By 1963, all wires on the fences grounded by twisted wire stays still retained their galvanized coating, and they showed but little deterioration. The transmission line, the unprotected parallel fence had deteriorated badly. This short note does not permit elaboration of all the evidence available to substantiate our theory that lightning caused much of the damage. Galvanizing remained much longer on all four wires of the standard fences for about 12 inches on either side of those wires used as hold-downs in the draws. Apparently, the wooden posts also acted as grounds to dissipate some electrical energy, since the galvanizing remained longer on all four wires for about 3 inches on either side of many posts. Sagebrush, forbs, and tall grass growing in the fence line apparently grounded the bottom wire effectively, but grounded each higher wire less effectively. This grounding effect was confirmed on numerous occasions by the presence of dead sage foliage along the fences.

We conclude from these observations that thorough grounding of barbed wire fences is essential. We do not know the optimum spacing for the grounds, but believe it should be frequent. Hold-downs 100 yards apart did not prevent electrical deterioration of the top wires on standard fences. Until more is known, we suggest that twisted-wire stays be installed every 10 to 20 ft, or between each two posts, in most fences in the West. These stays should make firm contact with the soil.

Wire stays not only protect the fence wire and posts from electrical deterioration, but reduce livestock losses from lightning along the fence lines. They also make a sturdier fence that requires less maintenance.

The Woodward Gate Latch

C. G. ARMSTRONG AND E. H. MCILVAIN


Stockmen have been seeking a sturdy, dependable, semi-automatic, low-cost gate latch for years. Aided by suggestions from fellow employees and others, we developed the Woodward Gate Latch to meet this need. Modification and testing during the past 12 years resulted in the present simple, reliable latch, an improvement over the earlier, bulky, complicated models.

Construction is both rapid and simple, requiring less than one man hour of shop labor. Materials cost about eighty-five cents per latch.
The body of the latch is an 8-inch piece of 3- by 3- by ½-inch angle iron (item No. 1 in Figure 1). Four holes, 9/16 inch in diameter, are drilled in the upright side of the angle iron. The middle holes are used to bolt the latch to a post. The outside holes are for 3-inch hinge rods made from 9/16-inch cold-rolled steel. The hinge rods are placed through the holes and welded on the back. For the hinged levers, two rectangular holes are then cut in the base of the angle iron; and the ends of the base are curved downward.

Each hinged lever (items No. 2 and 3, Figure 1) is made from a 3¼-inch piece of 1- by ½-inch strap iron welded to the outside and near the end of a 2½-inch piece of ¼-inch pipe (o.d. 3½ inch). The curved handles on the hinged levers are made from ¼-inch mild rod, so that the lower part of the lever will be much heavier than the handle. The gate is released by pressing down on the handle.

The keeper bar (item No. 4 in Figure 1) is made from an 8-inch piece of 1- by ¼-inch strap iron. A 2-inch piece of ½- by ½- by ½-inch angle iron is welded to the inside, and even with the top edge of the keeper bar, to serve as a striker plate for the hinged levers.

A “half latch” for gates that open in on only one direction can be made in a similar manner.

A short piece of ¾-inch pipe, fastened to a gate, makes a very good latch bar. When the latch bar is properly adjusted, the gate cannot be rubbed open by cattle or blown open by wind. The latch bar can also be adjusted to rest on the base of the latch to help support the weight of a heavy gate.

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**BOOK REVIEWS**

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**Public Relations In Natural Resources Management.**


Everyone involved in management of natural resources, whether an individual or agency, portrays an image to those with whom they come in contact. This image is reflected to the various audiences becomes the public relations of that individual or agency. As stated by the author, “We have public relations going all the time; the question is whether these public relations are good or bad.”

The author has pulled together a considerable amount of information on various phases of public relations. He covers such topics as (1) history of public relations, (2) principles of public relations, (3) principles of communications, (4) publics in natural resource management, and (5) suggestions and techniques for improving public relations in natural resource management. In covering these topics, the author has attempted to show the relationship of these various facets of public relations to the management of natural resources.

Most of the material appears sound from the public relations standpoint. Certainly nearly everyone involved in the management of our natural resources could benefit by a higher degree of training and competency in this area. A study of this text could well furnish the basis for some thinking on the part of agencies and individuals alike.

It would appear from the text that a prime lesson of public relations would be to not offend or alienate those with whom we are attempting to communicate. I wonder if the author has committed that very “sin” when on page 68 in referring to the idea of remuneration to the land owner for producing wildlife he states, “The farmer or rancher should view the game as another crop, and in many instances the game is there in spite of the land owner not because of him.” I am unsure as to the author’s precise intentions in making this statement, however, it would seem to me that many land owners may interpret this as further evidence that sportsmen and game managers assume that it is a land owner responsibility to furnish food and habitat for wildlife so they may be available for public consumption.

In another section on page 55, the author may have unintentionally alienated another group upon which much depends if management of our natural resources is to advance.

When speaking of the researcher he states, “The researcher in a natural resource agency seems to present a common headache to the agency. He is a specialist and is trained to do a certain job. He often seems to lack conception of the importance of other happenings and positions. Many lack patience when their findings aren’t immediately used (nor should they be completely ignored).” This seems to me to be another instance where the non-researcher has fallen into the common trap of placing all the research people into a common mold. In so doing, he has attempted to portray the researcher as the long-haired, queer acting, scientist who goes about his business with little concern or regard for things or persons about him. This may be so in some individual instances, however, scientists with whom I’ve been associated in my work as a researcher and Extension specialist as a group have been observed to be extremely aware and concerned about what was going on about them, and especially interested in how their research fit into the overall picture of the subject matter area in which they were working. Many scientists and researchers are completely capable of doing as good or better job of presenting their work in a palatable form, to those who must use it, as others who play...