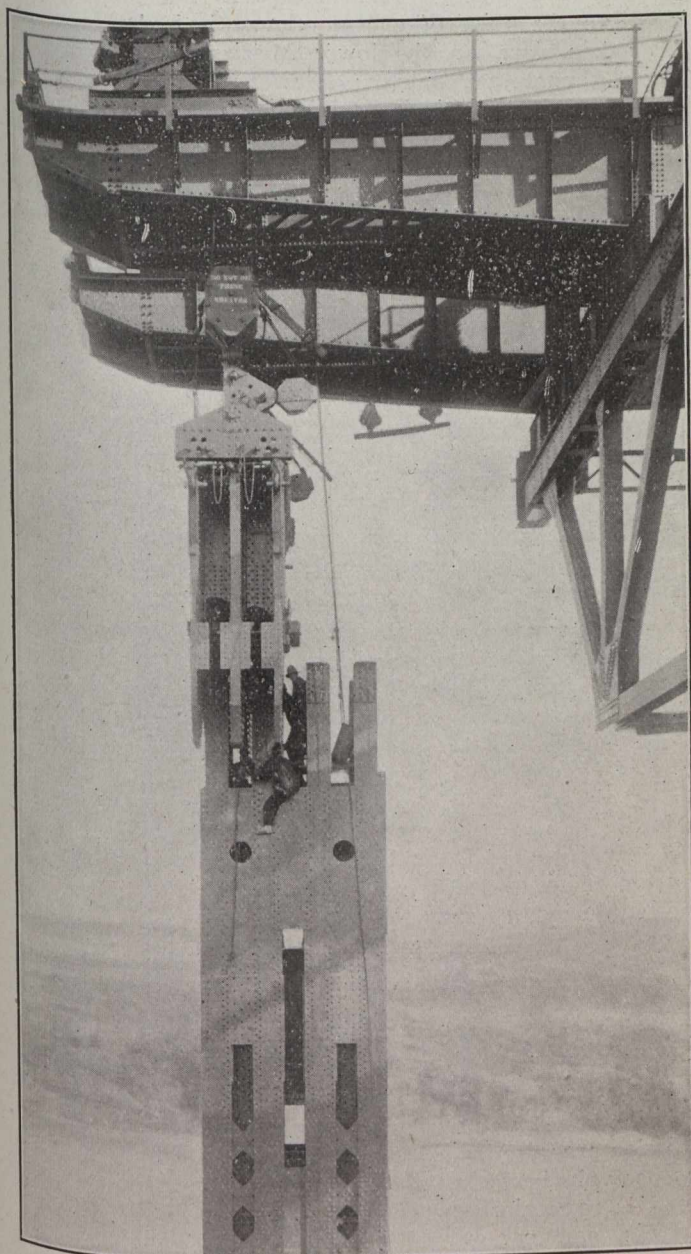


twenty-five days each, including Sundays and lost time. As the panels progress towards the end, the members are getting lighter and splices smaller, and the speed of the work will be materially increased.

Owing to the great accuracy of the shop work, the members go together without any difficulty in the field, and no time is lost in correcting errors.

It is expected that, if too much time is not lost by bad weather, the entire north shore cantilever arm will be completed by the middle of November.



Placing Half Section of Link on Top of Main Post, 350 Feet Above the St. Lawrence River.

The traveller on this side will then be taken down, transferred to and re-assembled at the site where the suspended span will be erected.

As the erection of the cantilever arm progresses, very careful measurements and observations are made to determine whether the alignment is perfectly correct. At the present time the centre points of the floor beams of the erected portion is absolutely in line with the centre point of the pier on the south side of the river.

The erection of the main shoe on the south shore started on July 8th of this year. On account of the experience gained in the erection of the falsework and anchor arm on the north shore, the erection of the south anchor arm has been greatly facilitated and much better time made. Although the work was started this year at approximately the same time as work on the north anchor arm last season, the work at the present time is nearly six weeks ahead of last year's programme. It is expected that before the work closes down the anchor arm will be completely erected, including the main post. Next year there will be no difficulty in fully completing the south cantilever arm in plenty of time to connect up the suspended span, thus enabling trains to run over the bridge.

The suspended span will be erected at Victoria Cove, a point about three miles below the site of the bridge. This span will be erected on falsework supported by concrete piers. It will be entirely erected at this site, with the exception of a portion of the floor system, and will be floated to the bridge on specially designed pontoons. Hangers connected to the four corners of the cantilever span will be connected to the suspended span by special devices, the entire span being lifted into place by means of 2,000-ton jacks placed at each corner. The suspended span is 640 ft. long, 88 ft. wide, and 110 ft. high at the centre, and weighs approximately 6,000 tons. It is expected that late in October of 1916 the work will be sufficiently advanced to float this span into place. If this programme is carried out, it will be possible to run trains across this bridge at the close of next season.

STREET CLEANING BY DRY METHOD.

From researches, which have been conducted by many American paving experts, the almost unanimous opinion has been evolved that modern cities should adopt what is termed the "dry" system of keeping down dust on well-paved streets. Carefully prepared figures in regard to the wear and tear of pavements show that the wear is much more severe where watering is in vogue than when oiling is resorted to. The "dry" system as adopted by Providence, R.I., during the past three years, which is declared by the city's engineers to be eminently satisfactory, has many interesting features. The city is divided into sections to each of which are allotted daily patrols, while pneumatic cleaning machines pass constantly up and down the streets. The city engineer reporting on the system says: "Even if dry cleaning were not cheaper, its greater efficiency in keeping street surfaces in better condition merits its adoption. It has been proven that pavements of the bituminous kind have much greater durability when dry cleaned than when watered. When water is applied we have the condition which from all ages has been known to wear the hardest steel, and is, therefore, used in the grindstone, to wit: The application of mud under a grinding process."

At the Bjølva waterfall, Norway, a new factory is to be erected for the manufacture of sulphate of ammonia and cyanamide. Arrangements have already been made to dispose of the output of the latter production for a period of five years. The annual output of sulphate of ammonia will be about 6,000 tons. The matter is being supervised by a committee of four experts, who are at present in Sweden in order to study the new method of manufacture.