point out that, in this book, mimicry is regarded as a mere question of "similar patterns" (pp. 181, 192). On page 193 we find that color may be "purely incidental" and the suggestion is made that spots occur in a certain place "because in that position the physiological gradient decrees the appropriate mutation." The extremely narrow view of mimicry which prompts such argument ignores the fact that mimicry is not merely a question of color and pattern but of shape, instincts and habits.

Moreover, such an argument takes no account of the resemblance of a moth, beetle or caterpillar to a birddropping, of a spider to an ant or of a young grasshopper in which resemblance to an ant is produced by the artistic process of painting out by pale pigment a large part of the corpulent abdomen, so that the narrow "waist" of the ant is pictured by a thin strip of the normal dark color, the remainder of the robust body being rendered invisible in its natural surroundings.

The writer concludes with commending to all students and critics of mimicry the slogan, "Mimicry deceives the artist but not the anatomist."

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## A SYSTEM FOR FILING MONOGRAPHS, PAMPHLETS AND REPRINTS

SEVERAL systems for filing pamphlets and reprints have been suggested (Stone<sup>1</sup>; Storer<sup>2</sup>; Eikenberry<sup>3</sup>; Morrey<sup>4</sup>; Harper<sup>5</sup>; Miller<sup>6</sup>; Montgomery<sup>7</sup>; Boring<sup>8</sup> and Smith<sup>9</sup>). Each of these systems embodies certain useful and helpful suggestions. The following plan has been used by me for several years and it has been found to be very efficient. Since many of my friends have commented favorably on the system, I am presenting a brief outline of it so that others may adopt it or certain parts of it.

As monographs, pamphlets and reprints are received, they are classified according to their subjects. If more than one subject is included in a single reprint, as is often the case, then an effort is made to select the subject-division which seems to be the best one suited for my collection. As soon as the reprints are classified according to subjects, a white gum label,  $1\frac{1}{2}$ by 15/16 inches, is placed on the upper left-hand corner of the front cover of each reprint or, if the reprint does not have a cover, the label is placed on the corre-

<sup>1</sup> Witmer Stone, SCIENCE, 22: 53, 1905.

<sup>2</sup> Tracy I. Storer, SCIENCE, 44: 735-739, 1916.

<sup>3</sup> W. L. Eikenberry, SCIENCE, 45: 64-65, 1917.

4 Chas. B. Morrey, SCIENCE, 45: 87, 1917.

<sup>5</sup> R. M. Harper, SCIENCE, 45: 315-318, 1917.

<sup>6</sup> M. R. Miller, Science, 46: 263-264, 1917.

<sup>7</sup> Priscilla B. Montgomery, SCIENCE, 52: 583, 1920.

<sup>8</sup> Edwin G. Boring, SCIENCE, 58: 329-330, 1923.

<sup>9</sup> Erwin F. Smith, SCIENCE, 58: 396-397, 1923.

sponding position of the front page. The subjectdivision of the classification, the number of the reprint in that division and the total series number are all written in that order on the label. For example, the 117th reprint on "Blood" was the 869th paper classified, and the 620th paper on "Endocrines" was the 1880th paper classified. The notations on the labels for these two reprints appear as follows:

| Blood   | Endocrines   |
|---------|--------------|
| #117    | <b>#</b> 620 |
| No. 869 | No. 1880     |

If a series of two or more reprints are bound under one cover by the publishers, as is sometimes the case for economic reasons, then the label carries as many numbers as there are separate papers bound together. The label is used so that the notations may be easily read, and this is a definite advantage, since many covers are colored. Also the label serves as an identification tag if one loans his reprints to other individuals.

A card catalogue is arranged according to both authors and subjects for all the classified reprints, and regular  $3 \times 5$  cards are used. If there is only one author's name appearing on a reprint, then it is necessary to make two cards. On one of these the author's name appears first, and it is followed by the title and reference in that order. On the other card, the title appears first, and it is followed by the name of the author and the reference. If there are two authors' names appearing on the reprint, then it is necessary to make three cards: one where the subject appears first, and then each author's name appears first on individual cards. If there are two or more author's names, they are arranged so that each one heads the list. The notations on the label on a reprint are typed in the upper right corner of both the author's and the title cards. The author's cards are arranged alphabetically and kept in a filing cabinet. The subject or title cards are filed in the same order as the reprints appear in a division, and in the same order that the divisions appear in the classified systems, and therefore the title cards for a particular division are kept together in the files. This is particularly handy for surveying the various titles in a division, since it is more convenient to remove several hundred cards to one's desk than it is to remove a corresponding number of reprints. Also, this method tends to preserve the reprints, since they are handled only when they are needed.

As soon as the index cards have been prepared, the separate reprints are filed in drawers with their front covers forward and their backs uppermost. This makes it easy to read the notations on the labels.

If a reprint does not fall into one of my divisions,

it is placed in the general file, which is indexed according to the author's name or to the name of the first author, in case there are two or more authors. These filing cards also carry the titles and the references and are filed alphabetically according to the author. The author cards are adequate information for one to determine whether he has received a particular reprint. The reprints in the general file are neither given a number nor labeled. However, as soon as several reprints on some subject accumulate in the general files, they are removed and they constitute a new division. The cards in the general files are removed and the new division, number of the reprint in the division and the number in the series are typed in the upper right corner. A title card is made, and if more than one author's name appears on the reprint, cards are made for each of them as described above.

The advantage of having an author's card made for each reprint that is classified is evident for at least two reasons: first, one has all an individual's references filed together and, second, it saves time in determining whether one possesses any of an individual's reprints and if so, which ones. The cross references might not be so essential if a group of individuals should become associated for life and publish all their researches as from one institution, but since a majority of individuals become connected with two or more institutions during their active careers, it is expedient that each author be given an entry for each paper that bears his name.

If a reprint were dated when it arrived, it would often lead to confusion. The chief reason for not doing so is that one often receives reprints from co-authors after one of them has accepted a position vlsewhere. If they had published a series of papers, one might receive the last few numbers of the series from one of the authors, and then some months or years later one might receive some of the earlier numbers from the other author. If one had dated the first papers when they arrived, it would be difficult and confusing to explain why the older papers arrived last.

Reprints from several authors that have been bound and sent to me from some individual or institution are not included in either the classified reprint or the general files, but are given space on the shelves with the bound books. However, if reprints of a symposium are bound together, they are filed according to the division they fall into. Such a volume is given as many numbers as it contains individual articles. That is, if a volume of a symposium contains twelve papers, then the numbers on the label would so indicate.

With this system of indexing and filing, it is as easy to locate a reprint, if you know the author or authors, as it is to locate a book on a regular library shelf. At the present time, I have about 4,000 reprints classified and about 1,500 more in the general files. The classified reprints are filed in steel and wooden drawers, while the general reprints are filed in boxes.

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## STARS IN THE BIOGRAPHICAL DIRECTORY OF AMERICAN MEN OF SCIENCE

IN view of the publication of a sixth edition of the "Biographical Directory of American Men of Science" I feel impelled to make some remarks about the affixing of stars to certain of the names. The selection of such names is made on a basis that is not very clear to me, and I doubt that it is well defined in the mind of the editor himself. The latter uses such designations as "leading scientific men," "most eminent men," "first —among research workers."

Now I must confess that I regard these elections to stardom as a somewhat childish albeit amusing pastime, but I understand that in some institutions the possession or lack of a star is taken very seriously and may even be decisive in questions of appointment and promotion. In view of that fact I would like to urge that the criterion on which selection is made be given a clearer definition. It should be pointed out that a "leading scientific man" is not necessarily synonymous with a "leader in scientific research." A biologist may be renowned as a writer of text-books and yet have a very poor record in the field of original research. He may be indefatigable and able in the administrative activities of scientific societies and still have only the most superficial interest in scientific discovery. But if eminence may rest on any one of such widely different endeavors it is only fair that that fact be definitely understood. Certainly the editor should make it clear that at present these eminent scientists are not necessarily outstanding research workers.

Personally I would much prefer to see the custom of starring abandoned altogether. I seriously question the justification for printing the results of such an election in a volume which is nothing more nor less than a directory.

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## THE PERCENTAGE OF IRON IN HEMOGLOBIN

It is known that the percentage of iron in different mammalian hemoglobins is substantially the same. In attempting to look up this rather fundamental value for use in teaching, we found the value 0.0335 given in Hawk and Bergeim's "Practical Physiological Chemistry" (10th ed., p. 467), in Starling's "Human Physiology" (7th ed., p. 652), in Bodansky's "Introduction to Physiological Chemistry" (3rd ed., p. 234),