33,1937

DOMINION OF CANADA

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In the Supreme Court of Canada

(OTTAWA) On appeal from a judgment of the Exchequer Court, for the Province VVC 1 of Quebec, (in appeal), District of Montreal. BETWEEN:-IN FILTIEC AND 1958 IN FILTIEC AND 1958 IN FILTIEC AND 1958 IN FILTIEC AND 1958

The Southern Canada Power Company Ltd.,

(Defendant in the Exchequer Court),

APPELLANT.

His Majesty the King,

· · vs ----

(Plaintiff in the Exchequer Court),

RESPONDENT.

RESPONDENT'S FACTUM

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The Southern Canada Power Company Ltd.,

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(Defendant in the Exchequer Court),

APPELLANT.

— vs —

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His Majesty the King,

(Plaintiff in the Exchequer Court),

RESPONDENT.

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RESPONDENT'S FACTUM

This is an appeal from a judgment of the Exchequer Court of Canada, delivered on the 29th day of December 1933 and condemning the Respondent to pay to the Appellant, with interest and costs, the sum of \$80.923.20, being the amount of the damages resulting from a railway accident.

THE FACTS

The action is instituted by His Majesty the King, as being the owner of the Canadian National Railway system; it is directed against the Southern Canada Power Co. Ltd, which own's and 10 operates a power development plant built across the St-Francis River, at a place known as Hemmings Falls, a distance of about 2 miles and ½ upstream from the railway bridge, at Drummondville.

On Easter Sunday, April the 8th, 1928, at about 4.13 of the afternoon, the Canadian National Railway Express, coming from Quebec, and bound for Montreal, was approaching the Drummondville Bridge, over the St-Francis River. Before reaching the bridge, the train which was running from east to west, 20 had to go over a viaduct about 20 feet long and whereunder passed a public road; then, over an embankment about 20 feet high and 90 feet long, abutting to the bridge itself. The train crossed safely the viaduct; but it did not reach the bridge. Shortly before, the embankment had been completely washed out by a huge mass of water amounting to approximately 600.000.000 cubic feet, which had leaped over the Appellant's dam, at Hemmings Falls, carrying with it enormous quantities of ice. The engineer could not bring the train to a stop and the locomotive with the bagage car and the second class coach plunged into the 30 gap resulting from the washing out of the embankment, between

the viaduct and the bridge. Two men were drowned in the baggage car; the engineer was grievously burnt and died at the hospital, four days later; several persons were injured, more or less seriously, and the locomotive, baggage car and second class coach were almost demolished. Hence the present action. (See photo exhibit No. 6; St-Pierre, case, Vol. I, p. 20, l. 9 to p. 22, l. 27; Stuart, case, Vol I, p. 26, ll 22 to 40; Guévremont, Vol. I, p. 34, ll. 45 to p. 36, l. 4; also page 31, ll. 36 to 43; Morazain Vol. I, p. 65, ll. 23 to 45; Blanchard, Vol. I, p. 60, ll. 17 to p. 61, ll. 47; also p. 63, ll. 27-28. Dupuis, Vol. I, p. 25, ll. 20 to 42; also p. 28, ll. 24 to 40)—.

The learned trial judge found that the construction of the Appellant's plant, at Hemmings Falls, had considerably extended the surface of the basin. immediately above, while reducing the velocity of the current, and had created new conditions, more favourable to the formation of ice and frazil, and to the accumulation of ice jams, while impeding the natural flow, downstream, of ice jams. (Case, p. 1079, l. 43 to p. 1080, l. 27; also p. 1088, ll. 3 to 23; — also p. 1103, ll. 18 to 40); that the dam forming part of the said plant had greatly affected the flow of the river downstream, specially during the break-up periods. (Case, Vol. 6, p. 1102, l. 42; to p. 1103, l. 16); and that without the said dam, the embankment would not have been washed out. (case, p. 10 1105, ll. 34, 35, 36)—. He also found, as a fact, that during the morning of the 8th of April, the officers and employees of the Appellant exploded two cans of thermite. (case, p. 1104, ll. 26 to 42)—. He further expressed the opinion — although admitting that the question had little, if any, interest in view of his previous findings —, that the disaster might have been averted, had the Appellant properly manipulated its sluice gates. (case, vol. 6, p. 1105, ll. 39 to p. 1106, l. 46)—.

On the other hand, the learned trial judge found that it 20 had been impossible for the Respondent to foresee and to prevent the accident; that the embankment where the accident occurred had been properly built, had always been in a good state of repairs and was in good condition, at the time of the accident (Case, vol. 6, p. 1060, ll. 30 to 45)—. And he therefore held that the Appellant was solely and entirely responsible for all the damages resulting from the said accident.

Proceeding to assess the damages, the learned trial judge found that the Respondent was entitled to recover the full amount 30 claimed by the information, save and except a sum of \$600.00 which the Respondent had allowed as grants, for flagging the train, and he therefore fixed the damages to the sum of \$80.923.20 (case, vol. 6, p. 1107, ll. 46 to p. 1109, l. 20)—.

The judgment appealed from, had also held that the Respondent was and is the real owner of the railway line where the accident occurred and of the entire Canadian National Railway System; but this holding is no longer open to discussion, for the reason that the parties, after the judgment, fyled a declaration whereby the Appellant admits that its sole grounds of appeal are: —a— that it is not responsible for the damages arising from the accident above described and which are considered as duly proven; and —b— that, subsidiarily, it is only partly responsible for said damages — (case, vol. 6, ll. 1, p. 1048, ll. 27 to 37)—.

We respectfully submit that the above findings are well founded, in fact and in law.

ARGUMENT.

—I—

10 THE ACCIDENT WAS CAUSED BY THE DAM ERECTED BY THE APPELLANT AT HEMMINGS FALLS AND THE APPELLANT WAS RIGHTLY HELD RESPONSIBLE

-A—The St-Francis River has its source in Aylmer Lake and empties itself in Lake St-Peter. It runs mostly from south to north. On its way down from Lennoxville, it passes, in the order indicated, Sherbrooke, Bromptonville, Windsor (also men-tioned as Windsor Mills), Richmond, Ulverton Rapids, Hemmings Falls and Drummondville, to mention only the principal 20 places referred to in the evidence. On a militia map (exhibit 29) are indicated the distances along the river, at every five miles, from Lake St-Peter upstream. Drummondville is about half way between miles 30 and 35; Hemmings Falls is a very short distance above mile 35; Ulverton Rapids at mile 57, Richmond a little below mile 65 and Sherbrooke between miles 86 and 87. Although not shown on the militia map (exhibit 29), Dauphinais' Rapids must be mentioned: the head of these rapids is situate between miles 40 and 45; (See also exh. Z-24). The change in elevation between the head of the Hemmings Falls' 30 rapids, at about mile 36 and Lake St-Peter, is 300 feet; it is 160 feet between Lennoxville and the head of the Hemmings Falls's rapids, a distance of 54 miles and it is 345 feet between Lake Aylmer and Lennoxville, a distance of 45 miles. — (Olivier Lefebvre, case, Vol. 4, p. 795, ll. 11 to 19; see also exhibits Z-27, Z-28, Z-29, Z-30, and Z-31). — The section of the river from below Windsor Mills to Hemmings Falls, a distance of about 39 miles, is still unimproved. This section includes the Ulverton Rapids and the Dauphinais' Rapids. The drop in this section is about 80 feet: above that unimproved 40 section, dams are found at Bromptonville and at Windsor Mills. (see exhibit 30; depos. McLachlan, vol. 2, p. 283, ll. 12 to 17)-. The water level below Windsor Mills standing at the elevation 395 in low water, is about 405, or so, at high water — (McLachlan, case, vol. 2, p. 282 — l. 47, to p. 283, l. 3)—.

A water level profile fyled as exhibit 30 shows the following levels: — at Sherbrooke, 470; at Bromptonville, 454; at the Canada Paper Mills dam at Windsor, 410; at Richmond, 370; at Ulverton Rapids, 355; at the head of the Dauphinais' Rapids, 321. — As to the head of Hemmings Falls, the water level is retained by the dam, at elevation 317. (McLachlan, vol, 2, p. 282 l. 19 to p. 283, l. 12)—. See exhibit 30)—.

10 According to both Mr. McLachlan, for the Respondent, and Mr. Lefebvre, for the Appellant, the St-Francis River flows through a territory having quite steep slopes; its drainage area is contained in a more or less circular basin, not far from Sherbrooke, and covering a surface of about 4000 miles; the velocity of the waters coming from its tributaries is great and, as a consequence, it is liable to rise very suddenly, after heavy rain and to become dangerous, during the break-up periods at spring-time. (McLachlan, case, vol. 2, p. 288, ll. 35 to 40; — Lefebvre, case, vol. 4, p. 796, ll. 19 to p. 797, l. 15)—.

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"C'est un cours d'eau en régime torrentiel" says Mr. Lefebvre (case, vol. 4, p. 796-1. 21)-.

And further:-

"La rivière coule du sud au nord, et, à cause de ce fait, "elle est sujette à de graves inconvénients, lors des débâcles au "printemps. (Case, vol. 4, p. 796— l. 42 — and 43)—.

30 In 1887, when the embankment that was washed out was built, there was no dam in that section of the St-Francis River, extending from below Windsor Mills to below Drummondville. But, in 1896, the town of Drummondville built a wooden dam about 6 feet high, at a distance of about 1150 feet above the railway bridge (Moisan, case, Vol. 3, p. 553, ll. 23 to 41; McLachlan, vol. 5, p. 928, ll. 31 to 35; See plans exhibits 19 and Z-10)—.

In 1918, the Appellant acquired the power plant of the town of Drummondville, including the wooden dam above men-40 tioned. It, then, built a new dam a few inches higher than the old one, which was demolished. This new dam is still in existence. It stands about a hundred feet below the old one, opposite the town of Drummondville, and above the railway bridge. (Gratton, case, vol. 5, p. 886, ll. 30-31 It comprises a wing wall on the east shore of the river running down-stream for a distance of about 500 feet and standing at elevation 271; from that point, the dam, turning almost at right angle, crosses the river somewhat further than midstream; from there, turning again at practically right angle, it runs downstream past the C.N.R. Line until it reaches the power house and it forms with the west shore of the river a canal which brings the water to the power house. The elevation of the section of the dam partially crossing the river is 264 (See plans exhibits 19 and Z-10; also photo exhibit Y";-Mercure, case, vol. 3, p. 545, ll. 10 to 20)-.

Then, in 1924-1925, the Appellant, built at about 2 and 1/2 miles upstream (see exhibit 29; Mercure; vol. 5, p. 917, ll. 31-(32) its Hemming Falls Plant, which is aptly described by the learned trial judge as follows:--

"Starting on the east side of the river there is first a con-"crete wing wall about 420 feet long which on the date of the "accident was at elevation 324 but has since been raised to ele-"vation 327, apparently in consequence of the 1928 flood. At the "end of this wall is the power house, about 250 feet in length. 20 "Then there are four sluice gates, each of them 50 feet wide, "having with their frames a total width of approximately 275 "feet. Adjoining these gates is the spillway, 507 feet long, ex-"tending to the west shore of the river. Next to the spillway, and "forming therewith an obtuse angle is a concrete wing wall run-"ning upstream for a distance of 300 feet; this wall abuts on a "comparatively elevated point or strip of land, some 300 feet "wide at the shore line, forming a natural embankment. Then pro-"longing the wing wall and the embankment upstream is an earth "dyke or, as it has been repeatedly called during the trial, an 30 "earth fill 4200 feet long."

The elevation at the sill of the gates is 299, and the gates are 22 feet in height. The elevation of the spillway is mentioned as being 313.7 on plan exhibit 19 and 314 on plan exhibit 18.

Removable flash boards 7 feet long are placed on top of the spillway to raise the level of the water, when necessary.

The elevation of the wing wall on the west side of the ri-40 ver is 324 and that of the earth fill 327. (Dunfield, vol. 1, p. 74, 1. 38 to p. 76, l. 40; pp. 79, 80; vol. 1, p. 266, l. 27 to p. 268, l. 23; Surveyer, vol. 4. p. 775, l. 40 to p. 776, l. 10- see plans exhibits 18 and 19; also photos, exhibits 12, 13 and 20)-

The dam above described modified considerably the course of the St-Francis River. It raised the level of the water upstream a little over 9 feet, to wit: from elevation 309 to elevation 318.2, creating thereby a basin extending 5 and $\frac{1}{2}$ miles upstream from the power house. At the same time, it widened the river consider-

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ably: on the west shore, from the spillway up to Ernest Dionne's property which is lot 99 of the township of Wickham, the river was almost doubled in width, reaching at its broadest point a width of over 1/2 mile; it was also widened although to a greatly reduced degree, as far upstream as lot 23-b, in the township of Simpson, on the east side and as lot 67 of the township of Wickham, on the 10 west side. On plan exh. 19, the new shore line of the river is indicated by a continuous heavy white line and the original shore line is indicated by a broken or dotted line.

Moreover, the construction of the dam has caused the Hemmings Falls' Rapids to entirely disappear.

In state of nature, the normal water level, from the foot of the Dauphinais' Rapids downstream, for a distance of about 32/3 miles gradually fell from elevation 310 to elevation 309. Then, 20 there was a drop of the river of nearly 45 feet. That is what was called "Hemmings Falls". (See plans exh. 19, 30, 65, Z-28; also see (Mercure, vol. 1, p. 93, ll. 37 to 45; p. 111, ll. 20 to 37; Ouimet, vol. 2, p. 325, ll. 39 to p. 326, l. 20; McLachlan, vol. 2, p. 291, ll. 4 and 5; Griffin, vol. 4, p. 630, ll. 2 to 24)—.

On account of the dam, this entire section of the river is now at the uniform elevation 318.2.—

- Again, the Dauphinais' Rapids have been affected. The 30 Dauphinais' Rapids, so called because they are opposite the property of one Dauphinais, being lots Nos 69, 70, 72 and 73, of the township of Wickham is situate at about mile 41, a distance of 5 or 6 miles from the dam .In state of nature, these rapids extended over a mile in length and had a drop of about 15 feet. The basin created by the dam now extends ³/₄ of a mile above what was the foot of the rapids, and it has absorbed about ²/₃ thereof. (See Mercure, case, vol. 1, p. 82, ll. 48 to p. 83, l. 10; also p. 85, ll. 30 to 35; Ouimet, case, vol. 2, p. 326, ll. 11 to 17; Beaubien. case, vol. 4, p. 755, ll. 35 to 47).
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Another effect of the dam must be noted. In a state of nature, the river, from Dauphinais' Rapids to the head of the Hemmings Falls Rapids was very shallow. It could be crossed afoot, or in vehicles; in many places, and the average depth was about 5 feet. After the dam was built, this section of the river was changed into a stretch, 12 to 13 feet deep. (Laprade, vol. 2, p. 216, l. 35, to p. 217, l. 30; Lea, vol. 2, p. 309, ll. 10 to 28).

Finally, because the depth of the river was affected, the velocity of the flow was considerably diminished for about 6

miles upstream, that is from the foot of the Hemmings Falls to the Dauphinais' Rapids. (Lea, case, vol. 2, p. 309, ll. 3 and 4); Beaubien, case, vol. 4, p. 755, ll. 46 to p. 756, l. 2). Before the dam was built, — says Ouimet—, the velocity of the flow was three to seven times higher than after. (Ouimet, case, vol. 2, p. 326, ll. 25 to 46).

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Such was the state of things when the spring break-up of 1928 took place. During the 5 days preceding the 8th of April 1928, mild weather had prevailed continually, the thermometer not descending to the freezing point. (Lefebvre, case, vol. 4, p. 800, 11. 32 to 37; See meteorological reports, exh. 33). The snow was melting rapidly; the inflow of the river was abundant and large quantities of ice were flowing down from upstream; but at the foot of the Dauphinais' Rapids, at a distance of about 5 or 6 miles from the dam, opposite lots Nos. 22 and 23, of the 20 township of Simpson and in the immediate vicinity of an island called "Ile Ronde", and bearing No. 71, of the Township of Wickham, (see plan exh. 65), a huge jam of broken ice and frazil had formed and was totally obstructing the river. It was about 20 to 25 feet high, extending from shore to shore and resting upon the very bottom of the river (Mercure, case, vol. 1, p. 83, ll. 3 to 44). and p. 113, ll. 22 to 35).

"Ca s'appuyait sur les côtes, — says Mercure, — et dans le fond de la rivière. C'était paqueté jusqu'au fond (Mercure, 30 vol. 1, p. 113, ll. 38 and 39). "C'était de la glace accumulée là pendant longtemps avant, je suppose. Je savais qu'il y avait du frazil d'accumulé. (Mercure. vol. 1. page 83, ll. 41 to 45; see also vol. 1, p. 85, l. 40 to p. 86, l. 22). Cusson, vol. 1, p. 146, ll. 1 to 10);

Naturally, the jam acted like a dam and was impounding large volumes of water and ice coming from upstream, that were spreading over the public road and the adjoining properties. This is clearly explained by Mercure. This witness has lived on 40 the shore of the river between the Drummondville dam and the Hemmings Falls dam for over 47 years. (Mercure, case, vol. 1, pp. 81, ll. 20 to 30; also vol. 5, p. 915, ll. 17 to 27). He has rafted logs on the river every spring, for over 40 years; he has known the river in its different phases; first in a state of nature, then with a wooden dam erected by the town, in 1896; later on, with the dam of the Defendant company replacing the town dam, in 1918, and finally with, in addition to the Drummondville dam, the dam at Hemmings Falls; he has witnessed all the ice breakups and spring floods for over 45 years and always took a keen interest therein, for the reason that, every spring, he was waiting for the river to get clear of ice in order to start the floating of his logs. (Mercure, case, vol. 1, p. 81, ll. 33 to 40; also vol. 5, p. 915 and foll.) Although this witness appears to have some indirect interest in cases more or less similar to the present one, 10 the learned trial judge expressly states in his remarks that this witness impressed him as being frank and honest and that he saw no reason not to believe his testimony (see remarks of the trial judge, case, vol. 6, p. 1079, ll. 22 and 23).

Mercure was at the Dauphinais' Rapids with Adélard Cusson, on Saturday, the 7th., of April, at about one o'clock in the afternoon:—

"J'ai constaté là —, says he — que, dans la rivière ici, la 20 rivière était barréc; il y avait une chute d'eau qui descendait et l'eau et la glace passaient sur ce terrain ici."

"Q.—Sur le terrain de Dauphinais ?

"Ř.—Oui; 70 ou 73 (meaning cadastral Nos. of the properties) et la maison de Dauphinais qui se trouve à peu près à deux arpents du grand chemin, il y avait de l'eau qui passait entre le grand chemin et Dauphinais, de sa maison". (Case, vol. 1, page 112, ll. 33 to 39).

- 30 At Cadieux' camp, which is built on lot No. 69 or 68, of the township of Wickham, just below Dauphinais' property, the water had reached the gallery, but had receded a couple of feet, leaving large accumulations of ice on the property. In Mercure's opinion, the water had reached 25 to 30 feet above its usual level and Cusson estimates that, at the time they were there, the water was from 18 to 20 feet higher than normally. (Mercure, case, vol. 1, p. 84, ll. 15 to 24; Cusson, case, vol. 1, p. 146, ll. 16 to 27).
- From Cadieux' camp, these two witnesses proceeded fur-40 ther up in the direction of Généreux' camp, but they where unable to reach that place, because they had to cross a ditch which was full of water and the bridge over the ditch was gone (Mercure, case, vol. 1, p. 84, ll. 24 to 28; Cusson, vol. 1, p. 146, ll. 49 to p. 147, line 9). Then, they decided to go to de Montigny's camp, which is about a mile above Dauphinais'. From the gallery of de Montigny's camp, they could see an enormous accumulation of ice on the river, broken and piled up 20 to 30 feet high, both upstream and downstream, as far as they could see, to wit:

approximately a mile both ways. Mercure, vol. 1, p. 84, ll. 29 to 40); Cusson, vol. 1, p. 147, ll. 10 to 30): The accumulation was such that no clear water could be seen (Mercure, vol. 1, p. 147, 11. 33, 34, 35). A few minutes after, they had reached de Montigny's camp, they noticed that the ice had started moving (Mercure, case, vol. 1, p. 84, ll. 44 to 49; Cusson, case, vol. 1, p. 147, ll. 10 33 to 40). Cusson decided he would go back to Dauphinais' to watch the movements of the ice, but Mercure did not go with him. He then noticed that the water had reached the windows of Dauphinais' house, although this house stands on a hill. (Cusson. vol. 1, p. 148, ll. 27 to 30;) Cusson, then, returned to de Montigny's camp. Seeing that the water was receding, both Cusson and Mercure decided that it was time for them to return home, as the situation might become dangerous. (Mercure, vol. 1, p. 85, ll. 10 to 20; Cusson vol. 1, p. 148, ll. 30 to 45). On their way back, Mercure noticed how the water had invaded Dauphinais' 20 house and he further noticed that the water had raisen about six (6) feet in the public road, and had deposited thereon heaps of ice (Mercure, case, vol. 1, p. 85, ll. 13 to 20). The flood caused by the jam, at Dauphinais' Rapids, extended even further back, Pancrace Allard who resided 9 or 10 miles above the Hemmings Falls dam, states that the water invaded his stable ; that he had to travel in a boat, from his house to his stable, in order to try and save his cattle, but that the water continuing to rise, he had to give up the task. He lost 16 heads of cattle that where drowned.

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"Il faisait un grand vent; il faisait de la glace et de l'eau "en abondance." (Allard, case, vol. 2, p. 232, ll. 7 and 8).

On Sunday, at day-break, the level of the water at Allard's property was between 31/4 to 4 feet lower; it receded again, on Sunday, at about 2.30 P.M., until it reached a level 7 or 8 feet higher than on the previous day (Allard, vol. 2, p. 231, ll. 34 to p. 232, l. 24).

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The reason why the jam was so long without moving from the foot of Dauphinais' Rapids, was obvious: it was kept in place by the sheet of solid ice covering the $5\frac{1}{2}$ miles basin that extended from the dam to the foot of the Dauphinais' Rapids.

Q.—"Par-quoi avait-elle été arrêtée? R.—"Parce que la glace d'en avant la retenait.

ther:--

"Je comprenais qu'il n'y avait pas moyen que l'eau force assez pour se faire un chemin à travers cette masse de glace-là durant cinq milles de long." (Case, vol. 1, page 87, ll. 10, 11 and 12).

And Cusson:---

Q.---Sur quoi était-elle arrêtée, la "jam", d'après-vous? Ř.—C'était encore dans le bassin qu'elle était arrêtée.

Q.—Sur quoi?

R.--Sur la glace.

Q.-Elle était arrêtée par la glace?

Ř.—Oui, certain. C'est cela qui tenait, comme ça avait fait le premier coup. (Case, vol. 1, p. 149, ll. 24 to 32).

The ice in the basin, adds Mr. Cusson, "n'était pas déran-20 gée"... "là on a dit: Ca ne pourra jamais passer"... (Cusson, case, vol. 1, p. 149, ll. 43 to 50). In the basin, says Sutherland, the ice "had not moved at all; it was in the same state it had been all winter". (Sutherland, case, vol. 2, p. 271, ll. 34 & 35).

The Dauphinais' jam finally gave way under the continual increasing pressure of the ice and of the water coming from upstream, as well as under the growing influence of the persisting mild weather; it began to move definitely towards the Appellant's dam, at about 4.23 P.M., on Saturday, the 7th., of April, 30 (see plan, exh. Z-5: McLachlan, case, vol. 2, p. 289, ll. 20, 21). That was the time when Mercure and Cusson noticed that the

flood was subsiding.

Charles Manseau saw the Dauphinais' jam entering into the lower portion of the basin. He left Drummondville between 3.30 and 4 P.M., with a party, for the purpose of watching the ice break-up .Having reached lot No. 8 of the township of Simpson, on the eastern shore of the river, at about 10 arpents from the Appellant's power house (see plan, exh. 21), he noticed that the 40 ice was accumulating upon the earth dyke, on the other side of the river, at a point marked "A" on the photo exhibit No. 20 (Manseau, case, vol. 2, p. 341, line 40 to p. 342, l. 33). At about 5 o'clock, the crash of the ice became terrible. "On entendait le "craquement de la glace et le bruit et une force terrible. On sen-"tait qu'il y avait là une poussée terrible. On s'est dit: "Tout "cela va partir. Si la glace part, verte comme elle est là, si cela "continue, tout cela s'en va". (Case, vol. 2, page 342, ll. 42 to 46).

Manseau proceeded a little further up to Bergeron's property, lot No. 10 -a- of the township of Simpson. The state of

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things was still getting worse. From Bergeron's property, they went to lot No. 12, where there is a small elevation.

"Là, tout était en mouvement, tout était bousculé. Tout
"était monté, les arbres cassaient, la terre partait, tout était bou"leversé à l'envers. La peur nous a pris de nouveau. On a dit:
10 ""On va s'en retourner sur le côteau." On est monté sur le cô"teau. Rendus là, on n'était pas capables d'aller plus loin. L'eau
"est monté peut-ĉtre vingt pieds dans l'espace de quinze minu"tes. On s'est trouvé renfermés. Parce que sur ce côté-ci du cô"teau, c'est une baissière, c'est le ruisseau. De l'autre côté, il y
"a un grand platin, jusqu'au 14. La glace est entrée dans le bois,
"il s'est pilé huit ou dix pieds de glace dans le chemin". (Case, vol. 2, p. 343, ll. 28 to 37). With great difficulty, they were rescued later on, from this perilous position. Lot No. 12 where the witnesses were surrounded by ice and water is opposite Labonté's
20 property and, says he, the ice was moving below, as well as above the point where he was standing. (Case, vol. 2, p. 341, ll. 44 to p. 343, l. 2).

On the same day, 7th., of April 1928, Mercure and Cusson who had inspected the Dauphinais' Rapids, in the afternoon, decided to go and see what was going on, at Hemmings Falls; they left at 7.30 P. M., accompanied by Wilfrid Proulx (Mercure, case, vol. 1, p. 87, ll. 23 to 27; Cusson, vol. 1, p. 150, ll. 25 to p. 151, l. 13). Both Mercure and Proulx climbed on the earth 30 filled dam, on the point marked "A", on photo No. 20, and walked some distance thereon. (Mercure, case, vol. 1, p. 87, ll. 27 and 28; also p. 109, ll. 45 to 50; Cusson, vol. 1, p. 151, ll. 20 to 33). Cusson followed them in a carriage, on the public road. (Mercure, case, vol. 1, p. 87, ll. 33 to 35). Mercure then noticed that the ice was leaning upon the earth filled dam and that at some places it had been pushed over it.

"Elle avait forcé, parce qu'elle s'était accotée, cassée, ct de clle était remontée à peu près à un endroit à peu près quatre pieds par-dessus le rempart". (Case, vol. 1, p. 88, ll. 1, 2, 3).

He then shouted to Cusson that the ice in the basin had moved and that it was pressing upon the earth dyke. At the same moment, Cusson found that the road was filled with ice and water and he replied to Mercure that he could not go any further and that it was time to go back, because it was becoming dangerous (Mercure, case, vol. 1, p. 87, ll. 35 to 49; also p. 102, ll. 37 to 40; Cusson, vol. 1, p. 151, ll. 40 to 50). In order to help them, should it become necessary, Cusson also climbed on the earth filled dam and he found that, at various places, chunks of ice were piled on the dam. (Cusson, case, vol. 1, p. 152, ll. 1 to 30) Thereupon, all three left the place hurriedly.

On Sunday the 8th., of April, at about 1 o'clock, in the af-10 ternoon, Cusson, Mercure and a civil engineer and landsurveyor, Séraphin Ouimet, Wilfrid Proulx and Alfred Mercure, son of Alexandre Mercure, drove from Drummondville to Hemmings Falls. Ouimet, Proulx and Mercure, father and son, went on the carth filled dam, at a point marked "A", on the photo exhibit No. 20. Cusson continued to drive a little further up on the highway which parallels the river, but when he reached point marked "C", on the photo Exhibit No. 20, he had to turn back, on account of the ice that was in the road. He then joined his companions, on the earth dyke. From that point, they examined the 20 river. All they could see, in both directions, was broken ice, packed and piled up, extending as far as the dam. The basin was completely filled and the ice was blocked in the entire basin. Huge icebergs 10 feet high, says Ouimet, could be seen floating for a while and then disappearing underneath the ice cover of the basin.

"Alors, ces glaces en se dirigeant vers les portes, je me "suis dit: "elles vont fermer les portes, elles vont aller fermer "les portes, et en fermant les portes, la rivière va arrêter, il va 30 "y avoir un remous, un "back water"", et dans ce "back water", "tout va lever, et ça va sauter par-dessus le rempart, où nous "étions. Alors, j'ai dit: "Sauvons-nous; je crois que dans quel-"ques minutes il sera peut-être trop tard." (Case, vol. 2, p. 194, 1l. 20 to 27).

The ice had gone up on Ernest Dionne's property, being lot No. 98, of the township of Wickham, and it had spread allover the ground, to the outskirt of the wood, at the back of his property. This witness could hardly see the house, on Labonté's 40 property, owing to the height of the ice accumulation. The ice had leaped over the upper end of the earth dyke and passed around it. Heaps of ice were piled on the earth dyke. For several hundred feet, the height of the ice exceded the height of the earth dyke. Chunks of ice filled the road and were scattered on the adjoining properties, for a long distance back. At places, it was 7 or 8 feet high, on the road. (Manseau, case vol. 2, p. 250, ll. 1 to 37; Bergeron, vol. 2, p. 264, ll. 38 to 40; Ouimet, vol. 2, p. 193, ll. 8 to p. 195, l. 50; Mercure, vol. 1, p. 88, ll. 40 to p. 90, l. 40; also vol. 1, p. 103, l. 1 to p. 104, l. 3; also p. 110, l. 45 to p. 111, l. 13; Cusson, vol. 1, p. 156, ll. 23 to 43; see also photo exh. no. 20). Walter Labonté and Ernest Labonté who were at the basin about the same time, entirely agree with the version of the above witnesses. (See Walter Labonté, case, vol. 1, p. 132, ll. 15 to p. 133, l. 50; Ernest Labonté, case, vol. 1, p. 135, ll. 33 to p. 136, l. 30).

10 The ice flowing down from upstream, adds Ernest Labonté, had pushed back the sheet of ice on the lower basin, up to the power-house. (Case, vol. 1, p. 136, ll. 13 to 19). When Ernest Labonté came back to his home which is situate at about 1 mile and ½ above the dam on the western shore, of the river, at about 3 P.M., he found that the water had raised in his house at a height of about 4 feet, that his barn had been upset and that the ice was spread all over the ground. (Labonté, case, vol 1, p. 135, ll. 13 to 35; p. 139, ll. 1 to 33; Cusson, vol. 1, p. 159, ll. 40 to p. 160, l. 30; Mercure, vol. 1, p. 91, l. 45 to p. 92, l. 30.)

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The above version is also corroborated by Argouin, a taxidriver who was called from Drummondville, to take Mr. Dunfield, assistant-manager of the Appellant, with two employees of the company, up the river. The ice was piled, says Argouin, along the power house, up to the window. (Argouin, case, vol. 1, p. 123, ll. 33 to p. 124, l. 49; also p. 126, ll. 3 to 46; also p. 127, ll. 33 to 40).

Now, all these witnesses assert that what was holding 30 back this huge mass of ice was the Appellant's dam:

"Q.—Qu'est-ce qui empêchait dans le temps cette masse de glace de partir?

"R.-C'était retenu par la "dam";

"Q.—Par la chaussée?

"Ř.---Oui.

"Q.—A Hemmings Falls?—

"R.—Oui, absolument"—. (Mercure, case, vol. 1, p. 90, ll. 9 to 16)—. And further:—

"Q.-Qu'est-ce qui retenait l'immense quantité de glace que vous voyiez là?

"R.—C'était la "dam" et le rempart, c'était tout cela"—. (vol. 1, p. 124, ll. 18 to 21)—. And Ernest Labonté:—

"Q.—Comment se fait-il que toutes ces glaces-là étaient amassées d'un bord et de l'autre, comme cela?

"R.-C'est parce qu'elles avaient été retenues par une glace trop épaisse, d'après mon opinion, dans le bassin, et par le barrage, naturellement, elle n'avait aucune chance de pouvoir passer.

"Q.-Qu'est-ce que vous appelez le barrage?

"Ř.—La chaussée elle-même.—" (case, vol. 1, p. 136, ll. 19 to 26)—. And Ouimet:—

"Qu'est-ce qui retenait à cet endroit toute cette quantité 10 de glace et d'eau?—

"-Le barrage de la compagnie et ses remparts"-. (case, vol. 2, p. 195, ll. 16 to 18)- And Manseau:-

"Q.—Qu'est-ce qui bloquait la glace, là, en avant?

"Ř.—Č'était la glace d'en avant de la Southern Canada Power Company. Il y avait deux milles de long encore de glace qui n'était pas partie, qui ne grouillait pas.

"Q.-Qui l'arrêtait, cette glace-là, qui l'empêchait de passer en bas?

"R.—Il n'y avait pas assez d'eau, je suppose.

20

"Q.—Y-a-t-il un barrage en bas là?"

"R.—Il y avait la dam."— (case, Vol. 2, p. 255, ll. 10 to 29)—.

The conclusion arrived at, by those who watched and followed the behaviour of the river and the progress of the ice break-up, during the two days of the 7th and of the 8th of April, is corroborated and scientifically justified by the experts of the Respondent.

30 Mr. MacLachlan, who can undoubtedly be called one of the most eminent experts in the matter, (see vol. 2, p. 279-280) asserts most emphatically that:—

"The accident to the Canadian National Railways was "brought about by the state of the Hemmings Falls' dam with-"out question. The building of that dam caused the jam to occur at "a point it would not occur in nature. (case, vol. 2, p. 281, ll. 32-33)—. And, at page 290:—

Relying upon his experience and upon the evidence of the above witnesses, Mr. MacLachlan fully explains the reasons of

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his opinion. Owing to the stillness of the water in the basin, the ice cover,—says McLachlan,—must have formed about the 5th of December 1927 and it continued upstream quite quickly. (Case, vol. 2, p. 287, ll. 20 to 33). On the 7th of April, jams existed at Richmond which is at mile 63; at Ulverton, mile 57; at Wentworth, mile $51\frac{1}{2}$; at Gauthier, mile 49; at Dauphinais, mile 40; (see exh. Z-24)—. Computing the velocity of the flow, Mr. Mac-10 Lachlan states that all these jams, with the exception of the Richmond's jam reached Dauphinais' before 4.23 P.M., on the 7th of April, that is to say before the Dauphinais' jam gave way. The jam at Richmond was too far to be at Dauphinais' at 4.23 P.M.— (case, vol. 2, p. 289, ll. 10 to 40). The Dauphinais' jam, measuring about 2 miles long, contained 92.000.000 to 110.000.-000. cubic feet of ice. (Vol. 2, p. 290, line 3 to p. 291, line 3). Moreover, it impounded a volume of water computed at 210.000.000. cubic feet (vol. 2, p. 291, ll. 13 to 21)— When the jam at Dau-20 phinais' broke, at 4.23 P.M., a pulsation must have gone down the river. The records of the Appellant's plants show a drop and then a sudden raise of 8 feet, to wit: from elevation 317.5 to elevation 325.5, in the water level above the plant. Immediately, according to the Appellant's record, 87.000. cubic feet per second of water passed over the dam. This caused a general rise of about 7 feet in the headrace and a drop above Dauphinais' of about 8 feet. (case, vol. 2, p. 291, ll. 35 to 46; see also exh. No. 34-; also Roberts, for the Appellant, p. 828, vol. 4, ll. 17 to p. 829, line 10)-. This mass of ice about 10 feet thick, with about 10 feet of water 30 underneath rushed forward, with a head of about 14 feet to start with, which gradually diminished, as it progressed. (Vol. 2, p. 293, 11. 3 to 20).- But, after it passed the point which is often called the sill, above Bergeron's and a little below Labonté's gauging station, this mass of water was stopped by the solid ice cover that extended from the Hemmings Falls' plant upstream. (see exh. 21 and 35; vol. 2, p. 293, ll. 27 to 40; p. 301, ll. 32 to 40;) According to the record of the Joint Board of Engineers (exh. No. 40;-vol. 6, pp. 1019 and 1931) "Ice will not go under if the "velocity is less than two and a quarter feet per second. It may 40 "go under, or it may not, up to perhaps something higher than "three and a quarter feet per second, or something of that type. "There is a region in which it may do one or do the other de-"pending on the crookedness of the river, whether the river is

At about 10 minutes after 6, in the evening, of the 7th of April, high velocities of the flow arrived and, in accordance with the data contained in the above report (exh. no. 40), the ice and water were carried under the ice that stretched across the Hem-

crooked or straight"-. (Case, vol. 2, p. 293, ll. 45 to 50)-.

mings Falls basin, from embankment to embankment. (See diagram exh. No. 36; vol. 2, case, p. 294—ll, 1 to 16)—. This condition continued until about 7.45 P. M., and during that whole period, the basin was being quickly filled with ice. On the other hand, the flow of water rose from 87.000 cubic feet per second to 100.000 cubic feet per second, before 7 P. M. and it continued until about 7.45 to flow at 100.000 cubic feet per second (see diagram exh. P. 36, 37, 38, 39, and 40; (Vol. II, p. 294, ll. 30 to 42). By 7 o'clock P. M., 133.000.000 — cubic feet of ice were carried into the basin that set up a resistance to the discharge of water through the basin, which caused the water level in that basin to assume a slope.

In fact, the water level in the basin which stood at elevation 321 rose suddenly to elevation 327. And this explains why about that time the ice was pushed over the end of the embank-20 ment, at the point referred to by the witnesses Mercure, Cusson, Ouimet and Argouin and marked "A" on the photo exhibit No. 20. (Vol. 2, case, p. 294, ll. 43 to p. 295, line 30)—.

After 7 P.M., the water level in the basin fell from elevation 321 to elevation 316.8 and the discharge was suddenly reduced from 100.000 cubic feet per second to 55.000 cubic feet per second. (Vol. 2, p. 295, ll. 25 to 50). That condition immediately changed the velocity of the flow at the head of the ice cover, to less than 21/4 feet per second and immediately the ice began to 30 pack upstream and it packed upstream through a period of about 2 hours during which the discharge was below 62,000 cubic feet per second. (Vol. 2, p. 296, ll. 1 to 23). It started to pack upstream, on account of the resistance which originated in the dam, each particle of ice being supported by the particle that was before and the packing upstream continued until it reached Labonté's gauging station.— (case, vol. 2, p. 301, ll. 33 to 40). At 10 o'clock, the flow through the power house raised to 75.000 cubic feet per second and the ice cover had packed back to Labonté's gauging station, where the section of the river is smallest 40 (See exh. 36) and where the velocities were, as a consequence, much faster. On account of these two factors, the packing back

much faster. On account of these two factors, the packing back of the ice stopped and the ice again began to go under (Case, vol. 2. p. 296, ll. 23 to 30)—. This reverse operation must have begun about midnight, when the Richmond ice arrived, and during the whole night that ice was carried underneath to pack somewhere in the vicinity of Labonté's gauging station and deposited partly between Labonté's gauging station and the sill, at station 84 above Bergeron's property, and partly in the basin below.— (Case, vol. 2, p. 296, ll. 33 to 43). It is known that the water level rose at Labonté's house to above elevation 334. (Vol. 2, p. 296, ll. 40 to 48). From midnight until Saturday, the 8th of April, at noon, 75.000 cubic feet per second was going into the river. During that same period, the discharge passing at Hemmings Falls Plant was 60.000 cubic feet per second, 15.000 cubic feet per second was being stored behind the jam. (Vol. 2, p. 296, ll. 43 to p. 297, line 29). At 2.30 P.M., on the 8th of April, 72.000 cubic feet per second was being passed through the plant, at Hemmings Falls. (see exhibit No. 39—). At that time, the water level at the head of the jam was 334. The water level in the basin just above the Power plant was clevation 317¹/₂. There were 16¹/₂ feet of slope built up. That must have accomodated all the ice from Richmond, and all the ice that was in the Dauphinais' jam, and all the ice that was covering the river between Dauphinais' and the head of the basin and as well as any frazil that may have been deposited in the river.

The total quantity of ice necessary to produce that difference of level was 210.000.000 cubic feet. At the same time, the jam was impounding 623.000.000 cubic feet of water (Vol. 2, p. 297, 11, 30 to p. 298, line 23)—. Such were the conditions at 3 o'clock in the afternoon of the 8th of April. Then, the jam above described suddenly went out. The water had been heating up rapidly and melting the jam. A channel had started to open up along the north shore and had gradually extended with the re-30 sult that the support which the sheet ice had on both shores gradually weakened, and finally a section of the basin ice sheared right out completely down the dam and the whole thing moved downward into the dam and into the basin below, extending from the power house to Drummondville. Immediately, 150.000 cubic feet per second passed in one hour, then, 126.000 cubic feet per second for another hour and 110.000 cubic feet per second also for another hour. That quantity of water raised the small area between the Hemmings Falls and Drummondville, about 10 feet in 40 minutes. It forced the channel through Drummondville to 40 carry 70,000 cubic feet per second more than it ever carried before 1928 and this excess of flow running for a couple of hours did the damages. (vol. 2, case, p. 298, line 30 to p. 299, line 45)-

Messrs Lea and Ouimet. both civil engineers of wide experience (see case, vol. 2. pp. 306, and 307), fully agree with Mr. McLachlan, as to the cause of the accident. "The cause of the "washout suffered by the railway,—says Lea—, was due to the "breaking of the ice jam above the Hemmings Falls dam, which "released a large quantity of water which was impounded above

"that jam, and there were no means of controlling this water "when released, and it passed down the river in a quantity which "has been variously stated as from 150.000 to 168.000 cubic feet "per second, which is about double the maximum flow of the "St-Francis River, and was of course likely to, and did, cause "the destruction to certain properties"-. (case, vol. 2, p. 307, ll. 10 43 to 50)—.

And the impounding of the water was due to the dam which acted as an obstacle to the normal flow of the ice and water. (Vol. 2, p. 308, ll. 1, 2, 3 and 4)—. That there was an obstruction is shown by the fact that the water about one mile above the dam reached elevation 325 to 326, which is at least 3 feet higher than it was at the dam (See exh. 34; vol. 2, p. 308, ll. 1 to 40). Again, Lea states that the head of the jam which occurred above Hemming Falls, after the Dauphinais' dam, carried away, must have 20 been somewhere near Labonté's gauging station, by reason of the fact that for a three mile stretch above that, there was very little difference in the level as recorded by the high water marks, which are shown on exhibit No. 35. And Lea concludes by saying that the dam which was built at Hemmings Falls "was the sole cause of that flood on the afternoon of the 8th of April 1928" (Case, vol. 2, p. 311, ll. 14 to 17)-. Ouimet is not less positive than the two previous experts:

"R.—"La cause de l'accident, — says he —, c'est les tra-30 "vaux de la compagnie, à la chute Hemmings.

"Q.-Quelle compagnie?

"R.-La Southern Canada Power Company, la défende-"resse". (Case, vol, 2, p. 324, ll. 39 to 42)-.

The Appellant's experts have pointed out what they call in accuracies, in the testimony of Mr. MacLachlan. According to Mr. Beaubien, the Richmond's jam did not arrive in the basin about midnight, as stated by Mr. McLachlan, but it reached the Dauphinais' Rapids before the jam, formed at the latter place, ⁴⁰ had left ; it released 540.000.000 cubic feet of water, increasing thereby the flow of the river, from 50.000 to 110.000 c. f. s., during three hours ; it increased by so much the volume of water and raised to 564.000.000 cubic feet the volume of ice, which were already impounded by the Dauphinais' jam; with the result that the basin for three miles 1/2, from Laborté's gauging station upstream, was completely filled, or — as expressed by several witnesses —, plugged with ice (Beaubien, case, vol. 4, p. 729, l. 47

tention, Mr. Beaubien assumes that the Richmond's jam travelled at a speed of 5 miles an hour(see exh. Z-24) and he relies upon the evidence of Messrs. Dunfield and Cusson (case, vol. 4, p. 726, lines 30 to 50)—; but these witnesses followed the jam for a very short distance and Mr. Beaubien, in his computation, makes no allowance for the numerous obstructions, such as emeringing islands and rocks, existing in the bed of the river. Moreover, his computation is contrary to the evidence (case, vol. 5, McLachlan, p. 935, ll. 3 to 40)—.

The figure of 540.000.000 given by Mr. Beaubien, as representing the volume of water retained by the ice obstructions at Richmond, is 3 times and ½ too much: it should be 148.000.000 cubic feet (McLachlan, vol. 5, p. 933, line 3 to p. 935, line 2)—. In fact, the Dauphinais' jam could not hold back more than 220,000.000 cubic feet of water (case, vol. 5, dépos. McLachlan, 20 p. 935, line 2 to p. 936, line 3)—.

Again, the increase in the flow, from 50.000 c. f. s. to 110.000 c.f.s., during the 3 hours following the break-up of the Richmond's jam, as mentioned by Mr. Beaubien, is 3 times as great an increase as could possibly occur. In fact, the flow at Richmond, during the 7th of April, never exceeded 79.000 c. f. s. (McLachlan, vol. 5, p. 936, ll. 22 to 26)—; p. 941, ll. 14 to 34)—. The figure of 564.000.000 cubic feet given by Mr. Beaubien as representing the volume of ice that passed into the Dau-30 phinais'-Labonté's basin, is also grossly exaggerated. Such a volume of ice could not have been brought down or deposited anywhere, in that section of the river (McLachlan, case, vol. 5. p. 935, ll. 33 to 43)—. The volume of the ice did not exceed 463.000.000 (case, vol. 5. p. 940, ll. 30 to 31)—.

Finally, the basin, between Labonté's and Dauphinais', was not plugged with ice, for the simple reason that, at flood stage, the level of the water, between Dauphinais' and Labonté's, was practically the same (McLachlan, case, vol. 5, p. 936, 40 line 44 to p. 937, line 27-.

At all events, — says Mr. McLachlan — , if the Richmond's jam actually did reach the Dauphinais' jam before the break-up of the latter, it would make no difference in the explanation of the phenomenon that occured at Hemmings Falls. (McLachlan, case, vol. 5, p. 957, line 44 to p. 958, line 15)—.

Mr. Roberts, another witness for the Appellant, referred to certain supposed errors made by Mr. McLachlan, in indicating the flow that passed the sill, or into the head of the basin ; but Mr. McLachlan explains that he took his data from the diagram of levels and discharges given by the Quebec Streams Commission and that the differences, if any, between his figures and the figures given by the Appellant's experts, do not change, but rather accentuate the conditions demonstrated in his presenta-10 tion. (case, vol. 5, p. 944, line 37, to p. 945, line 48)—.

The Appellant's experts have elaborated a theory which is the exact counter-part of the Respondent's theory. They contend that there was no connection between the construction of the dam and the accident; that the railway embankment of the Respondent would have been washed out just the same, if no dam had existed, at Hemmings Falls, and that the disaster would have 20 been even greater. In support of this theory, they contend :--

10—That, on account of the dam, less frazil ice was formed and no more sheet ice. (Case, Beaubien, vol. 4, p. 743, ll. 30 to 50; Surveyer, vol. 4, p. 755, ll. 20 to 40;— p. 776, ll. 33 to 37; and 788; Lefebvre, vol. 4, p. 798, ll. 25 to 33;— Roberts, vol. 4, p. 833, ll. 17 to 33)—.

20—That the dam did not cause the Dauphinais' jam; but that jams used to form at that place, before the dam was built 30 just as they did after — (Case, Beaubien, vol. 4, p. 743, ll. 30 to 50; p. 747, line 45 to p. 748, line 14)—.

30—That the dam, having created a larger basin, lowered the velocity of the flow therein and reduced thereby the possibilities of damage. (Case, Beaubien, vol. 4, p. 729, ll. 33 to 37 and pp. 753, and 754)—.

40—That the dam did not constitute an obstruction to the flow of water and ice and more particularly to the progress of 40 the Dauphinais' jam, after it gave way; nor did the cover of sheet ice, over the basin; but that the onward movement of the Dauphinais' jam was stopped by the natural obstructions existing opposite Labonté's gauging station, and Bergeron's property. (Case, Beaubien, vol. 4, p. 731, ll. 35 to 50; p. 743, ll. 17 to 50; p. 744, l. 40 to p. 745, line 11; also p. 752, line 1 to 36;— Surveyer, p. 776, ll. 23 to 33)—.

50—That the dam even acted as a buffer, when a greater quantity of water was released by the jam to wit: on Saturday the 7th of April, and that but for the dam, the damages would have been greater— (Case, Beaubien, vol. 4, p. 732, ll. 20 to 31; p. 744, ll. 40 to 50;— Surveyer, vol. 4, p. 778, line 47 to p. 779, line 10;— Roberts, vol. 4, p. 828, line 17 to p. 829, line 27)—.

60—That the dam did not affect adversely the course and 10 behaviour of the river. (Case, Beaubien, vol. 4, p. 752, ll. 37 to 44:— p. 743, ll. 17 to 50;— Roberts, vol. 4, p. 832, ll. 8 to 17;— p. 833, ll. 37 to 50— p. 838, ll. 15 to 30)—.

We respectfully submit that the above submissions are fallacious and contrary to the evidence.

10-It does not seem open to discussion that larger quan-20 titles of ice were formed in the basin, after the dam was built. The construction of the dam increased considerably the dimensions of the basin, both in length and in width, and this vast area of deep and still water began to freeze earlier and became entirely covered with solid ice up to the foot of the Dauphinais' Rapids — (Mercure, case, vol. 1, p. 107, ll. 14 to 20—; Lea, vol. 2, p. 309, line 40 to p. 310 line 11;— Ouimet, vol. 2; p. 325, ll. 45 to 50)-. Before the dam was built, the Hemmings Falls Rapids extended from Bergeron's property to the place where the dam now stands, a distance of one mile and $\frac{1}{2}$ (see exh. No. 19)—. 30 No ice could form over these rapids and even up to Labonté's, ice was rarely formed and, at all events, was not solid ice (W. Labonté, case, vol. 1, p. 131, line 5 to p. 132, line 1; Ernest Labonté, p. 137, ll. 14 to 50;- Cusson, p. 157, ll. 1 to 11;- Mercure, vol. 1, p. 94, line 44 to p. 95, line 13; and p. 97, lines 43 to 47; Roberts, vol. 4, p. 833, ll. 17 to 33)-.

Again, no ice could form over the Dauphinais' Rapids which extended over a distance exceeding one mile and which are now submerged to the extent of 2/3 (Case, Roberts, vol. 4, p. 833, 40 lines 17 to 33;—) And, finally, in a state of nature many islands emerged from the river which are now entirely under water and covered with ice, in winter— (Case, Roberts, vol. 4, p. 836, line 17)—.

Opposite Bergeron's property, there was an island (lot No 10 -c- of the township of Simpson, shown on plan exh. 19).— The island was between two and three arpents long and 150 feet wide. Mercure obtained from the Appellant immediately before the construction of the dam the job of cutting trees on this island; there were big trees and he affirms that the ice never caused any damage to these trees and even never went up on the island. (Mercure, case, vol. 1, p. 96, line 24 to p. 95, line 43; also Cusson, vol. 1, p. 245, line 44 to p. 246, line 25)—

The distance from Bergeron's property to the dam is 10 about 1 mile and $\frac{1}{2}$. (Mercure, case, vol. 1, p. 97, ll. 43 to 47)—.

It has been contended that the ice does not become thicker in still water (Lefebvre, case, vol. 4, p. 798, ll. 25 to 33; Beaubien, vol. 4, p. 743, ll. 30 to 50;—) — The same witnesses, however, assert that ice cannot form in rapids, which would seem somewhat contradictory. And it is a well known fact that ice is formed earlier on the shores where there is no current, than in midstream. Logically, an early formed ice should result in a thicker ice. (Ouimet, case, vol. 2, p. 327, ll. 17 to 25). In fact, Mercure 20 and Cusson took the trouble of cutting holes in the ice, on several dates, and at different spots, in the basin above the Hemmings Falls dam. At the end of December 1928, or the beginning of January 1929, they found the following thickness:—

Opposite Ernest Labonté's, 1 mile $\frac{1}{2}$ above the dam, $\frac{31}{2}$ feet; opposite Turcotte's camp, $\frac{22}{3}$ miles above the dam— $\frac{21}{2}$ feet; three or four arpents upstream from the power house, 3 feet; — (see deposition Cusson, vol. 1, p. 247, line 13 to line 37, and p. 248, ll. 40 to 46)—. These holes were dug at places where, 30 prior to the construction of the dam, there was a rapid and the depth of the river did not exceed two feet.

On the 8th and the 11th of February 1929, opposite lot 75. Mercure cut holes in the ice, the thicknesses found were 15 feet, $16\frac{1}{2}$ feet, 17 feet, 15 feet and $19\frac{1}{2}$ feet respectively. (Mercure, vol. 1, p. 114, l. 30 to p. 116, l. 18; see also plans exh. 21 and 22; Laprade, vol. 1, p. 221, ll. 27 to 36).

Although the ice was not even and the soundings were taken 40 where the ice was heaved up, it is nevertheless certain that there was 5 to 6 times as much ice at that spot as there was before the Hemmings Falls dam was built. (Mercure, case, vol. 1, p. 118, 11. 21 to 37; Cusson, vol. 1, p. 160. 1. 45 to p. 162, l. 35).

It seems therefore clear that the construction of the dam did really increase the volume of sheet ice in the basin.

But there is another feature which must be pointed out. In a state of nature and owing to the absence of ice, at the head of the Hemmings Falls Rapids ,the ice cover extending from about 3 miles below Dauphinais' would have risen, as the flow increased from normal to 60,000 c.f.s. As a consequence, this ice cover would have been released from its contact with the shores and carried in the rapids and considerably less ice would have been retained in the jam, at Dauphinais'. (Lea, vol. 2, p. 310, ll. 11 to 47; Ouimet, vol. 2, p. 327, ll. 27 to 45; Roberts, vol. 4, p. 833, ll. 9, 10, 11).

As to the formation of frazil, it is no doubt true that frazil is fabricated in rapids and that the Hemmings Falls Rapids, having disappeared entirely and the Dauphinais' Rapids in the proportion of $\frac{2}{3}$, there is now less frazil than before the erection of the dam. But, under natural conditions, this frazil was carried almost entirely downstream, into the lower basin extending from the foot of the Hemmings Falls Rapids to Drummondville, which 20 was an ideal receptacle for this frazil; while it now accumulates in large quantities at the very foot of the Dauphinais' Rapids, where the water has become deeper and still, with the result, as explained by Mr. McLachlan, that at the spring break-ups, there are 50.000.000 to 60.000.000 cubic feet of frazil waiting the arrival of the ice from up river and making natural jams, so much the worse (McLachlan, vol. 2, p. 285, line 45 to p. 286, line 10; -also vol. 5, p. 941, line 35 to p. 944, line 33; Lea, vol. 3, p. 309, line 40 to p. 310, line 11;- Beaubien, vol. 4, p. 750, line 45 to p. 751, line 20; Rutherford, vol. 3, p. 480, ll. 44 to 47;- Ouimet, vol. 30 2, p. 326, line 49 to p. 327, line 18:--.

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Of course, under natural conditions, the quantity of frazil deposited in the Hemmings Falls Drummondville basin was greater than it has been since the dam was built; but, as explained by McLachlan,: "the deposit of the great quantity of frazil "ice in the Hemmings Falls Drummondville basin, was not a se-"rious thing to anybody, because the sectional area is very large." "It is 20 feet deep and nearly 1.000 feet wide and nearly three "miles long, and it impounded no volume of water, so without 40 "doing any damage"— (Case, vol. 5, McLachlan, p. 943, line 47 to p. 944, line 2)---.

Dunfield complains that before the Hemmings Falls dam was built, they had trouble at the old Drummondville power house, with frazil which had formed in the Hemmings Falls Rapids (Vol. 4, p. 680, ll. 10 to p. 681, line 20)-. But this was due to the construction of the Drummondville dam and to trying to draw water through racks and wheels in winter instead of letting it flow down the rapids at Drummondville - and no trouble was caused by the accumulation of frazil, when no dam at all existed. (Vol. 5, Mercure, p. 916, line 17 to p. 918, line 8)—. At all events, the troubles outlined by Dunfield had to do with the plugging of racks and waterwheels in his power plant, during cold weather and did not cause damage at the breakup comparable to the flood of 1928.

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It may be added that the quantity of frazil deposited in the Dauphinais' basin did not exceed that 15.000.000 cubic feet and it is a gross exaggeration to state, as Surveyer did, that the building of the dam reduced the frazil so deposited to the extent of 30.000.000 cubic feet. (McLachlan, vol. 5, p. 944, ll. 9 to 18)--.

20.—Before the dam was built, the Dauphinais' Rapids were about one mile long and had a drop of about 15 feet. Oc-20 casionally, a certain quantity of frazil was deposited during the winter at the foot of these rapids; but the frazil that could be found there at the spring break-up was nothing like the huge mass of broken ice and frazil which has always formed there, after the dam was built. This is because the ice cover below Dauphinais now forms earlier in the winter and does not melt or go out as early in the spring. It catches and holds much ice in the early winter and late spring that would in nature pass to the basin below Hemmings Falls where it would melt away in the spring without doing damage. The deposits of ice and frazil 30 existing before the construction of the dam could hardly be called jams.

"R.-J'ai vu différents petits morceaux qui ont pu avoir "parti du rapide, mais bien peu.

"Q.—Vous parlez du rapide Dauphinais?

"Ř.—Oui.

"Q.—Avez-vous jamais vn sur la rivière, vis-à-vis chez "Dauphinais, les mêmes conditions quant à la glace avant la "chaussée que vous avez constatées après mil neuf cent vingt-40 "sept (1927) ?—

"R.—Non, jamais"—. (Case, vol. 1, p. 140, ll. 28 to 35, "Ernest Labonté)—.

And Mercure:---

"Q.—Avant la construction de la chaussée, il y a eu de la "glace chez Dauphinais comme cela, la même glace que vous avez "vue, qui retenait l'embâcle?

R.—Il n'y a jamais eu de "jam" de glace chez Dauphi-"nais comme j'en ai vu en mil neuf cent vingt-huit (1928), ou "mil neuf cent vingt-sept. (1927)— "Q.—Ils n'ont pas été aussi gros?

"Ř.—Non.

"Q.—Mais il y en avait chez Dauphinais?

"Ř.—Il n'y a pas de doute que la glace part au printemps "et elle doit s'accrocher un peu dans les îles.

"Q.-Et il y avait de la glace solide avant aussi pour la 10 "retenir chez Dauphinais?

"R.—Pas aussi solide qu'aujourd'hui.

"Q .-- Pourquoi cela?

"R.—Il y avait un mille et demi qu'il n'y en avait pas "du tout. La grande partie du bassin qui part de chez Labon-"té à venir à la "dam", c'est un grand bassin très large, il n'y "avait pas de glace quand la glace descendait d'en haut dans ce "temps-là.

"Q.—Ensuite, à partir d'un peu en avant de chez La-"bonté à la tête des rapides, aller chez Dauphinais, il y a au-delà 20 de trois milles?

"R.—Oui.

"Q.-Cela, c'était de la glace solide, d'hiver?

"R.-Pas toujours.

"Q.-Pourquoi pas toujours?

"R.—Parce qu'il y a des places où il n'y avait pas épais "d'eau et il y avait des roches qui ressortaient de la glace—". "(vol. 1. p. 104, ll. 50 to p. 105, l. 31)—

And Laprade :--

"Q.--Maintenant, par rapport aux embâcles qui se fai-30 "saient autrefois, avant la chaussée, y avait-il des proportions "ét quelles étaient les proportions entre les deux?

"R.—Je n'ai pas eu connaissance qu'il se soit fait avant la "chaussée aucun embâcle.

"Q.-Chez Dauphinais?

"R.—Chez Dauphinais, oui, c'était en plein rapide. Les "rapides cassaient, ça arrivait de temps à autre. Il se faisait un "motton de glace, comme le banc ici. Pas plus haut que le banc "ici. Et bien rarement. Il cassait deux ou trois morceaux de "glace. Il n'y avait rien que la glace du rapide qui se brisait 40 "en petits morceaux, c'était tout." (Vol. 2, p. 221, ll. 16 to 27; see also Cusson, vol. 1, p. 158, ll. 35 to 44; p. 172, ll. 28 and 29). And the reasons are obvious: the current had been almost annihilated, the water was about 7 feet deeper and the ice piled up. (Rutherford, for the Appellant, vol. 3, p. 480, ll. 44 to 47; McLachlan, vol. 2, p. 291, ll. 4 to 14; Ouimet, vol. 2, p. 329, ll. 3 to 12; Laprade, vol. 2, p. 218, ll. 20 to p. 219, l. 26).

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If the dam did not create the jams, at Dauphinais', it undoubtedly increased them to the point of becoming a great source of danger.

On the 13th of February 1929, Cusson made an inspection of the river, from Dauphinais' to Richmond. He found open wa-10 ter at several places. At other places, there were small piles of ice, not exceeding 3 feet high. Clear water was running in the middle of Kingsey's rapids, yet although these rapids are two miles long, the frazil which had accumulated at the foot thereof did not equal 1/4 of the jam existing at Dauphinais' Rapids. At Dauphinais' Rapids, the jam was one mile long and 20 feet thick. (Cusson, case, vol. 1, p. 165, l. 1 to p. 171, l. 50; Laprade, vol. 2, p. 221, ll. 27 to 34). In 1927, the jam at Dauphinais' was about half as high as the jam in 1929. (Cusson, vol. 1, p. 172, ll. 17 to 37).

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On the 3rd of December 1932, Mercure made an inspection of the basin, from the Hemmings Falls' dam to Dauphinais'. At Dauphinais', there was a jam about 6 to 8 feet high, one mile $\frac{1}{2}$ long and as wide as the river itself, surrounding entirely the island No. 71 (see exhibit No. 65), spreading over lot No. 22, where it had deposited piles of ice and measuring in height about 5 feet. It consisted of frazil and broken chunks of ice (Mercure, vol. 2, p. 353, l. 3 to p. 335, l. 26;— also Bahl, vol. 1, p. 184, ll. 12 to 42; p. 187, ll. 30 to 33; Laprade, vol 2, p. 221, ll. 34 to 40)—.

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30—It is an acknowledged principle that the wider the section of the river the lower the velocity of the flow, and consequently the velocity of the flow in the basin was lower after the construction of the dam. But the damage was not caused in the basin extending from Hemmings Falls Dam to Dauphinais', but it was caused below the Hemmings Falls Dam and by a mass of water and ice which had leaped over the dam down into the basin extending from the Hemmings Falls Rapids to Drummondville. The quantity of water which entered the lower basin in an interval of time was determined by the quantity leaping over the dam in that interval of time, and the quantity of water flowing over the dam was undoubtedly higher than would have flowed down the Hemmings Falls Rapids in a state of nature.

40—The contention that the dam is not an obstruction in the river, seems somewhat startling at first sight. It is in fact qualified by the condition that all the gates should be left open (Beaubien, vol. 4, p. 763, ll. 7 to 23;— p. 769, ll 1 to 15). But dams are not built with the view of keeping all the sluice gates open. In fact, during the 7th and 8th of April, the four sluice gates

were all open only once to wit: at 7 P.M. on the 7th. And at the very peak of the flood, gate No. 1 which, like the three others, was 22 feet high and 50 feet wide, was open only 16 feet.— (Dunfield, vol. 1, p. 71, ll. 23 to 34; - and p. 73, ll. 1 and 2; - also p. 73, ll. 44 to 50)—.

Moreover, Ouimet explains, by referring to plan No 65, 10 that, on the 11th of September 1924, before the dam was completed, when the flow was 65.000. cubic feet per second, the water level at Labonté's, a distance of 1 mile $\frac{1}{2}$, from the dam, was at elevation 317.3, while, at the place where the dam now stands, it was at elevation 295., a drop of 22 feet $\frac{1}{2}$. Since the completion of the dam, the water level over that entire section of one mile and 1/2, is maintained at elevation 317. (Kitson, vol. 3, p. 450, ll. $30 \text{ to } \overline{42})$ —. And this when all gates are open. (Ouimet, vol. 5, p. 971, ll. 20 to p. 972, line 30)-. And, says the witness :----

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"-Les portes ont été calculées pour laisser passer l'eau à "une hauteur surélevée, mais pas pour laisser passer la glace-"(Vol. 5, p. 972, ll. 49 and 50)-...

Ouimet's demonstration is even accentuated by the fact that the normal water level on the 7th of September 1924, was not at elevation 295., which was previously mentioned, but only 265.- Elevation 295. represents the water level maintained after some works had been performed at the Hemmings Falls' dam. 30 (Ouimet, vol. 5, p. 973, ll. 13 to 35; -- see plan exh. 65)-

It is true that some of the Appellant's employees have stated that there was an open space of clear water in front of the dam; but they are unable to agree upon the dimensions of this open space (Kitson, vol. 3, p. 451, line 37 to p. 452, line 10; p. 458, ll. 20 to 45; Rutherford, vol. 3, p. 470, ll. 3 to 30:- Dunfield, vol. 4, p. 674, line 43, to p. 675, line 10;- Brunelle, vol. 4, p. 621, ll. 1 to 50)-. On the other hand, Arthur Boisvert, a witness for the Appellant, says:-

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"-En avant de la "jam", jusqu'au pouvoir, la glace était "unie, excepté qu'elle était cassée de place en place". (Case, vol. 4. p. 714, ll. 39 to 40)-. And further:-

"-R.—Quand la "jam" est partie, elle a cassé. "Q.—Quand vous êtes allé là, vous, vous avez constaté que

"la "jam" forçait la glace du bassin? "R—.Quand la "jam" a "stucké" là, certain qu'elle a "forcé un peu.

"Q.....Elle était tenue là, la "jam". "R....La "jam" a été "jammé" là...." (Case, vol. 4, p. 715, ll. 25 to 30)....

And this is in accordance with the evidence given by all the witnesses for the Respondent.

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At all events, assuming that such an open space did exist, it would nevertheless be true that the ice cover in the basin was supported by the embankments, or the wing walls forming part of the plant. And this is admitted by one of the experts for the Appellant, Mr. Beaubien, (Beaubien, case, vol. 4, p. 738, ll. 18 to 38;)—

The resistance offered by the ice in the basin to the onward movement of the jam formed at Dauphinais' is illustrated 20 by what happened in 1927. On or about the 16th of March 1927, Cusson followed the jam, from Dauphinais' to opposite lots Nos 8 or 9 of the township of Simpson, where it came to a stop. It was blocked "par la glace du bassin" (vol. 1, p. 175, line 27); it moved again in the evening and again it was stopped "sur la glace du bassin" (vol. 1, p. 172, line 44). And the witness adds:—

"R.-Elle est morte là, ou à peu près. Elle a fondu là. dans le bassin.

"Q.-Dans le bassin, vers quel numéro?

"R.—Entre le sept et le 8.—

"Q.-Elle est morte à peu près vers le sept, c'est-à-dire "qu'elle s'est effrondée la?--

"R.—Oui. Elle a passée par dessus la dam, mais elle a "toute passée par petits morceaux.

"Q.-C'est-à-dire que le bassin l'a retenue virtuelle-"ment?

"R.—Oui. Elle n'a pas pu traverser, cette année-là".— (Vol. 1, p. 175, line 48 to p. 176, line 12).—.

(See plan no. 19)-.

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But, are the experts of the Appellant, right, when they assert that the 1928 jam was stopped by natural obstructions? The natural obstructions which they mention are the following:— The converging shores above Labonté's gauging station, the sill or hog's back which is located opposite Bergeron's, at station 64, and some bends in the river, at the sill.

No doubt the converging shores at Labonté's would tend to slow up the speed of the ice, if the river was running full of chunks of ice; but, in fact, they did not stop it, because the record shows that the ice passed that point. It passed that point no doubt because it did not, as stated by Beaubien, fill entirely the wider section extending 3 miles 1/2 upstream. From Labonté's gauging station, down to the power plant, the shores are no longer converging, but continuously diverging. (Mc-10 Lachlan, vol. 5, p. 937, line 40 to p. 938, line 11; see plan No. 21;)--.

Could the sill or hog's back stop the onward movement of the ice, after it had passed Labonté's?

In the first place, it was incumbent upon the Appellant to prove the existence of the so called hog's back. With this end in view, the Appellant has fyled as exhibit "V" a plan purporting to show the contours of the river bed, at the head of the 20 original Hemmings Falls Rapids. The plan was prepared jointly by Messrs. Desloover, Griffin and Dunfield. But the method adopted to gather the data necessary to prepare the plan is not convincing. (Desloover, vol. 4, p. 650 to 652; - Griffin, vol. 4, pp. 695 to 698; — also p. 705; — Dunfield, vol. 4, p. 678-No. 66, bearing upon the same subject, are inaccurate and contain gross errors. (McLachlan, vol. 5, p. 929, Line 15 to p. 930, line 11). The suggestion that, under natural conditions, the ice, in moving from above Labonté's gauging station, could be 30 stopped by the sill at station No. 84, is qualified by McLachlan as being in contradiction with everything he knows, about the subject, and as being inconceivable and impossible (McLachlan, vol. 2, p. 304, ll. 17 to 40)-. And he explains why. In a state of nature, the water level at Labonté's gauging station, would be 317.8. From Labonté's gauging station, down to the sill, at station No. 84, there would be under open water conditions, a drop of 2.7 feet. The cross section area is 9.364. square feet; the velocity would be 6.4 feet per second, equivalent to 4.3 miles per hour; the depth of water, on that sill, would be 40 7.1 feet exactly; the ice and water would be passing that station in about equal proportion: 55% of water and 45% of ice. This means that 3 or 4 feet at the surface would be ice and 3 or 4 feet at the bottom would be water. And the shore is diverging. showing that the ice chunks would be loosening, as they proceed. Under such conditions, the ice jam could not be stopped at the sill. And McLachlan further adds- 'There are sills in the "river that are more pronounced that this sill is. I have never "heard of any jam formed by them. On the St-Lawrence, we "have sills from the Cornwall Island and Cornwall. We have sills "at the end of Cornwall Island and Canadian shore. We have "seen for years and years great ice jams, great ice packs move "from above, down stream into Lake St-Francis, down to these "points. We have never had a jam where those sills are. The "only places we get the jams in rivers when ice packs are moving 10 "out, are places where the shore is converging and where resist-"ance to the progress of the sheet ice is gradually set up by the "ice being pinched between the two shores."— (Case, vol. 2, "p. 304, ll. 20 to 30)—.

In fact, it appears, by comparing the plan exhibit 66 fyled by Mr. Dunfield with the sounding plan exh. "V", that the ice met the basin ice 2000 feet below the actual location of the sill. (McLachlan, vol. 5, p. 939, ll. 35 to p. 940, line 3)—.

20 Could the movement of the ice be stopped by some bends in the river, at the sill ? It is true that, opposite the upper end of Bergeron's property, there is a small change in the alignment in the river. (See plan No. 21)—. But this change of alignment is so small that it could only set up a very slight resistance to the onward movement, of the pack of ice; a resistance quite insufficient to bring it to a stop. At all events, in the present case, this small change in alignment did not operate. If it had operated, it would have tended to throw the ice against the opposite side, while, in fact, the effects of the ice such as bridges 30 with ice cuts on the edge of the steep river bank appear on the embankment at the lower end of the Bergeron's property, and not on the opposite embankment. (McLachlan, vol. 5, p. 938, ll. 15 to 37)—.

Lefebvre has stated that, in March 1919, before the Hemmings Falls dam was built, the water level rose considerably at Labonté's gauging station, to wit: at elevation 322. ½, and he can see no other reason to explain that phenomenon, but that a jam had formed somewhere, below, probably at the Hemmings Falls 40 Rapids. (vol. 4, p. 798, line 33 to p. 799, line 17. McLachlan explains that this sudden rise of the water level was not due to a jam; but to the fact that, owing to a super cool condition, the water adhered to the floor of the rapids and, in that way, built up a temporary obstruction, right on the sill; but that this obstruction lifted and floated away, as soon as the weather got warm. And he adds that such a thing could not possibly happen in 1928, for the reason that the weather was warm, with 55 degrees temperature. (Vol. 5, p. 948, ll. 9 to 40)— It can, therefore, be safely asserted, from the above demonstration, that the onward movement of the ice could not be stopped, opposite Bergeron's property, by natural obstructions of the river; but that it was stopped, as said by Mr. MacLachlan, by a resistance originating at the dam. And this conclusion is fully corroborated by the way the river always behaved, at Ber-10 geron's and upstream, before the dam was constructed. By Mercure:—

R.-Quand la glace en haut descendait, c'était toujours "libre cela.

"Q.-Mettons donc cela sous une autre forme. Quelle gla-20 "ce partait la première, était-ce la glace chez Dauphinais ou chez "Bergeron?

"R.—C'était la glace à partir de chez Bergeron qui partait "la première.

"Q.—Avant la chaussée la glace partait de sur le rapide, "quand il en existait, avant qu'aucune glace descende d'en haut? "R.—Oui, c'est ce que j'ai constaté toujours". (Case, vol.

1, p. 96, ll. 10 to 24;)-

And Ernest Labonté, who occupied lot 96 of the township 30 of Wickham (see plan exh. 19— vol. 1, p. 138, ll. 15 to 19)—:

"-Q.-Maintenant, lorsque arrivait le printemps, quand "la glace partait, est-ce que c'était chez vous que cela descendait "en premier, ou si c'était le rapide?

"R.-Le rapide-

"Q.-Le rapide partait toujours avant que la glace parte "de chez vous?

"R.—Oui."— (case, vol. 1, p. 138, ll. 1 to 12)— Sutherland says:—

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"—Q.—Which ice left — first? "A.—On down in the rapids, down at Bergeron's.

"Q.—The ice from the rapids always left before the ice "above?

"A.—Yes.

"Q.-Before the construction of dam did you see any ice "jam at Bergeron's or near there?

"A.-No"-. (case, vol. 1, p. 274, ll. 10 to 17)-

And Alphonse Bergeron:

"-Q.-Est-ce qu'il y a une différence quant au niveau "de l'eau et à la conduite de la glace dans la rivière, vis-à-vis "votre propriété, depuis que la chaussée est construite?

"R.-Différence comme le jour et la nuit, et aussi que le "soleil est plus gros que la terre.

"Q.-Depuis que la chaussée est construite, est-ce qu'il 10 se forme des "jams" des embâcles de glace chez vous?

"R.--Considérables.

"Q.-Et avant la chaussée?

"Ř.—Il n'y en avait pas du tout, jamais.

"Q.-A quelle distance vous trouvez-vous, monsieur Ber-"geron, de la chaussée?

"R.-Un mille et quart ou plus.

"Q.-En haut de la chaussée?" "R.-En haut de la chaussée Hemmings."- (Case, vol. 2, v. 256, line 43 to p. 257, line 13)-.

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(See also Walter Labonté, vol. 1, p. 132, ll. 2 to 15)--.

And Adélard Laprade:-

Q.-"'Au printemps, est-ce que la glace chez vous partait "avant la glace qu'il y avait sur les rapides?

"R.-Ah! pardon.

"Q.-Qu'est-ce qui partait, en premier?

"Ř.-Č'était le rapide. Le bon sens est là, il fait sa preuve "nar-lui-même.

"Q.-Maintenant, est-ce que, à la tête des rapides, vous 30 "avez eu connaissance d'eaux qui "jamment",(depuis que vous "êtes là, avant la construction?

"R.-A la tête des rapides, il ne peut pas se faire de "jam" sans que ce soit par la glace étrangère, qui commence à "fouler par le bas. Dans les débâcles. ordinairement, s'il y a de "la glace sur la tête du rapide, elle est supposée être plus mince "que plus loin, et le parcours du rapide étant à l'eau claire, il "ne peut pas "jammer" sur la tête, il faut qu'elle aille commen-"cer son commencement au bas du rapide.

"Q.-Avez-vous jamais vu une "jam" en bas du rapide, 40 "ckez M. Bergeron?

"R.-Je ne l'ai jamais vue et je ne pense pas qu'elle ait "jamais existé avant la jam. Elle ne pouvait pas "jammer" là. Il "n'v a avait rien pour l'appuyer.

"Q.-Et il y avait une descente?

R.-Elle s'appelait la chute"-. "- (case, vol. 2, p. 220, line 31 to p. 221, line 10)- (See also Cusson, vol. 2, p. 245, ll. 17 to 24)-

The Appellant's experts object that the St-Francis River flows from south to north and that naturally the ice should leave sooner at points upstream, than at Drummondville, which is further north.

The distances from the principal towns upstream to Drum-10 mondville, in a straight line, are comparatively short, being approximately as follows:

From Lennoxville to Drummondville	$50 \mathrm{miles}$
From Sherbrooke to Drummondville	
From Windsor to Drummondville	
From Richmond to Drummondville	$25 \mathrm{miles}$

(see exhibit 29)—

- There are no meteorological reports allowing us to compare the respective temperatures at Lennoxville, Sherbrooke, Windsor and Richmond, with the temperatures at Drummondville, but the meteorological reports exhibit 33 show that the temperatures at Sherbrooke and Montreal were not very far apart: a few degrees higher at Sherbrooke, particularly more so on the 6th of April. Now one must not overlook the fact that Montreal is further north than Drummondville and at a greater distance from Sherbrooke than Drummondville is; the differenc of temperature between Drummondville and Sherbrooke should accordingly be less than between Montreal and Sherbrooke. In fact, Lefebvre, one of the defendant's experts, declares that the temperatures at Sherbrooke and Drummondville during the break-up period in 1928
 - brooke and Drummondville during the break-up period in 1928 were the same.

The similarity of temperatures at Sherbrooke and Montreal during the first week of April is not exceptional and peculiar to the year 1928, as appears from the meteorological reports for the month of April 1920: see exhibit 33—.

40 As said by the learned trial judge, "the contention of the "defendant's experts that the ice goes earlier at Lennoxville, "Sherbrooke, Windsor and Richmond than at Drummondville,, "on account of the difference of temperature has no foundation "whatever"— (case, p. 1089, ll. 37 to 40)—.

At all events, it is no doubt true that the Hemmings Falls' dam increased the time between the departure of the ice at Richmond and its departure from the basin above Hemmings Falls.

It might be said that, in a state of nature, jams would have naturally formed, at the foot of the Hemmings Falls' rapids, which would also have impounded a large quantity of ice and water and which, when giving way, might have caused a flood in the basin extending from the Hemmings Falls' Rapids to Drummondville. But a dam below these rapids at the most 10 liberal estimate could not impound more than 15,000.000 cubic feet of water, while the jam that formed above the Hemmings Falls' plant impounded 623.000.000 cubic feet. (McLachlan, vol. 2, p. 297, ll. 45 to 50). "It could have impounded water, — says "Lea — , only between itself and the base of Hemmings Falls, "a quantity which is negligible in comparison with the quantity "which was impounded back of the jam which did occur in the "pond above Hemmings Falls in 1928"-. (vol. 2, p. 311, ll. 9 to 13)—. And Surveyer admits that such a jam could not inipound a volume of water as large as did the jam itself. (Vol. 20 4, p. 783, ll. 7 to 22). It, therefore, follows that the break-up of such a jam could not cause a flood comparable with the one that washed out the railway embankment of the 8th of April 1928.

40.—The suggestion that without the dam the damage would have been greater is based upon the assumption that the mass of ice and water impounded in the basin above the power plant would have been the same. if there had been no dam. The learned trial judge has qualified this assumption as being unreasonable and contrary to common sense (Vol. 6, p. 1074, line 30 11). Ice and water accumulated behind the jam because the jam was hindered in its onward movement by a resistance which originated in the dam. Under natural conditions, — says Mc-Lachlan — , "the quantity of water available above the jam at "Dauphinais would undoubtedly be less than that which actually "occurred in 1928, and that a reservation to comparison can "be made"—. (Vol. 5, p. 930, ll. 40 to 44)—. (See also Mc-Lachlan, vol. 2, p. 301, ll. 27 to 42)—.

⁴⁰ The fallacy of the theory submitted by the Appellant's experts is demonstrated by Mr. McLachlan. This witness explains that, in a state of nature, there would have existed downstream two basins to retain the flow of ice and water stored at Dauphinais' and act as a protector, for the bridge: the basin extending from the foot of the jam down to the sill below Labonté's and the basin extending from Hemmings Falls to Drummondville, a distance of about 2 miles $\frac{1}{2}$; but in 1928, owing to the construction of the dam, the basin between Dauphinais and the sill, below Labonté's, did not really operate (Vol. 5. p. 930, ll. 18 to 35). Proceeding to

compute the area of these two basins and the volume of water impounded by the jam, Mr. McLachlan shows that, under natural conditions, the flow past Labonté's gauging station would have been 100.000 cubic feet per second, while it was, in fact 120.000 c.f.s., past the Hemmings Falls' dam, and that, consequently, the building of the dam, far from diminishing the release of water, actually increased it. -- (Vol. 5, p. 930, ll. 45 to p. 932, line 20) ---. 10 Moreover, in a state of nature, the jam which would have formed at the foot of the Hemmings Falls' rapids would also have acted as a protector to the embankment and flatten out the discharge to some degree. And this is admitted by one of the experts for the Appellant. Mr. Surveyer, (Case, vol. 4, p. 781, ll. 20 to 32). It is also to be noted that, contrary to the contentions of the Appellant's experts, the flow was higher on Sunday than on saturday (McLachlan, vol. 5, p. 940, ll. 16 to p. 941, line 15) —.

20 50—The above remarks upon the evidence adduced both by the experts and by the ordinary witnesses, testifying on behalf of the Respondent, are amply sufficient, we respectfully submit, to demonstrate the fallacy of the opinion often expressed by the Appellant's experts, that the dam built at Hemmings Falls did not affect the behaviour of the river. But nothing probably is more convincing, upon this point, than the deposition of Alexandre Mercure, comparing the behaviour of the river, during the various phases of its developments. As said by the learned trial judge, Mercure "is not expounding theories, but stating facts,

- 30 whereof he has been witness— (Vol, 6, p. 1079, ll. 15 to 16)—. Mercure has been living at Drummondville for 47 years (Vol. 5, p. 915, ll. 17 to 27)— He was there before the first dam was built. by the town of Drummondville; his father owned a saw mill which he acquired later on, and the property was fronting on the river, for 1000 or 2000 feet. Before the first dam was constructed, they never had any trouble with the ice. They had trees on that property and these trees were never damaged, during the 10 years previous to the construction of the first dam, and their mill, at that time. was 14 feet nearer the river.— (vol. 5.
- 40 p. 915, ll. 17 to 50)—. As soon as the first wooden dam was constructed, by the town of Drummondville, the behaviour of the river was changed. Jams of frazil began to form and sometimes blocked almost completely the basin extending from Hemmings Falls' Rapids to Drummondville. In 1913, there was a flood which invaded their property and which was clearly caused by a huge mass of frazil that accumulated at the foot of the Hemmings Falls Rapids. Mercure could plainly see this jam from his place and he followed very closely the progress of the flood. They never had a flood like that before. (Vol. 5, p. 916, ll. 17 to p. 917,

line 45). No doubt there always was some frazil that formed in the Hemmings Falls' Rapids; but, before any dam was constructed, the drop of the river was about 15 feet, on a distance of about 100 feet, and the velocity of the flow carried the frazil always first into the basin and then into the falls which existed in front of Drummondville, where the Drummondville dam was later on constructed. In 1921, the present Appellant had built a new dam at Drummondville. Again, Mercure's property was flooded. The water rose about 8 feet: in fact, it reached elevation 278— (Vol. 5, Mercure, p. 917, line 45 to p. 918, line 33; Ouimet, vol. 5, p. 969, ll. 1 to 37)—.

In 1928, the two dams of the Appellant were constructed: The Drummondville dam and the Hemmings Falls' dam. Again, the same property was flooded. The water came 5 feet higher than in 1921: it reached elevation 283 (Mercure, vol. 5, p. 918, 20 ll. 35 to 46; — Ouimet, vol. 5 p. 969, ll. 1 to 37)—.

After the construction of the Hemmings Falls' Dam the trees on Mercure's property were all destroyed. (Vol. 1, p. 108, ll. 26 to 31)--.

And Mr. Proulx substantially corroborates Mercure's version (Vol. 5, p. 902, ll. 42 to 50)---.

- That the behaviour of the river was changed by the con-30 struction of the Hemmings Falls' dam is also shown by the fact that various properties are now regularly flooded, which had never been flooded before the dam was built. Such is the case for Labouté's property, lot 96, of the township of Wickham, which is situate 3 miles below Dauphinais'. (See plan exh. 21;— also vol. 1, p. 138, ll. 12 to 20 and p. 139, ll. 1 to 40)—; also for Bahl's property, situate above 6 or 7 miles above the Hemmings Falls' dam.— (vol. 1, p. 186, ll. 1 to 50)— also for Joseph Brousseau's property, (vol. 2, p. 237, - 238; and also for John Proulx' property. (vol. 5, p. 902, line 45, to p. 903, line 50)—.
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But, says the Appellant, there were floods prior to the construction of the dam, and, therefore, it cannot be said that the dam was the cause of the flood of 1928 and of the damage resulting therefrom.

Leaving aside the supposed flood of 1892, for which there is no other evidence, than the vague and indefinite testimony of Moisan who was found by the trial judge to be somewhat evasive (see remarks of the learned trial judge, vol. 6, p. 1084, ll. 30 to p. 1085, ll. 1 & 2). the witnesses for the Appellant have referred to four different floods: those of 1887, 1913, 1915 and 1921.

First, as to the flood of 1887. Ernest Ménard, forest engineer, found, on the 16th and 17th of November 1932, that several trees on the east shore of the river, from the highway bridge to a point 700 feet to 800 feet upstream, were barked on the south side to the alburnum, or sapwood. In his opinion, these scars were such as would generally be caused by pieces of ice and other heavy things carried down by the water in the river.— Ménard, vol. 4, pp. 615 to 619). see also report exhibits L. M. and H)—.

Ménard made a special reference to tree No 7— on plan exhibit H, which is supposed to have been scarred during the spring of 1887— at elevation 265.

- 20 But McLachlan points out that tree No 7 is the only one that is scarred at an elevation which would indicate a serious flood and he expressed the opinion that the scar on that tree was most probably caused by the men working on the highway bridge, during 1886 or 1887, and that, at all events, such a mark cannot constitute a satisfactory evidence of a flood which is supposed to have occurred half a century before (McLachlan, vol. 5, p. 927, ll. 15 to 50)—
- Of course, Ménard never saw this flood. Speaking appa-30 rently of the same flood, Onésime Fleurant and Mathias Berthiaume state that the water moved a barn on the Hemmings' property. This barn has since been either burnt, or demolished. (Berthiaume, vol. 3, p. 599, ll. 30 to 40; Fleurant, vol. 3, p. 589, ll. 15 to 30)--.

The deposition of these two witnesses is very vague and uncertain. On the other hand, Mercure asserts that these witnesses are certainly mistaken when they say that that barn has been moved by the ice. (vol. 5, Mercure, p. 920, ll. 1 to 37)—.

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Finally, the Honourable Walter Mitchell states that when he was a boy, about 11 years of age, he was taken by his father to a house, which had been flooded, at the corner of the St-Cyrille road; he said it was the Blais house; it is indicated on plan exhibit H. When this flood occurred, the highway bridge had just been built, but the railway bridge had not yet been erected. The highway bridge dates back to 1885 and the railway bridge to 1887; it is possible, in the circumstances, that the flood mentioned by Mr. Mitchell is the flood of 1887"— (case, vol. 4, p. 698 to 700, line 30)—. The flood of 1913 invaded the property referred to as the Lafontaine farm, which was situate on the west shore of the river, at the foot of the Hemmings Falls rapid.— The farm occupied a comparatively low land. Water and ice also invaded the Comtois' property, situate a short distance downstream, from the Lafontaine's farm, along the Drummondville highway. (see 10 plan G; Bouchard, vol. 3, p. 540, ll. 10 to 50—; Boisclair, vol. 3, p. 536, ll. 4 to 25)—.

The 1915 break-up occurred at an unusually early date, to wit: on the 27th of February. According to the evidence, ice came up to the railway bridge; it was piled up against the railway embankment; it spread over the road which passes under the railway tracks on the east side of the river; on the west side, it carried away the small highway bridge over the canal conveying the water to the power house; (see depositions Ruel, vol. 3, pp. 20 569 to 571;— Hamel, vol. 3, pp. 580 to 582;— Dumaine, vol. 3, page 603, line 1 to p. 604, line 20.— Fleurant, vol. 3, p. 593, ll. 37 to p. 594, line 20)—.

This flood was described by Ruel, as the biggest one which ever occurred at Drummondville, (vol. 3, p. 568, ll. 24 to 25). But as pointed out by the learned trial judge, this statement is an obvions exaggeration, which can presumably be explained by the fact that Ruel acts occasionally as appraiser for the Appellant and is paid by this company, for his services. (See judg-30 ment, vol. 6, p. 1083, ll. 17 to 28)—.

The evidence given by Jos. David, in connection with the same flood, was so different from the one he had given in previous cases, that it was discarded by the learned trial judge (See judgment, vol. 6, p. 1083, ll. 7 to 13)—.

As to the flood of 1921, it is in evidence that the ice came up to the highway bridge and caused some damage, the extent whereof is not very definite; that water and ice spread over the 40 road under the railway track on the east side of the river and that a house occupied by one Blanchette and belonging to one Dion, situate on the St-Cyrille road, one arpent 1/2 above the Canadian National Railway line and at a distance of less than 100 feet from the river, was somewhat damaged. Some damage was also caused to the power house. (See depos. Girouard, vol. 3, p. 558. II. 3 to 50; Ruel, vol. 3, p. 571 to 573, line 20;— see also plan exh. J)—.

Out of those four floods, only one, to wit: the flood of 1887. occurred while the river was in a state of nature. The floods of 1913 and of 1915 occurred after the old dam had been constructed by the town of Drummondville and the flood of 1921 occurred after this wooden dam had been replaced by the new and somewhat higher dam which was built by the company in 1918, and which is still in existence. And all those who witnessed these 3 floods assert that they were caused by these two dams. (see as to the first flood, the depositions of Boisclair, vol. 3, p. 536, ll. 4 to 39; Laprade, vol. 5, p. 906, 908;— Mercure, vol. 5, p. 916, 917-918;— as to the second flood, the depositions of J. A. Gratton, vol. 5, p. 892—; Arthur Proulx, vol. 5, p. 898, ll. 35 to 50;— as to the third flood, the depositions of Mrs Proulx, vol. 5, p. 880, ll. 1 to 15;— Mrs Az. Gratton, vol. 5, p. 886 to 888;— Mr J. A. Gratton, vol, 5, p. 890 to 892;— Arthur Proulx, vol. 5, p. 897 to 898;— Johny Proulx, vol. 5, p. 903;— Noel Proulx, vol. 5, pp. 882 to 886;— see also L. David, vol. 5, pp. 908-909)—.

20 Moreover, the three worst floods that ever occurred in that section of the river all occurred during the seven years following the construction of the dam at Hemmings Falls, to wit: in 1927, 1928, and 1932.

The break-up of 1927 occurred on or about the 15th of March. The ice started to move down at Dauphinais' two days before the final break-up, around 7 p.m.; it proceeded a short distance and jammed at Island 71, where it stayed during the night and the next day. The following morning early the ice pushed forward but, after travelling another short distance it finally jammcd in the basin, where, with the exception of a few small pieces which went over the spillway, it melted gradually. Frazil had accumulated during the winter at the foot of the Dauphinais' rapid, to a lesser degree however than it did in 1929; there were several feet of ice on island 71— also on lots 22 and 23. During these 3 days, the ice in the basin was the same as in the winter. (Cusson, case, vol. 1, p. 172, line 1 to p. 176, line 20)—.

The flood reached elevation 330. both at Labonté's and at Dauphinais'. (see plans exh. 23 and 24). Moreover, Ouimet explains that he took as his datum elevation 311. at the spillway. while, according to the Appellant's own figures, the elevation at that point is 314. (see plans, exh. 18)— The elevation 330. above mentioned must therefore be increased by 3 feet (Vol. 1, p. 197, line 10 to p. 200, line 20)- This elevation considerably exceeded the highest level previously recorded, at least for the years regarding which proof has been adduced; (see the charts filed as exhibits Z14, Z15, Z16 and Z17). The highest level reached during the period of four years, covered by these charts was 322.5 towards the end of March or the beginning of April 1919. According to Griffin, the water rose at Dauphinais', in April 1924, to elevation 327. (Vol. 4, p. 633, to p. 640).

In 1928, the water rose to elevation 336 at Labonté's and to elevation 337. at Dauphinais', which are equivalent to 339 and 10 340 according to Ouimet's previous explanations— (Ouimet, vol. 1, p. 197, line 10 to p. 200, line 20; see plan exh. 23 and 24; At Mercure's property, the water reached elevation 283, which was 5 feet higher than in 1921— (Ouimet, vol. 5, p. 969, ll. 1 to 27); Mercure, vol. 5, p. 918, line 18 to p. 919, line 10;--). At Bahl's property, it rose 17 or 18 feet, which was higher than in 1927 (Bahl's vol. 1, p. 186, line 45 to p. 187, line 15). At Allard's property, it rose about 12 feet, invading his house and his stable, where 16 heads of cattle were drowned; it had never before reached these Luildings. (Allard, vol. 2, p. 231, line 35 to p. 323, l. 40;- p. 234, 20 lines 28 to 37;). Mercure has a particular reason to remember that the 1928 flood exceeded all previous ones. Prior to 1928, he always put logs on the slope of the river bank, so as to be ready to float them down the river, as early as possible, in the spring; but if he had done so in 1928, the logs would have been covered by at least 20 feet of ice.

"R.—J'ai constaté qu'avant la construction des "dams", je montais les billots sur un défaut de la côte pour les mettre à l'eau au printemps et si j'avais mis des billots en mil neuf cent vingt-30 huit (1928) à la même place, ils auraient été recouverts de vingt (20) pieds et plus de glace. Et avant cela on avait toujours mis nos billots là et jamais il n'avaient été noyés, jamais on avait perdu de billots.

"Q.—Quand vous dites vingt (20) pieds, ce n'est pas précis?

"R.—Je l'ai constaté, je l'ai mesuré, je l'ai marqué sur les arbres"—. Mercure, vol. 1, p. 108, line 40 to p. 109, line 15;—) These logs were placed on lot 22 (see exh. 19;— Mercure, vol. 1, p. 113, line 43 to p. 114, line 14) and lot 22 is 7 or 8 feet above the 40 low level of the river (Mercure, vol. 1, p. 120, ll. 40 to 46). And Mercure's statements are corroborated by several — witnesses. (see Cusson, vol. 1, p. 158, line 43 to p. 159, line 28;— vol. 1, p. 176, line 30 to p. 177, line 20). (Brousseau, vol. 1, p. 238, ll. 23 à 45).

The flood of 1932 was the worst ever experienced in the section of the river in which we are interested. At Bahl's property, the water rose 20 feet, that is to say 2 feet higher than in 1928. (Bahl, vol. 1, p. 186, ll. 34 to 35) At Jutras', it rose 3 feet higher than in 1928 (Jutras, vol. 1, p. 178, line 43, to p. 179, line 31). And, according to Boisvert, in 1928 "l'eau est montée beaucoup plus que dans les années précédentes" (vol. 2, p. 243, ll. 23, 24); see also Allard, vol. 2, p. 233, ll. 4 to 15; Brousseau, vol. 2, p. 238, ll. 13 to 23)—

Much evidence was adduced regarding the flood which occurred on the 6th and 7th of April, at Richmond, and at other points upstream. But, as stated by the learned trial judge, jams and floods occur periodically at Richmond, on account of the peculiar conditions of the river, at that place, and, more particularly, on account of what is called "the Narrows". (See judgment, case, page 1104, ll. 9 to 28). The same remark applies to floods at other points upstream. All the evidence relating to these various floods is therefore useless, for the decision of the present case.

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The Appellant further contends that the flood of 1928 was due to a combination of abnormal climatic conditions amounting to vis-major.

The territory through which runs the St-Francis river as described both by McLachlan and Lefebvre (McLachlan, vol. 2, p. 288, ll. 36 to 40;— Lefebvre, vol. 4, p. 796, ll. 19 to p. 797, line 15) is eminently conducive to sudden rises of the river. This, the Appellant knew or ought to have known when it built its dams and it accepted the risk inherent to these natural conditions. The precipitation of rain and snow during the fall and winter preceding the flood has been as follows:

12.75 inches of rain and 109.0 inches of snow from November 1, 1927, to April 30, 1928, as compared with 6.57 inches of rain and 124.6 inches of snow for the same period in 1919-20, the only year, besides 1928, for which records have been produced (see exhibits 31 and 33)—

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In the opinion of the learned trial judge, this was not abnormal (see remarks of the trial judge, p. 1071, case, ll. 16 to 37). Nor did the trial judge consider excessive the precipitation of rain during the 29th and 30th of November 1927, to wit: 0.28 inches and 0.46 inches, respectively, or of snow during the first three days of December, to wit: 0.5 inches, 4.5 inches and 0.28 inches respectively, (see exh. 33; also remarks of the trial judge, p. 1071, ll. 23 to 33); more particularly, on account of the fact that, as explained by the trial judge, "this over-flow was taken

care of by the river and carried down beyond Hemmings Falls and Drummondville, presumably to the mouth of the river, in the near few days, because of the mild weather, and that the flow of the river was soon after back to normal for that period of the year. During the winter, as I have already said, the precipitation although fairly abundant, was not in any way unusual". 10 (Case, vol. 6, p. 1071, ll. 32 to 37)-.

Moreover, Lefebvre, one of the experts for the Appellant, admits that exhibit Z-19, fyled by Dunfield, and purporting to give the average flow of the river, at Richmond, in December 1927, January 1928 and during the spring of 1928, is deceptive and cannot be relied upon. (Lefebvre, case, vol. 4, p. 824, ll. 42 to p. 825, line 41)— It is true that mild weather prevailed during several days before the accident; but mild weather is not abnormal, at the beginning of April. In fact, on account of mild wea-20 ther, the break-up of 1927 occurred 3 weeks earlier than in 1928. to wit: on or about the 15th of March. Flood at springtime, more particularly in rivers, such as the St-Francis river, can and must be foreseen and guarded against. In effect, the Appellant had foreseen such occurences and had attempted to protect the bridge against them, by means of a stone filled crib and other works. (see plans, exh. 71; letter, exh. 72; depos. Morrison, pp. 848-849-850- Brousseau, vol. 5, p. 870, ll. 33 to p. 871, line 10:p. 873, line 35 to p. 874, line 17). But these protective devices prove insufficient.

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We respectfully submit that the flood of 1928, under the circumstances, disclosed by the evidence, cannot be considered as an unforeseen event and does not constitute a vis-major.

"-Il ne faut pas ranger parmi les cas fortuits et force "majeure, les évènements de la nature quelque irréguliers qu'ils "soient si les parties ont dû s'y attendre, tels que la crue des fleu-"ves et des rivières, et les changements subits de la tmpérature" "- Mathieu J. 1886; Chalifoux vs Cie du Pacifique, M.L.R. 2 40 "S.C. - 171; M.L.R. 3 K.B.R., 324; 14 R.L. 149; 22 S.C. Rep. "721; 9 l.N. 164; 11 L.N. 32, 315; 31 L.C.J., 261.-"

"-Les accidents de la nature ne doivent être considérés "comme force majeure qu'autant qu'ils sortent de la marche ac-"coutumée de la nature. La pluie, la neige, le vent, la chaleur, "selon les saisons, peuvent devenir des causes de difficultés, "d'embarras et dommages pour le débiteur sans constituer la "force majeure ;- 2 Troplong, Louage, n. 207 ;- 16 Laurent, n. "257, 263;- Larombière, art. 1148, n. 10 et s.

In the case of Montreal Light Heat & Power Co. vs Archambault esql., it was held :---

"-20-Le propriétaire d'ouvrages hydrauliques établis
"dans une rivière et le locataire qui les exploite sont conjointe"ment et solidairement responsables des dommages causés par la
10 "débâcle de glaces formées, retenues et amoncelées par ces ouvra"ges. Il ne peuvent exciper de la force majeure, à raison de la
"rigueur exceptionnelle de l'hiver où le dommage est arrivé, ce
'fait étant dans l'ordre des prévisions ordinaires." (16 Q.O. Rep. K. B., p. 410)-.

And at p. 421 and 422, Mr. Justice Bossé, speaking for the majority of the Court, said:---

"Les défenderesses ont sérieusement soutenu que tout ce-20 "ci était force majeure et que, par conséquent, les compagnies "n'en sont pas responsables.

"Il est impossible d'admettre cette conclusion.

"D'autres hivers aussi rigoureux, et l'un d'eux, plus ri-"goureux que celui de 1903-04, ont produit leur effet sur la ri-"vière Richelieu, depuis 1845, date de la construction du pont, "et toujours, cependant, les glaces formées sur les rapides se dé-"sagrégeaient graduellement au début du printemps; les rapides 30 "se nettoyaient et étaient, lors de la débâcle, prêts à recevoir et "laisser passer sans entrave les glaces du haut de la rivière.

"D'ailleurs, les variations, des saisons et le plus ou moins "de rigueur des hivers ne sont pas force majeure. Chacun doit "les prévoir et chacun est obligé d'en tenir compte et de se garer "en conséquence.

"Les défenderesses devaient savoir qu'en certains hivers, "plus rigoureux que d'autres, la glace serait plus épaisse, et el-40 "les devaient savoir aussi que la glace de l'étang artificiel qu'el-"les créaient, pourrait emporter le pont.

"Les ingénieurs de la compagnie qui a construit la chaus-"sée ont en partie prévu ce résultat, mais soit que le remède "qu'ils ont suggéré ait été lui-même incomplet, soit qu'il n'ait "pas été entièrement appliqué, le pont n'ayant pas été élevé suf-"fisamment le malheur prévu est arrivé." (re do, pp. 421-422)..... And this judgment was affirmed by the Supreme Court of Canada (41 Supreme Court Rep. p. 116)—.

Moreover, a party cannot be relieved of his liabilities under the plea of vis major, if he becomes unable to control conditions for the existence of which he is himself responsible. (Chit-10 ty, on Contracts, 18th ed., p. 828)..

"—Il n'y a pas non plus, juridiquement cas de force ma-"jeure lorsque l'obstacle apporté à l'exécution par l'évènement "qui, en lui-même, a le caractère de cas fortuit, a été occasionné "par une faute du débiteur survenue avant, pendant ou depuis cet "évènement. En un mot, le débiteur n'est pas libéré si une faute "commise par lui a été la cause occasionnelle de l'inexécution"— "(Baud. Lac., XII, des Obligations, 3rd -dit. no. 460, p. 490)—.

20 (See also Huc, t. 17, no 143;— Cassation, 16 février, 1899; S. P. 99, l- 328)—.

The damage having resulted from the change in the behaviour of the river caused by the construction of the dam, and the doctrine of vis major not being applicable, the Appellant was properly held responsible. Under sections 5, 7, 8, 9 of the "Water Course Act of the province of Quebec"., R.S.Q., 1925, ch. 46), the construction of a dam must be authorized and approved by the Lieutenant-Governor in Council, and section 12 provides:—

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"12—The owner or lessee of any such work shall be liable "for all damages resulting therefrom to any person, whether by "excessive elevation of the flood-gates or otherwise"—

Moreover, under section 1054 of the C.C., every person is responsible for the damage caused "by things which he has under "his care"—.

"It is true that the flood was of extraordinary violence, 40 "but floods of extraordinary violence must be anticipated as "likely to take place from time to time. It is the duty of any one "who interferes with the course of a stream to see that the works "which he substitutes for the channel provided by nature are "adequate to carry off the water brought down even by extra-"ordinary rainfall, and if damage results from the deficiency of "the substitute which he has provided for the natural channel "he will be liable. Such damage is not in the nature of damnum "fatale, but is the direct result of the obstruction of a natural "watercourse by the defenders' works followed by heavy rain"— "(Greenock Corporation v. Caledonian Railway, Greenock Cor-"poration v. Glasgow and South-Western Railway, 1917, A. C. p. "572)---

"An extraordinary fall of rain is a matter which, in our "climate, cannot be called a damnum fatale — supposing the "doctrine so denoted by that term to be applicable — generally "speaking, — to a dam for collecting water. And the experience "of the last fifteen years has shown that the increased drainage "of the country brings down in heavy rains the whole water in "a very short space of time, and therefore in floods of a weight, "and power, and force of water quite unknown in former times. "But against such a state of things the party forming such dams "must completely provide, so as to secure safety to those lower "down the stream."— (Kerr v. Earl of Orkney, 20 Dunlop's "Rep., pp. 290 to 302)—.

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"La disposition du paragraphe 1er de l'article 1384 c. civ. "est d'une généralité absolue.

"Elle vise les dommages causés par les immeubles, comme "ceux qui sont occasionnés par des choses mobilières.

"La seule condition à exiger est qu'il s'agisse d'une cho-"se dont l'usage ou la détention nécessite une garde à raison des "dangers qu'elle peut faire courir à autrui"—. (Cass., Req., 6 30 "mars 1928, D. P. 1928-1-97)—.

(See also City of Montreal vs Watt & Scott, 1922 — 2 App. Cas., p. 555; — City of Quebec vs the Queen, 24 Supreme Court p. 420 — Gale vs. Bruneau, 44 Supreme Court Rep., p. 305 at p. 312; Cass., 16 nov. 1920, D. & P. 1920-1-169; — Cass., 15 mars 1921, D. & P. 1921-1-25)—.

-B- The Appellant must be held liable for the addi-40 tional reason that the accident was due to the fault, negligence and want of skill of its employees and representatives.

During the morning of the 8th of April, Dunfield, Kitson, Rutherford and two laborers went up to a point on the river opposite Bergeron's, at a distance of approximately fifty feet from the shore and there exploded a can of thermite.

Another can of thermite was exploded about an hour later.

The places where these cans were exploded are marked on a plan exhibit Z-5. The object of these explosions was to relieve the pressure.

In fact, is was then stated to Manseau and Bergeron, that thermite was used in order to protect the Appellant's plant. 10 (Manseau, vol. 1, p. 252, ll. 12 to 24; vol 1, p. 259, ll. 33 to 45)—.

It is plain that the people in charge of the Hemmings Falls plant were becoming alarmed over the situation.

Dunfield admits that perhaps "thermite did a little good" (vol. 1, p. 277, ll. 42 to 43) and that it did dissociate the ice to some small extent (vol. 2, p. 278, ll. 10 to 11) "We could see -"says Kitson —, the water coming down from upstream, down "over the ice, as if it would relieve the pressure" — (vol. 3, p. 460, 20 ll. 19 to 20). And Bergeron noticed that immediately after the explosion, the jam began to move (Vol. 2, p. 260, ll. 20 to 35). It was easy to realize that the break-up was imminent and that it was doubtful whether the dam could hold back the huge quantity of ice and water accumulated in the basin. Under such circumstances, it was clearly incumbent upon the Appellant's officers to take all possible precautions to protect, not only the company's plant, but also other people's property downstream. And the most elementary precaution was to open and to keep wide open all the four sluice gates, so as to lower the level of ³⁰ the water and relieve the congestion in the basin.

This, the Appellant's officers failed to do.

From noon, on the 7th, to 7 o'clock P. M. gate No. 1 was closed and gate No. 2 was open only 12 feet. The four gates were wide open at 7 P. M., when the biggest flow of the day occurred. But, at 7.40 P. M. gate No. 1 was again closed. At 8.50 P. M. gate No. 1 was raised 5 feet. At 9.40 P. M., it was open 10 feet and at 9.55 P. M., it was open clear off the water. Again, at 10.25 P. M., gate No. 1 was partly closed being open only about 10 feet, and it remained in that position until Sunday morning, at 9.20 A. M.. At that time, it was opened 16 feet and remained in that position until 3 o'clock, P. M.—; when the ice ________ and water accumulated in the basin rose to elevation 325.06, and the whole thing toppled over the dam. (Dunfield, vol. 1, p. 71, ll. 9 to p. 74, l. 29; do, vol. 4, p. 673, ll. 20 to 25)—.

The reason why the gates were not left wide open was that

the company wished to keep its turbines in operation and to avoid cutting off the supply of electricity.

The conduct of the officers of the Appellant, in the circumstances above described, constituted, we respectfully submit, a fault and a negligence.

Π

THE ACCIDENT WAS NOT DUE, IN WHOLE OR IN PART, TO THE RESPONDENT'S FAULT OR NEGLIGENCE.

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It has been urged on the part of the Appellant that the accident was due to the negligence of the Respondent and that said negligence consisted in:—

1. Not signalling the train before it reached the spot of the washout.

2. Not having foreseen the possibility of the accident and provided the bridge and tracks with devices strong enough to 30 resist the onrush of the flood.

Α

The masses of ice and water which washed out the embankment, leaped over the Hemmings Falls dam on the 8th of April, at 3 p.m. The train was due at Drummondville, at 4.15, and it was on time. It reached the bridge at about 4.13. (Guévre-40 mont, vol. 1, p. 29, ll. 45 to 49; St-Pierre, vol. 1, p. 19, l. 28).

On the other hand, it is a well established fact that the flood started to wash out the embankment scarcely half an hour before the arrival of the train, at the Drummondville bridge. On the date of the accident, Guévremont went to the east side of the bridge with his friend, Mr. Marier, for the purpose of watching the movements of the ice on the river. They arrived at the bridge half an hour before the train and, at that time says Guévremont, no damage was done to the embankment. (Guévremont, vol. 1, p. 30, ll. 1 to 30).

It was only at the last minute that, having heard the train coming, he noticed that the embankment was being washed out and realized the danger. (Guévremont. vol. 1, p. 31, ll. 20 to 31).

"C'à parti le temps de le dire, une seconde, rien que voir "venir l'engin du coin, c'à parti tout d'un coup.

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"Q.-Le remblai en terre en-dessous du point "A", vous "dites que c'est parti tout d'un coup?

"R.-C'est parti tout d'un coup." (case, vol. 1, p. 31, ll. 31 to 35).

Point "A" to which the witness refers appears on the photo exhibit No. 6. Guévremont's evidence is corroborated by Marier. (Marier, vol. 1, p. 39, ll. 13 to 40).

Mrs. Grondin left her home at about 3 o'clock p. m., on Sunday, the 8th of April. The water was then just starting to rise and there was no ice yet in the basin. (Mrs. Grondin, vol. 1. p. 41, ll. 20 to 49). But the water was rising very quickly. (Mrs. Grondin, vol. 1, p. 42, ll. 10 to 17; p. 44, ll. 9 to 22).

She went to the railway line, which is a short distance from her home, took the children to a barn where they would be safe and came back to the railway line. She then noticed that the ice was coming down: big pieces of solid ice, stumps and 30 trees were floating down the river. (Mrs. Grondin, vol. 1, p. 42, ll. 21 to 49).

It was then that she saw the embankment being washed out.

"L'eau a miné le pier (meaning the embankment); ensuite "les glaces sont arrivées. Les glaces ont emporté les morceaux "qui soutenaient la ligne au-dessus du viaduc. (Mrs. Grondin, vol. 1, p. 43, ll. 4 to 7).

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On the same date, at about 4 p. m., Séverin Pineault, an agent of the Canadian National Railway, at Drummondville, left his home and proceeded towards the railway bridge. The river was already rising quickly. Large quantities of ice were floating down the river. There was, however, nothing abnormal, so far. From where he stood, he could not see the railway embankment, on either side of the river. After a few minutes, he drew closer to the railway and then noticed that at one place the em-

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bankment on the east side of the river was commencing to disagregate. (Pineault, vol. 1, p. 52, ll. 27 to 47; see also Boisvert for app. vol. 3, p. 614, ll. 23 to 43).

From the dam to the railway bridge, the distance is about 2 miles 1/2. At the rate of speed mentioned by the Appellant's ex-10 perts, to wit : 5 miles an hour, the flood must have reached the bridge around 3.40 or 3.45 p. m. It can, therefore, be safely asserted that the damage to the embankment began between 3.30 and 3.45 p. m., and the accident occurred at about 4.13 p. m.

On the other hand, it is shown that all those who happened to notice this disagregation of the embankment made all possible efforts to signal the train. As soon as Mr. Guévremont heard the train coming, he said to his friend Marier:

20 "On va retourner avertir le train." (Guévremont, vol. 1, p. 32, ll. 24 to 27).

But, when he tried with his friend to cross the bridge, the portion of the embankment marked "A" on exhibit No. 6, was already washed out. It was too late and he had to go back to the entrance of the bridge. (Guévremont, vol. 1, p. 32, ll. 1 to 15; p. 36, ll. 35 to 45).

Pineault noticed, at about 4 p. m., that the embankment 30 was disagregating. His first thought was to go and signal the train, but looking at the time he realized that the train had left St-Cyrille, which is the first station east of Drummondville, and that he had not enough time to cross over to the other side of the river to give the signal. He telephoned to the station agent and told him to call the dispatcher. He went out again with the intention of returning to the river but came back home to inquire if the operator had succeeded in getting St-Cyrille; the answer was in the affirmative, but the agent told him that the train had passed St-Cyrille and that it had been impossible in the circumstances to stop it. (Pineault, vol. 1, p. 53, ll. 17 to 37). St-Cyrille is about 5 miles $\frac{1}{2}$ from Drummondville.

While she was watching the movements of the ice, Mrs. Grondin was suddenly told by her little daughter that the locomotive was coming. At once, she ran along the track, in the direction of the train and signalled the engineer to stop. "J'ai couru en avant des chars, j'ai crié, j'ai fait des "signaux, comme j'ai pu." (Mrs. Grondin, vol. 1, p. 43, ll. 25 to 27).

The train passed her; she saw the fireman hanging outside the window of the engine's cab, and she told him to jump, which 10 he did. Then the engine slowly dived in the gap. (Mrs. Grondin, vol. 1, p. 43, ll. 39 to 50).

We respectfully submit that, in view of all this evidence, th learned trial judge was amply justified to conclude as he did, when he said :---

"I do not think that any blame can attack to the Plaintiff, "in the circumstances, for not having stopped the train; it was "impossible, in my opinion, to do it'. (Case, p. 1095, ll. 4, 5, 6.).

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In fact, it is to the Appellant, and not to the Respondent, that the blame for not having signalled and stopped the train should attach.

The Appellant's officers were the first to know that the dam had failed to hold back the water and ice accumulated in the basin. It was then 3 p.m., and there was ample time to telephone to the station agent, at Drummondville, who, in turn, would have stopped the train, at St-Cyrille, and possibly further east. The 30 last stop of the train before reaching Drummondville, was at Aston Junction, which is about 27 miles east of Drumondville; there were however many intermediate stations at which the train could have been signalled. (St-Pierre, vol. 1, p. 19, ll. 30 to 47). But the Respondent's agents were not notified and no attempt to notify them was made. (Pineault, vol. 1, p. 54, ll. 23 to 28). It is in evidence that since 1928, the officers in charge of the Appellant's plant never fail to notify the railway agents of the breakups, as soon as they occur. (Pineault, vol. 1, p. 54, ll. 28 to 35; p. 58, ll. 15 to 35). What is done since 1928, could easily have been

40 done before. It was the plain duty of the Appellant which had created a danger by interfering with the natural flow of the St-Francis River to take all possible precautions, in order to avoid disasters such as the one which has given rise to the present action. And the failure to notify the railway authorities is another reason why the Appellant should be held responsible. The embankment which has been washed out in the afternoon of the 8th of April, dated back to 1887. From 1887 to the 8th of April 1928, it had stood undamaged the brunt of the ice break-ups, every spring, as well as the floods which occur perio-10 dically. (Pineault, vol. 1, p. 54, ll. 16 to 23; Dupuis, vol. 2, p. 361, ll. 27 to 36; Poulin, vol. 5, p. 875, ll. 15 to 18; Brousseau, vol. 5, p. 869, ll. 25 to 37; See admissions that Tessier would corroborate Poulin, vol. 5, p. 877, ll. 10 to 15).

The evidence further discloses that the section of the line where this embankment was located, extending two and a half miles west and three miles east of Drummondville, was inspected daily and kept in a good state of repairs. (Poulin, vol. 5, p. 874, l. 37, at p. 875, l. 17).

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As said by Brousseau, district engineer, since 1920:

"Q.—Au point de vue de solidité, comment sont-ils, ces tra-"vaux-là, comment étaient-ils au mois d'avril 1928?

"R.—Ils étaient en très bon état. La ligne de Drummond-"ville a toujours été la ligne où nous dépensons le plus d'argent "pour l'entretien des voies à cause de la rapidité des trains et "du service fréquent." (case, vol. 5, p. 869, ll. 37 to 43, p. 872, ll. 1 to 13).

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It is true that, during the break-up of 1918, the embankment was somewhat damaged by the flood. A photo has been fyled as exhibit No. 1 by one of the witnesses for the Appellant, Mr. Dick, who was employed in 1918 as engineer by the Morrow & Beatty Company, which built the dam and power house at Drummondville, for the Appellant. (Vol. 3, p. 506, l. 43 to p. 507, l. 35). The photo shows a cavity near the end of the embankment, on the west side of the river, looking from upstream. Dick first stated that he took this photo two or three days after the 40 1918 break-up; but, later on, admitted that he does not know when he took it. (Vol. 3, p. 507, ll. 35 to 50; p. 510, ll. 16-17). He was unable to tell the dimensions of the cavity, simply stating that, in his opinion, that cavity was large enough to be a source of danger. (Dick, vol. 3, p. 508, ll. 23 to 37).

On the other hand, Toupin, who was section foreman for the Canadian National Railway Co. in 1918, saw the cavity; he describes it as being about 5 feet long by 2 feet wide and says that the photo shows it bigger than it really was. (Toupin, vol. 5, p. 858, l. 30 to p. 859, l. 20).

B

In his opinion, it did not affect the solidity of the embankment. Vol. 5, p. 859, ll. 26 to 30).

In fact, it looked so unimportant that it was repaired only three or four months later. (Toupin, vol. 5, p. 859, ll. 37 to 41; p. 860, ll. 23 to 26). The repairs were made by the witness 10 and it took only one load of stone or earth to fill up the cavity:

"On a mis de la pierre. J'ai jeté à peu près la valeur de "deux voyages de chevaux là. J'en ai mis la moitié dans la partie "lavée et l'autre en bas.

''Q.—Ce serait un voyage à peu près, un tombereau de ter-''re?

"R.—Oui, en haut, où est la partie descendue pour (evi-20 "dently this is an error and the word should be "par") les pié-"tons; là on a mis à peu près une couple de voyages de "ballast". "C'est ce que l'on avait l'habitude de mettre tous les deux ou "trois ans, parce que les piétons descendaient là, à la rivière, "et cela se descendait." (Case, vol. 5, p. 859, l. 44 to p. 850, l. 3).

The continual use of this part of the embankment, to which Toupin refers, by persons going down the river, no doubt, caused more damage to the embankment than the flood itself. As ex-30 plained by Toupin, once the surface or crust is gone, the embankment wears out easily and quickly. (Toupin, vol. 5, p. 859, ll. 21 to 26; p. 861, ll. 45 to 50; p. 866, ll. 1 to 15).

At all events, this cavity, measuring about 5 feet in length by 2 feet in width, was the only damages to the embankment which were ever noticed from 1887 to 1934. (Toupin, vol. 5, p. 860, ll. 17 to 23; p. 867, ll. 15 to 40; Brousseau, vol. 5, p. 872, ll. 37 to 43; Poulin, vol. 5, p. 875, ll. 15 to 18). And it is a well established fact that, on the date of the accident, up to 3.30 or 3.45, the 40 embankment was in perfect condition.

Noel Tessier, a section man at the employ of the Canadian National Railway, made an inspection between 7.15 and 7.30 a. m., and again between 8.30 and 8.45 a. m., and he found everything in order. (Noel Tessier, vol. 2, p. 369, ll. 11 to 37).

The maritime express of the Canadian National Railway Co. from Quebec passed over this embankment at about one o'clock in the afternoon (St-Pierre, vol. 2, p. 365, l. 29 to p. 366, l. 22 and the embankment was still in good order, when Guévremont reached the bridge, at 3.30.

How can it be said that the Respondent was negligent, for not having foreseen that an embankment which had stood 10 the brunt of water and ice since 1887 would be so suddenly washcd out in 1928, or for not having adopted new and unheard of, devices in order to strenghten such a structure?

Negligence is a breach of duty and there is no duty to guard against contingencies too remote to be reasonably anticipated. (C. P. Ry. v. Fréchette, C. P. L. J. R. 1915, p. 168; Horsburh v. Sheach 1900 — 3 — Ses. cas. p. 268 — at p. 270; — City of Verdun v. Yeoman, Can. L. Rep. Supreme Court, 1925 — pp. 187-188).

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"To determine whether an act is negligent it is relevant "to determine whether any reasonable person would foresee that "the act would cause damage; if he would not, the act is not ne-"gligent." (1921, 3 K.B. 560, at 577).

"The line had lasted five years in a country subject to "floods, and it does not appear that there had been any accident "or objection to its construction until this extraordinary flood "occurred. The company were not bound to have a line construct-30 "ed so as to meet such extraordinary floods." (Wethers v. The North Kent Railway Company (1858) 27 L.J. Ex. 417, at p. 418).

III

THE APPELLANT IS RESPONSIBLE FOR ALL THE DAMAGES ALLOWED BY THE TRIAL JUDGE.

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The amount of damages, as fixed by the learned trial judge, is not in dispute. (See admissions, case p. 1048). On the other hand, we respectfully submit, for the reasons previously given, that no deduction should be made on the ground of contributory negligence, on the part of the Respondent. The judgment cannot therefore, be disturbed unless it is shown that the Appellant should not be held liable at all, or should not be held liable, for some of the items included in the condemnation.

The Respondent is entitled to obtain full compensation for all the damages resulting from the accident, and the restriction imposed by section 1074 C.C. to damages foreseen or which might have been foreseen, cannot apply. Such a limitation in the measure of damages is entirely based upon the presumed intention of the parties, when entering into a contract, and cannot therefore 10 be invoked where there is no contract.

"La jurisprudence décide, en général, que l'auteur d'un "dommage délictuel doit en réparer l'intégralité, quant même ce "dommage n'aurait pas été prévisible au moment où le délit a été "commis. (Trib. Chambéry, 28 mars 1885, 15 janvier 1886-S.86-2-117" (Colin et Capitant, 1932, t. III, no. 194).

"What a defendant ought to have contemplated as a rea-"sonable man is material when the question is whether or not he 20 "was guilty of negligence. This, however, goes to culpability, not "to compensation." (Remarks of Mr. Justice Middleton, re: Harding v. Edwards & al. 64 Ont.L.Rep., p. 98, to p. 105). (See also 5 Larombière, 1857, Sections 1382-1383, Nos. 26 and 37 — 1 Sourdat, Responsabilité, Nos 105-107; 5 Mignault, pp. 341-342).

No doubt indirect damages cannot be recovered. But damages can be said to be indirect, only when the act of the defendant has been merely the occasion and not the cause of the damage. (See 43 Critique de Législation, 1914, p. 289; also S.1911-l-545).

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"Il est de tradition et de jurisprudence constantes que le "dommage appelle une réparation quand bien même il ne se rat-"tacherait pas directement au fait fautif dont il ne serait qu'une "répercussion plus ou moins lointaine; l'article 1382 ne permet "pas de distinguer entre ces deux formes de préjudice." (Josserand, Dr. Civil, 1933, t. II. No. 440, pp. 234-235).

We submit that every item of damage included in the judgment appealed from is recoverable, under the principles above 40 enunciated. All these various sums have been paid by the Respondent, as a direct consequence of the derailment which occurred on the 8th of April 1928.

It was urged on behalf of the defendant that it cannot be called upon to reimburse the indemnities paid to passengers, employees and legal heirs of employees because it was not a party to any suit taken or arrangement made, and that it had no opportunity of contesting the claims or discussing the quantum thereof.

The fact that the Appellant was not a party to the suits taken or arrangements made, as a result of the accident, had this effect: it left the Appellant free, notwithstanding the payment made by the Respondent, to contend before the Exchequer Court that it was not liable or that the amount was excessive. In this sense, these proceedings or arrangements were not binding upon 10 the Appellant. But it was not a condition precedent to the Appellant's liability that it should be a party to these proceedings or arrangements.

As was said by Chief Justice Anglin, in re: Regent Taxi v. Congrégation des Petits Frères de Marie, (Canada Law Rep., 1929, p. 671):—

- "The expenses incurred by the plaintiff for doctor's bills, "and hospital care, etc. for Brother Henri-Gabriel may well be "regarded as outlay made by it in the discharge of an obligation "of the defendant and for its benefit. On similar grounds, in "Paquin v. Grand Trunk Rly. Co. (1896) cited by Greenshields, "J., the defendant railway company was held liable to the plain-"tiff, who had rendered medical services to persons injured in "an accident caused by its negligence, although such services had "not been requested or sanctioned by anyone authorized on its be-"half. Reference may also be made to the authorities cited by La-"rue, J. at p. 338; and to La Cité de St-Hyacinthe, vs. Brault."
- 30 We, therefore, respectfully submit that the present appeal should be dismissed and the judgment of the Exchequer Court affirmed, with costs.

Montreal, the 8th day of January, 1935.

Beaulieu, Gouin, Mercier & Tellier, Attorneys for the Respondent.

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DOMINION OF CANADA

In the Supreme Court of Canada

(OTTAWA)

On appeal from a Judgment of the Exchequer Court, for the Province of Quebec, (in appeal),

BETWEEN: -

The Southern Ganada Power Company Limited,

(Defendant in the Exchequer Court),

APPELLANT.

-- vs ---

His Majesty the King,

(Plaintiff in the Exchequer Court),

RESPONDENT.

Respondent's Factum

BEAULIEN, GOUIN, MERCIER & TELLIER, Attorneys for Respondent.