A New Method of Preparing Fish Scale.*

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A number of scales taken out of fish are first spread over a page of a note-book, on which all available data are written. The scales are thus brought back to a laboratory where they are immersed in water and rubbed off of their adherent matters. Then, one or two seconds' dipping in aceto-amyl is followed by pressing on a transparent sheet of celluloid. Care should be taken in pressing hard the underside of the scale on the celluloid sheet in order to avoid any air left between them and also any trimming of the margin of the scale. A few minutes' pressing is enough; and the scale is

Fig. 1. Scale of *Oncorhynchus nerka*.
A, pressed underside down; B, upperside down.

thus firmly fixed up for further examination. The method here recorded is more convenient than OOSTENT's (1923) one which consists of preserving fish scale in glycerine-gelatin. It is simpler and more exact than NESBITT's method (1934) which takes impression of fish scale on celluloid sheet by applying strong force at the risk of distorting the outline of the scale. The present author has obtained satisfactory result with salmon scales. But it goes without saying that the fresh scale is as good as dried one in the above-mentioned procedure, since drying is not necessary previous to the transference in aceto-amyl.

The reader is referred to the accompanying figure for results of two

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manners of handling. The scale attached on celluloid with its upperside down (Fig. 1, B) is almost useless. Acknowledgement should be made to Professor A. TERAOKA for his kind advice and encouragement and to Dr. K. KURONUMA for a loan of important literatures.

References.

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