ight y in

ould

l be

n of

wer pate

xcanec-

iels, be

row.

e to

hat.

ned

one

ould

mps

Fire

nly

k of

ars.

ne;

on

ater

be

e a

ent

on-

the

ter

of

Amelia Island. Another may be had on Victoria Island on the opposite side of the slide to this last, both discharging the tail-water into the slide channel at the foot of Amelia Island. Another site is at the head of the dry gully, in rear of Ahearn's Blacksmith Shop. This is upon private property,—the same owners as the Gully route. This last could be fed in three ways;—first, by a canal through Oregon Street, or through the vacant ground West of this street;—Second, by a cut taken from the slide channel at or immediately above the road bridge; and Thirdly, by bringing a flume around the stone mill, by the head of Amelia Island.

The best way to feed all these four sites, viz., the one at the chasm, the two at the head of the long slide, and the one behind the Blacksmith Shop, would be by bringing the head level down to Amelia Island, raising the long slide, and cancelling the Regulating Apron. This, as well as other features of these water powers, will be a matter of negotiation with the Dominion Government, as those of the Gully and other routes will be with individuals; and until all the conditions are known, no decision can be arrived at. When all the requirements of both parties are ascertained, a comparative estimate of costs and advantages can be made. In meantime enough is shown to determine the practicability within reasonable limits. All of the slide channel schemes can be carried out, with little difference of cost, without disturbing the present arrangement of the slides; and I know of nothir which is likely to cause any objections on the part of the Government to any of the plans. As to the Gully route, although I have estimated it, with the other thorough cuts, at the minimum width, for the purpose of fair comparison, I think that in view of the ice obstructions and the impracticability of future enlargement, these should be carried out on a much larger scale, proportionately, than the shorter and wider ones in the natural channels. But I take it for granted that the Gully route, when undertaken, will be on a scale sufficient to set at rest all these questions, because it is one of those schemes which would not pay upon a small scale.

## FIRE ALARM TELEGRAPH.

I have already expressed the opinion that Water Works should be arranged with a view to the most rapid possible extinction of fires; and that it is with reference to this object they are to be chiefly valued. For this reason I consider the Fire Alarm Telegraph as much a part of the