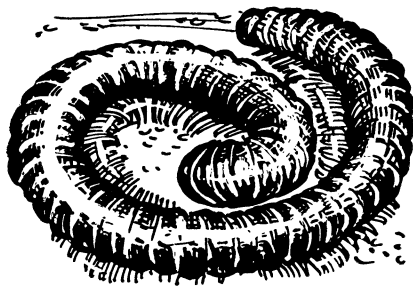


ZOOLOGY

**NATURE
RAMBLINGS**
by Frank Thone



"Thousand-Leggers"

WE OVER-RATE the "thousand-leggers" for both number of feet and wickedness of habits.

The older zoology books used to call them "millipeds," and class them with the centipedes (or "hundred-footers") into a group they called "myriapoda;" but it all came to the same thing: "milliped" is merely Latin, and "myriapod" Greek, for "thousand feet." But whether in Latin or Greek or English, a name that credits these wriggling soil-dwellers with a thousand feet apiece is undeserved exaggeration. They may seem to have a thousand feet when they unexpectedly crawl across the back of your hand, or ten thousand when you try to catch one before he gets back into his sheltering crack in the earth, but a mere three hundred is closer to the actual number. Each average thousand-legger is made up of a head and about seventy-five segments or joints, each of which has four legs.

Like almost every unusual crawling thing, the poor thousand-legger is commonly believed to be poisonous; whereas he really is quite harmless. Even his relative, the house centipede, is not poisonous, or at any rate is unable to bite through the relatively tough human skin. Only the large tropical centipedes are seriously venomous. The centipedes, both large and small, are carnivorous, and prey on insects, but the harmless "thousand-legger" is a vegetarian.

But this badge of inoffensiveness is also the sign of his disgrace. For many of the millipeds do considerable damage to the roots of plants, earning the ill title of false wireworms, by analogy with the true wireworms, which are the larval stages of beetles. In general, a "thousand-legger" in your garden is not to be regarded as a friend.

Popularly, the thousand-legger is usually somewhat loosely classed as "some kind of a bug," and so is his centipede second cousin. But even taking "bug" to mean "insect" (which will make orthodox entomologists squirm as though one were suddenly down their necks) the term is rather wide of the mark. Millipeds and centipedes are members of the same great zoological group that contains the insects, but they are no more nearly related to insects than goldfish are to humming birds, or frogs to elephants. They are sometimes rated as kin to spiders and scorpions, but even this relationship is remote. They are thousand-leggers, and that's all they are.

Science News Letter, May 5, 1934

VOCATIONAL GUIDANCE

10,000,000 White-Collar Men Must Change Jobs

TEN MILLION men who have been employed on white-collar jobs will be forced to change to manual labor during the next ten years, was an estimate cited by Dr. Morris S. Viteles, of the University of Pennsylvania.

Another 15,000,000 manual workers will find it necessary to transfer to jobs requiring skills other than those to which they have been trained, he predicted. He urged modern psychological methods of vocational study and re-education to meet this great problem of placement.

"In the case of these men there is no time to be wasted in trying out one or another job until by chance each finds that for which he is adapted," Dr. Viteles said. "The rapid adjustment and effective use of this man power require an exact analysis, by appropriate psychological techniques, of qualifications for work. Only in this way can there be sound and rapid re-education and placement of each in accordance with the new needs of industry and with the specific qualifications of each worker involved."

"Traditional notions of vocational fitness must give way to the use of psychological methods in measuring human capacities, temperamental traits, interests and skills that underlie job success," Dr. Viteles declared. He cited work already being done in employment research centers in Minnesota, Philadelphia, and New York, as pointing in the right direction.

▼ **R A D I O** ▲

ELECTRON OPTICS

an address by

Dr. C. J. Davisson

Of the Bell Telephone
Laboratories, New York
City

Wednesday, May 9, at
3:30 p. m., Eastern Stand-
ard Time, over Stations of
the Columbia Broadcasting
System. Each week a promi-
nent scientist speaks over
the Columbia System under
the auspices of Science
Service.

"The analysis of individual ability, emotional characteristics, and interests is only the first step in a scientific program for putting displaced labor into new fields of employment," he explained. "This must be supplemented by psychologically sound training programs for teaching men the new jobs for which they are qualified."

The former practice of choosing a vocation and then training for that particular job must be replaced by an attempt to increase general skill and dexterity and by learning various applications of these fundamental abilities. The aid of the psychologist must be enlisted to solve the problem of developing adaptability in the worker. Employers can do their part in this program.

"Industry, for example, can facilitate transfer within the organization by training its experienced workers—particularly the older ones—in the principles and practices of the jobs to which each can be mostly easily transferred in case of replacement of his job by machines, of changes in company practices, or of temporary economic depression," Dr. Viteles said, adding that the practicability of such a program is indicated by training plans already being pushed forward by a number of progressive organizations.

Dr. Viteles' address was broadcast over the Columbia Broadcasting System.

Science News Letter, May 5, 1934