operation would meet with approval by the do-it-yourself fraternity. For measled swine, bruised snails are prescribed, and against the "swine-death," pul-

verized wood in wine is given "and bury a root under the trough that the pigs eat from."

Relatively little had been written in America on the diseases of dogs to this date; nor does the little this work has to offer remedy the situation. To keep a dog from going mad: "On hot days give all his food in water or milk in which pigeon or hen dung has been mixed." For a dog or man which has been bitten, a complex regimen of complex remedies is prescribed. For fleas and lice, smear the animal with olive oil, followed by a vinegar rinse. And when a dog has painful eyes, we are to chew ivy, "and spit it in his eyes morning and evening."

## Pferde-Arzt

Considerable improvement can be noted in the *Complete Horse-Doctor-Book* (title translated) by Joh. Nicol. Rohlives, published in Reading (Pennsylvania) in 1817. The subtitle indicates that this gives: "fundamental information so the farmer and horse-owner can recognize and cure all illnesses . . . together with a treatise on the diseases of dogs." The book contains 65 pages devoted to 47 diseases of the horse, followed by a 35-page summary of the preceding, and 6 pages on the dog (9 diseases). In the Preface the author states:

There is such an increase in the United States of German receipt books of every kind, that it is difficult to determine which are of real benefit. . . . When a farmer lives alone and at a distance, or a traveller has misfortune, his horse is very sick, the receipt book that gives only remedies cannot help, without instruction how to determine each illness, or the variations it may have. . . . This book teaches how one can recognize the various diseases of horses.

The author is fairly faithful in carrying out his announced intentions; thus in colic:

The horse will not eat, and paws the earth with his forelegs. At the beginning of the disease he does not lie long, but springs up; when it progresses, he remains down, striking with all limbs.

We are directed to let a quart of blood,

and give a decoction of chamomile flowers, linseed oil, and saltpetre every two hours, with a clyster every half hour until the symptoms abate. The remedies for practically all diseases are free of superstition, and are quite moderate; how much good some may have done might be open to question, but at least most of them would have done little harm — which, perhaps, is the best we can say for some conditions today. On fractures, he says:

When a horse breaks a bone, it is best that you should immediately put him to death, as the healing of the bone is unlikely in most cases.

On dogs in particular, this work stands in bold contrast to that preceding. "The dog," says the author, "is unquestionably a domestic animal. He lightens the work of many men, protects his master against thieves, [etc.]." For ulcers of the mouth: "Take a spoonful of honey, mix with 4 spoonsful of vinegar, tie some linen cloth to a stick and swab the mouth three times daily." For diseases of the eye: give Glaubers' salts, and bathe the eye with cold water. If the eye appears hurt, rub grease on it. If a dog cannot hear, drop onion juice in the ear to loosen the wax. Also:

Flesh wounds which suppurate, and the dog licks, heal themselves. . . . If a limb is broken, bring the bones together and bind with cloth over four sticks. . . . Mix a quarter ounce of camphor in a quart of brandy and wet the bandages. It will soon heal.

For burns: "smear the burned place with fresh cow manure . . . or olive oil and cold water shaken together is a good remedy." And for fleas: "Take green walnut shells, steep in water, and wash the dog often, so will the fleas leave."

On coughs and catarrh: "Dogs kept in rooms get colds, start coughing and get a slimy nasal discharge. Take licorice and beer, mix with honey and give daily." The "dog-plague," says the author:

is a nerve fever that settles in the stomach and intestine. First there is a quivering of the muscles, the dog is dull, frisks little, later not at all. There follows a discharge from the nose, the hinder parts become lame and the eyes run.

Liver of antimony as an emetic, and Glaubers' salts as a laxative are prescribed. In madness:

The dog is dull, frisks not and seeks solitude, he barks no more, and harks no more to the voice of his master. Soon . . . a white foam runs from the mouth. He bites all that get in his way, and runs down the road, tail between his legs, and he has runny eyes. As soon as this happens, the dog must be killed. If a dog is

bitten by a mad dog, burn the wound. If the wound is entirely fleshy, cut out the part; place a half ounce of beef tallow over the fire, and mix with an eighth ounce of Spanish fly powder and a half ounce of oil of turpentine; let cool and smear the salve on the wound.

Perhaps with tongue in cheek, he adds: "There is yet another remedy against madness; one must use foresight to prevent the cur from biting his dog."