

EVAPORATION IN NEW ZEALAND. J. Finkelstein,
 Meteorological Service, Wellington.

Tank evaporation measurements were outlined with particular reference to the errors involved, the reduction factors to open water and the relation to meteorological conditions. Estimates of open water evaporation for a number of stations were given.

Reference: Finkelstein, J. 1961: Estimation of Open Water Evaporation in New Zealand. N.Z.J. Sci. 4: 506-22
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NOTES

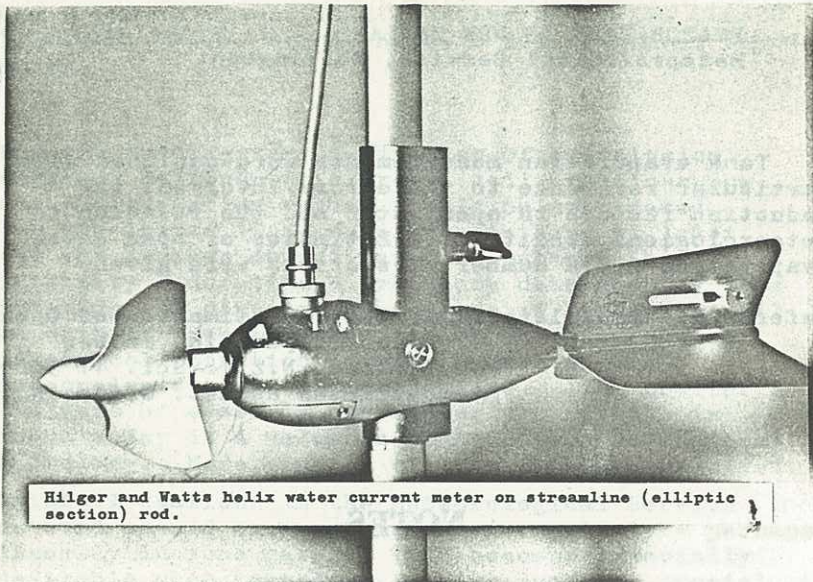
HILGER AND WATTS HELIX WATER CURRENT METER

A prototype of this new meter is being tested by the Hydrological Survey Branch.

The makers claim that the instrument has a number of advanced features, some of which are as follows:-

1. The meter is robust and not easily injured by floating debris or concealed rocks.
2. All component parts are interchangeable and easily replaced in the field.
3. Entanglement of water weed around the propeller spindle is reduced to a minimum.
4. Meter is impervious to salt or polluted water.
5. The velocity range is 0.2 to 30 feet per second.
6. The revolutions can either be counted by headphones or by an improved automatic counter which is capable of counting up to four pulses per second.
7. There is a choice of two signal ratios selected by an external control. These give one pulse per revolution or one pulse every ten revolutions.
8. The meter can be interchangeably supported on either one inch diameter rods of the old type or on a new type of streamline section rods.
9. The spindle runs on stainless steel ballraces which, together with the contact mechanism, are in a chamber filled with a suitable oil.

The instrument is not yet available for general use but it shows promise of being a very suitable instrument for all purposes where a horizontal spindle type of instrument is necessary.



Hilger and Watts helix water current meter on streamline (elliptic section) rod.

HILGER AND WATTS NEW TYPE GAUGING REEL

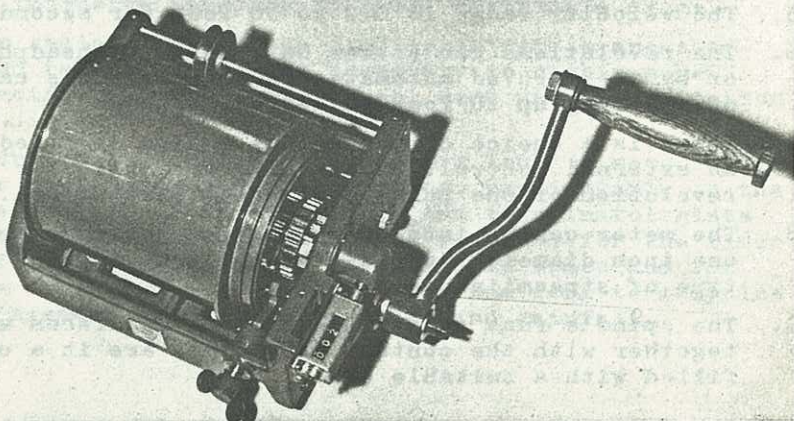
This reel combines features of both the United States Geological Survey type "A" and type "E" reels.

It is capable of handling a 100lb. weight and it takes 150 feet of Ellsworth cable or 100 feet of Hilger and Watts 0.15 inch diameter cable.

The drum is of large diameter holding two feet of cable per turn and is geared so that the handle delivers one foot per revolution. A hand operated brake is fitted.

Using Ellsworth cable it will be a useful reel for sediment sampling with slackline cableways where the extra length will be advantageous.

E.J. Speight.



Hilger and Watts new-type gauging reel. The brake hand-screw is near the bottom corner.