of representing the Swallows as having the *propatagialis brevis* inserted in the same way as the *Rhamphastos*, in other words, after the fashion of the picarian birds. Whether that drawing was sent to 'Science' by a mistake, or not, is of no consequence; the fact remains that a man, who is going to teach others all about the "taxonomic muscles" in birds, has prepared such a drawing and finished it so far that it could be reproduced by the regular photo-engraving process. I approve most heartily of Dr. Shufeldt's concluding sentence: *Yes, let us by all means have intelligent drawings!!*

Finally a few words in regard to the name of the much talked of muscular slip.

The only *rational* name of it is the one given by Fürbringer, viz., *pars propatagialis musculi cucullaris*. This is evidently an instance "where the name is five times as big as the muscle," which, "for the sheer sake of clearness and convenience," Dr. Shufeldt wants to lay aside as an abominable name bestowed by the "old anatomists." Here Dr. Shufeldt again proves his ignorance of Dr. Fürbringer and his works. Fürbringer is not one of the "old anatomists," he is one of the younger ones, and he is, moreover, the great reformer of myological nomenclature "for the sheer sake of clearness and convenience." The name given by him signifies that this muscle is only a patagial slip of *musculus cucullaris*, leaving nothing to be desired in regard to clearness and convenience, for, of course, in speaking of it Fürbringer does not use the whole name, but simply "*propatagialis cucullaris*," which is hardly longer than Dr. Shufeldt's "*dermo-tensor patagii*." The latter, however, is neither clear nor convenient, for surely *propatagialis longus* is the true *dermo-tensor patagii*, and not the slip of *cucullaris*, which in most cases is only a *dermo-tensor parapatagii*.

Washington, D. C., December, 1887. LEONHARD STEJNEGER.

NOTES AND NEWS.

IN THE last number of the 'The Auk' (Vol. IV, p. 359) reference was made to the movement for the erection of a monument to John James Audubon in Trinity Cemetery, New York City. The movement has now become well organized, under the lead of a committee of the New York Academy of Sciences, consisting of Prof. Thomas Egleston of the School of Mines, Chairman, Dr. N. L. Britton of Columbia College, Secretary and Treasurer, and Prof. Daniel S. Martin of Rutgers Female College. As already stated (see p. 97 of this issue), a committee to coöperate with the committee of the New York Academy was appointed by the American Ornithologists' Union at its late meeting in Boston, consisting

of Dr. George Bird Grinnell, Chairman, and Messrs. William Dutcher and George B. Sennett. Committees in further aid of the work have been appointed by the Linnæan Society of New York, the Torrey Botanical Club of New York, and the Staten Island Natural History Association. Circulars soliciting subscriptions have already been issued by several of these Committees, a joint meeting of which will soon be held in New York, on a call for this purpose from the Committee of the New York Academy, to perfect plans for carrying on the work.

It is estimated that from $6,000 to $10,000 will be required in order to erect a monument worthy of the naturalist whose memory it is intended to commemorate. It is hoped that at least the larger of these amounts may be raised. The character of the monument will of course depend upon the amount of money secured. It is not desired that any individual subscriptions of large amount be sent, it being preferable to have the testimonial rest on contributions from as many as possible of the great naturalists' admirers, representing all sections of our country. Gifts from abroad will be welcomed, but the work is obviously and primarily for Audubon's countrymen. It is hoped that each of the three hundred and odd members of the A. O. U. will feel it a privilege to contribute, with as little delay as possible, to the fund. Contributions sent to the Treasurer, Mr. William Dutcher, 51 Liberty Street, New York City, will be duly acknowledged, and permanently recorded.

On the completion of the monument it is intended to make the unveiling a public ceremonial befitting the occasion, thus further appropriately recognizing the great services of Audubon as a pioneer in American ornithology. A list of the contributors to the monument fund might very fittingly be included in the permanent history of the undertaking, showing how widely and heartily his memory is still revered among not only ornithologists, but the public at large, and especially among naturalists who are not distinctively bird men.

Mr. R. Bowdler Sharpe, in 'The English Illustrated Magazine' for December, 1887, in an article entitled 'Ornithology at South Kensington,' gives some account of the ornithological collection in the British Museum, detailing with evident pride its rapid increase and generally satisfactory progress during the last fifteen years, and contrasting very favorably its present condition with its status in the old galleries of the British Museum at Bloomsbury, before the removal to the new quarters at South Kensington. The article is full of important suggestions bearing upon the care and general management of such collections, well worthy of consideration by those having them in charge. Unfortunately we have space to notice only a few of the many statements of interest. He wisely advocates the exhibition of birds in natural groups, mounted in characteristic attitudes, and with accessories giving some idea of the habits and manner of life of the species, the public, he believes, "infinitely preferring a few artistic and naturally mounted birds to whole rows of specimens on stands, without any explanatory labels to relieve the tedium of the conventional

mounting." Already thousands of specimens in the old collection have been unmounted and variously disposed of since the abandonment of "the time-honored tradition in the mode of mounting animals." As he well says, "every bird exposed in a glass case is doomed to destruction sooner or later, its fate being merely a question of time, as exposure to the light is certain to bleach the plumage and deteriorate the appearance of the specimen; . . . . therefore the main zoölogical collections are preserved in cabinets and hidden from the light, and there is no reason why they should not be available for the purposes of study for many hundred years."

Mr. Sharpe describes in detail the series of the groups of British birds with their nests; the 'Index' collection, illustrating the osteology of birds, the structure and growth of feathers, the formation of the beak and feet in the principal forms of birds, etc., and the groups illustrating the hybridization of species in a wild state, and the variation of species under domestication.

During the last fifteen years, or since Mr. Sharpe was placed in charge, the bird department of the British Museum has advanced from a third-rate position to the first; the study collection has increased from 40,000 specimens to 200,000, and with the additions already promised and soon to be incorporated, will "reach the astounding number of 250,000." This, too, with very little encouragement from the Government towards the increase of the collection, its course in this respect contrasting, Mr. Sharpe claims, very unfavorably with that of other nations. This great increase is due to "the private collections, which formerly eclipsed the national one in value," having been given to the Museum. Among these are the Hume collection of nearly 85,000 Indian birds and eggs, and the American series of Messrs. Salvin and Godman, and Dr. Sclater, "which doubled at one stroke the number of specimens in the Museum." Besides these the Wallace and Gould collections have been added, and Mr. Seebohm's splendid collection of Palæarctic birds and eggs has been promised, while Captain Wardlaw Ramsay has announced his intention of presenting the immense series of Asiatic birds collected by the late Marquis of Tweeddale, numbering 40,000 specimens. Mr. Sharpe closes with an enthusiastic appeal to Englishmen everywhere to render still more perfect the already unrivalled collection under his charge.

MR. HENRY SEEBOHM has issued a prospectus of a work on 'The Geographical Distribution of the Charadriidæ (Plovers, Sandpipers, and Snipes, etc.).' In referring to this important announcement 'Nature' adds the following pertinent comment: "The unrivalled collection of Wading Birds in Mr. Seebohm's possession supplies the material for this work, and the volume will undoubtedly be one of great interest to ornithologists. Mr. Seebohm's ideas on nomenclature, the influence of the Glacial epoch on the migration of birds, and kindred subjects, are always original, and this new work of his will open, according to the prospectus, with an introduction setting forth his latest opinions. There is also to be given

'a complete synonymy from 1776 to the present time,' a rather appalling announcement, and one involving a vast change in ornithological nomenclature, as it will preclude the use of Linnæan names."

AT THE last meeting of the A. O. U. the Council, which has hitherto acted as a Publication Committee, relegated this function to a committee, consisting of the President and Secretary, Dr. Coues, Mr. Ridgway, and Mr. Brewster, most of whom were formerly on the Editorial Staff of 'The Auk,' which now consists of the editor and one assistant editor, the latter being Mr. C. F. Batchelder, of Cambridge, Mass. Being assured of efficient aid in the work of carrying on the journal, Mr. Allen consented to retain the editorship for another year, Mr. Batchelder kindly taking upon himself the greater part of the labor.

THE 'sensation of the hour' in certain scientific circles in New York City is an alleged discovery of great significance in the mechanism of birds' wings, whereby the extension of the wing in soaring is maintained automatically, or without the exertion of any muscular force on the part of the bird. That there is a mechanism for this purpose, resulting from the peculiar structure and relations of the bones of the fore-arm and hand, was long since discovered by anatomists, and is more or less well known to every well-informed ornithologist. But the 'discovery' now under notice is of a different character, having no relation to the bony framework of the wing, but to the primaries, and the alleged ability of the bird to so rotate the individual feathers at will as to practically turn them wrong side out! In other words, the inner vane of the first primary is brought from its normal position and function of underlying and supporting the second primary and made to *overlie* the second primary, — that is the first primary is imbricated upon instead of beneath the second, as it is normally seen — and in like manner the second upon the third, and the third upon the fourth, and so on. This position of the feathers, it is alleged, keeps the wing from closing, and enables the bird to soar indefinitely without experiencing fatigue. The fact that such a position of the feathers greatly weakens the power of support, by permitting the air to pass freely through the wing between the vanes of the primaries, and is besides so obviously contrary to the whole plan of a bird's wing as an effective instrument of flight, to say nothing of the well-known inability of the bird to thus arrange the primary quills, were points too trivial, in the opinion of the advocates of the new theory, to be entitled to serious consideration.

The matter was first made public in a communication by Professor W. P. Trowbridge, professor of engineering in Columbia College, to the National Academy of Sciences at its meeting held in November last in New York City. Professor Trowbridge stated that the discovery was made by his son, whose attention was directed to the matter by finding a Hawk he had just shot with the primaries overlapped in the manner above described, suggesting the inference that this arrangement of the

feathers was a provision for keeping the wing expanded in flight without muscular exertion on the part of the bird. Professor Newberry spoke in approval of the brilliant discovery and of its obvious importance, and, there being no ornithologists present, the discovery passed unchallenged, not only at the meeting, but into print, in the columns of 'Science' and elsewhere.

Some weeks later, a paper was announced on new discoveries in the mechanism of flight in birds, by Professors Newberry and Trowbridge, as a part of the evening's entertainment at the meeting of the New York Academy of Sciences for December 12. The title naturally attracted the attention of a number of ornithologists, who made it a point to attend the meeting. The communications covered, in a general way, the whole subject of the flight of birds, but the special point was, of course, the new discovery of the voluntary "interlocking of the primaries" so as to automatically prevent the closing of the wing during protracted flight. As soon as an opportunity was afforded, the ornithologists present quickly pointed out the utter absurdity and impossibility of the new 'discovery,' the speakers in opposition being Messrs. D. G. Elliot, J. A. Allen, and George B. Sennett. The arguments these gentlemen advanced failed to convince at least the principal advocate of the new theory, who declared, with some warmth, that he "was not a fool," and accepted the challenge to demonstrate by dissections all that he had claimed, including the ability of the bird to rotate and interlock the primaries. Accordingly the announcement card for the meeting of December 19 contained the following: "Prof. W. P. Trowbridge will exhibit wings, showing the tendons, as claimed, for the flexion, extension, and rotation of the primaries." The New York ornithologists were accordingly on hand, some of them provided, as well as Professor Trowbridge, with fresh preparations of birds' wings, to witness the promised 'demonstration.' Professor Trowbridge's exposition of the well-known muscles of flight and their functions was entirely successful, but his claim of showing also muscles capable of rotating the primaries so as to reverse their usual mode of imbrication was challenged by the ornithologists present, and finally this part of the 'demonstration' was abandoned, and the question at issue reduced to the discovery of a new muscle in the manus, having the function to open and close the primaries — "a muscle unknown" to ornithologists or anatomists, and hitherto undescribed. The muscle in question being the well-known *m. interosseus palmarum*, comment on the new point would be superfluous. He still claimed, however, in his closing rejoinder, that birds had the power of interlocking the primaries, as he originally maintained. This, with the peculiar summing of the controversy at the close of the meeting by the President (Professor Newberry) 'from the chair' renders it highly probable that the ornithologists will re-open the subject at the next meeting of the Academy. The participants in the discussion at the second meeting, in addition to the two gentlemen already named, were Messrs. Allen, Elliot, Sennett, Dr. Holder, and Mr. E. E. Thompson, of Toronto, Canada.

THE following extract from a private letter written to Mr. W. E. D. Scott, gives interesting information respecting the destruction of Herons and other birds for their plumes about Punta Rassa, Florida:—"From personal observation in the immediate vicinity of Punta Rassa, I can verify your account of the great decrease in the numbers of the birds since I went there in 1883. At that time it was a pleasure to sit on the piazzas of the telegraph station and watch the long flights of Herons, Pelicans, and Cormorants pass up the harbor on the way to their roosting places in the late afternoons; and at all times of the day some or all of these birds were to be seen in greater or less numbers. Each and every one of the small islands in the harbor within sight of our place was a nesting and roosting place for the Herons, Pelicans, and Cormorants and other birds at that time. In the spring of that year (1883) Isidore Cohnfeld, of New York, sent an agent to Punta Rassa, a Mr. Kornfeld, with a big lot of guns and ammunition, and he was the first one to inaugurate the crusade against the birds after my arrival there. Kornfeld died at Punta Rassa, but he was replaced by another agent, guns and ammunition were distributed liberally, and though the last agent, whose name I have forgotten, did not do much business, yet the slaughter was carried on from the start that had been made, and other parties reaped the benefit of Cohnfeld's plant. Shultz and I bought something near two thousand skins ourselves, a fact of which I have been rather ashamed ever since, but they came to us mostly in the way of trade, and we did not have any hunters in the field. That season satisfied me of the fate of the Herons unless a halt was made in the slaughter, and I talked against it, and tried to persuade some of the hunters to stop their shooting, but it had no effect. The usual answer was "others are doing it and I may as well get my share"; the same reason Johnson gave you. The following season, and in fact every season since then, the crusade has been kept up. Batty made his appearance there in the winter of that year, though his operations were confined more to the country south of Punta Rassa, but the next season he extended his business and had everybody shooting for him. Other parties were in the field also, and I received many letters from dealers in New York and Jersey City asking me to buy plumes for them, but I had had enough of it. Bird skins were taken at Myers in the stores in exchange for food and clothing, and the consequence was that during the spring preceding my departure from Rassa there was not a single bird nesting on more than one, possibly two, of the islands where before everyone of them had seemed to be overcrowded.

"I hope our next legislature will put a stop to this indiscriminate shooting. I have talked to our Senator from Key West, who is an old friend of mine, on the subject, and he is very much interested in it, and feels the necessity for some action in the matter at the next session of the legislature."