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### Col. Stoner on Maud S.

Since the death of the famous old Maud S., Captain George H. Stone, the man who bought her when she was an unbroken filly and saw her develop into the queen of the trotting turf, has been talking entertainingly of the idol of all old race

One of his most interesting stories is of her fast mile on the old fair-grounds track here in 1878. Her work had attracted the attention of W. H. Vanderbilt, and he offered \$20,000 for her if she could show 2:30 in a trial.

'I accepted the terms," said Captain Stone, "and Maud S. was shipped to Lexington for the test. Harker and myself went along, and stayed there for ten days, upon all of which there was more or less rain. Harker finally went back to New York, first making arrangements with Colonel Strader, in case of a good day and track, to time the mare's work and reportit tohim. Theday and track camein good time. and it was announced that the trial would beat 2:19. told Bair if he would beat 2:19 I would give him \$1,000. There was a large attendance of turfmen and Lexingtonians at the track to watch Bair jog Maud 8, around and finally start her on her mile. She finished in 2:173, and the country went wild—it was the fastest mile up to that time that had ever been trotted by a four-year-old.
"Along in June Mr. Vanderbilt telegraphed me

"Along in June Mr. Vanderbilt telegraphed me to go to New York. I called at his house upon arriving there, and he surprised me by saying: 'Stone, I guess I bought something that I don't want. I wanted a road horse. Maud S. doesn't seem to be a roadster. What will you give me for her back again?' 'Mr. Vanderbilt,' said I, 'Maud may have been spoiled. I can't afford to buy her, but I am interested to such an extent that if you'll send her back to Cincinnati I'll put her in Bair's hands and see if he can bring her back to her speed.'

"Mr. Vanderbilt agreed. He was going to Europe for a year, and told me to handle the mare exactly as though she were my own property. "'If we get her back to her speed,' I said, 'she'll

beat the fastest time ever made "It became noised about that Maud S. was a wonder, and no one was anxious for a race, until Major McDowell, of Kentucky, who had Trinket at that time, issued a challenge. The race was arranged for Chicago, and there was a purse of which 60 per cent. was for the winner and 40 per cent. for the There was a good day, a fast track, and a crowd of 30,000 spectators. I instructed Bair to be just fast enough to beat Trinket, and not let the mare out. Trinket was in bad temper and Maud won the first heat in 2:19½. The second heat was won in 2:22. Mr. Connolly then came to meand said, in view of the disappointment of the crowd, he wished I would give Maud her head and let her show speed in the third heat. I agreed if the distance flag should be removed, for I was certain Maud could distance Trinket, and I did not wish Major McDowell to lose the loser's end of the purse. He, of course, protested against moving the distance flag, but after some argument I had my way. In that third heat Maud S. trotted past Trinket as though she was tied, and came down the stretch like a hurricane, finishing in 2:13½, with Trinket far behind. It was the fastest time at that time that had ever been trotted in a race. St. Julian's record was made against time. I cabled the result to Mr. Vanderbilt, and here is the message I received in reply:

"'Stone, Chicago: You have verified your promise and electrified the world.

Captain Stone also relates how he and Bair devoted forty days to fitting out Maud S. for defensive operations against the new turf wonder, J. I. C. This was in the following summer, and her record was 2:10\frac{1}{2} at that time; J. I. C. stepped a mile in 2:10 flat at Narragansett Park, but he only wore the crown twenty-four hours, for the next day at Cleveland Maud S., piloted by Bair, and pulling a thirty-six-pound, old-fashioned, high-wheeled sulky, reclaimed her title by going the mile in 2:09\frac{3}{4}. That was the last time Captain Stone ever saw her.—

Kentucky Stock Farm.

# Bitting Hard-Pulling Horses.

Having been interested in breeding and handling horses for a good many years, I think the following, in regard to bitting, may interest some of your readers who have had a hard-pulling or lugging horse.

I had a mare a few years ago that had one of the hardest mouths I ever tried to handle. Every time I rode her she ran away with me. I bought every kind of bit, from J. I. C. to a double ring with nose piece, but it was just the same. So it finally occurred to me to wrap a straight steel bit with layer upon layer of rags, until it reached what I thought would be the proper size for my purpose. This not wearing well, though it had the desired result, I had a rubber bit covered with leather, one piece over another, until it was about six inches in circumference. She was ridden with this until she stopped lugging, which was in about ten days, when one layer was taken off and the bit made smaller; and this was continued until it was reduced to its original size. To-day she is ridden with a plain rubber bit, and anyone can hold her. Lots of horses are made pullers by their not being properly bitted. Most of these patented bits are too severe, as they fret and worry the animal. If anyone will try the above they will find it to work satisfactorily, as I have broken two or three horses with hard mouths with this method. — T. A. B. Dukeheart, in Rider and Driver.

### Lessons from the Lambing Season.

BY J. M'CAIG, ONTARIO.

At no time will the helplessness of the shepherd to meet all difficulties come home to him so strongly as at lambing time, and at no time will he have such opportunity for profitable observation for the direction of subsequent treatment and management of the flock.

It is a matter of common observation that the average number of lambs per ewe is greater at the beginning of the lambing season than at its close. Our first five Shropshire ewes last year dropped thirteen lambs, while the late ones dropped mostly singles. This is usually attributed to the condition of the ewes. The freshest and fattest ewes come first in season. It is not surprising that natural law should saddle the ewes in best condition with the heaviest burdens in maternity. Most people will require a physiological explanation on top of the philosophical one. They will want to know how it is. It would seem reasonable to suppose that the general healthy condition of the ewe means a healthy condition of the generative functions, and so the certain and rapid impregnation of the healthy ova discharged. It is to be expected that a healthy condition of the generative functions could not exist with a weak condition of general health. The contrary condition, viz., that the general condition might be fairly good, while the reproductive functions might not be any too good, might exist. It is evident that self-preservation comes first. It is an anterior condition to reproduction. It is a matter of common observation that the failure of the reproductive duties is one of the first signs of weakening in an animal, while the subject may continue to exist long after; so it may be inferred that the strengthening of the reproductive functions comes with the later features of improved condition in the animal. This idea must be taken guardedly. We cannot lose sight of the integrity of the animal organ ism and of the interdependence of parts. It would not be reason, for example, to say that an animal might improve in flesh considerably and yet not improve any in strength of the reproductive functions. All the argument amounts to is that, judging from the order of importance of animal functions, the improvement in breeding condition goes on more slowly than the improvement in stored up flesh for self-support. The practice depending on the idea is that of fitting ewes for copulation by generous feeding and rest before mating time. If large numbers of lambs are not desired, as they would not be where large size and faster growing are desired, then high condition would not be so important. It is not to be considered good for any purpose to have the ewe poor at mating time, for pregnancy means a drain on the powers of support of the ewe, and so should begin with the ewe in healthy condition.

The question of sex is usually thought to be bound up with that of numbers. If by natural law it is good to increase numbers rapidly, as seems to be the case when ewes are in good condition, an extension of the principle would favor the production of ewes rather than rams, as it is through the number of ewes rather than rams that rapid multiplication is possible. (This question of sex is sometimes considered to be influenced by the age of the sire or dam, or both.) It will generally be noticed, however, that where the number of the offspring is large the proportion of ewe lambs is large.

Besides the question of the number and sex, the

ondition of lambs affords opportunity for study. The shepherd has a right to expect that the flock will multiply naturally and satisfactorily without meddlesome care on his part. Nevertheless, it is true that the species of artificial management to which sheep are subjected under domestication (to produce good saddles, loins, and gigots) has made breeding more complex and difficult than it would be where sheep run in a natural state, and the operation of the inclemencies of nature thins the flock naturally to those best fitted to survive and consequently to reproduce. Highly-bred sheep are the result of careful treatment, and their continuance naturally demands continued care and nurture. Injudicious feeding and housing, together with want of proper exercise, produce irregularities at lambing time. Too heavy feeding during pregnancy may produce an overgrown offspring, and the assistance of the shepherd is necessary. Over-assistance may cause injury to the ewe and induce inflammation. Ewes carrying dead lambs may let the period of lambing pass without showing acute labor pains, though the customary signs of lambing time are present. The taking away of the dead foctus in bad condition may bring septic poisoning, which generally proves fatal. A good preventive is ten parts of olive oil to one of carbolic acid, to be used to smear the passages and interior of the womb. Overfeeding near lambing time frequently causes too heavy a secretion of milk, and hence milk fever. A young lamb will not relieve an overfull or caked bag. The milk should be drawn frequently. The ewe should be given a dose of six ounces of Epsom salts, and the bag should be bathed frequently with warm water and should be kept free from damp, cold, hard

The worst trial of the shepherd is with weak lambs. Too plentiful feeding of roots is frequently blamed for this. Roots of themselves, so far as their nutritive constituents are concerned, should not be bad in this respect, as their actual food constituents are slight. It is probable that the absence

of corresponding concentrated food with the turnips is responsible, and the effect of the low temperature of the roots in large quantities lying adjacent to the feetus. The first danger from a weak and watery lamb is that he may never get on his feet, but may be thrown in the absence of the shepherd and not have sufficient animation to sneeze the caul free of his nose, as he usually does, so dies from a species of asphyxiation. We have known of several cases of it this season, and blame the changeableness of the winter for some of it at least. The lambs come hardier after a steady, dry, sharp, hard winter than after one of alternating hard and soft spells.

An old shepherd says he likes a lamb with a brown or yellow covered coat at birth. Paleness of the liquor amnios and consequent paleness of coat generally go with weakness. Excessive whiteness extending to the coloring of the skin about the nose, lips and natural openings of the body indicates a very weak and flaccid lamb and one that will be hard to pull through and will be of a washy texture afterwards. A common cause of this species of weakness is want of sufficient exercise in the open

A ewe will occasionally disown her lamb. This in most cases arises from inability on the part of tne ewe to support the lamb. Her milk is scarce at lambing time, and she is naturally unmotherly. Frequent drawing on the udder and feeding on soft mashes will bring the milk and the necessary desire to be relieved of it by the lamb. Such a ewe should have no company but her lamb. She should be tied up to keep her from injuring the lamb, and it should be allowed to suck at least a dozen times the first day, and generally it will be taken by the ewe on the second day. A ewe may sometimes be brought to give up opposition to the lamb by rough handling, but good feeding should be chiefly relied on. A weak lamb should be carefully treated if it has to be artificially fed. It should never be given milk until the lamb has been warmed and circulation has become active, as milk only curdles in a cold lamb. It should be given small quantities often, rather than a larger feed at a single time.

#### Milk from Tuberculous Cows-

The last annual report of the Storrs (Conn.) Agricultural Experiment Station contains details of a trial of feeding calves with milk from tuberculous cows, begun in 1896, when four condemned Devon cows were obtained for the purpose from the State Cattle Commission. One object in view was to study the effect of the milk of slightly diseased cows when fed to healthy calves, and also the relative danger from the spread of the disease by association with diseased animals. The following deductions are given in the report:

are given in the report:
"We know comparatively little regarding the conditions which favor the spread and development of tuberculosis among animals or man. Most of all are we lacking in a definite knowledge of the dan-gers of this disease to mankind from the bovine Many have claimed that the danger to mankind from the spread of the disease through the milk supply is very great. It has generally been thought that one great cause for the spread of the disease among our herds is the feeding of the milk of tuberculous cows to calves. The experiments made during the past two years at this Station do not substantiate this view. It must be borne in mind, however, that the number of experiments is comparatively few, and that the cows whose milk was used were probably in the earlier stages of the disease. These facts have been carefully considered, and it is, of course, unwise to attempt to draw any definite conclusions from the work, but the follow ing deductions seem warranted:

"(1) Bovine tuberculosis is usually a disease of slow development, its progress depending quite largely upon the general vigor of the animal and its power to resist the action of the germs. In nearly two years and a half that the tuberculous cows have been at the Station, only one secondary case has appeared, and this was discovered about six months after the feeding period with milk had ended.

"(2) In the experiments here reported, eight calves have been fed upon the milk of tuberculous cows for periods varying from three months to sixteen months without developing the disease."

"(3) The results of these experiments coincide with the general results of European observations, and indicate that the danger from the spread of tuberculosis through the milk of cows to man or to other animals is not as great as has generally been supposed. In the earlier stages of the disease and at all times when the udder is not affected, the danger from the use of the milk is quite limited. Great stress, however, should be laid on the danger of using milk from cows which show any symptoms of udder affection."

## Sheep and Lambs High.

The high-water mark of the season for both sheep and lambs was reached in Chicago April 9th. Western sheep in fleece sold at \$6.50, which is the highest price since May, 1892. Shorn sheep reached \$5.90, which is a very exceptional figure. Several thousand Colorado lambs sold at \$7.50, which, in point of number, is the highest ever reached by this class of lambs. There were 3,452 Colorado lambs sold at \$7.50, and 754 head at \$7.55, which is the highest of the year, and equals the record established in April, 1893,