

an area of about sixty "blocks" immediately adjoining the University campus on the north. The spread of the fire was very rapid; in many cases ten minutes sufficed to carry the flames from one street to the next parallel street. In most cases the occupants of the residences did not have time to remove their possessions to appreciable extent. In the burned area lived about 60 University professors, associate professors and assistant professors, and about 50 instructors, assistants and associates; about 30 secretaries, library assistants, clerks and stenographers in the employ of the University; and 1,042 University students. The number of fraternity and sorority houses consumed was about 12.

Not only did members of the University community suffer serious loss and inconvenience as to residences and furnishings, but the libraries of those who were burned out, and other collections intimately related to their university duties, were consumed. In a few cases professors' manuscripts embodying the results of several years of research were lost. The students who were burned out did not devote their efforts in general to saving their own equipment of clothing and books, but unselfishly joined with the informal organizations of students engaged in getting the occupants of houses into safety zones, in removing limited quantities of residence contents to the University campus and elsewhere, and to efforts looking toward the staying of the flames.

Relief measures were promptly organized, and assistance has been rendered, though on a relatively small scale, to those in most serious need. Many organizations in Berkeley and in the San Francisco Bay region, operating chiefly through the Berkeley Chapter of the American Red Cross, have gone far to meet these needs. The unofficial relief centers and countless individuals have given assistance more directly upon a commendable scale. The spirit of those who suffered has been admirable, so far as I am aware in absolutely every case. All concerned have been averse to the making of a public appeal for help. Both the Red Cross and the University Committee engaged in meeting the situation have found their chief difficulty, not in the securing of relief funds, but in obtaining from those who suffered loss the information necessary to the carrying out of adequate and wise relief policies.

No University buildings were consumed or seriously damaged, and the University's minor losses are summed up in a few thousands of dollars. More than half of the students affected lost their lecture notebooks, and in other ways their studies were interfered with for a few days. Many of the professors who were burned out on Monday afternoon, September seventeenth, were in their lecture rooms early Tuesday morning; and the same spirit of determina-

tion to carry on has not diminished in the intervening three weeks.

Messages of sympathy for those members of the University community who suffered have been numerous, and have come from great distances—from the University of Louvain on the one hand and from the University of Peking on the other. In behalf of the University of California I desire to thank the senders of the messages and all those whom the messages represented. As an instance of sympathy and assistance extended, I desire to speak especially of the benefit concert given in the Greek Theater of the University by the San Francisco Symphony Orchestra under the leadership of Mr. Alfred Hertz. The services of the orchestra and of all who helped on that occasion were provided gratis by those who rendered them.

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APPLES, WORMS, PHILOSOPHERS AND GOATS

CHARLES DARWIN once showed the intimate connection existing in nature between cats, mice, bumble bees and clover. The classical presentation of this great naturalist must be at once my inspiration and excuse for offering some further biological reflections on the relationships of apples, worms, philosophers and goats. It will be necessary, in this ecological excursion, to go somewhat farther back than Darwin did, and begin at the beginning, in the same manner as the book of Genesis. We may have to invoke some form of metempsychosis or paronomasia, but in these days of advanced psychical research this should offer no difficulty.

It is necessary, in the first place, to show that the apple into which Adam sank his teeth was wormy, and, in the second place, that he nipped the worm's tail in this his maiden effort at consuming a specimen of *Pyrus malus*. It may be objected that, in the Garden of Eden, in which everything was perfect, there were no worms in the apples. I think that this objection may be easily overthrown, and I take as an authority no less a person than Mr. William Jennings Bryan. It is definitely known, according to Mr. Bryan, that the Lord created all plants and all other animals before he created man. Apple worms must, therefore, have been created before man. Since all transmutation of species by evolution must be excluded, these worms must have had to eat something to keep them alive, and they must have eaten apples and nothing else. In the perfect balance of things that must have obtained in the Garden of Eden, there was an apple for every worm, and, we may say also, a worm for every apple. By the use of pure Aristotelian logic, we have arrived at the conclusion that the apple which Adam ate was wormy. If any one

doubt this, I can only quote Oliver Wendell Holmes's old dictum that "Logic is logic."

We have now to show that Adam nipped the worm's tail when he bit into the apple. This is a relatively simple process, involving only a slight basis of observation of animal behavior and a little pure logic. Before Adam ate the apple, he was simple-minded, even as the rabbits and squirrels which played in the Garden, and could not have known about the habits of apple worms. Any one who has watched a horse or a cow or a pig or a baby or any other frugivorous animal eat an apple will readily appreciate the peril of the worm. Bearing in mind Adam's social training and table manners in his state of pure innocence, I need not labor the argument further to show that he nipped the worm's tail. Again, logic is logic.

Thirdly, we may point out that the worm, suffering mayhem in the first degree, was not long unavenged. Before this, it was incumbent upon him to dodge preying teeth and make his escape from danger. But with the acquisition of wisdom on Adam's part, he learned to know which apples were wormy and which were not, since the perfect balance in the Garden was now upset and he was driven out of it, and the responsibility now shifted from the worm to man. Whereas, in the Garden it was "Caveat vermis," we now say "Caveat emptor" and other things of this kind. All this has worked for the peace of mind of the worm, but for man, the case is different. It might be a more tranquil world if the worm still had to worry. Spraying apple trees is only a belated and partially effectual attempt to shift the responsibility back to the worm. But neither this nor the proverbial early bird relieves the boarding house guest from all responsibility with regard to prunes. The worm still has the better of the argument.

The general proposition of the recognition of worms of whatever sort in apples of whatever kind requires considerable philosophical insight, and there have been men in the world ever since the time of Adam, or soon after, who have had this facility in systematic zoology. They have not all been entomologists, for apple worms are not really worms, you know, but all of them have been philosophers, each after his own system. Among the other evils which Adam's gastronomic indiscretion brought into the world must be reckoned the philosophers, for their persistent exposure of human sham—really nothing more than a euphemism for worms in apples—has contributed much to the discomfort of many estimable people. All this must be reckoned as evil. The philosopher is so constituted that worms in apples disturb him, while those happier beings of more bovine intelligence, if they were capable of getting the philosopher's point of view, might think him foolish to worry about worms at all. And it is in connection with worms in

apples that the philosopher's metempsychosis occurs. Having once recognized the worms in the apples, and having pointed them out, he is quite likely to find that the responsibility in the matter has shifted from the worm to him. In other words, he has become the goat, and the worm has no further cause for worry.

Philosophers have been associated in the popular mind with the academia since the days of Plato, although Diogenes contented himself with a lantern and a tub, preferring the security of these to the uncertainties of academic tenure. It is doubtful whether the density of philosophers per million of population is any greater in the academia than it is in the general public at large, but they seem to be more prominent in the academia, and their prominence comes from their facility in detecting worms in the apples. Partaking of the double nature of philosopher and goat, the philosopher is particularly likely to become obnoxious in such an environment. He may innocently nibble at a gorgeous verbal bouquet intended for some strenuous defender of the system, because, to him, it bears a striking resemblance to spinach or some other herbage of this sort, and thereby incur the wrath of the powers that be. Or he may nip off the blossoms of a spray of lilies of the valley intended for some colleague, and expose the hemlock that has been concealed in it. This is a reprehensible trait, and the offence is generally punished as it deserves to be.

The worm is said to turn, and to manifest other evidences of an evil temper at times, particularly when trodden upon. But the most important characteristic of the goat which has been recorded in Holy Writ is that he shall have the sins of the tribe hung upon him and be driven out. This speaks well for the goat's gentleness of temper and general simple-mindedness, despite his facility as a philosopher in recognizing worms. If the artist's conception of the matter is correct, the painting by Holman Hunt shows a resemblance of the goat's decorations just before he is to be driven out to the academic robes and gayly colored hood of the philosopher in the academic procession. Somewhere it is stated also that the rocks are a refuge for goats.

The Greek attitude towards goats was more kindly, perhaps because of the lenient attitude of the Greeks towards philosophers. And I believe that it was a Greek who noticed that goats dance in the sun. But even in Greece, neither goats nor philosophers wholly escaped being offered up as a sacrifice. And if my conception of a philosopher-goat seem a fanciful one, one has only to recall the great god Pan.

At one time a distinction was drawn between academia and schola—between the institution for thought and that for mere pedagogy—but perhaps it would be invidious to insist upon this distinction at the present day. The term school is so common in

connection with our professional institutions, and generally so accurately descriptive, that no other term seems necessary. Furthermore, many so-called academies fall so far short of Plato's model that the words college and university seem all that are required to-day. Few philosophers will disagree with President Lowell's statement that America has failed to contribute its share to the world's thought.

But no one of these institutions should be without at least one philosopher apiece, for of such is the family of goats.

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PACHYOSTOSIS

THE term *Pachyostosis* to denote a benign type of osteohypertrophy, especially in aquatic animals, was first clearly discussed by O. Abel in his "Paleobiologie." It is interesting to note the animated discussion of the possible phylogenetic significance of this condition at the meeting of the German Paleontological Society at Tübingen in August of last year. The subject arose following the reading of Nopsca's paper¹ on the osteology of a Cretaceous snake. Baron Nopsca proposes the unusual term *Arrostie* for the condition of Pachyostosis, but spoils it by including in his classification such diverse pathological conditions as Osteosclerosis, Acromegaly and later some one proposed to include in it the condition known as Osteoporosis. This conception seems to me to be quite wrong, and I wish to add this word to the discussion.

It seems to me that the new term *Arrostie* is unnecessary and misleading. It implies a combination of conditions which does not exist. Pachyostosis, as I understand it, does not involve either infections or other pathological results, but is to be regarded as an adaptation in vertebrates to an aquatic habitat. The hypertrophy is a condition largely of the ribs and vertebrae, and while it may sometimes be due to the presence of heavy dorsal armor, yet more frequently it seems to me the thickening of the bones is an adaptation, permitting the animal to submerge more readily and to remain under the surface. Osteosclerosis is not an accompaniment of the pachyostosis in the few histological examinations of pachyostotic bones I have made. The unorganized deposition of calcium salts in callus following fracture, and in areas of intensely rapid growth stimulated by infection constitute a condition of osteosclerosis far removed from any interpretation of pachyostosis. I have recently noted in a Pleistocene tiger a condition in the pelvis

resembling in its great and uniform hypertrophy of both rami the heaviness seen in Pachyostosis. This was due, clearly, to the intense infection the results of which are evident in the sacrum, where the most posterior sacral element is greatly exaggerated in size.

It would seem unwise to include under the same classification such diverse hypertrophies as acromegaly, osteosclerosis and the absorptive process of osteoporosis. In fact, osteoporosis accompanies a number of pathological conditions, though the term has been somewhat restricted in Paleopathology to a condition described in the human skull in which the hypertrophy is accompanied by a riddling of the inner skull table. Pachyostosis is also to be distinguished from many types of osteitis deformans, such as Paget's disease, Leontiasis and other hypertrophies which are due either to infections, disturbances in the endocrine organs, faulty nutrition or other causes.

It is even to be doubted if the thickening of the bones in aquatic animals is to be properly regarded as a phase of pathology in any sense, unless we give the widest latitude to our definition of disease. I should like to suggest, therefore, that we differentiate carefully between results of adaptation and pathological results. Pachyostosis is a benign form of hypertrophy and has no relation, in my opinion, to other hypertrophies of a pathological nature.

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QUOTATIONS

CONTRACT MEDICAL PRACTICE IN ENGLAND

THE minister of health has answered the doctors in terms of arithmetic. He conceives that, in the final issue, an actuarial basis is that on which the capitation fee for panel practice, in company with all salaries and wages, must rest. In this view he has, without doubt, the full support of the friendly societies, whose members constitute the working population of the country. These societies, in their attitude to the medical profession, have discovered themselves as economists of the old school. A man's value, they suggest, is the amount which his services can command in the open market. This doctrine, when applied to the members of the friendly societies themselves, has not, it must be allowed, always worn, in their eyes, the aspect of reasonableness which it possesses when applied to doctors. Indeed it has frequently been assailed with bitterness as the creed of a rapacious *bourgeoisie* eager to exploit the helplessness of "wage slaves." Unhappily, it is impossible to have it both ways: what is "sauce" for the doctors must be "sauce"

¹ F. Baron Nopsca: "Ueber eine neue Kreideschlange aus Dalmatien." *Paleontologische Zeitschrift*, Bd. V, Heft 3, p. 258. 1923.