

HORSES;

Their Feed and Their Feet.

BY CHAS. T. PAGE.

In undertaking the editorial task of writing a short treatise on the horse, I have not in mind the consumption of all of his various ailments—the means, whether by drugging or what not of "curing" him of his "diseases"—but rather having him, as we do at the start, in health, I would endeavor to show how we may prevent disease. In a long experience, dating from early boyhood when I thought, as most persons think to day, that the principal, if not the only, thing is to feed high and often, I find that with horses as with men, more of them decline, become "seedy," emaciated, and sorry sights to behold, from overfeeding, or what is nearly the same thing, underworking, or from a combination of the two causes, than from any lack of food or care, as the term "care" is commonly interpreted.

Most persons love a horse, and I have very seldom found an owner who would not go hungry rather than have his horse go without food. He will say, "I will feed my horse before I will myself," and, in practice, too, will do it. To be sure, there is seldom any conflict between the two needs: we are all able to eat too much and too often, and incline to serve animals in the same manner. These things we do, whatever else is sacrificed or neglected. Even "hard cases," men who have not the means to purchase a good animal—that is, a valuable one—and who consequently are seen driving ratty, worn-out, consumptive creatures, and win the name of starving them—even there, as I have found upon diligent inquiry, often take scrupulous care to feed three times a day, and to give their poor dyspeptic horses more food than they can possibly digest. They do this, all the more because appearances are against them, and if it does not come to their ears, they feel sure that their neighbors and all who pass or meet them on the road, are saying something about "post-meat."

If some gentlemen's driving horses had more of this sort of diet—outdoor air and freedom from surfeit—they would not so soon fall into the hands of "five dollar jockeys." How often our eyes are pained at the sight of what was once a horse to be proud of, and whose owner really delighted in him, dragging himself along, and locking as if it would be a mercy to end his life. His old owner speaks of the case sorrowfully, and says, "When I owned 'Jim' he never looked like that; he got all he could eat, and I never over-worked him." He doesn't add the further fact that under his treatment the horse began to decline, and at an age, too, when he should have been in his prime, and that he put him away in consequence! Although the horse has many advantages over his owner, so far as he has less exciting causes of disease—still, as we all know, his disorders are of about the same nature, so far as they go. He has fewer diseases in number and frequency than we find in the human family; and this comparative exemption from disease bears a pretty close relation to the plainness of his diet.

In my recent work entitled "Natural Cure of Consumption," in which I discuss the advantages of *whole meal*, unbolled and unsifted, over fine flour or any other modification of it, in the treatment or prevention of dyspepsia—a disorder which is at the root of almost all the internal diseases of man and beast—I make use of the following language: "That most noble of all animals next to man, and in some aspects far superior to him, the horse, in his finest and most delicate state, finds a perfect food in the whole grain, chewing it himself. I may, in the minds of some, be weakening my argument by comparing the digestive apparatus of man with that of the horse, but I am desirous of impressing upon the minds of my readers the well known but imperfectly considered fact, that our horse feeders—who take on their ten-thousand-dollar animals, and would feed them on the finest of flour, would place before them the most costly and complicated cooked dishes if it were desirable, or even not pernicious in a healthy point of view—really keep their dearest pets on bread and water; and that, because of this, and the absence of all the hot, stimulating articles, solid or fluid, indulged in by their owners, then regular and moderate diet of uncooked food, and their superior hygiene in certain essential matters, our horses are saved, in great measure, from becoming fat, sick, mean, wheezy, or dyspeptic, like their masters and mistresses—men, women, and children."

And yet horses do, after all, fall prey to all these degraded conditions. In spite of the naturalness and wholesomeness of their diet, as to variety and quality, and in face of the most solicitous and painstaking care, we too often see them the subject of tedious and painful disorders, and of course there is a reason for it.

NON-VENTILATION.

One of the principal causes of disease among horses as among human beings is foul air. In large stables this cause operates effectually, for seldom is there any good arrangement for ventilating, least of all, any efficient means for maintaining even an approximately pure atmosphere. On the contrary, every precaution is taken, in most stables, to prevent the entrance of fresh air, without which the vitiated air must remain unchanged, loaded, as it is, with the foul emanations from the urine soaked floors and from the lungs and bodies of the animals imprisoned therein. Here, as nowhere else, is illustrated that most stupid of all economies, viz.: the "saving of fuel for the sake of its warmth." This is largely due to the overestimate of the necessity of keeping the temperature of the stable at a high point. Unquestionably horses

would eat more, would need more food, if the stables were kept supplied with fresh air, if, in consequence, the temperature should average several degrees colder; but he is a mean man who would cheat his horses out of the "breath of life" for the sake of a little saving in hay and grain. Living themselves in airtight apartments, and, often enough, innocent of all knowledge of the necessity for a constant changing of the air in their own homes, stable keepers are, of course, guiltless of all blame in the matter referred to. They know that the warmer the animals are kept, by means of close stables and blankets, the less food they require, and, unaware of the pernicious influence exerted upon the general health of the animals, this settles the question. With good ventilation, however much the temperature of the air might be lowered, the horses would more than compensate for the "extra feed" in improved digestion, vigor, and general health.

Horse Bobbing.

Henry Bergh, of New York, president of the Society for the Prevention of Cruelty to Animals, has published a letter strongly condemning the cruel fashion of bobbing horses' tails. He writes:

The cruel fashion of "bobbing" horses' tails is being revived. It was a fashionable craze about a generation ago, and was not entirely stopped until our society succeeded in getting stringent laws enacted against cruelty to animals.

The "bobbing" is mainly done by the wealthy people of course. They think that it makes their horses look more stylish, and to satisfy this caprice, God's noblest animal is made to suffer the most barbarous cruelty that devilish ingenuity can devise. Of late the officers of this society have noticed a great many horses with "bobbed" tails, and they were nearly all of them in fashionable turnout.

The men who perform these cruel acts are blacksmiths or horse doctors. The animal is taken into a blacksmith shop or out of the way place late at night or early in the morning. While one or two men stand guard outside, the doors are barred and the horse is securely tied by the legs so as to prevent kicking. Its tail is then tied to the loft or ceiling and a space of about an inch shaved a distance of about seven inches from the horse's body. A knife is placed on this spot by the so-called veterinary surgeon, and another man strikes the knife two or three blows with a mallet, driving it through the flesh and the bone until the tail is scyered.

The suffering of the horse is excruciating, its groans almost suggesting human agony. An iron, heated to white heat, is passed over the severed end so as to stop the future flow of blood, and an iron ring, red hot, is used to cauterize the flesh to the extent of half an inch from the extremity of the horse's tail. This is done to prevent the flesh from growing over the end of the tail, for the cauterized bone is crisp and hard and might disease the flesh.

Disease and death often follow this cruel treatment, because the men who perpetrate it are quick veterinary surgeons and blacksmiths, who are as ignorant of the anatomy of a horse as they are cruel. These men work very secretly, and, though we have broken up several places where they practised their cruelty, we were unable to catch the fiends at work.

Superfluous Girls.

Notice was given a few weeks ago of twenty vacancies in the London post-office, says "The London Globe," that were to be filled with women, and women desiring the places were summoned to undergo a competitive examination in arithmetic, handwriting, and dictation. The result was that as many as fourteen hundred women presented themselves for the ordeal. A few months earlier five hundred girls, of ages ranging from 18 to 20, underwent a similar examination for a similar number of vacancies.

Here we have a total of nineteen hundred women on one hand, and not above forty places on the other. That is to say, 1,860 of these applicants were superfluous. The matter becomes more complicated the further it is examined, since the girls already employed as clerks necessarily displace an almost equal number of young men.

Now, what is to be done about it? It is one of the social problems that are destined to baffle mankind for all time. Is the superfluous girl, like the poor, to be always with us? To answer in the affirmative is to take issue with one of the greatest philosophers, for he has written that "Nature makes no mistakes." And yet everything that is necessarily superfluous is a bad mistake.

But it is by no means certain that each one of these 1,860 girls who failed to secure positions in the London postoffice were so many superfluities. They were not needed in that particular field of effort. But, were they not needed somewhere?

The chances are that, as the 1,860 disappointed ones walked out of the post-office, tearing their hair and gnashing their teeth, 1,860 citizens of London were engaged in similar painful exercises because of their inability to obtain cooks equal to making bread, or parlor maids equal to dusting without breaking the china that came over with the conqueror, or governesses that understand the fine art of bending the twig without deforming it.

The Largest Room in the World.

The largest room in the world under one roof and unbroken by pillars is at St. Petersburg. It is 620 feet long by 150 in breadth. By daylight it is used for military displays, and a battalion can completely maneuver in it. At night thousands of tapers are required to light it. The roof of the structure is a single arch of iron, and it exhibits remarkable engineering skill in the architect.

NEWS ITEMS.

to greatly reduce the cut this winter, because, they say, they can buy logs cheaper than they can cut them.

There is but one place in the United States where gut cotton is made. Until six months ago the navy was obliged to depend upon England for all the gun cotton used, but a manufactory has been erected at the torpedo station, Newport, and now produces all that is required for sea-going men-of-war and torpedoes.

Mr. Frodoe is going round the world, partly for the sake of his health, and partly because, as he says, "I have grown tired of the chatter which my last volumes on Carlyle have brought forth, and I thought that in six months, at any rate, the world would forget the existence of so unlucky a person as the biographer of Carlyle."

Parties who have returned to the Pacific coast from a tour through the Superstition Mountains, in Arizona Territory, report the discovery of extensive stone ruins, some of them in almost inaccessible places. The walls look as if they had been battling with the elements for centuries. The prehistoric people of whose existence they are the only remaining evidence must have been numerous.

The sea coast of California has been visited this season by several varieties of birds which have never before been known to leave the mountains. This has generally been supposed to indicate a severe winter, but, according to science, the migration is more probably due to the prevailing scarcity of all kinds of seeds in the mountains this season.

The camphor laurel, a native of China, and the tree from which most of the camphor of commerce is obtained, seems to have been introduced successfully into California, one tree in Sacramento having attained a height of thirty feet. The wood of which smells strongly of camphor, is light and durable, not liable to injury from insects, and much favored by cabinetmakers.

In Texarkana, Ark., a few days ago a man was literally smoked to death. He was a little under the influence of liquor, and upon returning home found the door locked, when he attempted to crawl into the flue, head down. The flue being of an irregular width, the man stuck fast before he descended far, and was held until relieved by death, which was caused by the smoke from a small fire on the hearth.

Alhama de Granada, recently destroyed by an earthquake, possessed the most romantic situation and the most romantic history of any town in Spain. It stood high upon the verge of a gigantic cleft in the mountains, the result of volcanic action. From its position it was justly regarded by the Moors as the key of their kingdom of Granada, and when captured in 1482 by the forces of Ferdinand and Isabella, the Alhambra was felt to be foredoomed. It was that event which gave origin to the mournful ballad, "Muy Doloroso," translated by Lord Byron, with the sad refrain at the close of each stanza, "Woe is me, Alhama!"

CLIPPINGS FOR THE CURIOUS.

A case of scarlet fever in a canary has been described by Dr. Ogston, of Aberdeen, Scotland.

The city of London contains more Jews than Jerusalem, more Irish than Dublin, and more Roman Catholics than Rome.

A species of wild potato, indigenous to the mountains of Arizona, has recently been discovered. They are about the size of walnuts, and grow at an elevation of about 8,000 feet.

"To bite the thumb" at any person implied an insult; hence, in "Romeo and Juliet," Sampson says, "I will bite my thumb at them; which is a disgrace to them, if they bear it."

According to Mr. J. Harrington Douty, of the asylum at Worcester, England, an imperfect supply of oxygen, or simply breathing a vitiated atmosphere, may suffice to produce the mental disorder known as melancholia.

According to an old law of Pennsylvania a hanging cannot be witnessed by more than thirty-seven persons. These include a jury of twelve appointed by the judge of the circuit court, two spiritual advisers, the sheriff, twelve special deputies, three members of the condemned man's family, and seven representatives of the press.

When the ancient tower of Kuk-tatt Abbey fell, in 1779, Whitaker, a few days afterwards, discovered, embedded in the mortar of the fallen fragments, several little smoking pipes, such as were used in the reign of James I, for tobacco, a proof of the fact, which has not been generally recorded, that long prior to the introduction of that plant from America, the practice of inhaling the smoke of some indigenous vegetable prevailed in England.

When both parents have eyes of the same color, eighty-eight per cent. of the children follow their parents in this feature, and of the twelve per cent. born with eyes other than the parental color a part must be attributed to intermittent heredity. More females than males have black or brown eyes in the proportion of forty-nine to forty-five. With different colored eyes in the two parents fifty-three per cent. of the children follow the fathers in being dark eyed, and sixty per cent. follow their mother in being dark eyed.

In Biblical days the foolish virgins neglected to put oil in their lamps. In our times the foolish virgins put oil on their faces. The foolish virgins put oil on their faces, because it roots our clothes and makes such a draft on our pockets.

The Joys of Camel-Riding.

A few days ago I had my first camel ride, and I thought it would be my last. It was to go to our camp that I got cross-legged upon an Arab saddle, and was fastened by strings upon the back of a great, lumbering, hump-backed brute. I no sooner attempted to take my place on the saddle, than the camel, which was lying prone, into which position he had been forced, began grunting like an old village pump silently worked. At the same time he turned his prehensile lips aside, grinning like a bull dog, and showing a grinning row of teeth, which he sought to close upon me. I got aboard without accident, and had not long to wait for a rise.

The first movement, as he lifted his forelegs, nearly sent me over backward; the next, as he straightened his hind legs, still more nearly tipped me over his head. I had been warned to hold tight, but it was only the clutch of desperation that saved me. After several lunges and plunges, the brute got fairly on his legs.

The reins consisted of a rope round his neck for steering, and a string fastened to a ring thrust through his nostrils, to pull up his head, and stop him when going too fast. My camel began to move forward, and thereupon I oscillated and sea-sawed as if seized with sea-sickness or cramp in the stomach. Involuntary as the movement was, an hour of it, would, I am sure, have made an abject a victim of me as the worst sufferer on a channel passage.

A heartless friend was in front of me on another camel, which he set trotting. Instantly I became as helpless as a child, for my camel disregarded the strain upon his nostrils, and my fervent ejaculations. My profane Arabic vocabulary was too limited to have the slightest effect. I swayed to and fro, and was bumped up and down, until I was almost shaken to pieces. It would have been a positive relief could I have found myself at rest on the ground, but the motion was so incessant I had not time to make up my mind what course to adopt. It ended, as even the experiences of the worst kind must do, and I found myself still on the camel's back.

Not so my humorous friend, who, to my great comfort, performed a double somersault, and did not succeed in landing quite on his feet. I was told that I would become accustomed to camel-riding and might even get to like it. But my faith is not great enough for that.—[London Telegraph.]

The Telephone in Russia.

The most remarkable experiment in telephony yet attempted was recently carried out in effect in Russia, where a conversation was carried on between St. Petersburg and Bologna, a distance of two thousand four hundred and sixty-five miles. The Blake transmitting and Bell receiving instruments were used, and conversation was kept up notwithstanding a rather high induction. The experiments were carried on during the night, when the telegraph lines were not at work. The Russian engineers of this company are so confident of further success that they hope shortly to be able to converse with ease at the distance of four thousand six hundred and sixty-five miles; but to accomplish this astonishing feat, they must combine all the conditions favorable for the transmission of telephonic sound. If it is found possible to hold audible conversation at such extraordinary distances, it is possible that this fact will be speedily improved upon, and we shall be enabled to converse freely between London and New York, and by-and-by between London and the antipodes.

Simplicity of Political Life in Switzerland.

As an example of simplicity of political life and manners, I found the Mayor of a populous Swiss rural commune, who was also a member of the Cantonal Parliament, and while in office the responsible custodian of the communal maps and registers, cutting his hay at four o'clock in the morning, while his wife and children tossed and spread it; the following Sunday he presided with dignity at the ballot in the national church, on the occasion of a plebiscite on some financial measure which required the assent of the majority of voters in the canton. After dinner, where he showed himself a courteous and agreeable companion, he doffed his Sunday and official clothes, and in his blouse—carrying a heavy load of goods on his back, went up to his mountain farm, 4000 feet above his residence, to milk his ten cows and prepare for making cheese the next morning. The "Peasant Parliaments" of the Swiss Republics are largely composed of such men, whose qualifications to be legislators consist, not in rank, wealth, or book learning, but in their intimate acquaintance with the circumstances and wants of their fellow-citizens, among whom they live as equals. The result, so far as may be judged by the people's contentment with their laws, is satisfactory.—[Macmillan's Magazine.]

A Swallow Story Hard to Swallow.

A man engaged near Hurlston lately in filling up an old mining shaft found that thousands of swallows had built their nests and made their homes in the shaft, and they flew out in great numbers as he shoveled. After working a time he went home, but returned the following morning. No sooner had he begun his work than out the swallows flew in clouds. Soon he was started by a cold, slimy, wriggling snake falling from his neck. He supposed it came from a bush near by, but on looking up beheld a cloud of birds holding snakes in their claws, which they were trying to let fall on their enemy. He gathered up his pick and shovel and fled from the place.—[Oswell's (Cal.) Monthly.]

SCIENTIFIC.

At a meeting of the Academy of Sciences, Stockholm, Prof. Lundstrom exhibited a fossil scorpion recently found near Wisby, in the Silurian formation of Gotland, and remarkable as the most ancient of an air-breathing land animal yet discovered.

A parasite known as "Heterodora saccharis" has made its appearance in France, greatly injuring the beet root. To this parasite, M. Aime Girard thinks, is largely due the partial failure of this year's beetroot crop, which showed a deficit of 20 per cent. in the weight of the roots, besides a decrease in the yield of saccharine. In some of the northern districts, amounting to 12 or 14 per cent.

If, says M. Soberey-Kempfer, a mixture of two parts calcium sulphate and one part ferric acid is ignited to strong redness all the sulphur of the mixture is expelled. There remains a melted mass, soluble even in weak acids with insoluble ferric oxide. The result is similar with other diatomic metals. The sulphur is given off at first in the state of sulphuric anhydride, but afterward as sulphurous acid and oxygen.

M. Cocher, the French Minister of Postal Telegraphy, has ordered that the recently completed pneumatic system of Paris be employed to convey ordinary letters to the several railway stations after the closing hours of the different post offices. An extra charge of three deniers a letter is required for this additional service. It is expected that the pneumatic tubes will be still further utilized at an early day by the post office.

At a recent meeting of the Chemical and Physical Society, London, there was exhibited a collection of the various salts obtained in the extraction of cobalt and nickel from the manganiferous ores of New-Caledonia. These ores, containing the metals in the form of oxides, are extensively distributed over the island, and are also to be found on the continent of Australia. The amount of nickel and cobalt in various samples ranges from 1 up to 10 per cent.

It is reported that at a recent meeting of the South Wales Institute of Engineers Mr. A. Steer read an instructive paper on miner's safety lamps. He said that the Davy, Clanny, Mueseler, Marsaut, and various other lamps, when subjected to the apparatus for testing at different velocities, caused explosions in little more than five seconds, but that the Morgan lamp, although placed in every conceivable position in relation to the apparatus, withstood the ordeal perfectly.

The wonder is not that most residences in large cities are unhealthy, but that they are at all habitable. Generally the city house is immediately connected by a pipe of no great dimensions with drains of sewage miles in length and flowing under street after street. The conditions also are such that very frequently poisonous gases find a ready entrance to the kitchen, the bedrooms, and the living rooms. There can be no healthy houses unless the conservancy and drainage systems are placed entirely outside the main walls.

Mr. Russell W. Moore, of the John C. Green School of Science, Princeton, N. J., in a note on certain methods for detecting foreign fats in butter, says: "If a process should ever be devised to render cocconut oil completely inodorous (and it should be extensively used as an adulterant of butter) it would be seen that the Koettstorfer process would be utterly worthless as a test, and the Hehner of scarcely greater value. Thus entire reliance would have to be placed on the method of Reichert."

Taking all the facts into consideration, it appears clear to Mr. H. C. Sorby that all the bright and beautiful tints of leaves in Autumn are merely the earlier stages of decomposition, and are due to the more or less considerable triumph of chemical forces over the weakened or destroyed vitality of the living plant. He adds that one cannot but feel that this is a very unpoetically way in which to regard the magnificent tints of a fine Autumnal landscape, but it is not less true than that the colored clouds of evening mark the departing day.

So very few articles of iron of unquestionable antiquity have been discovered among the remains of ancient Egyptian art, while objects of bronze have been brought to light in abundance, that many have doubted whether iron had been introduced into Egypt before the time of the Ptolemies. But it is very certain that other and neighboring peoples, who never reached so high a stage of civilization as the Egyptians, knew well the manufacture and uses of iron, and it is scarcely possible that the builders of the monumental works of Old Egypt should have neglected so useful a metal. Besides there are chemical reasons why the iron remains are so few and the bronze relics so many. Yet it would seem that the ancient Egyptians had a marked preference for bronze weapons, implements, and ornaments.

Novel Means of Detecting Criminals.

There have been many ordeals through which those suspected of crime have been obliged to pass; among them may be mentioned the Ordeal of the Cross, the Ordeal of the Eucharist, the Ordeal of Cold Water, the Ordeal of Fire, the Ordeal of Touch and the Ordeal of Chewing Rice. This last is still in fashion in many parts of India. The person is obliged to chew rice in the presence of officers of the law. Curious as it may appear, such is the influence of fear on the salivary glands that, if they are actually guilty, there is no secretion of saliva in the mouth, and chewing is impossible. Such culprits generally confess without any further effort. On the contrary, a consciousness of innocence allows of a proper flow of fluid for softening the rice.