rule, gulls can only soar in a descending current of air."

While one hesitates to negative another's statements of observation, Hankin's findings in this, as in other cases, are certainly at variance with those of most students of flight. Apart from the admission that gulls sometimes glide in the ascending current to windward of a steamer, there is scarcely a statement in this paper in which the reviewer can concur. It is unfortunate that the details given are so few as to preclude the possibility of a reinterpretation of the data. Specific statements as to wind and weather are lacking. The position and extent of the soarable area under varying conditions are only vaguely indicated. "The level of the top of the stern flagstaff" is a somewhat indefinite statement of altitude. It is not clear what occurred after the gulls had glided to this height, whether they remained there a minute, or five minutes, or immediately dropped astern to repeat the performance. So complex are the air currents in the wake of a steamer that such statements of observation have little value, except as they describe in detail the behavior of individual birds under the most carefully analyzed conditions.

As regards changes of color, if any, during flight, these would appear to be of aesthetic or optical rather than aeronautic interest. But it is decidedly important to determine whether ascending or descending currents are utilized in soaring. No explanation is hazarded as to why the descending current should be preferred. Apparently the object of this paper is to support the author's previously expressed belief that soaring flight is a "complete mystery." The reviewer, who has elsewhere committed himself to the cause of those who find in ascending currents of air a sufficient explanation of soaring, will require further evidence to the contrary before reversing his opinion.—ROBERT C. MILLER, *Department of Zoology, University of California, January 3, 1924.*

CHAPIN'S GUIDE TO "THE PREPARATION OF BIRDS FOR STUDY."—Not in a long time has there come to my attention so useful a manual as the present one dealing with the preparation of bird skins. The author, Mr. James P. Chapin, is well-known as a pains-taking and otherwise successful field ornithologist, by reason particularly of his several years' work in Africa for the American Museum of Natural History. In the present contribution Mr. Chapin brings together the results of his own experience and, doubtless also, that of his several practiced associates on the staff of that long-established institution.

An especially helpful feature of this guide is the abundance of illustrations. These leave practically no step in the procedure of bird-skinning which is not clearly and even artistically demonstrated. Just where certain cuts are to be made, stitches to be taken, and the tendons seized for removal from the tarsi, the location and appearance of the sex organs, and the nature of the "windows" in immature skulls, are among the points illustrated.

This is Guide Leaflet No. 58, issued by the American Museum of Natural History, and we note that it can be obtained from the Librarian of that Museum, Central Park, New York City, for fifteen cents—a merely nominal sum for a 45-page manual of such obvious value. Every field collector, no matter how well he thinks he knows his technique, will be sure to profit by studying it; and for beginners I can recommend nothing better.

Some points that Chapin makes and that appeal to me as especially worth heeding are as follows: Powdered arsenic (in mixture with alum in damp climates) is by all odds the best preservative, and, "with ordinary care" in its use, "it offers no danger to the health of the collector." Do *not* plug the nostrils of a freshly taken bird, for the pressure may change their form, which it is important to preserve. Do *not* use plaster of paris as an absorbent, as it leaves an undesirable "bloom" on dark-toned plumages. Tie the mandibles together so that the bill remains closed as it does in life; "a well-closed bill is essential to a good skin." Do *not* strip the secondary wing quills from the ulna; leave them attached to the bone, in normal order.

There is only one point in the whole thing that I would criticise adversely, namely, the implication that there should be a "collector's label" briefly inscribed, on a temporary tag, affixed to specimens in the field, in lieu of the regular museum label to be added later. This is a serious matter, and I would urge, rather, that a permanent label, made out *fully* (save for the scientific name of the species) *by the collector, in the field* at the time the specimen is prepared, be

attached to each and every specimen. A label to a scientific specimen is a voucher for facts, and these should be attested to by the full (business) signature of the collector, just as in the case of a commercial check. The insidious danger of error, in copying labels and in translating abbreviations, is too well known to museum workers to be discounted on any ground that I know of. The *original label* is the important thing.—J. GRINNELL, *Museum of Vertebrate Zoology, University of California, Berkeley, February 18, 1924.*

MINUTES OF COOPER CLUB MEETINGS

SOUTHERN DIVISION

NOVEMBER.—The regular meeting of the Southern Division, Cooper Ornithological Club, was held at the Los Angeles Museum, November 22, at 8 P. M., Mr. Pierce presiding, with twenty-five members and friends present. Minutes of the September meeting were read and approved. As the Club met in October with Friends of our Parks, no business meeting was held at that time. September and October minutes of the Northern Division were read.

The following names were proposed for membership: Cecil A. Poole, Monmouth, Oregon, by Stanley G. Jewett; Lloyd Peabody, St. Paul, Minn., by Rev. P. B. Peabody; Mrs. Florence V. V. Dickey, Pasadena, by Donald R. Dickey; William Remsen Varick, Santa Barbara, by Henry E. Parmenter.

Mr. J. E. Law called attention to a resolution which was adopted October 21, 1922, by the Executive Committee of the American Association for the advancement of Science. He moved that a like resolution have the unqualified support of the Southern Division of the Cooper Ornithological Club. After being duly seconded, the Club moved its unanimous approval of the resolution which follows:

Whereas, by repeated action by Congress for more than half a century, widely approved by scientific and other societies and by the public generally, the National Parks of the United States have been completely conserved from industrial uses so as to constitute a system of National Museums of Native America; and

Whereas, one of the national parks of Canada is similarly completely conserved; and

Whereas, the combined National Parks System of both countries, covering geological, biological and geographical examples from the Alaska Range, through the Canadian Rockies, to the Grand Canyon of Arizona, if preserved untouched will constitute an unique Continental Exposition of inestimable value to science and to the popular education of future generations; and

Whereas, at the option of a single official of the Government, several of the national parks in the United States are nevertheless open to mining and grazing, while the control of water power in future parks has recently been surrendered to the Water Power Commission; and all but one of the national parks in Canada are similarly open to certain economic or commercial uses; and

Whereas, every interference with their natural condition will destroy the usefulness of these areas to science and education; and

Whereas, this generation can pass on to future generations no greater gift than these parks in their primitive condition; therefore,

Be it resolved, That the Cooper Ornithological Club earnestly requests the people and the Congress of the United States and the people and the Parliament of the Dominion of Canada to secure such amendments of existing law and the enactment of such new laws as will give to all units in the international parks system complete conservation alike, and will safeguard them against every industrial use either under private or public control at least until careful study shall justify the elimination of any part from park classification.

Miss Pratt exhibited a set of six leaflets, descriptive of Pacific Coast birds, published by the National Association of Audubon Societies. These leaflets have been written by west coast writers, and the illustrations, in colors, were by Major Brooks.

Miss Burnell called attention to the fact that Mr. Van Griffith is endeavoring to establish a bird sanctuary in Griffith Park at the head of Vermont Avenue, and that he hopes soon to secure an appropriation from the Park Commissioners for that purpose. She asked the Club's endorsement of the movement. A motion was made by Dr. Rich, seconded by Mr. Dickey, that the secretary be instructed to notify the proper authorities that the Southern Division of the Cooper Ornithological Club endorses the project for creating a wild bird sanctuary at the location mentioned. Motion carried.

Dr. Bishop read a communication from the New England Bird Banding Association, giving a list of birds banded by its members. Then followed a most interesting talk by Mr. Van Rossem on observations made by him during a recent trip in the High Sierras. Adjourned.—ELLA H. ELLIS, *Secretary pro tem.*

NORTHERN DIVISION

DECEMBER.—The regular meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology, December 27, 1923, at 8 P. M. President Cooper was in the chair, with attendance as follows: Members, Mesdames Allen, Bogle, Delport, Grinnell, Kibbe, Mead, Schlesinger; Misses Beaman, Bennet, Burk, Clough, Thomson; Messrs. Bryant, Carriger, Clabaugh, Elmore, Evermann, J. Grinnell, W. Grinnell, Kibbe, Swarth, Wood. Mrs. Evermann was a visitor.