

of heavy paper: half a dozen of these cones formed a large package. These, from day to day as fast as accumulated, were placed in a covered wooden box reserved for the purpose in the freezer. About three months later, on the second of January, 1895, the birds were taken out and found to be in excellent condition. The weather outside was about zero, and it kept them frozen, else only a few at a time could have been taken out; and to get them in shape for skinning it was only necessary to place the number one desired to prepare in any warm room, and they soon relaxed without sweating or even dampening a feather. In talking with the foreman of the freezing plant last fall he thought they might 'sweat' enough to wet and spoil the feathers, but the result proved the reverse, for the long freeze had a drying effect, especially at the throat, where the cotton had absorbed all moisture and the skin in some of the smaller specimens was almost rigid. The legs also of some of the smaller ones were beginning to dry, but the toes were not too stiff to place in position. It was necessary to be careful in skinning about shot holes, for wherever the natural moisture had been drained away the skin had a tendency to dry down upon the flesh below; but after preparing the first specimen all these difficulties were discovered and easily overcome in the others.

It occurred to me that many of the members of the A. O. U. and others in the larger eastern cities where cold storage freezers are in operation, might often save specimens which from pressure of business are often left to spoil, in spite of 'good intentions' when they are shot. With good collecting grounds on the coast a few hours' ride away, unexpected wind-falls of good species might be properly packed, so that tail and wing feathers are not crumpled, and shipped by express direct to the freezer; then, the following winter, when time hangs leisurely, they can be taken out and prepared with much better results, for each skin can be given all the attention it requires.

FRANK S. DAGGETT.

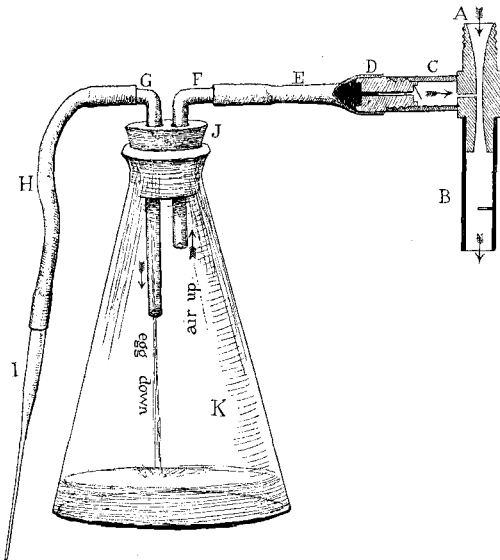
Duluth, Minn.

Apparatus for Preparing Birds' Eggs.

TO THE EDITORS OF 'THE AUK':—

Dear Sirs,—Never having seen any description of the apparatus used by me during the past season for preparing eggs for the cabinet, I am persuaded that a brief article concerning it will not be without interest to oologists. The accompanying cut will explain its mode of operation.

In operating on fresh eggs of size of common hen or less, use a drill not larger than .04 in. diameter; with small eggs .02 in. drill answers the purpose. Insert the point of tube *I* in the egg after turning on the water, and the contents of the egg pass rapidly over into the flask, provided the tube be not of too small calibre. In practice it is well to have a number of these tubes of different diameters.



Make connection between aspirator and water main at A. Provide means for carrying away waste water.

The water in passing through aspirator rarifies the air in K.

A, B, D, Chapman aspirator.

E, H, Pieces of rubber tubing.

G, F, Pieces of bent glass tubing.

J, Rubber stopper, doubly perforated.

K, Conical filtering flask capable of withstanding atmospheric pressure.

I, Glass tube drawn to small calibre at one end.

The tubing used to make tube *I* should have very thin walls, that the internal diameter of the attenuated point may be relatively large. It would appear that there is great danger of collapse if the suction tube nearly fills the aperture in the shell of the egg, but with fresh eggs I have never known it to occur. With eggs in an advanced state of incubation, however, care must be taken to allow air to enter freely around the tube.

I have found little difficulty in removing fully formed embryos from eggs as large as the Robin's, using an .08 in. drill and a suction tube of

.06 in. external diameter. The embryo was allowed to decay as suggested by Capt. Bendire, when, after about a week, it could nearly all be drawn through the tube. A few pieces of bone, the largest being the tip of the upper mandible, were withdrawn with the forceps. The shells are readily washed clean after removing the contents by submerging in water and allowing the pump to act until the wash water comes out clear from the shell. In case of eggs which are injured by water this plan will of course not answer.

The filtering flask used should be of *strong glass*, as otherwise the atmospheric pressure outside might cause its collapse, which may be nearly as disastrous as an explosion.

The rubber tubing should be of the kind known as pressure tubing.

All joints should be made tight to prevent the leakage of air and consequent lowering of the efficiency of the aspirator.

The different parts of this apparatus may be obtained from any dealer in chemical supplies, the most expensive item — the Chapman aspirator — costing about a dollar and a half.

When the water tap is provided with a screw thread, as is sometimes the case, the aspirator may be obtained with a connection suitable for attaching directly to the tap, which does away with considerable trouble in attaching to a water main. A water pressure of twenty-five pounds is found to work well. Probably a higher pressure would give still better results.

E. E. BREWSTER.

Iron Mountain, Mich.,
Dec. 3, 1894.

NOTES AND NEWS.

MR. GEORGE N. LAWRENCE, one of the Founders and an Honorary Member of the American Ornithologists' Union, and for some years a member of its Council, died Jan. 17, 1895, at his residence in New York City, in the eighty-ninth year of his age. Mr. Lawrence was especially known as an authority on the birds of tropical America, to which his attention was chiefly given during the long period of his scientific activity. As a writer on North American birds he will be mainly remembered for his association with Baird and Cassin in the authorship of the famous 'IXth Volume' of the Reports of Explorations and Surveys for a Railroad Route from the Mississippi River to the Pacific Ocean, published