DEVICE FOR FORMING EYELETS ON BALING WIRE AND STRAIGHTENING LENGTHS

By C. R. TAYLOR, Fields Instructor, Department of Agriculture, Rotorua.

A SIMPLE, effective, and inexpensive device for converting coiled hay-baling wire quickly into perfectly straight cut-off lengths with the necessary twisted eyelet at one end has been made and put to good use for several years by a Rotorua farmer, Mr. R. Johnson, of Te Ngae. Mr. Johnson makes about 10,000 bales of hay each year and so uses a fairly substantial quantity of baling wire. His device will also renovate once-used wire satisfactorily.

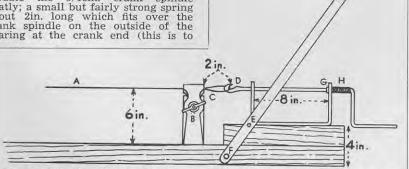
THOUGH one man can handle the device without much trouble it has been found that two men are able to work it a great deal more speedily and with far less walking about. The quality of the article produced is at least as good as its commercial counterpart and in many instances superior to it, in that the size of the twisted eyelet can be regulated so that further manipulation with pliers is unnecessary. Moreover, a longer or shorter wire can be made as required without wasting material.

The device is simply a piece of sound 4in. x 2in. timber 10ft. long on which 2 small clamps, which hold the wire tight while the twisted eyelet is being made, are mounted 8½ft. apart. In the device illustrated the clamps are a 3in. vice and a small hand clamp operated by a wing nut. However, 2 small vices would do equally well. Other necessary parts are: An arrangement like the crank handle of a car, which is made from 5/16in. round iron and is used to form the eyelets; a 2-bearing support for the crank constructed from lin. x 3/16in. flat iron, the ends of which are bent up at right-angles and drilled to accommodate the 5/16in. crank spindle neatly; a small but fairly strong spring about 2in. long which fits over the crank spindle on the outside of the bearing at the crank end (this is to

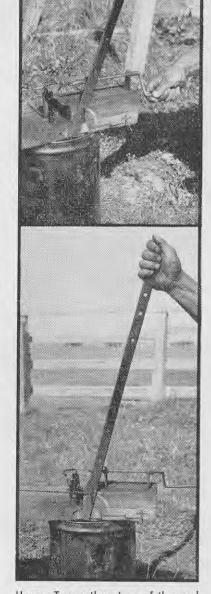
provide sufficient forward movement in the spindle to enable it to disengage from the formed eyelet in the wire without the wire having to be released from the 2 clamps); and, finally, a flat-iron lever about 2ft. long fitted with a 1½in. long stud near the lower end, over which the twisted eyelet is placed when the wire is being straightened.

Any handy man should be able to construct the device in a short time, using mainly scraps of material usually to be found on most farms.

Where coiled baling wire is used and it has to be cut into lengths and provided with an eyelet or loop the device described will make a first-class job in a fraction of the time that several men would take to do the work by hand with pliers, and the product will be superior to that made by the latter method. In fact, Mr. Johnson considers his invention an indispensable part of his comprehensive range of harvesting equipment.



Above—Details of crank end of device. A—Wire. B—Wing nut. C—2in. wire loop fixed into the slot on the spindle and with ends fastened in the clamp; 2 or 3 turns of the crank make an eyelet in the wire. D—End of spindle, which is hammered flat so that a slot can be cut in it. E—Stud. F—Bolt. G—Collar welded to spindle to allow movement of about Iin. against spring tension, which permits sufficient movement in the spindle for the eyelet to be released. H—Spring to take up end movement in spindle. I—Lever. Below—Diagram of baling wire device. A—Coil of baling wire on spinning jenny. B—Position where wire is cut off. C—Baling wire. D—Wing nut. E—Hand clamp. F—Stud. G—Bolt.



Upper—Two or three turns of the crank are sufficient to form a well-twisted eyelet. Lower—When the eyelet has been made the wire is released from the spindle and clamp and placed over the stud on the lever, which is then pulled to straighten the wire, the far end of which is still held in the vice.

