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TAXIDERMICAL METHODS IN THE LEYDEN  
MUSEUM, HOLLAND.

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Since publishing my "Scientific Taxidermy for Museums,"<sup>1</sup> a number of well-known taxidermic artists in the museums of America and Europe have written me concerning the various methods employed in their art in the institutions they represent. There has also been published a work by Mr. Montagu-Browne, entitled "Artistic and Scientific Taxidermy and Modeling."<sup>2</sup> So far as the criticism of this last volume has come to me, it would appear that it has by no means been received with favor, either here or upon the Continent. Its main defects, however, will be pointed out by me in another connection soon, and will be only incidentally referred to in the present paper.

Of all the reports recently received, no one has excited my interest more, or apparently contained suggestions of greater positive value, than has a MS., illustrated by a large series of photographs, received from Mr. H. H. ter Meer, jr., on the staff of and præparator to the Museum of Natural History, of Leyden, Holland. This communication is so full and the photographs so instructive that it commends itself to taxidermists at large, and especially to those of this country, where the methods in this art are now attracting so much attention.

For many years Mr. H. H. ter Meer, jr., and his father have been engaged on the taxidermical work done in the Leyden Museum, where Doctor J. Büttikofer is conservator, and where Doctor Fredericus A. Jentick is in charge as director. Judging from the plates in my work upon "Scientific Taxidermy for Museum," these gentlemen all speak in the highest possible terms of the artistic work in this line that has up to the present time been accomplished in the U. S. National Museum. Especial delight is expressed upon examining the achievements in modeling the marine invertebrates, and "the mounting of the fowls, pigeons, and parrots," and the wild turkey called forth expressions of the most extravagant praise. Among the mammals, the bisons, the

<sup>1</sup>Report U. S. National Museum, 1892, pp. 369-436.

<sup>2</sup>London, Adam & Charles Black. 1896.

zebra, the tiger, and the rhinoceros, mounted by Jenness Richardson, came in for the most favorable criticism, and this was given without stint.

It is with no little envy, and with still more regret, that Mr. H. H. ter Meer compares the advantageous circumstances under which the finished pieces of work are placed upon exhibition at the National Museum, as contrasted with what happens to them at Leyden, where the building is old, and where "the animals, instead of being placed in groups, are packed away in a compact throng in dark cases, one animal admiring the tail of the other."<sup>1</sup>

Further discouragement is experienced from the fact that the Dutch biologists filling the more influential positions do not exert themselves, either by pen or word, to powerfully promote the art among them. There are, further, no organized taxidermical societies in the country, and little or no literature is produced to assist the taxidermic artist. Mr. H. H. ter Meer, jr., is a firm believer in and advocate of the higher education of taxidermists, as set forth in the aforesaid "Scientific Taxidermy for Museums," and he takes occasion to express himself very forcibly to that effect. Pleasure is expressed at the fact that the American taxidermists are thoroughly alive to the question that the day is well past when the workman can hope to produce satisfactory results by "stuffing skins of the forms they intend to preserve" instead of by the use of the model and the manikin.

For some years past Mr. H. H. ter Meer has practiced what Kerr, his able instructor, had taught him, and with "extraordinary dexterity" he sews strips of tow side by side upon the sculptured body of the mammal, in such a manner as to exactly imitate the superficial muscles and other parts in the way they occur in nature. Mammals' heads are "carved out of peat," and it "does not matter out of what substance a mammal is modeled, provided the form is reproduced exactly as it would be were the animal alive, and that it is possible to drive pins in it without bursting or breaking the artificially prepared body, in order to press the skin into the hollows between the muscles." It is especially enjoined that the prepared model of the animal's body be the exact reproduction of the original, before the skin is drawn over it, in order to obviate the necessity of subsequently introducing any additional filling between it and the latter. Kerr's methods of imitating the superficial anatomical parts require much patience and time to learn and successfully practice, and this is apt to discourage many

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<sup>1</sup>Since the present article was written the author has published three articles entitled "Taxidermy at the Leyden Museum," and these are illustrated by eleven halftone figures, showing the most recent pieces mounted by Mr. ter Meer and his father. One of these represent a fine group of jackals, so the charge that no group of mounted mammals exists at the Leyden Museum must now be set aside. Various other improvements have also been introduced in the taxidermical department of the institution in question. (See *Shooting and Fishing*, XXII, Nos. 8, 9, and 11. New York, June 10, 17, July 1, 1897. Pp. 146, 147, 168, 169, 206, and 207.)

young taxidermists at first, as it did Mr. H. H. ter Meer, but its advantages are so great when once accomplished, that no abandoning thereafter is ever entertained by the expert.

My correspondent has succeeded in inventing a material, after years of experiment and practice, that possesses the molding properties of clay, and that dries with great rapidity and never cracks after once setting. I regret to say he has not given his formula for this material, so much in demand the world over among taxidermic artists, and I know of no better encouragement that Mr. H. H. ter Meer can extend to his colleagues in the art than a full description of his materials and methods, and thus break down the ancient barrier of secrecy, which in times past has been one of the greatest drawbacks to the progress of the art.

This new material was first employed by him in October, 1894, at which time, or shortly after, he modeled the buffalo (*Bubalus mindorensis*) shown in Plate 4, figure 2. The material is worked in a thin layer over the hollow wooden frame representing the animal's form, even to include the head, and the figure shows the result, at the point where it is to receive the skin over it. No skull was used, and the entire skeleton of this specimen could thus be saved for the Leyden Museum, where it is now upon exhibition.

This being the first attempt with the new material, it naturally presents some faults, yet upon the whole the beauty of the model can be easily appreciated from the figure, and it possesses the additional advantage of being very light. Smaller mammals—the size of a domestic cat, for example—are still mounted after the Kerr method, it proving the most successful. This new material, and what can be accomplished by its use, has received the approval of Sir William Flower, Doctor Bowdler Sharpe, and the distinguished artist, J. G. Keulemans, all of whom visited the museum at Leyden last year, to investigate the process. Mr. H. H. ter Meer, sr., mounts many of the birds at this institution, although the son also exerts his skill in this direction. Some of these are beautiful examples of taxidermy, and from the series sent me, I select a few, and these are given in my plates. Figure 2, of Plate 2, is an excellent specimen of *Buteo lagopus*, and equally good ones are seen in plate 6, figures 2 and 3 (*Botaurus stellaris* and *Pandion haliaëtus*). It is said that Mr. H. H. ter Meer, sr., makes the artificial bodies for his birds in so perfect a manner, that after the skin has been placed over it, in any case whatever, he finds it quite unnecessary to use "in strapping" either thread or pieces of cardboard to hold the feathers in place. This is not even done in either the tail or the wings. To show these results, photographs have been sent me of *Cygnus olor*, *Oedipodus crepitans*, *Buteo vulgaris*, *Larus ridibundus*, and the others shown in the plates. They are all fine pieces of work apparently, and are especially to be admired for their peculiar lifelike fidelity to the originals.

By the aid of his special methods Mr. H. H. ter Meer, jr., has mounted some fine mammal pieces, and a number of these are likewise shown in the accompanying plates—as, for example, the female and young of *Simia satyrus* (Plate 3, fig. 2, July, 1895), and a still better one, another female of the same species (also preserved in July, 1895), and shown with its model in Plate 1 and Plate 2, figures 1 and 3. This is one of the most admirable and lifelike results that I have ever had the pleasure of examining, and stands far ahead of the average mounted Simian seen in the cases of the larger museums of the world. At the time of its death it was nearly full-grown, and so is a most valuable specimen. In April, 1896, the senior H. H. ter Meer mounted the fine example of the Macaque (*Macacus coninus*) shown in Plate 3, figure 1, while only a month before that the head of *Felis leo*, shown in Plate 4, figure 1, was prepared. These talented taxidermists take especial pride in their mounted specimen of *Oris tragelaphus* (May, 1896), and no less than three photographs of this piece have been submitted to me, presenting it from different views. Two of these are shown in Plate 5 and Plate 6, figure 1.

Mr. H. H. ter Meer fully agrees with the present writer in the use of photographs and sketches as aids to the work of the taxidermic artist, and by such means he has fully illustrated the topographical anatomy of both the domestic cat and the horse, showing the muscles in various positions of the body. In this connection he deplores the scarcity of helpful manuals and text-books in such departments, and holds *The Cat*, by Professor Mivart, and Specht's designs of mammals, as among the best that have thus far appeared, and he also speaks of the figures in Brehm's "Thierleben" as also extremely useful.

When at Darmstadt some years ago, he "had an opportunity to become acquainted with Mr. Kusthart's method of mammal mounting. After having glued large pieces of peat on a frame, he carves [out] like a sculptor the whole animal from the peat, and thus obtains excellent results, by adjusting the prepared skin over the sculptured body." "The gluing of the peat on the frame is, however, a very tedious piece of work, but it admits of having the skin subsequently fixed over it most accurately with pins." My correspondent also comments upon the taxidermical methods now coming into vogue in Paris, where they cover the hollow wooden frame representing the body of the animal with a layer of plaster-of-paris about one-half an inch thick. Some tow is used in connection with the frame, and while the plaster is in a soft condition the taxidermist carves out rapidly the form of the animal. This method was published last year in *VIllustration*, and the article was illustrated by means of reproductions of photographs, giving various stages of the process as applied to a buffalo. Mr. H. H. ter Meer says the body was artistically prepared, and exhibited considerable study, though he doubts that the skin can be fixed into the sulci



among the muscles by means of pins, as the plaster would set too soon for the purpose.

In terms most unqualified he condemns the methods of mammal mounting practiced by Mr. Montagu-Browne at the Leicester Museum, and described in his recent work. And he is quite correct when he points out that it is simply impossible to get the correct form of a large mammal for the purpose of a model by taking casts in plaster "of its lifeless, flayed body."

The method sees its most useful end in the reproduction of the forms of dead animals—not living ones—and as the method is a time-wasting and mechanical one, the hand of the skilled taxidermic artist must ever be missed in its employment.







MOUNTED SPECIMEN OF ORANG-OUTAN.  
(Leyden Museum, Holland.)





MOUNTED SPECIMENS FROM THE LEYDEN MUSEUM.





MOUNTED SPECIMENS OF ORANG-OUTANS.  
(Leyden Museum, Holland.)





MOUNTED SPECIMENS FROM THE LEYDEN MUSEUM.







MOUNTED SPECIMEN OF A MOUFLON.  
(Leyden Museum, Holland.)





MOUNTED SPECIMENS FROM THE LEYDEN MUSEUM.