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Flood Gates for Agricultural Fences

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FLOOD GATES FOR AGRICULTURAL FENCES

by

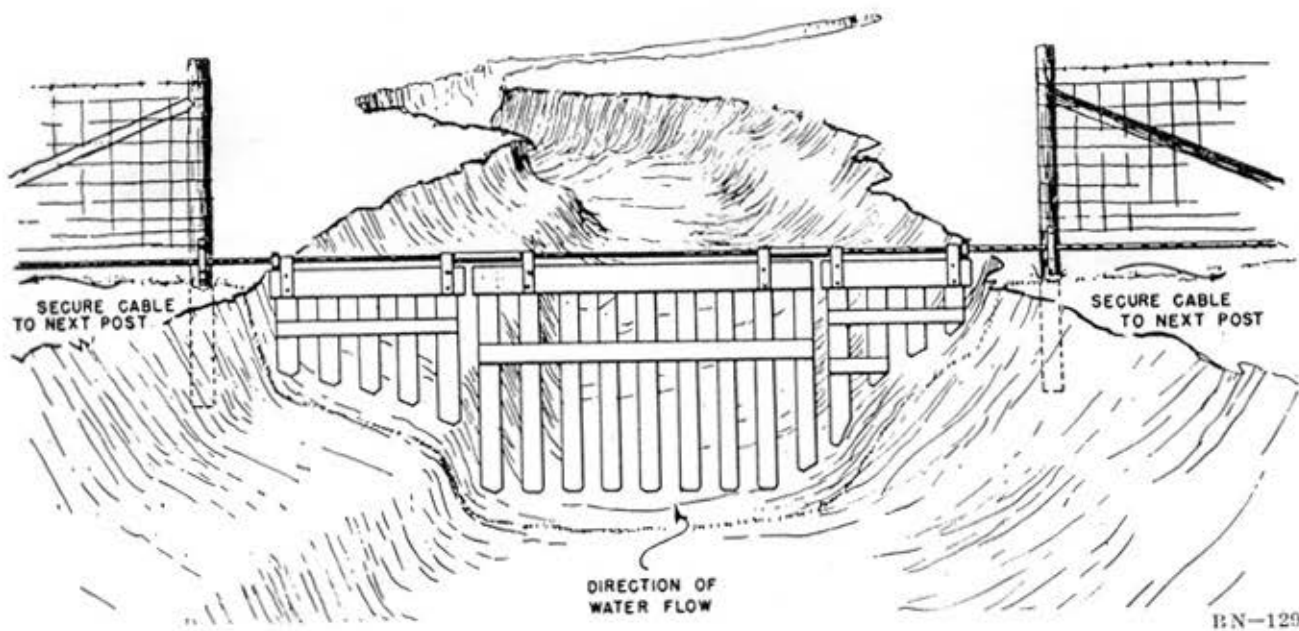
Larry W. Turner, Extension Agricultural Engineer

Flood gates are needed wherever fences cross ditches, gullies, and streams. They prevent livestock from swimming or crawling under the fence, and prevent debris from forming a dam that might wash out the fence or back up water to flood fields or other property.

Two important requirements for flood gates are strong anchor posts on each bank and prevention of bank erosion. Always clear flood gates of debris after a storm. This is especially important where the stream flows through woodland as in riparian areas.

Flood gates may either be electrified or non-electrified. For older woven-wire or non-electrified fences, a flood gate may be constructed of panels to follow the contours of the stream channel where the fence crosses (see Figure 1). In such installations, sturdy anchorage and continual maintenance of the flood gate is extremely important to maintain an intact barrier, as debris is easily trapped on the upstream side of the flood gate. Electrified flood gates offer advantages in ease of construction and improved maintenance.

Figure 2 illustrates a common installation for electrified flood gates (courtesy Gallagher Power Fence Inc.). A drawback to many electrified flood gates is that when the gate becomes submerged, the power can be lost in the fence across the stream from the gate. A cut-out switch and gate controller may be installed to overcome this problem, as shown in Figure 2. Chain is installed hanging down from a cross cable so that debris is more easily cleared from the fence during high water situations.



RN-12995-X

Figure 1. Typical installation for non-electrified flood gate.

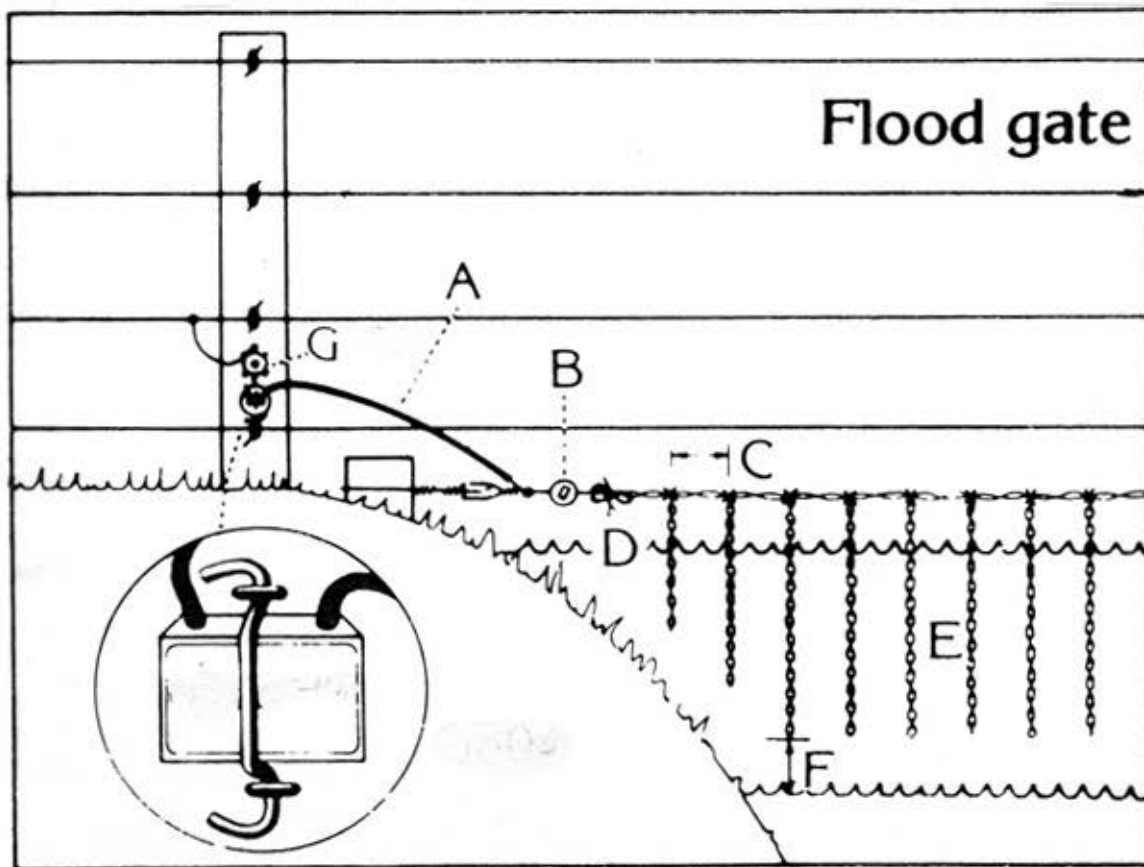


Figure 2. Electrified flood gate installation. Key: A- insulated cable, B-wire tightener, C-chain spacing 6" for sheep, 12" for cattle, D- maximum high water level, E-9 gauge (15 mm) chain, F-6" above avg. water level, G-cutout switch and controller.