

## THE HORSE.

THE TWO-MEAL SYSTEM FOR HORSES.

"BIDDEFORD, Me., Dec. 9, 1882.

"Editors of *Turf, Field and Farm*:—A writer in the *Mirror and Farmer* speaks of having fed his cattle on the two meal system for the past seven years, and finds no occasion for feeding oftener; in fact, he says they thrive better than on the 'cramming system,' or more frequent feeding.

"Although I have never doubted that this system would work as favorably with horned cattle, my own experience has been confined mostly to human beings and horses. According to my judgment, if applied to work or road horses, it will increase their working capacity very largely. That is, a given horse will do more work, day after day, either in the cart, before the plow, or on the road, and keep in prime condition; besides it would surely, because of his improved health, tend to prolong his life, and extend his years of usefulness. But aside from mere theorizing, or dogmatically asserting my opinion, which, however, I find is corroborated by every one who has given this system a fair trial, I will here give an illustration as to its operation on road horses. I bought a little 'chunky' mare, six years old, fat and lazy, fit for nothing but a timid woman's use—just right, one would say, for the women and children to jog round town with. She would travel about four and a half to five miles an hour with considerable urging, and if pressed beyond that would sweat profusely. Having been recently imported from Canada, it was predicted by all the horsemen about that she would have the distemper, as a matter of course. In order to more effectually guard against this, I fed her but once a day for a couple of weeks, giving her from ten to twenty miles jogging every day, Sunday included, thus reducing the fat, and increasing the flesh! Her one meal consisted of a very generous feed of hay, and four quarts of oats at night, after being thoroughly rested from work. After this, and with a considerable increase of work (averaging, all told, 150 miles per week,) I gave her a light feed of hay and two quarts of oats in the morning. In the course of two months her weight, which had at first fallen off quite rapidly, was but slightly less than when I took her, but it was made up of a different substance altogether. I had exchanged 100 pounds of fat for 75 pounds of flesh; or, in other words, I had relieved her of that much disease (effectually preventing the predicted outbreak), and had built up in its place a large amount of muscle, at the same time improving the quality of her entire muscular system.

"Speaking in a general way, a horse is an engine made up of muscles which increase in size and quality by increased use (always supposing a sufficient diet), and diminish in size, as well as in power, if the work is less or lighter. Consequently, if the horse is fed for health (i. e. in proportion to his labor), his weight will diminish with lessened, and increase with added, work. In feeding in the morning I aimed to allow some two hours or more—the more the better—for that digestion which takes place in the stomach, before she was harnessed, and the evening meal was never given until long enough after she came to the stable to insure her being well rested from her labor, and this though her dinner was postponed till a late hour at night. Whenever I had occasion, and I sometimes took occasion, to give her some early work, her breakfast would be postponed until long after the drive was finished, or to a convenient hour when rested and not obliged to resume work soon thereafter. Within four months this little, fat, soft, 'lozy' mare was transformed into a clean-bodied, tough, hard, little roadster that would take two in a buggy eight miles an hour for three or four hours, and after an hour's rest take them back again in the same time, and do it, too, without whipping or showing any symptom of lagging. When I sold her I told the buyer how I fed her. Did he learn anything? No, indeed. 'Well,' said he, 'I shall give her all she wants, three times a day, as long as I own her.' I see her now every day; she is just about where she was when I took her—fat and soft, and will sweat profusely if driven fifteen miles in three hours."

### EXTRA RATIONS.

Occasionally horses are, through cruelty and sometimes unwittingly on the part of their drivers, driven to exhaustion; and it frequently happens that a horse gives out without having been pushed hard, and to the complete surprise of his owner, who cannot account for it. "I knew he had a hard jaunt before him," says the owner, "and I gave him a couple of quarts extra at breakfast, but he gave out before he got half-way; in fact he wasn't himself from the start." The old saying that "a good pay-master pays after the work is done," applies here; a good horseman feeds to-day in proportion to the work his horse did yesterday. He pays him well, and every day, but never in advance. The fact is this: The digestive fluids are formed in the blood and remain subject to order, in proportion to the needs of the organism for food, and not in proportion to the amount of food swallowed,—the "need" having reference to work already performed, cold endured, etc. Other things being equal, the horse that is hard pushed on an empty stomach, will bear more before breaking down, and, if driven to exhaustion, has a far better chance to recover well, than the one driven in like manner, but fed immediately before starting, and halted just long enough to swallow his dinner en route. The rest, without the meal, would have been far better.

I am aware that in making this statement I am running counter to the opinions of most men, based, as they are, largely upon their own sensations when deprived of their regular meals. "Needn't

tell me," says the owner; "I won't work without my regular food, nor let my horse"; which sentiment is every way praiseworthy, and does honor to the man's heart. Nevertheless, I cannot withdraw this statement, for my opinion is based upon absolute knowledge from trial, both in the case of the horse and myself. When I ate three meals a day I was, as nearly all men tell me is the case with them, "hungry" at, often before, every regular meal. If the meal was not forthcoming from any cause, I felt faint and my stomach would "gnaw." I learned after a time, that under such circumstances a meal lost was a better one gained; that, in short this was a disease and not a natural condition at all, albeit it is the common experience of most persons. No person feels faint upon passing a meal, or has a gnawing stomach, except it be occasioned by an irritated or unduly congested state of that organ. It is a sure proof of *dyspepsia* (using this term in its popular sense, as implying the condition of the organ). Strictly speaking the term is a synonym of *indigestion*.

### The New Orleans Exposition.

The *Scientific American*, in an article on the great cotton exposition, gives the following interesting particulars:—

The main building, covering more than thirty-three acres, offers never-ending subjects of interest to the visitor, as those will appreciate who remember the amount of time required to obtain any adequate idea of what was contained in the principal structure at Philadelphia, which was only about half its size. Here is presented a representative panorama, through its broad vistas, of the productions and resources of the United States and nearly all foreign countries. It is the greatest school for the dissemination of practical and useful knowledge in the world to-day; the mechanic, the engineer, the farmer—the producer in every walk of life—can here find food for study, with amplest exemplifications of the experience of others, and the would-be man of the world can, figuratively, go into all foreign countries and learn much of their productions and characteristics—all under the same roof.

One of the most complete industrial exhibitions in the main building is that of a Connecticut company, making cotton thread. In this display is also included an automatic spool turning machine, where the workman puts armfuls of small cylinders of wood into a hopper, and they come out perfectly made spools. The cotton is taken from the bale here, and goes through all the processes of manufacture till it is finally wound on the spools—eight spools of 200 yards of thread each a minute—when these spools are put into a slide, the labels out and pasted, and they are ready for boxing—the entire work requiring twenty machines, and the exhibit taking up a space of 24 by 260 feet.

In cotton working and other machinery the Patent Office makes a most interesting display, the growth and development of many of our industries being shown by means of the models of labor-saving appliances. Perhaps the most historically interesting is the model of the original cotton gin invented by Eli Whitney. There is also a model of a contrivance for lifting vessels over shoals, patented by Abraham Lincoln; and another of the Hoe cylinder printing press.

The Chinese exhibit presents many novelties, some of which it is rather difficult for our citizens to comprehend. One of these is a model of a primitive irrigating pump, a hand pump showing one end in the water, and the power applied by a man treading around on a series of handles that project from the top piece; there is also one worked by ox power, the animal turning a crank. One significant feature in this department is the display of cotton cloth of all grades, from the coarsest bagging to a quality so fine as to be more valuable than silk goods. This is a "cotton centennial," it is true, but more than two thousand years before modern industry found profitable employment in working up this fiber for universal use, cotton was largely used in the domestic manufactures of India; and two centuries before the Christian era cotton cloth was either paid in tribute or offered in presents to the Emperors of China as a thing rare and precious, and some of these gossamer filaments are on exhibition here by the side of the products of our modern factories.

### The Black Watch.

The famous "Forty-second Highlanders" (famously known in the British Army as the Black Watch) have added one more to their countless exploits by the storming of the Arab entrenchments at Birt, where poor Gen. Earle was killed. Among the many deeds of daring performed by them in recent wars three stand out pre-eminently. They were one of the three Highland regiments with which Sir Colin Campbell (afterward Lord Clyde) broke the Russian centre at the Alma, on the 20th September, 1854. They formed part of the immortal "thin red line topped with steel," against which an overwhelming Russian force shattered itself in the memorable attack upon Balaklava five weeks later. In the advance upon Coomassie during Gen. Wolsley's Ashantee campaign, in January, 1874, the "Black Watch" bore the brunt of the great fight at Bomauf, suffering severe loss in carrying at the point of the bayonet a thick wood held by native sharpshooters. Indeed, every one must admit that they have fully obeyed the injunction with which their chief led them up the Alma hillside: "Now, my men, make me proud of the Highland Brigade."

It is not very generally known that Queen Victoria was once called Queen Alexandria Victoria, and that the oaths of allegiance were in that name.

## FRANCE'S ARMY.

Its Strength—Duties of the Private Soldiers in Time of Peace—Pay of Officers, &c.

To-day there are almost 3,000,000 soldiers in camp and barracks on the Continent, and after Russia, republican France supports more than any other nation. Mind you, we are speaking now only of the troops on duty—not reserves and landwehr; and if we take in all the European States, from the principality of Monaco, with its standing army of sixty-five, rank and file, to the great empire of the north, where the Czar has something like 750,000 men under arms constantly, I find that the total annual cost is in round numbers about \$1,000,000,000.

This taste for immense armies has taken hold of France and other nations since the war of 1870. Every Frenchman who saw the flood of German invasion sweeping through this country was astonished at what he supposed was the enormous quantity of men which the enemy had been able to throw across the frontier; but the French mistook celerity of action for vast numbers. Neither the English nor the French know anything about moving bodies of troops quickly. Witness especially the campaign in Egypt. It was because German officers knew how to move forces quickly that they managed to appear always numerically superior to the French, and yet when the end came there were more men under arms in Paris and in the provinces than Germany had sent into this country during the whole of the campaign. There were in the capital on the day of the capitulation 183,000 National Guards, 129,720 troops of the line, 14,081 sailors and marines, 105,391 mobiles—in all 462,000 men. In the provinces the army of the Mayenne numbered 275,000; in Algeria and in the training camps there were 351,000 and 132,000 conscripts had just been called out. Besides these General Clinchard had 80,000 men in Switzerland. This makes a grand total of over 1,250,000 men. Now, what do you think of that? It proves, I think, that it was not numbers but superior organization which defeated our friends the French. Hampered by disputes and ignoble jealousies among their leaders, the brave men of this country fell a prey to a resolute and vigilant foe. The French army, which sought to stay the invasion, was defeated because it was badly commanded, because it lacked everything. What would have happened had they succeeded in winning one of the great battles of the campaign—in piercing through at a single point the curtain of troops deployed in their front, and which, like a living mass, was closing in on Paris? Would the mass of invaders have been able to reform? These are questions which cannot be answered, although it may be accepted as a fact that the solidity of an army is only to be proved when it has to meet a serious obstacle, such, for instance, as Grant met with in the wilderness, or Lee at Gettysburg.

### STRENGTH OF THE ARMY.

The active army of France is nominally composed of 1,240,000 men, but the actual number on duty is but 502,786 soldiers and 110,000 sailors and marines. The others will only be called on to join their regiments in case war is declared. The active army and its reserves are organized in such a way that the various corps will form five distinct armies of about 250,000 men. In time of peace there are eighteen army corps, all organized on the same plan, viz., a general staff, two divisions of infantry, a brigade of cavalry, a brigade of artillery, a battalion of chasseurs, a battalion of engineers, an *escadron du train* and the accessory services. These eighteen army corps contain in all 144 regiments of infantry, eighteen battalions of chasseurs, thirty-six regiments of cavalry and thirty-six regiments of engineers and thirty-four regiments of cavalry which are not attached to any corps and which will go to form the nucleus of six additional army corps to be formed in case of war. Battalions of infantry and chasseurs—there are 606 of them—will on a war footing number each 1,000 men. There are at present 552 cadres of batteries, not counting the fortress and mounted ones. The cavalry is, on the whole, on about the same footing in time of peace as it would be in time of war; it is composed of thirty-four complete regiments and thirty-six skeleton ones, which can be filled up to the regulation force the moment war is declared. The calculation is that each corps will number in war 40,000 men of all branches. The territorial army is composed of all able-bodied men, of from 29 to 40 years of age, and it is divided into an active and a reserve force; the first, with the five classes of men from 30 to 34, inclusive, numbers 582,520, and the remaining six classes about 626,000. Thus far the War Department has acted on the supposition that the active portion of the territorial army would suffice, and none other has been organized. It has been divided into 145 regiments of infantry, and the necessary artillery, cavalry and baggage trains.

### THE SOLDIER'S LIFE.

Soldiers in the French army are, on the whole, a contented lot. The men are treated by their superiors in a very proper manner, and discipline, while firm, is one of kindness. The ration of meat has been increased lately from 250 to 300 grammes, or from 8.8 ounces to 10.6 ounces; his bread ration is about 26.5 ounces. In addition he purchases out of the *ordinaire* 10.6 ounces of bread to put in the soup. This *ordinaire* is a fund formed by a certain fixed deduction from every soldier's pay, and is employed in purchasing extra bread, vegetables and extra coffee and sugar, the rations of these groceries being only a part of what is required. The fund also provides him with an occasional glass of wine on a Sunday. In each company the cook is changed every two months and the assistant every week. The soldier gets his

coffee and chicory every morning at five o'clock in summer, later in winter. At 10 o'clock he has soup; at five in the afternoon a *ragout*, twice a week, and on other days soup. Retreat is from 7 to 9 o'clock, according to season, and tattoo half an hour later. Rest assured that in the meantime the men have had plenty of work to do. French officers don't go much on the manual of arms, but they are great on marchings and facings. In field and barrack-yard the boys are forever at it, and the French equivalent for "hay-foot, straw foot," is their song the *livelong day*. The regulations also prescribe certain hours for bayonet exercises, fencing and gymnastics. In time of peace the infantryman receives a clear 1 cent a day pay, but a *premier soldat* gets 2 cents. When on a war footing this pay runs up to 7 cents. As a rule the men do not seem to feel any restraint in the presence of their officers. Salutes are universal; the privates and non-commissioned officers bring their hands up to the visor of the cap, but the officer almost invariably returns the salute by lifting his cap or hat from his head. They are also very punctilious in addressing each other by their titles. These acts of courtesy have a very pleasing effect, and contrast favorably with the social habits of other armies that I have studied. Nevertheless, it is found difficult to retain good non-commissioned officers, simply because an industrious and able-bodied young man can do so much better out of the army than in it.

### COMMISSIONED OFFICERS.

No one can obtain a commission as sous Lieutenant unless he is 18 years of age or if he has not served two years as a non-commissioned officer and has not passed out of a military school after at least two years' study. One-third of these commissions are given by law to non-commissioned soldiers, the other two-thirds as indicated. Two-thirds of the promotion to the ranks of Lieutenant and Captain are given by seniority (in the army), the other third by selection. Promotions to the rank of chief of battalion or chief of squadron are given one-half by selection, the other half by seniority, and for all higher ranks promotion is given entirely by selection. Officers in the French army are not over well paid. A Marshal of France now receives as full pay 29,520 francs (\$5,900) per annum; a General of division, 19,440 francs (\$3,880); a General of brigade, 14,220 francs (\$2,840); a Colonel of artillery or engineers, 8,892 francs (\$1,775); a Captain, 3,708 francs (\$740); and a Lieutenant 2,628 francs (\$525); a Colonel of cavalry receives 8,316 francs, a Captain, 3,672 francs, and a Lieutenant 2,592 francs; a Colonel of infantry receives 7,740 francs, a Captain 3,528 francs, and a Lieutenant 2,326 francs. No officer can marry without the consent of the War Department, and under no circumstances is he ever permitted to do so unless the lady of his choice has a *dot*—that is to say, a certain fortune, the minimum of which is fixed by the army regulations.

## BRITISH OFFICERS IN EGYPT.

A Few of the Officers Serving Prominently Under Wolsley in the Soudan.

The following sketches of some of the officers whose names have been recently brought into prominence in connection with the British expedition, will prove interesting:—

Major-General Sir Redvers Buller, chief of the staff, is an old and tried officer, having served under his present chief in most of his undertakings—in the Red River expedition of 1870, in the Ashantee war of 1874, and in the first Egyptian expedition, 1882, besides in such subsidiary affairs as the Caffre and Zulu wars.

Colonel Butler is another Red River and Ashantee officer, and also took part in the Egyptian campaign. He married, it may be remembered, Miss Elizabeth Thompson, the well-known painter of "The Roll Call," "Quatre Bras," and other military subjects. Col. Butler is with what is known as the Earle column.

Col. C. W. Wilson, R. E., is well experienced in the ways of Eastern nations, having served as Her Majesty's Commissioner for the Serbian frontier in 1878, and as Consul General at Anatolia during the following year.

Colonel Henry Brackenbury, R. A., served in the Indian mutiny and through the Ashantee campaign. In 1880 he was appointed private secretary to Lord Lytton, when the latter was Viceroy of India; in the following year he was nominated Military Attache at Paris, and in 1882 was Assistant Under-Secretary for Ireland.

Lieut.-Col. Boscawan also served in the Egyptian campaign, and has lately been the assistant military secretary to the Commander-in-Chief in Ireland.

### The Fear He Entertained.

An old Chelsea prisoner, seated on an embankment, was lamenting the death of a comrade. "Poor old chap! How shall I get on without him?" "Were you very much attached to him, then?" inquired a bystander. "Twasn't altogether that, sir," replied the veteran; "but you see, he'd lost his left leg and I've lost my right. We shared a pair of boots between us, and it's ten to one whether there's another in the hospital whose feet are so exactly the same size as mine."

A writer in the *British Medical Journal*, who was acquainted with Coleridge and De Quincey says that the latter was systematic in his use of opium, and increased or lessened his doses gradually, as the exigencies of his health required. But Coleridge took opium by fits and starts, and often such heavy doses as to overpower him. He did this on one occasion when he had engaged to lecture before the London Philosophical Society. The hour arrived, but the man was in blissful forgetfulness of all material matters.

## A BUNGLING HANGMAN.

Three Attempts to Hang a Murderer.

A terrible exhibition of incompetency on the part of the hangman was witnessed recently at the attempted execution of John Lee at Exeter, England. The prisoner was employed as a confidential servant by Miss Emma Keys, a wealthy lady living at Babbicombe, near Torquay, in Devon. Taking advantage of his position he proposed marriage to Miss Keys, and was indignantly rejected. On the night of the 14th November, according to the prisoner's subsequent confession, he went into Miss Keys' bedroom and renewed his proposals, and on being again repulsed he indecently assaulted her and afterwards murdered her, and to hide the traces of his crime he set fire to the house. His trial took place at Exeter, and on the 4th inst. he was found guilty and sentenced to be hanged. At an early hour the necessary preparations were made for the execution, and the prisoner having been pinioned was

### TAKEN OUT TO THE GALLOWES

erected in the gaol yard. When the pre-arranged portion of the Lord's Prayer was reached, the sheriff gave the signal and the hangman tried to draw the bolt, but something had gone wrong with the machinery and the drop failed to work. Lee was taken back to his cell, while the drop was examined. It being apparently all right, the prisoner was again brought out and placed in position, showing slight signs of trepidation. On the signal being repeated, the bolt was drawn back with a sharp click, but the trap refused to move. The prisoner became horribly agitated and had to be assisted back to his cell. The machinery was once more tested and, every thing being apparently in working order

### FOR THE THIRD TIME

the rope was adjusted and the black cap pulled down. The unfortunate wretch had now become so agitated that his terror was pitiable to witness, and he was so nervous that he had to be held in position by two turnkeys. A third attempt was made to carry out the dread sentence of the law, but for the third time the drop failed to fall, and notwithstanding that the hangman jumped on it while the turnkeys held the prisoner up by the shoulders, it remained as firm as a rock. The sheriff, who was greatly pained at the wretched bungling of the hangman, ordered the execution to be postponed and the prisoner was taken back to his cell. He is in such a state of nervous prostration that a physician had to be in constant attendance. The facts were at once communicated to Sir William Harcourt, and a reply came back at once saying that Lee was to be respited by order of the Home Office.

## LOVELY LADY DUFFERIN.

The Beautiful Irish Helpmeet of a Distinguished Englishman.

Lady Dufferin, who made herself generally beloved in Canada, was a warm-hearted Irish girl, of Killyleagh, Castle Down, when Frederick Temple Hamilton-Temple-Blackwood, Fifth Baron of Dufferin, came that way.

Dufferin had just returned from an important post in Syria and the green fields of old Ireland looked particularly refreshing to him. He decided to take a souvenir away with him and he showed his taste by choosing Harriot, the fair eldest daughter of Archibald Rowan Hamilton, Esq., of Killyleagh. The bridal tour was to India, where the groom was appointed Under Secretary. Promotion followed fast and in 1871 the Baron was made Viscount Clarendon, and Earl of Dufferin—he being the first Earl of that name.

From 1872 to 1878 as Governor-General of Canada, Earl Dufferin gave such general satisfaction that the people never expect to look upon his like again. His charming wife nobly seconded him and there were no bickerings or heart-burnings among the women of Canada while she ruled with tact and kindness.

When the good Dufferins with their numerous children sailed away the people of Canada went down to the wharf and shed tears enough to raise the tide three feet and safely carry the ocean steamer over the harbor bar. Business was depressed for a year afterward.

Earl Dufferin's latest mission was to Egypt, and his diplomacy there is about the only bright spot in that particular bit of England's interference around the Nile.

The titles of the Earl, which his wife helps to bear, are many. He is a Knight of St. Patrick, Privy Councillor, Knight of Grand Cross of the Bath, Knight of Grand Cross of St. Michael and St. George, Fellow of Royal Society, Doctor of Civil Law and a Doctor of Laws. He has many minor titles, such as Justice of the Peace and Hon. LL.D. of Harvard University, near Boston. The crest of the Dufferins bears a lion and a tiger with the motto, "Straightforward."

There are seven little Dufferins—four sons and three daughters. The eldest son is Archibald Temple, twenty-two years old, a lieutenant in the Royal Irish Rifles. Terence Temple, Basil Gawaine Temple are between him and the Hon. Frederick Temple, the baby of the family—nine years old.

In the line of girls Lady Helen Hermitone comes first with an age of nineteen years; Lady Hermione Helen is sixteen, and Lady Victoria Alexandrina is twelve. Unfortunately for the American youth these girls were too small when the Dufferins ruled Canada.

For a long time past the head man of *Petit Journal*, who used to be a workman at three francs a day, has made an average of two million francs a year. It is claimed that the *Petit Journal* has a circulation of 800,000 copies a day.