

The case against the rook is not yet proven, but the evidence should be collected together and submitted to the consideration of a scientific jury.

SYDNEY J. HICKSON.

The University, Manchester, June 22.

DR. LONG (NATURE, June 20, p. 304) raises a point which I think must appeal to many. The potential damage, represented by the 23.9 per cent. of injurious insects, is surely the one factor upon which everything depends; and, difficult though it is to see just how the necessary information is to be acquired, we are scarcely justified, so I am inclined to think, in arriving at any conclusion without it.

Is it not a fact that the Hungarian Central Office for Ornithology reached the conclusion, after careful investigation, that the rook is of service both to agriculture and to cattle-breeding?

H. ELIOT HOWARD.

Hartlebury, June 22.

"Harbour Engineering."

LEST it should be assumed that I tacitly acquiesce in certain sins of omission alleged in the review of the second edition of the above book, which appeared in NATURE of June 13, may I point out that the matters in question (slipway construction, durability of concrete in sea-water, mechanical handling of material, etc.) are discussed so fully in the companion volume on "Dock Engineering," to which they are equally, if not more, appropriate, that it seemed undesirable to include any extended notice of them in "Harbour Engineering"? Reference to this fact is to be found in several places (pp. 147, 265, etc.).

BRYSSON CUNNINGHAM.

June 20.

UNITS AND UNITY.

THE note that appeared in NATURE of March 7 (p. 14) about the nomenclature of temperatures in centigrade degrees measured from a zero 273° below the normal freezing point of water invited further contributions on the subject of units, and other circumstances transform the invitation into an imperative demand. The report of Sir J. J. Thomson's Committee on Science Teaching, without making a definite recommendation for the adoption of metric units, deliberately adjusts its scheme of education in such a way as to make familiarity with metric units a part of general education. What is the use of doing so if metric units are not to be used for the practical affairs of life? Our present situation is ridiculous. Every boy and girl at school who "does science" now learns that metric units are the universal medium of scientific expression, and is practised in their use. At the same time, we cry out for more science in our practical life. What can we expect from our appeal? A boy goes home at the end of term and tells his father that he has been doing science, weighing in grams, measuring lengths in centimetres, pressures in millimetres of mercury, and temperatures in degrees centigrade. Surely the most natural remark for any naturally minded parent to make is that his boy need not pay any attention to that, because, if it had any

bearing at all upon practical life, he would certainly have been taught to use pounds or grains, inches, and Fahrenheit degrees, and not the outlandish things that nobody uses after he has left school. There is a story told of Adams, the astronomer, who, in a Swiss hotel, asked for a bath, and was particular that the water should be at 100°. After a long time, the maid came and said she had done her best, but she could not get it above 95°; and I doubt if, even at this day, the President of the Royal Society himself uses the same unit for his bath-water and his water-bath.

If science is to be a part of practical life, the units of science and the units of practical life must be the same. One thing or the other: either practical folk must learn to use metric units, or British men of science must use British units in their laboratory courses. The present divorce between education and practice is ruinous for both. If we want instruments according to metric measures, we get them from instrument-makers who understand such measures, not from those who do not—that is, we tend to get our scientific instruments mostly from abroad—and so on in everything. Hitherto men of science have not cared, because we can use either measure with equal facility, and we take a little pedantic pleasure in being bilingual in that sense. It is the same with our language. We take a tiny pride in the small difficulties of pronunciation that stand in the way of its being a *lingua franca*; we sneer at any attempts to bring spelling into agreement with pronunciation; we advocate the learning of Esperanto or Ido instead, to avoid international jealousy, forsooth. Shakespeare wrote "Gloster," but we lose marks if we do not write "Gloucester"; classical authors wrote "gage," but we must write "gauge," and we chuckle inwardly when our friends write "guage." There is a *ton* of "the high life" in knowing that "C-h-o-l-m-o-n-d-e-l-e-y" is pronounced "Marchbanks" which we are all proud of; and meanwhile English is set down as impossible for the use of the world at large.

The attitude of mild complacency with our own superior knowledge runs through everything. I have heard it said quite recently that meteorology stands in the way of the adoption of metric units. Certainly that is not true of the Meteorological Office. Since May 1, 1914, we have gone a step further than most people in using C.G.S. units for pressure, millimetres for rainfall, metres per second for wind velocity in the Daily Weather Report, and we use absolute temperatures wherever we dare. We have even gone so far as to use milliwatts per square centimetre for solar radiation, instead of the preposterously unscientific unit gram-calories-per-square-centimetre-per-minute. But it is difficult to keep these things going without the support of those who could help. The United States Weather Bureau and the French Meteorological Service, and some others outside, have gone with us. In this country nobody but the Meteorological Office appears to