YALE UNIVERSITY, Dartmouth College and Stanford University will each receive \$50,000 from the estate left by the late Charles F. Brooker, chairman of the directorate of the American Brass Company.

ACCORDING to the *Journal* of the American Medical Association, a committee of physicians, under the chairmanship of Dr. John Punton, has made a study of the advisability of establishing a medical school as a department of the new Lincoln and Lee University in Kansas City. The committee has recommended that a grade A medical school be established and the cooperation of local physicians in raising the funds will be sought. The alumni of the old University Medical College have volunteered to raise \$150,000.

A DIVISION of municipal and industrial research has been established at the Massachusetts Institute of Technology. This division was made possible through a gift of \$100,000 made by J. E. Aldred, president of Aldred and Company, of New York City. The work will be in charge of Professor William A. Bassett.

DR. SAMUEL AVERY, chancellor of the University of Nebraska since 1908, has handed in his resignation on account of poor health.

SAMUEL T. DANA, for three years director of the Northeastern Forest Experiment Station with headquarters at the Massachusetts Agricultural College, has been made provisional dean of the new school of forestry at the University of Michigan.

ARTHUR C. MCINTYRE, government research specialist in forestry, has joined the forestry department of the Pennsylvania State College to study research problems in reforestation.

MAURICE B. VISSCHER, assistant professor of physiology at the University of Minnesota, has been appointed associate professor of physiology at the University of Tennessee College of Medicine.

PROFESSOR MARIO BEZZI, the well-known authority on the Diptera of the world, has been appointed professor of zoology and director of the zoological museum in the Royal University of Turin, Italy. He succeeds the late Professor Ermanno Giglio-Tos.

DISCUSSION

EARLY DAYS OF ANTI-VIVISECTION I. Miss Cobbe

"The Nine Circles of the Hell of the Innocent described from the Reports of the Presiding Spirits."¹

¹ The two outstanding figures in the early history of anti-vivisection are, in England, Miss Cobbe, and in the United States, Mrs. White. THIS book of 163 pages with the foregoing title was published in London in 1892. The title page also reads "compiled by [Mrs.] G. M. Rhodes with Preface by Frances Power Cobbe."

In it there were described various alleged cruelties classified in nine sections. Hence the sulphurous title, after Dante—and a long way after. Miss Cobbe in the preface (page viii) says, "Nothing has been inserted save verbatim extracts with reference in most cases from the actual reports of the vivisectors themselves, as published in their own books and in the scientific journals, or abridgements of the same."

On reading it, Mr. (later Sir Victor) Horsley found twenty cases including some of his own in which all mention of anesthetics was omitted, in spite of the fact that in every one of these twenty cases it was distinctly stated in the original papers that the animal or animals had been anesthetized.

On October 25, 1892, Mr. Horsley made these facts public in a letter to the London *Times*. In consequence of the exposure of these absolutely false statements the book was withdrawn. A "Second Revised Edition" with an introduction and reply by Dr. Edward Berdoe, F.R.C.S., was issued in the following year.

In the reply Dr. Berdoe takes up each of these twenty cases, quoting first the "objection" and then the "answer." These answers in a number of cases said that the statement of the administration of anesthesia had been "overlooked." In other cases he stated that the data were taken "second hand" from other sources than the original papers. He asserted that the compiler [Mrs. Rhodes] had no access to Mr. Horsley's original papers.

To accuse these various scientists of not having administered an anesthetic when the fact that an anesthetic had been used in every case and was clearly stated in the original papers, was a most serious charge of cruelty. Surely such a charge should never be made unless verified. Mrs. Rhodes could easily have consulted the original papers, for she had free access to the libraries of the British Museum and of the several medical libraries at her elbow in London.

Not all the blame should be put on the shoulders of Mrs. Rhodes. As Horsley points out in his letter to the *Times*, Miss Cobbe in two letters signed personally and published in the London *Zoophilist* of November 1, 1890, and March 1, 1892, likewise omits all mention of anesthesia by Dr. Bradford, and by Ballance and Shattuck, though in the original papers the administration of anesthesia was distinctly shown. Moreover, in the second edition, page 143, Miss Cobbe "assumes all responsibility for this book."

In the same issue of the Times appears a letter from

Sir Charles S. Sherrington, who has recently retired from the presidency of the Royal Society, the highest scientific distinction in the world. He writes:

I find three instances in which I am by name and deed held up to public abhorrence. From each of the three statements made about me, the employment of anesthesia in my experiment is studiously omitted, although expressly mentioned in each of the published papers. . . . In two out of the three statements I am accredited with inflicting upon living animals and without the employment of anesthetics, a dissection and procedure that I pursued only upon animals already dead.

No further comment is necessary as to such misrepresentation.

II. MRS. WHITE

In the United States Mrs. Caroline Earle White played as prominent a rôle as did Miss Cobbe in England. She founded, and until her death was the president of the American Anti-Vivisection Society in Philadelphia and was editor of the *Journal of Zoophily*, now called *The Starry Cross*.

Nearly half a century ago Mrs. White called upon me in order to convert me to her views. We discussed vivisection in my office for about two hours. When we parted I said to her as nearly as I can recall:

I want my position to be clearly understood by you. I deem it a professional, a moral, and a Christian duty to thwart your efforts to prevent experimental research, because that is the most valuable and effective weapon in our warfare against disease in man and animals. The Anti-Vivisectionists are, in my opinion, the active enemies of animals as well as of human beings.

Nevertheless, we parted amicably and remained in friendly, though not intimate, personal relations until her death. I have always had a real appreciation of her fine personal character apart from this one blot, which was an obsession.

Some years ago I pointed out that she clearly advocated human vivisection. I quote now from my book on "Animal Experimentation and Medical Progress."²

On March 11, 1885, I gave the address at the Commencement of the Woman's Medical College of Pennsylvania. In this address I emphasized the terrible fact that about twenty thousand people were killed annually in India by snakes, especially the cobra. In reply to this address Mrs. White published an "Answer" and on page 10 of this "Answer" is found the following flat-footed advocacy of human vivisection.

² Houghton Mifflin Company, Boston, Mass., pp. 251-253.

"Dr. Keen mentions that in India alone twenty thousand human beings die annually from snake bites and as yet no antidote has been discovered. How can we search intelligently for an antidote, he says, until we know accurately the effects of the poison? I should reply that in order to find out the effects of the poison and to search also for an antidote, the best plan would be for the experimenters to go to India where they could find as large a field for investigation as they require in the poor victims themselves. Here is an opportunity such as is not often offered for experimenting upon human beings, since as they would invariably die from the snake bites, there can be no objection to trying upon them every variety of antidote that can be discovered. Nothing seems to me less defensible than these experiments on the poison of snake bites upon animals, since it is the one case in which they could be observed with so much satisfaction and certainty upon man!

"Such a proposal [I said] is as absurd as it is cruel. Even if the experimenter could afford sufficient time and money to go to India for months... how could he arrange to be present when such unexpected accidents occurred [for the cobra has no warning rattle] How could he have at hand in the jungle, the ether, chemicals, assistants, tables, tents, food and drink, and the necessary yet intricate and delicate instruments? And even if he had all of these, how could he work with the calmness and the orderly deliberation of the laboratory when a fellow human being's life was ebbing away and every minute counted in such a swift poison?"

This is so swift that usually a patient dies in a few minutes. Even were a hospital and all appliances at hand the patient would ordinarily die before careful, painstaking investigation could possibly be made.

Of course this caused an angry protest from the anti-vivisectionists. But no one could more clearly and calmly advocate human vivisection than did Mrs. White in this quotation. Moreover after twentyseven years of reflection Mrs. White said, "It does not seem to me that this is a cruel suggestion [*i.e.*, experimenting on human beings bitten by snakes] as my only object in it was to benefit the poor natives who die by the thousand every year."³

Again further comment is needless.

PHILADELPHIA, PA.

W. W. KEEN

HELIUM IN DEEP DIVING

In view of the reported success obtained by the use of mixtures of helium and oxygen, substituted for air in deep diving and other high pressure work, whereby it is reported by the Bureau of Mines that not only is much greater speed of recovery from exposure to

³ Boston Medical and Surgical Journal, July 25, 1912, p. 143.