has been previously flamed to insure sterility) large end down and the alcohol ignited by quickly passing a flame under the egg. The success of the method from this point on depends upon the formation of a drop of water from the alcohol (60–70 per cent. alcohol has been found most satisfactory) on the bottom (large end) of the egg.

When the alcohol has burned off, a very hot flame (Tirrell burner) is directed at the drop of water on the under side of the egg and after sufficient heating a piece of the egg shell from 1 to 2 cm. in diameter snaps off. In some cases the vitelline membrane is broken at this point and the contents of the egg run out, so it is necessary to have a container ready for use.

If the vitelline membrane does not break at this point or all the contents do not run out, it is only necessary to apply the flame gently to the top (small) end of the egg when the expansion of the air will totally empty the shell. Care must be taken at this point not to burn the egg shell or coagulate the contents. This heating should be done with a nearly luminous flame.

The most satisfactory type of receiver is a large Phillips beaker which has been previously sterilized with a sufficient quantity of broken glass in it to cover the bottom of the flask. This broken glass serves to cut up both the yolk and white and make a homogeneous mixture from which an average sample can be withdrawn and plated, using the usual precautions.

This method has the following advantages:

1. Simplicity. It eliminates the sterilization of instruments in opening the egg and simplifies the operation of breaking the shell.

2. It eliminates the chances of introducing foreign chemicals, which have been used for sterilizing the instruments for breaking the shell, into the egg.

3. It minimizes the chances of infecting the egg during opening and consequently allows of a more accurate determination of the bacterial count of the content.

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QUOTATIONS

THE DISMISSAL OF PROFESSOR NEARING

THE issue which the trustees of the university of Pennsylvania have raised by their summary action in dispensing with the services of one of the most able and efficient professors of the Wharton School faculty is vastly more important than any considerations whatever affecting the personality or opinions of the teacher in question or of the members of the board itself. It is because the incident reveals the existence of an irrepressible conflict between two widely differing ideals of university responsibility and duties that it has called forth an instant and widespread protest. The *New Republic* recently defined this conflict as one "between political reaction and political progress, between intellectual repression and freedom of speech, between a plutocracy strongly intrenched and a democracy not yet fully conscious of itself." And the arguments that have been already volunteered in defense of the trustees, albeit they are themselves silent as to the reasons for their unusual action, fully justify the assumption expressed in every protest that the trustees ("the people who raise the money") regard "the expression of economic discontent as immoral," and are determined to penalize instead of encourage, on the part of the teaching staff, that "continual and fearless sifting and winnowing by which alone the truth can be found.

One of the trustees, however, has modified the issue, if he has not raised an entirely new one, when he denied the right of the public or the alumni to demand any explanation of the governing body of the university. "No one has the right to question us" he is reported to have said. "The University of Pennsylvania is not a public institution. It is only quasi-public. We are answerable only to our own sense of duty and responsibility." This is true only in the most narrow and technical sense, and it is certainly not the position taken by the trustees when they approach the city and state for legislative favors and for grants

in aid from the public treasury. But even were it literally true, the public would still have a right to know something about the policy of a great institution, chartered by the state, which performs so vitally important a function in the formation of public opinion and in the creation of an intelligent understanding among the people of the problems of science and government. They have the right to inquire as to motives and actions of those who presume to limit the boundaries of research, to define what is and what is not truth, and to put the brand of uniformity upon the teaching body.

There is something peculiarly Prussian in the assumption that because Mr. A., representing great corporation interests, and Mr. B., appointed to the board by reason of his wealth and his willingness to invest it in university buildings and endowments, have thereby acquired a vested right to design and apply their own peculiar brand of orthodoxy to the teaching of an institution which proclaims in its motto that "culture without character is vain." What sort of "character" will be imposed upon the student body by teachers compelled under threat of summary dismissal to take an oath of conformity to the views of men who can not bear to hear a frank discussion of political, social or economic reform? The public has every right to know whether its greatest teaching institution is free to seek the truth and to proclaim it without fear, or whether it is compelled to suppress every opinion on economics or politics that is for the moment distasteful to trustees whose sole responsibility is discharged when they appoint able and fearless men to its faculties and attend to the business details of university management.—The Philadelphia *Public Ledger*.

SCIENTIFIC BOOKS

Nature and Science on the Pacific Coast. A Guidebook for Scientific Travelers in the West. Edited under the auspices of the Pacific Coast Committee of the American Association for the Advancement of Science. Paul Elder & Co., San Francisco. 1915.

This is a happily conceived and creditably executed enterprise by the Pacific Coast Committee of the American Association for the Advancement of Science. Its many chapters, individually and severally, are chart and compass to the natural attractions and scientific wealth of the west coast and will make an effective guide to the traveler of this and future years. All the world is on the way to the Fair, and it is certainly appropriate that the organized body of scientific men of the west have joined hands in preparing this useful and attractive exposition of what that part of the country is prepared to and does contribute to the scientific treasury of the world.

Probably the old-time breed of eastern folk who entertained the notion that the Pacific ocean washes the western foot of the Alleghany Mountains is now pretty nearly extinct, but there is still something of this psychological attitude in the east toward the west which needs the infusion of just such a serum as a book of this kind, presented in inviting form and popular dress, may produce. Dwellers in Manhattan say they can identify a Brooklynite by his psychology; likewise the dwellers in the east have been wont to look upon the great propositions of the west as not seriously entering into their lives. This is merely by way of expressing an inherited mental attitude. Tides and winds, ocean currents and climate zones, different fauna and other flora, newer mountains, younger rocks, unlike opportunities for economic development, and dissimilar production, all certainly do tend to make the Pacific states unlike, in natural factors and product, to those of the east. As woman can not be expressed in terms of man, so the west can never become fully comprehensible in terms of the east; but the readjustments in ideals and idolatry which invasion of the west by the east requires, are essential to the making of the full-fledged American.

So the present occasion affords every excuse for such an authorized production of these chapters on the natural aspect of the Pacific coast, all of them prepared by men