[Bridge Across the Niobrara River.]
Mr. Allen, from the Committee on Indian Affairs, submitted the following

REPORT:
[To accompany S. 1403.]

The Committee on Indian Affairs, to whom was referred the bill (S. 1403), to authorize the reconstruction of a bridge across the Niobrara River, near the village of Niobrara, Nebr., beg leave to report the same favorably, and recommend its passage with the amendment noted in the margin in this language; after the word "that," in the third line of section 1, insert "for the purpose of reaching the Ponca and Yankton Sioux Reservations."

The history of this bridge, its destruction, and the estimated cost of its reconstruction are fully set forth in the appended letter of Hon. George G. Bayha to Mr. Allen.

DEAR SENATOR: Your kind favor, with copy of bill inclosed that you have introduced for the rebuilding of the bridge over the Niobrara River that was taken out by the ice last spring, came duly to hand. I should have sent estimates sooner, but was busy making settlement with the county and State. In order to have a full understanding of the matter I suppose it will be necessary to go somewhat into detail regarding the bridges. In the year 1884 the Government made an appropriation of $12,000 to build the bridges over the Niobrara River, at or near Niobrara, also one span over what is termed the back channel that forms Niobrara Island, also three spans over the Bazil Creek that is east of here about 3 miles. All these streams are between the Santee and Ponca Indian Agencies in this county.

The bridges were built for the benefit of the Indians so as to have communication between the two agencies. Also that they could get their freight from the nearest railroad station to Ponca Agency, and to get to market with whatever product the Indians might have for sale. Without the bridges the Ponca Indians were entirely isolated and had no way of getting to market only by fording the Niobrara River and the back channel, which are very dangerous and treacherous streams; having a quicksand bottom there is no safety at any time. In crossing or fording the streams they would often lose their teams and whatever load they would have on their wagon, considering themselves well satisfied to get out themselves. This matter was fully explained at the time the appropriation was made from the Government. On examination by the Government engineer of the several streams it was thought best to make the spans of the bridge each 60 feet in length, and the piers of the piling so as to keep within the appropriation. The Niobrara River being 960 feet in width it took sixteen spans, the back channel one span, the Bazil Creek three spans, making in all twenty spans of 60 feet each. The piers are constructed by driving four piles 30 feet long and two 25 feet long for an ice break.
After the piles were driven they were planked on each side with 2-inch white oak plank from low-water mark to the top of the pier, and a cap put on the piling of two pieces 3 by 12 inch white oak gained into the top of the piling and bolted firmly to them. The ice break is cut from the foot of the truss to the water's edge and cap put on of heavy oak timber well bolted to the piling, on which is spiked a bar of railroad iron to break whatever ice might come against it. The bridge is what is commonly called a combination four-panel Howe truss; the lower cords are made of iron, the upper of 10 by 10 inch pine timber. The needle-beams are 8 by 14 inches and floor joists 3 by 12; all braces made of iron. Covering is of 2-inch white oak plank.

What the appropriation is desired for is to replace four spans taken out by the ice and sufficient to repair the ice breaks that are yet in place which were damaged considerably by the ice, and to repair Pier No. 5 from east end of bridge, one end of which has been knocked from under the foot of the truss, and replace the bridge on same again, and replace two of the head piling of the ice breaks that have been taken away by the ice, and to tighten up the bolts and rods of the part of the bridge yet standing that have become loose by the shrinkage of the timber and general wear and tear of the bridges, and also the repainting of the entire bridge; also enough to put in a protection to save the river bank at each end from cutting away, which is very important as the river is cutting very badly at both ends of the bridge, but principally at the west end of the main bridge, where it will require about 200 feet of protection to keep it from cutting into a slough that runs around the west end. If it cut into this slough it will require three spans more of bridge to reach the shore.

There has been some protection put in on the east end, but it is not sufficient, as the river is now cutting back of the head of this protection, and if not prevented will soon cut around the end of the bridge. As you are familiar with streams of this class that are quicksand, you know how easy it cuts around into the banks. They have tried several ways to prevent its cutting, but the only successful way is to drive two rows of piling about 8 feet apart and fill between them with willows, crossing them as they are laid in, and weight them down with stone. The approaches to the Bazil bridge were also taken out by the ice last spring, and the main structure badly racked. The bridge also needs replanking very badly. It is in a dangerous condition for travel at present. There has been temporary approaches put in, but they are now out of repair again.

There should also be new piers put under the channel bridge with ice breakers, as the piling that were put in for the present piers appear to be too short, and the ice keeps knocking them around every spring, and the bridge is expected to go out every time they are knocked out of position. It was only saved last spring by the greatest effort. They have the piers now propped up, but I don't think they will stand long. The following is an approximate estimate of putting the bridges in good condition. If you wish a detailed estimate statement of lumber, nail, iron, etc., Mr. Fox of Norfolk, has sent one into the Indian Department, and they also no doubt have the plans and specifications of the bridge as let by contract in the year 1884.

Replacing four spans taken out by flood $3,000.00
Repairing ice breakers damaged by flood . 450.00
Repairing Pier No. 5 from east end of bridge and replacing bridge 75.00
Riprapping for protection of river bank:       
    Fifty piling 500.00
    Driving same 250.00
    Three hundred loads of willows 350.00
    Two hundred loads of rock 250.00
New approaches to Bazil Creek bridge and repairs on main structure 200.00
Replanking Bazil bridge 242.00
Putting in new piers and ice breakers under the channel bridge 300.00
Riprapping at channel bridge 200.00
Labor on riprapping 100.00
Labor in tightening up rods, bolts, etc., on the bridge still standing 85.00
Repairing the entire bridges 250.00

Total 6,252.00

If there are any other details that you think of, we will gladly furnish them immediately.

Thanking you very much for the interest you are taking in our affairs, I remain, yours, respectfully,

Hon. William Allen,
Washington, D. C.