nearly the whole fall could be given to the pipe—which to pass 5,000,000 galls in 24 hours, would require a diameter over 30 inches and a fall of 10 feet in the whole distance. The cost of this pipe would be about the same as that of the excavated aqueduct.

The objections to an open canal, are reduced in the present case, by its secluded position. In the whole length of nearly five miles, it is crossed by but two public roads, norwithstanding its proximity to the city. By fencing in the route, and passing the highways by tight bridges, any interference must not only be premeditated, but upon such a trivial scale as would render harmless such useless and unprofitable mischief.

The New River—an artificial open channel 40 miles in length, and crossed by 200 bridges, has, for 240 years, furnished the principal supply of water to London. 'The Canal de l'Ourcq—24 leagues long—serves the same purpose to the City of Paris. Dublin and Greenock are likewise supplied by open aqueducts.

In the recent agitation for an improved water supply for London, two of the leading schemes proposed, contemplate open canals. The "Henly Scheme" embraces an open canal to carry 200 millions of gallons daily.

The "Maple-durham Scheme" proposes an open canal 4½ miles long, (about the same length of yours) for a part of the distance—thence, through three iron pipes of five feet diameter each.

The objections to open canals are :---

- 1st, Loss of water by evaporation, leakage, and filtration.
- 2nd, Exposure to breaches in the embankments, from long continued rains.
- 3rd, Exposure to impurities, either from wash and surface drainage—absorption of the earthy strata through which it passes—or from deleterious substances thrown in, ignorantly or maliciously.