INTERIM REPORT No. 97.

As is usual, prior to my annual report I made an official visit of inspection of the river to note the works completed or in progress during the working season now drawing to a close. was accompanied by two members of the Trust, Messrs. J. H. Burnet and W. A. Veitch, M.P.

The conditions of the river were generally favourable for inspection.
We left Wanganui on Sunday, the 22nd March, in the s.s. "Ohura," at 7 a.m., and arrived at Pipiriki at 6 p.m., on the way up noting any difficulties in navigation. On arrival at Pipiriki we found the river-gauge showing $30\frac{1}{2}$ in. below the mark or zero established by the steamerproprietors as a gauge. (I may here mention that the zero was established in the early history of the river service by the steamer-proprietors when it was considered to be suitable water to reach Pipiriki, or ordinary summer level.) We met with little or no difficulties on the way up-stream, despite the fact that the "Ohura" was carrying probably fifty passengers for wayside ports and some cargo.

We found the walls and groynes erected by the Trust proving effective. stone walls that have been constructed, these are in marked contrast to the shingle and wire-net They are permanent structures not affected by flood-water, whereas the walls constructed with shingle and enclosed by wire netting have not a long life, and must be only looked on as temporary structures, being liable to damage during flood, more especially by floating timber. From time to time these shingle and wire-net walls must be replaced by permanent stone walls. This will be a gradual evolution, and will be very materially assisted by the steel launch now

being procured.

In the past the Trust has suffered from the want of a suitable launch for towing punts to and from places where suitable stone is available on the banks of the river. I may here remark that it is noticeable throughout the course of the river that where walls are required for lifting the river over the shallows or scouring the rapids suitable stone for constructing walls is not available; consequently, recourse had to given to the utilization of walls constructed of shingle enclosed in wire netting. There is an abundant supply of suitable stone on the river-bank, but, unfortunately, the stone is frequently at some distance from requirements.

So far as the shingle-wire-net walls are concerned, the position is that they have a short life, through the galvanizing being worn off the iron wire and the friction of the shingle. Then, again, the wire netting on the tops is liable to be torn off in flood-water by floating timber, and the shingle escapes, thereby minimizing the effectiveness of these walls. They have, however, proved most useful, and in the early history of the Trust were indispensable; but, as I have

before remarked, they are only temporary structures.

The future work on the river will therefore be the gradual replacing of shingle and wire-net walls by permanent stone structures or a system of locks. The latter proposition, however, although worthy of consideration and should be kept steadily in view, does not appear to be practicable in the meantime.

Present troubles are mainly damage to wire-net walls in flood-time and moving shingle. am constrained to say that the latter is, and will always be, a continual and ever-present diffi-

culty and expense.

It is and must be apparent to the most casual observer that at the junction of the Ongarue with the Wanganui River many thousands of tons of shingle are annually deposited in the river, which in the ordinary course works it way down-stream. Freshets and floods carry this shingle seaward, and it is interesting to observe that the shingle, comparatively large at the junction, gradually becomes smaller as it reaches the outlet to the sea at the mouth of the river

During the winter months, when the river is in a more or less flooded condition, drifting shingle deposits in the shallows, more especially below where the walls have been constructed,

and this is where trouble comes along when the river falls to summer level.

Shingle is also deposited in the wider places of the river that are not confined by walls or groynes, and when the river is below normal summer level shoals are in evidence. These shoals are the bane to steamer traffic, and always will be. To my mind, having an experience of over fifteen years, I am constrained to say that for all time, unless the river is locked, moving shingle will be present, and will be a continual source of expenditure in the way of maintenance.

To put the matter of my recent visit squarely, I say without hesitation, and after due consideration, that the Trust must in the first place know and appreciate the fact that shingle and wire-net walls are but temporary structures; that they must be gradually replaced by permanent stone walls; and that the shingle that will for all time be deposited in the river will require annual attention. This, of course, is and can only be considered maintenance.

If the Trust were assured of an income of £2,500 per annum I have no doubt that not only could the steamer-channel be maintained, but the permanent stone walls be gradually constructed to take the place of the wire-net walls now doing excellent service.

In continuation, having briefly referred to matters pertaining, I must say we reached

Pipiriki at 6 p.m.

On the following morning we proceeded up-stream by the oil-launch "Waiora," a powerfully driven boat of some 70 horse-power, with a Thorneycroft engine. On leaving Pipiriki the water was 32 in. below the mark. We arrived at the Houseboat at Ohura, some fifty-eight miles nearer Taumarunui, at 6 p.m.

The following morning, at 7 a.m., we went on with the "Waiora" as far as Kokakonui, where a good wharf has been recently constructed, and changed over to the "Wai Iti," oil-driven launch with Thornycroft engines of 60 horse-power. Thence we proceeded to Tau-

marunui, where we arrived at 5.30 p.m.

The conditions of river were as previously described, and the launch had no difficulty in negotiating the various rapids.