stubborn bull will turn his head to the onrushing locomotive and dispute the right of way, but always to his sad discomfiture. One of these familiar scenes is depicted on the double page in the center of this number of the WEST SHORE.

Hundreds of cattle are annually killed in this way, and the railroad companies pay out large sums of money for damages to the clamorous owners. None but the finest beef cattle or the best dairy animals or the primest horses are ever killed by the engines, if the claimants' statements in their applications for damages can be relied upon. This is a little peculiar, but it is equally odd that, on the part of the railroad, there is never any carelessness by its employees. To take the statements of both sides, it seems that the choicest animals of the country deliberately walk upon the track and commit suicide. But the amount paid to the owners of stock is not all the loss suffered by the companies, for often an engine is derailed and thousands of dollars of damage done. It is a question whether the entire right of way of the railroads cannot be fenced for a less cost than the amount of damage caused by the want of fences during the time a fence would remain in good condition. There is something more than mere damage to property involved in this question of protecting railroad tracks from invasion by cattle, and that is the safety of passengers on the trains. It is the duty of the companies to throw around them all the safeguards possible, and if this duty is neglected the state legislatures should provide for its attention by proper legislation. If railroad companies in a spirit of false economy imperil the lives of their passengers by neglecting to fence their tracks, they should be compelled to construct these necessary safeguards by the hand of the law.

## FERRY ACROSS SNAKE RIVER.

N the back page is given a sketch of a scene that has been a common one in the west ever since the white-topped wagon of the emigrant first crossed the plains and penetrated the mountain passes and valleys of the Pacific coast. Here and there in the more populous settlements, or where the railroads have been compelled to cross streams, bridges may be seen, but even to this day the almost universal method of crossing unfordable streams in the west is by means of the flat-bottomed ferry. Early in the history of California and Oregon, and, a few years later, in Washington, Idaho and Montana, the necessity of providing the necessary roads, bridges and ferries required for passing from place to place, and the utter inability of the various counties to construct them at the public expense, led to the granting of innumerable franchises, many of which continue till the present day, existing by authority of acts of the legislatures of the various states. Some of these franchises have made their owners rich, and still pour a constant stream of money into the pockets of their proprietors.

On the larger streams, where there is constant travel, and boats make regular and frequent trips, steam power is used, sometimes the boat being attached by wheels to a heavy wire cable in the water, and sometimes being entirely independent, but the almost universal style is the overhead cable and current motor principle, similar to the one shown in the sketch. Suspended from a high post on either bank of the river, a wire rope, or cable, crosses the stream at a height of about twenty feet above the water in the center, and thirty or more at the ends. The cable is kept taut by being firmly anchored in the ground or to large trees at either end. Upon this cable run several wheels, sometimes attached together and sometimes singly, and to these wheels the boat is attached by ropes from both ends. By pulling in upon the forward one of these ropes, the bow of the boat is turned slightly up the stream, and the pressure of the current forces the boat along, the guiding wheels running smoothly on the supporting cable. As both ends of the boat are alike, all that is necessary to be done to recross the stream is to slacken the short rope and shorten the long one, thus turning the other end up stream, and the craft moves off easily in the opposite direction. The writer well remembers the first time he saw one of these peculiar boats. It was a dark night in the month of October, and he sat with the driver of a four horse stage, his first trip by night in one of those now almost extinct conveyances, when the vehicle reached the crossing of the Upper Sacramento river. After the stage was safely stationed on the boat, which was just large enough to hold it, he heard a creaking of a windlass and observed a man pulling on the spokes of a wheel near the bow. Soon the craft began to move off into the darkness without any apparent propulsive force. He was as much astonished as the Chinaman in San Francisco, who exclaimed when he first saw one of the cable cars climb a steep hill, " no pushee, no pullee, allee same debbil." The next morning, when another ferry was crossed, it was light enough for him to investigate and solve the mystery, also to learn what caused a strange noise he had heard over his head, which proved to be the wheels running on the cable.

In the scene depicted by the artist one recognizes some of the characteristics of Idaho. The steep rocky bluffs so familiar for hundreds of miles along Snake river, with the fringe of cottonwood trees on the narrow margin of level land along the river bank, will be recognized by every one who has seen that greatest tributary of the Columbia. Equally familiar are the emigrant wagon and the cow boy and his hardy steed.