



Title	固定標本の新洗滌装置
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摘 要

札幌博物館所藏北日本産鼠科目録

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北海道帝國大學農學部附屬博物館所藏の北日本（北海道、千島、樺太）の鼠科目録を略記す。九種の中北千島幌筵島より採集保存せられたる一種は、新亞種なるを以て之が特徴を記し、下記の如く命名せり。

Clethrionomys rufocanus kurilensis sub. sp. チシマヤチネズミ（新稱）

新亞種は北ヨーロッパ並に北アジヤに廣く分布する *Clethrionomys rufocanus rufocanus* に親縁を有し、体の上面は赤栗色にして、下面は灰白色なり。外見上後種と異なるは体の一般に小形なる點とす。頭骨にあつては一般に前後に壓縮されたる觀を呈し、鼻骨は特に短し。臼齒の狀は全く後種と等しく、區別する點を認めず。

(Institute of Zoology, the Kyoto Imperial University)

A CONICAL FUNNEL-SHAPED WASHING APPARATUS

BY

KYOJIRO SHIMAKURA

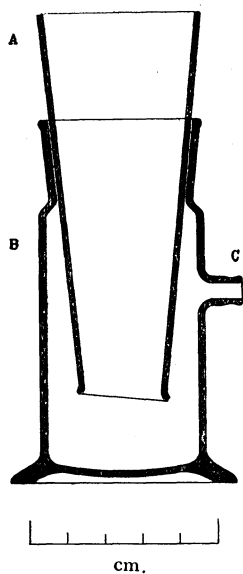
(With One Text-figure)

Following the fixation in a solution containing chromic acid, osmium tetroxide, or potassium bichromate, a thorough washing of the specimen in running water is occasionally needed in order to secure good cutting and staining qualities, clear appearance, and preservability of the preparation. The following device is a new addition, perhaps worthy of being described, to a number of useful kinds of washing apparatus hitherto employed (cf. ROMEIS, Taschenbuch der mikroskopischen Technik, 1932; SUZUKI, Microscope and Microscopical Technique, in Japanese, 1924).

The working part of the new device is an upright conical glass funnel, the diameter of which is twice as large at the broader end as at the narrower. After applying a piece of silk cloth to close its narrower end, where the edge

is slightly turned out for the purpose, the funnel (A) is tightly inserted into a glass bottle (B), in the same manner as a ground glass stopper, as shown in the appended figure. The bottle is provided with a side tube (C), which may be connected with a faucet by means of a rubber tube.

In use, the bottle is filled with water, and the specimen to be washed is carefully flowed with some water into the funnel. The broader end of the funnel is closed with another piece of silk and then the faucet is slowly opened.



Conical Funnel-shaped
Washing Apparatus
in Vertical Section.

As water runs upwards through the funnel the velocity of the current is multiplied four times and, consequently, the resistance exerted upon the specimen, which tends to sink (unless it contains air bubbles), is about sixteen times as great at the bottom of the funnel as at the top. This causes the specimen to be suspended midway between the two ends of the funnel, gently moving to and fro and seeking the equilibrial point between the attraction of gravity and the resistance of the current. Practically the specimen seldom adheres to the funnel wall and the risk of damaging the specimen is entirely avoided, whereas the washing is extremely effective and complete. If water contains excess of air dissolved in it, bubbles may accumulate beneath the silk at the bottom of the funnel. To avoid this the narrower end of the funnel should be cut slightly aslant so as to make the air bubbles gather automatically at the top of the bottle (B). When the washing has been finished it is no less easy to remove or flow

the specimen with some water into a glass vial for the next treatment. Since several years, the device has worked quite satisfactorily in our laboratory.

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摘 要

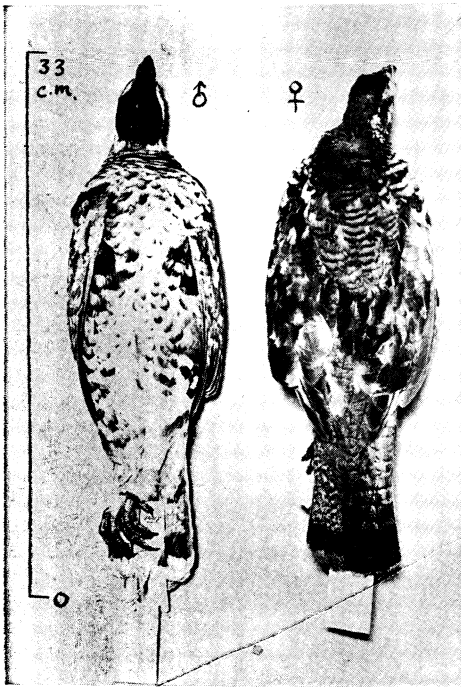
固 定 標 本 の 新 洗 滌 装 置

島 倉 亨 次 郎

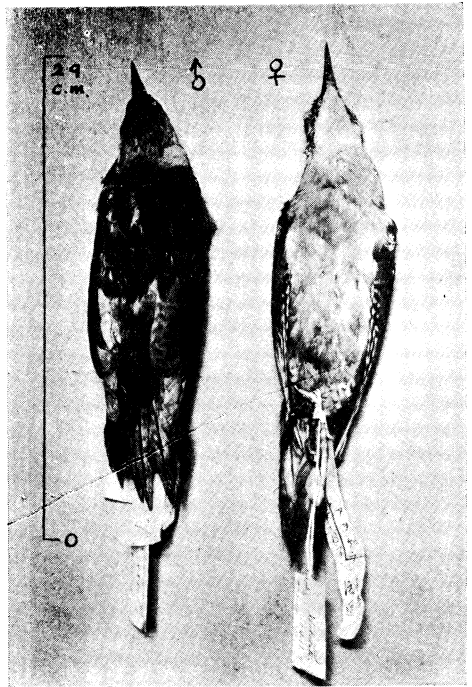
固定標本を流水で洗はうとする時に、流速を加減した上向きの上流水を作つてその中に標本を自動的に懸垂させながら、効果的に、安全に目的を達しようとする方法並びにその装置。



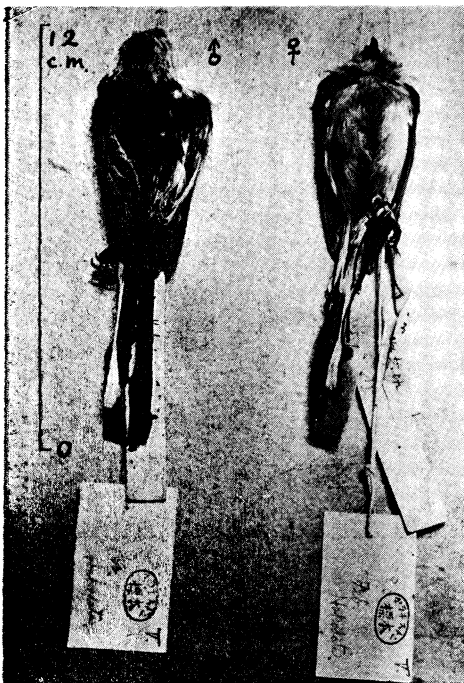
Thos. Blakiston



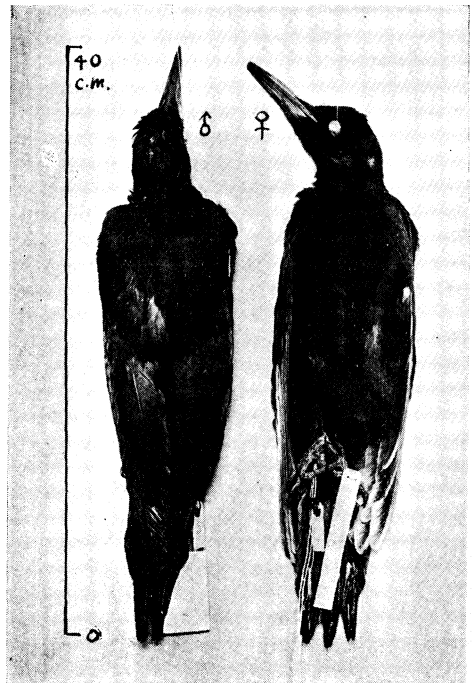
1. *Yezo-raicho*.
Tetrastes bonasia vicinitas Riley



2. *Yama-gera*.
Picus canus jessoensis Stejneger



3. *Shima-enaga*.
Aegithalos caudatus japonicus Prazak



4. *Kuma-gera*.
Dryocopus martius martius (Linnaeus)

Birds' skins from the BLAKISTON'S collection