Such shear concept Hess, now, and the present author earlier, hold to be fundamentally and completely erroneous.

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## ON THE GREAT ABUNDANCE OF THE BLACK WIDOW SPIDER

DURING this past summer, I have found the black widow spider (*Latrodectus mactans* Fabricius) quite common in the cities of Denver and of Boulder, and I have had reports that this species was quite abundant this year in Kansas, New Mexico and in Texas. In previous years, I have found these spiders in no small numbers under rocks and in protected sand banks in the prairies around Boulder and Fort Collins and in garages and basements in the outskirts of Denver. However, this is the first year that I have taken black widows in the center of the city of Denver, except on one instance when I captured a male in a centrally located high school on November 26, 1932.

While it is true that black widow spiders are more frequently observed this year because of wide-spread newspaper reports of their existence, I am convinced that the mild winter and very dry summer here in Colorado and elsewhere have favored their development and survival, since I find them more abundant in their natural habitat as well as in the city. Perhaps, one may account for their abundance in the city by the fact that they have come in to obtain moisture and to escape the drouth. In three blocks of the downtown district in Denver, I counted thirty-two black widow webs that were constructed, for the most part, in the corners of exposed walls of stores that were adjacent to the sidewalks. Contrary to popular opinion, I found most of the webs on the sunny side of the street.

This year I have found their webs in all sorts of situations. Some were constructed in sand banks that were exposed to the sun, others in the corners of chicken coops and rabbit pens, and still others on the undersides of plant tables in greenhouses. However, the majority of the webs were in basements and in garages. I found the most frequent prey to be grasshoppers, especially *Melanoplus bivittatus* Say. In fact, I counted the remains of eleven adults in one web that was constructed in a large trash receptacle. I have also noticed a marked decrease of other Theridiidae this year in the city. Possibly *L. mactans* is beginning to get the upper hand in the great struggle for existence.

ALBERT MILZER
UNIVERSITY OF COLORADO

## FRESHWATER MEDUSAE NEAR BUFFALO

FRESH-WATER Medusae were noticed for the first time in western New York on August 1, 1934. They occurred in a pond a few hundred feet from the shore of Lake Erie at Bay View, Lackawanna, a suburb of Buffalo, New York. They have been collected at intervals since from the same locality. The last date was August 28 when a few were taken all of which were of large size. About thirty, collected on August 17, were kept in an aquarium at the Buffalo Museum of Science for two weeks. At the end of this time they had all disappeared. The aquarium has been left undisturbed in the hope that eventually the hydroid form may develop.

IMOGENE C. ROBERTSON

## GRANTS IN AID OF RESEARCH FOR 1935

AT the October meeting of the Executive Committee of the American Association for the Advancement of Science the customary allotment of $3,000 for the grants in aid of research was approved. All applications for consideration this year must be received by the Washington office before Thanksgiving. At the Boston meeting the recommendations of the Committee on Grants were approved. These provided for continuing the practise of previous years in giving small grants for the completion of important projects already initiated or supplying apparatus or facilities where adequate funds are not otherwise available.

The official year of the association extends from October 1 to the following September 30. All grants not utilized within the year revert to the treasury on October 1. Individual grants have regularly been limited to a sum less than $500, but the small sums have been useful in meeting emergency needs or such as are not covered by other agencies.

Applications are filed on special blanks furnished by the permanent secretary's office and considered only once annually. Applications should be supported by letters from at least two sponsors personally acquainted both with the applicant and with the project. These applications are handled by the committee of which the membership for the current year is as follows: Arthur H. Compton (1937) (for Physics), *chairman,* University of Chicago; Edward W. Berry (1936) (for Geology), Johns Hopkins University, Baltimore, Md.; William Crocker (1935) (for Botany), Boyce Thompson Institute, Yonkers, N. Y.; Philip Fox (1935) (for Astronomy), Adler Planetarium, Chicago, Ill.; Carl E. Guthe (1934) (for Anthropology), University of Michigan, Ann Arbor, Mich.; Samuel Colville Lind (1934) (for Chemistry), University of Minnesota, Minneapolis, Minn.; C. C. Little (1937) (for Zoology), Jackson Memorial Laboratory, Bar Harbor, Me.; Walter R. Miles (1936) (for Psychology), Yale University, New Haven, Conn.

The report of the committee is made annually to the council, which votes the allotments in December.

Payment of grants is made by the treasurer. Unused portions of grants should be returned on October 1 of each year.

Recipients of grants are expected to send to the permanent secretary's office at least one report during the fiscal year. Where results follow by reason of a grant, any publication on the subject should include due acknowledgment of the aid of the association.

HENRY B. WARD,
*Permanent Secretary*

# QUOTATIONS

## CONSIDER THE ANT

IF embryologists and evolutionists find it useful to correlate the structure and functions of man with those of lower animals, is there not reason to believe that something may be learned by comparing the social systems of men and insects? Professor William Morton Wheeler, of Harvard, does so in *The Scientific Monthly,* with results that would have pleased Dean Swift. Some 10,000 species of social insects are doing their best to set an example of loyalty, cooperation and devotion to the highest ideals. Some of these exemplars of correct social behavior began as long as a hundred million years ago to live in model communities. In comparison man is a mere upstart. His age is not more than a million years, so that his community life is but an expression of "social infantilism or immaturity."

If man is socially unstable, it is because of the "problem of the male," in Professor Wheeler's opinion. He is a restless, aggressive criminal. Such insects as the ants, bees and wasps settle the problem he presents by reducing him to futility and elevating the female. Woman reigns supreme among them—several kinds of women, in fact. The termites go even further. Keeping only a single monogamous male, they reduce the queen's offspring to sterility and set them "to work with their equally sterile sisters in the kitchens, dining rooms and nurseries, and at building and defending the termitary instead of permitting them to sit around like a lot of social parasites and annoy the females."

No well-disciplined, self-governing colony of ants or bees would tolerate the conduct of the human male. That worthy, as Professor Wheeler sees him, is forever killing something because he is hungry or because he likes to hunt; fighting with other males for a mate, or struggling for some selfish object. Wasps or bees would not even jail such a creature. They would kill him. From his anthropoid ancestors he has inherited intense egoism, pugnacity and the unsocial instincts that have always kept society in a state of turmoil. Professor Wheeler sees us confronted with a trilemma. We must find some means of socializing the large body of males that threaten to wreck civilization. Or we must return to a more unprogressive society resembling the termite state. Or we must lapse "into something like Spengler's Fellahin society." Professor Ernst Bergmann, of the University of Leipzig, agrees. Crush the male and save society is his formula. Go to the ant, consider her social ways and be wise.—*The New York Times.*

## THE BIRTH RATE OF FRANCE

THE bureau of statistics has published a final report on the vital statistics of France in 1933. The general results are frankly unfavorable. There were 40,000 fewer births than in 1932, 200 more deaths and 600 more marriages. The excess of births over deaths was reduced to 21,600, as compared with 61,400 in 1932. The birth rate was reduced from 17.3 to 16.3 per thousand of population; the mortality remained stationary, and the number of marriages showed but slight variation (15.1, as against 15.0). The reduced birth rate is manifest chiefly in the southern departments of France. The central region shows little variation over the previous year. The excess of births over deaths is found chiefly in the departments of the North, West and East and has been so every year for a considerable period. It is surprising that the warmer regions of the South have fewer births, for Italy, under similar conditions, has an excess of births over deaths. In southern France, however, the population is less inclined to work hard. The people live a great deal in the open air and are fond of discussing, to little purpose, questions of politics, while the interest in religious questions is diminished. In place of industrial or agricultural work, they seek positions in the cities as employees or so-called civil servants. In this environment, increases in families appear to be less welcome. On the contrary, in the agricultural regions of Bretagne and Normandy, in which religious sentiments are more manifest and the interest in manual toil is greater, the families are larger. Children work in the fields at an early age. Similar conditions are found in the industrial regions of the North and the East, which are likewise more religious. In these regions school attendance is less rigorously supervised. The mayors of villages who have charge of school matters are inclined to permit peasants to keep their children at home for work in the fields. The conclusion is that the excess of births is in direct relation to the early use of the working power of the child and is in inverse proportion to school attendance, the progress of school instruction and interest in religion. Economic factors appear to be dominant. The number of children is evidently greater in regions where their services are profitable and is diminished in regions where their