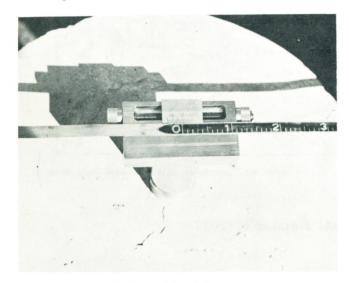
## FIELD TAPE STANDARDIZATION APPARATUS

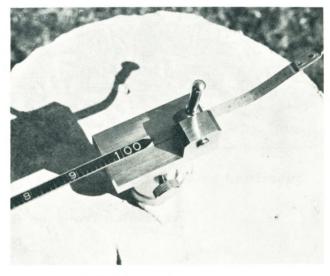
By J.W.L. Monaghan,

This equipment consists of two concrete monuments 10 inches in diameter and 7 feet long, which extend 5-1/2 feet into the ground and are placed 100 feet apart. A wooden rail extends between the monuments for the purpose of supporting the tape. In the centre of each monument a non-corroding stainless steel adaptor has been permanently fixed on which two removable heads are attached for the tape comparison purposes.

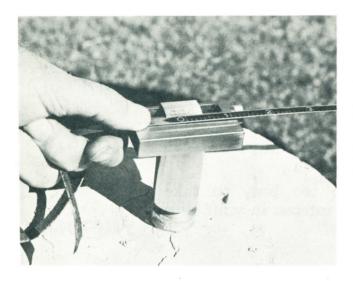
The rear head contains an engraved index mark and a clamping device to hold the tape in place. The front head contains a moving scale with a tangent screw and a clamp.

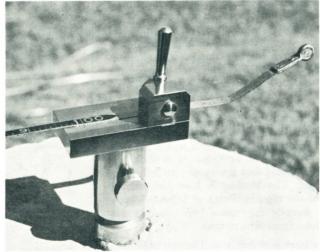


zero end of tape



100 ft. end of tape





The scale is divided at 0.002-foot intervals on either side of the index mark. For the purpose of eliminating parallax, both the scale on the front head and the index mark on the rear head are elevated by the amount of the thickness of an ordinary tape.

The tape comparison routine is very simple. First, an Ontario Land Survey-or's standard tape, which is checked annually in Ottawa by the National Research Council laboratory, is placed on the apparatus. The 100-foot mark of the tape is

aligned with the index mark on the rear head and the end of the tape is firmly clamped.

Then, after applying proper tension to the tape, the scale index mark is adjusted by means of the tangent screw to coincide with zero mark of the tape and locked in place by tightening the clamp.

Next, a field tape is placed on the apparatus and by applying any desired tension the correction is determined directly on the scale. Finally, after comparing a number of field tapes, the index marks on the apparatus are re-checked with the Ontario Land Surveyor's standard tape.

To eliminate temperature correction all tapes must be at an identical temperature and for this reason they are usually left near the apparatus for several minutes before commencing the standardization procedure.

This device has proved to be of great value in steel and machinery layout and other precise and ordinary survey work.

Should a tape be broken, we can effect repairs with a portable welding machine which operates off 220 volt current. The break is straightened, cleaned and squared off with a special shearing machine. If the break is at right-angles to the tape it can be repaired with only a slight loss of length. If, however, the break is diagonal or multiple, short pieces of discarded tape are inserted to bring the tape to approximately the true distance between foot-marks. In either case, the tapes are re-standardized and returned to use on secondary surveys.

## SEMINAR IN MONTREAL

-015-

The Canadian Institute of Surveying will conduct a seminar on surveying and photogrammetry in l'Ecole Polytechnique, 2500 rue Guyard, Montreal, on November 8 and 9, 1962, under the auspices of the Montreal Branch of the Institute.

Purpose of the seminar is to stimulate interest in and discussion on various survey methods as they may be applied to the field of land surveying.

All professional people interested in surveying and photogrammetry are invited to attend and to participate in the discussion.

-015-

## SIMPSON AND TAYLOR

## Ontario Land Surveyors

Announce the opening of a Survey office at Parry Sound, Ontario, having taken over the practise of Mr. B. Tompsett, O.L.S., successor to Mr. J.T. Coltham, O.L.S.

1308 Algonquin Ave., Dial 472-2650, North Bay, Ontario.

Post Office Box 29, Dial 746-5213, Parry Sound, Ont.