PLATE XXI.—VIEW FROM EAST HIGH DOWN TO AFTON DOWN, showing the position of the Chalk Ridge, and its relationship to the White Chalk on the south and the Tertiaries on the north. Note the position of Pits No. 1 and No. 2 in *mucronata*-chalk and their relation to the *quadratus*-zone in Freshwater Bay. There is no spot in the whole island which so graphically illustrates the structure of the land. The picture also indicates the extremely feeble barrier which now exists between the inroads of the sea and the river Yar, which rises only a few yards from the beach. Once this barrier is breached, the Island is cut in two. The position of the old road in the eastern cliff of Freshwater Bay shows the encroachment of the sea in comparatively recent times.

PLATE XXII.—PIT NO. 37 ON THE SOUTH SIDE OF BRADING DOWN, showing the "black marl-band," the "spurious Chalk Rock," and the "*Bicavea*-bed." This is one of the few sections in the Island where these three features can be shown on the same plate. The ends of the measuring-rod rest on the two former features. The position of the remarkable white flints which occur in the lowest flint course in the *Holaster planus*-zone is also indicated. The "grey marl-band," which divides the zones of *Terebratulina gracilis* and *Holaster planus* occurs 7½ ft. above the "black marl-band." The remarkable siliceous nodules are not seen in this pit, as the section is not deep enough. The face photographed shows, therefore, only the two zones already mentioned; but the front of the pit displays the zones of *Holaster sub-globosus* and *Rhynchonella cuvieri*. This quarry gives a greater zonal range than any other in the Island, for the only others approaching it are at Pits 13, 51 and 77, and they do not embrace the Grey Chalk.

PLATE XXIII.—PIT NO. 77C, BRIGHSTONE DOWN, showing the "black marl-band" and the "spurious Chalk Rock." The "grey marl-band," 7½ ft. above the "black marl-band" divides the zones of *Terebratulina gracilis* and *Holaster planus*, and is situated at the top of the pit. Only these two zones are exposed here. We could not find the "*Bicavea*-bed" in this pit, as the chalk where it should occur was too obscured by vegetation.

NOTE ON THE MAPS OF THE ISLE OF WIGHT WHICH ACCOMPANY THIS PAPER, AND ON THE PHYSIOGRAPHY OF THE TERTIARY SEA-BOTTOM.

By C. DAVIES SHERBORN, Hon. F.Z.S.

During the nine weeks of 1904-1906 spent by Dr. Rowe and myself in examining the White Chalk of the Isle of Wight it became apparent that the preparation of a large scale map of the Chalk Ridge would not only be essential to the descriptive part of the paper but would be of more value to the student than a series of sections of different localities. And for this reason, that a 6-in. map enables one to show sufficient detail of coast section and quarries, particularly where, as in this island, the beds are more or less vertical.

To the unprofessional geologist like myself the plotting of the vertical beds on the east and west limbs of the Chalk area

presented little difficulty, but the mapping of the Central area seemed formidable, especially as the time at my disposal was quite insufficient to allow of a minute and careful survey of the surface. I wish, therefore, to record here the assistance received from the mapping of the line of the so-called "Chalk Rock" in the map issued by the Geological Survey. After following that line over the Central area and satisfying myself as to its substantial accuracy I have used it as a base for the calculation of the zonal limits, which have themselves been defined from a careful examination of the various pits or road-cuttings now exposed. And I have the pleasure to thank my friend, Mr. Allen Howe, for his professional help and suggestion when drawing the zonal lines.

I have been told that it is not possible to show on the one inch to one mile map of the Geological Survey the zonal divisions of the Chalk. In my opinion this is nonsense. It is even worth pointing out that Barrois contrived fairly successfully to show the zones of the Chalk on a scale of five miles to one inch so long ago as 1876. These divisions made by Barrois thirty years ago might quite easily have been verified or corrected and added to our maps.

No one for a moment can state positively that the zonal lines on his map are indisputable, because no one better than the zoologist knows the impossibility of obtaining zoological junctions without openings from which to obtain his evidence. Such zonal lines, if preferred, can be put in by means of dots, although even that precaution has not seemed to me necessary after the short time spent in the examination of the Chalk of the Isle of Wight. The shifting of a zonal boundary line a few yards north or south or east or west by a subsequent observer is of far less import than the omission altogether of such lines from a geological map.

It has also been urged that such palæozoological knowledge as is needful for zonal purposes is only possible after years of study. This, also, is nonsense. With the exception of the microzoa, the Chalk contains scarcely 200 fossil species. Of these, less than fifty are useful as zonal guides, and it cannot be held that more than a week's study is needful to grasp the essential features of structure in so small a number of forms. The same remarks apply to any other formation beside the Chalk, so far as the percentage of fossils of value as zonal guides is concerned. The fact is that palæozoology has been neglected for years in this country, and the Geological Surveyor has not been encouraged, and often has not had the knowledge, to collect for himself the zoological evidence necessary for the proper interpretation of his field-work.

Equally nonsensical statements have been made as to the impossibility of zoning pits. We refuted them in the Yorkshire paper, they have been disproved by all the amateurs working on

the Chalk of late years, and are finally exploded in this present paper. Naturally, it is dangerous to zone pits without a knowledge of the fauna, but, with that knowledge, half-an-hour should enable anyone to come to a fairly definite conclusion as to the position in the series of the beds he is investigating.

A point of especial interest brought out by the present survey is the evidence as to the physiography of the sea-bottom on which the lowest Tertiary beds in this area were deposited. Although it has been known for years that extensive denudation occurred in this country at the close of the Cretaceous period, it has not been possible till now to show a section of the Cretaceous-Tertiary junction of any length.* We are now able to show such a section twenty-one miles in length, and to show it with sufficient accuracy to draw the conclusion that in this particular area the later conditions seem to point to subaërial (and consequent washing) action rather than to a plain of marine denudation. The very striking thickness of *mucronata*-chalk left at intervals of the section seems to mark high downs, while the cuts into the *quadratus*-chalk may represent the remains of water-courses in the old landscape. As the chalk sank beneath the sea all superficial features would be stripped off.

This uneven surface of the bed of the Plastic Clay sea would, in its turn, naturally suggest that there may be something wrong with the mapped thickness of the Plastic Clay in this area. It is hardly conceivable that so uniform a thickness of clay as is shown on the Geological Survey map, could have been laid down on a sea-bottom which varied in depth in its own features, from 500 ft. to nothing, within a distance of two miles. We should possibly find that the Plastic Clay in the Isle of Wight showed a great variation in thickness, and it would be an interesting question for some geologist to take up. So long as the Chalk is unzoned such a source of error is quite possible, but directly the zonal age of the Chalk is determined, suspicion is aroused as to any uniform thickness of the lowest Tertiary deposit being possible on a surface showing hills of considerable height.

The measured thickness of Plastic Clay in the Isle of Wight is, so far as I have found it published :

Alum Bay	.	.	Feet.	84	} — {	Mem. Geol. Surv., Isle of Wight (Sheet 10), 1862, p. 34; do., do., 1889, p. 95.
Downend	.	.	110			
Ashey	.	.	92			
Brading	.	.	140			
Whitecliff	.	.	163			

These are in themselves suggestive, but not extraordinary. A series of measurements from Alum Bay to Downend should prove of much interest.

* Messrs. Treacher and White have made some valuable observations on this subject in the north of the London basin, in *Proc. Geol. Assoc.*, xix (9), 1906, p. 395.

FIG. 26.—DIAGRAM TO SHOW SURFACE OF CHALK IN THE ISLE OF WIGHT AT THE COMMENCEMENT OF THE DEPOSITION OF THE EOCENE BEDS (PLASTIC CLAY).—*C. D. Sherborn.*

Taken from the North side of the Chalk Ridge, W. to E., between Alum Bay and Whitecliff Bay.

Horizontal scale 3 m. to 1 inch; vertical scale 100 feet to $\frac{1}{32}$ inch.

This Map of the Chalk Ridge of the Isle of Wight has been presented in eleven somewhat arbitrary sections on six sheets, as it seems more convenient for use in the field, and less likely to tear or otherwise damage than if the map were in one folded sheet. The eastern and western limbs of the Ridge are given on the scale of six inches to one mile, while the central area is given on that of two inches to one mile.

The Chalk of the southern area of the Island does not come within the scope of this paper, as it is mainly, if not entirely, confined to those beds below the White Chalk beds, with which this paper does not deal.

The Index provided to the four previous papers has been reprinted and completed so as to include references to this fifth paper, which completes our survey of the White Chalk of the English Coast.

FIG. 27.—OUTLINE MAP OF THE ISLE OF WIGHT, SHOWING AREAS REPRODUCED ON THE LARGE SCALE MAPS ACCOMPANYING THIS PAPER.—C. D. Sherborn.

LIST OF FOSSILS FROM THE WHITE CHALK OF THE ISLE OF WIGHT.

ABBREVIATIONS.

B. m. = Zone of *Belemnitella mucronata*.
A. g. = Zone of *Actinocamax quadratus*.
M. t. = Zone of *Marsupites testudinarius*.
M. c.-a. = Zone of *Micraster cor-angui-*
num.

M. c.-t. = Zone of *Micraster cor-testu-*
dinarium.
H. p. = Zone of *Holaster planus*.
T. g. = Zone of *Terebratulina gracilis*.
R. c. = Zone of *Rhynchonella cuvieri*.

C. common; R.C. rather common; R. rare; R.R. rather rare.

	<i>B. m.</i>	<i>A. g.</i>	<i>M. t.</i>	<i>M. c.-a.</i>	<i>M. c.-t.</i>	<i>H. p.</i>	<i>T. g.</i>	<i>R. c.</i>
<i>Ventriculites radiatus</i> , Mant. ...	C.	C.	C.	C.	C.	C.	R.	...
<i>Ventriculites impressus</i> , T. Smith ...	...	...	...	...	R.R.	R.C.	R.	...
<i>Ventriculites decurrens</i> , T. Smith ...	R.	R.R.	R.	...	...	...	R.	...
<i>Ventriculites mammilaris</i> , T. Smith ...	...	...	...	...	...	R.	R.	...
<i>Ventriculites cribozus</i> , Phill. ...	R.C.	...	...	...	...	...	...	...
<i>Ventriculites infundibuliformis</i> , S. Woodw. ...	...	...	...	R.	...	...	...	...
<i>Plocoscyphia convoluta</i> , T. Smith ...	C.	C.	C.	C.	C.	C.	C.	C.
<i>Plocoscyphia labrosa</i> , T. Smith ...	...	...	...	...	...	...	R.C.	R.C.
<i>Plocoscyphia cf. fenestrata</i> , T. Smith ...	...	...	...	...	...	...	...	R.C.
<i>Camerospongia aperta</i> , Hinde ...	...	...	...	...	...	...	...	R.
<i>Cephalites benettii</i> , Mant. ...	...	...	...	...	...	...	R.	R.
<i>Craticularia fittoni</i> , Mant. ...	...	...	...	...	...	...	R.	R.
<i>Coscinopora infundibuliformis</i> , Goldf. ...	C.	R.C.	R.C.	C.	...	...	R.	...
<i>Leptophragma murchisoni</i> , Goldf. ...	R.C.	...	R.R.	R.	...	...	...	...
<i>Guettardia stellata</i> , Mich. ...	R.	...	R.R.	R.	...	R.R.	R.	R.
<i>Aphrocalistes</i> , sp. ...	R.C.	...	...	...	...	...	...	...
<i>Placotrema cretaceum</i> , Hinde ...	...	...	...	...	R.	...	...	...
<i>Cliona cretacea</i> , Portl. ...	C.	C.	C.	C.	C.	C.	C.	R.
<i>Doryderma ramosum</i> , Mant. ...	...	...	C.	C.	...	...	...	...
<i>Heterostinia obliqua</i> , Benett ...	...	R.C.	R.R.	R.R.	R.R.	R.	...	...
<i>Siphonia königi</i> , Mant. ...	R.	R.	R.R.	R.R.	...	...	...	...
<i>Plinthosella compacta</i> , Hinde ...	...	...	...	C.	...	...	...	...
<i>Plinthosella squamosa</i> , Zittel ...	...	...	...	R.R.	...	...	...	...
<i>Pharetrosporgia strahani</i> , Sollas ...	R.R.	R.C.	R.	R.R.	R.	R.	...	R.
<i>Porosphæra globularis</i> , Phill. ...	C.	C.	C.	C.	C.	C.	C.	R.R.
<i>Porosphæra nuciformis</i> , von Hag. ...	C.	R.R.	R.R.	R.C.	...	...	...	...
<i>Porosphæra pileulus</i> , Phill. ...	C.	R.R.	R.R.	R.C.	R.	R.	...	...
<i>Porosphæra patelliformis</i> , Hinde ...	C.	R.R.	R.R.	R.R.	R.C.	R.R.	R.	...
<i>Porosphæra arrecta</i> , Hinde ...	R.R.	R.	R.	R.	...	...	...	...
<i>Talpina</i> sp., von Hag. ...	C.	...	...	...	...	...	...	...
<i>Spinopora dixonii</i> , Lonsd. ...	R.C.	...	R.R.	R.	...	...	R.	R.
<i>Cælosmilæ laxa</i> , E. and H. ...	C.	R.C.	...	...	...	...	...	...
<i>Parasmilæa centralis</i> , Mant. ...	R.C.	...	R.R.	R.	R.R.	R.C.	R.C.	R.R.
<i>Parasmilæa granulata</i> , Dunc. ...	...	...	...	...	R.	...	...	...
<i>Caryophyllia cylindracea</i> , Rss. ...	...	...	R.	...	...	...	...	...
<i>Onchotrochus serpentinus</i> , Dunc. ...	...	...	...	...	...	R.	R.C.	R.R.
<i>Stephanophyllia bowerbanki</i> , E. and H. ...	...	...	...	...	...	...	R.	...
<i>Micrabaccia coronula</i> , Goldf. ...	...	...	...	...	...	...	R.	...
<i>Axogaster cretacea</i> , Lonsd. ...	R.R.	...	...	...	...	...	R.	R.

	<i>B. m.</i>	<i>A. g.</i>	<i>M. t.</i>	<i>M. c.-a.</i>	<i>M. c.-t.</i>	<i>H. p.</i>	<i>T. g.</i>	<i>R. c.</i>
<i>Serpula plana</i> S. Woodw.	C.	C.	C.	C.	C.	C.	R.	R.
<i>Serpula pusilla</i> , Sby.	R.R.	...	...	...	...	...	...	...
<i>Serpula granulata</i> , Sby.	R.	R.	...	...	R.R.	R.	R.	R.
<i>Serpula ampullacea</i> , Sby.	R.C.	R.C.	R.R.	R.C.	R.R.	R.R.	R.C.	...
<i>Serpula canteriata</i> , v. Hag.	R.C.	...	...	...	...	...	...	...
<i>Serpula</i> sp. (heptagonal)	C.	...	...	...	...	...	...	...
<i>Serpula pentangulata</i> , S. Woodw.	...	...	...	...	...	R.	...	...
<i>Serpula fluctuata</i> , Sby.	R.	...	...	R.R.	...	R.	...	...
<i>Serpula cincta</i> , Goldf.	...	...	...	...	C.	R.R.	...	...
<i>Serpula macropus</i> , Sby.	R.	...	...	...	...	...	...	R.
<i>Serpula avita</i> , Sby.	...	...	...	...	...	...	...	C.
<i>Serpula turbinella</i> , Sby.	C.	C.	R.R.	R.R.	...	...	...	...
<i>Serpula ilium</i> , Goldf.	C.	C.	R.C.	C.	C.	C.	C.	...
<i>Serpula plexus</i> , Sby.	...	...	R.	...	...	...	...	...
<i>Serpula gordialis</i> var. <i>serpentinus</i> , Schlot.	R.R.	...	R.	R.R.	...	...	...	...
<i>Serpula</i> sp: (adnate: long smooth tube)	R.	...	...	R.	R.	R.	...	...
<i>Scalpellum maximum</i> , Sby.	R.	...	R.	...	...	R.	R.	...
<i>Pollicipes glaber</i> , Roem.	...	...	...	...	...	R.	...	...
<i>Echinocorys scutatus</i> , Leske	C.	C.	R.C.	R.C.	R.C.	R.C.	...	...
<i>Echinoconus conicus</i> , Ag.	R.	...	...	R.	...	R.	...	...
<i>Echinoconus vulgaris</i> , Lam.	...	...	R.R.	R.C.	...	...	...	...
<i>Echinoconus albo-galerus</i> , Lam.	...	...	...	R.	...	...	...	...
<i>Echinoconus globulus</i> , Desor	...	...	R.	...	...	...	...	...
<i>Echinoconus subrotundus</i> , Ag.	...	...	...	...	...	...	R.R.	R.
<i>Discoidea dixonii</i> , Forbes	...	...	...	...	...	R.	R.	C.
<i>Cardiaster pillula</i> , Lam.	R.R.	R.R.	...	...	...	...	...	...
<i>Cardiaster pygmaeus</i> , Forbes	...	...	...	...	...	...	...	R.
<i>Cardiaster cretaceus</i> , Sorig.	...	...	...	...	...	...	...	R.
<i>Cardiaster ananchytis</i> , Leske	R.	...	...	...	...	...	...	...
<i>Holaster planus</i> , Mant.	...	...	...	...	C.	C.	...	...
<i>Holaster placentia</i> , Ag.	...	...	...	R.	R.R.	R.R.	...	...
<i>Infulaster rostratus</i> , Forbes	...	...	R.	R.	...	...	...	...
<i>Hemiaster minimus</i> , Ag.	...	...	...	R.	R.	R.	R.C.	R.C.
<i>Micraster cor-anguinum</i> , Leske	R.	R.	R.R.	R.C.	...	...	...	...
<i>Micraster cor-anguinum</i> var. <i>laticor</i> , Rowe	...	...	...	R.R.	...	...	...	...
<i>Micraster præcursor</i> , Rowe	...	...	...	R.	R.C.	C.	...	...
<i>Micraster cor-testudinarius</i> , Goldf.	...	...	...	...	C.	R.	...	...
<i>Micraster leskei</i> , Desm.	...	...	...	...	...	R.R.	...	...
<i>Micraster cor-bovis</i> , Forbes	...	...	...	...	...	R.R.	R.R.	...
<i>Epiaster gibbus</i> , Lam.	...	...	...	R.	...	...	...	...
<i>Cidaris hirudo</i> , Sorig.	C.	C.	R.R.	C.	C.	C.	C.	C.
<i>Cidaris sceptrifera</i> , Mant.	...	...	R.	C.	R.C.	R.C.	...	...
<i>Cidaris perornata</i> , Forbes	...	...	...	R.C.	R.	R.	...	...
<i>Cidaris clavigera</i> , König	...	...	R.	R.C.	R.C.	R.C.	R.R.	R.
<i>Cidaris subvesiculosa</i> , d'Orb.	R.C.	...	...	R.R.	...	...	R.	...
<i>Cidaris serriifera</i> , Forbes	...	...	...	...	C.	C.	R.C.	R.
<i>Cidaris serrata</i> , Desor	C.	...	...	...	...	...	...	...
<i>Cidaris pleracantha</i> , Ag.	R.R.	...	...	...	...	...	...	...
<i>Salenia granulosa</i> , Forbes	R.	...	...	...	R.	R.R.	...	R.R.
<i>Salenia geometrica</i> , Ag.	R.	...	...	...	...	...	...	...
<i>Cyphosoma königi</i> , Mant.	R.	...	R.	R.R.	...	...	...	...
<i>Cyphosoma corollare</i> , Klein	R.	...	...	R.	...	...	...	...
<i>Cyphosoma spatuliferum</i> , Forbes	...	...	...	...	...	R.	...	...
<i>Cyphosoma radiatum</i> , Sorig.	...	...	...	...	R.C.	C.	C.	R.

	<i>B. m.</i>	<i>A. g.</i>	<i>M. t.</i>	<i>M. c.-a.</i>	<i>M. c.-t.</i>	<i>H. p.</i>	<i>T. g.</i>	<i>R. c.</i>
<i>Ophiura serrata</i> , Roem. ...	...	...	...	...	...	R.	..	...
<i>Marsupites testudinarius</i> , Miller ...	...	...	C.	...	...	...	...	...
<i>Uintacrinus</i> ...	...	...	C.	...	...	...	...	...
<i>Bourgueticrinus ellipticus</i> , Miller ...	C.	C.	C.	C.	C.	C.	C.	R.C.
<i>Pentacrinus agassizi</i> , v. Hag. ...	...	...	...	...	R.	C.	C.	R.
<i>Metopaster parkinsoni</i> , Forbes ...	C.	...	...	...	...	R.	...	...
<i>Metopaster mantelli</i> , Forbes ...	R.C.	...	R.	...	...	...	R.	R.
<i>Metopaster uncatus</i> , Forbes ...	R.	...	...	...	...	...	...	...
<i>Mitraster hunteri</i> , Forbes ...	C.	...	...	...	R.	...	R.	R.
<i>Mitraster rugatus</i> , Forbes ...	R.R.	...	...	...	...	...	...	...
<i>Pentaceros pisuilliferus</i> , Forbes ...	...	...	...	R.	...	...	...	...
<i>Pentaceros ocellatus</i> , Forbes ...	...	...	...	R.	...	...	...	R.
<i>Pentaceros bulbiferus</i> , Forbes ...	R.	...	R.	...	...	...	R.	R.
<i>Pentaceros boysi</i> , Forbes ...	...	...	...	R.	...	...	...	R.
<i>Pentagonaster megaloplax</i> , Sladen ...	...	R.R.	R.R.	R.	R.	R.	R.	R.C.
<i>Pycnaster angustatus</i> , Forbes ...	C.	R.	...	...	...	R.	...	...
<i>Rhynchonella limbata</i> , Schloth. ...	C.	R.C.	...	...	...	R.	...	...
<i>Rhynchonella plicatilis</i> , Sby. ...	R.C.	R.C.	R.	...	...	R.	...	...
<i>Rhynchonella reedensis</i> , Eth. ...	R.C.	R.C.	R.R.	R.C.	R.C.	R.C.	R.R.	...
<i>Rhynchonella cuvieri</i> , d'Orb. ...	...	...	...	...	...	R.C.	R.C.	C.
<i>Magas pumilus</i> , Sby. ...	R.C.	...	...	...	...	...	...	...
<i>Thecideum weitherelli</i> , Morris ...	R.C.	R.C.	R.C.	C.	...	...	...	...
<i>Thecideum cf. vermiculare</i> , Schloth. ...	R.	...	...	...	...	...	...	...
<i>Crania parisiensis</i> , DeFr. ...	...	...	R.	R.C.	...	...	...	...
<i>Crania egnabergensis</i> , Retz. ...	R.	R.R.	R.R.	R.R.	R.C.	R.R.	R.	...
<i>Crania costata</i> G. B. Sby. ...	R.C.	...	...	...	...	...	...	...
<i>Terebratula carnea</i> , Sby. ...	R.C.	...	...	...	R.C.	R.C.	C.	R.R.
<i>Terebratula semiglobosa</i> , Sby. ...	...	...	...	C.	R.C.	R.C.	C.	R.R.
<i>Terebratulina striata</i> , Wahlen. ...	R.C.	R.R.	R.R.	R.C.	R.R.	R.R.	R.R.	R.
<i>Terebratulina rowei</i> , Kitchin ...	...	R.	R.R.	...	...	...	...	...
<i>Terebratulina gracilis</i> var. <i>lata</i> , Eth. ...	...	...	...	...	...	R.C.	C.	R.R.
<i>Kingena lima</i> , DeFr. ...	R.R.	...	R.	R.R.	...	...	...	...
<i>Inoceramus cuvieri</i> , Sby. ...	...	C.	C.	C.	C.	R.	C.	...
<i>Inoceramus</i> sp. ...	C.	...	...	...	...	...	...	...
<i>Inoceramus</i> sp.* ...	...	...	...	...	...	R.	...	...
<i>Inoceramus lamarchi</i> , Park. ...	...	R.C.	...	R.	C.	R.C.	R.C.	R.R.
<i>Inoceramus brongniarti</i> , Sby. ...	...	...	...	...	...	R.R.	R.C.	R.
<i>Inoceramus mytiloides</i> , Schlot. ...	...	...	...	...	...	...	...	C.
<i>Plicatula sigillina</i> , Woodw. ...	C.	R.C.	R.C.	C.	C.	R.C.	R.R.	...
<i>Plicatula barroisi</i> , Peron ...	R.	...	...	R.	R.R.	R.	R.	...
<i>Ostrea vesicularis</i> , Lam. ...	C.	C.	C.	C.	C.	C.	R.C.	R.R.
<i>Ostrea lateralis</i> , Nilss. ...	R.R.	R.R.	...	R.	...	R.	R.	...
<i>Ostrea hippopodium</i> , Nilss. ...	R.C.	...	...	...	C.	R.R.	R.C.	R.
<i>Ostrea semipiana</i> , Sby. ...	...	R.R.	...	...	R.	R.R.	R.R.	...
<i>Ostrea normaniana</i> , d'Orb. ...	...	...	R.	...	...	...	...	...
<i>Ostrea wegmanniana</i> , d'Orb. ...	...	...	R.C.	R.	...	R.	...	...
<i>Ostrea acutirostris</i> , Nilss. ...	R.	...	...	...	...	...	...	...
<i>Spondylus spinosus</i> , Sby. ...	R.	R.R.	R.R.	R.R.	C.	C.	C.	...
<i>Spondylus latus</i> , Sby. ...	C.	C.	C.	C.	C.	R.C.	R.C.	R.
<i>Spondylus du Templeanus</i> , d'Orb. ...	R.R.	...	...	R.	...	R.	R.	R.
<i>Lima granulata</i> , Nilss. ...	R.	...	...	...	...	...	...	...

* H. Woods, "Mollusca of Chalk Rock," *Quart. Journ. Geol. Soc.* Vol. liii, 1897, Pl. xxvii, Figs. 4, 15.

	<i>B. m.</i>	<i>A. g.</i>	<i>M. t.</i>	<i>M. c.-a.</i>	<i>M. c.-t.</i>	<i>H. p.</i>	<i>T. g.</i>	<i>R. c.</i>
<i>Lima cretacea</i> , Woods	...	...	...	...	...	...	R.	...
<i>Lima decussata</i> , Goldf.	R.	...	R.	...	...	R.R.	R.R.	...
<i>Lima wintonensis</i> , Woods	...	...	...	...	...	R.	...	...
<i>Lima koperi</i> , Mant.	...	...	R.	...	R.	R.	R.	...
<i>Pecten quinque-costatus</i> , Sby.	R.C.	R.C.	R.R.	...	...	R.	R.	...
<i>Pecten cretosus</i> , Deffr.	R.C.	R.R.	R.	R.C.	R.	R.	R.	...
<i>Pecten campaniensis</i> , d'Orb.	R.R.	...	...	...	...	...	...	...
<i>Pecten pexatus</i> , Woods	...	...	...	...	...	R.	R.	...
<i>Pteria (Avicula) cœrulescens</i> , Nilss.	R	...	...	...	...	...	...	...
<i>Septifer lineatus</i> , Sby.	...	R.	...	...	...	...	...	...
<i>Teredo amphishœna</i> , Goldf.	...	...	...	...	...	R.	R.	R.
<i>Radiolites mortoni</i> , Mant.	...	...	...	...	...	...	R.	...
<i>Apornthis</i> sp.	...	...	...	...	...	R.	R.	...
<i>Pleurotomaria perspectiva</i> , Mant.	...	...	...	...	R.	...	R.	...
<i>Belemnitella mucronata</i> , Schlot.	R.C.	...	...	...	...	...	...	...
<i>Actinocamax quadratus</i> , Blainv.	...	R.	...	...	...	...	...	...
<i>Actinocamax granulatus</i> , Blainv.	...	R.	...	...	...	...	...	...
<i>Nautilus</i> cf. <i>atlas</i> , Whiteaves	...	...	...	...	...	...	R.	R.
<i>Ammonites peramplus</i> , Mant.	...	...	...	...	...	...	R.	...
<i>Aptychus portlocki</i> , Sharpe	R.	...	...	R.	...	...	...	...
<i>Oxyrhina mantelli</i> , Ag.	R.	...	...	...	R.	...	R.	...
<i>Lamna appendiculata</i> , Ag.	R.	...	...	R.	R.	R.	R.	...
<i>Ptychodus mammillaris</i> , Ag.	...	...	...	...	...	R.	...	R.