

SENECA RESERVOIR.

To contain the greatest amount of water which (in connection with the extent of drainage, the proportion of rain allowed, the loss on the reservoirs, and the supplies required continually for the canal, and also on the supposition that these supplies would be drawn from all the reservoirs proportionally at the same times,) this reservoir would retain at any one time, this dam would have to be raised so as to admit of a depth of water of 40 feet, estimating from the point of entrance of the feeder, which is always from 5 to 10 feet above the bed of the stream. The length of the dam embankment would be about 400 feet. Such a height would dam the water back on the Wild Cat Branch about 3500 feet, and on the Seneca River 9000 feet. The extent of country draining into this reservoir is 17.044 square miles.

GOSHEN FEEDER.

Returning to the Seneca Bridge, where the feeder from the Goshen Branch enters (marked E. on the maps) that feeder is traced up the south side of the branch to a point immediately below the junction of Daw's and Rigg's Branches where the dam for the reservoir collecting the waters of these branches is located. This branch feeder is 0.702 miles in length. The dam of the Goshen Branch reservoir, to fulfill the conditions already mentioned, will require to be raised so as to ensure a depth of water of 20 feet, estimating from the entrance point of the feeder. The length of the dam would be about 800 feet. [GOSHEN BRANCH RESERVOIR.]—The depth mentioned will throw the water back on Rigg's Branch 3400 feet and on Daw's Branch 4600 feet. The country drained into this reservoir includes 7.208 square miles.

The supply from these two feeders embraces all the water drawn from the Seneca Valley.

We shall now describe the feeders of the valley of the Patuxent. The point of entrance of these feeders which for a short distance before entering are combined, occurs in the valley of Hawlings River, at a point about 800 feet below the mouth of Reedy Branch (C. on the maps). The canal is placed here on the south side of the Hawling's River Valley. To attain the north side, the feeder crosses the valley directly from the entrance point. An extensive aqueduct would be required here, the bed of the stream being 53 feet below the level of the feeder. Having crossed the valley, the feeder proceeds up the Hawlings River by its North slope. [HAWLINGS RIVER FEEDER.]—At a point 6700 feet up the river (estimating from C.) and on Mr. Holland's farm, the feeder from the Patuxent River unites with this of the Hawlings River. Describing that of the Hawlings River first; the route continues up the same side of the valley without encountering any prominent difficulties of construction to a point immediately above the crossing of the Brookville and Unity Road, and on the farm of Mr. Bowie Davis, where it terminates. The length of this feeder is 3.068 miles.