the "fun" of hoaxing or mystifying had ample play; and, as he played at bowls, he had frequent rubbers. But as only one of them could be understood without a good deal of particular description, I shall conclude with a notice which touched myself, and showed a bit of the temper of my friend :-

DEAR JERDAN,-I have seen the "Literary Gazette" of last

Do you intend to enlist yourself in the business of libelling me, or copying those who do?

I ask merely for information; because if such be your design, it is a game at which two can play, and I hate being under an obligation to any man which I do not intend to return.

An answer will oblige, faithfully yours, WILLIAM MAGINN.

Standard Office, Bridge Street, Blackfriars. Thursday.

Our misunderstanding was of very momentary duration; and I may say that though quite competent to sting, his use of the weapon was seldom waspish, and never ill-natured. No periodical writer has been more misrepresented by pseudo-biographers than William His mystifying and hoaxing were goodhumoured even when sarcastic, and no undue bitterness entered into his revenges, even when most provoked. His eccentricity was a constant source of pleasantry to friends, and no heinous offence to enemies.

WILLIAM UPCOTT.

I must afford a scrap to my old friend William Upcott, the great prototype of autograph collectors (a pursuit which, since his time, has grown into extraordinary magnitude), and a most vigilant inquisitor into muniment chests and family papers. He and his colleague, Mr. Ilbery, were the sub-librarians under Porson in the City Library, Old Jewry, and eminently deserve a memorial of grateful encomium for their attachment to their principal, and the unwearied care and attention they bestowed upon him, when sorrowfully needed, to the day of his death. Mr. Upcott's letter is, at any rate, a sign of character in the exemplar and promoter of what has become almost a fashionable or popular mania.

> 102, Upper Street, Islington, January 12, 1841.

DEAR SIR,-When I last shook your hand a promise was made bear Sir,—When I last shook your hand a promise was made to look up some autographs for my old friend Mrs. Hutton, of Birmingham, which, I suspect, you have forgotten. I heard from her to-day to remind you. Do oblige me, and I shall at any time acknowledge the favour by doing what I can to serve you. In a few days I shall send her a packet. Devote half an hour in a rummage—let the produce of the search be left at Mr. Bunn, 10, Agar Street, Strand, who will convey the parcel to, Dear Sir,

Very faithfully yours, WM. UPCOTT.

ELEPHANT HUNTING IN SOUTH AFRICA. BY T. BAINES, F.R.G.S.

THE graphic reports in the newspapers lately, of the Duke of Edinburgh's sport in South Africa, have recalled my own humble experiences on the same field. Some points relating to the elephant in South Africa may interest naturalists as well as sportsmen.

The elephant, once common in South Africa, down to the mountains of the Cape, has since the commencement of the colony been gradually driven backward before the deadly firearms of the European hunters; till-except in a few localities, where it may not be hunted without special permission—it is no longer to be met with in sufficient numbers to repay the cost of a

hunting trip, unless sought farther and farther every year in the interior. The native methods of hunting, whether by pitfall, by the chase of single animals, or even by battue, unless fire is used, seem not much to alarm the survivors; nor would the European, chasing them fairly with horse and rifle, soon drive the elephant from its favourite haunts. But when the hunter can no longer repay the cost of his outfit in this manner, and is obliged to waylay the animals by night at their drinking places, the sense of insecurity comes over them, which in a short time makes them retire to more distant and less persecuted districts.

The hunter, with his waggons equipped for the season's journey, like ships for a long voyage, with oxen numerous enough to supply the place of those killed by the tsetse, or poisonous fly, and as many horses as he can afford, to allow for losses by sickness, or casualties, or exhaustion in the chase, and with, generally, articles of barter, to fill up his cargo by purchase from the natives, reaches the country he has chosen for his hunting ground, and, having secured the friendship of the chief, or the confidence of the scattered natives, who flock readily to his waggons as soon as the object of his journey is made known, commences operations.

Scouts are sent out on all sides, and reports of spoor, or tracks, or of the most probable localities, are brought to him. Choosing those of the males as bearing the largest ivory, he follows, tracking them patiently for hours, sometimes for days, until he comes up with them and gives chase. The bull with the finest tusks is, if possible, selected, and by persevering efforts chased out and separated from the herd, each horseman, if there be more than one, choosing in turn his own victim, and not interfering with his comrades, unless it may be

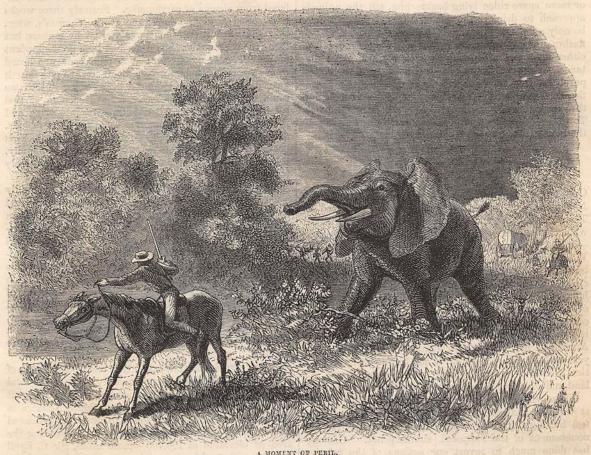
necessary to give them help.

Sometimes the successful shot is soon obtained. The after part of the lower lobe of the immense ear marks the death-spot, in which, if the ball strikes fairly, it either breaks the bones of the shoulder, or, missing them, passes into the heart or other vital organs. If possible the fire should be delivered when the fore leg of the elephant is thrown forward, as the skin is then more tightly stretched, and the thinner parts behind the shoulder more exposed. An experienced hunter will know at once whether the wound is sufficient to kill or disable the animal. Without loss of time he will chase and kill another, or perhaps a third - as one of my friend McCabe's hunters, Christian Harmse, has, I believe, frequently done-coming back again to take up the spoor and kill the first, if not already dead.

Sometimes the chase is long and arduous, and continues till the tired elephant resorts to the last expedient, of inserting his trunk into his mouth and drawing water from his stomach to refresh himself by throwing it over his skin; when, if the horse be not equally exhausted, his pursuer knows the chase is near its hopedfor termination. Sometimes, instead of fleeing, the elephant turns upon its persecutor, and with shrill and angry scream, uplifted trunk, and wide-extended ears, charges furiously. If the horse be already in motion, the hunter may urge him on yet more swiftly, and escape; but if not, terror may seize him at that dreadful scream, and, paralysed in every limb, he may stand trembling and unable even to make an effort for his safety. Perhaps the rider, throwing himself off, may escape by flight, or he may even shoot the furious animal while it wreaks its vengeance on the helpless steed. Sometimes, before this happens, a daring comrade may ride between him and the elephant. and draw the pursuit upon himself, trusting to the imperilled hunter

to recover the command of his horse, and come as soon as possible to his aid; or there is a chance, although a small one when such fury is excited, that the elephant may swerve and pass to either side.

at times too true; but it may be taken as a general rule that comparatively few animals are killed wastefully by Europeans. The professional hunter shoots for the ivory, and will not, except in cases of need, kill anything



A MOMENT OF PERIL.

Sometimes the hunter has to try the endurance of his horse in fair full flight; and many are the tales I have heard of hair-breadth escapes when the pursuing elephant, determined upon vengeance, has put forth his utmost speed, and the fugitive has at last gained ground enough to dismount and shoot his pursuer as he came up, or was fortunate enough to lead him past a comrade, ready with deliberate aim to bring him down. Sometimes, from loss of horses or the retreat of the herds into the "fly country," they must be followed on foot, and this is weary work. McCabe told me that once he and half-a-dozen friends had followed spoor all day, and had brought down their elephant by a running fusilade. Unable to move another step, the exhausted hunters leaned against the carcase, and thrust their fingers into the bullet holes to ascertain by the size of the orifice whose gun had given the fatal wound. While thus engaged the elephant planted one huge foot upon the earth and raised himself suddenly in their midst. Their activity was restored marvellously. They radiated in all directions, some catching up the guns which they had been too wearied even to reload; only one was ready to fire, when McCabe noticed that the elephant's eyes were closing, and that he was beginning again to sink in death.

Many persons, hearing of the number of animals killed by hunters in Africa, are apt to imagine them guilty of cold-blooded and useless slaughter. This is

but a "tusker," lest the natives who follow him should content themselves with the flesh and neglect to lead him to the animals he seeks. Sometimes he shoots more than they can consume, and finds them too indolent to cut it up and dry it; but more frequently it is a work of labour to keep the supply of meat up to the demand. The remote colonist, or the emigrant Dutch boer of the interior, knows too well the value of ammunition to throw it away wastefully. He goes out to supply his homestead; every animal he is able to shoot is carefully brought home, and the "huisvrow" exults in the prowess of her "man" if she can point to nine or ten "wilde beestes" or "bles boks" hanging in The true sportsman, who, like Captain Harris and many others, is a naturalist, a geographer, and an artist, has surely an object in view sufficient to justify him in rejoicing in his victory, when, after an arduous chase or exciting conflict, some mighty animal, seen perhaps for the first time, lies prostrate at his feet. Even where the higher qualifications I have named are wanting, the risk incurred is made the pretext to give the chase the character of fair play, and redeem it from the imputation of anything like cold-blooded slaughter. With the wasteful shooting of numbers, for the mere purpose of making a bag, I have no sympathy whatever.

In countries where elephants are less plentiful, low walls of stone are built by the water, or pits, to con-

ceal the hunters; or trenches ten feet long are dug, the middle being covered with stout logs that an elephant may pass over without breaking, and, well concealed by earth thrown over them, the ends are left open. Here the hunters watch or sleep by turn, each with one or more spare rifles lying beside him, till the animals approach to drink; when, from a few yards, or it may be only a few feet of distance, the deadly streak of fire flashes upward from the earth, and the creature falls either upon the spot, or retires to die at a short dis-By these or other modes of hunting, or by purchase from natives who have learned the use of firearms, the cargo of ivory is at length completed, and the hunter turns homeward to realise in Graham's Town, or other frontier markets, or in the Cape itself, the hard-earned reward of his labour.

SUBMERGED ISLANDS.

OUR readers will remember the sensation caused last November by the announcement that the island of Tortola had been submerged, and the relief experienced when the statement was proved to be incorrect. Tortola -one of the Virgin Islands, a cluster forming part of the West India Group-it was found had not been submerged, but the neighbouring island of St. Thomas had experienced a catastrophe only less disastrous. A fearful hurricane had burst upon the island, sweeping before it every object that lay in its course. Unhappily, such an occurrence was by no means unprecedented. The little island (until recently a Danish possession, but now American) had before been similarly devastated. The year 1837 is still memorable in the history of its calamities. Then, as recently, ruined dwellings overspread the land, and shattered vessels covered the neighbouring seas.

Those who have paid some attention to the influence at work on and beneath the surface of the globe, would feel but a qualified degree of surprise at the first announcement of the supposed submergence. Geology has done much to invert our notions of the relative stability of sea and land. The "ever-changing ocean" has been found to preserve a nearly uniform level; * while in relation to the land, which we are so accustomed to regard as the very type of fixity, the poet's words are amply verified-

> "New worlds are still emerging from the deep, The old descending, in their turn to rise:"

When movements of the earth's crust are spoken of, the majority of persons immediately think of earthquakes. But these terrific phenomena form but one class of terrestrial fluctuations, although the suddenness of their action renders them more conspicuous and impressive than agencies which are slow and gradual in their operation. They are closely connected with the phenomena of volcanoes. The latter may be defined as openings in the earth's crust, through which the products of igneous action make their escape into the atmosphere. As Strabo sagaciously remarked, eighteen centuries ago, they act as safety-valves for the gaseous and liquid emanations of the interior, and thus tend to diminish the violence of those convulsions which even now bury in ruins the proudest works of man, and carry the solid "earth into the midst of the sea."

Some two hundred volcanic vents have been observed in different parts of the world, but they are by no means uniformly distributed. Numerous regions have been mapped out by geologists as areas of volcanic action.

The region of the West Indies is one of these areas, many of the islands being themselves the products of volcanic upheavals in past ages. A volcano in St. Vincent's poured out ashes and lava early in the present century; and Jamaica and St. Domingo have often suffered from shocks of earthquake. Scarcely three weeks had passed since the hurricane at St. Thomas's, when that shattered little island was visited by a sharp but transient earthquake, thus described by a correspondent of the "Times" newspaper:—"A faint roar was heard from seaward. Houses groaned and creaked; the earth heaved, and reeled, and danced beneath us, so that we could scarcely keep our feet. I have been in several earthquakes, but never felt one of greater intensity; and the inhabitants of St. Thomas, as well as of other islands, declare that they never felt one nearly so severe." This occurred on the 18th of November last; but, happily, the actual amount of damage done was comparatively slight.

That an earthquake should have followed so rapidly upon a hurricane, seems to support the view enunciated by some geologists, including no less an authority than Sir Charles Lyell. "Many of the storms termed hurricanes," he observes, "have evidently been connected with submarine earthquakes, as is shown by the atmospheric phenomena attendant on them, and by the sounds heard in the ground and the odours emitted. Such were the circumstances which accompanied the swell of the sea in Jamaica in 1780, when a great wave desolated the western coast, and, bursting upon Savanna la Mar, swept away the whole town in an instant, so that not a vestige of man, beast, or habitation, was seen upon the

It has occasionally happened that one of the results of an earthquake has been permanently to alter the level of the district in which it has operated. After the great earthquake which visited the coast of South America in 1822, a portion of Chili was found to have been upheaved to a height of from three to seven feet. Reckoning the area of elevation at 100,000 square miles, Sir C. Lyell computes that this convulsion gave to the land an addition of fifty-seven cubic miles of rock. In 1837 the shore near Valdivia, more to the south, was elevated to an extent of eight feet. In February, 1835, Conception, another Chilian town, was thrown down, and the island of Santa Maria, distant twenty-five miles, was raised some nine feet. At Talcahuano the coast was raised about four feet in February, but appears to have subsided again to half that extent by the month of April.

In 1819 a large district at the mouth of the Indus experienced an extensive oscillation. One of the estuaries of the river was deepened in parts some ten or twelve feet. A tract of country, 2,000 square miles in extent, sank down, and the sea rushing in, it speedily became a vast lagoon. At the same time a neighbouring plain rose about ten feet, converting a long strip of level ground into an artificial mound fifty miles in length, and in some parts sixteen in breadth. A further subsidence afterwards took place in the year 1845.

It will be seen that phenomena of this kind, further illustrations of which might readily be adduced, are adequate to the production of extensive and terrible convulsions. Tortola happily was not submerged; but several authentic instances of the appearance and subsequent disappearance of islands in mid-ocean are on record. Volcanic eruptions and earthquake movements occur at sea as well as on land, and occasionally a submarine Etna or Vesuvius is seen to rise amid the watery waste, and rear its rocky crest, canopied with fire and smoke, above the surface.

^{*} Hugh Miller has shown that the sea-level is not absolutely unchanging, as some geologists have asserted.