

THE Hancock Life Insurance Company, Boston, has made an additional gift of \$20,000 to the Harvard Cancer Commission; \$5,000 to be used for purchase and installation of a diagnostic apparatus and \$15,000 to be placed in the permanent fund. The insurance company previously gave \$30,000 toward the building of the Huntington Hospital, which is devoted exclusively to cancer cases. The new gift will be used in the biophysical laboratory, which is also under the direction of the commission.

UNIVERSITY AND EDUCATIONAL NOTES

AT the commencement exercises of Harvard University President Lowell announced the receipt of gifts during the year amounting to nearly four million dollars. This sum includes the payment of pledges to the Harvard endowment of \$1,080,619.

THE Tanners' Council of America has voted to erect a research laboratory at the University of Cincinnati, contributing \$110,000 for the erection of the building.

TWO bequests, one of £30,000 and one of £20,000, have been made to the University of Melbourne Medical School.

DR. FREDERICK P. GAY, professor of bacteriology in the University of California, has accepted the chair of bacteriology in Columbia University.

PROFESSOR M. C. BURRITT and Professor W. H. Chandler, vice-deans of the New York State College of Agriculture, will retire at the end of the present academic year.

DISCUSSION AND CORRESPONDENCE

THE PREPARATION OF FIVE KILOGRAMS OF DESICCATED EUGLENA¹

GOTTLIEB (1850), Kutscher (1898), Bütschli (1906) and others have attempted the collection of *Euglena* in amounts sufficient to warrant biochemical investigation of this relatively accessible microorganism. Their interesting re-

sults were in each case limited by the very small quantity of material attained by their methods of filtration and sedimentation. The present communication is offered as a suggestion that *Euglena*, and possibly other unicellular bodies, can be obtained in great quantities with less difficulty than might at first be apparent.

In 1921 a heavy scum, or "bloom" of *Euglena* (Sp.) appeared on one of the campus ponds. To concentrate this scum by filtration is impracticable. It was found, however, that the scum is sufficiently tenacious to permit its accumulation with the following device. By means of cords, a wooden float, consisting of a board 1.5 m. long, 10 c.m. wide and 5 c.m. thick, was suspended parallel to and from the small end of a long bamboo pole. To collect the material the pole was swung in arcs over the surface, dragging, or better, pushing, the scum close to a concrete embankment—an effect suggesting the skimming of cream with a gigantic spoon. The scum was then easily gathered with a large photographic developing tray and transferred in five or ten gallon lots to the laboratory.

After sufficient dilution, the euglenae were shaken until a uniform suspension resulted. This was strained through a "10-mesh" brass sieve to remove the gross débris. The fluid was then forced through a "60-mesh" sieve by stroking the upper surface of the sieve with a strip of pliant rubber. The suspension was allowed to stand in the dark for twelve hours in large jars to which cracked ice had been added. It was found that agitation followed by cold and darkness results in the euglenae settling sharply as a bottom sludge. The supernatant liquid, containing most of the foreign protozoa and some other floating particles, was siphoned off. Microscopic examination revealed that the sludge consisted of euglenae in a state of high purity.

The sludge was dehydrated by adding an equal volume of ninety-five per cent. alcohol, allowing the euglenae to settle, decanting the diluted alcohol and adding fresh; this procedure being repeated until the euglenae were in ninety per cent. alcohol. After a Buchner filtration, the filter-cake was granulated with a potato masher. The resulting damp granules were dried at 50°. From roughly 250 liters of

¹ 1850 Gottlieb, J. *Ann. d. Chemie u. Pharmacie* Bd. 75 p. 51; 1898 Kutscher, F. *Zeitschr. f. physiol. Chemie* Bd. 24 p. 360; 1906 Bütschli, O. *Arch. f. Protisten.* Bd. 7 p. 197.