## HORSES AND WOLVES.

The Pine-nut range in Nevada extends for seventy-five or a hundred miles out toward Utah, and is covered with a thick growth of shrub-like pines, which bear a nutritious nut, and which give ample shelter, while affording the seclusion which the wild bands of horses seek. The Indians used to live on the nuts, and they do yet to some extent, but in the valleys below the pines and growing at intervals among them is a very nutritious grass. It is on this that the wild horses live.

The real mountain wild horse is a mustang of large size. His shoulders are unfitted for the collar, not being so heavy as those of the American horse, and he is a mountain climber, scarcely excelled by the wild goat.

Every color, from bright bay to iron gray, white and black, can be found. For steady running nothing of the equine breed can equal him. The racers which run on tracks would outrun him for a couple of miles, perhaps, but they have not the staying qualities of the wild ones.

I am just in from the Pine-nut range. I went over there hunting deer on the 8th of November, in company with William McKendree and John Thurston, of Pioche. We fell afoul of a band of about twenty wild horse on the 20th ult., that dashed into our camp and liked to have made us walk more than one hundred miles. It was about 10 o'clock, and we had just turned in.

Our camp-fire was yet brightly blazing, and I heard a roar off to the northwest like the tread of an advancing army. We were on the southwest side of the range, and there was a steady incline right down to us for a couple of miles. I gazed out into the dim light, but could see nothing, as the fire into which I had previously been looking and thinking blurred my eyes.

The roar continued, and I called to Thurston and McKendree to get up, and that something was going to happen. One said it was a storm brewing away off in the hills, and the other thought it was an earthquake.

All three of us peered forth into the darkness. Our four horses grew uneasy, and dashed around and pulled at their lariats.

In a minute we saw the band emerge from a stretch of pines and come on toward us. They were running at a fearful rate; their nostrils were dilated and their long manes and tails flying in the wind. Their eyes flashed fire, and none of us could understand the reason of their flight. On they came, seemingly seeking protection, and dashed right up to us.

We saw we were to be ground under their heels unless we did something, and we began to shout and halloo for all we were worth.

Our horses were meantime dashing and charging, and it looked as if every instant they would break away. We grasped our guns and fired over the heads of the horses, for they were so pretty that we didn't want to kill them.

Finally, just at the last second of time, when we thought we were to be borne down by the wild throng, they turned and dashed down the hill into the darkness.

By this time we began to hear weird howls and neighing and stamping. Every once in a while we heard a whack as though something was hitting something else with terrific force, combined with louder howls. The noise was just behind the spur of pine-nut trees, a quarter of a mile away. It continued louder than ever, and two of us concluded to push on out and see what the rumpus was.

Judge of our surprise when we saw three old stallions surrounded by a pack of big mountain wolves and kicking and biting for all they were worth. Three or four of the wolves had been sent to g ass, their ribs broken and disabled in other ways.

Around the stallions were the able-bodied wolves, snapping and growling, and showing their long, white, vicious teeth. Their eyes gleamed wickedly in the darkness. The side of one of the horses was bitten and bleeding,

The horses stood almost head and head, and planted terrific blows on the heads and bodies of the wolves.

Every once in awhile a wolf described a parabola in the air. It was a scene long to be remembered. Out there in the keen, crisp night air of the mountains, the three wild horses were fighting not only for their lives, but for the younger and weaker members of the band, who were being defended from the wolves, which, hungry, had stolen in upon them.

We fired upon the wolves, and for a minute there was as interesting a fusilade as you could wish to see. We shot right into the pack, to the right and left of the horses, and several of the big, gray wolves bit the dust. They did not give up right off, though.

They still eyed and snapped viciously at the horses, and even when we had disrupted the band by our firing and the horses turned to run away, some of the wolves followed them. A shot from Thurston's gun fixed the old lead wolf, and another ball crippled the next, and the wild horses fled far away to join the band which they had so valorously defended.

In a moment there was nothing but the distant resounding of the hoofs as the horses fled far down the edge of the little stream in the distance. The wolves took the back-track to the trees far back in the Pine-nut range, and we saw no more of them that night, though you may be sure that one or the other of us was awake until broad daylight.

Early in the morning we put off to the battle-ground to see how many we had killed. Within a radius of about forty feet the ground was all tramped and torn up.

Five dead wolves lay without the circle, killed by our rifle balls, and twenty-five yards away lay an old wolf, his side literally caved in by the heels of one of the stallions. Thirty yards away there lay another wolf similarly demoralized, and on a little further was a little wolf that seemed to have been kicked far over all the rest in the pack. He was just able to drag himself along. Near him was another of pretty good size which was smashed all to pieces back of the fore legs.

These wolves looked beseechingly at us in their helplessness, but as may be supposed we made short work of them. The State of Nevada paid $5 bounty for each wolf scalp, and therefore we made haste to rake them in. We took the scalps and hides of the whole nine, and then, noticing blood leading off toward the pines, we followed the trail.

Just over a little knoll we found a wolf stone dead, which had run that far after being shot. It was then getting late, and we did not pursue the track of the wolves any farther, else we might have got one or two more.

Fifty dollars made in a night, however, so unexpectedly, was good enough for us, and we drew off and went on looking for deer.

We followed in the trail of the wild horses, and after three hours came to where they had remained all night in a secluded dell. The snow was splotched over with blood, both along the trail and in two places about the rendezvous, but there were no indications of any of the horses having received mortal wounds.

About one o'clock we descried a tall object on a distant mountain side. Thurston got his field-glass and was able to make out an old gray stallion standing sentinel there, while in the rear of him were dimly seen the remainder of the band quietly feeding.

The wolves must have been terribly hungry. It is not often that they attack such game. Singly they are cowardly, but banded together in lots of twenty-five or thirty, as in this case, they are fearless and relentless enemies. The little coyotes of Nevada will hunt rabbits and help each other run them down. Or they will round them up in canyons. But the gray wolf of Nye and Douglas counties is quite another thing.

He is almost as big as three coyotes, and has the strength of a gray-hound. It is no joke to meet these fellows out in the Nevada wilderness. They attack men sometimes, especially if there are many wolves together.

There is a drove of horses in the timber of White Pine county, and there are other bands of from twelve to thirty or forty each about Sevier Lake.

Occasionally domestic horses are found with them, as well as the ordinary ranch horse of the West, which is produced in such large numbers by horse breeders. These often bear the marks of the branding iron, but it is just about useless to try to catch them. The real wild horse, which is the overland mustang I spoke of, is the best of all.

There are about twenty of these owned about Carson now, and they are the finest saddle-horses a man ever looked at. Eighty or one hundred miles a day is nothing to them. More than this, they are handsome, built for speed and as tough as a pine-knot.—[Correspondence San Francisco Examiner.

## VETERINARY DEPARTMENT.

*NOTICE.—We are always anxious to make our Veterinary Department as complete as possible, and hope our readers will avail themselves of it whenever they desire any information, thus assisting us to make it one of the most interesting and valuable features of The Horseman. We often receive letters with requests for private written replies to be sent to the questions by mail; where that is done it ceases to be a public benefit, and becomes simply a private advantage. All such requests must be addressed direct to our veterinary editor, Dr. A. H. Baker, 145 Michigan avenue, Chicago, with a fee of $1 inclosed, as a professional opinion for a person's private use is entitled to and should be paid for.*

M. L. & H. M. J.—We have on the range a number of fine but not full-blooded two-year-old mares which we wish to use for nothing but brood mares. My stud is a very fine Shire. Would you advise me to breed them, or let them run until they are three years old? ANS.—Breed them at two to foal at three.

E. C. C.—I have a yearling colt that I casterated on the 27th of September, and he runs behind yet. What should make him, and what can I do for him? He feels all right, and is doing nice. I am giving him a little copperas now. His coat looks nice. ANS.—The cord has grown to the scrotum, and is apt to develop a fibrous tumor. It will need to be opened up and a portion of the cord excised after breaking down the adhesions around the side.

A. C.—(1) I have a weanling filly that has worms, which keep it very poor; am afraid it may die. Will you advise me through your valuable paper what to do for it? (2) Also have a yearling that is swelling up under the jaw and around the eyes. Do you think it is a cold, or what? ANS.—(1) Give her a teaspoonful of wood ashes in her feed once a day for a week. Feed her two quarts of crushed oats three times a day and give her a warm place to sleep in.

SUBSCRIBER.—I have a yearling filly that has a curb; has been there for six months or more. Can it be taken away? If so, what shall I do with it? I got some cerate of cantharides; its in a stiff salve, and don't know how to prepare it for use. Would it be the proper medicine to use for the curb? ANS.—Yes; just warm the cerate a little, and rub a little well in. After twelve hours grease. After twenty-four hours wash it with soap and water; when dry grease it.

G. M. S.—I have a three-year-old filly that has lost the use of the muscles to her under lip. One side drops entirely down, and she cannot use it at all. I do not know the cause of it. ANS.—It is partial paralysis from an injury to the nerve running to it. If there is any swelling on the side of the jaw or under it, or on the face, bathe it with hot water two or three times a day. Give her internally half a dram of powdered nux vomica in her feed night and morning. If anything else developes in the way of enlargement of the jaw bone or increase and extension of the paralysis write us again.

J. C. W.—A mare twelve years old has been lame behind for about a year—that is lame for a few steps (like spavin). Unless she has not rested the lame leg she usually rests one or the other when standing, and one as much as the other, but will not start up lame unless she has been resting the lame leg. There is no enlargement anywhere, only wind-puffs that have been on her since she was three years old, and no soreness that I can find anywhere. ANS.—The description fits spavin to a dot except the enlargement, but many cases of bone-spavin lameness exist with no enlargement, and are spavins just as much as though there was a large tumor on the joint, and the firing and blistering are needed to cure them.

J. F. D.—About a month ago I bought a pacer. He had long hair on his legs and in clipping him I found that he had a long cut about two inches in length on the inside quarter of his off fore foot. It has grown down about one-half inch from the top of the hoof. It is not sore and he is not lame. On the upper side of the cut there is a ridge that has grown out so it lies out over the cut. When he is standing it lies together so you can't notice it. Was caused by getting on the quarter some time, I think. Please answer if paring the under part of the cut would benefit it, and if filing the ridge off a little would help it, so there will be no pressure on the edges? ANS.—It may be thinned with the rasp from the ridge down to advantage, and the ridge needs to be kept reduced with the rasp.

C. R.—(1) Please state what causes thoroughpins, bog spavins and wind-puffs? Do any of them come from the spine, or in having them do they affect the spine? (2) In opening a puff what do you use to destroy the sack? (3) Will blistering remove them? If it will what do you use? ANS.—(1) They come from some irritation of the membrane lining the cavities or sheaths of tendons, causing an increase of the lubricating fluid (joint oil) and distension of the sack. They have nothing to do with the spine in any manner. (2) We seldom or never open them, it being very dangerous, liable to set up a fatal inflammation of the joint or affected part. When we do risk such a thing we sometimes inject tincture of iodine. (3) Sometimes. Then we use simple cantharidean ointment.

S., Ohio.—(1) I have a well-bred mare that was hurt in foaling last June, and has ever since thrown off pus. What are the chances for covering her, or wont it pay to try, all things considered? In either case please advise. (2) Also, about a month ago my horse hit his tendon. The swelling is all gone, but there is just a little lump left on the tendon above the ankle. ANS.—(1) The chances are good to cure her. Syringe her out good night and morning with a solution of sulphate of zinc, one ounce to a pint of warm water. It may be injected cold. Give her in addition internally sulphate of iron one dram night and morning in her feed for a month. Wait a week and repeat. (2) Bandage it middling tight with a cold water bandage on coming in from driving, or two or three times a day if idle.

E. H.—(1) I have a fine gelding which was cut last summer; seemed to do well, only that he swelled fearful bad in sheath and about the bag, and continues to be swollen and does not rightly heal up. (2) I have also a standard three-year-old filly which I find has struck herself when trotting so as to form a hard place just on inside of knee, just a little higher up than where a splint comes. I have used a number of remedies, but can't take the lump away. She is now heavy in foal. What should I do for the lump on her leg? ANS.—(1) There is a fibrous tumor developing in the end of one of the cords that will need to be dissected out, which will require the services of a veterinary surgeon. (2) Blister it with cantharidean ointment or cerate of cantharides. When healing give it a little hand-rubbing.

D. C. R.—I have a four-year-old colt by Star Hambletonian which is badly swollen at the top of his shoulders. It is eight or ten inches across the withers, and swollen about the same on each side. They have been that way for six or eight months, only not quite so large until I commenced to drive him six weeks ago. The swelling seems to be perfectly hard; no place that I can find to indicate the presence of any puss, and he never seemed the least sore or to mind it in any way till ten days ago, when I blistered them with cantharides, and now the hair and skin is all coming off the size of the blister, but the bunches still remain. I have thought it was fistulus withers until recently, and have been waiting for them to come to a head. ANS.—You have pursued the right course exactly. If it points and softens in any spot open it; if not, repeat the blister again after a couple of weeks.

R. J. C.—Please give me treatment for my mare I wrote about a few days since. The swelling continued in her thighs until Friday last. Has not laid down since Sunday, which was five days on Friday. She was taken with acute pain, as I think from the stomach or bowels; she suffered for twenty-four hours. I never witnessed a horse that suffered as much. Her tongue swelled until it couldn't keep in her mouth. It is still swelled, and is as black as a man's hat. She is now apparently easy, but her mouth and tongue are so sore she can't eat. Now her front legs begin to swell, and she appears as sore as she has been from the start. I have given her quinine and iron up to Friday. Since I have been giving her, when she was suffering, opium and mercury, and now I am washing her mouth with carbolic acid and bathing it in warm water all the while, and will continue giving quinine and what soft feed I can get her to take, such as bran mash and gruel. She baffled the skill of the veterinary and all of the doctors of the place. I think she will die, though she is better than she has been since Friday morning. I fear erysipelas, if horses have such a disease. Do you think it is contagious? She has done but light work, and is in fine flesh. ANS.—The pain was caused by colic. The sore mouth was caused by caustic drenches. Give her warm bran mashes, and give a teaspoonful of nitrate of potash in her drinking water night and morning. Give a large box-stall.

F. C.—(1) Will you please tell me what to do for a horse that has over-reached in trotting and cut his hind foot just above the horn of the hoof? The cut caused the horn to grow. It grew just like a wart. I had it cut off once, but it grew out again. I used silk cord to cut it. Please inform me what to do to make a permanent cure. (2) Her appetite is very poor. She looks well and is willing to go, but is gaunt and will not eat her oats. I started giving her some bicarbonate of soda. Is that a good thing? ANS.—(1) Cut it off close down to the level with a knife and burn or dry it with a little powdered blue vitriol, applied once a day. If it becomes a raw sore after using the vitriol a few days, heal it up with a white lotion: Sulphate of zinc, six drams; sugar of lead, one ounce; water, one pint; mix. Shake the bottle and apply three times a day. Keep the bunch small by occasional paring. (2) In addition to the bicarbonate of soda give a tablespoonful of wood charcoal in her feed night and morning for a week or so.

J. L.—A few months ago I wrote you in reference to my trotting-horse with big ankle, and you advised firing and blistering, which I had done some six weeks ago. The point of the iron used was about one-sixteenth of an inch round and about three-quarters of an inch long, and was applied nearly its full depth about forty places around the affected parts of the ankle. It did not discharge a great deal or become very sore, but swelled up about twice its natural size. He stands on it and seems to be doing very nicely, but the swelling does not seem to go down. Some advise me to apply zinc and sugar of lead, others say paint it with iodine. Please give me your advise as to what course to pursue to bring it to its natural size; also, if the ankle is liable to be larger than before the operation. ANS.—From your description it was very well done, and no doubt the leg will be improved by it. Grease it once a day and give him gentle exercise, increasing it a little from day to day. Do not apply anything else. It will come down in the course of six weeks or more; if not, write us again. These things require time.

C. H. C.—I have a colt about sixteen months old with a soft bunch on his gambrel joint. I think it was caused by jumping over a fence when he was about five months old; the bunch has shown since that time. I have rubbed it with warm water. I can rub it off, but it returns again. When the colt is confined in box-stall over night, in the morning the bunch is smaller. Turn him out in lot and at night it is increased very much in size; in fact it grows larger as the colt grows in size and age. He is of good stock and a colt of promise. I apply to you for your opinion and the proper treatment, as I suppose the case is no new thing to you. It is something different or new to the old horsemen in this section. There is no regular veterinary surgeon in this section, and I begin to think it time something was done, as he is growing older and the bunch larger. ANS.—It is a puff caused by distension of the syoriol bursa, and resembles wind-gall, bog-spavin, etc. The best treatment is pressure, but it is almost impossible to apply it there, and when he went to work again it would recur. We would recommend you to let it alone. It is harmless.

C. P.—(1) I have quite a good four-year-old colt that has a sort of wind-puff on his hind gambrel joint about the size of a small hen's egg. You can rub it away on one side and it will come out on the other side. Then there is a small puff on the front part of the joint. It is not what you would call a bog-sprain, simply a wind-puff. What can I do to cure it? (2) Are wood ashes injurious to feet of horses? (3) What is your best liniment for sprains? ANS.—(1) The side puffs are thoroughpins and the one in front is a bog-spavin. Pressure by means of a truss would be best, but these trusses need careful watching to prevent blemishing. When they begin to chafe leave them off for a few days and grease the spots with carbolized lard—ten drops of the acid to one ounce of lard. When nicely healed, go on again with the truss. Send to Housmann, Macomb & Dunn, of Chicago, for a bog-spavin and thoroughpin truss. Let him wear it four or six weeks, and give him a long run afterwards in a barn-yard. (2) Yes, if made to stand in them much they would destroy the unctious secretion that keeps the hoof soft and pliable. (3) Tincture of arnica two ounces, tincture of opium one ounce, aqua ammonia two ounces, water to make one pint; mix. Apply twice a day, well rubbed in.

G. F. C.—I purchased a fine trotting mare a year ago this fall She was in foal, and had been campaigned very hard through the season by a rough and dissipated owner. He admitted there was a little spavin, but she was not lame. I let her have an easy time through the winter, and she became fat, but in the spring went some lame from the spavin, and also favored her right fore foot or leg, which she would extend out some after driving. Thinking a summer's run with her colt would cure the whole thing I took shoes off and did not shoe again till last October. Still she is quite lame in both legs. The spavin don't seem to have enlarged any, but she is very lame when first taken out to drive. In my opinion the lameness forward is in the main back cord—say from the ankle up to the knee and perhaps down into the foot. It is not enlarged, but after driving and speeding up a little it is quite sensitive on coming to the stable. Her feet are also pretty dry and hard, as I have not time to take her out as much as she should be. I have been using a strong liniment, but cannot see any improvement permanent. As she is a valuable and fast mare if not permanently lame, I am anxious to bring her out of it if possible. Please give proper methods and material to use; also, how she should be shod for her difficulty forward, as she is fat and healthy, and ought to be drove considerably for exercise, at least while the temptation is great to speed her on our fine snow roads. ANS.—The spavin needs to be fired and blistered. The lameness forward is most likely due to vanicular disease, treatment for which is neurotomy, and requires expert services. We would advise you to call in a competent veterinarian.

G. C. C.—(1) I have a large, well-bred five-year-old mare that is willing to go, but has very little knee-action in front at all rates of speed, and when jogging along on an ordinary country road is apt to stumble. Have used four-ounce and six-ounce toe-weights on her, but could see little if any improvement from them. What can I do to make her travel higher in front? She is sound and spreads out well behind. (2) Bred a mare last May. She evidently did not get with foal, and was bred several times after that, the last time in August. When she came home in August she was thin, and with good care did not pick up or do well until quite recently, but now looks and drives as well as ever. Is there any way to determine at this time as to her being with foal? (3) Have a mare by Flying Cloud, dam by Kentucky Hunter; is now seventeen years old. She has always been quick and active, and a mare of great nerve force and endurance. Looks and acts like a colt to-day as much as ever. Never missed a feed in twelve years I have owned her. Until last August she did not seem to do very well, and legs stocked a little. One evening after having her in harness at slow work for several hours that day she was taken quite violently with blind staggers, and fell three times. Bred her and turned her out. Dou think her blind staggers likely to return again? ANS.—(1) She either requires still more weight or very much less. Try the latter first. Shoe with eight or even seven-ounce shoes. If this does not improve her try a fourteen-ounce shoe and a six ounce toe-weight. Drive her slowly till she becomes accustomed to the new weight. (2) Nothing positive aside from the enlargement of the belly and motion of the foal. If neither of these can be seen you will have to wait for further developments. (3) No.

W. J. M.—Have a two-year old filly. Was twenty-four hours on the cars. Said to have been perfectly sound and no weakness about her when shipped. Upon arrival I noticed she stood very much behind like ankle-cocked horse on both sides. Found her bowels costive, urine scanty, frequent desire to roll and rubbed her tail, and acted weak on left ankle. The first time I drove her she appeared tied up behind, but after being driven a few miles went level and all right. Next day went all wrong; did not drive out of it. Stumbled behind, frequently on both sides, but oftener on the left. Continued so for five days, when I gave her a mild medicine for bowels, and water when it commenced to operate. She gradually improved in way of standing. Does not show near as much weakness in ankles, and does not stumble behind any more. But although her urine has been all right for two weeks, she is quite lame behind on left side, and still shows a little weakness, apparently in left ankle, but does not have the tied-up action as at first. I should state that her bones would crack in left hind leg in morning around in stable, and do yet some, but not so much as at first. She stands on one leg as much as on the other. Can feel no heat anywhere, and does not flinch when you work the ankle. Can find no enlargement. What is the cause of the lameness? Is it not time for her to be entirely well? What treatment shall I give her? She has also had a watery discharge from her right eye all the time, and still has. She has quit rubbing her tail and rolling, but occasionally shows a queer movement in left ankle when made to stand around quick and sometimes when on road, which will be followed with more acute flinching for a few steps than usual. ANS.—It is rheumatism. Give her half a dram of powdered calchicum seed and half a dram of nitrate of potash in her feed night and morning for a week. Give her usual grooming and exercise.