Industrial and Engineering Chemistry reports that the British Institute of Metals and the Iron and Steel Institute have been invited by the American Institute of Mining and Metallurgical Engineers to hold their respective autumn meetings in New York in September, 1932, the meetings to be followed by a tour in the United States and Canada. The detailed program for these joint meetings has now been issued. The sessions will begin Monday, September 12, 1932, in the Engineering Societies Building, New York, and the tour of industrial cities will end in Montreal on September 29. The English party will sail from that port on September 30.

THE *Journal* of the American Medical Association reports that the Rockefeller Foundation has offered to assist in the establishment of a School of Hygiene and Public Health in Tokyo. It is said that buildings will be erected at a cost of $5,000,000. The Japanese government has nominated a special committee on organization which consists of Dr. Hayashi, dean of the medical department of the Tokyo Imperial University; Dr. Kitajima, dean of the Keio Medical College, and Dr. Teusler, chief of St. Luke's International Hospital; Chairman, Mr. Akagi, chief of the Sanitary Bureau; Commissioners, Drs. Nagayo and Miyagawa, of the Imperial University of Tokyo and the government Institute for the Study of Infectious Diseases; Drs. Miyajima and Hata, of the Keio Medical College and the Kitasato Institute; Dr. Sato, of St. Luke's International Hospital, and Drs. Kusama and Noheji, of the Sanitary Bureau of the Home Ministry.

THE *Journal* of the American Medical Association reports that the Southern Pacific Company recently offered the use of a completely equipped laboratory on wheels to the University of California Hooper Foundation for Medical Research to assist in answering emergency calls throughout the state for help in fighting epidemics. The car has been rebuilt to fill the needs of a staff of public health workers, either for emergencies or for routine examinations and educational programs, and is available at any time for use anywhere along the railroad's lines. It has a well-equipped bacteriologic and chemical laboratory, an x-ray room with facilities for developing films, a waiting room, examining room, quarters for two physicians and a technician, a galley and combination dining and record room, and quarters for a crew of two. Dr. Karl F. Meyer and Dr. Jacob C. Geiger, of the foundation, have already made use of the car in demonstrations before various medical associations.

LEGISLATIVE appropriations for the support of Kansas State College of Agriculture and Applied Science for the two years beginning July 1, 1931, amount to $2,751,000. They include $40,000 for research on animal diseases, $40,000 for laboratory equipment, $10,000 for continuing the soil survey, $120,000 for branch experiment stations, $44,000 for soil and crop experiment fields and $20,000 for completing the equipment of the college library.

THE bill extending the Adirondack Park to an area of 4,604,000 acres and making it the largest public park in the United States has become law. The park area will now take in 1,550,000 acres, of which 1,201,000 are privately owned and 349,000 state owned. Within the greater park there will be 2,636,000 acres of privately owned and 1,968,000 of state-owned lands.

DISCUSSION

THE IMPORTANCE OF GIVING PAGE REFERENCES IN DESCRIPTIONS OF PLATES

IT may fairly be assumed that it is the desire and intent of authors and editors of scientific publications to render their work as complete and readily usable to the scientific public as possible. There is, however, one point that is too generally overlooked that is believed to be of very essential importance to one who is reading or otherwise making use of a scientific publication. This point is the matter of giving page references in the description of plates. When the paper is a small one, it is of little importance, or even quite unnecessary, but in large papers or monographs the lack of page citations in descriptions of plates entails some, even considerable effort on the part of the reader. If a paper, zoological or botanical, is a systematic one, it may be assumed that the sequence of plates corresponds fairly closely with that of the text. Even then, however, exigencies of the size or character of figures often require considerable irregularity in their order.

When a reader sees a figure on a plate and wishes to consult the text where the figure is described, if no page reference is given, the quickest method usually is to refer to the index. In very many publications, however, no index is given. Lacking an index, the reader must then turn the pages of the text in quest of the desired description of the said figure. If it is a systematic paper on a subject with which the reader is familiar, the required page can usually be found after a moderate search. If, however, it is not a systematic paper but, for example, morphological, then without a page reference or index it may become a serious, even a difficult matter to find the place in the text where a given figure is described.

Recently this difficulty of finding the description of figures in the text was brought home to me strongly in making use of a French morphological memoir with over 300 pages of text and 32 plates. No page references were given in the description of plates and there was no alphabetical index. As I was fortunate enough to possess a copy of the work, it was possible to note the necessary page references on the plates as ascertained by carefully going through the text, but it was a great labor. All this would have been saved and the memoir much improved by simply adding page references in the description of plates.

In doing such work, one may not succeed in finding the description of a given figure. That leaves a student in a quandary. It might be thought, and usually correctly so, that if there is a figure on a plate it is sure to be considered somewhere in the text. On the other hand, I know an author who published many figures that certainly are not considered in the text. To hunt for a description of a figure in the text and not find it, then feel that one must have overlooked it and hunt again, perhaps without avail, but surely with loss of time and vexation of spirit, is most trying. The author of a memoir is in a position to add page references in description of plates with comparatively little trouble, and with an immense gain to the reader. The cost of such insertions is so trifling as to be negligible. Of course it should be borne in mind that in the preparation of manuscript one should write: page, or p. 000, so that space will be available for the printer to insert the required page numbers.

In some publications page references are given in descriptions of plates; as such may be mentioned those of the New York State Museum, the paleontological publications of the United States Geological Survey, and largely in the well-known Challenger Reports. In using such publications it is immediately felt what a convenience and comfort it is to be able to turn directly to the indicated descriptive page without the labor of hunting for the same.

I adopted the method of giving page references in descriptions of plates in my first considerable paper, published some forty years ago, and have employed the same method in what few large papers I have since published with one exception, in which the editor refused to allow page references as they did not accord with the system adopted in that publication. He apparently felt that adherence to system was of more importance than the convenience of the reader.

It appears that there is every argument in favor of giving page references in descriptions of plates, and no argument against it, excepting in so far as the trouble to the author may be considered an objection.

It is highly desirable to have the descriptions of plates facing the plates, but as it costs more, it is not always feasible. When descriptions are printed so as to face the plates, it seems that it would be very desirable to give such descriptions page numbers, as is done in some publications. The main object of this is that a subsequent writer who may wish to refer to them may do so by quoting the *page number,* rather than by the alternative of *page facing plate blank,* which is somewhat lengthy and cumbersome.

Another point that is worth consideration is that in an index to a publication, when an item has references to two or more pages in the text, it is of convenience to have the principal reference indicated by heavy-faced type. Such a method, where adopted, facilitates the finding of the principal reference.

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CYTOPLASMIC INHERITANCE OF MALE STERILITY IN ZEA MAYS

WHEN the transmission of a character has been conclusively proved to be independent of nuclear factors it must necessarily be inherited through the cytoplasm. Such a mode of inheritance is called cytoplasmic in contrast to the better understood Mendelian inheritance. The few cases of cytoplasmic inheritance that have been clearly established are concerned with certain chlorophyll characters in plants in which the nature of the cytoplasm or plastids contributed by the maternal parent or, more rarely, by either parent, determines whether the progeny shall be green or abnormal (white, pale green, or variegated). There is at least one case (in flax) where the interaction of specific genes with the cytoplasm of one of the parental types results in male sterility; this can not be considered as purely cytoplasmic inheritance, since nuclear factors are also involved.

Recently, investigations of the inheritance of a male sterile line of maize found in a collection made by R. A. Emerson and F. D. Richey at Arequipa, Peru, indicate that the sterility is determined entirely by the non-nuclear elements of the maternal gamete. The cross of the original male sterile plant by an unrelated normal gave an F_1 of 45 sterile individuals. The F_2 cultures consisted of families which bred true for male sterility, and of others that gave normal-appearing individuals in addition to sterile plants. Races in later generations have been established which (1) breed true for male sterility, (2) throw male sterile and normal plants, and rarely (3) are completely normal. There is no female sterility apparent.

The analyses made permit the following statements concerning the inheritance of the male sterile character:

1. Replacement of the original chromosomes in the