

## ERECTION OF NEW-TYPE FENCE

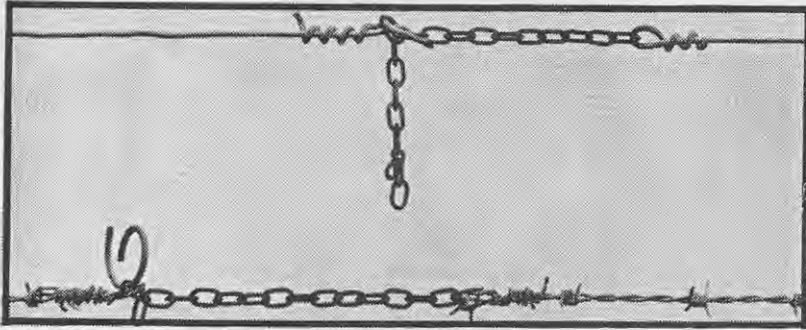


Fig. 3—Chains inserted for use in straining the fence.

fasten the chains, straining is a simple operation. It is claimed that one man could strain a mile day. Since the chains have a long life and are securely fixed to the wires, much less work will be required to keep them in order than is the case with wooden battens, particularly where inferior timber has to be used for battens. The elasticity of the fence and wider spacing of posts tend to absorb shocks and the wire is not so subject to bending and fracture. The fence is easier to repair on country liable to slips, as there are fewer posts and no battens to be dug out and the wire can be pulled through the chains. Wires are not as likely to rust as when some types of wooden battens are used, and the chains offer much less resistance to strong winds, reducing the wear on the wires and posts and allowing for a much wider spacing of posts.

### Resistance to Stock

The ability of this type of fence to hold all kinds of stock has been well tested on Mr. Hunter's farm. An animal cannot get through the fence or under it if it is properly erected, and should it charge the structure between the posts, the effect is similar to hitting a wire mattress. The fence first gives, then springs back into position, and there is less likelihood of breaking a post, because the shock is absorbed. Cattle which jump the fence do less damage, as there are fewer posts to break.

An important point made by Mr. Hunter is that the fence should be kept strained fairly tight to prevent sagging and loss of height between

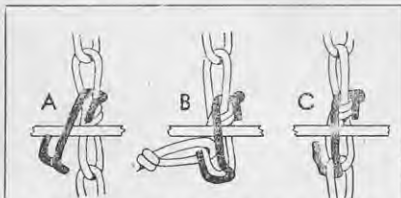


Fig. 4—A—The clip is hooked into the chain as shown and passed over the fence wire. B—The next link of the chain is raised so that the lower end of the clip can be hooked in. C—Shows how the fence wire is clipped securely to the chain.

posts. To simplify straining he suggests the use of a 2ft. or 2ft. 6in. length of chain let into each fence wire at the middle of the strain. One cut end of the wire is fastened to one end of the chain, a loop is made in the other end of the wire, and the chain passed through it. The chain is used for straining and a piece of No. 8 wire is passed through the chain when it is tight. The wire is bent in a circle, as a straight piece may cut stock (see Fig. 3).

### Reduced Cost

The following are average costs which farmers can check and apply to their own districts.

An orthodox 8-wire post-and-batten fence with 5 posts per chain and wooden battens 3ft. apart would cost approximately £490 per mile on the line at Mr. Hunter's farm, 35 miles from rail, calculated as follows:—

	£	s.	d.
400 totara posts at 9s. . . . .	180	0	0
1360 totara battens at £5 per 100 (conservative) . . . . .	68	0	0
6 wires No. 8 plain and 2 barbed . . . . .	94	0	0
8 anchors or stays at £1 . . . . .	8	0	0
4 gates at £5 . . . . .	20	0	0
Erecting at 30s. per chain . . . . .	120	0	0
	£490	0	0

The cost of the Hunter fence, based on the cost of the length erected, would be:—

	£	s.	d.
Totara posts at 2 per chain . . . . .	72	0	0
Chains, dips, and clips . . . . .	60	0	0
6 wires No. 8 plain and 2 barbed . . . . .	94	0	0
8 anchors and stays at £1 . . . . .	8	0	0
4 gates at £5 . . . . .	20	0	0
Erecting at 30s. per chain . . . . .	120	0	0
	£374	0	0

The difference in favour of the Hunter fence is £116 per mile, though the saving would probably be greater because depreciation and maintenance are less. The cost of erection on another length of this fence erected elsewhere was 22 per cent. less than with the conventional-type fence.

### Hints on Erection

Do not strain the fence too much immediately after erection. Over-strain will reduce the strength of the

wire, and footed posts will be much firmer the next time the fence is strained, as the ground will have consolidated.

Fig. 4 demonstrates the method of clipping on the chains using a patent clip. No pliers are required. It is suggested that the gauge of the fence should be worked out to synchronise with the links in the chain. Mr. Hunter prefers an 8-wire fence and uses the following spacings from the bottom wire, which is 5in. from the ground: 4½in., 4½in., 4½in., 4½in., 6in., 6in., 7½in., a total of 3ft. 6½in.

It is advisable to carry a gauge which can be hooked on to the fence such as the one shown in Fig. 5. When fastening the batten chains it is a good plan to reduce the gauge slightly so that when the clips are fastened the chain between the wires is pulled tight. Should difficulty be experienced with the gauge of concrete posts, it is always possible to affix a 9-gauge chain to the post and clip the wires on in the ordinary way. Barbed wire should not be used on the top, as this wire

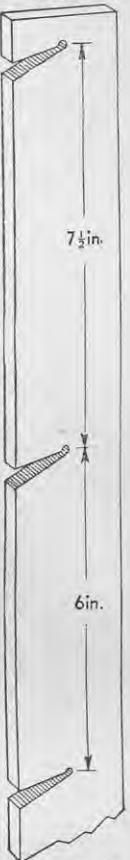


Fig. 5 (right)—Suitable gauge for use in spacing wire while clipping on chains.

must have sufficient strength to hold the strain and maintain a straight top line without sag. The chain batten will not hold the top wire up or bottom wire down, but with the top wire appearance is the main thing. It is only lambs under 2 months which will try to go through under the bottom wire. However, sufficient battens can be anchored to the ground to stop this if necessary. As the life of the anchor chains used in dips and on the flat in place of posts depends on the wire from the chain to the foot, the durability of the material used for this wire is important. Stainless steel or copper wire appears to be best for this purpose. Both should be insulated from the galvanised chain with a small section of rubber or plastic tubing to prevent corrosion between the copper or stainless steel and the galvanised chain.

The fence devised by Mr. Hunter has certain definite advantages, which can be listed briefly as follows:—

1. The batten materials used are more durable than those in the conventional post-and-wire fence.
2. The materials are likely to be more easily obtained than wooden droppers.
3. The ability to anchor portions of the fence results in a reduction in posts required and therefore in cost of materials and cost of erection.
4. The method of construction reduces wear and therefore maintenance, at the same time maintaining or even improving upon the stock-holding capacity of standard fencing.