writings Küster presents the same idea that kataplasmas may range from structures suffering slightly inhibited differentiation to those homogeneous parenchyma types in which differentiation is wholly inhibited. Nowhere does Küster restrict the term to the latter "undifferentiated parenchyma" type.

In the same paragraph dealing with Küster's terms Cook accepts the statement of the writer that galls of Nematoda, Lepidoptera and certain other animal groups are kataplasmas. The vast majority of these galls show differentiated cells, especially xylem and phloem elements and are never wholly composed of "undifferentiated parenchyma."

Regarding prosoplasmas Cook says "they are structures in which there is a differentiation into other tissues." No explanation of what these "other" tissues are like is appended, so the statement is meaningless. Küster has defined prosoplasmas as gall structures which are characterized by definite size, form and time of development and possessing tissue characters (form and orientation characters chiefly) which are new, *i. e.*, they are not duplicated in the host plant. They range from poorly differentiated types to ones highly differentiated.

In this connection attention should also be called to Cook's error in classifying crown gall as a "low type of prosoplasma" because they possess "rather weak fibrous tissue." Küster on page 152 of the above mentioned work definitely, and to the mind of the writer correctly, includes all bacterial galls under "kataplasmas."

From the above definitions of Küster's terms basic to the fundamental classification of galls it is apparent that the assertion of Cook that "Küster has classified galls on the basis of *presence or absence of cell differentiation* into two great groups" is entirely wrong.

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ATHLETICS AND THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

THE propagandist for any particular reform is always ready and willing to enlist in his holy cause any agency capable of lending the slightest assistance, however remote the real aims of such agency may be and regardless of the possibility that the agency in question may have its hands more than full with its own proper business. This reflection represents the reaction of one reader to Dr. W. E. Allen's article in a recent number of SCIENCE. No doubt athletics is in a bad way in some seats of learning—although I hasten to disclaim any reference here to the Scripps Institution—and Dr. Allen's continual italicization of the word *commercialized* gives the whole matter an ugly look, while providing a convenient loophole for the escape of the administrator or professor who regards athletic activities at his particular college as *non*-commercialized, but before the association embarks upon the crusade, conjointly, of course, with all other societies interested in the advancement of knowledge, it would be well to make sure of the facts and relations involved.

Is it in reality true that earnest undergraduates, strongly or even feebly determined upon becoming, say, consulting chemists to the soap industry or uncompromising foes of the corn ear-worm, are turned aside from these worthy aims and their slender means confiscated by burly fullbacks and members of the "sporting fraternity," detailed for such canvassing? Is this sort of thing characteristic of many institutions of high standing? We know from recently published statistics that the higher grades of students go largely into university teaching with its implied devotion to research, and I, for one, scout the notion that such undergraduates are in any danger whatever of being led permanently astray by athletes or athletics, *commercialized* or pure. If I may be permitted to draw upon my own experience and observations at Harvard, I would affirm that such an opinion is pure nonsense, since each student is naturally regarded by his fellows as a free agent in such matters. Let those who are unduly impressed with this rare if not wholly imaginary seduction of infant scientists remember that there is something to be said on the other side; *organized* athletics provides in its public spectacles one of the rare spots of high color in a somewhat drab civilization, it furnishes funds which give the whole student body apparatus and opportunity for interesting and therefore wholesome

exercise, and it affords those capable of playing on the first teams a unique and invaluable chance to develop and display those extraordinary qualities of heart and mind required in their contests.

If an entirely unscholarly individual is hired to go to college so that the team may profit by his athletic prowess (as may still happen, I believe, in some sections of the country), if the coach pays the opposing captain to throw the game, if, worst of all, the student body in general is found prodigally to be wasting its money, time, interest and enthusiasm on sports to the exclusion of learning—then we have a black picture, indeed, but still indubitably a case for action by the administration of the institution concerned.

To enter this field, already under the anxious scrutiny and stern hand of those whose duty it is to guide such activities, would not only be a work of misguided supererogation, diverting the energy of the association from its proper aims, but it would, and quite properly, tend to alienate from science and scientists those students who, strange as it may seem to some honest souls, have at one and the same time a liking for sports, shared or watched, and for the study of nature. Let the association mind its own affairs, advancing the cause of science and ameliorating the conditions under which scientists labor, and recruits of promise will not be wanting.

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WAR EXPLOSIVES MISTAKEN FOR MINERALS

AT the close of the war, large quantities of explosives were distributed to the various states to be used mainly in bridge and road building. This material was frequently piled up in boxes in out of the way places where the containers sometimes became broken open and the explosives scattered some distance from the original source. The writer has personally observed one such case twenty-five miles south of Tucson, Arizona, where several tons of T. N. T. were kept for several weeks without guard or protection of any kind. Pieces of T. N. T. were picked up two or three hundred feet from the pile of boxes. As is well known, this substance turns yellow to brown on exposure to light and the stray pieces referred to above had so altered on the surface as to resemble rusty scrap iron. The pieces were of peculiar shape, some being cylindrical, evidently having been removed from unused shells. On breaking open some of the pieces with a hammer the material showed a fibrous radiating appearance not unlike some minerals. It does not seem strange, then, that occasionally these explosives should actually be mistaken for minerals. Moreover, in the case of more soluble substances such as picric acid, the material might become so mingled with sand or pieces of rock as to greatly increase the resemblance.

During the past year four distinct cases have been brought to the writer's attention where these explosives have presumably been mistaken for minerals. It has even led some men scientifically trained to seriously question whether these compounds might not actually occur as natural products. The first case was that of some earthy material stained with picric acid in such a manner as to almost exactly resemble carnotite. The material was received at the Arizona Bureau of Mines and the sender affirmed most emphatically that the substance was of natural origin. The bitter taste and the dyeing of a small piece of filter paper and comparing with a piece dyed with known picric acid was sufficient to identify the material.

The second case was that of a sample of whitish material, also received from a small town in Arizona by the Bureau of Mines. It was mingled with a very small amount of foreign matter and on testing was found to be T. N. T. (trinitrotoluene). In this case, on further correspondence with the sender, it was admitted that T. N. T. had been used the previous year near the locality concerned, and that some of the men interested in having the material tested had suggested that it might be an explosive. Had this information been included in the first letter a considerable amount of labor would have been saved in the identification.

The other two cases of widely different localities (New Mexico and Colorado) were called to my attention by Dr. S. C. Lind, of