

Let us now suppose a hurricane expending its power upon the whole extent of both floors, and at the rate of 50 lbs. per superficial foot uplifting force.

The surface of the upper floor is,	20,000 ft.
“ “ lower “ -	18,000 ft.
Total, - - .	<u>38,000 ft.</u>
Pressure at 50 lbs.	1,900,000 lbs.
or - - - -	950 tons

to which a resistance is opposed of 2000 tons. No tornado however will act with equal force upon both floors at the same time, nor uniformly throughout their whole extent. Before the two floors were connected, I noticed, that while the lower one was sensibly affected by a gale, the upper one showed no motion at all; its force appeared to be expended below. Owing to the bend of the river, the Canada shore is well protected while the opposite side is exposed from all quarters. Not the slightest motion from high winds was ever noticed since the two floors were connected. The work has been frequently tested by the strongest gales that blow in this vicinity. I am also convinced that it will be proof against a hurricane.

The Tornado which on the morning of the 18th last month, made such havoc at the town of Niagara, and was also severely felt at Lockport and Rochester, did not expend its *full* force upon the bridge. Its vortex was either too much elevated, or too far north east. Only a severe momentary shock, accompanied by great darkness, was experienced and lasted but a few seconds. This shock did not produce the slightest perceptible