

which our knowledge of these subjects is still fragmentary and imperfect, — points which are to be settled by direct experiment. Such experimental researches are of the highest value; and it is much to be regretted, that while the governments of England, France, and Germany, are employing their leading scientific men in such work, Congress has deliberately stopped a most promising series of investigation of this kind, and has resolved to confine its efforts to paying bills after an epidemic has made its appearance.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

Use of the moxa in Japan.

As I rode behind the naked-backed jinriksha coolies, I noticed along each side of the spine, from the head to the hips, white, irregular scars, about the size of a dime, indicating, as I supposed, some skin-disease, to which they are very subject from their diet and exposure when young. These were the marks left by the *moxa*, a household remedy, probably invented in Japan, — a painful and powerful agent, well known in modern surgery. It is made of the pith of a reed (*Artemisia*), mixed with powdered charcoal, in a conical form. This is ignited, applied to the skin, and allowed to burn slowly until extinguished. The flesh is severely burned, with the resulting scar alluded to. As if this were not sufficient to expel the 'winds and vapors,' which they and the Chinese believe to be the cause of all diseases, this is combined with acupuncture, the needle passing through the moxa deeply into the tissues, and conveying the heat to the supposed seat of disease. As they employ this every spring as a preventive measure, it is rare to see a coolie without these scars. The accoucheur calls it to his aid, and is directed to burn three cones on the little toe of the right foot to accelerate the operation of nature. Even infants are thus tortured. A child about three years old, suffering from a wasting diarrhoea, who had thus been uselessly tormented, was brought to me; the many wraps having been removed, a simple water dressing and mild opiate brought the little creature round all right in two days. SAMUEL KNEELAND.

The least bittern in Newfoundland.

While on a recent visit to Newfoundland, I examined a mounted specimen of the least bittern (*Ardetta exilis*) that had been killed in a fresh-water marsh about a mile from St. John's, in the early part of October, 1882. The latitude of St. John's is 47° 33' N., and it is hardly necessary to add that this species has not previously been recorded from so far north.

C. HART MERRIAM, M.D.

Locust Grove, New York.

Science for workingmen.

Your article in the number of *SCIENCE* for April 20, upon this topic, was timely and suggestive. The example offered by the Baltimore and Ohio railroad is indeed worthy of imitation. But such work, however novel it may be in the east, has been done to a greater or less extent in this state for several years. It may interest your eastern readers, who sometimes think that we westerners must always wait for them in such matters, to know of a few attempts here to do similar work for the working-classes. Three years ago the officers of the St. Louis and San Francisco railroad maintained, with the hearty co-operation of its friends, a course of lectures in at least one im-

portant town on its line of road, for the special benefit of the railroad employees.

Two winters ago the Crystal plate-glass company, whose works, situated about thirty miles from this city, bring about them a population of nearly fifteen hundred, arranged a similar course of instruction lectures, which were attended by audiences of six and eight hundred persons.

The president of the St. Joe lead-mines at Bonne Terre, about seventy-five miles south-west of St. Louis, has just begun a like work, and intends to provide a good course of practical lectures, or talks upon science, literature, and travel, for the coming winter.

At Bonne Terre and at Crystal City, reading-rooms and libraries have been opened for all who choose to avail themselves of such opportunities; and at the former place a public reading from some standard author is given every Friday evening. The results attending such efforts to help working men and women have been sufficient to encourage these and other corporations to go on to still better things. The knowledge conveyed, and impulse given to thought and study, are only a part of the good done. A better relation between employers and employed is sure to come from the good feeling which prompts such action, and the grateful appreciation with which it is received.

Washington university is in this matter willing to take the position assumed by Johns Hopkins university in Baltimore, and has some half a dozen or so among its busy professors who are always ready to respond heartily to such calls for help. This institution has, in fact, been the main dependence of the corporations above mentioned in their efforts to do something to entertain and instruct their people.

We have accomplished but little here yet, but it may not be amiss to put ourselves on record as having begun. It helps us, always, to know what others are trying to do.

M. S. SNOW.

Washington university, St. Louis, May 2.

Robins, sparrows, and earth-worms.

An amusing bit of impertinence on the part of the immigrant house-sparrow is seen in his habit of stealing earth-worms from our great lumbering, native American robin. As everybody knows, the robin is not a little skilful in extracting earth-worms from their burrows in land covered with short grass, as in pastures, lawns, and yards. The bird quickly detects the worm's head, as the creature lies resting near the mouth of its burrow, and seizes it instantly by a sudden blow with the beak. The head of the worm once firmly grasped, the robin straddles his legs apart, braces himself firmly, and gradually lifts his head to the uttermost, and thus slowly, by what is manifestly a powerful and a fatiguing effort, drags out the resisting worm. Having succeeded in an important enterprise, the bird very naturally pauses for a moment to take breath; and at this critical instant of time a sparrow steps forward, out of a squad of these birds which have been watching the robin's proceedings, quietly takes the worm from the robin's mouth, and incontinently flies away with it, leaving the original possessor in blank amazement. The transaction is well worth seeing for its own sake, and needs but to be looked for, in order to be seen frequently in and about our cities; and it suggests a question which may, perhaps, be profitably studied by the coming generation of naturalists. Indeed, the fact itself is worth putting upon record as a sort of bench-mark to serve as a point of comparison for observers in future years.