

the views of the lumbermen and largely added to the extent and capacity of the works, which consist of:—

	Feet in length.
Double boom 15x30 inches.....	6,000
Single do do do .....	10,630
4 support piers 18x18x18 feet.	
22 sunken or anchor piers 16x16x10 feet.	
2 floating platforms, suitable heavy mooring chains and buoys.	

#### *Portage du Fort.*

At Portage du Fort station, about fifty-five miles above this city, there are rapids and a fall of twenty feet. At so important a point, the attention of the early lumberers on the river was directed to the removal of this obstruction, and in 1838-9 Mr. Hugh Bolton constructed a crib slide, with that object in view; but his efforts were not crowned with that degree of success that such a laudable enterprise would seem to have deserved, as I am informed that at no station on the river was there greater danger to life and property than at his slide.

The spring floods of 1840 displaced the works, but they were reconstructed by Mr. Poupore, sr., in 1841, and by him transferred to the Department, about the year 1845; but whether for a consideration or not I cannot say.

A new slide was built by the Government in 1852, and its working has been attended with the best results. It has been almost wholly reconstructed since that date.

Works at that station:—

Guide boom at entrance of slide, (100 feet of which is six-ply and 610 feet double timbers), supported by four piers 710 feet in length; crib slide twenty-six feet wide, 350 feet in length.

#### *Mountain.*

At the Mountain station, which is about six miles above Portage du Fort, an obstruction to the descent of timber, in the shape of falls and a rapid (twenty feet in height) presents itself. In 1843-4 a crib slide was made for the benefit of the lumber merchants. The principle on which it was at first constructed was very defective, and it has since had to be lengthened and improved. A second bulkhead was found to be a great desideratum in order to lessen the abrupt pitch, when the slide had only one of these appliances. A long guard pier was also built below the outlet of the slide to neutralize the effects of a strong eddy, or cross current, that materially interfered with the safe passage of timber. The difference between high and low water levels at this place is about thirteen feet. Since 1867 a large portion of the works have been built over again.

The works at this station are:—

	Feet.
Double guide boom at head of slide.....	297
Two pine piers 14x16, and bulkhead span.....	26
Crib slide, twenty-six feet wide.....	572

#### *Calumet.*

At the Grand Calumet Falls, about nine miles above Portage du Fort, and sixty-four miles distant from this city, a formidable difficulty in the way of passing timber existed prior to 1843-4; and the Government, about that period, at a heavy outlay, caused two crib slides and the necessary guide booms to be constructed in order that cribs might avoid the falls and intricate channels, where the difference of level is as much as fifty-six feet. Some miscalculations as to the placing of the entrance sills