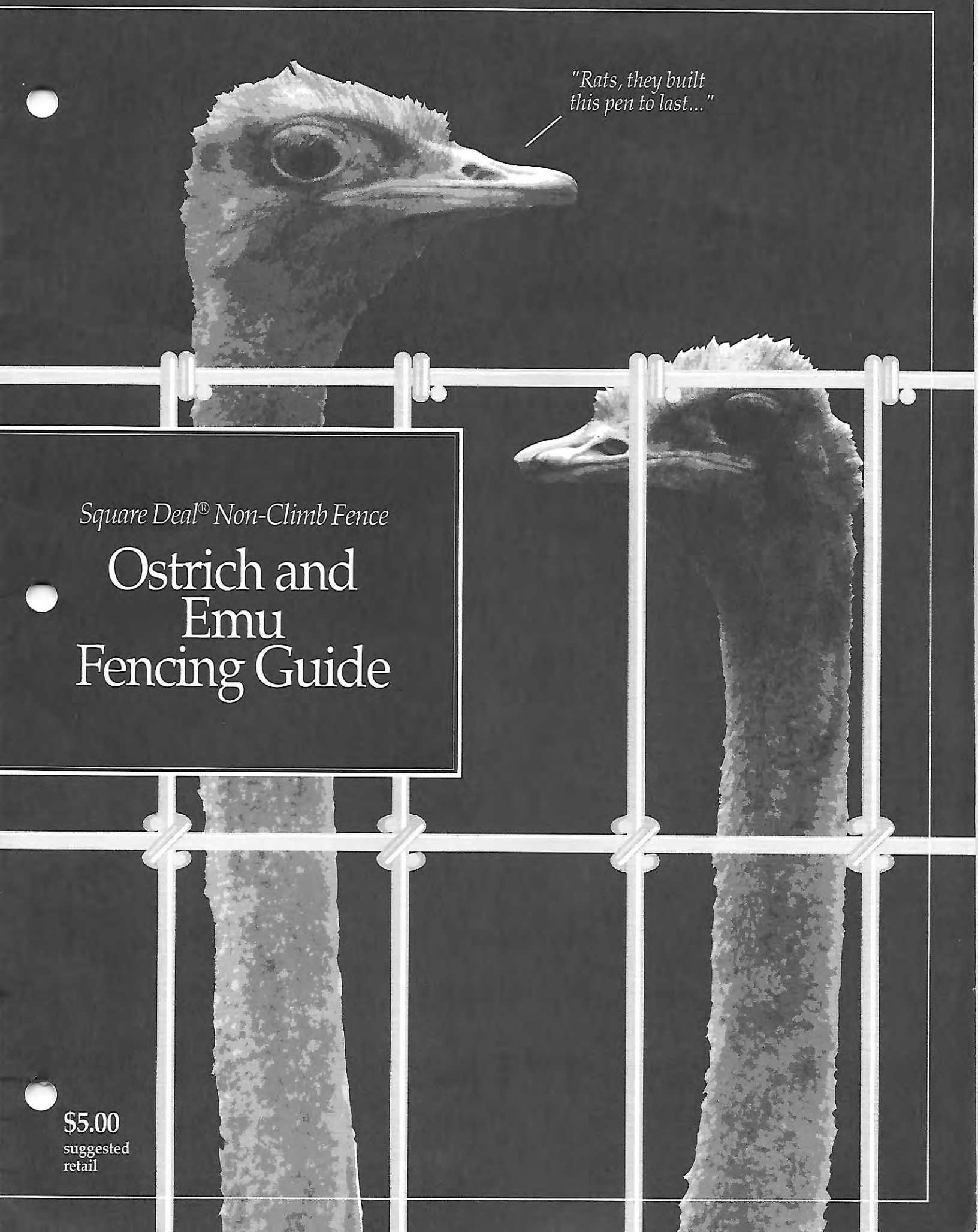


Square Deal® Non-Climb Fence

Ostrich and Emu Fencing Guide

$5.00
suggested
retail

Birds will be birds

"She's only in the next pen. I think I can get there."

And they will test the limits of any fence. Square Deal® Non-Climb Fence stands up to the challenge of providing a long-lasting enclosure which keeps your birds safe and healthy.

Strong, 2" x 4" steel mesh prevents frightened or fighting birds from stepping through, walking down, or getting over the fence. And, it flexes on impact, preventing injury to bird or fence.

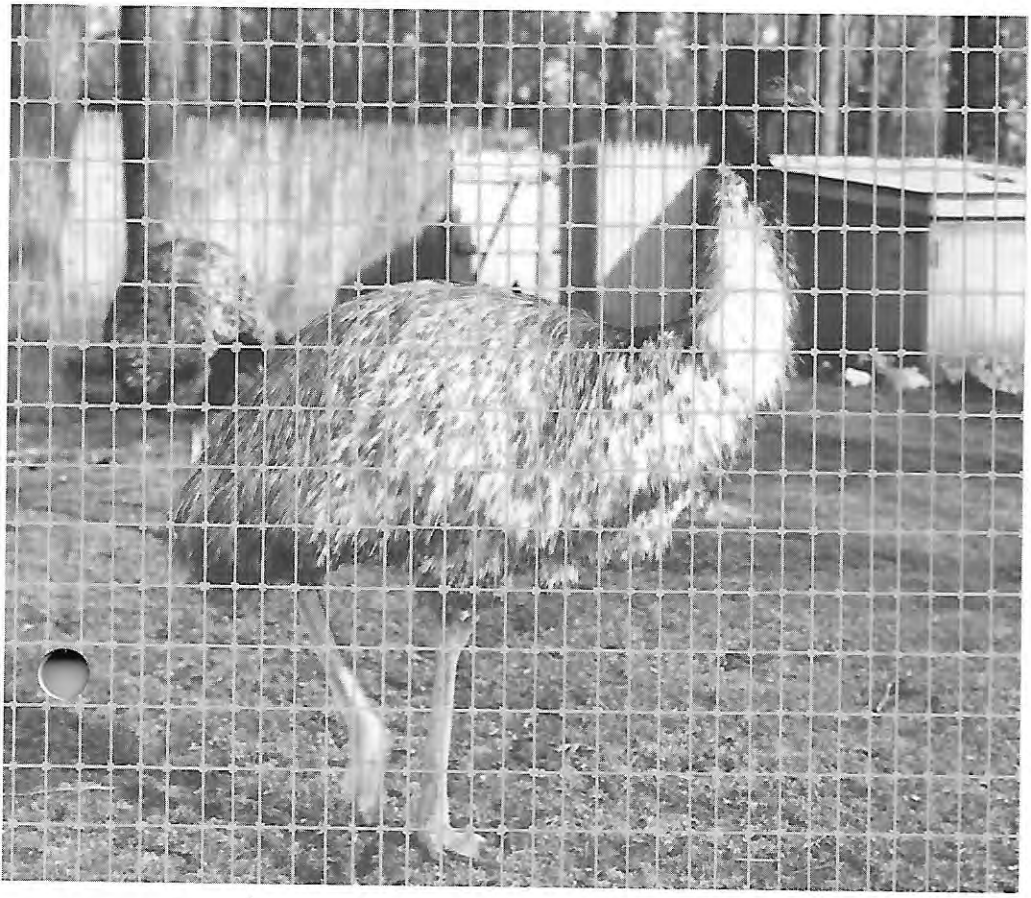
Since fence is woven, not welded, it resists being broken or eaten. When properly installed with smooth side inward as shown on cover, Square Deal knots won't cut or damage birds.

Flexibly constructed fence follows the contour of hills or uneven terrain. Once properly stretched, it won't sag or buckle, providing superior strength.

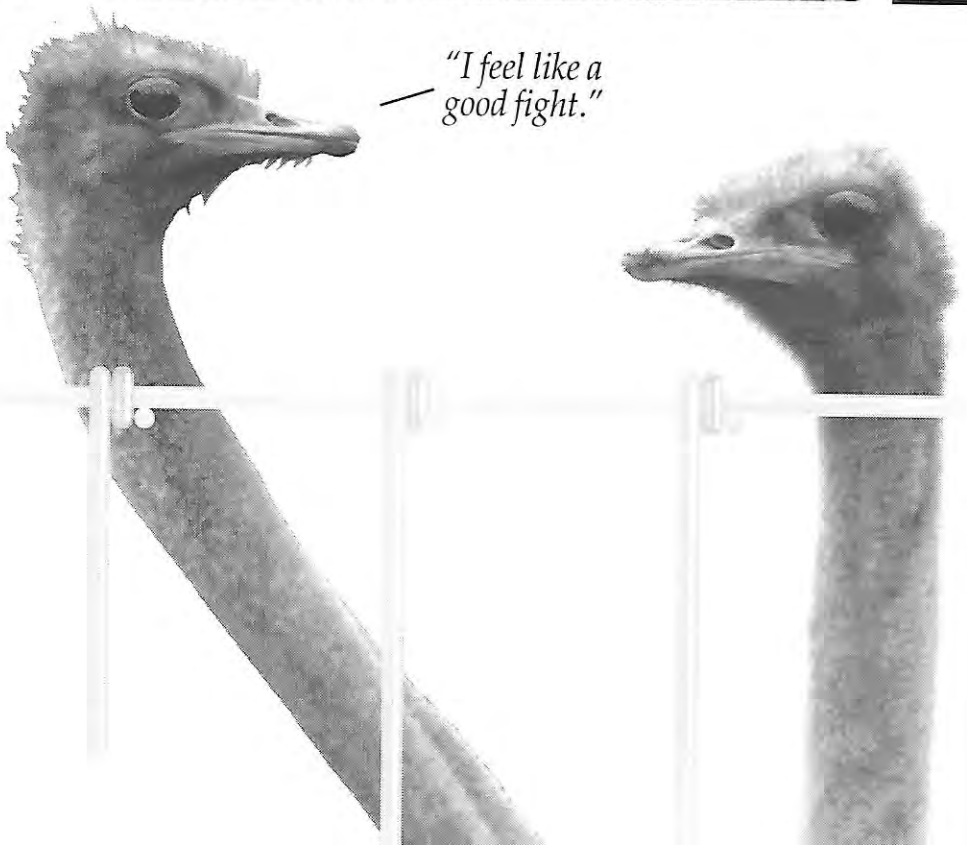
Square Deal Non-Climb Fence is built for years of service with 12-1/2 gauge, galvanized steel line wires and 10 gauge top and bottom wires that withstand weathering and everyday wear and tear.

This guide was developed to help you plan and install enclosures best suited for your birds' safety and unique behavior. If you have questions—or suggestions—give us a call 1-800-447-6444.

For the location of your nearest Keystone dealer, call 1-800-635-7500.



page 4 Planning for ostriches
5 Planning for emus
6-7 Draw your own layout
8 Tools and materials
9 Laying out and setting posts
10-11 Installing your fence



"I feel like a good fight."

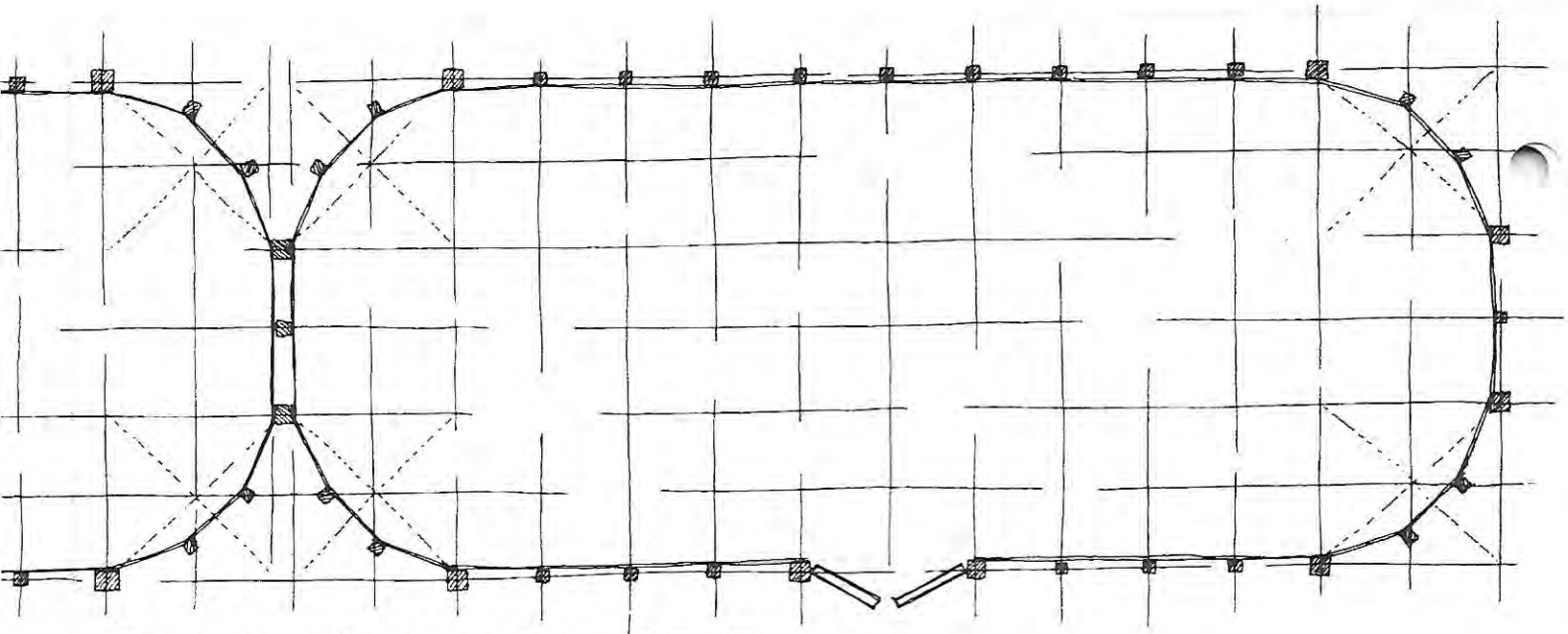


Figure 1. Oval or rounded pens eliminate sharp corners which can injure running birds, a potential problem with ostriches. Squared enclosures may be used for emus. To construct rounded corners, see page 9.

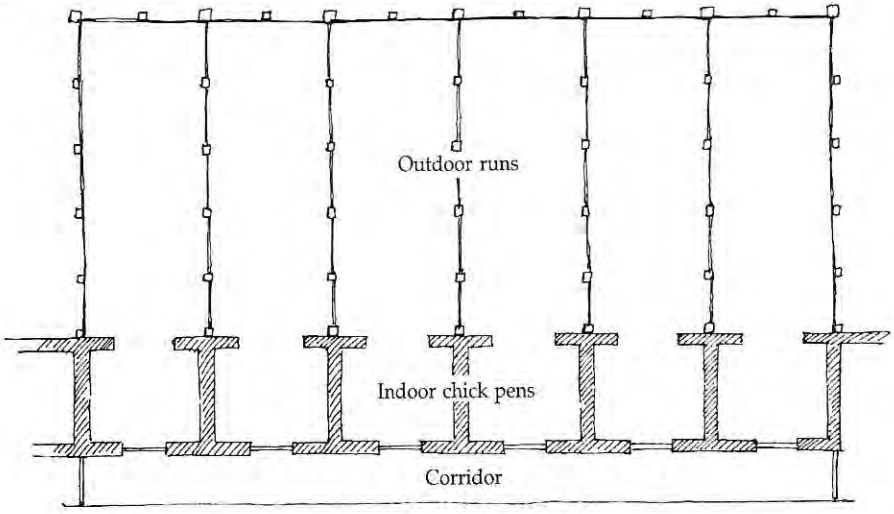
Planning for ostriches

Ostrich chicks

Chicks two-weeks and older should have access to outdoor runs with heat lamps, sunlight, food, and shelter for bad weather. Since young chicks tend to huddle and may smother each other, no more than eight to ten should be together in a pen. Chicks should be separated by weekly age until approximately two months old. Chicks can then be grouped by month.

Since chicks grow very rapidly, gaining about one foot of height each month, enclosures should be large, long and narrow with ample space for exercise. See figure 2. So chicks won't outgrow runs and to provide for interchangeable use, 72-inch high fencing for outdoor runs is practical.

Figure 2. Chick enclosures for ostrich or emu



Ostrich yearlings

Yearlings are decidedly awkward in appearance. When they have lost their camouflage coloring (males turn darker, females turn lighter) yearlings require large areas for exercising and minimizing stressful interaction. They are close to their full adult height of seven to nine feet and weigh 300 to 350 pounds.

Many farmers report that bigger pens eliminate stress and result in higher production of eggs later on. Constructing rounded corners, as described in this guide, also minimizes stress and place for injury.

Ostrich breeders

Sizing a pen for breeding pairs is important. Oversized pens can make finding eggs difficult. Undersized pens crowd these temperamental, aggressive birds. Rounded corners help reduce potential for injury. See figure 1.

Gathering eggs poses its own special set of problems. Luring an aggressive male into a nearby empty pen makes egg gathering easier. Specially constructed gates and corridors can help. See figure 3.

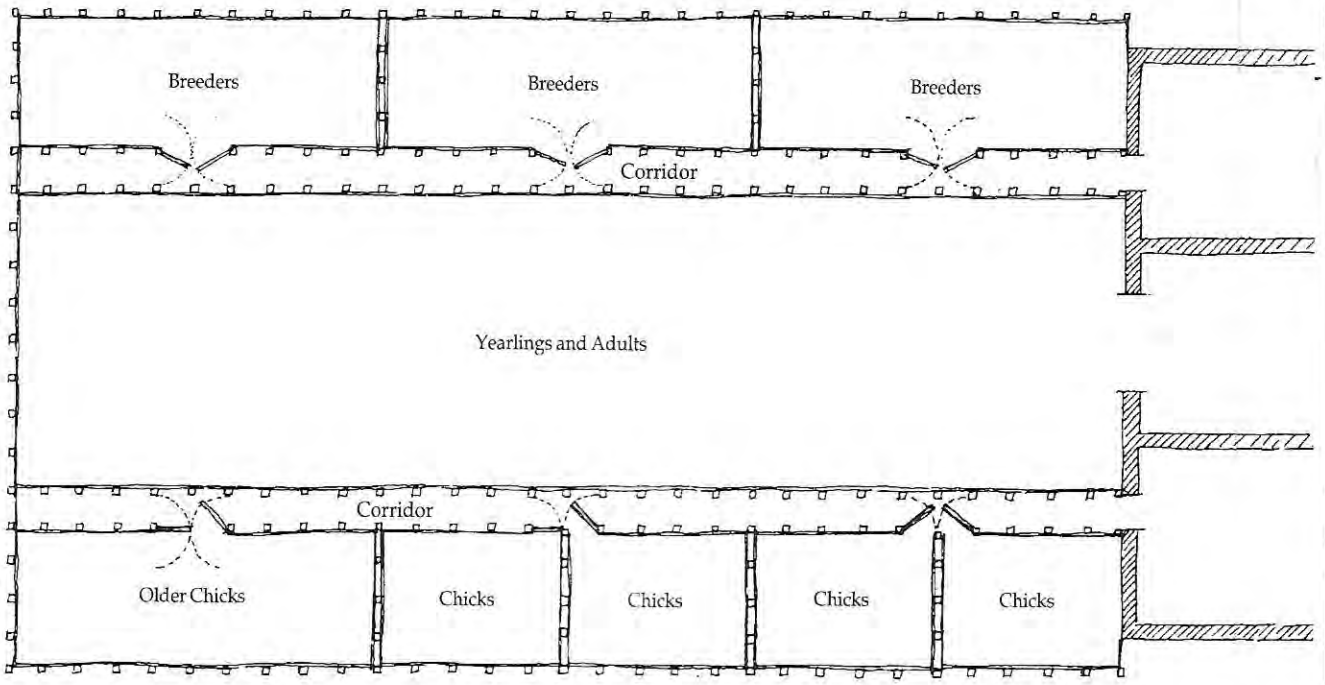
Ostrich pens

AGE OF OSTRICHES	NO. BIRDS	FENCE HGHT.	PEN PERIM.*	PEN ACRES**	FENCE ROLLS
Older chicks	8-10	72"	600'	.5	6
Yearlings	10-12	72"	1700'	3.0	17
Breeders	1 pair	72"	600'	.5	6

*Approximate. Deduct footage for gates.
**American Ostrich Association (AOA) *Ostrich Primer*.
Our thanks also to the AOA for pen layout information.

Figure 3. Corridors between pens give access to birds (ostriches or emus) and help them become accustomed to people. Birds respond well to routines, schedules, and familiar caretakers. Tame birds are better producers.

Gates that open both ways and are as wide as the corridor facilitate transferring birds from pen to pen.



Planning for emus

Emu chicks

Since young chicks tend to huddle and may smother each other, no more than 10 to 12 should be together in a pen. Chicks, two-weeks and older, should have access to outdoor runs with heat lamps, sunlight, food, and shelter for bad weather.

At three months, when their black and white striped feathers turn nearly solid brown, chicks should be moved. They can now run almost 20 miles an hour and may injure smaller chicks.

Enclosures for older chicks should be long and narrow with ample space for exercise. So chicks won't outgrow their pens and to provide for interchangeable use, fencing for outdoor runs should be 72-inches high.

Emu yearlings

By one year of age, emus are generally six feet tall and 90 to 100 pounds. During this formative stage yearlings require abundant exercise for muscle development. Proper pen size is critical. Long, narrow pens work best since emus are fence walkers and don't fully utilize the center of the pen.

Many farmers report that bigger pens are better. If they have more space, emus are less stressed and become more productive adults.

Emu breeders

Pens for breeders must keep birds in close proximity, yet provide space for both aggressive and skittish mating behavior. Long, narrow pens give birds room to move without injuring each other. Since emus are not as aggressive as ostriches, squared corners are not a hazard.

Emu pens

AGE OF EMUS	NO. BIRDS	FENCE HGHT.	PEN PERIM.*	PEN ACRES**	FENCE ROLLS
Older chicks	10-12	72"	300'	.1	3
Yearlings	12	72"	1100'	1.5 - 2.0	11
Breeders	1 pair	72"	300'	.1	3

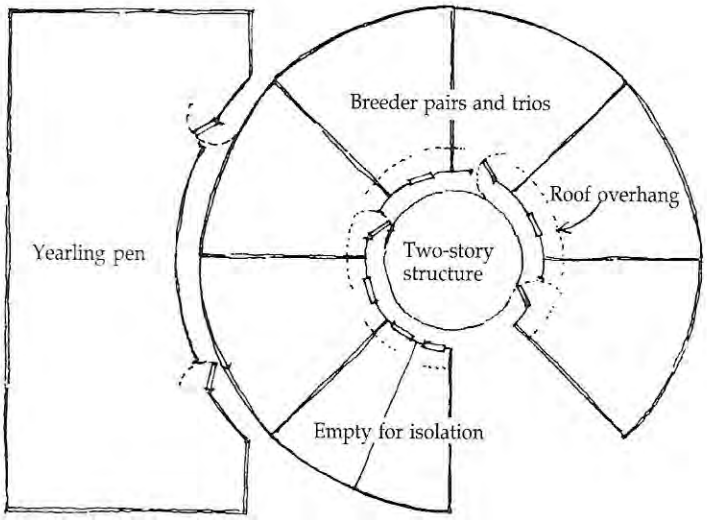
*Approximate. Deduct footage for gates.

**American Emu Association

Figure 4. The "Wagon Wheel" pen layout enables breeders to have close, efficient contact with birds (ostriches or emus) and facilitates feeding and watering.

A round two-story building may be constructed in the center for storage, offices and observation.

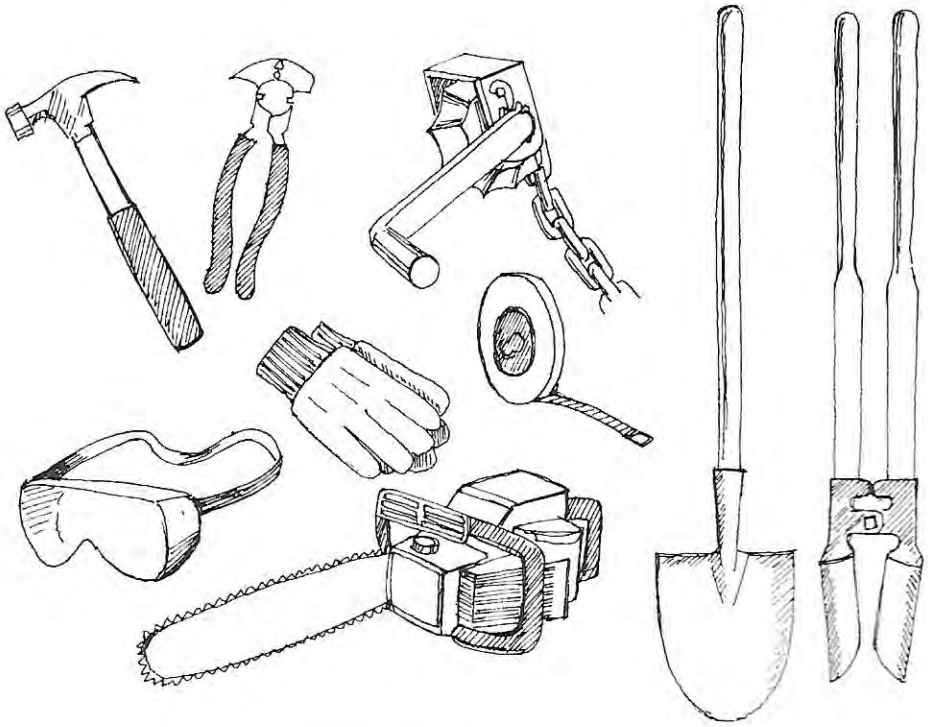
An overhanging roof may protect feed and provide shelter from rain and sun.



Draw your own layout

Keystone Steel & Wire

SCALE: inches = feet



Assemble tools

Ratites are famous for swallowing everything, sometimes with very tragic results, so place assembled equipment out of reach of your animals.

You will need:

- ❑ Chain saw
- ❑ Double jack fence stretcher
- ❑ Fence leveler
- ❑ Fence tool
- ❑ Gloves
- ❑ Grippler tool, if using Gripples (product code #79600)
- ❑ Hammer
- ❑ Keystone Post Driver (product #76147)
- ❑ Post hole digger, manual or hydraulic
- ❑ Rule or steel tape
- ❑ Safety goggles
- ❑ Spade tamper
- ❑ String, 200 feet or more
- ❑ Wire splicer

Tools and Materials

Select materials

Choose strong, pressure-treated wood posts that are relatively smooth and not apt to splinter. Avoid creosote treated posts which are poisonous to birds. Faced posts allow stronger installation, but round posts can be used. Seventy-two inch fence is recommended for ostrich and emu pens.

❑ Square Deal® Non-Climb Fence

CODE	HEIGHT	LENGTH	WEIGHT	TOP &BOTTOM WIRE	FILLER WIRE	QUANTITY
70318	72"	100'	179 lbs.	10 gauge	12 gauge	_____
70316	60"	200'	302 lbs.	10 gauge	12 gauge	_____
70314	60"	100'	151 lbs.	10 gauge	12 gauge	_____
70312	48"	200'	244 lbs.	10 gauge	12 gauge	_____
70310	48"	100'	122 lbs.	10 gauge	12 gauge	_____
70301	36"	100'	94 lbs.	10 gauge	12 gauge	_____

"Yum-m-m, I'd like to snack on those staples..."

❑ Fence Posts and Fasteners

POSTS	CODE	TYPE	HEIGHT	QUANTITY	FASTENER*	CODE	QUANTITY
END	-	8X8 WOOD	9'	_____	1-1/2" STAPLES	72576	_____
LINE	-	6X6 WOOD	8'	_____	1-1/2" STAPLES	72576	_____
LINE	80179	TEE-POST	8'	_____	POST FSTNERS	71757	_____
LINE	-	CHAIN LINK	8'	_____	CLIPS	-	_____

*Plan on using 40 fasteners for each end post and 20 fasteners for each line post

❑ Lap-type sleeves or Keystone Gripples (Product code #79600) for 12-1/2 gauge, galvanized wire (20 sleeves/Gripples per 100 feet of fence) _____

❑ Concrete (60-80 lbs. pounds per fence post) _____

Choose one, if desired, to give fence sight line and finished look

- ❑ 1 x 6 wooden top boards _____
- ❑ Barbless cable (Product code #70523) _____
- ❑ PVC or metal pipe _____

Square Deal® is a registered trademark of Keystone Consolidated Industries, Inc.

Laying out and setting posts

Round corners

Ostriches—easily startled by sound, people, animals, and pen mates—often run to corners causing serious injury and even death. Rounded corners on pens minimize danger. To curve corners as you install your fence, follow these steps:

1. Set end posts 16 feet from the corner post position.

2. Using string, outline a 16-foot square starting from the end post. Mark with stakes.

3. Set another end post in the opposite corner of the square.

4. Again using the string, draw a diagonal line from post to post. From the midpoint of this line (11 feet 4 inches), attach string to the corner of the square. Attach another string from the midpoint of this line (5 feet 8 inches) to the center of each end post.

5. Set line posts 8 feet from each end post.

6. Attach fence to line posts and end posts. Fence for other animals is attached to the *outside* of end posts to facilitate stretching. Since ostriches and emus can injure themselves on exposed posts, you may prefer to attach fence *inside* posts as shown in figure 5.

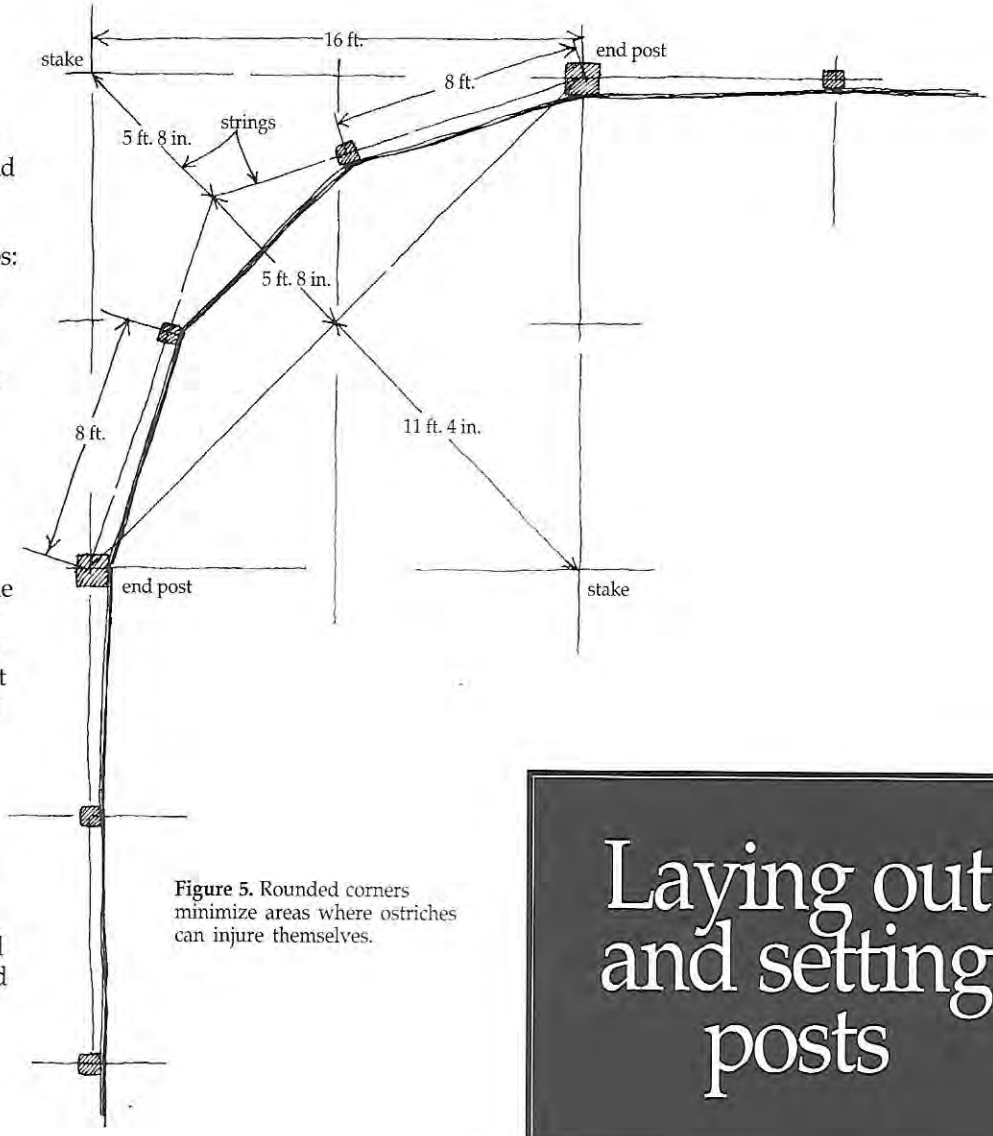


Figure 5. Rounded corners minimize areas where ostriches can injure themselves.

Set posts

Wooden end posts should be sunk or driven two or three feet into the ground and then reinforced with concrete. Wooden or metal line posts are strongest if reinforced with concrete. Installing Keystone tee-posts requires a post driver.

If the fence line is to be longer than 160 feet, set concrete for pull posts 160 feet apart to help erect tight wire. Use string to line up the inside of the posts.

Set line posts in 8-foot intervals, and again line up posts to the inside. Place posts in position and wait until concrete has completely set before attaching fence. See figure 6.

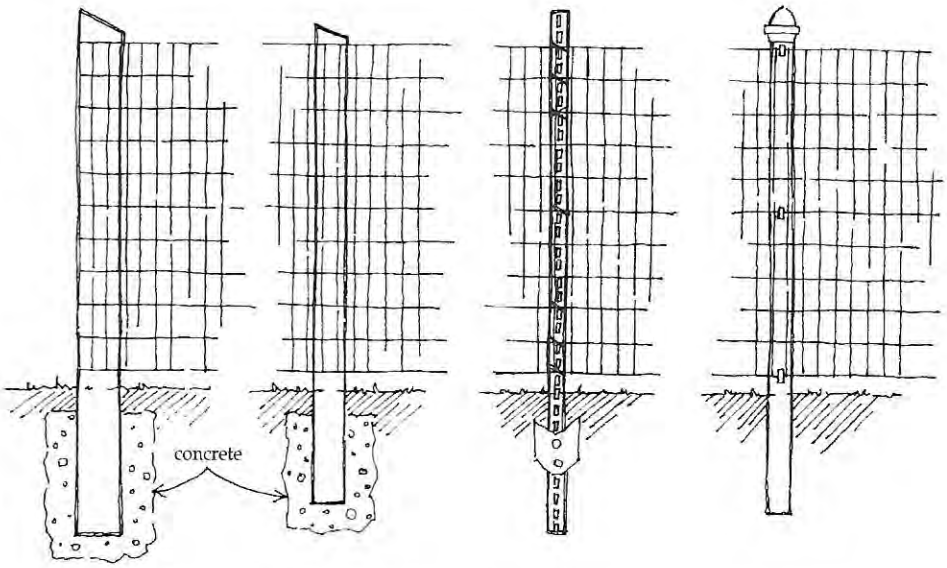


Figure **6a** Wooden end post **6b** Wooden line post **6c** Tee-post **6d** Metal post

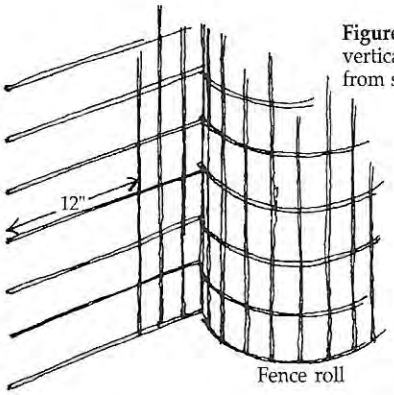


Figure 7. Cut out vertical wires one foot from starting end.

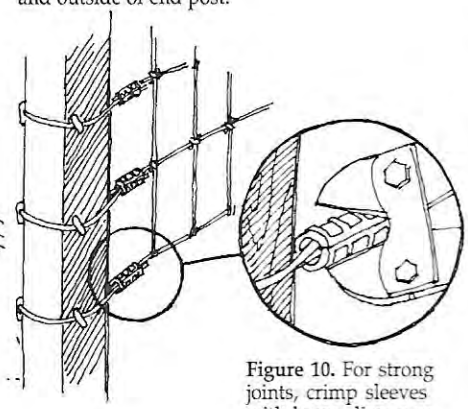


Figure 8. Staple wire diagonally on inside and outside of end post.

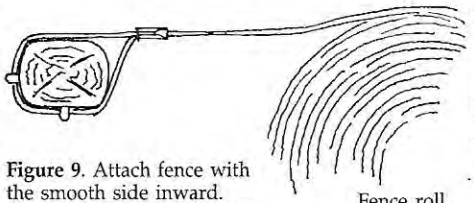


Figure 9. Attach fence with the smooth side inward. Cover illustration correctly shows smooth side of knots toward birds.

Figure 10. For strong joints, crimp sleeves with large pliers or a crimping tool. Cut off protruding wires. Be sure to pick up scraps.

Attach fence

Fence should be attached on the inside of the posts with the smooth side toward the birds. See figure 9.

Attach fence wires to post using the following steps:

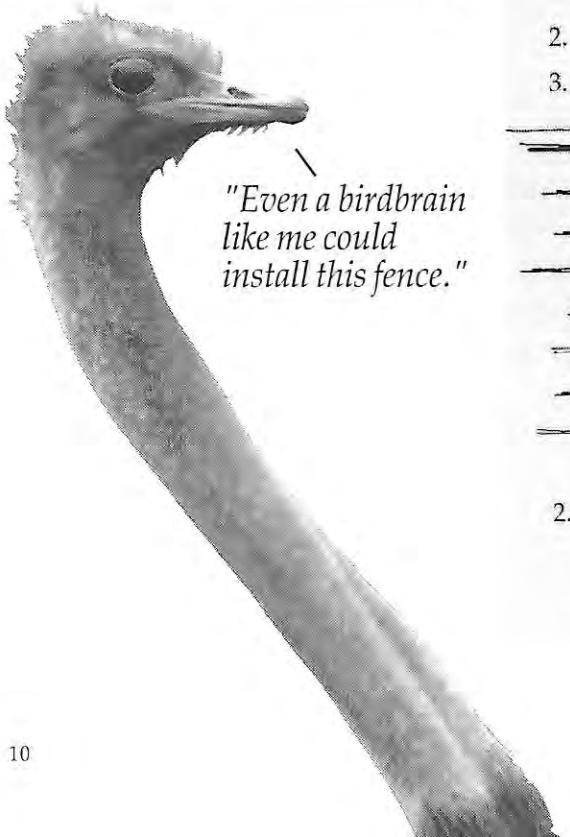
1. Cut out vertical wires one foot from the starting end and wrap horizontal wire around the end post. See figure 7.

2. Staple each line wire diagonally into the outside and inside of the end post, making sure that the bottom line wire is no more than two inches above ground.

3. Use fence sleeves or wrap the horizontal wires three or four times around the corresponding wires on the fence line to secure. Crimp with large pliers or crimping tool. See figure 10.

4. Cut off any protruding ends. Survey the ground carefully or drag a magnet to be certain no pieces of wire are left for your birds to consume.

Installing your fence

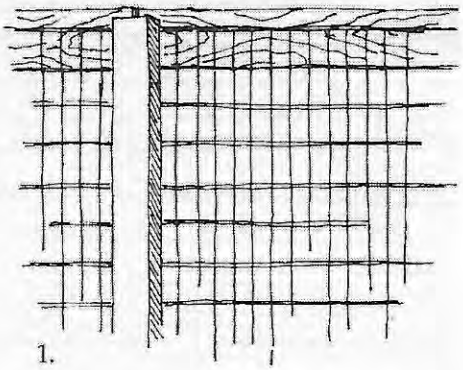


"Even a birdbrain like me could install this fence."

Top it off

To give your fence a sight line, choose one of the following:

1. Standard 1 x 6 top boards, in 16-foot lengths. If boards are installed on the *inside* of the fence, as shown, it may help keep birds from rubbing and hurting their necks on the fencing wire.
2. PVC or metal pipe
3. Barbless cable



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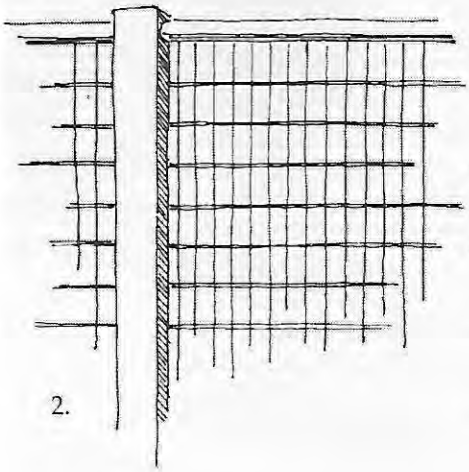

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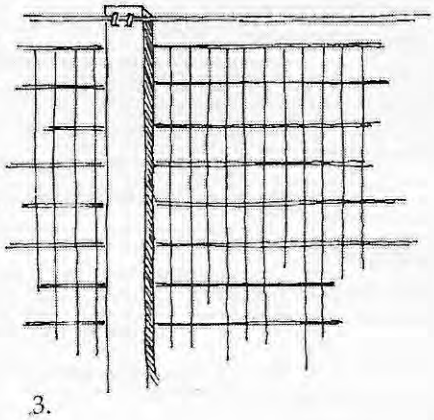


3.

Stretch fence

Use tractor-adaptable stretcher or hand stretcher to straighten fence between posts. If using a hand stretcher, erect a wood dummy post four or five feet past the pull post and secure with a heavy brace. Attach stretcher bar to fence and stretcher chains to dummy post. Stretch fence slowly between the pull post and dummy post, keeping stay wires as vertical as possible. Pull the top and bottom of the fence at an equal rate. During stretching, make sure the fence does not catch on posts or kink. See figure 11.

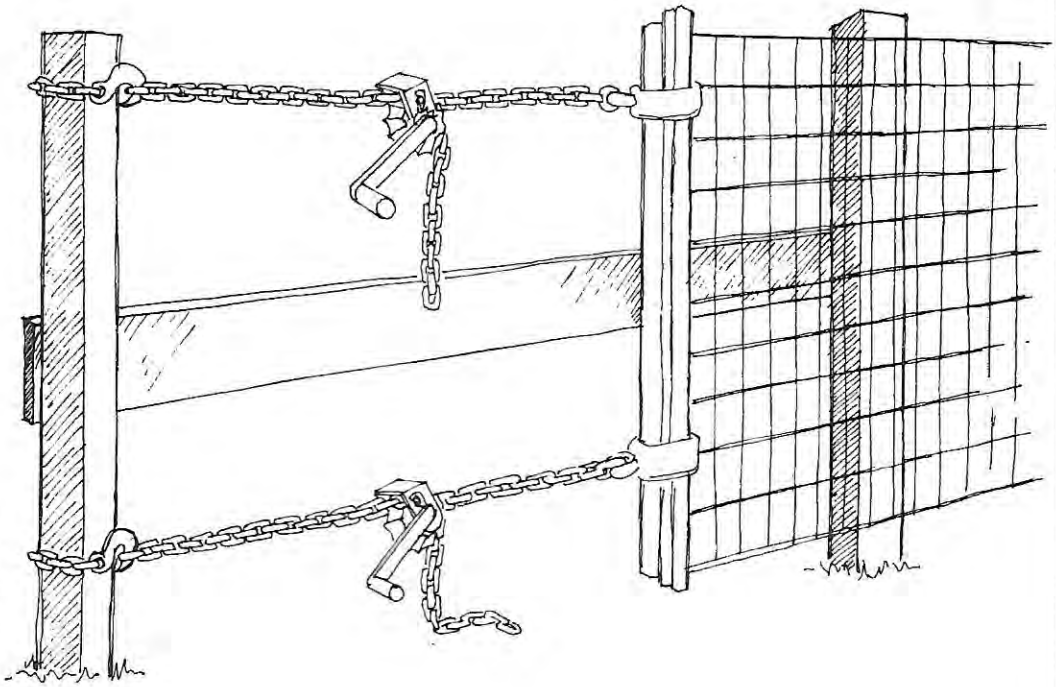


Figure 11. Specially constructed to be flexible and gentle on birds, Square Deal Non-Climb Fence is strong, but should not be stretched with a truck or car. Stretch fence slowly and carefully.

Crimp, splice and staple

Before stapling, check that the stay wires are as vertical as possible and the bottom wire is where desired.

1. Staple fence line wires to the center of the line posts, one at a time from the bottom up. See figure 12.

2. Use a claw hammer to crimp fence horizontally and tighten wire. This will allow you to keep the fence level to the ground and maintain proper tension between posts.

3. Staple fence to the pull post then release stretcher.

4. Position next roll of wire. Splice wire ends together with Keystone Gripples by pushing loose wire ends (with slight twisting motion) into the Gripple. If you're using lap-type sleeves cut all loose vertical wires and insert horizontal wires into sleeve. Press sleeve tightly to wire with splicing tool. Or, splice by hand by securely wrapping each set of horizontal wires five or six times. Make sure fence is clear of sharp ends to avoid injury. See figure 13.

5. Attach stretcher to new wire end and repeat stretching procedure for next section of fence.

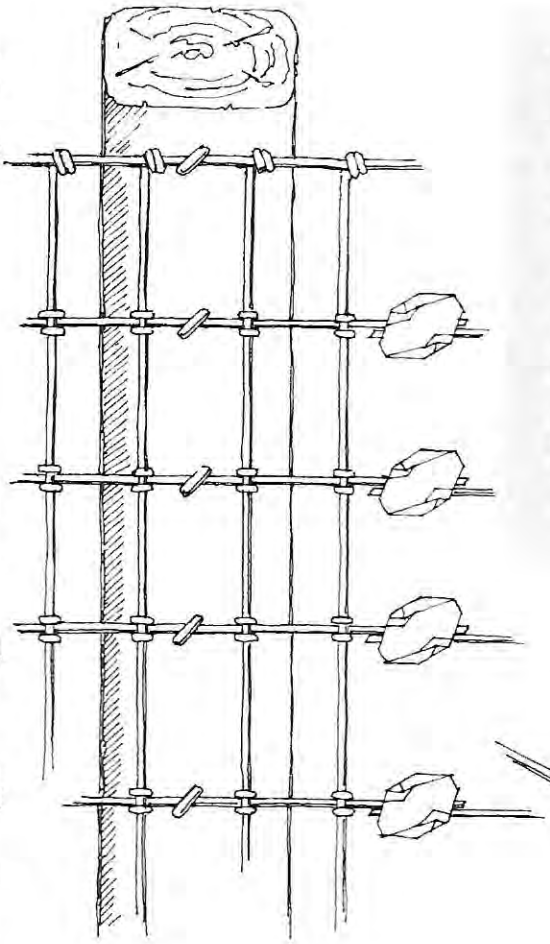


Figure 12. Staple wires diagonally.

Tax deductible and more!

Square Deal Non-Climb Fence is tax deductible. And, the IRS lets you expense capital items that you would normally depreciate. Code section 179 lets you to expense up to $10,000 in the year of your purchase. For example, if you spend $2,000 for fence, instead of depreciating this amount over seven years, you can deduct the entire $2,000 in the year of your purchase.

Source: Earl Walters, CPA

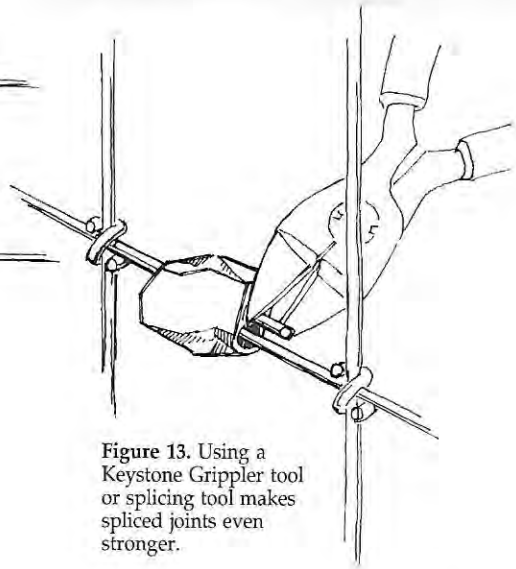
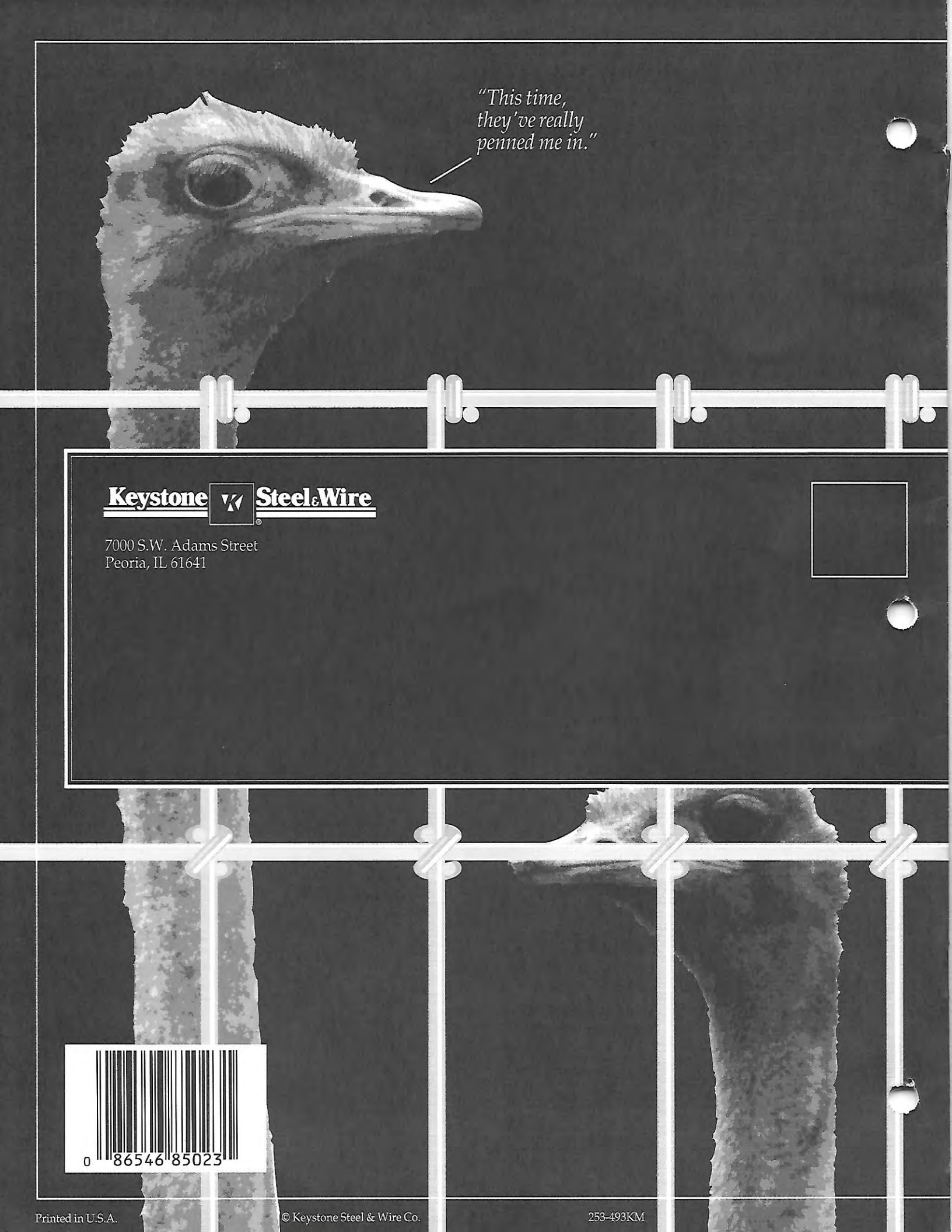


Figure 13. Using a Keystone Grippler tool or splicing tool makes spliced joints even stronger.



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