

took place at the season of the highest water, interrupting the passage of timber for five days ; it was caused by the splitting of a sill by iron spikes at a place where the slide passes through a rock cutting on an island near the foot. The great pressure of water caused a leak through the crevice of sufficient strength to raise the slide for about 100 feet ; hence the damage. The men in charge set about the repairs vigorously, and the defect was remedied in the remarkably short time above stated, such assistance as was available having been pressed into the service at Arnprior. In consequence of the great floods in the Ottawa and Madawaska rivers this spring, there were 7 feet of back water on the floor of the slide, which tore up some of the bottom planking, shortly after the slide was put in operation. The repairs were executed with all possible despatch, and the actual delay to the lumbermen did not exceed one day, as the weather was foul for the running of timber for a portion of the time the repairs were being executed.

When the spring flood was at its height, a small boom pier was upset in the Joachim slide channel, but the obstruction was removed as speedily as possible, and no serious delay was experienced by the trade.

That action may as soon as possible be taken towards the consummation of the following very necessary improvements, I respectfully call attention to an extract from my report dated 24th Dec., 1868 : " The lumbermen are gradually extending their operations into the interior, consequently, in many cases their rafts do not arrive at the lower stations until the water has fallen ; I have therefore, in addition to the repairs that are absolutely necessary before the passage of timber can be effected in the spring, made provision for raising the water at Calumet, Mountain, Portage du Fort, and Chats stations on the Ottawa, so that the timber from the more remote limits may be passed through these slides at the season of low water.

" I may mention that river works that were well enough adapted for the accommodation of the trade twenty years ago, are now, from the increased business and other causes, altogether unsuitable as regards the supply of water for the duty required of them ; and in proof of this I need only call attention to the fact, that last summer the late timber was either prevented from passing the above named slides or had to be broken up and run over the chutes, a circumstance which, in either case, was attended with great loss and inconvenience to the parties interested. I propose to raise the water by constructing dams at the head ; and at the Calumet and Mountain stations, where there might be a possibility of flooding lands in the spring, were permanent structures used, I have provided for openings which will only be closed for raising the river at the season of low water, when no damage can ensue."

These can scarcely be considered new works, as the improvements at the stations referred to are incomplete without the dams.

I have the honor to be, Sir,
Your most obedient servant,

(Signed,)

HORACE MERRILL,
Superintendent O. R. Works