

## IMAGE EVALUATION TEST TARGET (MT-3)



Photographic Sciences Corporation


# CIHM/ICMH Microfiche Series. 

# CIHM/ICMH Collection de microfiches. 

Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques


86

The Institute has attempted to obtain the best original copy available for fliming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the isual method of filming, are checked below.

Coloured covers/
Couverturn de couleurCovers damaged/
Couverture endommagéeCovers restored ar :\%or laminated/
Couverture restaurée et/ou pelliculéeCover title missing,
Le titre de couverne manque
Coloured maps/
Cartes géographiques en couleúr
Colourad ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
Coloured plates and/or illustrations/
Planches et/ou illustratlons en couleur

Bound with other material/
Relió avec d'autres documents
Tight binding may cause shadows or distortion along interior margin/
La re liure serrér peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Blank leaves added during restoration may appear within the text. Wnanever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajouties lors d'une restauration apparaissent dans le texte, mais, lorsque cela ótait possible, ces pages n'ont pas été filmées.

Additional comments:/
Commentaires supplémentaires:

L'Institut a microfilmé le meilleur exemplaire qu'il lula été possible de se procurer. Les détails de cet exemplaire qui sont peut-ètre uniques du point de vue bibliographique, qui peuvent modifier una image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Pages damaged/
Pages endommagées
Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
Pages detached/
Pages détachées

Showthrough/
Transparence


Quality of print varies/
Quallté inégale de l'impression
Includes supplementary materia!/
Comprend du matériel supplémentaire
Only edition available/
Seule édition disponible
Pages wholly or partially obacured by errata slips, tissues, etc., have been refilmed to ensure the best possible imsge/ Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure. etc., ent été filmées à nouveau de fac̣on à obtenir la meilleure image possiole.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.


Tha copy flimed hera hss been reproduced thanks to the ganarosity of:

Library
Agriculture Canada

Tha imeges appaaring hara are tha best quallty possibie consicisring the condition and leglbility of tha originsl copy and in keeplng with the filming contract specifications.

Originai sopias in printed paper covers are filmed beginning with the front cover snd ending on tha last page with a printed or lilustrated impression, or tha back novar whan appropriata. Aii otiner origina! copies ara filmed beginaing on the first paga with s printed or iliustrated impreseslon, and anding on the last paga with a printed or Illustrated Impression.

Tha last recorded frame on each microfiche shsil contaln tha symbol - imaaning "CONTINUED"), or tha symboi $\nabla$ (maaning "END"). whichevar applles.

Maps, plates, charts, etc., may be filmed at differant reluction ratios. Those too larga to be antirely Inciuded in one exposure sre fiimed baginning in the uppar laft hand corner, iaft to right and top to bottom, as many frarnes as required. Tha following diagrams iliustrate the method:

L'oxempiaire fiimd fut reprcduit grâce à is génd́rosité da:

Bibliothèque
Agriculture Canada

Les Imeges suivantes ont úté reproduites svec la pius grand soin, compte tanu de ia condition at de le nattoté da l'axampiaire fiimé, at an conformité avec les conditions du contrat de filmage.

Les examplaires originaux dont la couvartura on papior est imprimée sont filmis en commencant par le promiar plat at en terminant soit par la dernidra pege qul comporte une empreinte d'impression ou d'iliustration, solt par la second plat, selon le cas. Tous les autres exemplairas originaux sont filmés an commançant par la pramldre page qui comporte une ampruinta d'Impression ou d'illustration ot en terminant par la dernidra paga qui comporta une telle ampreinta.

Un des symboles suivants apparaitra suc la dernidre imsga de chaque microfiche, selon :e cas: ie symbola $\rightarrow$ signifie "A SUIVRE". ie symboie $\nabla$ signifia "FiN".

Les cartas, pianches, tablaaux, otc., pauvent àtre filmés à des taux cie réduction différents.
Lorsque le documant ast trop grand pour âtre roproduit on un seul ellchd, il est filmé à partir de i'sngie supdrieur gauche, da gauche à droite. ot de haut en bas. on pranant la nombre d'images nécessalra. Les diagrammes suivants iilustrant la méthode.


| 1 | 2 | 3 |
| :--- | :--- | :--- |
| 4 | 5 | 6 |

A

## NEW METHOD

0 F

# BREAKING OXEN, 

## COWS, \&c.,

ARD A BYETEMATRC METHOD OF

## MAKING YOKES AND BOXES.

BY PETER MUSSELMAN.

> VAUGHAN: COUNTY OF YORK. 1867.

Entered, according to the Act of the Provincial Parliament, in the year one thousand eight hundred and sixty-seven, by Peter Musselman, in the office of the Registrar of the Province of Canada.
$\qquad$

## PREFACE.

Some person has said that "a good " book needs not a preface, and a bad " one never ought to be written," but the following pages are purposely written for a special class, viz., my Brother Farmers. I need not fear the criticisms of the "English Bards," and " Scotch Reviewers." It is not composed to instruct in the Arts or Sciences, or for the Philosopher's Studio, or the Dominie's Desk, but a few simple hints, written in a homely style, and compressed into a small compass.

For more than twenty years my
neighbours have patronized me with breaking-in their "Steers." During that long space of time any one of my patrons could have done it as well as myself, if they had spent the same time, patience, and trouble, as it often took he from four to five weeks; but yet I Was considered a good Ox-Breaker.

About two years ago, after long years of practice and deep study, I brought to perfection my present system, by which 1 will guarantee to break a pair of oxen far better in two or three hours than I formerly could in so many weeks.

## TO BREAK OXEN.

## MPLEMENTS.

Two leather straps, four and a half feet long, and one inch and a $\mathcal{N}$ half wide, with holes in each end one inch apart, then two strong buckles, $\wedge$ sewn on fourteen inches from the short end ; also a spring hook for the nose, with a rope about ten feet long, for a halter.

## OXEN TO BE BROKEN.

Now yoke the oxen to bo broken,
and take them to an even piece of ground. Put the halter on the nigh ox. The best way to do so is to throw the rope round the nose, and then quickly place the ring in the nose. If you have not this article, make a halter, and place one of the before mentioned leatbr straps on the nigh ox. (The use of the other strap will be explained hereafter.) Be careful to put the long end on the outside front leg, on the small part, just below the knee, and the short end on the other front leg. You will now perceive the use of the long end. Take a piece of strong twine, and twist it around the double leather, between the bucklc and the

## BREAKING OXEN.

leg of the ox. By this means you can make the strap long or short, and give the ox a long or short step. You are now ready to proceed to break your oxen. Allow them to commence a shor time, according to their own will, to get accustomed to the fettered legs. The principal object now to be obtained is to teach them to "Gee" and "Haw." If you want them to "Haw," strike the nigh $o x$ on the nose, and the off one on the back. They will now come round as long as you repeat the process. Should they be stubborn, shorten the leather-(you will now see the benefit of the twine) and repeat as before to "Haw," but

## 8

 NEW METHOD OFdo not continue too long, every few minutes stopping. Now teach them to "Gee," by striking the off ox on the nose, and the nigh one on the back. Continue this until you think they are sufficiently obedient to command. Get them familiar with what you mean by "Gee," "Haw," and "Whoa."

You can now put them to haul a light load; but should they not be obedient enough, repeat the previous process; and if in your opinion they are wild and stubborn, chain them to a post or tree, previously cut around, about the height of the flan': of the ox, to keen the chain from
rising or falling, and also cut the notch in the post so that the chain may casily slide around; but be careful that your chain is not too long.

Now commence to teach them to "Gee" and "Haw," by using the aforesaid syllables; but in this, as well as in all other operations, be very gentle. Do not lose your temper; if you do, the ox will lose his also. Allow them to stop every few minutes, to reflect on their new and peculiar position. Should they not turn very freely, take your chain from the ring, and place it around the yoke, between the centre and the

10 NEW METHOD OF
bow hole, in order to give advantage to the nigh ox if to "Gee," but if to "Haw" reverse it. After you are satisfied that they are subdued, unchain them from the post, and put them through the same movements without the chain. If they are still awkward, chain them to the post again, and give them another lesson, until you think they are quite obedient.

In order to get them to the right step, again buckle on the leather to the nigh ox, as before, and put them through another training.

The use of the Second Leather Strap.
I would suggest the propriety of
putting the two leather straps on the two fore legs of the oxen you intend to break at least three or four hours before you yoke them, in order to get them accustomed to the step. Entice your oxen to come under the yoke, the first time, by giving them a little salt. Never allow them to walk about in the yoke at large, as it gives them a false step, and bad habits.

I would also add, that, according to my experience, oxen are more docile in the Fall than in ine Spring, consequently it is the best time of the year to break them.

12

## NEW METHOD OF

Great care should be exercised in selecting your oxen to work together, for if one is fast, and the other slow, you will never get a good pair. Your best index is, to examine their eyes. If one has slow, stupid looking eyes, and the other the reverse, you need not expect a good yoke of oxen.

## TO TAME WICKED CATTLE.

To prevent wicked Cattle, such as Bulls, \&c., from attacking persons, or throwing down fences, $\& c$.

Put one of the leather straps for breaking oxen on the front legs of the beast, in the same way you would for breaking oxen, with a ring on the leather, between the legs; tie a rope to this ring, and to one of the hind legs. This rope can be made either long or short, as you may require.



## TO TAME WICKED COWS.

## ARTICLES REQUIRED.

Two leather straps, three feet long, and one inch and a half wide. Two strong buckles on each. Holes about one inch apart, in the ends. The buckles to be sewn on the centreone for the front legs, seven inches apart; the other for the hind legs, ten inches apart. A rope, about ten feet long.

Having the necessary articles, the

16 NEW METHOD OF
first thing to be done to break a cow is, to place the short strap on the two front legs, just below the knees. You can either buckle it short or long; according to the anticipated trouble. Your cow should be either in a large stable or yard. Now allow her to walk about, constantly trying to stroke her, \&c. If she is wild, she will now and then fall on her knees. Sometimes try to milk her. Should she still continue restive, put the other strap, (with the buckles sewn further apart than the one on the front legs,) on the two hind legs, below the knees. Allow her to stumble about, constantly trying to milk her, \&c. Unless she

## TAMING WICKED COWS. <br> 17

is very stubborn, she should be now docile, and stand quiet to be milked.

A cow must be unusually wicked if she will not now entirely give up. But it sometimes happens that they will try to fight; if so, now bring into requisition your rope. First tie it round the hind leg, and put it through the ring of the front strap, which ring should have been previously placed between the two buckles of the front strap. You can now throw her as often as she tries to jump about.

If she is sil 1 stubborn, I would
18. NEW METHOD OF taming cows. advise you to put the long buckle strap on the front legs, and turn her to her pasture or stable, and keep it on as long as you think proper ; but give her a lesson every day.

## TO MAKE OX YOKES

## AND BOWS.

First make your wood eight inches square, and four feet five inches long. Strike a centre line, top and bottom, Make your centre hole, and work the shoulder, ten inches, viz., five inches each side, (that is the bottom side.) Then from the shoulder to the first hole for the bow, six and a half inches, and from the centre of this hole to the other, eight inches. You can now commence to

## 20 to make ox yokes

bore your holes for the bows. First bore from the bottom side, half way through, (with a bevel of half an inch to each hole.) Then finish it with a gimlet, to see if it is right with the centre. Then bore from the opposite side to meet the holes.

Now shape your yoke from the shoulder, for the neck of the ox, a curve of eighteen inches long, cut out four inches deep. Finish your bottom side, by rounding it down to the edges, about one inch and a hot? but retain a proper curve, with the centre the most. Now take the top. From the centre, between the bow holes, hollow each side to the

## AND BOWS.

centre of the yoke, about two and a half inches. We shall now have five and a half inches of wood left for the shoulder piece. Next round your top, to remain at the thickness to the ends of three and a half inches.

To dress your sides, commence with the centre, to four and a half inches of wood remaining at the hollow, and five inches at the top; and the width at the ends, four inches. You will now have eight inches of wood remaining for the neck of the oxen. Take off the edges, each side, but allow to remain four inches standing square at the centre.

22 OX YOKES AND BOWS.
This yoke will suit an ordinary ox. If your oxen are larger, or smaller, so change the size of the yoke, but retain the same proportions.

The bows should be two feet one inch deep, and nine inches wide for the widest part, which should be eight inches from the bottom part. The bows should be brought up to the throat of the ox within one inch.

Yokes should be very short for breaking oxen.

## MACHINE TO MAKE

## THE BOWS.

The wood may be of pine. First, a geod piece of pine, four feet long and eight and a half inches square. Measure eight inches from the bottom, and taper ten inches towards the top, until you have four inches of wood left. Now taper the bottom; until a cord, from the eight inch mark around the end, measures twenty-one inches. The widest part of the wood for the bow will be eight

## 24 TO MAKE BOWS

 and a half inches. Put a piece of leather on each side, quarter of an inch thick, and about two inches wide, on the widest part, that the bow may not bind to the wood.For bending the bow, put two crooks of iron, the bottom one to be five inches from the bottom, and the other about fifteen inches from it, towards the top. The crooks should be two and a half inches wide, with a hook turned half an inch; the top one should be eight inches long, with screws at the ends.

Hollow from the top, two and a

## TO MAKE HOWS.

half inches wide, for a pulley, and to tie the bows at the top. Place your pulley in this hollow, thirtyone inches from the bottom. The use of this mechanical power will readily suggest itself.

Fou now commence to bend your bow, by placing the wood in the two crooks. Take your machine to a post, with the hooks downwards. In order to keep your machine from rising with the force of bending the bows, you must have a pin, or shoulder, to the post, either stationary or moveable. Now tie a cord to the end of the bow, and pass it around the pulley, and commence to

## 26

 TO MAKP BOWS.bend the bow. As you do so, dyive a wedge in the bottom hook, to keep the bow close to the machine. Pull it down, and tie it together at the top.

Now take the bow off, and bend it to its proper shape and sizeeither wide or narrow, as you may want.

Measure eight inches from the bottom, and put a brace of nine, or nine and a half inches, as may be required for large or small oxen. Allow your brace to remain until you find that the wood is sufficiently seasoned.

## TO MAKE BOWS.

- For steaming your wood for the bows, rock elm requires about twenty minutes, with a slow boil. Hickory requires to be boiled slowly for about thirty minutes.


