port, for taxonomic and genetic studies of the genus *Coenonympha* (Lepidoptera), and to Robert R. Mc-Math, for a precision Bell and Howard gate mechanism for recording the phenomena of solar prominences. With the resignation of Dr. Heber D. Curtis, the board of directors of the Bache Fund is now: Dr. Edwin B. Wilson, *chairman*, Dr. W. J. V. Osterhout and Dr. C. R. Stockard.

THE George L. and Emily McMichael Harrison department of research has been established at the University of Pennsylvania. This was made possible under the terms of the will of the late George Leib Harrison, a retired chemical manufacturer, cousin of the late Provost Charles Custis Harrison, by which the university receives the income from the residuary estate, approximating \$40,000 annually. The George L. and Emily McMichael Harrison professorship in surgery has been formally established and the new chair has been filled by the appointment of Dr. Isidor S. Ravdin, J. William White professor of surgical research in the School of Medicine.

DISCUSSION

BUREAUCRACY AS A WAY OF LIFE

THE government worker lives in a glass house—his hours, his pay, his tasks are known or may be known to all. As a dweller in a glass house he is by proverb prohibited from throwing stones. On the other hand, he has been for years the target for two general, almost blanket, criticisms—first, that he is an inefficient workman and, second, that he is a moral weakling.

Recently less has been said about the inefficiency of government workers. This may well be because of the drastic deflation undergone in the standing of our leaders of industry, trade and banking. On the other hand, certain by no means to be despised voices have been raised to the effect that the government worker is at least as efficient as, perhaps more efficient than his brother in industry. Witness for example the statement of Oswald Garrison Villard:¹

I have not been moved to call attention to Mr. Eastman because he is exceptional; there are many other public officers who are serving the government with great ability and devotion. He himself answers the question whether it is possible for a government to enlist men of first-class competence and shining integrity without paying them the high salaries offered by private corporations to the men they select for president or vice-president. When I contrast the character and talents of Mr. Eastman with those of some of the men who have been paid a million dollars a year by banks and steel companies, it is to laugh.... I have no doubt that he could have wangled a fat job for himself from some of the large corporations years ago, and feathered his own nest most richly. He has preferred his small Government salary and the privilege of serving his fellow-countrymen, which is delightful proof that the private-profit motive is not essential to the carrying on of a civilized government. And there are many like Mr. Eastman.

In the same vein we have the thoughtful statements of Charles and William Beard in "The Case for Bureaucracy":² It would be easy to pick out illustrations of steady and efficient functioning on the part of numerous bureaus and agencies in Washington—work done by the bureau of mines in saving human lives, by the coast guard in stormy seas winter and summer, by the men who manage the vast system of airways, by the forest service in conserving and guarding the national forest domain, by the public health service, and so on through a catalogue filling a volume. Where we find a bureau functioning in some field that does not invite collision with private enterprise, we usually discover the most intelligence and public spirit. But generally the bureaus are hampered in constructive work by acquisitive pressures from the outside. . . .

With more direct reference to the scientific work of the government, R. L. Duffus, writing in *Harper's* for June, 1933, says:

Consider the scientific agencies which can be found in almost all the departments. They are full of men who are building roads into the future. In stuffy little offices, in laboratories smelling of chemicals and of decaying organic matter, these devotees study the habits of insects, the diseases of poultry, human beings, and livestock; they test soils and seeds, they weigh the earth and the stars, and when called upon as Paul de Kruif has glowingly related, lay down their lives in a rather casual way for the service of mankind.

A somewhat special class, perhaps, these investigators, but for the larger groups also there are to be found defenders. For example, the Beards point out that the efficiency of the fire departments of our various cities (manned chiefly by Civil Service employees) is recognized not only by occasional notice of a particular heroism in newspapers, but strange as it may seem by that all-important American document, the balance sheet. Fire-insurance companies make it a practice to lower their rates in cities which have standard equipment for fighting fires. The assumption is that if the men have the apparatus, they will use it effectively. Here business takes the efficiency of government for granted and measures results in dollars and cents.

¹ Nation, February 7, 1934.

² Scribner's Magazine, 93: 4, April, 1933.

Secretary of Agriculture H. A. Wallace, in speaking a year or two ago before a group of Department employees, paid obviously sincere tribute to the fidelity and ability of government workers and the efficiency with which government work is conducted. Referring specifically to the clerical force, he said that he well remembered and had come to agree with the point of view of his father, Secretary of Agriculture in the Harding Administration, who said at that time that he found that federal clerical work was more efficiently conducted than similar work in private business and planned to take some of the federal workers back with him when he retired to private life.

So much for efficiency; now as to morality. Only last week our minister insisted from the pulpit, with cautious reservations in favor of those with intellectual interests, that working for the United States Government is bad for the character. From listening to his sermons on a surprising number of Sundays, I take it that he feels that the particular type of competitive effort supposed to be associated with business and with most of the professions is necessary to the development of real character.

This idea is not new even to the clergy. I have recently read a letter dated October 11, 1850, from the Reverend A. P. Chute, then of Lynnfield, Massachusetts, to a brother clergyman in Maine, which includes the following paragraph:

I observe that your bro. Maurice has lost his office at Belfast. My brother who was a subordinate in the Castine office will also lose his office probably, though it is not certain. He is, however, expecting it. It should not be regretted either by them or their friends for officeholding under the Government has a bad effect on men, intellectually & morally. A man long in public office loses his spirit of *self-reliance* if he does not deteriorate in moral character.

(To point out that this same A. P. Chute writes in September, 1861, "At his desk in the Custom House Boston" to his "Dear Brother Blake" would not add anything to the present discussion.)

The agreement of these reverend gentlemen, separated in time by an eighty-year interval, is impressive. Whether they are correct depends on one's ideas of "character" and "morality." This problem is well stated by the Beards in the article to which reference has already been made.

Is the bureaucrat's morality, the job holder's morality, ipso facto, worse than the business man's morality? Who are our leading business men? They are the men who have made the most money. What is the rule of business? It is to buy in the cheapest market and sell in the dearest, to give as little as possible for as much as one can get. If a dreamy professor comes along, meets a realtor, and pays him a thousand dollars more for a house than the latter is willing to sell it for, would not the former be condemned as a fool in any well-bred American community and the latter congratulated on "making a good thing out of the deal?" There are exceptions, to be sure, and much talk about service, but the business of business is to get money, to collect what the traffic will bear. If not, what is it?

The justification for this kind of ethics is that it supplies initiative, but peril of it lies in the fact that no civilization can endure which has written over its shrine: No profit, nothing doing. And the justification of the bureaucracy lies in the fact that, allowing for dead wood and dead heads, it supplies from top to bottom an ideal which this country needs, the true soldier's ideal, namely, that great deeds may be done without hope of profit, either near or distant, openly and professed or sneakingly and concealed.

The real problem then seems to boil down to something like this. Is active labor under a profit system necessary to the development of character? Curiously enough, at least one great organization stands fast in the faith that an entire absence of such a motive is necessary to the highest development of character. Our largest church by formal vows makes sure that its leaders shall be free from the distractions of profit seeking and most of our smaller denominations wisely make equally certain by somewhat less formal means of a similar position in their clergy.

The great educational institutions also while carrying on a rather mild competition among themselves on salary schedules have never attempted to compete with business concerns. Curiously, or perhaps naturally, enough, the college professor like the clergyman sometimes sighs for the degeneracy of his brother in the Civil Service of the United States.

In a biographical sketch of the late Roland Thaxter of Harvard, his successor recounts a discussion of possible openings in which Dr. Thaxter remarked with a sigh, "Of course one can always get some sort of position in Washington, and even able men like Dr. Lyman seem to like it there, I'm sure I don't know why!" Now the answer is simple. Even able men "like it" in the Civil Service because it enables them to do effective and useful work among pleasant people who are companionable and understanding.

Dr. George Sarton, who is spending his life in the study of science in relation to human life in the past as well as in the present, points out the relation of surroundings to the deepest happiness in the following phrase:

To be truly happy and gay we must be able to pursue the truth, not alone, but among lovable men and women, who are kind to us and to whom we can show our own kindness. Even as the discovery of any particle of truth, whether it be to our advantage or not, pleasant or unpleasant, is a positive gain for the whole world, even so every act of kindness is a creation in the right direction.

Our tactful family physician says that our village is a pleasant place in which to live because it contains a large per cent. of men who have been very careful in the selection of their wives. Without attempting to defend this somewhat startling generalization I will adopt his phraseology and assert on the basis of over twenty years of work in its ranks that the Civil Service is a pleasant place to live and work because it is made up of carefully selected people. Selected not so much by the formal tests as by the type of work they do, the type of life they may be expected to lead. and the almost entire absence of a profit motive. I believe them to be distinguished among American groups for courtesy, generosity, industry, honesty and happiness. Whether the characteristics which I find among my associates are to be rated as good or bad I must leave to the clergymen to decide. That is their field of specialization-not mine. But I have the feeling that they bear strong resemblance to the ideas held out as ideals by certain great moral leaders of different ages.

NEIL E. STEVENS BUREAU OF PLANT INDUSTRY U. S. DEPARTMENT OF AGRICULTURE

A REPRODUCTION PHENOMENON

In certain species of parasitic Hymenoptera, particularly those belonging to the genus *Coccophagus*, the males develop only as parasites of hymenopterous larvae and the females only as parasites of homopterous nymphs or adults; *i.e.*, mealybugs or scale insects. The hymenopterous host, however, must be within a homopterous insect. This is a remarkable differentiation in the host relations of the sexes within a species.

The production of males in a pure culture of a species having such a habit necessitates the destruction of immature females since they are the only hosts of the male present in the culture. The conditions under which the destruction of the females occurs vary with the species.

Apparently in all the species the female is endoparasitic. The male, however, in some species, may be endoparasitic, in some ectoparasitic and in others alternately ectoparasitic and endoparasitic. The male exhibits marked differences in the structure of the respiratory system and other morphological characteristics.

As in other species of Hymenoptera, the male develops from unfertilized eggs deposited by unmated females. These females either deposit their eggs directly on or in the immature hymenopterous host or they deposit them in the fluid media surrounding such hosts. In this fluid media the eggs remain unhatched until the hymenopterous host is in a suitable condition for attack.

This peculiar phenomenon is of practical importance in the biological control of insect pests.

S. E. FLANDERS

CITRUS EXPERIMENT STATION RIVERSIDE, CALIF.

PSEUDOLARIX AMABILIS, A NEW HOST FOR DASYSCYPHA WILLKOMMII¹

DURING recent months the writers scouted for Dasyscypha willkommii (Hartig) Rehm, the European larch canker organism, in radii of $2\frac{1}{2}$ miles from the present known centers of infection in the two towns of Hamilton and Ipswich, Massachusetts. Though paying strict attention to the species of Larix present, several cankers closely resembling those caused by the disease on imported Larix europaea were observed on the branches of a golden larch, Pseudolarix amabilis Rehder. Specimens of the host were sent to and identified by Alfred Rehder at the Arnold Arboretum, while G. G. Hahn at the Federal Laboratory of Forest Pathology in New Haven, Connecticut, identified Dasyscypha willkommii from cultures typical of the parasite made from the inner bark of that host. This is the first host genus other than Larix upon which the true European larch canker organism has been reported in America.

> J. ARMSTRONG MILLER KENNETH F. ALDRICH

IN AID OF DR. LUDWIG MACH

DR. LUDWIG MACH, the only surviving son of the late Ernst Mach, is threatened by economic pressure with the prospect of having to abandon the house and laboratories in which he has for years endeavored to complete his father's physical researches. The premises contain a complete Archiv with Ernst Mach's notebooks and diaries, on the basis of which Dr. Ludwig Mach had hoped to prepare a memoir of his father's life. Eviction from the valuable but heavily mortgaged property would mean the destruction of all the material assembled. 3,000 to 4,000 marks would enable Dr. Mach to complete Volume II of the Prinzipien der physikalischen Optik, while 500 to 600 marks would stave off the immediate difficulty. Since the case is urgent, remittances of those interested should be addressed directly to Dr. Ludwig Mach, Vaterstetten bei München, Wasserburger Landstrasse 61, Germany.

ROBERT H. LOWIE

¹Report from Emergency Conservation Work and Division of Forest Pathology, Bureau of Plant Industry, in cooperation with the Northeastern Forest Experiment Station and Osborn Botanical Laboratory, Yale University.