she got to be half as tall as I am, and then, sad to relate, with advancing age her temper did not improve; I am afraid if I spoke the truth I should have to describe it as savage. She became a perfect terror to many people, and she even attacked me once or twice. She was playful to the last when I had her alone, and often resumed many of her old quaint caressing ways that were indescribably fascinating from their childlikeness. But the funny thing was, that if the Bishop was near she would immediately turn upon me and scratch and bite me, and he had only to go out of sight for her good temper to return. At last, however, I felt she was becoming a nuisance to other people, by her habit of grabbing at everybody that passed, and her savage gesticulations; so, seeing also how she longed to exercise those active wiry little limbs of hers-inventing all sorts of ludicrous games and gymnastics—I made up my mind to let her loose. There is a charming little island not far from the shore, which we thought would be just the place Judy would revel in. Mr. — and Miss —, and a number of our little boys, escorted her there. She came down to the shore to watch them off, and gave one cry of dismay at being deserted; but we hope that the sweets of liberty have more than consoled her for the loss of I missed the creature dreadfully at first. She was a constant amusement and interest with her quaint ways, and even her naughty tempers were ludicrous. Really if Mr. Buckland had been alive I think I should have sent her to him. I think he would have appreciated her intelligence and love of a romp, and she would never have been savage with him. She never once attempted to bite our Bishop; she always preferred him to any one else, and was always affectionate with him. very much to know whether other people have noticed that these baboons really laugh; I have heard somewhere, I am sure, that the power of laughter is the distinction between man and animals. But Judy certainly used to laugh—not at a joke I confess; and nothing made her so savage as being laughed at. But when she romped with me she used to open her mouth and show all her white teeth, and regularly laugh like a child, especially when she was tickled. I shouldn't have parted with her if I had been living alone, but living with others, as one does here, it did not seem fair to keep a creature that really did frighten some of the household."

## "Tanganyika Shells"

UNDER the above heading a paragraph appeared in NATURE, vol. xxv. p. 101, in which Mr. C. A. White, of Washington, states that certain species described by me in the *Proceedings* of the Zoological Society, 1881, pp. 558-560, from the great African Lake Tanganyika, "are without doubt, generically identical with the *Pyrgulifera humerosa* of Meek," a fossil form from the Bear River Tertiary of North America. Mr. W. H. Dall, of the Smithsonian Institution, had previously, in a letter to me, dated October 24, expressed a similar opinion. I have been unable to procure for examination and comparison a specimen of the North American shell, and am consequently compelled to arrive at a conclusion from a study of Mr. Meek's figure and description in the report upon the "United States Geological Exploration of the Fortieth Parallel," vol. iv., pp. 176-178, woodcut 6, and plate 17, figs. 19-19a. As a result I find it decidedly unadvisable at present to locate the two forms in question in the same genus. I admit that in regard to general outline and character of "sculpture" there is no distinction of any importance. However, when the aperture (which in univalve shells most frequently exhibits the main generic characters) is closely scrutinised, features present themselves which incline me, until actual comparison is possible, to hold these two types generically distinct. The outer lip of *Pyrgulifera* is said to be "subsinuous at the termination of the shoulder of the body volution above," and the basal margin of the aperture is described as "faintly sinuous." On the contrary, in *Paramelania* no trace of the latter character is present, and the upper extremity of the labrum where it joins the volution, instead of being "subsinuous," is actually prominent. But another equally important distinction is the prolongation of the body-whorl below the aperture, together forming a more or less basal effusion. Independent of these actual differences, we must take into consideration certain probabilities and improbabilities. In the first place the difference in geographical position militates to some extent against the identity of these two forms. Then the vast lapse of ages surely must have evolved some differences in the animals as indicated by the dissimilar apertures, and again the operculum of Paramelania is very peculiar, and who shall say that this appendage was

of a like nature in the Bear River shell. In conclusion, I should observe that the African form was considered of sub-generic rank by me, and not as a distinct genus, as stated by Mr. White.

EDGAR A. SMITH

## The Growth of Trees

JUST fifty years ago I was at school in Salisbury. I have only visited it once since until last week, when I had the unique pleasure of rambling over the old but familiar haunts, of course including Old Sarum. On mounting the outer ring of the well-known mound from the Stratford side, a beech tree in the bottom of the ditch reminded me that it was just there our usher carved with his knife on such a tree "Tempus Fugit." On going down to look for the motto, I only found unreadable abrasions on the bark, but on the north side of the same tree "1817" was distinctly engraved. On examining a tree near, I found on the bark "Carpe Diem, 1831." This recalled to my memory the fact that our usher's "Tempus Fugit" was suggested by some such motto carved by the usher of another school. Is it worth recording that this carving on the bark of a beech tree is quite legible after an interval of fifty years, while the date "1817" on another is also probably genuine? If so, perhaps it is worth noticing that both legible carvings are on a north aspect not reached by the sun, while the lost motto "Tempus Fugit" would be exposed to the sun with an easterly aspect.

Barnstaple, January 2 W. Symons

Indian Fossils.—Mr. Richard Lydekker, of the Geological Survey of India, asks if any of our readers can give him information as to the whereabouts in England of collections of fossil bones from the Siwaliks of India. He is aware (beside the British Museum collection) of collections at Ludlow, Cambridge, and Edinburgh, but he believes there are others in the country. A large collection was sent home some years ago by a Major Hay, the destination of which is unknown to him. Mr. Lydekker is now engaged in working at Siwalik fossils, and as he intends spending some months in England next summer, he wishes to look up all the collections then.

## OUR ASTRONOMICAL COLUMN

COMET 1881 b.—Notwithstanding some statements to the contrary, the orbit of this comet when the later observations are brought to bear upon it, is sensibly different from a parabola, and from two independent investigations, the first by MM. Dunér and Engström, the second by M. Bossert (from eight normal places, based upon 423 observations), the period results about 2955 years. An observation at Marseilles on October 24 gave at 9h. 39m. 4s. mean time, R.A. 18h. 44m. 58 12s., N.P.D. 20° 24′ 23″ 2, corrected for parallax.

The following positions are given by Dr. Dunér:-

	R.A.						Decl. N.		Distance	
			h.		S.		D	1	1	rom Earth.
January	10		22	58	11	•••	57	28.3	***	3.118
	12		23	3	4	***	57	15.2		
	14		_	7	53		57	3.3	***	3.192
	16			12	39		56	51.2		
	18		_	17	22		56	40'3		3.274
	20		_	22	I		56	29'5		
	22		23	26	38		56	19'2		3.354

The student of this branch of astronomy will be aware that comets have been followed to greater distances; the extraordinary comet of 1729, which never approached the earth, indeed could not approach her, within three times the earth's mean distance from the sun, and yet was visible with small telescopes, still affords a unique case, it must have been a body of an altogether exceptional character.

THE MINOR PLANETS IN 1882.—The supplement to the Berliner Astronomisches Fahrbuch for 1883, containing ephemerides of the small planets for 1882 has been circulated in advance of the publication of the volume as usual for some years past. Of the two hundred and twenty members of the group detected up to the present time, we find approximate places for every twentieth day of 217, and accurate opposition ephemerides of 41. The approximate ephemerides include No. 220. Three only of the planets approach the earth at opposition, within the earth's mean distance from the sun, viz. No. 12, Victoria, in