Elastic Stockings
TRUSSES, ETC.
Haussmann & Dunn Co.
107 South Clark St.
CHICAGO.
SECOND EDITION
REVISED

A SHORT AND Plain EXPLANATION

... OF ...

FARMEr MILES' METHODS

... OF ...

ANIMAL CASTRATION AND SPAYING

AND AFTER TREATMENT
WHEN NECESSARY

WITH ILLUSTRATIONS

BY FARMER MILES
CHARLESTON, ILL.
U. S. A.

1898
PREFACE

In boyhood I had a natural fondness for animal surgery. My father being a physician, I naturally acquired, through him, more or less knowledge in that line. I moved from Kentucky to Illinois in 1846, where I had a large farm and was raising all kinds of stock. There being no veterinarys near, I was compelled to frequently use the knife, first for myself, then for my neighbors. In those early frontier days here in Illinois neighbor helped neighbor, and I appeared to be the one always called upon to do the surgery, until so much practice gave me a reputation second to no one living near. Then ridgling horses were almost worthless, and my neighbors would sometimes ask me to "cut or kill them." I always did one thing, and sometimes both, but free of all charge. In thus experimenting, I obtained a reputation thirty years ago, which caused me to stop farming and travel most of the time, in answer to calls, over this country, from Maine to California. I also spent one year on the other side of the Atlantic, in England, Ireland and Scotland, where I performed many operations in animal surgery in 1878.

This little book is intended as an expose of my favorite methods, ropes, instruments, and after treatment. I have tried to make it plain, and truthful, as well as helpful, to all castrators and farmers. Trusting it will be a benefit to many thousands of owners, and a mercy to all stock yet to be castrated, I am

Yours truly,

Farmer Miles.
EXPLANATION

About twenty-five years ago I wrote a pamphlet on Castration and Spaying stock, and soon sold out all I had at $5 a copy. In 1877 I was invited to England by Geo. Fleming, V. S. of the Queen's Life Guard and a noted V. S. writer. I went in 1878, to stay one month only, but stayed one year, castrating in all portions of England. Soon after my return, many students wanted to learn my methods, in my specialty, and followed me around, and wanted me to go with them to different places, which did not work well.

Several years later I prepared myself to teach my methods to classes, ten days in each April, here at my home, on the royalty plan, every pupil giving me a bond, signed by two responsible securities, that they would pay me my small royalty (my only fee for instructions) monthly for ten years. For some time previous to the time for my annual classes I advertised in six or eight counties adjoining my home, for farmers, stockmen and friends to bring in their stock, and I would do all their work free, in that ten days, so I would have plenty of work during that time, to show and explain my methods fully to my pupils. In six years I fully instructed 120 men, only twelve of whom have proven honest regarding the payment of the royalty. I did not like to induce men to lie, so discontinued that method. I then thought best to print a complete expose of my methods, ropes, and instruments, and take the book to England to sell at $25 a copy, as that was what they paid me for every
ridgling I cut over there, seventeen years before. I sold some of the books at that price, but found the price too high, and later sold them at $10 each.

Experience has taught me the necessity of many essential improvements, and I have consequently revised that English edition, leaving out a little, and putting in more of better and later methods, learned by actual experience since the publication of the English edition, adding new illustrations, so you will more fully know how I do, and fully understand my remarks and advice to you. This revised book will cost you only $2, and after you have read it through five or six times and prove yourself a competent workman, you can sell the book for $2 to some friend in another county, and help the country along, in a humane and much improved method of castration, and spaying of all stock, and dogs and introduce my string Ecraseur, that you can make and use.
ANIMAL CASTRATION

I commenced the castration of stock in 1850, without books, teacher or theory, not thinking then, or for years after, that I would ever leave my immediate neighborhood on such business, but I now think I have traveled over more territory in this business, than any ten castraters I ever heard of, and I have tried all known methods worth considering. I have had the counsel and advice of some of the best M. D's at all times. I have liked the business more and more, even so much as to neglect my farming entirely, and have given all my time and attention to it. I got the prize at our Centennial Exposition at Philadelphia, Sept. 14, 1876 as the best castrater of ridgling horses in the U. S. I do not claim to know it all, but do claim to be in good practice, and to do every operation the best I can, which is usually satisfactory to all parties concerned.

THE NOSE TWITCH.

First, I like a nose-twitch in horse surgery better than chloroform or ether. The best twitch I get is made of a spoke out of a buggy wheel, about sixteen inches long, and flattened at the small end. The loop at the large end of the twitch should be of one-half inch cotton, (or flax rope, flax
is best) spliced in thirteen inches long, and a large twine string, three feet long, should be fastened in the middle to the small end of twitch, like the cut of the twitch.

I have never seen but three or four horses that I could not get the twitch on while standing. The twitch loop should be over the left wrist; then gently grasp all of the upper lip you can. with left hand and, with a slow movement, twist the twitch until it binds the nose lightly; then, with both hands on the twitch, turn \textit{slowly}, still tighter, until the colt raises his head and winks his eye, then stop and turn the small end of the twitch \textit{slowly} up beside the halter and tie it there, with the long strings on the small end of the twitch, in a bow-knot in No. 4. Now ask the man that is to hold the colt's head while casting him, "Please Sir, do not touch the twitch until we are through operating on this horse, or colt."

In common castration of colts and stallions. I tried all the different methods known I could think of. I have made a choice of all methods for my own use, and this little book is intended as a full expose and explanation of my present methods and practice. To meet a demand for my printed methods, my ropes and instruments are shown, so as to more fully explain my use of them.

I will now speak of colt or common castration in a general way. First halter the colt with a leather head-halter, and have a one-half inch rope twelve feet long, to tie in the halter ring beside the other strap. I call it the chin rope, on the halter; now take a half hitch on the under jaw with the rope, and push the lips in under the rope; next, put on the nose-twitch, as above described and shown best in cut No. 4 and tied to the halter properly. Then nearly every colt
will stand still. Have two knee ropes ½ inch seven feet long. Have one 3/8 inch surcingle rope seven feet long, tie a three inch iron ring in one end of surcingle, and gently slip it over his back, and tie it good. Take one knee rope seven feet long, tie the ends together and loop it in the middle under the belly, on this surcingle, it belongs there all the time, for several reasons I will give you later on. Cut 1 shows a grown horse, with his right foot looped up, by that knee rope, being wrapped around his right ankle two or three times, sulking, because the twitch is on just right, and he don’t seem to care whether he is up or down, now if all three men pull firmly and slow, I think he will lie down himself. I know he will, if the castrator will turn his nose around to the left side and say pull. I like to let him put his knee down first and turn over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle. Now having first looped one knee rope seven feet long, in the middle, loop it, about twenty inches from the three inch ring on the circingle, so as to hang down loose under the belly, for after service, now put on the circingle, as cut 1 shows and tie it good, then put the chin rope through the ring on his side over as in cut 5, without a struggle.
ankle above the pastern, and draw all up snug on the left side, lastly, before casting, have the man holding the halter rope from the half hitch, in the mouth, through the ring and over the back, lift the right fore foot, and wrap the knee rope around it several times, (as cut 1 shows him on three legs only). The castrater should gently turn his FOUR HOBBLIES

![Diagram of hobbles](image)

THIRTEEN INCHES LONG INSIDE.

BACK ROPE SIXTEEN FEET LONG.

horse's nose around to his left side, and say, 'pull gently and hold tight,' and down he must go easily as in cut 5, and should he there quietly. Then I take the chin rope and run it through the lower part of the halter and back through ring on circingle and ask some man to lift his head back on his side and I pull my halter rope tight; confining his head as in cut 3 but want a man to hold that rope. Now I take the back rope as we call it, that the two men now hold, in cut 5, and step forward, and put the back rope under and around the lower hind ankle snugly without jerking, then walk behind to the horse's rump or loin holding 10 pounds pressure all the time, and ask some one to lift 50 pounds up by the tail,
while I try to draw that rope under the hip, and also draw the under hind foot near his belly and hold it there, and ask some one "won't you please put this long end over his upper hind foot and give me back the end?" I then draw it tight as I can conveniently, and say "men let's turn him upon his back" (as in cut 6,) except the head should be tied tight to his left side, as cut 3 shows it now, by chin rope and halter; now this man at the head in cut 6 does no good, tie that nose around tight to his left side and he will lie still, comparatively; now the four men chock the horse on his back with their feet under him, toes they must not push first, against each other, but hold his knees, and hocks and pull the horse tight on their own feet, as chocks, that is right, so far, now let's tie him so that he cannot hurt himself or anybody else. I don't like to bind a horse very tight, when we first turned him up on his back, his right hind foot may have been too loose; if so bear that foot down gently, and draw the back rope tighter slowly under him; don't jerk or he will struggle; that is horse nature; take up your slack on his left hind foot to match it, and wrap your rope around twice, and take one half hitch and ask a helper to hold it, so it wont slip; now unwrap the knee rope from the right fore foot, and loop it over both hind feet, that ties his hind feet to his belly cir-cingle forward, and the back rope ties them to his hips, and leaves his back out of all danger of hurt or strain.

My advice to all new beginners is to get a colt out on a good place, cast and tie him several times. Learn the A, B, C of castration before you attempt any surgery. Almost every man that attempts colt castration soon gets conceited and thinks himself an expert, when in fact he is liable to do
wrong. But let us suppose our colt is now cast skillfully and
riпd slowly and safely, and held firmly on his back by our
assistants. If the bag, or scrotum, testicles and all are down
well, then with the elbow forward between the hind feet
grasp one seed at a time in the left hand, and with a knife,
or hook, which is my preference,
split the bag over the extreme
hind part of the seed one inch
long into the water, then intro-
duce the hook No. 1 here de-
scribed—all other blades shut—
and push forward to the point
you wish to split to; or repeat,
to cut enough forward; then turn
the point of hook upward, and
with one gentle pull split the
skin and tunic, and that will ex-
pose the testicle. Then do the
other the same way, about one
inch on each side of the septum
or raphe three inches long well
forward. But if the seeds are
small and are not well down, and
are hard to grasp with the left
hand, grasp the sheath two inches
behind the front end and push it
forward tightly. Then place your
hook where you want the front end of the gash, and slowly
pull back, with your hand raised a little after the hook enters
the skin, and the front end will slide along just under the
skin and you will not cut deeper than the skin, nor cut into
large veins just below, and repeat on the other side. Each incision three inches long. Now both testicles are exposed with (tunic) or striffin on. Split the tunic and lift the seeds up well. I pull up about two pounds on the average yearling and three or four pounds on the average stallion on each seed, so as to get well up on the cords. The best way I think, is to use a good ecrasure and the hook knife to get the testicles exposed, then grasp them both in the left hand at the same time, through the chain of your ecrasure and lift up about three pounds on a large yearling or six pounds on a large stallion. Then with the right hand adjust your chain several inches up on the bloody cord (spermatic cord) and attachments but always square across, and sometimes over the exposed ends of the tunic, which is not wrong, if you like, but always, after closing the chain, you can cut two inches of the tunic off, it has no blood in it, over one or both testicles, and around both cords at once, hold now with the ecraseur in the right hand. Now, take the two large cords, one at a time, in your left hand, and draw them one inch or more through the chain, so as to shorten them still more. Now see that no skin or extra tissue is caught under the chain; then change hands by grasping the ecraseur near the front end with the left hand, with the thumb resting firmly upon the chain and loop, in the ecraseur, then with the right hand quickly take up all slack in the chain and tighten it some, enough to bite it half off, then loosen your chain and drop towards the seed one-half inch, and put on your chain tight now, then with the left hand grasp the middle of the ecraseur over the handle to better hold it, as you should; then grasp the gimlet handle in the right hand, and turn until one or both cords are severed, which
one or both cords are liable to do. But in case they do not, only press your left forefinger on the cords in front of the ecraseur, then turn handle back a few turns to loosen chain, then grasp with right hand one chain and jerk it on through the cords and tissue, which will saw it off like a mash off, which pull through the loop, and all will be well. I expect to be criticised by thousands of castraters as a crank, but nevertheless I propose to tell the truth plainly as I can, and candidly express my preferences, obtained by thirty years of practice. In speaking of the ecraseur I prefer a loose one, liable to pull part of both cords through the loop of the ecraseur, or, at least, some of the tissue, because when the chain fits closely it is harder to cut off with, and will bleed more than an old, loose, half worn out ecraseur does. Later I will describe my string ecraseur.

If you wish a bloodless operation, pinch one, or both cords at once, with your ecraseur chain one inch above where you intend to crush them off at. Pinch half hard enough to sever the cords; then loosen and slip the chain one inch nearer to the seeds, and crush off square across the cords. As to turning the ecraseur slowly, I never do. I cannot see any benefit by doing so longer than five seconds on the first pinch; that stops the circulation in the blood-vessels inclosed in the chain.
Rupture or scrotal hernia should always be castrated by the covered operation, two inches higher than commonly done, with large clamps, put on tightly, and left on to fall off within from five to seven days; therefore medicine on the clamps is unnecessary. Most all colts that show a rupture, while suckling, will be all right when one year old. Umbilical hernia is easily cured by a strong wooden clamp, put on tightly while the colt is held on his back; no cutting is necessary, only clamp all of the loose skin you can, and the end of the umbilical cord inside tightly, and let up; all will drop off in from five to seven days, and will be all right.

Ridgling or Cryptorchid Castration.—When talking to my pupils I class as five different kinds. Number 1 is in the tunic and half way down from the inguinal ring to the scrotum, and is easily felt by an expert castrater while standing. Number 2, also, is in the tunic, but is so small, or so high up, or both, that they cannot be felt, as a rule. Number 3 is above the inguinal ring in the abdomen. Number 4, the testicle is in the abdomen, yet the courage ball (Globus Minor), and some water is down in the tunic, as a number one ridgling seed, but seems small. Number 5 was once a plain No. 3, but is now diseased, and enlarged to ten or twenty times its natural size in the abdomen, with serum, pus, or both.

To castrate ridglings I think it very important to tie them in such away that the operator will have every advantage. I will here try to explain my favorite method: As I go through and over ten or twelve States each year in answer to calls to castrate, I first meet the owners of the stock, and next ask to see the stock. I first put my hand under and feel the scrotum, so as to decide for myself, or diagnose each
case regardless of what I am told, for owners are so often liable to forget how it is, and make mistakes. I then ask "Where do you wish the work performed?" If I think the place suitable, I take my ropes there and get ready; otherwise I select a place, and ask that we may use it. Any dry place, twelve by sixteen feet, is suitable, and five men as assistants are enough—a crowd is not desirable, neither is it best to have assistants change places as holders, as a rule. On fresh plowed ground is a good place when dry, but in wet weather a barn floor is the general place. Then a bed of straw or hay is used, seven by ten feet, twenty inches deep, on which spread several old blankets to complete the bed and hold the straw in place, close to which lead the ridgling, and half hitch the halter strap or chin rope in his mouth; then put on your nose twitch tightly, and now place him just at the edge of the bed, and he will stand there until you cast him. Now put on the ridgling ropes, 3/8 inch size, and sixty-six feet long, looped in the center for a collar to fit the horse, and put over his head the old-fashioned way, then pass both ends between his legs and outward, cross the same ropes under the first as they go back to the collar, on each side, as per cut No. 7. Explained only in my English or second Edition No. 3, 4 and 5, ridgling methods which I sell at $10 each, and do not expect to put in this $2 book; and hope before I get through,
to fully satisfy all but rigdling castraters. I sell the second Edition at $10 to all that want it at that price. But no ordinary castrator should try to alter No. 3, 4, or 5 ridglings, for he will kill half of them. Experts should make it a specialty, but be willing to insure them and pay for the dead ones.

Next put on your hopple as in cut No. 7, to cast him with. The ridgling ropes are only to re-tie with after casting, yet can be used some by one man drawing on the right hand ridgling rope, at the word "pull." The operator should hold the left ridgling rope in his left hand, and when all is ready, as per cut No 7, should say "pull!" he and the head-holder, at that time, should push the horse over on the bed. Next the operator should draw on the rope in his left hand, hard, then put it where it comes around the hind leg, down to the ankle, and hold his left hand rope all the time; now withdraw the back rope out of the two first rings on the back rope and free the left hind foot from the hopple. The two men pullers again take that rope, still holding tightly on the back rope which is still on all the other feet, while you adjust your big rope so as to let the left hind foot back near the stifle. The head-holder should now have the chin up and back, near point of the horse's shoulder; one man should be holding ten pounds on the big rope on the under side of the collar, out forward. Now put your left knee under the left hind leg half way from foot to hock, and bear it in to the horse, as in cut 8, about even with the stifle; then put your long rope down on it at the ankle, and once around; then draw tightly to fit the rope to the ankle close; then take one-half hitch. Now put your rope over the rump or loin, and under the thigh. Ask some man to
draw twenty-five pounds on that rope. While he draws, you lift the left hind foot with your hand enough to tighten, like cut 8, up and between the hocks and wrap around ankle, and then take two half-hitches and ask some one to hold five pounds on that rope, which will keep it from slipping and getting too long. Now go to the horse's lower feet and remove the back rope from the left fore foot by slacking the pull of the two first pullers on the left fore foot. Now re-tie that foot up tightly by looping a knee rope in the middle over that ankle, and one end under the leg and one over the arm; tie tightly in a bow knot near the collar in No. 8. Now have the two first pullers who still hold the end of the back rope walk around behind the horse to his back, and pull hard. One man should now lift on the under fore leg, and, the operator assisting, all should turn the horse over slowly, then tie the right legs just as you did the left legs; then turn him up on his back again, place the spreaders in

**SPREADERS 20 INCHES INSIDE.**

between the ankles as in cut 9, and tie them by putting the spreader loops over each hind foot, then tie around each leg with strings in the spreaders. Please cast and tie other horses repeatedly this way before you tackle a ridgling for castration—practice the A, B, C of ridgling work.

Your easiest ridgling to castrate will be the one you tie best and hold properly. To get a good tie you must first
practice to get them in proper position; also learn to have them held properly after they are tied. The operator should keep cool and go slow, use no bad words, and show no cruelty to the poor horse that has not consented to such treatment, which he will prove by struggling, unless your nose twitch and half-hitch on his jaw constrains him to lie still, and thereby help you to do your work quicker. We will now suppose your ridgling is properly tied and held in position by three or more assistants, as in cut 9, on his right side, with chin up and back, and the top ridgling rope over your shoulder as you sit down flat on the ground, facing the horse with your legs over his tail; now grasp the sheath in your left hand, well forward, and make your incision through the skin four inches long, about one inch above the septum, or raphe, just where the seed should be, if down properly. Now with the two front fingers like glove stretchers, separate the tissues up the inguinal canal, but do not gouge into the body of the sheath; go up near the skin. When your hand is in the inguinal ring, six or seven inches up, according to the size of the horse, your fingers should be only one-half inch below the black skin; now oil your hand well with a tablespoonful of the best carbolized olive oil, and insert your hand, with the fingers pointed together cone-shaped, and rotate your left hand while you push upward, about five pounds weight, and slowly open the inguinal canal. The rotation of your hand will cause the tissues to give way in the proper place, until you reach the inguinal ring, which is up about eight inches in an eight-hundred-pound horse, and nine inches in a thousand-pound horse, and ten inches in a twelve-hundred-pound horse, and about twelve inches up in a fifteen-hundred pound horse, varying only a little from this,
according to the fatness of the horse. A number one ridgling's seed will be found in the tunic, five to six inches up the canal. A number two ridgling's seed is eight or ten inches up, yet in the tunic. In each case work your finger around the seed, tunic and all, and break the adhesion, and gently draw it down some, then split the tunic with your hook or knife one inch and with your two fingers tear the tunic open until the seed slips out, then put on your ecraseur and crush off one inch above the seed and Globus minor. Numbers 3 4 and 5 not explained in this revision, are above the inguinal ring, floating in the abdomen.

A few times I have been called on to alter a horse with one large seed, after two had been removed, and found it a scirrhus cord as large as a seed. If it had been cut off three inches higher it would have been all right then, and no scirrhus cords would have appeared afterward. I think all cases of hydrocele (water seeds) may be avoided by cutting high, say three or four inches above the testicles. I think all tetanus may be avoided in castration by using no clamps or ligatures to be left on over one day. I think nearly every death may be prevented by proper exercise and medicine after castration. I never saw a horse I was afraid to castrate at a reasonable price, and insure him to live for ten per cent on that amount beside my regular fee for that class in that locality. Of course my fees are much lower at home than a thousand miles away from home.

The best treatment I know of is to drench the horse twenty-four hours previous to the castration with one and one-half pints of raw linseed oil, and soon as castrated give him drachm doses of my castrating tincture every three hours apart:
Tincture of anconite root, one ounce
Fluid extract belladona, one ounce.
Quinine, one-half ounce, rubbed down in one-half ounce of sulphuric acid.

Put this all in a pint of water and give twelve doses, 1 drachm, or teaspoonful back on his tongue, not remaining up at night. The horse should be walked at least two hours daily. Moderate plowing all day is the best exercise to prevent stiffness. The oil you use when castrating ridglings should be pure olive oil, and to one pint add one ounce of carbolic acid. Your hands should be well washed, first with anticeptic solution, one to two-thousandth parts, then well oiled with this only; then insert your hand and do your operation.

Have the incisions on ridglings opened well up, four or five inches high, just before they are walked morning and evening, so as to let all serum drop out, and thereby prevent all swelling, as it is called, when in fact it should be called neglect to open up the cuts five inches high for five days. Stallions and plain colts would do better in retaining flesh, and make a better recovery if they were opened twice daily for five days three inches high. My forte, if I have any, is with a set of old ropes, casting and tying stock, and trying to cut or spay them, of which I am now trying to tell you my favorite methods. I castrate mules the same as I do horses, but I never saw a mule with a testicle in the belly, except one hermaphrodite that I altered. I have successfully castrated nine or ten hermaphrodite mares, finding several just like number two ridglings; others were as double number three ridglings, except the mammary glands were of the usual size for mares; I never knew one to die. I have cut them from four months old up to four years old.

— 24 —
To castrate a plain bull seems too common to speak of. But I prefer to cut off the lower end of the sack or bag, as little as will do, and squeeze the testicle down and out, tunic and all. Then grasp all of one seed with one hand and push up with the other, and break the cord off six, eight or ten inches above the seed. I do the other likewise. This is the most common method known. Yet some prefer to leave the bag on, and split into the seed through the tunic on each side. This leaves the tunic in the bag to inflame, which I think is bad. I have known a few bulls to bleed to death from castration. In such cases I think a large rubber ring, or even two, high on the bag would soon stop the blood, but should be removed in four hours, or sooner. I will tell you better later on. I have castrated quite a number of ridgling bulls, the most of which were double number threes; all were barren. The seeds are not attached in a ridgling bull as in the ridgling horse, but are fast to the loin. To get them out, I have always had to cast the bull and cut in the side and spay them the same as a heifer,
place the hook, No. 2, in knife, where I wish the lower end of the cut. Bear the hook in, and pull up slowly about five inches, cutting only through the skin and tissue to the red slick beef. Now draw the hinder flap of this cut back one inch and then puncture the flesh and peritoneum with blade 4 on knife. Then insert my first fingers of both hands and tear the flesh enough to admit my left hand. Then oil it with carbolized oil and insert it, and feel just behind the kidney, and I find the seed easily, unless I have overlooked a No. 2 seed high in the groin outside, and very small. To remove it, or any ridgling bull’s seed, pull and twist. It should break off where the cord is small, five or six inches long. The lip covers the rupture you make, and the air is excluded by three or four stitches, only skin deep.

You can alter ridgling hogs the same way, nicely and safely, if they weigh over two hundred pounds, but shoats of fifty pounds can be cut by using only two fingers in the side like spaying shoats; but decide before you cut in on which the side the seed is, by the testicle or scar on the side opposite. On the large hog there is no difference about sides, as the whole hand is inserted, and either is within easy reach just behind the kidneys.

To spay sows, I cut in the same place. On a sow of one hundred pounds I cut on the left side, one inch forward of and three inches below the hip bone. Just shave the hair off clean, then split through the skin and fat, up and down, to the lean flesh, and pull the hind lip back, and puncture to the bowels, but not into them, back of the cut, one inch. Then introduce just two fingers on the left hand, and bear down in the hog’s side, and wipe back on the loin with the fingers to catch the ovary. Then remove it, and follow the
uterus down one horn to the junction, bearing down all the
time, then up the other horn to the other ovary, and remove
it, and sew up with two stitches skin deep only.

The way to make hog spaying easy is to get in practice,
and never forget to bear down constantly on the cut with the
back of your other fingers, which sinks your left front fin-
gers nearer to the ovaries, and keeps the bowels in at the
same time. The hog should lie flat on the ground on its
right side, with two men holding each foot in a hand, and
stretching lengthwise, with mouth open. This is the pre-
ferred position by experts, who spay thirty hogs per hour
all day. My dislike for hog music, which is so abundant in
spaying, has prevented my doing it for pay, at the usual
price of ten cents each, but I would use a bench if I spayed
hogs.

I do like, however, the work of spaying cattle. Year-
lings are the most common ages; but all ages are spayed.
A spaying chute is the best way, for then they are held still
while standing; but for general practice the ropes are the
most available and convenient. Let us suppose we have a
lot of fifty cattle to spay today, mostly yearlings, and have
five men as helpers, and have choice of a large lot of one
acre, or a small lot fifteen feet by thirty feet, or a barn floor.
If the weather is fair, the small lot will be the best; if rainy,
the barn is preferable—the acre lot is too large for conven-
ience in catching. Now, all ready in the small lot, first run
a wagon near one corner to crowd them behind; the catcher
should be a plucky fellow, and catch the first yearling near
him with his left hand under the chin, and his fingers in the
right side of the mouth, his right hand on the left horn;
then turn the calf’s nose up and back on the left side tightly,
and hold it so one minute, when the calf will fall over on its right side. Rather than have its neck broken in this twist, when the calf falls the holder also should go down on its shoulder and still hold the nose up and around on its side. Now put the back rope, looped, around the right fore-foot, and a short hopple around the right hind-foot and left fore-foot; then thread the back rope through these three hopple-rings as above named, and have one man to hold them tightly. First put a knee rope upon the left hind foot, and have one man to hold it down and back tightly. She is now in position. Now clip the hair off where you wish the cut, and brush off cleanly all particles of dirt and hair, with a brush, or little broom, and use carbolized oil on your hand. Then make your incision about four inches long, through the skin and tissue, down to the red beef, one inch forward of the hip-bone, and about the middle of the heifer from the back to the belly. I like the hook No. 2 best in this operation, and use it entirely in all my spaying; but if you have something better to make the incision with, use it; then draw the hinder lip of the incision back one inch and a-half, then puncture through the flesh to the hollow but not into a bowel; then insert your two front fingers surely through the peritoneum; then tear the beef by pulling upwards with left forefinger and pushing down with the thumb until your left hand will slip in easily when oiled, and feel on each side of the back-bone just behind the kidneys for the ovaries—in yearlings, lumps about the size of sparrow eggs, in cows, four times larger—hanging from two to four inches below the loins if standing, but when cast, may rest against the loins. If you do not understand the anatomy of the parts, go to a slaughter-house and examine them well first.

— 29 —
To remove the ovaries, I first find them with my left hand and shut my hand on the ovary while standing at their backs. I then put my long curved spaying scissors,

**SPAYING SCISSORS**

16 inches long, points wide, and smooth and round, and push the points downward, on my arm, to the ovary, for perfect safety. Tie your scissors handles so you cannot open the points over half an inch back; then no bowel can slip in and get cut, as we work in the dark, inside, while I hold the ovary in my left hand. Then in my hand I open points of the scissors, and clip the ovary off while under my flexed fingers, with no danger of nipping a bowel. I like dull flesh scissors; next to the ecrasure, to crush off with, and much more convenient internally. When both ovaries

**NEEDLE—SIX INCHES LONG**

are removed, with half-inch of the attachments and filopean tubes, I sew up the skin only with this long needle, after bathing the parts internally and externally with the anti-septic solution, one part to two thousands, two tablets to one pint of water.

Vaginal spaying of cows is the preferable way, but it is seldom that our cattle is large enough, and it is rarely done.

— 30 —
What little spaying I have done on cows and mares per vagina has been done with rude instruments of my own—a spear eighteen inches long, with a hook half an inch behind the point to cut back with, and surgeons' curved scissors twenty-two inches long.

**SPEAR—EIGHTEEN INCHES LONG.**

I first insert my left hand in the vagina, then the front finger into the os uteri, and bear down and forward, and puncture the vagina two inches behind the os uteri, above; then draw on the hook upon the end of the spear to split the vagina about two inches. I then remove the spear, and with my left hand enlarge the opening, and pass my hand on in the abdomen and grasp the ovaries, one at a time, and nip them off with the dull points of the long curved scissors, cows and mares both alike. No after treatment is used but my castrating tincture to mares as per ridglings later on.

To spay a bitch of any size or age, I want a rope snug around the neck, held straight out in front of them, but always under the chin, now tie a strong string three feet long over the nose and rope, one knot under the chin, then up behind the ears, and tie tightly on the top of the neck, near the head, in a bow-knot; then with a string or rope, according to the size of the dog, loop one end above each hook. Now hang the pup or bitch up so that the two hind teats, when hung up, would be nearly as high as your shoulders—about three of four inches below. Next loop the ends of another string three feet long around each frout leg. These you can slip up or down on the frout legs to suit you after-
ward. Now have the collar rope fastened below on the wall, on a nail or ring, to hold the head down not tight, and one man to attend the head and keep the collar from choking the dog, and one man near to hold the tail from switching around. Now put your left leg over the string, as in cut of dog, holding the front legs, and adjust it to suit you, as per large or small bitch. With your left leg back a little, you hold the dog's back away from the wall and its belly facing you properly. All is now ready, with scissors cut all long hair and brush it away. Now make your incision on the median line from between the two hind teats down to or a little below the next two teats, to the red flesh. Now puncture near the middle of cut, to the bowels only, then stick in the forefinger, then the right forefinger and tear the red flesh up and down; a tear heals better than a cut, look for either horn of the uterus. In a six weeks' old pup it is not larger than a large sewing thread; in a six months' old pup it is about one-sixteenth of an inch, and in an aged dog one-quarter of an inch, if she is not in pup. Now, with both forefingers pointed together as a pair of foreceps, and all other fingers shut, insert the two forefingers, and with the back of the closed fingers push. And hold the bowels inside, while you are looking for the uterus, which is always near the loin behind the bladder, as the dog hangs up, and will soon turn red, if not found at once in pups, which makes it easy to distinguish as a little red cord. Then with your foreceps fingers secure and hold it. Then hold it in left hand, and never pull up more than one pound on a pup six weeks old, or you are liable to break the uterus off at the ovary, but hold just so you can slip the right fore-finger down the uterus to find the ovary, which
is as small as a grain of coffee, or even smaller, and fast to the kidney, and in a sack, at the lowest forward end of the uterus. Tear the ovary sack and all loose and up with the right finger nail. Then the uterus is strong enough to lift the ovary up to the opening. Now put your artery foreceps on, and pinch all attachments half an inch from the ovary, and cut the ovary off with small scissors, and leave foreceps on, holding all hemorrhage shut off, until you need them on the other ovary, and pinch it the same way until you clip the other ovary off with your scissors. Be sure to get it all, and one-half inch of the uterus besides. If you do not have clasp foreceps wax a small strong string, and tie it for two minutes, tight, but remove the waxed string and then sew up.

I like to sew up with the uninterrupted suture, with that six inch crooked needle, you can hold it so well, and a good string in it; commence at the lower end and secure the peritoneum as well as the skin, and adjust the stitches before you fasten the top stitches. If the bitch is pregnant, I think she can be spayed safely and with less trouble. Instead of the trouble as in finding uterus and pup's, you find, with no delay, uterus, pups, and all, and draw them all out and detach the ovary sacks with your finger nail from below, and a two pound pull up on the other hand, until all are outside, and loose on both sides; then ligate all fatty attachments with the vagina, one inch above the mouth of the uterus, tightly, and cut off and take out the whole uterus, pups, ovaries, and attachments. I find they do well in recovering. I have lost two bitches by my neglect to sew up tightly enough, and the bowels came out the next day. I think it much better to have them empty
of food. Two days at first, until you get started.

I secure and spay cats the same as pups, only they are much easier to spay; but it is well to keep one eye on their claws while so doing.

I think the antiseptic solution is beneficial on all surgery at the strength of one to two-thousandth part, mostly used upon your hands, but some in and on the wounds.

I think the stitches should be removed the third day on cats and dogs, if the dogs have not already licked them out; a pair of small scissors is best to cut stitches with.

**Calf Spaying**

To spay calves two to ten weeks old, I like to swing them up like the bitches are; and cut in as high as the udder, without cutting into it, then three inches down; and look behind the bladder, this is much easier than spaying bitches; you have only to try a few times to make it easy to do. Remember their teats not quite so high as your shoulder will be best, but some calves are large and their heads and shoulders will rest on the ground. Sew up skin and flesh, over and over, then tighten up evenly, your thread from bottom to top. I use flax thread six strands, but put no wax on it. Spay thousands of scrub calves and do your country good. Ask your butcher when he kills a calf to let you split your cut, and feel in while he skins, one or more; take one inch of the uterus off with the ovary.

**Caponizing Chickens**

The most perplexing castration I find is the caponizing of chickens. I have removed, as I supposed, two testicles each from young chickens, and found them when grown and fat, each one to have from one to three testicles remaining in him. These we call slips, and they will crow and have
red combs, but will never sell as first-class.

They chase the hens, but do not fertilize the eggs. In caponizing, to avoid making some slips, it requires great care, and a fair chance, small birds of one or two pounds weight, well emptied, a clear day, the sun up high, and the work well done with convenient instruments through a large incision between the two last ribs on the right side. First, if the chicken has had no food for thirty hours, you will have him in condition; next, have a small table two by three feet, and two large strings each three feet long. Fasten a half brick to one end of each string. Now tie one string around his legs and drop the brick over the right end of the table; then the other string tie around the wings, close to the back, and drop the other brick over the left end of the table. He is now tied, and on his left side. Next pick the feathers off over the last rib to the hip bone. Now wet the feathers all around this naked place with very cold water, which numbs the feeling; the wet feathers will push back and stay out of the way better. Now put your fore finger on the hip bone and across the flank to the first rib. Then stick your knife in a half-inch deep there, between the first two ribs, and cut down and forward to the lower end of the ribs, then turn your knife and cut up between these first two ribs to near the backbone. For small chickens use one rubber, and large chickens use two rubbers. The rubbers pull the handles together.

Now put in the spreaders and open the ribs. Next split the diaphragm which hides the bowels from you, now turn your table so the sunlight will shine inside on the testicles, and all will be seen plainly. Now take the grippers, and with the open ring up, slip under the lower testicle, and

— 36 —
gently wipe up from under the lower seed first, which will draw it toward you somewhat. Now stop and open the gripper's mouth by spreading your fingers while you hold still as you possibly can, under the seed; when the grippers open, the seed will drop below the ring on the lower jaw; then shut them, and now turn the gripper over several times to twist the tunic, then draw out and try to get all the seed and the tunic (covering). The top seed is much easier to get, but it is better to leave it until the last; use it as a guide to get the lower seed first. Now replace the wet feathers properly and let him go without sewing up, as the ribs close the opening. If you have no caponizing instruments, split between the ribs with any knife, and take two wires a foot long, bend a hook on one end each and have a boy hold the ribs apart as wide as you like them, while you work. Next have a small ecraseur of your own make out of a goose quill. Cut off the lower point and cut a hole in the side, get out the pith and insert both ends of a long coarse horse-hair from below, and leave a loop at the lower end like the cut. Through the hole in the side put this loop of hair over the seed, then tighten it by lifting on both ends the hair, and pull all out while you push down to keep it tight, and pull seed, tunic, and all out clean, and you will
have but few slips. This will work on small chickens, one and a half pounds fellows, but cannot be used on two or three pounds young cockerels. A wire six inches long, crooked at the end to raise testicles up will be handy. Try a dead one first.

**MY MISTAKES THROUGH IGNORANCE**

I was called to spay twenty cattle, and alter one colt at a certain town. I did the work nicely, as I thought. The seventeenth subject, a two year old heifer, was so hot that I then remarked, "She was boiling hot inside;" but I proceeded with my work without washing my hands or instruments, or using any antiseptics, and spayed three more and altered the colt. Within a week the heifer I mentioned, the three operated upon after, also the colt, all died. I now think ignorance on my part cost the lives of these three well cattle and the colt.

Again, I was called to alter five ridglings and one stallion at Dr. Wm. Sheppard's, M. R. C. V. S., of Ottawa, Ill. I was, while there, presented with a fine gold-headed cane by twenty veterinarians. The work was nicely done, as all pronounced it, and so I thought. However, all died but one horse, and he had a bad time of it because the first one was a double number three ridgling, and was sick. I noticed it, and said he was very hot inside, but did not think to wash my hands, or know how to use antiseptics, which I shall never fail to do hereafter. Still. I have done hundreds not so smoothly, that seemed to do extra well. My advice to all surgeons is to use your thermometer per rectum, and if the temperature is above one hundred and one degrees, defer your operation and give some sort of physic and come again. When you do operate, have clean hands and instru-
ments, for your own credit and your patron's good.

But I now remember a different result on sick horses. At Hartford, Ky., I altered three ridglings in an old shed in a heavy and protracted rain, five miles from the railroad. When done, one owner said, "My colt has the distemper, and was a double number three ridgling, and this weather is so bad, I think I will have him insured at one hundred dollars." His brother said, "My colt has the same disease, and I believe it will be best to be on the safe side, if it does cost ten dollars more," and both took my insurance policy for one hundred dollars each, and paid me the extra money. If the other owner had been present instead of the groom, I think I should have had to make out, unwillingly, another policy. My circulars for the past eighteen years have said: "I will insure all ridglings that I get the first cut on, for ten per cent extra, upon the value of the horse, the owners to decide which they prefer after they see the work done." At this particular time, in the mud, rain, etc., I sort of had the blues, something I am not subject to, and I would have preferred paying the ten per cent, not to take the risk, as these horses had the distemper, and were obliged to go several miles in a hard rain and deep mud; and, from general appearances, I feared would have poor stables and attention at home. But my circulars in our correspondence made the offer, and I felt honor bound to make my word good without complaint. Luckily for me, however, all three did well, and I received a very complimentary letter in two weeks saying, "Our horses are all well, and did not appear to mind the operation at all."

ANOTHER MISTAKE

I would like to tell you how I lost my handkerchief. I
was called to Terre Haute, Ind., to alter a number three ridgling. I got him down and tied. I then made an incision through the peritoneum. Just then he struggled, and I made the rupture much too large, and the bowels came down. I put them back again and again, and finally got the seed out and the bowels in. But they would not stay, so I asked a boy to give me my handkerchief from my overcoat on the fence. I took it and crammed it high up in the inguinal canal and let the horse up, and down came the bowels again. I caught them, and with little difficulty replaced them once more while standing, but forgot the handkerchief. I soon missed it, however, and supposed I now had a new and desperate case on hand, but I had no trouble while standing to lift his hind foot and set it on my knee, and then gently insert my hand to the rupture and my fingers inside, and there found and got the handkerchief. That colt worked every day and did well, but I did not tell any one for several years of my loss. I now tell you, so that you may be more careful; for should such an accident happen you, it may be of service to you to know how others have done when cornered.

I have now about one hundred and twenty pupils upon the royalty plan, for ten years' time, and I tell them all never to be afraid of blood or bowels, for there is a way to manage them with safety. You can take up and tie almost any blood-vessel, or open a horse and take out and look at his bowels and safely put them in, and have him live and do well.

There are a number of bitches in this town that I have spayed, removing ovaries, womb, pups and all, that lived and did well. There is a dog here now that never was born.
and his mother is here and well, also. The pelvis bones would not open, and, after one day in labor, I opened the belly and the womb and took him out, and in four months after spayed the mother, at the same opening, and found the womb grown in the cicatrix.

I never found the mare or cow I could not deliver successfully.

I was called by Jack Pierce, my friend, at Ridge Farm, Ill., to altar three ridglings, about forty miles from here. The first one had been cut into, without success, twice before, and was healed up tightly, and was hard calloused in the groin. This horse was badly stringhalted at that time on that side. By chance that horse was cast first, and with much trouble castrated.

The second was cast and partly tied, when upon looking around I saw the bowels of the first one hanging out. I asked some man to hold them up until the second horse was castrated, so we could have the ropes to use, but the horse was restless and the man timid, and he would let go. So the bowels came on down nearly to his hocks, and we let the half-tied horse up, and cast number one with the four hobbles and back rope, and soon replaced the bowels. I then castrated the second and third ridgling. I then saw the bowels hanging out again. We cast number one the third time, and I took a stitch, as I supposed, around the inguinal passage and left for the train. When I had gotten a quarter of a mile away I heard a call, and looking back, knew by their gestures that something was wrong. I returned at once and found a bucket full of bowels out and the horse down in the dogfennel and weeds and quite sick. We put the ropes on this one the fourth time; next picked the
dogfennel off, oiled the bowels. I then slipped my hand into the inguinal passage up to the ring; then grasped the bowels and put them back through the rupture by lifting one inch at a time, when the horse was on his side and the rupture up. I then split into the inguinal channel as high as I could conveniently, about half way up to the ring, up and down, three inches long, so I could then see where to put my needle, still above my last cut, so as to close the suture around the channel above. That horse made a good recovery, but strange to say, he was never seen to show stringhalt afterward and soon sold for a good price.

I forgot to speak of one ridgling I castrated in Kentucky. He had been unsuccessfully operated upon repeatedly on both sides, and was hard and calloused in the groin. I spayed him (the only one I ever did that way) in the right side, as we do cows in the left side. He got his pint and a half of linseed oil twenty-four hours previously, and twelve of my one-drachm doses of castrating tincture promptly afterward, and the antiseptics were used freely. He did well in recovering.

SOME OF MY MISTAKES ON DOGS

I spayed an eight-month-old pup, and by mistake got one ureta, instead of one horn of the uterus, and broke it off near the kidney. Then, for experiment, I cut it off near the bladder, and then spayed her. She was helpless for several days after, and filled up, seemingly with water. She broke at the incision several times, and the water ran out, but she finally got well in two months.

I spayed a four-weeks-old pup, and made the same mistake, and it lived. But the nicest job I ever did in spaying was on three-month-old pups. The second one was spayed
in five minutes, without one drop of blood. I was proud, if I must admit it, of my skill. The owner was pleased that the pup took it so kindly; it made no move while I was spaying it, or ever afterward, but it was not choked to death, which there is some danger of doing. The same man wanted some pups' tails cut off, near Boston, Mass. I put the tails in the ecraseur, and pinched them off. That works like a charm. Try it, Mr. V. S.

Horses Tails

I am often called to straighten horses' tails. My preference is to cast the horse with my four hobbles and back-rope, and use my castrating knife with No. 4 blade, the small blade on my castrating and spaying knife, as shown on page 13.

To cut the upper cord or muscles in two, in one, two or three places, according to how much it crooks, avoiding the joints. I aim to cut so the tail will go straight and a little over to the other side, for in healing it will settle back a little. I put my blade in half an inch below the hair, sideways, and bury all the cutting edge beyond the skin well; then turn the edge up and cut all the top muscle in two up to the skin. Then turn the knife over and cut down to the tail bone to make sure of all the cord while the muscle is tight. By bending the tail from you, no after treatment is necessary. I like this better than only to make one cut, and tie the tail around to the opposite side for one week or longer.

Dehorning

I never met a farmer who knew nothing about dehorning but objected to such cruelty. I also never knew one who had had twenty cattle dehorned but was in favor of it
always afterward. I am most decidedly. I think it a great prevention of cruelty to animals. The best way is to blister the horns off of the little calves with the strongest blister you have. I think any strong blister will kill the horns, especially one drop of the oil of mustard on each horn; but after the horn is one inch long, here horn forceps are used to take them out with. Yearlings and all older cattle are best dehorned with a small bone saw, such as butchers use. Specialists, as dehorners here, make a frame to load in a wagon and haul around the country and will stop at the barn door or gate and dehorn all your cattle for ten cents each, and they saw down into the head so as to have a ring (a quarter of an inch) of skin left on each horn, which is the best way and the right place. I think in a few years more, in this country, horns on cattle will not be seen at all for none die from dehorning and the cost is so slight. They feed, handle and ship better, as well as sell better, without horns. Try it and be convinced.

PRICES

In the Western and Middle States the common price for ordinary castration is generally one dollar per head, in small lots, but for yearling mules in large droves, twenty-five cents each is a common price—that is for seventy-five or one hundred in a place. In the Eastern States the price is generally double what it is in the Western, that is, where there are not so many in a place to alter. Where there is but one or two in a place, the price is five dollars each, East, if well-bred stock. Three-fourths of them are now cast and clamped; many years ago standing was as common as casting. I think casting the best way, and do that entirely of late years, but have altered nearly one thousand
standing. I never did but one ridgling standing, and will never try another that way. I suppose I get better prices than any castrater ever did or ever will again, as my trips are so lengthy, but my pupils will soon divide that practice up, and none have such long trips or heavy expenses to reach their patrons. I castrate in the East a few yearlings in bunches at five dollars each; where there are but two or three at a place, ten dollars each; ridglings, four or more in a place, twenty dollars each; for one only, more is charged, according to time taken and railroad expenses.

Two years ago, W. L. Scott, of Erie, Pa., wanted me to alter five yearling colts—all plain work. I did them nicely as I could, when he asked me what my charges were. I told him ten dollars each—he objected to the price and paid me fifteen dollars each. Last year I altered eleven plain colts for him, and charged one hundred and ten dollars. He objected again, and paid me one hundred and twenty-five dollars. Let me further say, one of his first five colts ("Chaos") won for Mr. Scott, as a two-year old, seventy-five thousand dollars as a race horse—in five races.

While in Tennessee, Nov. 1887, I received a letter saying, "Farmer Miles, when can you come to Saratoga and alter four plain colts? J. B. Dyer." I answered, "I can go to Saratoga, N. Y., and alter four plain colts nicely, Dec. 10, for seventy-five dollars, if answered soon, saying come." In three days I received a telegram saying, "Farmer Miles, your seventy-five dollar rates are satisfactory. Come Dec. 10." I went and got his seventy-five dollars, and his thanks, also.

Dec. 20, 1888, I was again called to castrate seven plain colts for J. B. Dyer, and did so, charging him one hundred
and fifty dollars. This you may think a big price, but Mr. Dyer seemed satisfied.

In June, 1888, I was paid sixty-five dollars to alter one ridgling colt for Mr. E. Thorn, of Henderson, N. C.

In August, 1888, I was paid seventy-five dollars to alter one double number three ridgling horse for T. Dudley, Topeka, Kan.

The best I ever did was to alter six ridglings and two plain yearlings at Bangor, Me., for one hundred and sixty dollars, one afternoon, all easy work, and a pleasant crowd, and plenty of sweet cider to drink. The most I was ever paid for one operation, was eighty-five dollars, on a ruptured, heavy stallion, near Pittsburg, Pa.

The most difficult operation I ever did on a fine bull, was for rupture of the scrotum on one side, in Chicago. One State Veterinary had tried to return the bowels with his hand in the rectum and the bull on his back one hour, and failed to return them, two weeks before I was called. I split the bag, tunic, and all, and found adhesion of the bowels all around in the tunic, which was very large and hard. I broke down the adhesion and then replaced them. Also put the testicle on that side in, rather than remove it, and sewed all up, with anticeptic, in which Dr. Withers, V. S., of the Veterinary College of Chicago, kindly assisted me.

The most surgery I ever did in one day with five helpers and only one set of ropes, was to spay two hundred and five large wild cows for J. W. Iliff, of Denver, Col., and I climbed a small pole about twenty-five times, besides, when I was tired. I presume you would like to know what pole climbing had to do with spaying cattle? It saved my life

— 48 —
many times. It is very easy to do when a fellow knows the cow is very mad, and comes at him double quick, with such long horns, out on the plains, thirty miles from any tree or house. I sometimes feel I could climb two at a time, or any other way to get out of their reach. Each helper also had a pole planted near him, to climb when necessary. Mr. Iliff had fifty-five thousand head, and all as wild as Buffaloes.

The most large horses I ever altered in one day was sixty-six head for Lux & Miller, of San Francisco, Cal., on a farm fourteen miles wide on an average, and over fifty miles long. I also spayed a few cattle for them, out of their eighty thousand head, and other stock in proportion. From there I went to Pettaloma, Col., and offered to castrate the “man eater” free of charge (it was an imported Norman stallion seventeen hands high, that had killed several men) but he was kept as a show then, and I failed to get the job; but a month later he was shot seven times and killed, while he had his keeper, Prof. Tapp, down trying to kill him.

I felt proud as an American to cast a very vicious ridgling horse for Mr. Case, in the Veterinary College, London, Eng., and castrated him in good order, before a large crowd of veterinarians there, who always treated me as kindly as if I was a veterinary myself, with a large diploma.

I have castrated in the veterinary colleges of Paris, France; London, Eng.; Glasgow, Scotland; Montreal, Canada; Boston, Mass.; Chicago, Ill., and other cities too numerous to mention. I have spayed cows for the State of Pennsylvania, and have castrated colts for the Baltimore & Ohio Railroad Company, two of the richest firms any castrater ever worked for.

— 49 —
I felt pleased to be permitted by George Fleming, F. M. R. C. V. S., to alter one of Queen Victoria's Life Guard horses, free of charge, after I said I did not charge poor widows anything. I now have Mr. Geo. Flemings testimonial of it and that the horse was sound and well the twelfth day, at St. John's Wood Barracks, London, before several of England's best veterinarians. He was a black, bob-tailed number three ridgling. I did him in good time and order, and did not draw ten drops of blood. The horse was sound and well twelve days after, which proved that the work was well and properly done.

I went to England in September of 1878, to spend three or four weeks only, and found it so pleasant that I remained there one year. I have most kind remembrances of the treatment I received while in England and Ireland by the veterinary surgeons there, and of their universal kind treatment and hospitality. Where I expected rivalry and competition, I found all helps and kind treatment. I now wear a gold watch—a timer—presented to me at Drawhada, Ireland, and inscribed thereon as follows: "Presented to Father Miles by Messrs. Drummond and Jones, Veterinary Surgeons, in testimony of his ability as an operator upon horses when in Ireland in May, A. D. 1879."

I was also presented with the following upon parchment, which I call my English diploma:

"We, the undersigned veterinary surgeons, practicing in the county of Lincoln, having witnessed Mr. T. C. Miles' operations upon ridgling horses, desire to bear witness to the humane, scientific and perfectly satisfactory manner in which he attains his object. We also wish to express our approval of his method of casting and securing the animal, and

— 51 —
of the instruments he uses in the performance of the operation.'

This was signed by fifteen of the best veterinarians in Central England, and sent to me most unexpectedly as a present from rivals in castration after my return home to Illinois, and for which, both watch and diploma, I have often felt that it would be a great pleasure to me if I could again meet those gentlemen and say, "Thank you, thank you," several times to each one for the gratification and pleasure you gave me.

Some of the pictures in this book are of a ball face horse bought for $100.00 for the purpose of operating upon, and for giving some final instructions to a class of pupils. He was a double No. 3 ridgling. He was first cast and tied as herein represented, and held upon the ground, while twenty-four hands were inserted in my cuts up to the bowels, for three minutes to each pupil, while examining the parts, as I progressed in his castration. Of course he was as mercifully treated as possible, and with clean hands, well oiled. Still he was kept tied down more than an hour. However, he did well, and I considered him sound and well the twelfth day after, with no swelling of the sheath, as is common in castration, and was used daily while recovering. He was not given the pint and a half of linseed oil previously, as recommended, but was given the regular drachm doses of the castrating tincture promptly, and was well opened twice a day for five days five inches up in the groin on each side, and was trotted around in our operating house twenty minutes after each opening of the cuts, and I now think all operators on ridglings can safely and well perform all such castrations, if they will strictly follow the contents of this
little book. I do not think any man will fully understand these instructions by once reading them, but it will be best to read them, short as they are, until all are familiar; then put in practice all tying and rope work, until all is easy to do, before the commencement of surgery. I feel sure you will never regret the time lost in so doing. There is money in it, and more sport and pleasure in it than gunning where the game is plenty. My pupils all declare there is nothing called business so pleasant as to meet a crowd of gentlemen with four or five ridglings to alter, and be able to nicely cast, and tie, and castrate them in one hour, to the satisfaction of all present, and then be paid one hundred dollars cash in hand, and complimented for their success. I have experienced this sensation many times in life, and I also testify that it is pleasant. Try it a few times. I think you would like it more and more.

Believing I have given all the necessary information upon this subject, I wish, before closing, to say to all readers of this little book, as I generally say to the crowds of spectators that collect at the various places where I am called to operate, and to those who help me in my work, that surgery, whether upon man or beast, should always be humane. We should always remember that a horse is one of man's nearest and best friends and helpmates below his own race; that God has given him to serve and obey; to be patient and kind to man. In return we should remember that in sickness and health we should care for this animal with a kindly heart and the greatest sympathy. While he trusts man we hope that man will not betray the confidence the noble brute places in him, and in all kinds of surgical operations it has been one of my highest aims and ambitions
to do the work skillfully, and to cause as little pain as is possible with success. We must remember that the poor creature is bound and held at our mercy; that he too, has nerves, suffers pain and is entitled to all human kindness; and I believe there is no greater crime in the annals of inhumanity than the torture or recklessness which may produce pain and suffering in this noble animal. And I do hope and trust that all who may try to follow my footsteps in the surgical part of this work will also keep ever in mind that pain is severe; that animals suffer but can not speak or even cry to tell us of their pain and sorrow. Never keep an animal fettered or bound a moment longer than is necessary. Never produce pain that can be avoided. In other words, always follow the golden rule in your dealings with your best friend in the animal kingdom.

Finally, good-bye. God bless you all. Live right and easy, and let us all try to meet in heaven. I believe in God the Father, God the Son and God the Spirit, three in one. I believe as old Paul said to the Athenians, the time of this ignorance God winked at, but now commands all men everywhere to repent. I think good works are good fruits for believers to bear; but that Jesus Christ is the only Savior of sinners, and that on the conditions that we trust Him and try to obey Him.

Yours truly,

FARMER T. C. MILES.

CHARLESTON, ILLINOIS, U. S. A.
APPENDIX

...TO....

ANIMAL CASTRATION AND SPAYING

AS PRACTICED BY FARMER MILES

FARMER MILES’ THEORY ON CATTLE SPAYING

That scrub cattle are more costly per pound for either milk or beef to farmers than well bred cattle. And that twelve years of annual castration of all males not needed, as best for bulls, and twelve years of annual spaying of cows, calves and heifers of ten per cent of all female cattle, selecting each year to spay only the most inferior of their classes; Jersey’s, Guernsey’s, Holstein’s (for milk); Short-horn’s, Poled Angus and Hereford’s (for beef) would soon work wonders in improvement and pay well from start to finish. Any man, country or state can do it safely and profitably, if they try. “Then” why has it not been done before? I think I can tell the whole story from personal observation in twenty to thirty years ago. I spayed cattle in different countries, in several states, and spayed cattle became very much sought after, and I was kept busy as I was in good practice, and did good work, for several years in connection with my specialty on ridgling horse castration,
but in later years when called to the same places to alter ridglings I was asked repeatedly, "Why spayed heifers bulled badly now a days?" I answered, "Spayed heifers never bull."

These stock men claimed that so many heifers bulled and kept the herds excited that they would not dare to handle them any more as stockers or feeders.

I had charged fifty cents each to spay, and could spay ten or twelve an hour. Men and boys helping me to cast and hold them saw all outside work and took up the trade at twenty-five cents each, and spoiled it by only half spaying some and getting out a lump that is not an ovary by mistake. I offer to pay the worth of any cow or calf I spay that bulls afterward, and can teach my methods plainly to others now in this book to safely spay cattle. Calves and yearlings are the best age, but old cows also are safely spayed. I have spayed many cows forward in calf, which is not advised, it is not so safely done then. I have spayed hundreds of milch cows. The rule is, they give much more milk and in three or four years, gradually get very fat, while milking well. If I was a dairyman I would spay all my dairy cows. As a rule, spayed dairy cows milk well, for three or four years, and if well fed, can be kept up to a full flow in winter, when milk is scarce. But the point in a spayed dairy cow is that her stomach is like the hopper of a good mill grinding; it must make good goods of all that goes through it, either milk or high-priced beef, or both, while the open cow wastes part of her time and feed wanting a bull every twenty-one days; and, after that time, much of her feed goes to build up a worthless calf, which lowers her amount of milk, and if sold for beef, lowers

— 58 —
her quality and price for beef. Generally; two fat spayed milch cows, in the Spring, will sell for more than three fresh cows cost.

In prices of beef, per pound, old bulls are the lowest, old cows the next; good fat steers better, but nice, fat spayed heifers, of same age of steers, are the best. But young spayed cows, milked three or four years, and fed well all the time, pay well all the time and get very fat, and when dried up and stuffed two months sell on a spring market up with large fat steers at any time. I was paid $40.00 by a committee of Veterinary Surgeons, for the state of Pennsylvania, to spay eight nice milch cows at Steelton, Pa., in full flow of milk, to test its effects on the cows and on the quality of the milk. I met one of the gentlemen a year later and asked him what they thought of it now, he said they were much pleased and would want more spayed.

I know abortions of dairy cows, so much dreaded by large dairymen, can be prevented entirely by spaying and not lose more, or so many, as in giving birth.

I see three kinds of factories to make our beef of, grass; and three kinds of mills to make our flour of, our wheat; the bulls and breeding cows' stomachs are like our old mills were fifty years ago, a poor article at best, the castrated steer well fed makes much better beef; the heifer, spayed when young, and well fatted, the best of all. The bull frets and slobbers over his feed and wastes some feed; the breeding cow takes much of her feed to make a calf; the steer is more quite and makes a better article; the spayed heifer is still more quiet and feeds better yet, and makes the most and best beef out of a bushel of feed, and if at the same age, will sell in market quicker than the steer, for as
much, or more per pound, she may not grow quite so large as the steer, but she will gain more and net better on a given amount of good food and pay a better per cent on what she consumes.

I have driven fat cattle, when a boy, from Lexington, Ky., to New York City. I have driven fat cows and barren heifers, all short horns, to Cincinnati for Christmas beef that netted 1,112 pounds, after being killed forty-eight hours.

I suppose you know that heifers twins with a bull calf are always barren, as though spayed.

The shrewdest cattle man I ever knew, I think, was J. W. Iliff, of Denver, Col., for whom I spayed 1,407 cows, calves and heifers, every old cow, every very ill shaped cow and all black ones. I think I spayed more than 100 cows for him over fifteen years old, and pulled out all front teeth, if there was any teeth, he said they could eat better with their gums alone than with two or three old snags. His idea was to stop their breeding long enough to get fat and sell them, and buy two two-year-olds with the money they brought him, on each old cow. Spayed cows milk continuously for several years, and in winter as well as summer, and pay better than to let the cow bull or fret for a bull every twenty-one days, and when bred, to stop that loss by fretting, then the expense of building up a worthless calf commences. No dairyman wants a calf, but milk. No feeder wants a calf, but beef. A fat spayed heifer's beef sells highest per pound, a fat breeding cow much lower per pound.

Or in other words $20 worth of good feed fed the spayed heifer, or spayed cow, will pay the owner a much better
profit than the pregnant cow or the bulling cow can pay, and spaying the inferior cows the crop of calves will be better each year, we all know.

You may say Farmer Miles is a crank on spaying, but that does not disprove his theory. He has spayed from Bangor, Maine, east, to Southern California, and all through the states, and as high as 1,407 at one place, has spayed for men and firms worth millions, has spayed in England, Ireland and Scotland, of all ages and kinds. J. D. Gillett, of Elkhart, Ills., had me spay 300 thoroughbred short-horn yearlings one year, and the next year 500 of the same kind. I thought that a great pity, but he said spay, and I try to do as requested.

I feel certain that no man ever saw 800 finer beeves than they made, bred, raised and fed by one man, on one farm of 18,000 acres, in Central Illinois. Why cannot such stock be raised, just as well as scrubs, by spaying up to it in a few years time, and live on the fat scrubs for beef, until the scrubs are all consumed, and this land as cattle breeders be known as the wonder of the world. All make both more milk and more money by judicious spaying.

MISCELLANEOUS TALK TO STALLION OWNERS

I was passing near Waterville, Maine, in a buggy several years ago, with Dr. Wm. Fairbanks, V. S., of Augusta, Me., when a voice was heard, "Hello there?" I looked out and a man asked "is Farmer Miles there?" I said yes sir. He replied, "drive in, I want to see you." We were now at C. H. Nelson's Steed Farm. Mr. Nelson said to four men "Boys, hook up Nelson, I want the greatest castrater in the world to drive the greatest trotting stallion in the world." Saying to me "Farmer Miles, Nelson's — 61 —
record as a stallion is 2:09 3/4, and I was offered $100,000.00 for him lately, but won’t sell him. You get in that buggy and go where you please, but don’t you let any one pass you.

I drove Nelson about two miles and returned, feeling I had lots in my care just then.

I was also told that Nelson was booked to be bred to thirty mares that season, at $750.00 per mare. In my absence the twenty-second mare arrived at the stud to be bred. The four grooms soon had the harness off, Nelson rubbed dry and slicked up in good order. In that time the mare was tried by another of Mr. Nelson’s four or five stallions, and found to be ready to be bred. She was then tied firmly by the halter in a triangular stall that was well padded on three sides, then, after a good set of hobbles was placed on her, to prevent kicking, Mr. Nelson ordered the groom to bring Nelson to the breeding room. I stood by with Dr. Fairbanks and saw the performance, after which Mr. Nelson said to me “Farmer Miles did you see what I did?” I answered, yes sir, I did. He asked me what I thought of it. I said I never saw any thing like that before, I would thank you for a reason for all your trouble.

**THE MODUS OPERANDI**

When the Stallion leaped on the mare’s hips a groom on the off side caught her tail and pulled it out of the way, to the right side, while the first groom held the mare by the bridle, forward. Mr. Nelson grasped the penis from above with his right hand, about seven or eight inches from the end, not closing his fingers all around or under the penis, but let the horse use about one-third of his penis only.

Mr. Nelson then said, “Farmer, you see that Nelson has
a long rod, and for years was not a sure foal getter, but since I have adopted this rule eighty-five per cent of all the mares he serves, have colts."

I believe Mr. Nelson's theory is correct. I have repeated this (Nelson) practice to several large breeders since, that told me. "I now know why one of my best horses was a failure as a breeder, he was almost barren, also saying he had the longest rod on him you ever saw." Again I personally knew of several mares, bred year after year called barren, but, when let run with a young stallion colt out in the pasture, that bred without trouble. That I believe would always have remained barren if hampered and hobbled and helping the horse to pass beyond the proper limit. That, a mare can prevent when loose in the pasture, by stepping forward.

I have owned ten or twelve stallions and seven or eight jacks and several times, just as the stallion was getting off, it looked as though all of the semen was spilt on the ground. I said to the groom, write on the stud book for that mare, that all spilt out, and let us see the results. Each mare stood from the spilt covers, to my surprise.

I now remember that the jacks had all advantage of the mare in the stocks, and universally a long root, and went too far and did not prove sure as stallions do. I think that was the cause of failure. I feel certain that mares will all step forward, when loose in the lot, when the horse or jack on them hurts them by going in too far; a violation of animal nature and costly to the owners.

Western and Texas Cavelry yard studs are good herders, they keep their bands together on their own range near water; owners know where to find them, but he may be the
worst scrub in the lot. The owner wishing to breed to a better and larger horse sometimes lassoes that little scrub stud and split his sheath, three or four inches long, back between his testicles and push his penis back, and put the end through this cut, downwards, so he cannot draw the end back into the sheath proper.

Then when a mare comes in season he will mount her frequently, but his penis points downward and he cannot serve her. While so doing the owner or herdsman out on the ranch can see what is needed; will drive the whole band of horses into a yard and separate that mare in a pound to herself and then turn his better stallion in with her, and after service let her go, &c, &c, &c, until the good stallion has served them all; in the breeding season, then lasso the scrub and replace his penis until spring again.

I am told one of the little scrubs will whip and drive clear away any large well bred stallion. I was also told that strange mares, lotted one night with the little scrub are so subjugated and instructed in the law of wild horses that she dare not desert his band, under penalty of being severely whipped by him, as the king. In this way cheap horses are raised on the range, south and west, at almost no expense, but are also almost worthless, except as herding ponies; are born wild, live wild, die wild and are dangerous to handle: are not worth the cheap grass they eat. If Congress did not have its hands full now, I think war should be declared against all such scrub ranch ponies and the wolves and coyotes, of our western grazing lands, by killing the meanest ponies first, and sprinkle strychnine on the flesh and call the wolves all up to dine and die, and so on, until such destruction would stop for want of ma-
terial to destroy, and let lambs and wool grow on the grass now wasted to feed worthless scrub ponies.

**DOGS**

Why castrate and spay dogs, as a rule, and breed the best; but cut and spay the scrubs?

1st. Because they kill sheep and chickens, and sometimes people.

2d. Because they are frequently a nasty, noisy, nuisance.

3d. Because that would improve the breeds greatly; rid the country of scrubs and cur dogs and diminish hydrophobia.

4th. Because it would diminish the dog tax greatly.

Then how would we get dogs after the old cut ones die? As water seeks its level so would demand be supplied, and that of pure breeds in due time, and profitably. If dogs became scarce, dog farms, as now exist in Maine, would start up, with such breeds as demands called for, only.

I don't know, but the state legislatures would know how to charge a large license on breeders; nothing on cut and spayed ones, or pups under three months old. The breeders would all spay or castrate pups then, before sale, with but little trouble. Like farmers formerly did cut and spay all pigs for pork fifty years ago, and just as easy, when they know how to do it.

Who would go to all that trouble?

I think plenty of men would make a business of it. As soon as the law said: *Cut and spay, or kill all dogs, or pay a breeder's license*, men, I think, wanting work, would cut dogs for twenty-five cents or spay bitches for fifty cents, and would be glad to look after all such jobs and would
report delinquents liable for breeder's fees, until not one was left but breeding dogs and bitches, and cut ones. The breeders to be kept in at home as stock are.

Who would this benefit? I think, any town, county or state. "'How?'" Like anything first-class is better than second-class.

Shepherd dogs in Scotland are first-class and instinctively take to helping with stock. A well-bred rat terrier will work at his calling when other dogs sleep, and so on. All kinds are needed, but demand for cut or spayed pups of the various breeds will regulate itself; fox hounds will be bought for their work as pointers for birds, but all well-bred and naturally true to their trades.

What are the dogs you speak of worth?

I have heard of sales from $10.00 up to $500.00, but have seen many that $50.00 would not buy; should sell as high as cattle do, if bred to perfection in their breed.

What would a man take for a spayed bitch that his children loved, that would plainly tell him of a thief in his house at night, and that you could depend on to bark if the house was on fire, or would swim in the water and save your child? Many well-bred dogs do such things, but if not castrated or spayed they are naturally too nasty.

"'How' does castration change their nature? If done when young it stops the growth of sexual organs, and of their licking them to keep clean. It stops the male dog also from sprinkling articles of food and clothing when he smells that some other dog has sprinkled there before him.

Wm. Whitely, of London, said to have the largest store in the world, had hitch racks for dogs near each door, with plain posters saying: "'Dogs not admitted.'" For he knew
these nasty sprinklers would damage much goods by stains in his store. But worse still: A gentleman in London told me he saw a nice looking lady leading a pet poodle on a main street, five or six squares from her home; she stopped a moment to look in a show window; when she started to walk on, her little Dolly could not lead—a larger dog was trying to pull the other way, and you can imagine her mortification in a crowded street. Probably $100.00 would not have been thought of as the worth of Dolly. To let go was to loose Dolly and a $20.00 chain and collar, besides, when fifty cents spaying would have saved all this shame and made Dolly a canine lady pet, for ladies and little children to play with on all occasions.

I practice what I preach. My dogs for the past twenty years have been spayed bitches, are clean and nice, never go off, don't smell doggy, don't want to play with common dogs, would prefer children's company. There are more spayed bitches in this county than in any five counties in the state. Try it and you will keep no others hereafter, unless you should get part of your farm fenced with high woven wire, and try to raise about five hundred pups a year of the royal stock with long pedigree. I have heard that a box of monkeys was a funny lot, but I think fifty two-months-old pups, in a pound, would be more interesting to me, especially if some gifted trainer had them broke to work in their line, as trainers break colts to do, or go in their line of pacing, racing or to light harness. I mean the best, first, last and all the time. The world buys our horses and cattle why not induce them to buy our dogs. All Englishmen like dogs, even Queen Victoria raises dogs and feeds them well; as regularly as we feed horses. The
Queen's kennel is noted abroad for fine dogs.

Again, dogs and bitches, castrated, do not have an appetite for sexuality, therefore do not complain for dog company and howl and bark as those with the old nature, and get in some kind of mischief in the night when people want to sleep. Again, worthless dogs are worthless, why allow them to accumulate? They are like weeds in the garden; consumers of what vegetables need and not liked or used by anybody, but liable to spread hydrophia and kill you or your stock.

Lastly. I have seen blood hounds used to track up thieves, and believe that each county sheriff should keep two or three well-bred blood hounds that would follow up any robber or thief from your house, and land him where his steps stop, and there find both goods and robber and stop much out-lawry, in fear of the sheriff's dogs.

FOR PASTIME

If you do not object to reading of some of my travels and trials. I will try to tell you a true account of my first trip to England as a farmer and citizen of Illinois:

I got an invitation from a noted Veterinary Surgeon, of London, to visit him in 1877. I felt somewhat flattered to go so far as a castrator and said yes. The Russian and Turkish war prevented me from meeting the gentleman, Geo. Fleming, for he was needed in that war with the Queen's life guard horses. But, one year later, October 1878, friends in New York City urged me to go. I boarded a steamer with my board paid across, but instead of getting fat I lost all of my fullness, and for nine days a sicker child you never saw, but landed at Liverpool alive and thanked the Lord that it was no worse than it was. I soon got the
cars and in ten hours reached the Langham Hotel, London. I took a good room, and took a bath, and in that bath I took a chill. I rang the bell, the waiter came, my jaws seemed locked but I said, "A glass of Bourbon." Something was brought and swallowed; in time the fire burned in my room, and the spirits got in its work going through my empty stomach clear down to my toes. I next called for the dining room; between table d'hote and table feed, I got my fill and the next day called and paid my bill and found it took just $6.00 to eat one day when hungry. I had a letter of introduction to my man and took a nice cab and spent the day looking over London for him. I had the wrong numbers by ten too much on the right street. I at last found his office and heard that he had been married two days and was in Scotland, to be home in a month. I soon found a hotel near his office. Among strangers. Was I lonesome? I should say so. What to do I did not know. What would you have done? I did nothing for a week. Why? Because I could get nothing to try to do, and I always since that pity a foreigner.

Hurriedly, as I left New York City, the editor of Wilks Spirit of the Times handed me a letter of introduction to Mr. Geo. Fleming, also a V. S. editor. In Mr. Fleming's absence in Scotland I sent this introduction to him in my letter.

Friend, I want to ask you a question right now, just for pastime: What would you think the editor of the largest horse paper in New York City would say to the editor of the largest Veterinary Journal in London, Eng., as an introduction for a free-born American, as a specialist? The letter was not sealed and I read it and came very near tossing

— 69 —
it in the ocean. Guess again. No, he did not say that. Guess again.

MR. GEO. FLEMING, Esq.—Let me introduce to you Mr. Farmer Miles, an honest man. Any favor you may show him will be appreciated by me.

Most respectfully, GEO. E. BUCK.

I mailed that, the only written introduction I ever had except one no better in London, in my letter to Scotland, and soon found he received it by a reply.

All Londoners seemed strangers to me, and as I thought, wished me to be a stranger to them or leave there.

I felt lonesome of course in not meeting Mr. Fleming, and getting him to say in his Veterinary Journal that I was visiting him, and friends wishing my services would please call on him at once. So to pass my lonesome hours away I wrote six pages of foolscap, took it to a printer and had 2500* printed and mailed to the Veterinarians of England, Ireland and Scotland and some in France. The next morning my landlord said to me, "A gentleman in a cab, at the door, asks for you." I walked out to him. He said, "My name is Pritchard, I stop at the Veterinary College," and further said: "I got a card from you last evening; no I mean a circular, with your address. I am anxious to make your acquaintance and have come by to see if you wont eat dinner with me some day. Will you, please." I answered promptly, yes sir, if you have more to eat than you can eat and want help I will help you. He next asked what day I could come. I said any time. "Could you come to day?" I said yes sir and asked the hour he dined, he replied "From half-past six to seven." I said Oh! Oh! I don't know that I can wait that long for dinner. His horse was restless

— 70 —
and fretting to go and we parted. At 6:30 p.m., I stood at his front gate. His house was a large brick on a hill; his yard fence was a heavy brick wall about sixteen feet high, in that wall was a heavy door or gate, by which, on a plate of brass was written plainly a bell knob opposite each. I pulled the knob for visitors; the door opened and a servant faced me. I asked, is this where Mr. Pritchard lives? With an emphasis he replied, "This is where Prof. Pritchard lives." I told the servant I did not know about the 'Prof.' but was invited to dine with him. I was shown into the library to await Mr. Pritchard’s arrival. Fifteen minutes later when the door opened in walked the gentleman and took me by the right hand cordially, and with his left hand grasped my wrist and said, "Farmer Miles, I am glad to make your acquaintance indeed, take a seat." I did so, and looking around his large library said, Mr. Pritchard this is a large house you have; how much of a family have you? "I will show you" he said, and stepped out and soon returned with his pretty lovely wife, saying, "Mr. Miles, Mrs. Pritchard" and I took her by the right hand and caught her wrist and said, I was so very glad to shake hands with a lady once more, saying I had left home and family two months ago and had been with strangers ever since. Then Tony a little skye terrier was presented and the Professor said "They are all of my family." I replied, not numerous Professor, but lovely as far as they go.

Dinner was waiting and I was invited to the dining room, and seated to a large table full of meats, vegetables and other good things, lacking cake and pies only. While the Professor carved the roast pheasant and a quarter of lamb and put on my large plate more than I ever ate in one
day, two nice looking white men as waiters, with white aprons and white caps on, attended us, the first placing my bountiful plate before me. The second waiter placed three wine glasses and a goblet before me, and filled my goblet out of a bottle; it looked like water. He then did Mr. and Mrs. Pritchard’s likewise. In that time I had tasted from my goblet and found it sweet and delightful and drank half of it, the waiter at once returned and filled it again. I was so delighted with the company of Mrs. Pritchard and not thinking nearly emptied my goblet the second time. When the waiter returned to refill it I put my hand on his arm and said, hold on Mister, I don’t know what this is; perhaps I have enough. I held him away but he stood there until I took my hand from his arm, then refilled it, full. After as pleasant a dinner as I ever had, we retired to the sitting or family room and their questions kept me talking all the time. I looked at my watch and was so surprised that I asked Professor Pritchard, what time is it please? ‘Oh it is early yet.’ I said I did not ask you that, what time is it please? ‘Eleven, only,’ he said. Will you please give me my hat and cane? ‘Oh it is early yet’ said he. Yes sir, but I make it a rule not to talk people to death the first visit, and would not sit down. I got my hat and cane and bid them good night, and started to walk about a mile, I now think I was entirely sober, but if some of those lamp posts I passed could have spoken, that we would have had an argument right there.

I got to my hotel nicely; slept well and felt happy that I had found such nice friends; my lonesome blues had taken wings and gone. At breakfast my landlord handed me a letter; I opened it and read: ‘Farmer Miles, dear friend—
I have just met my most intimate friend; he is very anxious to meet you. Won't you please dine with me today and meet him? I took that letter to my room and in answer said: Prof. Pritchard, yours of this a. m. at hand. As long as the grub is as good as it was last night you can depend on my company at any time.

I rang the same bell at 6:30 and was taken to the family room and enjoyed Mrs. Pritchard's company for half an hour, when I was introduced to Dr. T. W. Talbott, one of London's best veterinaries.

These two gentlemen were to me as brothers from then 'till now. Friends in need are friends in deed; I then understood.

Prof. Wm. Pritchard, head of the great Veterinary College in London, took me four different days out in the country; one time about eighty miles and introduced me and saw me operate. He had over two hundred students in the college. Prof. Pritchard always paid the bills at all times and exacted the strangest favor of me you could think of. If you are not tired I will tell all about it: These 2500 circulars I sent to all Veterinaries and some Lords were offensive there; many said, "The worst Yankee, the biggest fool and the —— liar of them all is in London now, pretending to cut ridgling horses; it never was done and how can he, a farmer, be so smart?" I think it was our third day out and eighty miles away; Prof. Pritchard introduced me to ten rich veterinary gentlemen. Quite a lot of others collected to see this American Farmer handle five large ridgling horses; one seed only could be seen or felt. I soon got to work and did two nicely at $25.00 each. I then said, come gentlemen this is not fair, I am a cripple and this is
hard work; I will give either one of you $25.00 to do the third one while I rest; take my rope and knife and go ahead. Prof. Pritchard saw the point, turned his back on me and ha hawed out loud. He then said to Mr. Brown, V. S., one of the ten invited friends of his: "Brown, you never made five pounds in five minutes in your life; do one and rest the gentleman." Mr. Brown replied, "I believe not now Professor," and they all ha hawed. I acted astonished and said, this is the strangest crowd I ever saw; that none of you want any money. If you will go to America and offer any Yankee $25.00 for a nut out of a horse like one of these, I think in ten minutes he would show you the seed or paw a bushel of guts out of the horse. But instead of hearty ha ha's the music now was screams and howls and sitting down on the dirty ground in mirth.

I called the groom with the third horse, saying, come on, they won't help us, let's go on and get done. And I did the third, fourth and fifth ridgling. These doctors had the time and agreed on one hour and six minutes. While collecting my ropes and instruments Prof. Pritchard was collecting my pay and handed me $125.00, which he called twenty-five pounds. We washed some at the barn and went to the house and re-washed and took some wine. I talked much more than my share to answer questions. After a splendid dinner and drinks of more kinds than I had ever seen on a table, with two hours more talk and our train coming, these ten veterinary's thanked me for the most pleasant day they had spent in a year, and all said, "I will collect business at my place for you, and want you to come the day before and spend the night with me." I said to all I will be much pleased to visit you at any time, when $100
follows it.

When on the cars for London that day, Prof. Pritchard asked that strange favor of me; he said, "I want to ask a favor of you." I said, anything in my power Professor is granted, what is it? He said, "Promise me when you are surrounded by Veterinary's in England like you were today and have ridgling horses to cut, that you will not get done before you stop, and offer any of them £5 to do one." And because of that promise I made the offer all over England, Ireland and Scotland, but never found a man that wanted any money on such terms. But I heard much laughing over it, &c, &c, &c.

QUESTIONS, ANSWERS AND EXPLANATIONS

Q. Why do some colts swell more than others, all cut at the same time and way?

A. (The serum) or drip cannot get out and the parts fill up with bloody water, for some men cut a four-inch gash well forward on one side and only a two-inch gash well back on the other side; the two-inch cut, far back, will shut first and swell most every time.

For example, two plain cases: I cut a nice two-year-old colt for Capt. A. Hulse, East Nantucket, N. Y. I made both cuts alike four inches long, well forward; put my chain over both seeds at once; lifted both seeds side by side three inches up with colt on his back. I had plenty of time and good help. I took both seeds off at once, side by side. Five days later I happened to pass there and saw that colt, he was swelled badly on one side and not any at all on the other side. Because the Captain thought as I took both off at once, I took both out of one gash. He was instructed to open that colt twice a day three inches up for five days. He
did one side that way but the other side was not opened at all, but was grown up tight and swelled badly. The other side had no swelling at all. Remember this was five days' neglect on one side.

Now let me tell you of a one day's error: I was called by both letter and telegram, from New York, to come to Babylon, L. I., to alter a colt that Dr. Clock, V. S., tried to alter and found two cords in the groin, but no seed. A fine colt in a bad fix.

That was the worst swelled yearling in one day's time I ever saw. Please notice particularly; Dr. Clock is a good veterinary and a nice gentleman, but was not in practice castrating, and cut five inches further back than I would; then he failed to recognize the testicles that he held in his hand all the time in the cords, as he called them, and felt and gouged around in the colt's groin one hour and ten minutes, so good witnesses told me when I cut the same colt twenty-four hours later. Swelled as large as a gallon jug; stiff and sore. Dr. Clock soon found the tunics, but failed to recognize the undeveloped testicles from his cuts, so far back. He held the testicles, tunic and all in his hand, pulling and squeezing them and the colt struggling one hour and ten minutes and gave it up.

I tied that stiff colt; pushed him over gently; turned him on his back, saw the seeds, and tunic not split, all red and inflamed, and two pockets of serum near the end of the sheath. I first split his gashes, from the front end on forward about five inches, put my ecraceur on both testicles, striffin (tunic) and all, and gently lifted up three or four inches, and bit both off. If Dr. Clock had have cut as much in front of the testicles on the sheath, as he did be-
hind the testicles there would have been no swelling, for
the drip would have dropped out, but he had two deep pock-
ets in the sheath and felt all up and in the groin, and all
lacerated parts shed blood or serum or both, to be caught
in the sheath pockets and soak through the tissues as water
soaks in a sponge.

Q. Does everybody open colts?
A. No; but that is best for both colt and owner.

Q. Why open cut colts or stallions twice a day for five
days when you see they do drip right along?
A. To commence the first two or three hours after and
slip two fingers up full length and open them well does not
hurt the colt then, and lets out all accumulation of serum;
to repeat that twice a day hurts but little and you are sure
to have no swelling. But let it alone while the drip comes
for four or five days, then try, and you hurt the colt in
tearing open the adhesions; you are too late to stop swell-
ing, for the serum has lost its outlet and has spread out in
the sheath. It is too late to get the swelling to drip out
after it gets hard and hot, and feverish. Nature's way is to
make the parts hot and cook this serum down to pus (as we
boil maple sap down to syrup); it comes to a head like a
boil and breaks and runs out as pus. We want to avoid all
that pain and fever to the horse; it is easy to do and more
than pays for all trouble. Anticeptics are good in opera-
tions but I think to keep wounds open until the drip stops
is the the best way—for about five days.

Q. How long does it take for colts to get sound and
well after castration.
A. Any and all colts and stallions, opened properly,
should be entirely well in ten days.

— 77 —
MILES' STRING ECRASEUR FOR CASTRATING (DIFFERENT SIZES)
Q. Do you like the ecraseur best?
A. I like that principle the best—a crush off. But I make and sell for fifty cents each, a string and ring ecraseur that works like a charm. Farmers need no other ecraseur to castrate colts, stallions, rams, old bulls, or to crush any artery with once or twice one-half inch apart, then cut off with knife or scissors still nearer the seed.

Nothing else does better work and costs so little as this string ecraseur, but Veterinarians like more show of costly instruments.

Q. What else does a man need to cut his own colts with, your way?

A. I think two or three or more neighbors, between them, should have a good set of my Ropes and Hobbles........ $5 00
One String Ecrazeur........ 50
One long Spaying Needle. 1 00
One Hook Knife (at least) 1 50
My book to tell how to work 2 00

$10 00

And have the ropes convenient in case you want to cast a
horse or cow with a nail or snag to take out, or to cast and
gentle any wild colt with and break it without getting hurt,
and make that wild colt safer all its life. To be cast easily,
tied properly, rolled over and over and perfectly conquered
at first is the best.

I handle all wild horses best by casting them and re-
casting and sitting on them with robes or blankets and get
the fear all out of them.

My ropes are the thing to cast a cow or mare with in dif-
cult labor; turn them on their backs well tied and push
the calf or colt forward to get room; to get the head or legs
in position and no one get hurt. Many times such ropes
are badly needed if bowels are snagged and out; to cast a
large bull, or spay cows and heifers; to cut a wart off of a
kicking horse or cow. Casting them is the best way, when
it can be done so easily and safely, as this book plainly tells
you how to do it.

$10.00 is very little money for what may save you $100
a year, and still be worth ten times their cost annually.
Five men can pay $2.00 each and save all costs the first
year and do safer and better work than you can hire it done.
Do it yourselves.

Q. If a man wants to see this fellow that does all this
talking do the work, how can we see him?

A. Only get him five or six bad ridglings to cut, near
you, and write him.

Statistics of Agriculture for 1892 tell us that the United
States had
15,498,140 Horses, at $65.01 each.........$10,075,936.36
2,314,699 Mules at $75.55 each............. 1,748,820.70
16,416,351 Milch Cows, at $21.40 each..... 3,513,781.32

— 80 —
37,651,239 Oxen and other Cattle, at $15.15. 5,707,491.55
44,958,365 Sheep at $2.58 each. .......... 1,161,212.90

Let us figure a little on our horses and losses.

I am confident one in every twenty head has to be castrated annually or 774,907 in number, and that six percent (by the old) methods die, entailing an annual loss of over three million dollars, taking the value at $65.00 each, as estimated in government statistics. I am sure by my improved methods that one half of that loss can or would be avoided annually and better methods adopted all over the country, for all time to come.

Q. Suppose I buy your book and ropes and cannot do good work.

A. Anybody, anywhere, can get a visit from me, or one of my pupils, at his home by talking up a lot of such work as he thinks he cannot do himself. When we do it he will see it, and talk it, and help to work; then, if he cannot he had better sell the book at cost and quit trying.

Q. What do you sell besides the book?

A. Everything required and shown in this book such as I use and my pupils ask for.

I have castrated and spayed stock almost all over this country and know that most of the work is done poorly, by men who never did know how to do good work.

I know many men like Dr. Clock that don’t know how; and should not try, until they do know more in this line. I know their work for I have to cut what they fail on; that tells me what they don’t know.
TO THE PURCHASER

DEAR SIR—Your book will show, and tell you plainly, the ropes and instruments I use and like best. But it may not be convenient for you to buy such things at your home. Or you may not have leisure time to put your ropes together as well as we do it; for we make them here to sell to our pupils, at the following prices:

1 set Farmer Miles' Castrating Ropes, consisting of
   1 Back Rope 16 ft. long 3/8 in. best cotton
   1 Circingle 8 " 3/8 " " "
   1 Chin Rope 10 " 1/2 " " "
   2 Knee Ropes 7 " 1/2 " " "
   1 Nose Twitch, wood, flax thread filling
   4 Hobbles of Flax Thread . . . $5.00
Farmer Miles' Ecraseur, metal . . . 15.00
Farmer Miles' Best String Ecraseur, for all Farmer's Castration . . . 5.00
Farmer Miles' Four-Bladed Castrating and Spaying Knife, two Hooks . . . 5.00
Farmer Miles' One-Bladed Hook Castrating and Spaying Knife . . . 1.50
Farmer Miles' Long Curved Spaying Scissors 6.00
Farmer Miles' Spaying Needle (curved) six inches long, this is the best Needle known 1.00
Farmer Miles' Spreaders for Ridgling's Legs 5.00
Sixty-five feet five-eights inch Best Cotton Rope, with Double Snaps and Links, for Ridglings work only, . . . 4.00

— 82 —
I send you this list, not that I am a merchant, and want your trade, but just to help you along right, if you should need my help.

Again, I say, if you would rather buy than make your own outfit, or part of it, look over these articles and select what you need, and name them separately, and the prices to each, and then all, and send me pay for them in P. O. order or registered letter, and be plain in your name, town and county, and you will get the goods promptly, unless we are out and have to wait a few days to have them made; but I will try to keep a supply on hand all the time.

Yours truly,

FARMER MILES.

Charleston, Coles County, Ills.