Zimbabwe: A Re-statement of its problem, and a solution

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and are the basins into which the rivers Yo and Shari empty themselves. Judging from the accounts of early explorers it would appear that the lake has lost one-third of its area by evaporation in the course of the last fifty years. Possibly the Harmattan wind which prevails in this part of Africa for one-half of the year is responsible for the decreasing area of the lake, partly by reason of the evaporation caused by its extreme dryness, and partly also owing to the quantities of sand—especially on the east side—which it deposits, and which form islands of constantly increasing size. The waters of the lake are shallow, averaging between two and six feet in depth, and in no place has a sounding of more than twelve feet been yet obtained. The lake contains quantities of fish, and there are also numbers of hippopotami, alligators and turtles. Game abounds in the vicinity, elephants, giraffe, rhinoceros, pigs and antelopes all being found in considerable numbers. The islands of the lake are well populated, though many of the inhabitants of the archipelago have been probably driven there temporarily by slave-raiding marauders. They carry on a large trade with the people of Bornu in dried fish, and also in cattle in which they are especially rich. Until recently these herds were the objects of frequent raids on the part of the Tubus, the inhabitants of the country to the north of the lake; but the latter did not always enjoy the fruit of their rapacity in peace, as they in their turn sometimes fell victims to the Tuaregs, the “kings of the desert.”

ZIMBABWE:

A RE-STATEMENT OF ITS PROBLEM, AND A SOLUTION.

By A. H. HARLEY.

THE hypotheses of Science have long been taken up into our intellectual life; its methods are now being applied to all our interests. Out upon Nature, in upon himself turns man's inquisitive spirit accumulating a limitless material, but meaningless till submitted to the classification that passes with us for knowledge. Fain would he regulate destinies: not so elusive are the secrets of the eternity behind him, before his imagination the world may yet stand in the first blush of its youth. But into the effort to rehumanise the impersonal past, and to read a history in fossil or fragment must be adopted those methods of “organised common sense” that relate and classify, and treat only the irrational as inexplicable. Their application hails the advent of specialism, before which a science breaks up into departments, and one man's authority is particularised.

Half a century ago Archæology was defined by Sir Charles Newton as “the science of all the human past.” Since then the range has been found too wide. The historian for his researches has appropriated the literary documents from the mass of materials, but more than enough remains, and few students will dissent if, with Mr. Hogarth, we define

Archæology as "the science of the treatment of the material remains of the human past" (Preface to *Authority and Archæology*). The volume now before us, *Mediæval Rhodesia*,¹ by Mr. David Randall-Maciver, is in intensest sympathy with this definition, and if to the end the author refers to documents it is not by way of appeal from his material, but that he may bring life into his picture.

Only some fifteen years ago the world was told a tale of East Africa, how a round thousand years before the present era certain sons of Arabia had visited and toiled in Rhodesia. It touched us gently in the manner of ancient tale or Oriental. Like a robe of fine-spun it settled, mantling itself easily round us. A few with theories or other qualms chose to be dissociate; their attitude seems justified by this recent publication.

Zimbabwe, chief of Rhodesia's numerous ruins, was known to the Portuguese settlers in East Africa, but stood neglected or forgotten for near three hundred years. The credit of rediscovery rests with Adam Renders, who pitched tent in its neighbourhood in 1868; Dr. Karl Mauch gave the first information. Since then many have visited the ruins, but the two memorable years are those when the British Association took action, for by them are dated the two theories of their origin. In 1891 Mr. Theodore Bent, aided by a grant from the Association, made explorations at Zimbabwe, and published his conclusions in his *Ruined Cities of Mashonaland*. In 1905, when the Association arranged to visit South Africa, Mr. Maciver was asked to precede them and report on the ruins. Between April and September he worked on several sites, including Zimbabwe. The results of his exploration are detailed in *Mediæval Rhodesia*, of which his paper in *The Geographical Journal*, April 1906, is a comprehensive survey.

Whatever unrest the finds may have occasioned certain experts, the ordinary reader must have regarded the utter absence of inscriptions as at least a misfortune for the older theory. This ill-luck does not haunt that which is now proposed, for, when the identity of the people has been established, we shall see that an inscription might have been a misfortune.

The author had opportunity to visit seven sites,—Niekerk, Inyanga, and Umtali in the north-east of Rhodesia; Nanatali, Dhlo Dhlo, Khami, to the south-west in Matabeleland; and Zimbabwe, near Victoria. From the evidence he has gathered we would show the homogeneity of their buildings. Zimbabwe, he claims, can be translated into terms of the others; its "Temple" can be "explained as a combination of the developed form of Inyanga hill-fort with such a stone-fenced kraal as Nanatali" (p. 84).

A.—HOMOGENEITY OF THE BUILDINGS.

The buildings of Niekerk and Inyanga are reducible to three types: forts, pit-dwellings, and ordinary dwellings.

¹ *Mediæval Rhodesia*, by David Randall-Maciver, M.A. Illustrated. London: Macmillan and Co., 1906. Price 20s. net.

Forts.—None of the forts visited is the exact reproduction of its neighbour. As in our own architecture the site influences the form, exigencies the minutiae. The prevailing shape may be termed elliptical—under a certain reserve, for symmetry was sacrificed to expedience. The contour of the ground was studied; a boulder could support a wall, and it was a coign of advantage to defender or assailant as it was within or without. This remark anent the large eastern fort at Inyanga is memorable for its own sake, and for a light it throws on the buildings on all the sites:—"There is no uniform design; the building was evidently carried out by many hands working simultaneously at different points, and the resulting irregularities were compromised according to the inspiration of the moment. Thus, a wall was begun of a given thickness, but, on being carried to a certain point, came into collision with another wall, whereupon its thickness was reduced to meet the necessities of the new case" (p. 6). The walls are of rough construction, of undressed stone, and round the inner side runs a banquette. In the interior notice is attracted by rings of stone at Inyanga, and circular platforms of clay at Niekerk, whose use will be explained later.

The Niekerk fort, which is specially referred to in the thesis of the "Temple's" explanation, merits a detailed description. It shows a slight development of form; in shape elliptical, it is divided into halves by a curved wall across its lesser axis. Within the southern half is a built enclosure "standing free of the outer wall in such a way as to leave a passage about two metres wide between the two, suggesting the origin of the well-known 'Parallel Passage' at Zimbabwe." There are several circular platforms in the northern half. The stone-laying is rough, but "much dexterity has been shown in dovetailing the living rocks, one of which towers up six metres, into the circuit of the rampart."

Pit-dwellings.—These dwellings are almost invariably situated on a hillside or an incline. The builders, having selected a suitable site, raised a massive platform. The surface was kept horizontal; the frontage towards the hill-foot was therefore the steepest. Within this platform is a pit, and from it there leads a narrow underground passage emerging into the open uphill. The pit, then, is raised not sunk, and with its passage is on the natural level.

The question of the purpose of the pit has drawn the several conjectures of cattle-sheds, slave-pits, grain-stores, etc. Our author contends that the importance of the pit and the passage have been emphasised to a misconception; they are but parts of a complex whole. Be it noticed that the surface is occupied with circular enclosures or with clay platforms, such as were observed in the forts. Evidence was forthcoming that the enclosures and platforms had been the scenes of huts, with stakes and thatching in the art of modern Kaffir erections. The hypothesis of a recent Kaffir settlement might readily suggest itself, but for the fact that there is no evidence of modern natives having squatted in Niekerk, and "that the same characteristics are extended over so wide an area." These constructions on the hillside were miniature citadels, and the pit was a place of refuge. The occupants of the huts may frequently have

been called on to defend themselves, and, in the event of a strong invasion, the defenders would be able to turn all their energies to resistance, undistracted by anxiety for their women and children who would be sheltered in the pit; and, in the last resort, one warrior at the entrance to the passage could refuse admittance to a host. The proximity of the citadels to forts adds weight to the evidence from their common possession of enclosures and platforms that both types were contemporaneous.

Ordinary dwellings.—The feeling of security, derived probably from the neighbourhood of a fort, effected changes in the pit-dwelling, gradually more radical, till the original cannot be traced in the expressionless final form. But stages could be observed which proved the evolution of this new type.

The majority of the buildings at Umtali are dwelling-places, merely girdle-walls with the now familiar rings of stones. There are no forts or miniature citadels. There are no lines of defence on the hills.

Lines of Defence.—Another reason for thinking that the inhabitants of Niekerk lived in constant fear of attack is found in a new evidence of their preparedness to withstand the most formidable foe in "one of the vastest series of entrenchment lines anywhere in the world," "built walls, row on row, covering plateau and hill alike." A system emerges; there are nine or ten well-defined hills; around the bottom of each runs a boundary wall, behind which and at a few metres interval series of thirty to fifty or more girdle-walls encircle each hill to the village on the summit. For their explanation the cultivation-terraces of South Arabia have been urged. Professor Keane illustrates (*Great Zimbabwe*, Introduction, p. 34) by excerpts from two narratives the close correspondence, but where a careful synthesis is preferred to a partial observation the following statement will receive due acknowledgment: "These intrenchments have been erroneously described as irrigation terraces by those who have only seen the lower series and the bottoms of the hills. . . . The view that they were made for purposes of cultivation would be untenable in any case. There is not enough water to irrigate, the walls are too high, except close down to the valleys, to allow of crops growing between them, nor is there any indication that soil has washed out from them. At the most a few small crops may have grown between the lower tiers, but the immediate connection of the walls with the pit-dwellings and forts is quite unmistakable" (p. 28).

(a) That the object of the northern buildings was to secure the indwellers against invasions is one position which may be asserted; the evidence suffices for a second, the desired protection was from a Northern foe, for, whereas at Umtali there are no fortifications, between it and Inyanga the pit-dwellings begin, and nearer Inyanga the hill-forts; farther north Niekerk is similarly defended, and rendered practically impregnable by a system of intrenching extending over every hill within view northwards, and intermittently probably to Nani. From the region of the Zambesi came fearsome marauders, but met at Niekerk and Inyanga a worthy foe, a people that knew the arts of war and of peace; that discerned the possibilities of their ground, and made safety doubly sure; that engineered with skill their watercourses, and attained

excellences in dry-building. Was this an African people? The Kaffir preserves at all events the model of their huts; and nothing has been observed that is not African.

"The ruins of north and west explain Zimbabwe"; we look to the west therefore for new features. The buildings on these three sites are of one type, and that not unknown to us—elliptical enclosures, girt by a wall of undressed stone, and occupied with circular platforms. The platforms here and at Zimbabwe are of granite-cement, but they filled the same function as those of clay, they provided the flooring of huts. The type of building is, then, the northern fort. But, whether paradoxical or not, it is true that the problem of these western buildings is suggested by the two known factors, the wall and the platforms; for the former is not built consistently throughout, and the platforms hold various relations to it. Are there in these facts signs of different periods and builders? The following references are to Dhlo Dhlo and Nanatali in particular, but not exclusively, for Khami possesses a "minute similarity of structural detail" with the others.

On the west and north-west quarter of the citadel at Dhlo Dhlo the main wall rises in three well-built tiers, and is variously decorated with patterns of herring-bone, chessboard, chevron, and cord. "These patterns are all characteristically African, and found in every corner of the Continent, north, south, east, and west" (*The Geographical Journal*, p. 328). Flush with the top of the third tier is a platform, which shares with another on the east side of the dividing northern entrance the distinction of being highest in the whole enclosure. The cement floor of the citadel might have been raised to a common level, but it has not, and for another reason than the incline of the site,—this platform was held in the highest honour, and picked out to every eye by the ornamentation. We may turn to Nanatali for confirmation. Here the similarly tiered and ornamented wall extends from a platform on the west to a point a little beyond the north entrance, which leads directly and exclusively to a platform in the centre of the fort. Its intention therefore is to mark off these two platforms as of special note. But there are other features which would incline one to this view; the platforms are on the same level; they are the highest in the enclosure; that on the west is built in the line of the main wall, that in the centre is an actual hub with radiating walls to the girdle-wall.

Do the materials yield a clue to the secret of this distinction? Our author finds several grounds for conjecture that a witch-doctor occupied the hut on the western platform. By means of the private path from his dwelling along the inner side of the tiered wall he would have ready access to the chief; for the commanding eminence of the central platform seems explicable only on the ground that its hut housed a chief in becoming retirement from his followers in the southern and plainer part. Possibly there would be support for this conjecture in a remark of Mr. Hall: "Before the British occupation the witch-doctors practically ruled the people, and their influence in many known instances was greater than that of dynastic chiefs" (*Great Zimbabwe*, p. 97). The decoration therefore picked out sacred or venerated precincts.

The outer-wall is not consistent throughout its length. At Nanatali it varies in thickness from 1·70 to 4·0 metres. At Dhlo Dhlo a girdle-wall is carried round from the north-east till it meets the tiered wall on the west, but "this girdle-wall and the enclosures and rings against it are quite undistinguishable in style from the rough buildings of Inyanga, of the Niekerk Ruins, and Umtali." One might be disposed to assign them to another period than that of the better-built ornamented wall, but that they complete the defences, and are therefore essential to the plan of fortification; they contain besides "exactly the same cement platforms that are found within the citadel." There is no case for the hypothesis of different periods, and the buildings of this district are but developments of the northern fort.

(b) The evidence from these sites may be thus summed up: the buildings in the west are but a development and elaboration of the rude northern fort; the builders' wealth of design has been spent on the important quarter in comparative indifference to the remainder.

In these later days the ruins near Victoria have appropriated the name Zimbabwe. The received translation is "houses of stone," and in its original use the term denoted the residence of any chief. The ruins, massive and majestic, but wanting the beauty and symmetry of Nanatali, comprise three groups:—the Acropolis, the Valley Ruins, and "The Elliptical Temple." The last is the best known. Mr. Bent explored it, and the designation is his. This latest explorer has found reasons for substituting "The Great Kraal." The "Temple," he maintains, reproduces on a vaster scale the plan of the fort described at Niekerk; it resolves itself into two nearly equal divisions; a parallel passage runs along the line of the east wall; there are dwelling-platforms within. Further, "the northern division exhibits the same scheme of arrangement as that seen in its most perfect form at Nanatali" (p. 71). The façade of the main wall on the east and south-east carries a decorative pattern, and we are not now surprised to find that the quarter behind was held in signal estimation; it is here that the large cone stands. The greater part of the southern division was occupied by platforms. "Elliptical Temple" is therefore a misnomer; more properly might the stately ruins appropriate Bent's unsupported interpretation of Zimbabwe, "Here is the Great Kraal."

One point requires present notice—the main wall, it has been said, does not belong in its entirety to one period; it exhibits an "ancient" and an "old." The west wall provides the test case. It is admittedly slighter than the east wall, for example, inferior in its construction, and shows a misfit where it joins the northern; further, near this joint there is a foundation of a wall which would have continued the main on a truer curve (cf. Preface, *Great Zimbabwe*, by R. N. Hall). These facts are formidable, rather were so, for by this time we have ceased to regard Zimbabwe as an isolated unit, and we translate it into terms of the known, viz. meaner parts yielded to the more conspicuous in workmanship and elaboration. If the west wall is unsymmetrical and shows a misfit, that was stated as a characteristic of, not as a charge against the companion forts in the north. The supernumerary foundation-wall is

not without its parallel, for the northern and the eastern forts at Inyanga show similar foundations as lines of intrenchments or ruins of outworks.

Zimbabwe, for the hurried examination of the Acropolis and the Valley Ruins presented no new problems, has its fellows; its veriest detail is a sympathy. It possesses in its Cone one peculiar feature, or idea rather, for in a piece of dry masonry of such a height the batter-back, which has resulted in the conical shape, may have been found necessary. With the western trio Zimbabwe developed a grandeur and a grace that the rougher buildings of the north could not boast, but it worked upon a derived form. "The Temple can be completely explained as a combination of the developed form of Inyanga hill-fort with such a stone-fenced kraal as Nanatali."

From the facts before us we can deduce the relative dating of the ruins. The strongest measures of defence were taken in the region of the Zambesi. Niekerk and Inyanga show so similar fortifications that they can be assigned to the same period. These measures relax at every advance southwards, till the rather expressionless Umtali is reached. There is every probability that this site falls into line with Niekerk and Inyanga, for the weakening system of fortification is perished, and it repeats the type of the ordinary dwelling at Niekerk. From its composition of fort and decorative design Zimbabwe connects with north and west. Last in succession, and none claiming a considerable seniority, come Nanatali, Dhlo Dhlo, and Khami, children of an age when the fiercer art began shading off into the gentler. It was in the North the pioneers evolved their style of fort, in the South they turned their art to its adornment.

B.—DATING.

Some of the sites have been occupied by modern natives; an object, therefore, fixed on at random is no argument for anything; it is a curiosity till its relation to something known has been defined. We know that the platforms, whether of clay or cement, served to support huts of similar construction to modern Kaffir; we have yet to see the relation of the platforms to the walls. They have been built without the main wall, but in this position their date is indefinite; into its line, so that they are of one age; within it, in such a manner that "at Dhlo Dhlo the whole interior of the Acropolis, and at Zimbabwe the whole interior of all the buildings, have been filled with these constructions of rubble and cement, which fit as closely to the sides of the stone walls as water frozen into a glass" (*Geographical Journal*, p. 331). They are numerous in all the sites, and we have not realised their importance. The outer walls, meagre, massive, or majestic, were built by men, not by sportsmen, by a people for the protection of life and home. Anything, therefore, found in or beneath these floors, is contemporary with the main building.

There is no occasion to enumerate the various finds; many of the implements are of a kind in current use; the pottery, coloured or incised,

and hand-made, is quite African. The most valuable for our purpose are imported objects of known date discovered in unquestionable positions. The three Northern sites yield nothing foreign, save one fragment from Umtali of stoneware with a "celadon glaze which dates it from the thirteenth to the fifteenth centuries A.D." In the interior of Dhlo Dhlo a platform was selected for excavation, "and yet it was here, in the unbroken cement floor of a dwelling demonstrably as old as any in the whole settlement, that the Nankin china was found," "two pieces of flowered blue-and-white china," which are certainly not earlier than the sixteenth century A.D.

There may still be a feeling that, since Mr. Hall does not claim a date in the remote Himyaritic period for Dhlo Dhlo and Inyanga, Zimbabwe's pretensions to stratification may be valid. The area of this controversy narrows itself down to Enclosure 15, the lowest part of the "Temple." "From an archæological point of view this enclosure is one of the most interesting compartments in the temple," writes Mr. Hall, "for here are to be seen several layers of floor of a succession of occupiers, each for a long period of time" (*Great Zimbabwe*, p. 263). In one of the floors he found among other objects Arabian glass and Nankin china. The theory of stratification is now strenuously opposed. In the first place, Mr. Hall did not dig to bed-rock—was, indeed, two metres short of it. This intervening space was occupied by a layer of sand next the rock, another of sand and ashes, and immediately beneath his lowest floor one of rubble and cement. The bottom of the layer of sand and ashes contained objects such as had been discovered three metres higher. In the second place, all above the lowest floor is a homogeneous whole. Strata there are, but not chronological; they are due to the method of building. "When one bed of soft cement had been laid, wood was put upon it and a fire lighted to harden it, so that distinct lines of charcoal can be seen at all depths. . . . All manner of débris that might be lying about, potsherds, pebbles, and broken stuff of every description was thrown in to make a stiffer concrete" (p. 66). A further proof of this unity there is in wooden baulks, which were set vertically in the soft cement to hold it together, and whose remains still penetrate several layers.

This is the lowest part in the "Temple," and there is none older, for the depth of some of the finds is lower than the foundation-wall. Possibly it contains in itself signs of a previous settlement; the layer of sand and ashes may once have been a rubbish-heap, but it is too thin to have been of long accumulation, and contains the same objects as were found at a much higher level; it may merely have been laid as a bed for the foundation of rubble. The foreign glass and china determine the date of the enclosure and hence of the "Temple."

From Render's Ruins in the Valley comes a piece of Oriental faience belonging to a vase of which several fragments have been previously recovered. This piece bears a Persian inscription, "date month Shawwal." Four Persian scholars set it down as not earlier than the fifteenth century, while Mr. Read of the British Museum assigns it to the fourteenth, or possibly the thirteenth, in which case this "faience

and the Arabic glass would be the earliest of all the objects ever obtained from Zimbabwe" (p. 80).

We have now considerable guarantee of accuracy in dating the structures. The absence of imported articles from Niekerk and Inyanga constitutes a difficulty, but it is open to us to work back from Zimbabwe. Its buildings were raised no earlier than the fourteenth century, however much later, and the hypothetical older settlement can be but a century or two remoter. Unto this last would approximate Inyanga and Niekerk, with Umtali mediate. The sixteenth or perhaps the seventeenth would see the erection of the kraals in the West.

C.—SYMBOLS, ETC.

The Cone.—A quite plausible explanation of its shape has been suggested; another is proposed for its significance, and based on the fact that "the great kraal" has single possession. It may have symbolised the chief's majesty, and the humbler cone close by the lesser presence of his principal wife, his heir, or Vizier. Such explanation, "though there may not be an exact parallel for it, is yet in perfect consonance with African custom," and, if valid, completes the unseating of the theory that the cone was the embodiment of Phallic worship.

Phalli.—Phallic emblems have been found in Zimbabwe, but it is "rash" to suppose that it was therefore the centre of a Worship; they may have had merely ceremonial functions. Further, "it is misleading to describe as a 'Phallic worship' those rites in which an anthropomorphic deity of any kind appears"; and could such a worship be proved, it need not own to a Semitic origin, for 'if there is any evidence of actual worship of the phallus in any part of the world, it is to be found amongst the most typical of all negroes, viz. those of the West Coast of Africa' (p. 100, Notes).

The Zodiac, discovered near Zimbabwe, and upon which so much has been based, is treated with scant ceremony; this "wooden platter, carved with bungled figures of the zodiac . . . belongs to a class quite well known to ethnographers as coming from the West Coast of Africa. It is, of course, not Oriental, but Kaffir work influenced by European" (p. 93, Notes).

Quite fearlessly are these supposed points of Oriental contact examined, and their cumulative evidence for the older argument is rejected. The negro built and manufactured to his own design; the Semite was only partner in the barter of wares.

D.—TRADITION AND HISTORICAL SITUATION:

Traditions of the origin of the ruins are wanting amongst the natives. The only source preserved to us is in the accounts of the Portuguese settlers most conveniently consulted in Theal's *Records of South-Eastern Africa* (who reached Sofala in 1505 and established a trading-station. The references to stone ruins in the interior are few in number, and, the internal evidence is not very satisfactory. Two belonging to the

middle of the sixteenth century deal at some length with a building, apparently Zimbabwe, but both confess to oral inspiration. All the narratives agree, however, that the interior was under rule of a great chief with the dynastic title of Monomotapa. His capital in the sixteenth century was Zimbabwe, and he administered his state through captains, who dwelt in similar fortresses. There is no mention of foreign dominance, but witness that the ruler was of the same negro stock as his people. By the seventeenth century the chief's kraal had been transferred to the region of the Zambesi. Popular dissension threatened his sovereignty from within and the Portuguese from without. The title is not in evidence after the early years of the nineteenth century.

Historical situation.—The argument has been kept within the defined range of Archæology; the material remains have shown the character of the impress made on them. Platform and building are African, the work of a "negro or negroid race of African stock, coming . . . possibly from north of the Zambesi" (p. 37). Reaching Niekerk about the fourteenth century A.D., this semi-barbaric people applied itself to its defence. In course of time its projections extended southwards, to Umtali in the fifteenth century probably, and to Zimbabwe, which was at the zenith of its importance in the first years of the advent of the Portuguese. Then followed in the sixteenth or seventeenth the fortress-kraals of the West, but possibly not till the "Zimbabwe" had begun to decline, and had lost its title to the new capital by the Zambesi. The conclusion of the tale is yet to find. The same storms, the efforts to withstand whose violence have been the object of our study, may at last have proved this people's undoing. "Some one of those terrible waves of devastating conquerors which have swept over South Africa periodically as long as we have any knowledge of its history, may have blotted the inhabitants off the face of the earth and left the city to fall into ruins" (p. 86). The veil of Romance has been lifted, but it has revealed to us a pulsing form. Dimensions are as large as before, only they are those of an African people.

ON ISLAND FLORAS.¹

THE volume named below adds one more to the many contributions which have island floras as their main objective. Mr. Guppy professes only to follow in the steps of men like Bentham, Hooker, Hemsley, Hildebrand, Seemann, Schimper, and others who have endeavoured to explain the peculiarities of island floras. The "observations" have been made in many islands in the Pacific, and during sojourns in Java, South America, and the Mediterranean. During recent years the trend of Mr. Guppy's work has been evident in a series of papers mainly contributed to scientific societies, and including a paper to this Magazine

¹ *Observations of a Naturalist in the Pacific between 1896 and 1899.* By H. B. Guppy, M.B., F.R.S.E. London: Macmillan and Co., 1906. Price 21s.