recurred regarding the reality of Gondwanaland as pictured to us by Blanford and Suess. More recently Charles Schuchert and Bailey Willis have discussed this problem; and the former by his 'Land Bridges' and the latter by his 'Isthmian Links' show that it is possible to provide sufficient land connections for the migration of animals and plants in the past without having to postulate the existence of such a continuous and extensive land mass as the Gondwanaland. Thus both these authors are inclined to hold on to as much of Dana's doctrine of permanency as seemed possible.

At the beginning of this century, this problem of the origin and history of the continents and oceans came to be tackled from an altogether different point of view, and the idea of the possible horizontal displacement to great distances of continental masses—or 'continental drift' as it is now generally called,—was put forward by Taylor and Wegener. This theory very soon attracted considerable attention, since it opened up "new possibilities of migration of land animals and plants, without absolute destruction of the long cherished geologists' pet of permanency for the oceanic basins". Within the last few years, Wegener's theory has been critically examined not only by geologists and palæontologists but also by physicists and mathematicians, and quite a large volume of controversial literature has since grown up. As Sir Thomas Holland points out, a final judgment on the acceptability or otherwise of this theory will have to be given only after accumulating a large number of observations based on close surveys of special areas, and analysing the evidence dispassionately. An admirable beginning in this kind of work has been made by A. L. du Toit for the two opposite shores of the South Atlantic Ocean and his work in these two areas shows that there is a "remarkable duplication of characteristics of a stratigraphical, palæontological, tectonic, volcanic, and even of a climatic nature"; and he believes that these resemblances are "too numerous and of a kind too significant to be mere coincidences," and leave little doubt "that South America and South Africa have actually travelled 2,000–3,000 miles from one another since the end of mesozoic times". The thing now to do is to follow in the footsteps of du Toit and closely examine other areas and collect more data; for this problem—"whether the oceanic basins and continental masses have ever changed places by vertical rise and fall, or whether the continental fragments have moved superficially to their present positions over the ocean floor"—can be settled only in one way; and that is, as Sir Thomas puts it, "by the patient accumulation of data so numerous and consistent that little room will be left for the assumption of mere fortuitous repetition of similar phenomena."

Within the brief space of about 20 pages, Sir Thomas Holland has in this lecture given us a most lucid and masterly review of ideas on a subject which from the days of Huxley himself has always been coming up for comment and discussion in some form or other. It is a fascinating subject in which not only geologists but various other scientists are greatly interested, and Sir Thomas Holland has done a great service in taking stock, as it were, of our present position in the matter, and pointing the way to further study and research.

L. Rama Rao.

Sugarcane—Sorghum Hybrids in Wild State.

RELIABLE information has been received that in the wild unexplored parts of New Guinea, plants that are considered by competent authorities to be hybrids between Sugarcane and Sorghum, have been found growing there in the wild state. The Imperial Sugarcane Breeding Station at Coimbatore was the first to artificially produce these intergeneric hybrids, and we learn that certain of the complicated crosses made at Coimbatore between Sugarcane and Sorghum have thrown out types similar to certain indigenous Indian canes. This suggests the possibility of certain of the Indian canes having originally risen as hybrids between the Sugarcane and the Sorghum.