worthy Haidas of Masset, B. C., who are capable of corresponding and executing the purchase of a pole or poles, and of engaging other help and superintending the lowering and creating of poles, their transportation across the inlet from Yan to the wharf at Masset and their shipment to destination. The poles are very heavy and the cost of handling will be perhaps equal to the price of the poles. They are soft and their own weight will crush parts of the carvings unless they are properly crated. Some of the poles 50 to 60 feet in length may have to be cut in sections for shipment.

Here is an opportunity. Examples of this unique art now going to decay may be rescued, loaded and started on their way to safe-keeping in our museums at the rate of about one hundred dollars per specimen.

HARLAN I. SMITH

GEOLOGICAL SURVEY, OTTAWA, CANADA

TO KILL CATS FOR LABORATORY USE

A QUICK and humane method of killing a cat or other small mammal in the laboratory is to put the animal under an open topped bell jar, i. e., a bell jar which has a small bottle-like neck at the top through which there is an opening. This mouth should be comparatively small, not over a half inch in diameter, and the neck should be at least an inch long. After the animal has been placed under the bell jar, a very small quantity of ether or chloroform is poured through the opening in the top, and it is then corked up. The liquid strikes the sides of the neck and immediately runs down in a thin film over the inner surface of the bell jar and evaporates into the chamber in two or three seconds. The enclosed animal shows its effects almost immediately, and dies in a very short time.

While it is not necessary, it is better to seal up the base of the bell jar because occasionally the animal falls down after it becomes unconscious, and its head comes in close proximity to the crack between the jar and the object on which it is placed, and it thus obtains sufficient air to delay its death. This can be pre-

vented by wrapping a damp towel around the base so as to exclude the air. By placing the bell jar on a glass plate and sealing with vaseline, an airtight chamber can be made, but the advantage thus gained does not make up for the care necessary in order to avoid getting one's clothing in contact with the greased surfaces.

HORACE GUNTHORP

Washburn College, Topeka, Kans.

ANTS AND SCIENTISTS

To the Editor of Science: As a result of watching a colony of ants and attending a scientific meeting on the afternoon and evening of the same day, it seemed to me the two teeming hordes of excited workers—the insects and the scientists—had some queer traits in common, as:

- 1. How they work in ranks and cohorts, mutually attracted by some exciting discovery that a wandering member has stumbled upon, and that awakens the most astounding and intense interest.
- 2. How they immediately set to work to pull opposite ways, fight valiantly over their treasure, and heroically keep it up after they have amputated some of each others' legs and other appendages.
- 3. How they take up one thing, drag it about for a time, and then drop it for some other thing.
- 4. How they often expend enormous labor on something that isn't worth a darn; and here Mark Twain's story of the two ants and the grasshopper leg came to mind.
- 5. How their splendid industry is generally circular in direction; so that after long struggle, they get the thing back to the exact spot from which it started.
- 6. How they firmly believe that "they are the people" and refuse to admit or bother over bigger intelligences that are their interested observers and that can and sometimes do sweep them and their hills and runways and stores into oblivion.
- 7. How, measured by final results, they are nevertheless a wonderful body of workers;

and in tireless energy, patience and talent, stand out preeminent in their respective groups.

ALBERT MANN

QUOTATIONS

THE BRITISH NATURAL HISTORY MUSEUM

WE learn that there are at present vacancies in the entomological, zoological and geological departments of the Natural History Museum which have been open for several months, and that more vacancies are expected in the immediate future. The museum is one of the great national instruments for the collection, classification, and preservation of specimens of the animal and plants, the rocks and minerals, of the world. For the adequate performance of its duties, it must have a full staff of able and devoted specialists. It should require no defense on utilitarian grounds, for the advancement of natural knowledge of the kind to which it is devoted is recognized as a privilege by every civilized state. But there are plenty of utilitarian arguments. Take entomology alone: number of living species of insects is estimated at over 2,000,000. The preserver of insect life on human life is continuous. As household pests, as carriers of disease, as enemies of stores or crops, they are every day being found to have an unexpected economic importance. It is to the experts and the collections of the Natural History Museum that we have to turn for the requisite information, and unless the museum has an adequate staff we turn in vain. The difficulty in filling posts with suitable men is partly financial. The present rate of pay for assistants in the second class is from £150 to £300, and in the first class from £300 to £500 a year, with a temporary war bonus. These salaries—the "despair" of Professor Stanley Gardiner, whose cogent letter we publish in another column—are no longer sufficient to attract or to retain men of the right attainments, unless they happen to have private means. The smallness of the staff and its inevitable division into water-tight compartments makes promotion slow and capricious. These disadvantages are increased by an antique privilege of the principal trustee, who nominates candidates for vacancies instead of advertising for them. It has frequently happened in the past that middle-aged mediocrities have been brought in and placed over the heads of the existing staff because of their acquaintance with a group in which some of the trustees are interested. The fact is that the mode of governance of the Natural History Museum is medieval. It should be separated from Bloomsbury and placed under a body of trustees selected not because they make a hobby of collecting bugs or butterflies, but because they have a wide knowledge of the scientific purposes which it is the business of the museum to subserve.—The London Times.

SCIENTIFIC BOOKS

Geodesy, including Astronomic Observations, Gravity Measurements and Method of Least Squares. By George L. Hosmer. John Wiley and Sons. First edition, 1919, 377 pages, 6 × 9, 115 cuts.

This book is especially to be commended for the skill shown in the selection of illustrations, both photographs and drawings, and for the excellence of arrangement and printing of the text and tabular matter. These things contribute substantially to the satisfaction and comfort of the user.

Still more is the book to be commended for its positive qualities, which make it a distinct and valuable addition to that part of the literature of geodesy which serves to carry information and understanding from the extreme specialists who are developing the methods and extending the knowledge in these fields, to the students and the practising engineers who desire to get a well-balanced view of the whole field of geodesy quickly. The old well-known matters are restated well in effective grouping. The ideas, formulæ and tables most needed by the student and the practising engineer are selected from the great mass of available material with rare skill. The recent developments in geodesy are shown in true perspective with respect to old things, to a quite unusual extent for a text-book.